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THIRTY-FIFTH ANNUAL REPORT  
OF THE  
SECRETARY OF STATE  
ON THE  
REGISTRATION  
OF  
BIRTHS AND DEATHS  
MARRIAGES AND DIVORCES  
IN  
MICHIGAN  
FOR THE YEAR 1901

---

FRED M. WARNER

SECRETARY OF STATE

---

EDITED BY

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LETTER OF TRANSMITTAL.

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STATE DEPARTMENT,  
*Lansing, Michigan, December 24, 1904.*

TO HIS EXCELLENCY, AARON T. BLISS, *Governor:*

SIR—I hereby transmit the Thirty-fifth Annual Registration Report of Michigan, containing statistics of births and deaths, marriages and divorces in this State during the year 1901, as required by law.

Respectfully,

FRED M. WARNER,  
*Secretary of State.*



# CONTENTS.

[See also ALPHABETICAL INDEX, p. 113.]

## TEXT AND SECONDARY TABLES.

	PAGE.
Letter of transmittal .....	iii
Contents .....	v

### PART I.—VITAL STATISTICS AND POPULATION, 1901.

(Pages viii to xxi.)

Vital statistics returned for 1901 .....	ix
<b>Table 1.</b> —Births, marriages and deaths in Michigan, by months, 1901 .....	x
2.—Marriages, births and deaths registered in Michigan for the years 1887-1901, with rates per 1,000 population (stillbirths included in births but not in deaths) .....	xi
3.—Persons married per 1,000 living population in certain countries and states during the years 1887-1901 .....	xiii
4.—Births registered per 1,000 living population in certain countries and states during the years 1887-1901 (stillbirths excluded) .....	xiv
5.—Deaths registered per 1,000 living population in certain countries and states during the years 1887-1901 (stillbirths excluded) .....	xv
6.—Deaths, marriages, divorces and births in Michigan, by counties, for the year 1901, with rates per 1,000 estimated population .....	xvii
7.—Deaths, marriages, divorces and births in Michigan, by counties, for the year 1901, showing also the increase (or decrease) of the number registered for 1901 as compared with that of the preceding year (stillbirths included in births and excluded from deaths) .....	xx

### PART II.—DEATHS AND CAUSES OF DEATH IN MICHIGAN DURING THE YEAR 1901.

#### SECTION I.—INCIDENCE OF DEATHS IN MICHIGAN DURING THE YEAR 1901.

(Pages xxiii to xliii.)

<b>Table 8.</b> —Deaths in Michigan, by months and quarters, 1901 (stillbirths excluded) .....	xxv
9.—Delayed returns of deaths by months, 1901 (stillbirths excluded) .....	xxv
10.—Deaths and death rates in Michigan, by sex, 1890-1901 (stillbirths included) .....	xxvi
11.—Deaths in Michigan, by sex and age periods, 1901 (stillbirths excluded) .....	xxvii
12.—Deaths and death rates in Michigan, by age periods and sex, 1901 (stillbirths excluded) .....	xxviii
13.—Death rates and ratios of deaths at certain periods of age, 1870-1901 (stillbirths excluded from both births and deaths) .....	xxix
14.—Mortality in Michigan, by geographical sections and groups of cities, as originally published in the Michigan Monthly Bulletin of Vital Statistics, 1901 .....	xx
15.—Cities of Michigan, grouped in order of population by U. S. census of 1900, with deaths and death rates per 1,000 estimated population, 1901 (stillbirths excluded) .....	xliii

#### SECTION II.—CAUSES OF DEATH IN MICHIGAN DURING THE YEAR 1901.

(Pages xlii to cx.)

<b>Table 16.</b> —Deaths in Michigan during the year 1901, statistically classified by the Bertillon system, with rates per 100,000 estimated population .....	xlii
--	------



	PAGE.
<b>Table 17.</b> —Causes of death in Michigan, by months and ages, for the state and geographical sections, 1901.....	xlvi
18.—Deaths from typhoid fever in Michigan, 1901 .....	lx
19.—Deaths from smallpox in Michigan, 1901 .....	lxi
20.—Deaths from measles in Michigan, 1901 .....	lxii
21.—Deaths from scarlet fever in Michigan, 1901 .....	lxiii
22.—Deaths from whooping cough in Michigan, 1901 .....	lxiv
23.—Deaths from diphtheria and croup in Michigan, 1901 .....	lxv
24.—Deaths from influenza in Michigan, 1901 .....	lxvi
25.—Deaths from tuberculosis of lungs in Michigan, 1901.....	lxvii
26.—Deaths from other forms of tuberculosis in Michigan, 1901 .....	lxviii
27.—Deaths from cancer in Michigan, 1901 .....	lxix
28.—Ratio of deaths from cancer to deaths from all causes registered in Michigan, exclusive of stillbirths, for the years 1870-1902 .....	lxx

#### INCREASE OF CANCER IN MICHIGAN.

lxxi

(Article reprinted from Michigan Monthly Bulletin of Vital Statistics, November, 1902.)

<b>Exhibit A.</b> —Deaths in Michigan from cancer and "tumor," by sex, for years and periods of years, 1870-1900 .....	lxxiii
<b>B.</b> —Death rates in Michigan from cancer and "tumor," by sex, per 100,000 estimated population, for years and periods of years, 1870-1900.....	lxxiv
<b>C.</b> —Death rates in Michigan from cancer per 100,000 population of same sex and period of age, for periods of years, 1872-1900 .....	lxxv
<b>D.</b> —Per cents of increase of death rates in Michigan from cancer per 100,000 population of same sex and periods of age in preceding quinquennial periods, 1872-96 .....	lxxvi
<b>E.</b> —Mortality index for cancer in Michigan, by sex, 1890, on basis of age distribution of population in 1870 .....	lxxvii
<b>F.</b> —Per cent of deaths from cancer in Michigan by sex and organ or parts of body affected for periods of years, 1872-1900 .....	lxxx

#### MORTALITY FROM CANCER IN MICHIGAN.

lxxx

(Paper reprinted from Proceedings and Addresses of the Sixth General Conference of Health Officials in Michigan, 1903.)

<b>Diagram.</b> —CANCER IN MICHIGAN, 1872-1900 .....	lxxxiii
--	---------

<b>Table 29.</b> —Distribution of deaths from cancer in Michigan by part or organ affected, according to returns under old law (1872-96) and on basis of physicians' certificates under new law (1898-1902), by five-year periods and with average for twenty-five year period under old law.....	lxxxix
30.—Deaths and death rates per 100,000 population of same age and sex from cancer and tumor in Michigan, as enumerated under old law (1870-97) and as registered by physicians' certificates under new law (1898-1902), with five-year averages and average for twenty-five year period under old law .....	xc
31.—Deaths from meningitis in Michigan, 1901 .....	xcvii
32.—Deaths from cerebral congestion and hemorrhage (apoplexy) in Michigan, 1901 .....	xcviii
33.—Deaths from paralysis in Michigan, 1901 .....	xcviii
34.—Deaths from convulsions in Michigan, 1901 .....	xcix
35.—Deaths from heart disease in Michigan, 1901 .....	c
36.—Deaths from bronchitis in Michigan, 1901 .....	cii
37.—Deaths from bronchopneumonia in Michigan, 1901 .....	ciii
38.—Deaths from pneumonia in Michigan, 1901 .....	ciii
39.—Deaths from diseases of stomach in Michigan, 1901 .....	cv
40.—Deaths from diarrhea and enteritis, under 2 years, in Michigan, 1901....	cvi
41.—Deaths from diarrhea and enteritis, over 2 years, in Michigan, 1901....	cvi
42.—Deaths from Bright's disease in Michigan, 1901 .....	cvi
43.—Deaths from suicide in Michigan, 1901 .....	cvi
44.—Deaths from accidents in Michigan, 1901.....	cix

# CONTENTS.

vii

## PART III.—MARRIAGES IN MICHIGAN DURING THE YEAR 1901.

	(Pages cxi to cxvi.)	PAGE.
Summary of the registration of marriages in Michigan, 1901 .....		cxi
<b>Table 45.</b> —Marriages returned, by months, for the years 1892-1901, with average for the ten-year period .....		cxli
<b>46.</b> —Marriages in Michigan, by months and quarters, 1901 .....		cxlii
<b>47.</b> —By nativity, the number and per cent of brides and bridegrooms returned for the year 1901 .....		cxlii
<b>48.</b> —Nativity of marriages in Michigan for the year 1901, compared with averages for six successive quinquennial periods, 1871-1900 .....		cxlii
<b>49.</b> —Percentage of males married in Michigan at specified periods of age for the year 1901, compared with averages for six quinquennial periods, 1871-1900 .....		cxlii
<b>50.</b> —Percentage of females married in Michigan at specified periods of age for the year 1901, compared with averages for six quinquennial periods, 1871-1900 .....		cxlii

## PART IV.—DIVORCES IN MICHIGAN DURING THE YEAR 1901.

	(Pages cxvii to cxix.)	
<b>Table 51.</b> —Children affected by divorces in Michigan during the year 1901, showing the relation of sex of complainant to size of family .....		cxviii
<b>52.</b> —Duration of marriages terminated by divorces granted in Michigan during the year 1901, showing the relation of sex of complainant to lapse of time before divorce .....		cxviii
<b>53.</b> —Principal causes of divorce in Michigan during the year 1901, showing, by sex, the percentage of complainants from each cause .....		cxix

## PART V.—BIRTHS IN MICHIGAN DURING THE YEAR 1901.

	(Pages cxx to cxxii.)	
Summary of the enumeration of births for the year 1901 .....		cxx
<b>Table 54.</b> —Births returned by months, for the years 1892-1901 inclusive, with average for the ten-year period (stillbirths included) .....		cxxi
<b>55.</b> —Parent nativity of children born in Michigan, during the year 1901 (stillbirths included) .....		cxxi
<b>56.</b> —Parent nativity of children born in Michigan for each of the years 1892-1901 inclusive, with average for the ten-year period (stillbirths included) .....		cxxii
<b>57.</b> —Parent nativity of children born in Michigan during the year 1901, compared with averages for six quinquennial periods, 1871-1900 (stillbirths included) .....		cxxii

## CLIMATOLOGICAL DATA FOR MICHIGAN, 1901.

	(Pages cxxiii to cxxxi.)	
Review of the year 1901 .....		cxxi
MAP I.—ANNUAL MEAN ISOTHERMS AND PREVAILING WINDS IN MICHIGAN, 1901 .....		cxxiv
MAP II.—TOTAL PRECIPITATION IN MICHIGAN, 1901 .....		cxxv
<b>Table 58.</b> —Temperature and amount of precipitation in Michigan during the year 1901, compared with previous years .....		cxxix
<b>59.</b> —Relative humidity, wind movement and atmospheric pressure in Michigan during the year 1901 .....		cxxix
<b>60.</b> —Temperature, precipitation, sky and direction of wind in Michigan, for the State and geographical sections, 1901 .....		cxxx

## PRIMARY TABLES.

### PRIMARY TABLES RELATING TO DEATHS AND CAUSES OF DEATH IN MICHIGAN DURING THE YEAR 1901.

(Pages 1 to 59.)

<b>TABLE I.</b> —Deaths in Michigan by months, counties and sex, during the year 1901 (stillbirths excluded) .....	
--	--

3

	PAGE.
<b>TABLE II.</b> —Deaths in Michigan by ages, counties and sex, during the year 1901 (stillbirths excluded) .....	8
<b>III.</b> —Causes of death in Michigan, by months, ages and sex, during the year 1901 (stillbirths excluded) .....	18
<b>IV.</b> —Causes of death in Michigan, by counties, during the year 1901 (stillbirths excluded) .....	36

#### PRIMARY TABLES RELATING TO MARRIAGES IN MICHIGAN DURING THE YEAR 1901.

(Pages 61 to 73.)

<b>TABLE I.</b> —Marriages in Michigan, by months and counties, during the year 1901	63
<b>II.</b> —Persons married in Michigan, by ages, counties and sex, during the year 1901 .....	65
<b>III.</b> —Marriages and persons married in Michigan, by nativity and counties, during the year 1901 .....	70
<b>IV.</b> —Marriages in Michigan, by ages of males and females married, during the year 1901 .....	72
<b>V.</b> —Probate marriages in Michigan, by ages of males and females married, during the year 1901 .....	73

#### PRIMARY TABLES RELATING TO DIVORCES AND CAUSES OF DIVORCE IN MICHIGAN DURING THE YEAR 1901.

(Pages 75 to 95.)

<b>TABLE I.</b> —Divorce business in Michigan, by counties, during the year 1901, showing, according to the "Summaries" filed by the county clerks, the number of bills for divorce pending at the beginning and end of the year, number filed during the year, number withdrawn or otherwise disposed of, number contested, and the number of divorces granted and refused .....	78
<b>II.</b> —Divorces in Michigan, by counties and sex of complainant, during the year 1901, showing place of marriage, number of children in family, and duration of marriage before divorce .....	80
<b>III.</b> —Causes of divorce in Michigan, by sex of complainant, during the year 1901, showing place of marriage, number of children in family, and duration of marriage before divorce .....	90

#### PRIMARY TABLES RELATING TO BIRTHS IN MICHIGAN ACCORDING TO THE ENUMERATION BY SUPERVISORS AND ASSESSORS FOR THE YEAR 1901.

(Pages 97 to 112.)

<b>TABLE I.</b> —Births in Michigan, by months, counties and sex, as enumerated by supervisors and assessors for the year 1901 (stillbirths included)....	99
<b>II.</b> —Births in Michigan, by nativity of parents, counties and sex, as enumerated by supervisors and assessors for the year 1901 (stillbirths included) .....	104
<b>III.</b> —Stillbirths, twins and illegitimate births in Michigan, by counties, as enumerated by supervisors and assessors for the year 1901 (stillbirths included) .....	110
<b>IV.</b> —Stillbirths, twins and illegitimate births in Michigan, by months and sex, as enumerated by supervisors and assessors for the year 1901 (stillbirths included) .....	112
<b>V.</b> —Stillbirths, twins and illegitimate births in Michigan, by nativity of parents, as enumerated by supervisors and assessors for the year 1901 (stillbirths included) .....	112

<b>INDEX</b> .....	113
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# THIRTY-FIFTH ANNUAL REGISTRATION REPORT OF MICHIGAN CONTAINING VITAL STATISTICS FOR THE YEAR 1901.

## PART I.—VITAL STATISTICS AND POPULATION, 1901.

In this part of the report an effort has been made to present information and data sufficient to give a general idea of the scope and results of registration in Michigan during the year 1901, and which will serve as an introduction to the more detailed study of the statistics in the divisions following.

This is the fourth report issued from this Department since the operation of the new registration law for deaths, which went into effect August twenty-ninth, 1897, and as the law has been longer in operation, and hence more widely and better understood, it is probable that a somewhat higher degree of accuracy in returns has been attained than in the earlier years of its operation.

A change from previous reports has been made with this issue in the matter of compilation of stillbirths. While stillbirths are required to be registered in the same way as deaths from any other cause, they are not, as formerly, included in the statement of total deaths, and will be treated as an entirely separate item. This is in accordance with modern statistical practice and corresponds to a similar change in the mortality statistics of the United States census.

### VITAL STATISTICS RETURNED FOR 1901.

In the following summary will be found some of the principal facts relating to returns of vital statistics in the State for the year 1901:

Total number of deaths, 1901.....	32,834
Deaths per 1,000 population, 1901.....	13.4
Total number of marriages, 1901.....	24,079
Persons married, 1901.....	48,158
Persons married per 1,000 population, 1901.....	19.6
Total number of divorces, 1901.....	2,448
Persons divorced per 1,000 population, 1901.....	2.0
Total number of births, 1901.....	43,221
Births per 1,000 population, 1901.....	17.6

As stated in the report for last year, the Michigan law for the collection of births is the antiquated measure of 1867, providing for the enumeration by supervisors and assessors. It is so grossly defective, as compared with the registration law for deaths, that the usual comparison of births and deaths, their difference constituting what is known as

the natural increase of population, cannot be made for this or future years, until a modern system for the registration of births shall be instituted.

#### RETURNS BY MONTHS, 1901.

Table 1 gives the distribution of births, marriages and deaths by months during the year, together with the average daily numbers. By means of these averages we are enabled to make comparisons of the amounts of mortality, nuptiality and natality in the several months with as much accuracy as if we had computed the rates. As noted above, however, the registration of births in this State is so very incomplete and imperfect that the figures compiled thereupon can in no sense be taken as representing the actual number or relative distribution throughout the year.

From a comparison of the figures given in table 1 it will be noted that the greatest average number of deaths per day was for the month of February, while the month of least daily average deaths was July.

The highest average daily number of births was in the month of September, while the lowest average number was in the month of January. As the earlier months of the year are less perfectly enumerated, this difference may be partly or wholly due to the imperfections of the returns.

In making these comparisons, it will be well to bear in mind that stillbirths are excluded from deaths, but are included in births; the reason for thus making a difference of treatment lies in the fact that while it seemed desirable to make the accurate statistics of deaths obtained under the act of 1897 conform to modern statistical requirements, any effort to improve the form of the statistics of births would be quite wasted, as the returns are so imperfect and irregular in their degrees of inaccuracy as to make any deductions based upon them of very little value. Hence the compilation was made in the old way, and the figures are simply given to show the number of births returned, not the number of births actually occurring in the State. The latter is quite unknown.

In marriages we find the highest average daily number to be in the month of October, and the least in the month of March. June weddings are nearly, but not quite, as popular as October ones.

**Table 1.—Births, marriages and deaths in Michigan, by months, 1901.**

	Total num- ber reg- istered, 1901.	Returns by months, 1901.												
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk
DEATHS:*														
Number.....	32,834	3,128	3,089	3,390	2,894	2,720	2,351	2,395	2,573	2,847	2,435	2,354	2,655	.....
Daily average	90.0	100.9	110.3	109.4	96.5	87.7	78.5	77.3	83.0	94.9	78.5	78.5	85.6	.....
MARRIAGES:														
Number.....	24,079	1,624	1,372	1,360	1,922	1,779	2,537	1,934	1,897	2,376	2,642	2,421	2,211	4
Daily average	66.0	52.4	49.0	43.9	64.1	57.4	84.6	62.4	61.2	79.2	85.2	80.7	71.3	.....
BIRTHS:†														
Number.....	43,221	2,974	3,087	3,782	3,682	3,594	3,492	3,745	3,926	3,953	3,633	3,438	3,881	34
Daily average	118.4	95.9	110.3	122.9	122.7	115.9	116.4	120.8	126.6	131.8	117.2	114.6	125.2	.....

\* Stillbirths excluded.

† Stillbirths included.

Table 2.—Marriages, births and deaths registered in Michigan, for the years 1867-1901, with rates per 1,000 population. (Stillbirths included in births but not in deaths.)

Years.	Population.	Registration returns, 1867-1901.			Rates per 1,000 popula- tion.		
		Number of mar- riages.	Number of births.†	Number of deaths.§	Persons married.	Births.‡	Deaths.§
1867*.....	993,902	4,312	14,000	4,409	.....	.....	.....
1868.....	1,057,288	8,697	25,020	8,189	16.5	23.7	7.7
1869.....	1,120,673	8,459	27,093	9,016	15.1	24.2	8.0
1870†.....	1,184,059	9,791	28,663	10,540	16.5	22.5	8.9
1871.....	1,221,552	10,605	25,992	9,460	17.4	21.3	7.7
1872.....	1,259,045	10,752	27,993	13,167	17.1	22.2	10.5
1873.....	1,296,538	11,897	34,608	13,984	18.4	26.7	10.8
1874†.....	1,334,031	12,255	31,151	12,036	18.4	23.4	9.0
1875.....	1,384,515	11,851	31,958	11,361	17.1	23.1	8.2
1876.....	1,435,000	11,913	34,235	11,930	16.6	23.9	8.3
1877.....	1,485,484	11,899	35,395	12,199	16.0	23.5	8.2
1878.....	1,535,968	12,880	35,162	11,973	16.8	22.9	7.7
1879.....	1,586,453	13,892	34,122	13,658	17.5	21.5	8.6
1880†.....	1,636,937	14,935	35,323	15,364	18.2	21.6	9.4
1881.....	1,691,117	15,894	34,749	18,547	18.8	20.5	11.0
1882.....	1,745,296	16,830	37,026	15,633	19.3	21.2	9.0
1883.....	1,799,478	17,174	40,809	16,022	19.1	22.7	8.9
1884†.....	1,853,658	15,989	40,408	17,137	17.3	21.8	9.2
1885.....	1,893,697	15,885	42,119	15,638	16.8	22.2	8.3
1886.....	1,933,735	16,665	41,095	17,278	17.2	21.3	8.9
1887.....	1,973,774	17,179	46,226	18,585	17.4	23.4	9.4
1888.....	2,013,812	17,297	48,952	20,406	17.2	24.3	10.1
1889.....	2,053,851	18,317	49,272	19,113	17.8	24.0	9.3
1890†.....	2,093,889	18,664	52,306	20,245	17.8	25.0	9.7
1891.....	2,130,827	19,244	50,812	20,989	18.1	23.8	9.9
1892.....	2,167,765	20,107	46,221	20,715	18.6	21.3	9.6
1893.....	2,204,703	19,197	47,722	20,963	17.4	21.6	9.5
1894†.....	2,241,641	18,220	44,596	19,957	16.3	19.9	8.9
1895.....	2,271,531	18,952	46,273	21,648	16.7	20.4	9.5
1896.....	2,301,421	18,897	46,302	20,729	16.4	20.1	9.0
1897.....	2,331,311	18,579	43,688	19,150	15.9	18.7	8.2
1898.....	2,361,201	20,138	43,462	28,248	17.1	18.4	12.0
1899.....	2,391,091	21,877	41,818	32,500	18.3	17.5	13.6
1900†.....	2,420,982	23,295	43,699	32,559	19.2	18.1	13.4
1901.....	2,450,872	24,079	43,221	32,834	19.6	17.6	13.4

\* From April 5 to December 31, 1867.

† Census years.

‡ Stillbirths included in births. For the years 1867-1873 and 1898-1901 only those returned as births are so included.

§ Stillbirths not included.



In Table 2 estimated populations are given for intercensal and post-censal years since the institution of registration in this State, April fifth, 1867, by whose aid the death rates, marriage rates and birth rates may be computed for each year.

It will be of especial interest to note the large increase in the number of deaths returned for each of the years 1898-1901, as compared with any of the preceding years of registration. There were probably no more deaths, in proportion to the population, during these latter years than during the period 1867-97, but approximately *all* of the deaths which have occurred in the State since 1898 have been placed on record, while under the old system of enumeration by supervisors and assessors probably not to exceed two-thirds of the deaths that actually occurred were recorded. Hence no accurate or reliable comparisons can be made between the number returned for the years 1898-1901 with the imperfect records of the preceding years.

The number of births returned for the year, 43,221, showed a falling off as compared with the preceding years of registration, and, with one exception, that for the year 1899, is the smallest number recorded since 1887. This, too, not considering the increase in population. However, as explained heretofore, the figures thus given for births are not very reliable, and the decrease above noted may be due to irregularities of enumeration.

The death rate per 1,000 population for 1901, 13.4, was precisely the same as for the preceding year, and, barring the year 1898 which certainly had a phenomenally low mortality, is about the usual or normal death rate for this State.

According to the returns the number of marriages recorded in 1901, 24,079, shows about the usual yearly increase in proportion to the increase of population, and is directly comparable with recent years of registration.

Table 3.—Persons married per 1,000 living population in certain countries and states during the years 1887-1901.

Country or state.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Austria.....	15.8	16.0	15.1	15.1	15.6	15.6	15.9	15.8	16.2	15.9	16.2	15.7	16.5	16.5	16.4
Belgium.....	14.2	14.2	14.5	14.5	14.8	15.4	15.2	15.1	15.5	16.2	16.4	16.6	16.5	17.2	16.6
Denmark.....	14.0	14.2	14.2	13.8	13.6	13.5	14.0	13.8	14.1	14.5	14.9	15.1	15.0	15.3	14.4
France.....	14.5	14.4	14.2	14.0	14.9	15.1	14.9	14.9	14.7	15.1	15.1	14.8	15.3	15.5	15.6
German Empire.....	15.6	15.6	16.0	16.1	16.1	15.9	15.8	15.9	15.9	16.4	16.7	16.9	17.1	17.0	16.5
Prussia.....	16.0	16.0	16.3	16.4	16.3	16.1	16.1	16.1	16.0	16.5	16.8	16.9	17.0	17.1	16.6
Holland.....	14.0	13.8	13.9	14.2	14.2	14.4	14.6	14.4	14.7	14.9	14.8	14.6	14.9	15.2	15.4
Hungary.....	18.0	18.7	16.3	16.4	17.2	18.4	18.7	18.5	17.0	16.1	16.3	16.7	18.0	17.7	17.4
Italy.....	15.9	15.9	15.3	14.7	15.0	14.9	14.8	14.9	14.6	14.1	14.4	13.8	14.7	14.4	14.5
Japan.....	17.1	16.7	17.0	16.1	16.0	17.0	17.3	17.3	17.3	23.5	16.9	21.5	13.4	15.4	16.7
New South Wales.....	15.1	15.1	14.1	14.3	14.8	13.6	12.9	12.5	12.8	13.3	13.5	13.4	13.8	14.8	15.4
New Zealand.....	12.0	12.0	11.9	12.2	12.1	12.5	12.4	12.3	11.9	13.7	13.7	13.8	14.6	15.3	15.0
Norway.....	12.5	12.2	12.5	13.0	13.2	12.7	12.9	12.8	13.0	13.4	13.4	14.0	14.3	13.8	13.4
Sweden.....	12.5	11.8	12.0	12.0	11.7	11.4	11.3	11.5	11.7	11.9	12.1	12.3	12.5	12.3	12.1
Switzerland.....	14.2	14.2	14.1	14.0	14.2	14.4	14.3	14.3	14.5	15.0	15.6	15.5	15.5	15.5	15.2
United Kingdom.....	13.5	13.5	14.1	14.5	14.6	14.5	13.9	14.2	14.3	15.0	15.2	15.4	15.6	15.1	15.1
England and Wales....	14.4	14.4	15.0	15.5	15.6	15.4	14.7	15.0	15.0	15.7	16.0	16.2	16.5	16.0	15.9
Ireland.....	8.6	8.4	9.0	8.9	9.2	9.3	9.4	9.4	10.1	10.1	10.1	10.0	9.9	9.5	10.2
Scotland.....	12.7	12.8	13.3	13.7	13.9	14.1	13.2	13.3	13.5	14.2	14.4	14.8	15.0	14.6	14.0
United States:															
Massachusetts.....	19.0	18.2	18.8	18.6	18.9	19.2	19.1	16.9	18.5	18.1	17.6	16.5	17.2	17.4	17.3
Michigan.....	17.4	17.2	17.8	17.8	18.1	18.6	17.4	16.3	16.7	16.4	15.9	17.1	*18.3	*19.2	*19.6
Rhode Island.....	18.0	18.7	17.3	18.4	18.5	19.1	18.7	17.4	18.2	17.0	15.6	15.8	16.2	18.4	17.6

\* Returns vitiated by "excursion marriage" industry. Since 1896 the marriages recorded no longer relate exclusively to the inhabitants of Michigan.

#### MICHIGAN VITAL STATISTICS COMPARED WITH THOSE OF OTHER STATES AND COUNTRIES.

As stated in the last report the significance of the vital rates of any state or country cannot be fully known until comparisons have been made with those of others. While the crude marriage, birth and death rates are not sufficient for the formation of absolutely reliable conclusions relative to the exact intensity of the marriage movement, or of the fecundity or sanitary conditions of the populations so measured, nevertheless the crude rates, taken without correction for dissimilar constitution of the population, must always form the first step in the comparative study of vital statistics.

**Table 4.—Births registered per 1,000 living population in certain countries and states during the years 1887-1901. (Stillbirths excluded.)**

Country or state.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Austria.....	38.2	37.9	37.9	36.7	37.0	36.2	37.9	36.7	38.1	38.0	37.5	36.2	37.1	37.3	36.9
Belgium.....	29.4	29.1	29.5	28.7	29.6	28.9	29.5	29.0	28.5	29.0	29.0	28.6	28.8	28.9	29.4
Denmark.....	32.0	31.7	31.3	30.6	30.9	29.5	30.5	30.1	30.0	30.3	29.7	30.2	29.8	29.8	29.9
France.....	23.5	23.1	23.0	21.8	22.6	22.3	22.8	22.3	21.7	22.5	22.3	21.8	21.9	21.4	22.0
German Empire.....	36.9	36.6	36.4	35.7	37.0	35.7	36.8	35.9	36.1	36.3	36.0	36.1	35.8	35.6	35.7
Prussia.....	37.7	37.4	37.1	36.6	37.7	36.3	37.5	36.6	36.9	36.9	36.5	36.7	36.3	36.1	36.2
Holland.....	33.7	33.7	33.2	32.9	33.7	32.0	33.8	32.7	32.8	32.7	32.5	31.9	32.0	31.5	32.3
Hungary.....	44.2	43.8	43.7	40.3	42.3	40.4	42.6	41.5	41.8	40.5	40.3	37.7	39.3	39.3	37.8
Italy.....	38.9	37.5	38.3	35.8	37.2	36.2	36.5	35.5	34.9	34.8	34.7	33.5	33.9	33.0	32.6
Japan.....	27.6	30.0	31.1	28.8	26.7	29.4	28.5	28.9	29.5	30.0	30.9	31.3	31.4	31.4	32.7
New South Wales.....	37.1	37.2	35.0	35.4	34.5	34.0	33.5	31.6	31.0	28.6	28.7	27.4	27.1	27.4	27.6
New Zealand.....	32.1	31.2	30.1	29.4	29.0	27.8	27.5	27.3	26.8	26.3	26.0	25.7	25.1	25.6	26.3
Norway.....	30.8	30.8	29.7	30.3	30.9	29.6	30.7	29.8	30.6	30.4	30.0	30.3	30.9	30.1	29.8
Sweden.....	29.7	28.8	27.7	28.0	28.3	27.0	27.4	27.1	27.5	27.2	26.7	27.1	26.4	27.0	26.8
Switzerland.....	28.0	27.8	27.6	26.4	27.8	27.4	27.7	27.1	27.1	27.9	28.1	28.4	28.9	28.6	29.1
United Kingdom.....	30.7	30.1	30.0	29.2	30.4	29.5	29.8	28.8	29.4	29.0	28.9	28.7	28.5	28.2	28.0
England and Wales....	31.9	31.2	31.1	30.2	31.4	30.4	30.7	29.6	30.3	29.6	29.6	29.3	29.1	28.7	28.5
Ireland.....	23.1	22.8	22.7	22.3	23.1	22.5	23.0	23.0	23.3	23.7	23.5	23.3	23.1	22.7	22.7
Scotland.....	31.7	31.3	30.9	30.4	31.2	30.7	30.8	29.9	30.0	30.4	30.0	30.1	29.8	29.6	29.5
United States*.....	.....	.....	.....	26.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	27.2	.....
Connecticut.....	22.8	22.2	23.4	23.3	24.8	24.7	25.4	24.9	24.4	24.9	23.3	23.5	22.6	22.6	22.3
Massachusetts.....	25.9	26.0	26.2	25.8	27.5	28.1	28.1	27.4	27.0	28.3	28.0	27.3	25.7	26.2	25.1
Michigan.....	21.1	20.3	21.3	19.8	20.8	20.9	21.2	19.4	19.9	19.6	18.3	18.2	17.2	17.8	17.5
New Jersey.....	21.4	22.0	20.8	20.9	19.5	20.3	21.0	21.3	19.0	18.2	18.0	18.0	15.8	17.1	18.0
Rhode Island.....	24.2	24.2	24.1	24.7	26.5	25.2	26.5	26.6	25.7	27.3	26.8	25.9	25.6	25.9	25.8

\* Imperfect data.

In Tables 3, 4 and 5, corrected according to the international statistics published in the last report of the Registrar-General of England, will be found data by means of which the vital rates of Michigan for the past fifteen years may be compared with those of various European countries, and with certain states in this country, as well as with those of New Zealand and New South Wales, representative of the vital statistics of Australia. Some statistics for Japan have also been added from the reports of the Imperial Bureau of Statistics of that country, and are of especial interest as comparing the movement of population of an oriental country with the American, the European and Australasian data.

Table 5.—Deaths registered per 1,000 living population in certain countries and states during the years 1887-1901. (Stillbirths excluded.)

Country or state.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
Austria .....	28.9	29.2	27.3	29.4	28.2	28.8	27.2	27.8	27.7	26.4	25.6	24.9	25.4	25.4	24.2
Belgium .....	19.3	20.1	19.1	20.6	21.0	21.8	20.3	18.6	19.5	17.5	17.2	17.6	18.8	19.3	17.1
Denmark .....	18.3	19.7	18.6	19.0	20.0	19.4	18.8	17.4	16.8	15.6	16.5	15.5	17.3	16.9	15.8
France .....	22.0	21.9	20.7	22.8	22.9	22.8	22.5	21.2	22.2	20.0	19.5	20.9	21.1	21.9	20.1
German Empire .....	24.2	23.7	23.7	24.4	23.4	24.1	24.6	22.3	22.1	20.8	21.3	20.5	21.5	22.1	20.7
Prussia.....	23.8	22.8	23.2	24.0	22.9	23.4	24.2	21.8	21.8	20.7	20.9	20.0	21.4	21.8	20.5
Holland.....	19.7	20.4	20.1	20.5	20.7	21.0	19.2	18.5	18.6	17.2	16.9	17.0	17.1	17.8	17.2
Hungary.....	33.8	32.0	29.9	32.4	33.1	35.1	31.2	30.5	29.7	28.9	28.5	28.0	27.2	26.9	25.4
Italy .....	28.0	27.5	25.6	26.3	26.1	26.2	25.2	25.0	25.0	24.1	21.9	22.9	21.9	23.8	22.0
Japan.....	19.3	19.9	20.2	20.4	21.0	21.6	22.7	20.1	20.2	21.4	20.3	20.4	21.1	20.3	20.3
New South Wales.....	13.4	13.9	13.9	12.9	14.3	12.2	13.3	12.3	11.9	12.4	11.0	12.6	11.8	11.2	11.6
New Zealand.....	10.3	9.4	9.4	9.7	10.4	10.1	10.2	10.2	9.9	9.1	9.1	9.8	10.2	9.4	9.8
Norway.....	16.0	16.9	17.4	17.9	17.5	17.8	16.3	16.9	15.7	15.2	15.3	15.3	16.9	15.9	14.9
Sweden.....	16.1	16.0	16.0	17.1	16.8	17.9	16.8	16.4	15.2	15.6	15.4	15.1	17.7	16.8	16.0
Switzerland.....	20.3	20.0	20.3	20.8	20.4	18.8	19.9	19.9	19.1	17.7	17.6	18.2	17.6	19.3	18.0
United Kingdom.....	19.0	18.1	18.1	19.4	20.0	19.0	19.0	16.8	18.7	16.9	17.6	17.7	18.2	18.4	17.1
England and Wales...	19.1	18.1	18.2	19.5	20.2	19.0	19.2	16.6	18.7	17.1	17.4	17.5	18.2	18.2	16.9
Ireland.....	18.2	17.9	17.4	18.2	18.4	19.4	18.0	18.2	18.5	16.7	18.5	18.2	17.7	19.6	17.8
Scotland.....	19.0	18.0	18.4	19.7	20.7	18.5	19.3	17.1	19.4	16.6	18.4	18.0	18.1	18.5	17.9
United States*.....				19.6										17.8	
Connecticut.....	17.0	17.1	17.0	18.3	19.2	19.0	18.6	16.8	17.8	17.5	15.7	15.8	15.7	18.0	16.2
Massachusetts.....	19.8	19.9	19.2	19.4	19.7	20.9	20.5	19.1	19.0	19.3	18.1	17.5	17.4	18.2	16.8
Michigan.....	9.4	10.1	9.3	9.7	9.9	9.6	9.5	8.9	9.5	9.0	8.2	12.0	13.6	13.4	13.4
New Jersey.....	19.0	17.0	19.0	19.8	19.5	21.6	19.9	19.1	18.3	17.9	16.9	15.1	16.7	16.7	16.5
Rhode Island.....	19.9	20.4	19.0	20.1	18.6	20.1	19.6	19.1	19.6	19.1	17.6	16.7	17.6	20.6	18.2

\* Registration area only.

† New registration law for deaths in effect in Michigan for 1898.

## RETURNS COMPARED WITH POPULATION, BY COUNTIES, 1901.

In Table 6 estimated populations are given for each of the counties of the State for the year 1901. In estimating populations what is known as the "arithmetical method" has been employed; in fact, this method has been used in this State for the estimation of populations for intercensal and postcensal years, both for the *Michigan Monthly Bulletin of Vital Statistics* and for the annual registration reports ever since any systematic methods of estimating populations have been made use of. While all methods of estimating populations are more or less liable to error, especially when there are long intervals between census enumerations, investigation has proven that the arithmetical method accords more closely with the actual enumerated results than any other method, while at the same time it is readily applied, and is one of the most simple methods.

In this table the number of deaths, marriages, births and divorces registered are given for the State and for individual counties, together with the corresponding rates per 1,000 estimated population for the year. It will be noted, however, that the marriage and divorce rates are stated as *persons married* and *persons divorced*, instead of as so many marriages and divorces per 1,000 population. In comparing the vital rates of the different counties, it is important to consider the age distribution of the population. As the greatest number of deaths, relatively speaking, occurs in the age periods under five years and over sixty-five years of age, it follows that the counties having proportionally the greatest population covered by these ages will also show the greatest number of deaths.

To obtain an exact basis for marriage rates, the persons married should be compared with the number of unmarried persons of marriageable age in the population. In like manner, divorce rates should be based on the number of married persons in the population affording them. It should be borne in mind, however, in studying this table, that the number of divorces for any stated year cannot be compared directly with the number of marriages in the same year, owing to the fact that the divorces granted are the outcome of marriages performed some years prior. While births are obtained in the same manner throughout the State, namely, by enumeration by supervisors or assessors, the rates based thereon are not only not reliable as compared with other vital rates, but comparisons between the different counties should not be given too much credence, as the supervisors of some counties may make more complete and accurate enumerations than those of other counties, especially than those in counties having sparsely settled populations. While such rates as are given in these tables are necessary and form the first step in any statistical investigation of this character, the above statements are given so that conclusions based upon these rates will not be accepted as absolutely reliable, until they have been fully analyzed and investigated.

Prior to 1901 quite a large number of districts were exempt from the law requiring the immediate registration of deaths, but in the early part of this year the law was so amended as to bring the entire State under the operation of the registration law.

The death rates for the individual counties do not, as a rule, vary very widely from the State average of 13.4 per 1,000 population. Especially is this uniformity noticeable in those counties recently brought under the operation of the registration law by the extension of the law to cover the entire State. Oscoda has the lowest rate for the State, 4.2 per 1,000 estimated population, and is the only county that varies to any very considerable degree from the general State average.

The returns of marriages from Berrien county are greatly increased by means of the famous St. Joseph marriage industry, which has come to be recognized as a characteristic feature of the marriage statistics of Michigan. The rate for the county thus obtained as shown by this table, 59.9, is not, therefore, comparable with other county marriage rates, and the general marriage rate of the State is somewhat affected by this increase.

Table 6.—Deaths, marriages, divorces and births in Michigan by counties, for the year 1901, with rates per 1,000 estimated population. (Stillbirths included in births and excluded from deaths.)

State and counties.	Estimated population of Michigan, June, 1901.*	Number of deaths registered, 1901.	Number of marriages registered, 1901.	Number of divorces granted, 1901.	Number of births registered 1901.	Rates per 1,000 population, 1901.			
						Deaths.	Persons married.	Persons divorced.	Births.
STATE.....	2,450,872	32,834	24,079	2,448	43,221	13.4	19.6	2.0	17.6
Alcona.....	5,737	63	43	1	81	11.0	15.0	0.2	14.1
Alger.....	6,615	48	39	6	101	7.3	11.8	1.8	15.3
Allegan.....	38,749	406	302	33	574	12.8	15.6	1.7	14.8
Alpena.....	18,343	210	160	8	472	11.4	17.4	0.9	25.7
Antrim.....	17,258	209	175	15	219	12.1	20.3	1.7	12.7
Arenac.....	10,301	120	101	1	200	11.6	19.6	0.2	19.4
Baraga.....	4,335	60	31	1	104	13.8	14.3	0.5	24.0
Barry.....	22,317	267	219	37	319	12.0	19.6	3.3	14.3
Bay.....	62,557	782	560	40	1,362	12.5	17.9	1.3	21.8
Benzie.....	9,955	136	87	14	219	13.7	17.5	2.8	22.0
Berrien.....	49,753	659	† 1,490	57	572	13.2	† 59.9	2.3	11.5
Branch.....	28,078	381	298	30	337	13.6	21.2	2.1	12.0
Calhoun.....	49,622	736	493	83	623	14.8	19.9	3.3	12.6
Cass.....	20,826	269	201	31	235	12.9	19.3	3.0	11.3
Charlevoix.....	14,423	176	130	10	247	12.2	18.0	1.4	17.1
Cheboygan.....	15,785	201	143	14	291	12.7	18.1	1.8	18.4
Chippewa.....	22,341	313	271	13	399	14.0	24.3	1.2	17.9
Clare.....	8,434	90	83	9	160	10.7	19.7	2.1	19.0
Clinton.....	24,948	337	243	22	371	13.5	19.5	1.8	14.9
Crawford.....	2,982	26	27	2	36	8.7	18.1	1.3	12.1
Delta.....	24,651	297	239	11	656	12.0	19.4	0.9	26.6
Dickinson.....	18,422	253	214	8	618	13.7	23.2	0.9	33.5
Eaton.....	31,508	403	357	60	385	12.8	22.7	3.8	12.2
Emmet.....	16,771	214	188	20	271	12.8	23.4	2.4	16.2
Genesee.....	42,013	572	401	61	471	13.6	19.1	2.9	11.2
Gladwin.....	6,841	63	68	6	166	9.2	19.9	1.8	24.3
Gogebic.....	17,180	257	221	5	558	15.0	25.7	0.6	32.5
G'd Traverse.....	20,973	342	229	32	285	16.3	21.8	3.1	13.6
Gratiot.....	30,075	361	331	35	379	12.0	22.0	2.3	12.6
Hillsdale.....	29,797	422	317	41	312	14.2	21.3	2.6	10.5
Houghton.....	69,711	892	757	14	2,682	12.8	21.7	0.4	38.5
Huron.....	34,480	373	265	14	818	10.8	15.4	0.8	23.7
Ingham.....	39,840	542	395	27	431	13.6	19.8	1.4	10.8
Ionia.....	34,247	464	382	42	408	13.5	22.3	2.5	11.9
Iosco.....	9,897	135	71	4	224	13.6	14.3	0.8	22.6
Iron.....	9,606	105	81	5	215	10.9	16.9	1.0	22.4
Isabella.....	23,008	243	218	25	455	10.6	18.9	2.2	19.8
Jackson.....	48,503	615	508	83	696	12.7	20.9	3.4	14.3
Kalamazoo.....	44,686	740	495	90	557	16.6	22.2	4.0	12.5
Kalkaska.....	7,382	88	78	16	116	11.9	21.1	4.3	15.7
Kent.....	131,010	1,769	1,398	190	1,924	13.5	21.3	2.9	14.7
Keweenaw.....	3,286	41	25	17	107	12.5	15.2	10.3	32.6
Lake.....	4,800	58	50	5	100	12.1	20.8	2.1	20.8
Lapeer.....	27,435	415	276	23	342	15.1	20.1	1.7	12.5
Leelanau.....	10,720	122	79	6	159	11.4	14.7	1.1	14.8
Lenawee.....	48,384	704	423	61	565	14.6	17.5	2.5	11.7
Livingston.....	19,535	252	163	15	237	12.9	16.7	1.5	12.1
Luce.....	3,089	43	34	3	74	13.9	22.0	1.9	24.0
Mackinac.....	7,781	82	73	2	121	10.5	18.8	0.5	15.6
Macomb.....	33,367	483	265	26	468	14.5	15.9	1.7	14.0
Manistee.....	28,146	305	207	15	470	10.8	14.7	1.1	16.7
Marquette.....	41,776	507	366	8	1,429	12.1	17.5	0.4	34.2
Mason.....	18,962	255	157	10	376	13.4	16.6	1.1	19.8
Mecosta.....	20,687	275	174	18	332	13.3	16.8	1.7	15.0
Menominee.....	27,596	294	322	8	585	10.7	23.3	0.6	21.2

\* Population estimated by average annual increase as shown by State census of 1900 over U. S. census of 1894. Where counties have made unusually rapid growth since the last census, the estimates of population cannot be depended upon, nor are the rates based thereon reliable.

† This includes many marriages of residents of Chicago during the summer excursion season.



Table 6.—Concluded.—Deaths, marriages, divorces and births in Michigan by counties, for the year 1901, with rates per 1,000 estimated population.

Counties.	Estimated population of Michigan, June, 1901.*	Number of deaths registered, 1901.	Number of marriages registered, 1901.	Number of divorces granted, 1901.	Number of births registered, 1901.	Rates per 1,000 population, 1901.			
						Deaths.	Persons married.	Persons divorced.	Births.
Midland.....	14,643	193	125	8	252	13.2	17.1	1.1	17.2
Missaukee.....	9,700	86	84	10	220	8.9	17.3	2.1	22.7
Monroe.....	32,683	418	410	22	543	12.8	25.1	1.3	16.6
Montcalm.....	32,520	419	306	37	442	12.9	18.9	2.3	13.6
Montmorency.....	3,397	32	26	6	32	9.5	15.4	3.6	9.5
Muskegon.....	36,988	446	334	44	691	12.1	18.1	2.4	18.7
Newaygo.....	17,431	209	161	23	225	12.0	18.5	2.6	12.9
Oakland.....	45,146	664	296	35	540	14.7	13.2	1.6	12.0
Oceana.....	16,652	211	146	27	276	12.7	17.5	3.2	16.6
Ogemaw.....	8,120	99	69	3	113	12.2	17.9	0.7	13.9
Ontonagon.....	6,084	83	51	4	173	13.6	16.8	1.3	26.4
Osceola.....	18,090	185	170	17	334	10.2	18.8	1.9	18.5
Oscoda.....	1,412	6	12	1	21	4.2	17.0	1.4	14.9
Otsego.....	6,405	83	73	0	121	13.0	22.8	0.0	18.9
Ottawa.....	39,764	487	362	15	718	12.2	18.2	0.8	18.1
Presque Isle.....	9,306	108	80	5	227	11.6	17.2	1.1	24.4
Roscommon.....	1,899	27	13	7	40	14.9	14.4	7.7	22.1
Saginaw.....	81,118	1,091	804	96	1,636	13.4	19.8	2.4	20.2
St. Clair.....	55,379	770	483	54	871	13.9	17.4	2.0	15.7
St. Joseph.....	23,689	356	183	29	286	15.0	15.5	2.4	12.1
Sanilac.....	35,240	349	296	10	710	9.9	16.8	0.6	20.1
Schoolcraft.....	8,016	113	83	6	193	14.1	20.7	1.5	24.1
Shiawassee.....	34,035	457	351	57	417	13.4	20.6	3.3	12.3
Tuscola.....	36,136	509	316	31	548	14.1	17.5	1.7	15.2
Van Buren.....	33,643	495	332	44	391	14.7	19.7	2.6	11.6
Washtenaw.....	48,470	656	340	45	516	13.5	14.0	1.9	10.6
Wayne.....	358,182	5,608	3,066	350	7,439	15.4	17.1	2.0	20.8
Wexford.....	17,311	215	180	26	332	12.4	20.8	3.0	19.2

\* Population estimated by average annual increase as shown by State census of 1900 over U. S. census of 1894. Where counties have made unusually rapid growth since the last census, the estimates of population cannot be depended upon, nor are the rates based thereon reliable.

## COMPARISON OF RETURNS FOR THE YEARS 1900-1901.

In Table 7 the deaths, marriages, divorces and births, as returned to this Department, are given for the year, together with the corresponding items for 1900; also the increase or decrease of returns for 1901 as compared with those for 1900.

In deaths, the returns show an increase of 281 for the year over the number returned for the preceding year. The counties showing increases or decreases were quite evenly divided, 44 of the number showing an increase, two showing neither increase or decrease.

The number of marriages increased only 784 over 1900, the increase in Berrien county being only 42, as compared with an increase for this county of 371 for 1900 over 1899. There were 51 counties that showed an increase over the previous year, while the county of Montmorency showed neither increase nor decrease. Wayne and Kent, as might be expected, showed the largest amounts of increase, the former showing an excess of 136 over 1900 and the latter 190.

Divorces for 1901 increased but slightly over the number returned for the year 1900, the increase amounting to only 13. In this connection, it may be noted that there were 2,449 divorces granted during the year, while only 47 were refused. There were 3,883 bills filed during the year;

thus the per cent of divorces granted during the year to the number of bills filed during the year was 63.1, and while some of the divorces granted were from cases begun in previous years, and many cases begun went over for action to the following year, the ratio would seem to be a useful one, and more reliable than the ratio of divorces granted to cases pending, as a basis for determining the proportion of divorce suits that end in divorce.

According to statements received at this Department from county clerks, there were 3,907 bills for divorce pending in the courts of this State on January 1, 1901. The number of new bills filed during the year, as stated above, was 3,883, making a total of 7,790 cases under consideration by the courts during the year.

Taking this number as the aggregate number of cases before the courts, then the number granted would constitute 31.4 per cent of the total number of petitions. Such a comparison as the above, however, should be taken only as a very general one.

Relative to the returns of births as shown in this table, attention should again be called to the absolute unreliability of any figures showing returns of births in this State. According to the figures shown in this table, there was a decrease, 478, for 1901 from the number returned for the preceding year.

That this decrease, however, was only apparent and not real is likely to be true. The county of Wayne alone shows an apparent decrease of 882, which seems very improbable, especially when we consider the large increase of population. It would, indeed, be very desirable that these statistics of births should be collected in such a way that they might be reasonably accurate, and the conclusions drawn from them would then be acceptable without making the usual large discount for imperfect returns.

VITAL STATISTICS OF MICHIGAN, 1901.

Table 7.—Deaths, marriages, divorces and births in Michigan, by counties, for the years 1900-1901; showing also the increase (or decrease) of the number registered for 1901 as compared with that of the preceding year. (Stillbirths included in births and excluded from deaths.)

State and counties.	Deaths.*			Marriages.			Divorces.			Births.*		
	Number in 1901.	Number in 1900.	Increase or de- crease.	Number in 1901.	Number in 1900.	Increase or de- crease.†	Number in 1901.	Number in 1900.	Increase or de- crease.	Number in 1901.	Number in 1900.	Increase or de- crease.
State.....	32,834	32,553	281	24,079	23,295	784	2,448	2,435	13	43,221	43,609	-478
Alcona.....	63	44	19	43	36	7	1	2	-1	81	110	-29
Alder.....	48	68	-20	39	65	-26	6	5	1	101	117	-16
Allegan.....	496	433	63	302	312	-10	83	43	40	574	634	-60
Alpena.....	210	266	-56	160	188	-28	8	8	0	472	471	1
Antrim.....	209	267	-58	175	172	3	16	22	-7	219	198	21
Arenac.....	120	117	3	101	96	5	1	5	-4	200	199	1
Baraga.....	60	34	26	31	44	-13	1	0	1	104	94	10
Barry.....	267	270	-3	219	212	7	37	42	-5	319	298	21
Bay.....	782	824	-42	560	557	3	40	38	2	1,362	1,240	122
Benzie.....	136	119	17	87	95	-8	14	10	4	219	169	50
Berrien.....	659	590	69	1,490	1,448	42	57	59	-2	572	585	-13
Branch.....	381	392	-11	288	277	21	30	31	-1	337	358	-21
Calhoun.....	736	648	88	493	509	-16	83	94	-11	623	610	13
Cass.....	269	284	-15	201	212	-11	81	18	13	235	216	19
Charlotte.....	176	193	-17	130	167	-37	10	8	2	247	221	26
Cheboygan.....	201	170	31	143	129	14	14	8	6	291	288	3
Chippewa.....	313	301	12	271	200	71	13	5	8	399	458	-59
Clare.....	90	101	-11	83	67	16	9	9	0	160	156	4
Clinton.....	337	312	25	243	230	13	22	27	-5	371	364	7
Crawford.....	26	22	4	27	26	1	2	4	-2	36	45	-9
Delta.....	297	373	-76	239	248	-9	11	12	-1	656	588	68
Dickinson.....	253	233	20	214	194	20	8	7	1	618	575	43
Eaton.....	403	392	11	357	310	47	60	52	8	386	363	22
Emmet.....	214	216	-2	188	171	17	20	26	-6	271	296	-25
Genesee.....	572	534	38	401	402	-1	61	53	8	471	496	-24
Gladwin.....	63	67	-4	68	57	11	6	1	5	166	115	51
Gogebic.....	257	244	13	13	181	40	5	2	3	558	564	-6
Grand Traverse.....	342	297	45	229	237	-8	32	31	1	285	286	-3
Gratiot.....	361	392	-31	331	316	15	35	35	0	379	420	-41
Hillsdale.....	422	369	53	317	313	4	41	35	6	312	296	16
Houghton.....	892	919	-27	757	752	5	14	14	0	2,682	2,634	48
Huron.....	373	343	30	265	276	-11	7	7	0	818	814	4
Ingham.....	542	565	-23	395	376	20	27	31	-4	431	422	9
Ionia.....	464	488	-24	382	312	70	43	44	-2	406	435	-27
Iosco.....	135	116	19	71	91	-20	4	6	-2	224	192	32

# VITAL STATISTICS AND POPULATION.

xxi

	105	81	24	81	108	-22	5	6	-1	215	212	3
Iron.....	248	295	-52	219	108	-1	25	25	0	455	481	34
Isabella.....	615	578	-37	474	474	34	83	70	4	606	739	43
Jackson.....	740	722	18	495	435	60	90	68	22	557	778	231
Kalamazoo.....	88	90	-11	78	68	10	16	7	0	116	83	33
Kalamazoo.....	1,769	1,793	-24	1,398	1,294	104	190	213	-23	1,924	2,416	492
Kent.....	41	44	-3	25	22	3	17	1	16	107	103	4
Keweenaw.....	58	63	-5	50	58	-8	5	4	1	100	74	26
Lapeer.....	415	351	64	276	242	34	23	35	-12	342	390	38
Lapeer.....	122	152	-30	70	81	-2	6	7	-1	159	186	27
Lehiawee.....	704	672	32	423	464	41	61	58	3	565	563	19
Livingston.....	262	260	2	163	152	11	15	17	-3	237	235	2
Lucas.....	43	40	3	34	25	9	8	2	1	74	41	33
Lucas.....	82	77	5	73	68	5	2	4	-2	121	90	32
Mackinac.....	483	494	-15	265	246	20	29	24	-5	468	508	40
Macomb.....	305	358	-53	207	201	6	15	5	10	470	608	138
Manistee.....	507	519	-12	366	378	-12	8	7	1	1,429	1,298	136
Marquette.....	265	263	-2	157	163	-6	10	20	3	376	404	28
Mason.....	275	268	7	174	192	-18	18	16	-2	332	305	27
McDonnell.....	294	298	-4	322	291	31	8	16	-8	585	418	167
Midland.....	163	192	-1	125	110	15	8	8	0	252	272	20
Missaukee.....	86	102	-16	84	75	9	10	10	0	220	232	12
Monroe.....	418	446	-28	410	393	47	22	23	-1	543	538	5
Montcalm.....	419	446	-20	306	321	-13	37	42	-5	442	408	33
Montmorency.....	32	26	6	95	26	0	6	4	2	32	57	25
Muskegon.....	446	476	-30	334	320	14	44	41	3	691	682	69
Newaygo.....	216	215	1	161	151	10	23	14	9	225	176	49
Oakland.....	684	630	54	298	256	-58	35	37	-2	540	439	101
Oceana.....	211	213	-2	166	185	11	27	24	-3	276	245	31
Ogemaw.....	89	82	7	60	72	-13	3	3	-1	113	132	31
Ontonagon.....	83	80	3	51	38	13	4	3	4	173	139	44
Oscoda.....	185	249	-64	170	159	-13	17	11	6	334	331	3
Oscoda.....	6	6		12	14	-6	1	1	0	21	16	5
Oshtemo.....	82	83	-1	72	54	19	0	3	-3	121	110	11
Pittsford.....	467	498	-31	362	331	31	15	18	-3	718	708	80
Presque Isle.....	108	95	13	79	68	-5	7	1	6	227	218	9
Roscommon.....	27	13	14	13	8	38	94	110	-14	40	39	11
Saginaw.....	1,091	1,038	53	804	766	38	54	39	15	1,636	1,182	454
St. Clair.....	770	453	46	453	407	16	54	39	15	871	805	66
St. Joseph.....	323	323	33	183	204	-21	29	12	17	286	289	27
Sauquoit.....	409	298	-60	298	290	16	10	15	-5	710	645	65
Schoolcraft.....	113	104	9	83	77	6	6	12	-6	188	143	29
Shiawassee.....	457	439	18	351	367	-16	57	70	-13	457	468	81
Tuscola.....	509	473	36	316	327	11	31	38	-2	546	611	63
Van Buren.....	466	444	51	323	327	46	44	46	-7	591	577	14
Washtenaw.....	666	603	47	340	325	16	45	382	-32	516	594	78
Wayne.....	5,503	5,414	89	3,066	2,830	136	360	382	6	7,439	8,321	882
Wexford.....	215	180	-44	180	194	-14	26	20	0	382	356	24

+Decrease indicated by minus sign (-).

\*Stillbirths not included in deaths, but included in births (returned under old law).

## PART II.—DEATHS AND CAUSES OF DEATH IN MICHIGAN DURING THE YEAR 1901.

The total number of deaths returned to the Department of State during the year, under the law requiring certificates of death and burial permits, was 32,834, an increase of 281 over the previous year. This number is exclusive of stillbirths, of which 1,501 were also returned on certificates of death.

Quite a large number of districts, aggregating a population of 21,821 persons, have been exempt heretofore from the law requiring the immediate registration of deaths and the issue of burial or removal permits, owing to the very sparse population. We are pleased to say, however, that on March 18, 1901, an amendment to the registration law was passed, taking immediate effect, whereby the entire State was brought under the provisions of the law. Many of the districts, however, that were legally exempt during the first two and one-half months of the year made voluntary monthly reports to the Department, so that very few deaths escaped registration from the fact that a few nonregistration districts existed for a short time in the early part of the year.

As the number of deaths thus possibly escaping registration was very small and probably not sufficient to affect the death rate in any way, no account is made of them in this report.

In Table 1, Part I, is presented a statement of the number of deaths occurring each month of the year, together with the daily averages.

The largest number of deaths occurring in any month was during March, with 3,390, but the month of largest *daily average* was February, having 3,089 deaths, but with a daily average of 110.3. The months in which the least number of deaths occurred were June and November, 2,354 each, but the month of least *daily average* was July, with 77.3 deaths per day.

Table 2, Part I, shows the deaths and death rates for previous years in comparison with 1901. Under the International Classification, which has now come into general use, stillbirths are excluded from deaths, being relegated to a separate class.

In examining Table 2, it may be noted that while the rates for the years of registration under the old law, prior to 1898, are too imperfect to be directly comparable with the later years, 1898, 1899, 1900 and 1901, nevertheless, it is probable that the variations in the mortality are, for the most part, correctly indicated. The method of enumeration remained uniform during the earlier period, 1867-97, so that, undoubtedly, the general degree of accuracy remained the same.

Among other classes of vital statistics presented in Table 6, the distribution of deaths through the various counties of the State is also shown, the death rates there shown being based upon the estimated populations. In comparing the death rates of the several counties, as shown in this table, due attention should be given to the age and sex distribution, which greatly affects rates of mortality.

As in previous reports, this portion is divided into two sections, viz., Section I, The Incidence of Deaths, by months, sex, age, geographical location, etc., and Section II, The Causes of Death. It should not be understood that the second division fails to study the factors mentioned in the preceding group, but its distinctive feature is that it classifies them with reference to particular diseases, instead of simply showing their relation to total mortality.

## SECTION I.—INCIDENCE OF DEATHS IN MICHIGAN DURING THE YEAR 1901.

The tables in this section contain statements in regard to the incidence of deaths in the State during the year 1901, arranged to show the following particulars: (1) Deaths from all causes by months; (2) number and proportion of each sex among the decedents; (3) deaths by ages of decedents; (4) geographical distribution of deaths; and (5) location as urban and rural. Herewith is presented a brief statement of the more prominent facts contained in this section.

Following are some of the most important facts relative to the occurrence of deaths from all causes during the year 1901:

Total number of deaths returned, 1901.....	32,834
Death rate per 1,000 population, 1901.....	13.4

In addition to the above stated number of deaths, there were also 1,501 stillbirths included among the returns of deaths but no longer compiled with them.

Stillbirths registered, 1901.....	1,501
Stillbirth rate per 1,000 population, 1901.....	0.6

As to the monthly incidence of deaths, we have:

More than average mortality, 1901.....	January, February, March, April, September
Less than average mortality, 1901.....	May, June, July, August, October, November, December
Maximum mortality, 1901.....	March, 3,390 deaths or 17.2 per 1,000
Minimum mortality, 1901.....	June and November, 2,354 deaths or 11.7 per 1,000

By sex, there were:

Males dying in Michigan, 1901.....	17,540 or 13.9 per 1,000 male inhabitants
Females dying in Michigan, 1901.....	15,273 or 12.9 per 1,000 female inhabitants
Ratio of death rate of males to death rate of females, 1901.....	108 per cent

By age periods there were, exclusive of stillbirths, deaths as follows:

Under 1 year of age.....	6,319 or 19.2 per cent
Under 5 years of age.....	8,571 or 26.1 per cent
Aged 5 to 14 years.....	1,461 or 4.4 per cent
Aged 15 to 64 years.....	12,993 or 39.6 per cent
Aged 65 years and over.....	9,692 or 29.5 per cent



By geographical sections, we have the following:

Death in the Upper Peninsula.....	3,388 or 12.5 per 1,000 population
Northern counties.....	3,664 or 12.1 per 1,000 population
Central counties.....	5,461 or 12.4 per 1,000 population
Southern counties.....	20,331 or 14.2 per 1,000 population

Distinguished as urban and rural there were:

Deaths in cities.....	13,837 or 42.1 per cent death rate 14.4 per 1,000 population
Deaths in country.....	18,997 or 57.9 per cent; death rate 12.8 per 1,000 population

#### DEATHS BY MONTHS AND QUARTERS, 1901.

The distribution of deaths by months and quarters for the year is shown in Table 8, the mortality being distributed through the months about as evenly as it was in the preceding year. The maximum monthly rate, however, 16.4, was in the month of February, while in the preceding year it was 17.1 for September. March had the largest number of deaths for any month during the year, 3,390, while the largest daily average was for the month of February. The least number of deaths occurred during the months of June and November, each being credited with 2,354 deaths, with a corresponding rate of 11.7. While March had the greatest number of deaths numerically, the highest death rate per 1,000 estimated population was for February, 16.4; and although, as noted above, June and November had the fewest number of deaths, the minimum death rate per 1,000 estimated population, 11.5, was for the month of July.

It will be observed also in this table that for convenience of comparison in studying the comparative mortality by months, a scale on which the average number of deaths per month is taken as 100 is used. By the use of this scale, we find the months standing in the following order: February, 123; March, 122; January, 112; April, 107; September, 105; May, 97; December, 95; August, 92; October, 88; June and November, each 87; July, 86.

A comparison of the death rates of the months, as based on the final compilation of returns after all delinquent districts have been reported, with the rates as originally printed in the Monthly Bulletins, is also shown in this table.

An interesting feature is also appended to this table showing the increase or decrease in rates corrected for increase or decrease of reporting population.

In Table 9 the total number of deaths for the year, as published in the Monthly Bulletins, is shown, 32,339, in comparison with the number ultimately returned and compiled in this report 32,834; thus it will be seen that there were 495 delayed returns during the year, that is, returns not reaching the State Department until after the close of the Bulletin each month, as compared with 458 during the preceding year. It should not be considered, however, that the 495 deaths noted as delayed returns in this table, were long delayed, the great majority being received only a few days after the close of the Bulletin, which is usually about the twelfth of each month. The final figures as compared with the original returns make but very slight variations, affecting only the decimal part of the rates. The monthly differences, however, vary somewhat irregularly, as shown in this table.

Table 8.—Deaths in Michigan by months and quarters, 1901. (Stillbirths excluded.)

Year and months.	Number of deaths.		Average number per day.	Rank.	Death rate per 1,000 estimated population.	Death rates as originally printed in Bulletin.*	Preceding column corrected for increase of reporting population.	Increase for delayed returns.†
	By months.	By quarters.						
Year, 1901.....	32,834	32,834	.....	1,200	13.4	14.0	.....	0.1
January.....	3,128	9,607	100.9	112	15.1	15.7	15.0	0.1
February.....	3,089		110.4	123	16.4	17.1	16.3	0.1
March.....	3,390		109.4	122	16.3	17.2	16.3	.....
April.....	2,894	7,968	96.5	107	14.4	15.3	14.4	.....
May.....	2,720		87.7	97	13.1	13.7	13.0	0.1
June.....	2,354		78.5	87	11.7	12.5	11.7	.....
July.....	2,395	7,815	77.3	86	11.5	12.2	11.5	.....
August.....	2,573		83.0	92	12.4	13.1	12.3	0.1
September....	2,847		94.9	105	14.2	14.7	14.1	0.1
October.....	2,435	7,444	78.5	88	11.7	12.6	11.8	-0.1
November.....	2,354		78.5	87	11.7	12.5	11.6	0.1
December.....	2,655		85.6	95	12.8	13.5	12.7	0.1
Average..	2,736	8,209	90.1	100	.....	.....	.....	.....

\* For the year 1901 the reporting population was not estimated, as has been the usual practice but the census figures for 1900 were used. The resulting differences can be noted by examining the following column, which is employed in the subsequent comparison of rates.

† Decrease indicated by minus sign.

Table 9.—Delayed returns of deaths by months, 1901. (Stillbirths excluded.)

Deaths returned and published in—	Total deaths, 1901.	Months of death, 1901.											
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Annual Registration Report.....	32,834	3,128	3,089	3,390	2,894	2,720	2,354	2,395	2,573	2,847	2,435	2,354	2,655
Monthly Bulletins...	32,339	3,061	3,034	3,341	2,864	2,664	2,334	2,351	2,539	2,801	2,416	2,305	2,629
Delayed returns.....	495	67	55	49	30	56	20	44	34	46	19	49	26
Per cent*.....	1.5	2.1	1.8	1.4	1.0	2.1	0.8	1.8	1.3	1.6	0.8	2.1	1.0

\* Per cent of deficiency of Bulletin returns as compared with final figures of report (=100%).

## MORTALITY OF THE SEXES IN MICHIGAN, 1901.

The distribution of deaths by sex during the year 1901 is shown in Table 10, together with a comparison with the estimated population of each sex, and also of the results of the preceding years, 1890-1900, with the twelve-year average, 1890-1901.

Excluding stillbirths, there were 17,540 male decedents and 15,273 female decedents during the year. The respective death rates were 13.9 and 12.9 per thousand population. These death rates are strictly comparable only with those of the years 1898, 1899 and 1900, as the previous years, 1890-97, were collected under the very imperfect law that was then in effect. However, the relative number of males per one hundred deaths of females for the year, 114.8, is fully comparable with the cor-

responding ratios for the preceding years, and the relative male mortality shown in the last column of the table, 108 per cent, which is the ratio of the death rates of males to the death rates of the females taken as 100 per cent, is also correctly shown. The fact of the exclusion of stillbirths for the current year should be considered, this factor possessing a high relative male mortality.

As usual, the male mortality somewhat exceeds the female mortality, the number being 2,267. A more satisfactory and complete comparison, however, can be made by means of Table 12, which gives the important item of age distribution by sexes.

Table 10.—Deaths and death rates in Michigan by sex, 1890-1901. (Stillbirths included.)

Year.	Population.		Number of deaths.		Rates per 1,000.		Deaths of males to 100 deaths of females.	Relative male mortality.†
	Males.	Females.	Males.	Females.	Males.	Females.		
1890*.....	1,091,780	1,002,109	11,801	9,771	10.8	9.8	120.7	110
1891.....	1,108,970	1,021,857	11,908	9,998	10.7	9.8	119.1	109
1892.....	1,126,160	1,041,605	11,837	9,809	10.5	9.4	120.7	112
1893.....	1,143,350	1,061,353	11,772	10,142	10.3	9.6	116.1	107
1894*.....	1,160,540	1,081,101	11,159	9,744	9.6	9.0	114.5	107
1895.....	1,177,730	1,100,849	12,161	10,510	10.3	9.5	115.7	108
1896.....	1,194,920	1,120,597	11,807	10,119	9.9	9.0	116.7	110
1897.....	1,212,110	1,140,345	10,294	8,829	8.5	7.7	116.6	110
1898.....	1,229,300	1,160,093	15,624	13,809	12.7	11.9	113.1	107
1899.....	1,246,490	1,179,841	18,025	15,005	14.5	13.2	115.5	110
1900*.....	1,248,905	1,172,077	17,948	15,772	14.4	13.5	113.8	107
1901‡.....	1,263,632	1,187,240	17,540	15,273	13.9	12.9	114.8	108
Average, 1890-1901	1,183,657	1,105,756	13,490	11,615	11.4	10.5	116.1	109

\* Census years.

† Ratio of *death rates* (not deaths) of males to death rates of females. This comparison eliminates the unequal distribution of the sexes in the population.

‡ Stillbirths excluded.

#### DEATHS BY SEXES AND AGE PERIODS, 1901

In Table 11 will be found data showing the general distribution of deaths returned for the year 1901, distinguishing the sexes and age periods of the decedents. Stillbirths are not included in this table, as formerly. The relations of the number of deaths at each year under five and at quinquennial age periods up to the age of eighty years are given. It will be noted that 19.2 per cent of the total number of deaths in the State were under one year of age, and 26.1 per cent in the age period under five years. In other words over one-fourth of the total number of deaths recorded for the year were those of children under five years of age, the percentage for males being somewhat higher than that for females.

Comparison of the percentage of deaths of males and females to the total number of deaths, exclusive of unknown sex, shows that for most

periods of age the percentage of males is the larger. Exceptions are for the ages fifteen to thirty-four, corresponding to the child-bearing age of females, during which the number of deaths recorded is greater than those of males.

Table 11.—Deaths in Michigan by sex and age periods, 1901. (Stillbirths excluded.)

Ages.	Number of deaths, 1901.				Per cent of deaths at each age to total at all ages.			Per cent of deaths of each sex to total of both sexes.*				Excess of the sexes by number.		Males to 100 females.
	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Males.	Females.	Excess.		Males.	Females.	
										Males.	Females.			
All ages.....	32,834	17,540	15,273	21	100.0	100.0	100.0	53.5	46.5	7.0	.....	2,267	.....	115
Under 1 year..	6,319	3,583	2,730	6	19.2	20.4	17.9	56.8	43.2	13.6	.....	853	.....	131
1 year.....	1,121	594	526	1	3.4	3.4	3.4	53.0	47.0	6.0	.....	68	.....	113
2 years.....	530	274	256	.....	1.6	1.6	1.7	51.7	48.3	3.4	.....	18	.....	107
3 years.....	348	163	185	.....	1.1	0.9	1.2	46.8	53.2	.....	6.4	.....	22	88
4 years.....	253	135	118	.....	0.8	0.8	0.8	53.4	46.6	6.8	.....	17	.....	114
Under 5 years..	8,571	4,749	3,815	7	26.1	27.1	25.0	55.5	44.5	11.0	.....	934	.....	124
5 to 9 years....	786	399	387	.....	2.4	2.3	2.5	50.8	49.2	1.6	.....	12	.....	103
10 to 14 years..	675	380	295	.....	2.1	2.2	1.9	56.3	43.7	12.6	.....	85	.....	129
15 to 19 years..	1,056	522	534	.....	3.2	3.0	3.5	49.4	50.6	.....	1.2	.....	12	98
20 to 24 years..	1,301	631	670	.....	4.0	3.6	4.4	48.5	51.5	.....	3.0	.....	39	94
25 to 29 years..	1,262	585	677	.....	3.8	3.3	4.4	46.4	53.6	.....	7.2	.....	92	86
30 to 34 years..	1,151	515	636	.....	3.5	2.9	4.2	44.7	55.3	.....	10.6	.....	121	81
35 to 39 years..	1,163	586	577	.....	3.5	3.3	3.8	50.4	49.6	0.8	.....	9	.....	102
40 to 44 years..	1,196	633	563	.....	3.6	3.6	3.7	52.9	47.1	5.8	.....	70	.....	112
45 to 49 years..	1,189	637	552	.....	3.6	3.6	3.6	53.6	46.4	7.2	.....	85	.....	115
50 to 54 years..	1,374	736	638	.....	4.2	4.2	4.2	53.6	46.4	7.2	.....	98	.....	115
55 to 59 years..	1,561	860	701	.....	4.8	4.9	4.6	55.1	44.9	10.2	.....	159	.....	123
60 to 64 years..	1,740	947	793	.....	5.3	5.4	5.2	54.4	45.6	8.8	.....	154	.....	119
65 to 69 years..	2,249	1,240	1,009	.....	6.8	7.1	6.6	55.1	44.9	10.2	.....	231	.....	123
70 to 74 years..	2,241	1,253	988	.....	6.8	7.1	6.5	55.9	44.1	11.8	.....	265	.....	127
75 to 79 years..	2,222	1,204	1,018	.....	6.8	6.9	6.7	54.2	45.8	8.4	.....	186	.....	118
80 yrs. and over	2,980	1,583	1,397	.....	9.1	9.0	9.1	53.1	46.9	6.2	.....	186	.....	113
Unknown ages	117	80	23	14	0.4	0.5	0.2	77.7	22.3	55.4	.....	57	.....	348

\* Unknown sex excluded.

In order to obtain a more satisfactory statement of the mortality of the sexes by ages, Table 12 has been prepared, showing the estimated population for each sex and age.

The total death rate for both sexes, 13.4 per 1,000 estimated population, is based on the total estimated population for the State for the year. In like manner the rates for individual ages are based on partial popu-

lations for these ages estimated in the same manner as the total population.

Considered with reference to the sex distribution of the population, the death rate of males for the year, 13.9 per 1,000, as compared with the death rate of females for the year, 12.0 per 1,000, represents a relative male mortality of 108 per cent. The relative male mortality is highest under one year of age, although the period 10-14 nearly reaches it.

**Table 12.—Deaths and death rates in Michigan by age periods and sex, 1901. (Stillbirths excluded.)**

Ages.	Estimated population, 1901.			Deaths, 1901.				Death rates per 1,000 estimated population of same age and sex, 1901.			Relative male mortality.*
	Total.	Males.	Females.	Total.	Male.	Females.	Unknown.	Total.	Males.	Females.	
All ages.....	2,450,872	1,263,633	1,187,239	32,834	17,540	15,273	21	13.4	13.9	12.9	108
Under 1 year.....	53,929	27,303	26,626	6,319	3,583	2,730	6	117.2	131.2	102.5	128
1 year.....	50,783	25,679	25,104	1,121	594	526	1	22.1	23.1	21.0	110
2 years.....	50,035	25,396	24,639	530	274	256	....	10.6	10.8	10.4	104
3 years.....	53,105	26,752	26,353	348	163	185	....	6.6	6.1	7.0	87
4 years.....	52,253	26,302	25,951	253	135	118	....	4.8	5.1	4.5	113
Under 5 years.....	260,105	131,432	128,673	8,571	4,749	3,815	7	33.0	36.1	29.6	122
5 to 9 years.....	266,570	135,260	131,310	786	399	387	....	2.9	2.9	2.9	100
10 to 14 years.....	250,609	126,338	124,271	675	380	295	....	2.7	3.0	2.4	125
15 to 19 years.....	235,176	117,364	117,812	1,056	522	534	....	4.5	4.4	4.5	98
20 to 24 years.....	224,723	112,782	111,941	1,301	631	670	....	5.8	5.6	6.0	93
25 to 29 years.....	200,026	102,278	97,748	1,262	585	677	....	6.3	5.7	6.9	83
30 to 34 years.....	179,878	93,191	86,687	1,151	515	636	....	6.4	5.5	7.3	75
35 to 39 years.....	167,119	88,040	79,079	1,163	586	577	....	7.0	6.7	7.3	92
40 to 44 years.....	151,381	81,061	70,320	1,196	633	563	....	7.9	7.8	8.0	98
45 to 49 years.....	124,608	67,233	57,375	1,189	637	552	....	9.5	9.5	9.6	99
50 to 54 years.....	105,713	57,247	48,466	1,374	736	638	....	13.0	12.9	13.2	98
55 to 59 years.....	88,407	46,769	41,638	1,561	860	701	....	17.7	18.4	16.8	110
60 to 64 years.....	68,132	35,698	32,434	1,740	947	793	....	25.5	26.5	24.4	109
65 to 69 years.....	52,615	27,865	24,750	2,249	1,240	1,009	....	42.7	44.5	40.8	109
70 to 74 years.....	34,830	18,597	16,233	2,241	1,253	988	....	64.3	67.4	60.9	111
75 to 79 years.....	21,765	11,794	9,971	2,222	1,204	1,018	....	102.1	102.1	102.1	100
80 years and over.	15,345	7,970	7,375	2,980	1,583	1,397	....	194.2	198.6	189.4	105
Unknown.....	3,870	2,714	1,156	117	80	23	14	30.2	29.5	19.9	148

\* Ratio of death rates of males to death rates of females.

**Table 13.—Death rates and ratios of deaths at certain periods of age, 1870-1901. (Still-births excluded from both births and deaths.)**

Years and periods.	Death rates per 1,000 population of corresponding age.						Percentages of deaths at each age to total deaths at all ages.					Deaths of infants under 1 year of age per 1,000 living births.
	All ages.	Under 1 year.	Under 5 years.	5 to 14.	15 to 64.	65 and over.	Under 1 year.	Under 5 years.	5 to 14.	15 to 64.	65 and over.	
1870.....	8.9	74.4	26.5	3.5	5.4	37.0	23.5	42.1	9.6	36.6	11.6	91.3
1871.....	7.7	58.3	21.2	2.9	4.8	39.9	21.2	38.7	9.3	38.1	14.0	75.6
1872.....	10.3	88.7	30.9	4.0	6.3	38.1	23.9	41.6	9.3	37.2	11.9	110.9
1873.....	10.6	92.4	31.7	4.4	6.5	41.2	23.9	40.9	9.9	37.2	12.0	96.0
1874.....	8.8	79.5	25.7	3.0	5.6	38.0	24.6	39.6	8.1	38.7	13.7	94.8
1875.....	8.1	71.2	23.3	2.6	5.1	34.6	24.2	39.1	7.8	39.1	14.0	85.5
1876.....	8.2	72.0	23.5	3.0	5.0	37.9	23.7	38.3	8.5	37.8	15.4	82.8
1877.....	8.1	66.9	23.0	3.2	5.0	37.1	22.1	37.5	9.2	37.8	15.4	81.1
1878.....	7.7	59.7	21.2	3.4	4.6	36.0	20.6	35.8	10.0	38.0	16.0	70.5
1879.....	8.6	67.5	24.3	4.3	5.0	38.5	20.8	36.7	11.7	36.0	15.7	84.1
1880.....	9.4	75.7	27.4	4.6	5.4	39.9	21.5	37.9	11.3	35.7	15.2	93.5
1881.....	11.0	91.7	33.8	6.1	6.1	41.3	21.7	39.0	12.6	34.7	13.7	116.4
1882.....	9.0	73.3	26.1	4.7	5.3	36.8	20.9	36.3	11.9	36.3	15.4	88.7
1883.....	9.0	74.5	25.8	3.8	5.5	37.7	21.1	35.5	9.7	38.5	16.3	83.0
1884.....	9.4	88.5	28.7	3.8	5.5	39.2	23.7	37.4	9.2	36.9	16.5	101.2
1885.....	8.4	72.9	23.6	3.2	5.2	37.6	21.6	34.1	8.6	39.1	18.2	81.2
1886.....	9.0	83.2	27.2	3.3	5.4	38.7	22.8	36.4	8.3	37.5	17.9	96.1
1887.....	9.5	86.1	28.4	3.4	5.7	41.4	22.1	35.5	8.1	37.9	18.5	(97.2) 89.3
1888.....	10.2	97.0	30.8	3.3	6.2	44.9	23.0	35.4	7.2	38.3	19.1	(103.4) 97.2
1889.....	9.3	84.5	27.6	3.2	5.8	40.4	21.7	34.3	7.6	39.1	19.1	(91.1) 84.9
1890.....	9.7	84.0	27.2	3.8	6.1	41.9	20.6	32.4	8.6	39.7	19.4	(89.7) 80.8
1891.....	9.9	86.3	26.9	3.3	6.1	46.0	21.3	32.0	7.5	39.2	21.2	(93.7) 87.8
1892.....	9.6	78.3	25.1	3.2	5.9	47.0	20.2	31.0	7.4	39.3	22.4	90.5
1893.....	9.5	80.8	25.0	3.1	5.9	46.8	21.1	31.1	7.2	39.1	22.4	93.2
1894.....	8.9	75.3	22.8	2.6	5.7	43.5	21.2	30.6	6.4	40.8	22.3	95.9
1895.....	9.5	78.0	23.2	2.5	6.2	50.9	20.6	29.1	5.7	41.0	24.2	97.9
1896.....	9.0	69.6	21.8	2.6	5.7	46.2	20.0	29.5	6.3	40.4	23.7	91.0
1897.....	8.1	61.9	18.9	2.4	5.2	45.1	19.6	28.1	6.3	40.3	25.3	86.6
1898.....	11.8	88.6	26.0	2.6	7.5	74.0	19.6	26.8	4.6	39.8	28.8	.....
1899.....	13.3	99.6	29.8	3.0	8.3	84.0	19.6	27.5	4.7	38.8	29.1	.....
1900.....	13.4	126.8	36.2	3.1	8.2	71.9	21.2	29.1	4.9	38.3	27.3	.....
1901.....	13.4	117.2	33.0	2.8	8.4	76.4	19.2	26.1	4.4	39.6	29.5	.....
1870-74.....	9.3	78.7	27.2	3.6	5.7	38.2	23.4	40.6	9.2	37.6	12.6	93.7
1875-79.....	8.1	67.5	23.1	3.3	4.9	36.8	22.3	37.5	9.4	37.7	15.3	80.8
1880-84.....	9.6	80.7	28.4	4.6	5.6	39.0	21.8	37.2	10.9	36.4	15.4	96.6
1885-89.....	9.3	84.7	27.5	3.3	5.7	40.6	22.2	35.1	8.0	38.4	18.6	(93.8) 89.7
1890-94.....	9.5	80.9	25.4	3.2	5.9	45.0	20.9	31.4	7.4	39.6	21.5	(92.6) 89.6
1895-99.....	10.3	79.5	23.9	2.6	6.6	60.0	19.9	28.2	5.5	40.1	26.2	.....
1870-99.....	9.4	78.7	25.9	3.4	5.7	43.3	21.8	35.0	8.4	38.3	18.3	.....

NOTE.—The numbers in parentheses in the last column represent the figures for infant mortality after correction, as far as possible, for fraudulent returns of births and deaths from Wayne county (Detroit) during the years 1887-91. See report for 1892, p. 14. No comparison can be made of the deaths as accurately registered under the new law for the years 1898-1901 with the very imperfect returns of births obtained under the law of 1867, which has never been amended.

## DEATH RATES AND PROPORTIONAL DEATHS BY AGE PERIODS, 1870-1901.

Table 13 compares the incidence of mortality from all causes at certain important periods of age and also states the proportional deaths at those periods. The increased accuracy of registration beginning with the year 1898 will account for the higher rates shown for the past few years. While the proportional deaths should not be necessarily affected by increased accuracy of registration, assuming that one age was just as liable as another to be omitted under the old law, it is possible that study may show some differential selection of certain ages, and hence conclusions in involving comparisons of the two sets of returns should be cautiously drawn.

Table 14.—Mortality in Michigan, by geographical sections and groups of cities,

Population by geographical sections and as urban and rural.	Total reporting population by U. S. census of 1900.	Total deaths reported for 1901.	Annual death rates per 1,000 population.	Still-births.	Important			
					Under 1.		1 to 4.	
					Number.	Per cent.	Number.	Per cent.
JANUARY.....	2,386,359	3,173	15.7	112	544	17.8	192	6.3
I.—UPPER PENINSULA.....	245,728	279	13.4	12	60	22.5	44	16.5
II.—NORTHERN COUNTIES.....	282,027	361	15.1	16	85	24.6	23	6.7
III.—CENTRAL COUNTIES.....	437,983	514	13.8	13	108	21.6	30	6.0
IV.—SOUTHERN COUNTIES.....	1,420,621	2,019	16.8	71	291	14.9	95	4.9
ALL CITIES.....	943,184	1,374	17.2	72	246	18.9	89	6.8
Over 50,000.....	373,269	555	17.5	40	126	24.5	33	6.4
25,000 to 50,000.....	95,153	153	19.0	5	20	13.5	13	8.8
10,000 to 25,000.....	212,890	267	14.8	16	37	14.7	16	6.4
5,000 to 10,000.....	153,006	230	18.2	8	39	17.1	16	7.0
Under 5,000.....	108,866	163	17.7	3	24	15.0	11	6.9
COUNTRY.....	1,443,175	1,799	14.7	40	298	16.9	103	5.9
FEBRUARY.....	2,385,991	3,145	17.1	111	536	17.7	185	6.1
I.—UPPER PENINSULA.....	244,896	292	15.5	17	75	27.3	38	13.8
II.—NORTHERN COUNTIES.....	283,332	330	15.1	12	71	22.3	20	6.3
III.—CENTRAL COUNTIES.....	439,828	566	16.7	17	97	17.7	40	7.3
IV.—SOUTHERN COUNTIES.....	1,417,933	1,957	17.9	65	293	15.5	87	4.6
ALL CITIES.....	943,184	1,301	17.9	68	235	19.1	69	5.6
Over 50,000.....	373,269	521	18.1	41	110	22.9	32	6.7
25,000 to 50,000.....	95,153	127	17.4	6	17	14.0	5	4.0
10,000 to 25,000.....	212,890	286	17.5	10	47	17.0	6	2.2
5,000 to 10,000.....	153,006	232	19.7	7	38	16.9	21	9.3
Under 5,000.....	108,866	135	16.1	4	23	17.6	5	3.8
COUNTRY.....	1,442,807	1,844	16.6	43	301	16.7	116	6.4
MARCH.....	2,395,583	3,468	17.2	147	673	20.1	203	6.1
I.—UPPER PENINSULA.....	247,695	277	13.2	29	86	34.7	36	14.5
II.—NORTHERN COUNTIES.....	289,852	409	16.7	20	101	26.0	26	6.7
III.—CENTRAL COUNTIES.....	437,770	609	16.4	21	124	21.1	45	7.7
IV.—SOUTHERN COUNTIES.....	1,420,666	2,193	18.2	77	362	17.1	96	4.5
ALL CITIES.....	943,184	1,408	17.6	83	278	21.0	78	5.9
Over 50,000.....	373,269	600	19.0	40	145	25.9	37	6.6
25,000 to 50,000.....	95,153	130	16.1	6	10	8.1	6	4.8
10,000 to 25,000.....	212,890	281	15.6	10	44	16.2	10	3.7
5,000 to 10,000.....	153,006	237	18.3	23	50	23.4	13	6.1
Under 5,000.....	108,866	160	17.3	4	29	18.6	12	7.7
COUNTRY.....	1,452,799	2,080	16.9	64	395	19.6	125	6.2
APRIL.....	2,395,268	2,999	15.3	135	497	17.4	175	6.1
I.—UPPER PENINSULA.....	253,629	287	13.8	16	88	32.5	23	8.5
II.—NORTHERN COUNTIES.....	287,471	345	14.6	18	81	24.8	31	9.5
III.—CENTRAL COUNTIES.....	438,741	501	13.9	17	85	17.6	23	4.8
IV.—SOUTHERN COUNTIES.....	1,415,427	1,866	16.1	84	243	13.6	98	5.5
ALL CITIES.....	943,184	1,274	16.5	79	207	17.3	84	7.0
Over 50,000.....	373,269	508	16.4	47	89	19.5	37	8.1
25,000 to 50,000.....	95,153	118	15.1	2	14	12.1	8	6.9
10,000 to 25,000.....	212,890	291	16.7	14	55	19.8	14	5.0
5,000 to 10,000.....	153,006	209	16.7	10	25	12.6	15	7.5
Under 5,000.....	108,866	153	17.1	6	24	16.3	10	6.8
COUNTRY.....	1,452,084	1,725	14.5	56	290	17.4	91	5.5

## DEATHS.

xxxi

as originally published in the Michigan Monthly Bulletin of Vital Statistics, 1901.

ages.		Deaths and annual death rates per 100,000 population from important causes.									
65 and over.		Pulmonary tuberculosis.		Other tuberculosis.		Typhoid fever.		Diphtheria.		Croup.	
Num-ber.	Per cent.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.
972	31.8	235	116.2	30	14.8	76	37.6	37	18.3	32	15.8
27	10.1	26	124.9	4	19.2	8	38.4	9	43.2	4	19.2
68	19.7	28	117.2	3	12.6	10	41.8	5	20.9	5	20.9
159	31.7	41	110.5	4	10.8	9	24.2	5	13.5	3	8.1
718	36.9	140	116.3	19	15.8	49	40.7	18	15.0	20	16.6
347	26.7	109	136.4	12	15.0	24	30.0	18	22.5	14	17.5
128	24.9	44	139.1	6	19.0	4	12.6	6	19.0	7	22.1
46	31.1	13	161.2	3	16.6	3	37.2	1	12.4	2	24.8
58	23.1	21	116.4	3	16.6	5	44.3	3	16.6	3	16.6
64	28.1	16	123.4	2	15.4	5	38.6	4	30.8	1	7.7
51	31.9	16	162.6	1	10.8	4	43.4	4	43.4	1	10.8
625	35.5	126	108.0	18	14.7	52	42.5	19	15.5	18	14.7
1,029	38.9	165	89.9	19	10.4	43	23.4	27	14.7	20	10.9
28	10.2	18	95.6	5	26.5	4	21.2	4	21.2	1	5.3
89	28.0	11	50.5	1	4.6	3	13.6	1	4.6	3	13.8
187	34.1	29	85.7	2	5.9	5	14.8	3	8.9	4	11.8
725	38.3	107	98.1	11	10.1	31	28.4	19	17.4	12	11.0
343	27.8	82	113.0	11	15.2	17	23.4	15	20.7	8	11.0
118	24.6	37	128.9	3	10.4	6	20.9	5	17.4	3	10.4
48	39.7	8	109.3	1	13.7	2	27.3	3	18.3	1	13.7
70	25.4	15	91.6	3	18.3	4	24.4	3	25.5	3	25.5
63	28.0	15	127.4	4	34.0	4	34.0	3	47.8	1	11.9
44	33.6	7	83.6	1	7.2	1	11.9	4	10.8	12	10.8
686	38.1	83	74.8	8	7.2	26	23.4	12	10.8	12	10.8
1,024	30.6	217	106.9	34	16.7	45	22.2	21	10.3	14	6.9
27	10.9	16	76.2	4	19.1	6	28.6	1	4.8	4	19.1
90	23.1	29	118.1	6	24.4	2	8.1	2	8.1	2	8.1
167	28.4	38	102.4	9	24.3	6	16.2	9	24.3	4	10.8
740	35.0	134	111.3	15	12.5	31	25.7	9	7.5	4	3.3
336	25.4	97	121.4	17	21.3	19	23.8	9	11.3	8	10.0
124	22.1	37	117.0	3	9.5	10	31.6	5	15.8	3	9.5
35	28.2	9	111.6	2	24.8	1	12.4	1	12.4	1	12.4
83	30.6	21	116.4	5	27.7	5	27.7	2	11.1	2	11.1
51	23.8	17	131.1	2	15.4	2	15.4	1	7.7	1	7.7
43	27.6	13	140.9	5	54.2	1	10.8	1	9.7	1	10.8
688	34.1	120	97.5	17	13.8	26	21.1	12	9.7	6	4.9
884	30.9	207	105.4	34	17.3	32	16.3	36	18.3	6	3.1
25	9.2	22	105.8	5	24.1	4	19.2	4	19.2	1	4.8
74	22.6	31	131.6	2	8.5	1	4.2	6	25.5	1	4.2
134	27.7	34	94.5	10	27.8	3	8.3	6	16.7	2	5.6
661	36.5	120	103.4	17	14.7	24	20.7	20	17.2	2	1.7
306	25.6	86	111.2	23	29.8	15	19.4	20	25.9	2	2.6
110	24.1	30	98.1	5	16.3	4	13.1	8	26.1	.....	.....
36	30.2	10	128.2	6	76.9	2	25.6	2	25.6	.....	.....
67	24.1	18	103.2	8	45.8	1	5.7	5	28.7	1	5.7
48	24.1	21	167.5	3	23.9	5	39.9	2	15.9	.....	.....
46	31.3	7	78.4	1	11.2	3	33.6	3	33.6	1	11.2
578	34.6	121	101.7	11	9.2	17	14.3	16	13.4	4	3.4



Table 14.—Continued.—Mortality in Michigan, by geographical sections and groups of

Population by geographical sections and as urban and rural.	Scarlet fever.		Measles.		Whooping cough.		Pneumonia.	
	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.
JANUARY.....	30	14.8	3	1.5	13	6.4	402	198.8
I.—UPPER PENINSULA.....	12	57.6	1	4.8	1	4.8	31	148.9
II.—NORTHERN COUNTIES.....	4	16.7	.....	.....	2	8.4	48	200.8
III.—CENTRAL COUNTIES.....	6	16.2	1	2.7	5	13.5	74	199.4
IV.—SOUTHERN COUNTIES.....	8	6.6	1	0.8	5	4.2	249	206.8
ALL CITIES.....	10	12.5	.....	.....	8	10.0	170	212.7
Over 50,000.....	4	12.6	.....	.....	4	12.6	65	205.5
25,000 to 50,000.....	.....	.....	.....	.....	2	24.8	27	334.8
10,000 to 25,000.....	3	16.6	.....	.....	1	5.5	28	155.2
5,000 to 10,000.....	2	15.4	.....	.....	.....	.....	37	285.3
Under 5,000.....	1	10.8	.....	.....	1	10.8	13	140.9
COUNTRY.....	20	16.4	3	2.5	5	4.1	232	189.7
FEBRUARY.....	34	18.5	5	2.7	13	7.1	474	258.3
I.—UPPER PENINSULA.....	8	42.5	.....	.....	3	15.9	39	207.0
II.—NORTHERN COUNTIES.....	5	22.9	.....	.....	1	4.6	55	252.4
III.—CENTRAL COUNTIES.....	8	23.6	2	5.9	4	11.8	92	271.9
IV.—SOUTHERN COUNTIES.....	13	11.9	3	2.8	5	4.6	288	264.0
ALL CITIES.....	12	16.5	.....	.....	7	9.6	184	253.6
Over 50,000.....	4	13.9	.....	.....	3	10.4	77	268.2
25,000 to 50,000.....	.....	.....	.....	.....	.....	.....	21	286.9
10,000 to 25,000.....	1	6.1	.....	.....	2	12.2	34	207.6
5,000 to 10,000.....	7	59.5	.....	.....	.....	.....	32	271.9
Under 5,000.....	.....	.....	.....	.....	2	23.9	20	238.8
COUNTRY.....	22	19.8	5	4.5	6	5.4	290	261.3
MARCH.....	44	21.7	7	3.4	20	9.8	489	240.8
I.—UPPER PENINSULA.....	7	33.3	.....	.....	5	23.8	35	166.7
II.—NORTHERN COUNTIES.....	6	24.4	.....	.....	1	4.1	60	244.3
III.—CENTRAL COUNTIES.....	17	45.8	2	5.4	4	10.8	100	269.5
IV.—SOUTHERN COUNTIES.....	14	11.6	5	4.2	10	8.3	294	244.2
ALL CITIES.....	12	15.0	.....	.....	10	12.5	194	242.7
Over 50,000.....	4	12.6	.....	.....	1	3.2	86	271.9
25,000 to 50,000.....	1	12.4	.....	.....	2	24.8	19	235.6
10,000 to 25,000.....	3	16.6	.....	.....	4	22.2	38	210.6
5,000 to 10,000.....	2	15.4	.....	.....	3	23.1	31	239.1
Under 5,000.....	2	21.7	.....	.....	.....	.....	20	216.8
COUNTRY.....	32	26.0	7	5.7	10	8.1	295	259.6
APRIL.....	17	8.7	5	2.5	15	7.6	361	183.9
I.—UPPER PENINSULA.....	1	4.8	2	9.6	1	4.8	32	153.9
II.—NORTHERN COUNTIES.....	3	12.7	.....	.....	1	4.2	52	220.7
III.—CENTRAL COUNTIES.....	4	11.1	.....	.....	6	16.7	72	200.2
IV.—SOUTHERN COUNTIES.....	9	7.8	3	2.6	7	6.0	205	176.7
ALL CITIES.....	7	9.1	2	2.6	8	10.3	121	156.5
Over 50,000.....	4	13.1	.....	.....	1	3.3	56	183.0
25,000 to 50,000.....	.....	.....	.....	.....	3	38.5	8	102.6
10,000 to 25,000.....	2	11.5	.....	.....	1	5.7	30	171.9
5,000 to 10,000.....	1	8.0	1	8.0	3	23.9	14	111.6
Under 5,000.....	.....	.....	1	11.2	.....	.....	13	145.7
COUNTRY.....	10	8.4	3	2.5	7	5.9	240	201.6

## DEATHS.

xxxiii

cities, as originally published in the Michigan Monthly Bulletin of Vital Statistics, 1901.

Diarrheal diseases under 2 years.		Meningitis.		Influenza.		Puerperal septicemia.		Cancer.		Violence.	
Number.	Death rate.	Number.	Death rate.	Number.	Death rate.	Number.	Death rate.	Number.	Death rate.	Number.	Death rate.
39	19.3	51	25.2	206	101.9	15	7.4	108	53.4	143	70.7
7	33.6	7	33.6	1	4.8	1	4.8	5	24.0	32	153.7
6	25.1	6	25.1	12	50.2	2	8.4	11	46.0	11	46.0
11	29.6	6	16.2	34	91.6	3	8.1	15	40.4	22	59.3
15	12.5	32	26.6	159	132.1	9	7.5	77	64.0	78	64.8
16	20.0	23	28.8	91	113.8	6	7.5	54	67.6	66	82.6
5	15.8	11	34.8	35	110.6	2	6.3	28	88.5	21	66.4
1	12.4	7	38.8	12	148.8	1	12.4	2	24.8	7	86.8
3	16.6	2	15.4	12	66.5	2	15.4	7	38.8	15	33.1
4	30.8	3	32.5	17	131.1	1	10.8	12	92.5	10	77.1
3	32.5	28	22.9	15	162.6	1	7.4	5	54.2	13	140.9
23	18.8			115	94.0	9		54	44.2	77	63.0
34	18.5	31	16.9	378	205.9	18	9.8	121	65.9	100	54.5
8	42.5	1	5.3	10	53.1	4	21.2	11	58.4	18	95.6
4	18.4	5	22.9	29	133.1	2	9.2	7	32.1	8	36.7
5	14.8	9	26.6	95	280.8	2	5.9	19	56.2	11	32.5
17	15.6	16	14.7	244	223.7	10	9.2	84	77.0	63	57.8
15	20.7	14	19.3	117	161.3	9	12.4	68	93.7	40	55.1
7	24.4	7	24.4	32	111.4	4	13.9	19	66.2	18	62.7
1	13.7	2	27.3	20	273.3	2	12.2	8	109.3	4	54.7
3	18.3	2	17.0	24	146.6	2	17.0	23	140.4	10	61.1
2	23.9	3	35.8	25	212.4	1	11.9	9	76.5	7	59.5
19	17.1	17	15.3	16	191.1	9	8.1	9	107.5	1	11.9
				261	235.2			53	47.8	60	54.1
50	24.6	57	28.1	320	157.6	37	18.2	112	55.2	126	62.1
8	38.1	6	28.6	4	19.1	3	14.3	3	14.3	16	76.2
10	40.7	6	24.4	36	146.6	8	32.6	12	48.9	19	77.3
8	21.6	11	29.7	55	148.3	8	21.6	15	40.4	22	59.3
24	19.9	34	28.2	225	186.8	18	15.0	82	68.1	69	57.3
17	21.3	28	35.0	105	131.4	8	10.0	52	65.1	41	51.3
11	34.8	12	37.9	41	129.6	2	6.3	20	63.2	17	53.7
2	11.1	3	37.2	13	161.2	1	12.4	6	74.4	2	24.8
2	15.4	5	27.7	24	133.0	2	11.1	8	44.3	7	38.8
2	21.7	4	30.8	12	92.5	2	15.4	11	84.8	6	46.3
33	26.8	4	43.4	15	162.6	1	10.8	7	75.9	9	97.6
		29	23.6	215	174.6	29	23.6	60	48.7	85	69.0
57	29.0	63	32.1	142	72.3	26	13.2	101	51.4	132	67.2
14	67.3	8	38.5	2	9.6	4	19.2	5	24.1	29	139.5
7	29.7	9	38.2	13	55.2	1	4.2	14	59.4	9	38.2
12	33.4	11	30.6	34	94.5	4	11.1	15	41.7	13	36.1
24	20.7	35	30.2	93	80.2	17	14.7	67	57.7	81	69.8
25	32.3	30	38.8	33	42.7	11	14.2	41	53.0	64	82.8
12	39.2	12	39.2	10	32.7	5	16.3	17	55.6	17	55.6
4	51.3	3	38.5	5	64.1	.....	.....	4	51.3	4	51.3
4	22.9	6	24.4	5	28.7	.....	.....	5	28.7	15	86.0
2	15.9	7	55.8	8	63.8	4	31.9	12	96.7	17	135.6
3	33.6	2	22.4	5	56.0	2	22.4	3	33.6	11	123.3
32	26.9	33	27.7	109	91.6	15	12.6	60	50.4	68	57.1

Table 14.-Continued.—Mortality in Michigan, by geographical sections and groups of

Population by geographical sections and as urban and rural.	Total reporting population by U. S. census of 1900.	Total deaths reported for 1901.	Annual death rates per 1,000 population.	Still-births.	Important			
					Under 1.		1 to 4.	
					Number.	Per cent.	Number.	Per cent.
MAY.....	2,390,587	2,785	13.7	121	326	12.2	162	6.1
I.—UPPER PENINSULA.....	242,907	275	13.4	15	73	28.1	29	11.2
II.—NORTHERN COUNTIES.....	288,386	329	13.5	15	60	19.1	23	7.3
III.—CENTRAL COUNTIES.....	439,421	493	13.2	24	74	15.8	37	7.9
IV.—SOUTHERN COUNTIES.....	1,419,873	1,688	14.0	67	119	7.3	73	4.5
ALL CITIES.....	932,616	1,184	15.0	74	195	17.6	65	5.9
Over 50,000.....	373,269	458	14.5	35	95	22.5	26	6.1
25,000 to 50,000.....	95,153	106	13.1	11	12	12.6	7	7.4
10,000 to 25,000.....	202,352	273	15.9	13	36	13.8	16	6.2
5,000 to 10,000.....	153,006	208	16.0	11	38	16.8	12	6.1
Under 5,000.....	108,866	139	15.1	4	19	14.1	4	3.0
COUNTRY.....	1,457,941	1,601	13.0	47	131	8.4	97	6.2
JUNE.....	2,398,540	2,468	12.5	124	420	18.0	143	6.1
I.—UPPER PENINSULA.....	254,400	275	13.2	24	62	24.7	33	13.1
II.—NORTHERN COUNTIES.....	286,641	265	11.3	11	53	20.9	19	7.5
III.—CENTRAL COUNTIES.....	437,423	380	10.6	18	59	16.3	26	7.2
IV.—SOUTHERN COUNTIES.....	1,420,076	1,538	13.2	71	246	16.8	65	4.4
ALL CITIES.....	943,184	1,090	14.1	85	202	20.1	65	6.5
Over 50,000.....	373,269	463	15.1	45	118	28.2	24	5.7
25,000 to 50,000.....	95,153	99	12.7	9	11	12.2	6	6.7
10,000 to 25,000.....	212,890	229	13.1	15	29	13.6	15	7.0
5,000 to 10,000.....	153,006	163	13.0	11	27	17.8	13	8.6
Under 5,000.....	108,866	136	15.2	5	17	13.0	7	5.3
COUNTRY.....	1,455,356	1,368	11.5	39	218	16.4	78	5.9
JULY.....	2,384,927	2,470	12.2	119	502	21.4	155	6.6
I.—UPPER PENINSULA.....	257,386	244	11.2	19	75	33.3	24	10.7
II.—NORTHERN COUNTIES.....	285,803	250	10.3	10	57	23.8	20	8.3
III.—CENTRAL COUNTIES.....	432,479	372	10.1	12	56	15.6	21	5.8
IV.—SOUTHERN COUNTIES.....	1,409,259	1,604	13.4	78	314	20.6	90	5.9
ALL CITIES.....	943,184	1,174	14.7	69	208	27.0	78	7.1
Over 50,000.....	373,269	577	18.2	36	195	36.0	47	8.7
25,000 to 50,000.....	95,153	84	10.4	1	16	19.3	7	8.4
10,000 to 25,000.....	212,890	225	12.5	17	19	9.1	9	4.3
5,000 to 10,000.....	153,006	168	13.0	11	45	28.7	7	4.5
Under 5,000.....	108,866	120	13.0	4	23	19.8	8	6.9
COUNTRY.....	1,455,356	1,296	10.6	50	204	16.4	77	6.2
AUGUST.....	2,409,095	2,672	13.1	133	646	25.4	210	8.3
I.—UPPER PENINSULA.....	255,517	381	17.6	25	157	44.1	39	11.0
II.—NORTHERN COUNTIES.....	293,844	295	11.8	15	68	24.3	35	12.5
III.—CENTRAL COUNTIES.....	438,037	450	12.1	18	117	27.1	38	8.8
IV.—SOUTHERN COUNTIES.....	1,421,897	1,546	12.8	75	304	20.7	98	6.7
ALL CITIES.....	943,184	1,178	14.7	73	333	30.1	84	7.6
Over 50,000.....	373,269	461	14.6	37	141	33.3	27	6.4
25,000 to 50,000.....	95,153	133	16.5	8	34	27.2	7	5.6
10,000 to 25,000.....	212,890	283	15.7	12	72	26.6	31	11.4
5,000 to 10,000.....	153,006	176	13.6	9	57	34.1	12	7.2
Under 5,000.....	108,866	125	13.5	7	29	24.6	7	5.9
COUNTRY.....	1,465,911	1,494	12.0	60	313	21.8	126	8.8

## DEATHS.

XXXV

cities, as originally published in the Michigan Monthly Bulletin of Vital Statistics, 1901.

ages.		Deaths and annual death rates per 100,000 population from important causes.									
65 and over.		Pulmonary tuberculosis.		Other tuberculosis.		Typhoid fever.		Diphtheria.		Croup.	
Num- ber.	Per cent.	Num- ber.	Death rate.	Num- ber.	Death rate.	Num- ber.	Death rate.	Num- ber.	Death rate.	Num- ber.	Death rate.
829	31.1	199	98.2	36	17.3	29	14.3	33	16.3	9	4.4
23	8.8	19	92.3	2	9.7	2	9.7	3	14.6	1	4.9
70	23.3	25	102.3	3	12.3	1	4.1	10	40.9	2	8.2
142	30.3	40	107.4	5	13.4	3	8.1	6	16.1	1	2.7
594	36.6	115	95.6	25	20.8	23	19.1	14	11.6	5	4.2
284	25.6	95	120.2	26	32.9	14	17.7	10	12.7	5	6.3
95	22.5	34	107.5	14	44.3	4	12.6	2	6.3	2	6.3
35	36.8	7	86.8	2	24.8	.....	.....	2	24.8	1	12.1
69	26.5	26	151.6	5	29.2	6	35.0	4	23.3	1	5.8
46	23.4	21	161.9	5	38.6	3	23.1	2	15.4	.....	.....
39	28.9	7	75.9	.....	.....	1	10.8	.....	.....	1	10.8
545	35.1	104	84.2	9	7.3	15	12.1	23	18.6	4	3.2
642	27.5	169	86.0	28	14.2	22	11.2	12	6.1	3	1.5
24	9.6	21	100.7	2	9.6	2	9.6	.....	.....	.....	.....
54	21.3	16	68.1	1	4.3	5	21.3	2	8.5	.....	.....
96	26.5	32	89.3	8	22.3	4	11.2	5	13.9	.....	.....
468	31.9	100	85.9	17	14.6	11	9.5	5	4.3	3	2.6
214	21.3	81	104.8	15	19.4	14	18.1	4	5.2	.....	.....
82	19.6	36	117.7	5	16.3	1	3.3	1	3.3	.....	.....
20	22.2	12	153.9	1	12.8	4	51.3	3	38.5	.....	.....
52	24.3	19	108.9	4	22.9	3	17.2	.....	.....	.....	.....
28	18.4	9	71.8	3	23.9	5	39.9	.....	.....	.....	.....
32	24.4	5	56.0	2	22.4	1	11.2	.....	.....	.....	.....
428	32.2	88	73.8	13	10.9	8	6.7	8	6.7	.....	.....
646	27.5	155	76.7	21	10.4	27	13.4	13	6.4	3	1.5
27	12.0	18	82.5	4	18.3	2	9.2	.....	.....	1	4.6
41	17.1	13	53.7	3	12.4	5	20.6	6	24.8	1	4.1
111	30.8	30	81.9	4	10.9	2	5.5	2	5.5	1	2.7
467	30.6	94	78.7	10	8.4	18	15.1	5	4.2	.....	.....
229	20.7	62	77.6	14	17.5	12	15.0	2	2.5	1	1.3
86	15.9	34	107.5	4	12.6	7	22.1	.....	.....	.....	.....
18	21.7	7	86.8	3	37.2	2	24.8	.....	.....	1	12.4
62	29.8	10	55.4	3	16.6	.....	.....	.....	.....	.....	.....
30	19.1	8	61.7	2	15.4	.....	.....	1	7.7	.....	.....
33	28.4	3	32.5	2	21.7	3	32.5	1	10.8	.....	.....
417	33.5	93	76.1	7	5.7	15	12.3	11	9.0	2	1.6
615	24.2	153	74.9	28	13.7	48	23.5	15	7.3	8	3.9
23	7.9	22	101.6	1	4.6	5	23.1	4	18.5	2	9.2
44	15.7	15	60.2	1	4.0	8	32.1	2	8.0	2	8.0
103	23.8	29	78.1	8	21.6	8	21.6	3	8.1	1	2.7
440	29.9	87	72.2	18	14.9	27	22.4	6	5.0	3	2.5
224	20.3	68	85.1	12	15.0	20	25.0	5	6.3	4	5.0
74	17.5	29	91.7	6	19.0	7	22.1	2	6.3	1	3.2
31	24.8	5	62.0	3	37.2	2	24.8	.....	.....	.....	.....
62	22.9	19	105.3	2	11.1	4	22.2	2	11.1	.....	.....
29	17.4	9	69.4	.....	.....	3	23.1	1	7.7	1	7.7
28	23.7	6	65.0	1	10.8	4	43.4	.....	.....	2	21.7
391	27.3	85	68.4	16	12.9	28	22.5	10	8.0	4	3.2

Table 14.—Continued.—Mortality in Michigan, by geographical sections and groups of

Population by geographical sections and as urban and rural.	Scarlet fever.		Measles.		Whooping cough.		Pneumonia	
	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.
MAY.....	29	14.3	6	3.0	15	7.4	245	120.9
I.—UPPER PENINSULA.....	6	29.1	2	9.7	3	14.6	25	121.4
II.—NORTHERN COUNTIES.....	6	24.6	.....	.....	5	20.5	37	151.4
III.—CENTRAL COUNTIES.....	7	18.8	.....	.....	2	5.4	46	123.5
IV.—SOUTHERN COUNTIES.....	10	8.3	4	3.3	5	4.2	137	113.9
ALL CITIES.....	13	16.4	1	1.3	3	3.8	94	118.9
Over 50,000.....	5	15.8	.....	.....	1	3.2	36	113.8
25,000 to 50,000.....	1	12.4	.....	.....	1	12.4	4	49.6
10,000 to 25,000.....	3	17.5	.....	.....	1	5.8	19	110.8
5,000 to 10,000.....	3	23.1	.....	.....	.....	.....	18	188.8
Under 5,000.....	1	10.8	1	10.8	.....	.....	17	184.3
COUNTRY.....	16	12.9	5	4.0	12	9.7	151	122.2
JUNE.....	17	8.6	12	6.1	9	4.6	143	72.7
I.—UPPER PENINSULA.....	5	24.0	7	33.6	3	14.4	20	95.9
II.—NORTHERN COUNTIES.....	2	8.5	.....	.....	1	4.3	23	97.9
III.—CENTRAL COUNTIES.....	5	13.9	.....	.....	1	2.8	22	61.4
IV.—SOUTHERN COUNTIES.....	5	4.3	5	4.3	4	3.4	78	67.0
ALL CITIES.....	9	11.6	5	6.5	3	3.9	63	81.5
Over 50,000.....	3	9.8	1	3.3	1	3.3	18	58.8
25,000 to 50,000.....	.....	.....	.....	.....	.....	.....	8	102.6
10,000 to 25,000.....	2	11.5	1	5.7	2	11.5	18	103.2
5,000 to 10,000.....	3	23.9	2	15.9	.....	.....	9	71.8
Under 5,000.....	1	11.2	1	11.2	.....	.....	10	112.1
COUNTRY.....	8	6.7	7	5.9	6	5.0	80	67.1
JULY.....	7	3.5	9	4.5	11	5.4	63	31.2
I.—UPPER PENINSULA.....	3	13.8	8	36.7	4	18.3	7	32.1
II.—NORTHERN COUNTIES.....	.....	.....	.....	.....	.....	.....	4	16.5
III.—CENTRAL COUNTIES.....	1	2.7	.....	.....	1	2.7	12	32.7
IV.—SOUTHERN COUNTIES.....	3	2.5	1	0.8	6	5.0	40	33.5
ALL CITIES.....	4	5.0	3	3.8	8	10.0	31	38.8
Over 50,000.....	2	6.3	.....	.....	4	12.6	12	37.9
25,000 to 50,000.....	1	12.4	.....	.....	.....	.....	5	62.0
10,000 to 25,000.....	.....	.....	.....	.....	3	16.6	5	27.7
5,000 to 10,000.....	.....	.....	.....	.....	1	7.7	6	46.3
Under 5,000.....	1	10.8	3	32.5	.....	.....	3	32.5
COUNTRY.....	3	2.5	6	4.9	3	2.5	32	26.2
AUGUST.....	18	8.8	1	0.5	15	7.3	50	24.5
I.—UPPER PENINSULA.....	6	27.7	.....	.....	1	4.6	9	41.6
II.—NORTHERN COUNTIES.....	3	12.0	.....	.....	4	16.1	5	20.1
III.—CENTRAL COUNTIES.....	1	2.7	1	2.7	1	2.7	13	35.0
IV.—SOUTHERN COUNTIES.....	8	6.6	.....	.....	9	7.5	23	19.1
ALL CITIES.....	10	12.5	.....	.....	8	10.0	18	22.5
Over 50,000.....	5	15.8	.....	.....	5	15.8	7	22.1
25,000 to 50,000.....	.....	.....	.....	.....	.....	.....	1	12.4
10,000 to 25,000.....	4	22.2	.....	.....	.....	.....	7	36.8
5,000 to 10,000.....	1	7.7	.....	.....	2	15.4	.....	.....
Under 5,000.....	.....	.....	.....	.....	1	10.8	3	32.5
COUNTRY.....	8	6.4	1	0.8	7	5.6	32	25.8

cities, as originally published in the Michigan Monthly Bulletin of Vital Statistics, 1901.

Diarrheal diseases under 2 years.		Meningitis.		Influenza.		Puerperal septicemia.		Cancer.		Violence.	
Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.
56	27.6	46	22.7	79	39.0	17	8.4	138	68.1	160	79.0
13	63.2	5	24.2	2	9.7	.....	.....	10	48.6	38	184.6
7	28.6	6	24.6	9	36.8	6	24.6	13	53.2	12	49.1
5	13.4	7	18.8	16	48.0	2	5.4	20	83.7	27	72.5
31	25.8	28	23.3	52	43.2	9	7.5	95	79.0	88	69.0
26	32.9	22	27.8	24	30.4	2	2.5	57	72.1	81	102.5
14	44.3	12	37.9	7	22.1	2	6.3	21	66.4	23	72.7
4	23.3	4	23.3	3	37.2	.....	.....	5	62.0	6	74.4
7	54.0	5	38.6	5	29.2	.....	.....	14	81.6	24	140.0
1	10.8	1	10.8	4	30.8	.....	.....	7	54.0	17	131.1
30	24.3	24	19.4	55	54.2	.....	.....	19	108.4	11	119.2
					44.5	15	12.1	81	65.6	79	63.9
103	52.4	41	20.9	32	16.3	10	5.1	106	53.9	198	100.7
13	62.3	3	14.4	2	9.6	1	4.8	10	48.0	44	211.0
12	51.1	2	8.5	1	4.3	1	4.3	8	34.0	27	114.9
8	22.3	10	27.9	5	13.9	3	8.4	15	41.8	23	64.1
70	60.1	26	22.3	24	20.6	5	4.3	73	62.7	104	89.3
59	76.3	21	27.2	11	14.2	3	3.9	52	67.3	88	113.8
44	143.8	12	39.2	2	6.5	2	6.5	19	62.1	25	81.7
2	11.5	1	12.8	2	25.6	.....	.....	4	51.3	6	76.9
5	39.9	3	17.2	2	11.5	1	5.7	13	74.5	27	154.7
8	89.7	4	31.9	2	15.9	.....	.....	7	55.8	23	183.4
44	36.9	1	11.2	3	33.6	.....	.....	9	100.9	7	78.4
		20	16.8	21	17.6	7	5.9	54	45.3	110	92.2
252	124.7	62	30.7	17	8.4	11	5.4	126	62.3	234	115.8
33	151.3	5	22.9	2	9.2	.....	.....	4	18.3	39	178.8
17	70.2	9	37.2	1	4.1	1	4.1	15	61.9	32	132.1
20	54.6	8	21.8	3	8.2	3	8.2	18	49.1	36	96.2
182	152.4	40	33.5	11	9.2	7	5.9	89	74.5	127	106.3
172	215.2	35	43.8	9	11.3	5	6.3	57	71.3	91	113.8
135	426.8	16	50.6	3	9.5	3	9.5	22	69.5	32	101.2
5	62.0	.....	.....	1	12.4	.....	.....	2	24.8	7	86.8
8	44.3	8	44.3	2	11.1	2	11.1	17	94.2	28	155.2
16	123.4	6	46.3	3	23.1	.....	.....	8	61.7	13	100.3
8	86.7	5	54.2	.....	.....	.....	.....	8	86.7	11	119.2
80	65.5	27	22.1	8	6.5	6	4.9	69	56.5	143	117.0
398	194.9	44	21.6	4	2.0	10	4.9	128	62.7	206	100.9
116	535.7	4	18.5	.....	.....	1	4.6	12	55.4	46	212.4
37	148.6	9	36.1	.....	.....	1	4.0	14	56.2	27	108.4
72	194.0	12	32.3	1	2.7	2	5.4	15	40.4	26	67.3
173	143.6	19	15.8	3	2.5	6	5.0	87	72.2	108	89.6
186	232.7	21	26.3	1	1.3	3	3.8	54	67.6	77	96.3
60	189.7	8	25.3	.....	.....	1	3.2	22	69.5	28	58.5
14	173.6	3	37.2	.....	.....	1	12.4	5	62.0	7	86.8
57	315.9	3	16.6	1	5.5	1	5.5	16	88.7	17	94.2
34	262.2	4	30.8	.....	.....	.....	.....	5	38.6	15	115.7
21	227.6	8	32.5	.....	.....	.....	.....	6	65.0	10	108.4
212	170.7	23	18.5	3	2.4	7	5.6	74	59.6	129	103.8

Table 14.—Continued.—Mortality in Michigan, by geographical sections and groups of

Population by geographical sections and as urban and rural.	Total reporting population by U. S. census of 1900.	Total deaths reported for 1901.	Annual death rates per 1,000 population.	Still-births.	Important			
					Under 1.		1 to 4.	
					Num-ber.	Per cent.	Num-ber.	Per cent.
SEPTEMBER.....	2,389,844	2,886	14.7	85	714	25.5	262	9.4
I.—UPPER PENINSULA.....	254,071	375	18.0	17	152	42.5	31	8.7
II.—NORTHERN COUNTIES.....	290,581	336	14.1	9	107	32.7	45	13.8
III.—CENTRAL COUNTIES.....	427,530	501	14.3	9	126	25.6	66	13.4
IV.—SOUTHERN COUNTIES.....	1,417,662	1,674	14.4	50	329	20.3	120	7.4
ALL CITIES.....	943,184	1,191	15.4	56	334	29.4	84	7.4
Over 50,000.....	373,269	435	14.2	23	113	27.4	35	8.5
25,000 to 50,000.....	95,153	127	16.3	3	36	29.0	7	5.6
10,000 to 25,000.....	212,890	304	17.4	17	100	34.8	12	4.2
5,000 to 10,000.....	153,006	183	14.6	8	44	25.1	20	11.4
Under 5,000.....	108,866	142	15.9	5	41	29.9	10	7.3
COUNTRY.....	1,446,660	1,695	14.3	29	380	22.8	178	10.7
OCTOBER.....	2,385,176	2,548	12.6	132	444	18.4	167	6.9
I.—UPPER PENINSULA.....	248,137	297	14.1	23	55	20.1	29	10.6
II.—NORTHERN COUNTIES.....	290,222	264	10.7	15	57	22.9	23	9.2
III.—CENTRAL COUNTIES.....	434,038	427	11.6	19	88	21.6	31	7.6
IV.—SOUTHERN COUNTIES.....	1,413,779	1,560	13.0	75	244	16.4	84	5.7
ALL CITIES.....	942,519	1,096	13.7	71	196	19.1	81	7.9
Over 50,000.....	373,269	437	13.8	31	92	22.7	36	8.9
25,000 to 50,000.....	95,153	113	14.0	9	16	15.4	9	8.7
10,000 to 25,000.....	212,890	226	12.5	20	34	16.5	16	7.8
5,000 to 10,000.....	153,006	188	14.5	6	37	20.3	13	7.1
Under 5,000.....	108,201	132	14.4	5	17	13.4	7	5.5
COUNTRY.....	1,443,657	1,452	11.9	61	248	17.8	86	6.2
NOVEMBER.....	2,401,425	2,454	12.5	149	346	15.0	177	7.7
I.—UPPER PENINSULA.....	255,876	270	12.9	24	55	22.4	34	13.8
II.—NORTHERN COUNTIES.....	290,838	262	11.0	13	62	24.9	25	10.0
III.—CENTRAL COUNTIES.....	436,829	378	10.6	19	52	14.5	22	6.1
IV.—SOUTHERN COUNTIES.....	1,417,882	1,544	13.3	93	177	12.2	96	6.6
ALL CITIES.....	943,184	1,110	14.4	84	175	17.1	85	8.3
Over 50,000.....	373,269	524	17.1	41	93	19.3	44	9.1
25,000 to 50,000.....	95,153	78	10.0	11	10	14.9	4	6.0
10,000 to 25,000.....	212,890	209	12.0	15	25	12.9	16	8.2
5,000 to 10,000.....	153,006	188	15.0	10	36	20.2	16	9.0
Under 5,000.....	108,866	111	12.4	7	11	10.6	5	4.8
COUNTRY.....	1,458,241	1,344	11.2	65	171	13.4	92	7.2
DECEMBER.....	2,414,720	2,770	13.5	141	387	14.7	182	6.9
I.—UPPER PENINSULA.....	258,952	268	12.2	24	61	25.0	30	12.3
II.—NORTHERN COUNTIES.....	292,307	279	11.3	10	53	19.7	22	8.2
III.—CENTRAL COUNTIES.....	440,478	428	11.5	25	55	13.6	28	6.9
IV.—SOUTHERN COUNTIES.....	1,422,981	1,795	14.9	82	218	12.7	102	6.0
ALL CITIES.....	943,184	1,264	15.8	86	184	15.6	95	8.1
Over 50,000.....	373,269	557	17.6	48	82	16.1	53	10.4
25,000 to 50,000.....	95,153	105	13.0	9	9	9.4	9	9.4
10,000 to 25,000.....	212,890	268	14.9	10	44	17.1	19	7.4
5,000 to 10,000.....	153,006	197	15.2	15	25	13.7	7	3.8
Under 5,000.....	108,866	137	14.8	4	24	18.0	7	5.3
COUNTRY.....	1,471,536	1,506	12.1	55	203	14.0	87	6.0

## DEATHS.

xxxix

cities, as originally published in the Michigan Monthly Bulletin of Vital Statistics, 1901.

ages.		Deaths and annual death rates per 100,000 population from important causes.									
65 and over.		Pulmonary tuberculosis.		Other tuberculosis.		Typhoid fever.		Diphtheria.		Croup.	
Num- ber.	Per cent.	Num- ber.	Death rate.	Num- ber.	Death rate.	Num- ber.	Death rate.	Num- ber.	Death rate.	Num- ber.	Death rate.
697	24.9	142	72.5	26	13.3	93	47.5	40	20.4	7	3.6
36	10.1	21	100.8	4	19.2	15	72.0	15	72.0	.....	.....
52	15.9	10	42.0	2	8.4	16	67.2	8	38.6	1	4.2
118	24.0	19	54.2	6	17.1	19	54.2	3	8.6	1	2.9
491	30.2	92	79.2	14	12.0	43	37.0	14	12.0	5	4.3
229	20.2	60	77.6	12	15.5	42	54.3	19	24.6	5	6.5
73	17.7	20	65.4	4	13.1	13	42.5	2	6.5	2	6.5
26	21.0	4	51.3	1	12.8	7	89.8	.....	.....	.....	.....
54	18.8	16	91.7	3	17.2	11	63.0	3	17.2	1	5.7
44	25.1	15	119.6	3	23.9	4	31.9	7	55.8	2	15.9
32	23.4	5	56.0	1	11.2	7	78.4	7	78.4	.....	.....
468	28.1	82	69.2	14	11.8	51	43.0	21	17.7	2	1.7
674	27.9	158	78.1	31	15.3	88	43.5	37	18.3	12	5.9
41	15.0	11	52.3	3	14.3	14	66.6	4	19.0	2	9.5
42	10.9	21	85.4	2	8.1	14	56.9	5	20.3	2	8.1
103	25.2	27	73.4	4	10.9	13	35.3	14	33.1	2	5.4
488	32.9	99	82.6	22	18.4	47	39.2	14	11.7	6	5.0
237	23.1	72	90.1	16	20.0	47	58.8	16	20.0	7	8.8
83	20.4	31	98.0	6	19.0	18	56.9	5	15.8	2	6.3
26	25.0	7	86.8	2	24.8	5	62.0	3	37.2	2	24.8
47	22.8	15	83.1	2	11.1	7	38.8	5	27.7	.....	.....
41	22.5	15	115.7	5	38.6	10	77.1	1	7.7	3	23.1
40	31.5	4	43.6	1	10.9	7	76.3	2	21.8	.....	.....
437	31.4	86	70.3	15	12.3	41	33.5	21	17.2	5	4.1
659	28.6	137	69.6	29	14.7	79	40.1	41	20.8	18	9.1
27	11.0	21	100.1	5	23.8	10	47.7	8	38.1	4	19.1
39	15.7	10	41.9	3	12.6	11	46.1	4	16.8	2	8.4
124	34.5	13	36.3	5	14.0	13	36.3	8	22.3	2	5.6
469	32.3	93	80.0	16	13.8	45	38.7	21	18.1	10	8.6
215	23.9	67	86.7	14	18.1	32	41.4	21	27.2	9	11.6
98	20.3	40	130.7	5	16.3	11	36.0	10	32.7	2	6.5
19	24.4	2	25.6	3	38.5	4	51.3	.....	.....	2	25.6
52	26.8	7	40.1	5	28.7	6	34.4	6	34.4	2	11.5
39	21.9	9	71.8	.....	.....	6	47.8	3	23.9	2	15.9
37	35.6	9	100.9	1	11.2	5	56.0	2	22.4	1	11.2
414	32.4	70	58.6	15	12.5	47	30.3	20	16.7	9	7.5
853	32.4	151	73.8	18	8.8	53	25.9	33	16.1	21	10.3
24	9.8	11	50.1	3	13.7	12	54.7	3	13.7	1	4.6
61	22.7	12	48.4	1	4.0	7	28.3	5	20.2	5	20.2
134	33.3	23	61.6	3	8.0	8	21.4	10	26.8	1	2.7
634	37.0	105	87.1	11	9.1	26	21.6	15	12.4	14	11.6
295	25.0	77	96.3	8	10.0	24	30.0	12	15.0	9	11.3
115	29.6	35	110.6	4	12.6	6	19.0	3	9.5	6	19.0
34	35.4	4	49.6	.....	.....	2	24.8	3	37.2	.....	.....
59	22.9	12	66.5	2	11.1	12	66.5	2	11.1	1	5.5
53	29.1	17	131.1	1	7.7	3	23.1	3	23.1	1	7.7
34	25.6	9	97.6	1	10.8	1	10.8	1	10.8	1	10.8
558	38.5	74	59.3	10	8.0	29	23.3	21	16.8	12	9.6



Table 14.—Concluded.—Mortality in Michigan, by geographical sections and groups of

Population by geographical sections and as urban and rural.	Scarlet fever.		Measles.		Whooping cough.		Pneumonia.	
	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.
SEPTEMBER.....	6	3.1	3	1.5	17	8.7	87	44.4
I.—UPPER PENINSULA.....			1	4.8			14	67.2
II.—NORTHERN COUNTIES.....	1	4.2					12	50.4
III.—CENTRAL COUNTIES.....	1	2.9	1	2.9	3	8.6	20	57.1
IV.—SOUTHERN COUNTIES.....	4	3.4	1	0.9	14	12.0	41	36.3
ALL CITIES.....	3	3.9	2	2.6	10	12.9	41	53.0
Over 50,000.....	3	9.8	1	3.3	9	29.4	15	49.0
25,000 to 50,000.....							4	51.3
10,000 to 25,000.....			1	5.7	1	5.7	14	80.2
5,000 to 10,000.....							2	15.9
Under 5,000.....							6	67.2
COUNTRY.....	3	2.5	1	0.8	7	5.9	46	38.8
OCTOBER.....	18	8.9	2	1.0	5	2.5	143	70.7
I.—UPPER PENINSULA.....			1	4.8			15	71.3
II.—NORTHERN COUNTIES.....	2	8.1					14	56.9
III.—CENTRAL COUNTIES.....	1	2.7	1	2.7	2	5.4	26	70.7
IV.—SOUTHERN COUNTIES.....	15	12.5			3	2.5	88	73.4
ALL CITIES.....	11	13.8	1	1.3	2	2.5	80	100.2
Over 50,000.....	5	15.8					42	132.8
25,000 to 50,000.....					1	12.4	8	99.2
10,000 to 50,000.....	3	16.6	1	5.5			14	77.6
5,000 to 10,000.....	3	23.1					11	84.8
Under 5,000.....					1	10.9	5	54.5
COUNTRY.....	7	5.7	1	0.8	3	2.5	63	51.5
NOVEMBER.....	27	13.7	6	3.0	8	4.1	206	104.7
I.—UPPER PENINSULA.....	3	14.3	3	14.3			23	109.7
II.—NORTHERN COUNTIES.....	7	29.4			3	12.6	22	92.3
III.—CENTRAL COUNTIES.....	5	14.0			1	2.8	32	89.4
IV.—SOUTHERN COUNTIES.....	12	10.3	3	2.6	4	3.4	129	111.0
ALL CITIES.....	12	15.5	4	5.2	2	2.6	115	148.8
Over 50,000.....	8	26.1	2	6.5	1	3.3	61	199.4
25,000 to 50,000.....							5	64.1
10,000 to 25,000.....	1	5.7					20	114.6
5,000 to 10,000.....	3	23.9	2	15.9			17	135.6
Under 5,000.....					1	11.2	12	184.5
COUNTRY.....	15	12.5	2	1.7	6	5.0	91	76.1
DECEMBER.....	39	19.1	14	6.8	13	6.4	330	161.3
I.—UPPER PENINSULA.....	5	22.8	4	18.2	3	13.7	33	150.4
II.—NORTHERN COUNTIES.....	6	24.2			2	8.1	33	133.2
III.—CENTRAL COUNTIES.....	6	16.1	1	2.7	3	8.0	55	147.3
IV.—SOUTHERN COUNTIES.....	22	18.2	9	7.5	5	4.1	209	173.3
ALL CITIES.....	21	26.3	11	13.8	7	8.8	157	196.4
Over 50,000.....	14	44.3	9	28.5	2	6.3	73	230.8
25,000 to 50,000.....	3	37.2			1	12.4	11	186.4
10,000 to 25,000.....	1	5.5	1	5.5	2	11.1	42	232.8
5,000 to 10,000.....	1	7.7	1	7.7	1	7.7	16	123.4
Under 5,000.....	2	21.7			1	10.8	15	162.6
COUNTRY.....	18	14.4	3	2.4	6	4.8	173	138.7

## DEATHS.

xli

cities, as originally published in the Michigan Monthly Bulletin of Vital Statistics, 1901.

Diarrheal diseases under 2 years.		Meningitis.		Influenza.		Puerperal septicemia.		Cancer.		Violence.	
Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.	Num-ber.	Death rate.
441	225.1	48	24.5	9	4.6	8	4.1	124	63.3	196	100.1
87	417.8	6	28.8	.....	.....	2	9.6	8	38.4	43	206.5
73	306.5	11	46.2	1	4.2	1	4.2	14	58.8	30	126.0
92	282.5	11	31.4	2	5.7	2	5.7	20	57.1	26	74.2
189	162.6	20	17.2	6	5.2	3	2.6	82	70.6	97	83.5
187	241.9	15	19.4	6	7.8	.....	.....	49	63.4	73	94.4
58	189.6	6	19.6	.....	.....	.....	.....	20	65.4	21	68.6
20	256.4	.....	.....	.....	.....	.....	.....	8	102.6	9	115.4
55	315.2	4	22.9	1	5.7	.....	.....	11	63.0	26	149.0
32	255.2	3	23.9	3	23.9	.....	.....	6	47.8	9	71.8
22	246.6	2	22.4	2	22.4	.....	.....	4	44.8	8	89.7
254	214.2	33	27.8	3	2.5	8	6.7	75	63.2	123	103.7
158	78.1	31	15.3	13	6.4	9	4.5	126	62.3	190	94.0
17	80.8	5	23.8	1	4.8	3	14.3	13	61.8	40	190.2
20	81.3	4	16.3	1	4.1	2	8.1	2	8.1	26	105.7
39	106.0	4	10.9	1	2.7	2	5.4	24	65.2	30	81.6
82	68.4	18	15.0	10	8.3	2	1.7	87	72.6	94	78.5
52	65.1	18	22.5	5	6.3	1	1.3	63	78.9	73	91.4
17	53.7	6	19.0	2	6.3	.....	.....	25	79.0	26	82.2
4	49.6	2	24.8	.....	.....	.....	.....	6	74.4	5	62.0
11	61.0	4	22.2	1	5.5	.....	.....	15	83.1	15	83.1
10	77.1	5	38.6	2	15.4	1	7.7	10	77.1	14	108.0
10	109.1	1	10.9	.....	.....	.....	.....	7	76.3	13	141.8
106	86.6	13	10.6	8	6.5	8	6.5	63	51.5	117	95.6
42	21.3	22	11.2	11	5.6	10	5.1	127	64.5	194	98.6
8	38.1	6	28.6	.....	.....	.....	.....	8	38.1	32	152.6
8	33.6	1	4.2	1	4.2	3	12.6	9	37.8	12	50.3
6	16.8	3	8.4	3	8.4	1	2.8	18	50.3	31	86.6
20	17.2	12	10.3	7	6.0	6	5.2	92	79.2	119	102.4
19	24.6	11	14.2	3	3.9	5	6.5	44	56.9	99	128.1
10	32.7	5	16.3	.....	.....	2	6.5	16	52.3	59	192.8
1	12.8	.....	.....	.....	.....	1	12.8	1	12.8	4	51.3
3	17.2	2	11.5	1	5.7	.....	.....	11	63.0	14	80.2
4	31.9	2	15.9	2	15.9	1	8.0	11	87.7	14	111.6
1	11.2	2	22.4	.....	.....	1	11.2	5	56.0	8	89.7
23	19.2	11	9.2	8	6.7	5	4.2	83	69.4	95	79.5
40	19.5	37	18.1	43	21.0	12	5.9	126	61.6	157	76.7
4	18.2	5	22.8	1	4.6	1	4.6	5	22.8	32	145.8
5	20.2	8	32.3	4	16.1	4	16.1	6	24.2	20	80.7
7	18.8	1	2.7	8	21.4	1	2.7	20	53.6	21	56.3
24	19.9	23	19.1	30	24.9	6	5.0	95	78.8	84	69.7
17	21.3	22	27.5	15	18.8	4	5.0	67	83.8	70	87.6
9	28.5	13	41.1	6	19.0	1	3.2	33	104.3	16	50.6
3	37.2	2	24.8	2	24.8	.....	.....	6	74.4	7	86.8
2	11.1	4	22.2	1	5.5	1	5.5	9	49.9	19	105.3
3	23.1	2	15.4	4	30.8	2	15.4	5	38.6	20	154.2
.....	.....	1	10.8	2	21.7	.....	.....	14	151.7	8	86.7
23	18.4	15	12.0	28	22.5	8	6.4	59	47.3	87	69.8

## DEATHS AND DEATH RATES, BY GEOGRAPHICAL SECTIONS, 1901.

It was shown in the discussion of a preceding table (Table 8) that the monthly death rates, as printed in the *Michigan Monthly Bulletins of Vital Statistics* during the year 1901, were practically correct, so far as the addition of delayed returns is concerned, but the correspondence of the rates as originally printed is not quite as close as usual owing to the fact that allowance was not made for increased population in 1901 in computing the figures in the Bulletins. It is easy to compute a coefficient of correction should it be desired to compare the rates in Table 14 with those given for other years.

The geographical sections shown in this table were explained in the report for 1898 and illustrated by a map, and are the same that are referred to in the meteorological statistics given in subsequent pages of the present report.

In Table 14, besides the total death rates for the State, geographical sections and groups of cities, together with the townships and villages taken together under the designation "country," important ratios are given for the number of deaths returned of infants under one year of age, children aged one to four years, both inclusive, and elderly persons aged sixty-five years and over, for each month of the year. The table also shows the deaths returned and the death rates based thereon for certain of the most important diseases, including especially those dangerous communicable diseases that the State Board of Health is required by law to restrict.

## DEATHS IN CITIES OF MICHIGAN, 1901.

Table 15 shows the number of deaths reported for 1901 from each city of the State, together with the population as given by the United States census of 1900. The total urban population of the State, including in this designation such small towns as Gladwin, 775, Harrison, 645, Mackinac Island, 665, and North Muskegon, 530, places which have few of the requisites of a city except the possession of a city charter, is 943,184, and the total number of deaths returned from these cities for the year was 13,837. The death rate was 14.4 per thousand, estimated, which may be compared with the rural death rate of 12.8. It should be remembered, in making comparisons with the results of the United States census, that the limit used by the latter for inclusion in the list of cities is 8,000 population, and hence that the list of cities under 5,000 population in the State entirely disappears from consideration.

The group of cities over 50,000 population consists of only two, Detroit with a death rate of 15.1, and Grand Rapids with a death rate of 13.0 for the year. Cities from 25,000 to 50,000, which list has been increased since the last census by the addition of Jackson, show the lowest recorded mortality in the State, being 13.7 per thousand estimated population.

The group of cities from 10,000 to 25,000 population has a rate of 14.0 per thousand, Kalamazoo having the highest, 18.8 per thousand, and Manistee the lowest, 9.5 per thousand. Two of the cities in this list, Alpena and Manistee, were rejected by the United States census authorities, owing to the belief that their registration returns were not sufficiently accurate to be included.

The cities from 5,000 to 10,000 population show a death rate of 14.6, which is the same as the group of cities over 50,000 population. The maximum death rate in this group, 18.4 per thousand, is that of the city of Traverse City, and the minimum mortality belongs to Holland, which has a rate of 11.8 per thousand.

Cities under 5,000 population, which are hardly included in the class of cities as usually studied in registration reports, show a higher mortality, 14.8, than the preceding group. There are, moreover, greater variations in the rates for the individual cities. Stanton shows a rate of 25.1 per thousand and Belding a rate of only 9.3 per thousand.

Table 15. Cities of Michigan, grouped in order of population by U. S. census of 1900, with deaths and death rates per 1,000 estimated population. (Stillbirths excluded.)

Cities.	Population by U. S. census of 1900.	Deaths returned 1901.	Death rate per 1,000 estimated population.*	Cities.	Population by U. S. census of 1900.	Deaths returned 1901.	Death rate per 1,000 estimated population.*
<b>TOTAL CITIES.</b>	<b>943,184</b>	<b>13,837</b>	<b>14.4</b>	Mt. Clemens.....	6,576	113	16.8
<b>CITIES OVER 50,000 POPULATION.....</b>	<b>373,269</b>	<b>5,603</b>	<b>14.6</b>	Negaunee.....	6,935	95	13.4
Detroit.....	285,704	4,449	15.1	Owosso.....	8,696	108	12.3
Grand Rapids.....	87,565	1,154	13.0	Petoskey.....	5,285	76	13.7
<b>CITIES FROM 25,000 TO 50,000 POPULATION.</b>	<b>95,153</b>	<b>1,297</b>	<b>13.7</b>	Pontiac.....	9,769	166	16.3
Bay City.....	27,628	351	12.9	St. Joseph.....	5,155	84	16.0
Jackson.....	25,180	344	13.4	Traverse City.....	9,407	185	18.4
Saginaw.....	42,345	602	14.3	Wyandotte.....	5,183	93	17.4
<b>CITIES FROM 10,000 TO 25,000 POPULATION.</b>	<b>212,890</b>	<b>3,032</b>	<b>14.0</b>	Ypsilanti.....	7,378	104	13.7
Alpena.....	11,802	162	13.8	<b>CITIES UNDER 5,000 POPULATION.....</b>	<b>108,865</b>	<b>1,613</b>	<b>14.8</b>
Ann Arbor.....	14,509	218	14.5	Albion.....	4,519	53	11.9
Battle Creek.....	18,563	304	15.9	Au Sable.....	1,116	28	* 25.1
Flint.....	13,103	194	14.3	Belding.....	3,282	31	9.3
Ishpeming.....	13,255	164	11.4	Bessemer.....	3,911	74	17.9
Kalamazoo.....	24,404	470	18.8	Big Rapids.....	4,686	83	18.0
Lansing.....	16,485	224	13.5	Charlotte.....	4,062	74	18.3
Manistee.....	14,260	137	9.5	Clare.....	1,326	23	17.5
Marquette.....	10,058	128	12.7	Corunna.....	1,510	23	15.3
Menominee.....	12,818	157	12.2	Crystal Falls.....	3,231	35	9.8
Muskegon.....	20,818	251	12.0	Dowagiac.....	4,151	48	11.3
Port Huron.....	19,158	267	13.8	East Tawas.....	1,736	19	* 10.9
Sault Ste. Marie.....	10,538	199	17.9	Eaton Rapids.....	2,103	31	14.8
West Bay City.....	13,119	167	12.6	Gladstone.....	3,380	36	10.0
<b>CITIES FROM 5,000 TO 10,000 POPULATION.</b>	<b>153,006</b>	<b>2,287</b>	<b>14.6</b>	Gladwin.....	775	9	11.9
Adrian.....	9,654	150	15.5	Grand Haven.....	4,743	54	11.6
Benton Harbor.....	6,562	85	12.6	Grand Ledge.....	2,161	34	15.8
Cadillac.....	5,997	74	12.0	Greenville.....	3,381	44	12.8
Cheboygan.....	6,489	87	13.6	Harrison.....	647	8	12.7
Coldwater.....	6,216	90	14.1	Hastings.....	3,172	35	10.9
Escanaba.....	9,549	163	16.7	Hillsdale.....	4,151	72	17.3
Holland.....	7,790	95	11.8	Hudson.....	2,403	37	15.3
Ionia.....	5,209	76	14.5	Lapeer.....	3,297	77	23.0
Iron Mountain.....	9,242	131	13.8	Mackinac Island.....	665	7	* 10.5
Ironwood.....	9,705	145	14.8	Manistique.....	4,126	84	18.8
Ludington.....	7,166	101	14.5	Marine City.....	3,829	77	19.8
Monroe.....	5,043	66	13.3	Marshall.....	4,370	63	14.5
				Mason.....	1,828	22	12.0
				Midland.....	2,363	42	17.9
				Mt. Pleasant.....	3,662	39	10.4
				Niles.....	4,287	74	17.4
				North Muskegon.....	513	6	* 11.7
				Norway.....	4,170	54	12.7
				St. Clair.....	2,543	38	15.0
				St. Ignace.....	2,271	41	17.8
				St. Louis.....	1,989	30	15.4
				Stanton.....	1,234	13	10.6
				Sturgis.....	2,465	48	20.0
				Tawas City.....	1,228	12	9.8
				Three Rivers.....	3,560	40	11.1

\* Population estimated by adding average annual increase from State census of 1894 to U. S. Census of 1900, except for certain small cities (rates in *italics*) with decreasing population in which the last census figures were used as a basis.

## SECTION II.—CAUSES OF DEATH IN MICHIGAN DURING THE YEAR 1901.

In Table 16 may be found a statement of the total number of deaths from each cause separately compiled in this report. The classification numbers as given in the left-hand column of the table are those of the International Classification, of which the table represents a somewhat condensed form. Thus under the head of "Other epidemic diseases," for which there were only 3 deaths returned for the year, are included the following International titles: 2, Typhus fever; 3, Relapsing fever; 11, Miliary fever; 12, Asiatic cholera; 15, Bubonic plague; 16, Yellow fever; 17, Leprosy; and the remaining list of diseases classifiable under title 19 except chickenpox, German measles and mumps which are specially stated. On the other hand certain titles of the International system are subdivided, as for example title 99. Other diseases of the respiratory system, from which the deaths reported from hemorrhage of the lungs (usually an equivalent of pulmonary phthisis) are distinguished. The list the intermediate form used for certain tables of the United States Census and explained in the "Manual of the International Classification of Causes of Death" published by the Census Bureau in 1902.

The details relative to distribution of the deaths from each cause by sex, ages, months of deaths, and counties in which the deaths occurred may be found in Tables III and IV, beginning on pages 18 and 36 of this report, respectively.

In Table 17 may be found in still more condensed form with reference to the list of causes, and arranged by geographical sections of the State, an exhibit of the mortality by months and groups of ages (individual years under five) for the year.

In comparing the figures found in any of the tables relating to causes of death as given in the present report with those of the corresponding tables for the years 1898-1900, it should be remembered that the revised Bertillon system, now known as the International Classification, was adopted for the statistics of the year 1901, and that there are some minor differences between it in its present form and that of the original form in which it appeared. Also, contrary to the requirements of the Bertillon system, the aggregate deaths as given in these reports prior to 1901 included stillbirths; these are now entirely omitted from the tables of deaths. Care should therefore be used in using data for comparative purposes in the different years. As soon as possible a table exhibiting the changes in deaths registered, with proper allowance for differences in methods of classification, will be prepared.

## CAUSES OF DEATH.

xlv

Table 16.—Deaths in Michigan during the year 1901, statistically classified by the International system, with rates per 100,000 population.

Classification number.	Causes of death, 1901.	Number of deaths.	Death rates per 100,000 population.
	ALL CAUSES.....	32,834	1339.7
	I. GENERAL DISEASES.....	8,401	342.8
	(A. Epidemic diseases).....	3,314	135.2
1	Typhoid fever.....	615	25.1
4	Typho-malarial fever.....	30	1.2
5	Malaria fever.....	109	4.4
6	Smallpox.....	27	1.1
7	Measles.....	79	3.2
8	Scarlet fever.....	312	12.7
9	Whooping cough.....	163	6.7
10	Diphtheria.....	359	14.6
13	Croup.....	55	2.2
14	Membranous croup.....	88	3.6
18	Influenza.....	1,099	44.8
(19)	Cholera nostras.....	38	1.6
2, 3, 11, 12, 15, 16, 17, 19	Dysentery.....	212	8.6
	Erysipelas.....	116	4.7
	Chickenpox.....	2	0.1
	German measles.....	2	0.1
	Mumps.....	5	0.2
	Other epidemic diseases.....	3	0.1
	(B. Other general diseases).....	5,087	207.6
20	Septicemia.....	116	4.7
27	Tuberculosis of lungs.....	2,152	87.8
26	Tuberculosis of larynx.....	22	0.9
28	Tuberculous meningitis.....	93	3.8
29	Abdominal tuberculosis.....	132	5.4
30	Pott's disease.....	29	1.2
31	Tuberculous abscess.....	3	0.1
32	White swelling.....	17	0.7
33	Tuberculosis of other organs.....	38	1.6
34	General tuberculosis.....	46	1.9
35	Scrofula.....	16	0.7
36, 37, 38	Venereal diseases.....	88	3.6
39	Cancer of mouth.....	38	1.6
40	Cancer of stomach and liver.....	612	25.0
41	Cancer of intestines.....	137	5.6
42	Cancer of genital organs.....	237	9.7
43	Cancer of breast.....	149	6.1
44	Cancer of skin.....	76	3.1
45	Cancer of other or unspecified organs.....	235	9.6
46	Tumors.....	40	1.6
47, 48	Rheumatism.....	221	9.0
50	Diabetes.....	264	10.8
53, 54	Anemia.....	195	8.0
56	Alcoholism.....	62	2.5
57, 58, 59	Chronic poisonings.....	18	0.7
21, 22, 23, 24, 25, 49, 51, 52, 55	Other general diseases.....	51	2.1
	II. DISEASES OF THE NERVOUS SYSTEM.....	4,012	163.7
60	Encephalitis.....	82	3.3
61	Meningitis.....	427	17.4
62	Locomotor ataxia.....	39	1.6
63	Other diseases of spinal cord.....	131	5.3
64	Apoplexy.....	1,243	50.7
65	Softening of brain.....	105	4.3
66	Paralysis.....	799	32.6
67	General paralysis of insane.....	139	5.7
68	Other forms of mental disease.....	80	3.3
(74)	Other diseases of brain.....	98	4.0
69	Epilepsy.....	177	7.2
70, 71	Convulsions.....	550	22.4
72	Tetanus.....	31	1.3
73, 74, 75, 76	Other diseases of nervous system.....	111	4.5
	III. DISEASES OF THE CIRCULATORY SYSTEM.....	3,291	134.3
77	Pericarditis.....	55	2.2
78	Endocarditis.....	102	4.2
79	Heart disease.....	2,691	109.8

Table 16.—Continued.—Deaths in Michigan during the year 1901, statistically classified by the International system, with rates per 100,000 population.

Classification number.	Causes of death, 1901.	Number of deaths.	Death rates per 100 000 population.
80	Angina pectoris.....	192	7.8
81	Diseases of arteries.....	117	4.8
82	Embolism and thrombosis.....	60	2.4
83	Diseases of veins.....	14	0.6
84	Diseases of lymphatics.....	5	0.2
85, 86	Other diseases of circulatory system.....	55	2.2
	<b>IV. DISEASES OF RESPIRATORY SYSTEM.....</b>	<b>4,377</b>	<b>178.6</b>
	{ Laryngitis.....	31	1.3
88	{ Other diseases of larynx.....	29	1.2
89	Diseases of the thyroid body.....	11	0.4
90	Acute bronchitis.....	535	21.8
91	Chronic bronchitis.....	334	13.6
92	Bronchopneumonia.....	489	20.0
93	Pneumonia.....	2,412	98.4
94	Pleurisy.....	89	3.6
95	Congestion of lungs.....	194	7.9
96	Gangrene of lungs.....	11	0.4
97, 98	Asthma and emphysema.....	122	5.0
(99)	Hemorrhage of lungs.....	39	1.6
87, 99	Other diseases of respiratory system.....	81	3.3
	<b>V. DISEASES OF DIGESTIVE SYSTEM.....</b>	<b>4,354</b>	<b>177.7</b>
100	Diseases of mouth.....	28	1.1
(101)	Tonsillitis.....	30	1.2
101, 102	Other diseases of pharynx.....	29	1.2
103	Ulcer of stomach.....	75	3.1
104	{ Gastritis.....	189	7.7
[314]	{ Other diseases of stomach.....	244	10.0
105	Dentition.....	9	0.4
106	Diarrhea and enteritis (under 2 years).....	1,768	72.1
108	Diarrhea and enteritis (over 2 years).....	526	21.5
107, 109	{ Hernia.....	93	3.8
110	Obstruction of intestines.....	239	9.8
111	Other diseases of intestines.....	76	3.1
112	Acute yellow atrophy of liver.....	18	0.7
113	Hydatid tumors of liver.....	0	.....
114	Cirrhosis of liver.....	211	8.6
115	Biliary calculi.....	49	2.0
116	Other diseases of liver.....	220	9.0
117	Diseases of spleen.....	7	0.3
118	Peritonitis.....	277	11.3
119	Appendicitis.....	263	10.7
120	Other diseases of digestive system.....	3	0.1
	<b>VI. DISEASES OF THE GENITO-URINARY SYSTEM.....</b>	<b>1,648</b>	<b>67.2</b>
121	Acute nephritis.....	71	2.9
122	Bright's disease.....	1,050	42.8
123	Other diseases of kidneys.....	107	4.4
124, 125, 126	Calculi of urinary tract.....	14	0.6
127, 128, 130	Diseases of bladder.....	138	5.6
131	Uterine tumor.....	42	1.7
(132)	Other diseases of uterus.....	58	2.4
133, 134, 135, 136, 137	Ovarian tumor.....	49	2.0
138, 139, 140, 141	Diseases of tubes.....	2	0.1
142	Other diseases of genito-urinary system.....	117	4.8
	<b>VII. CHILDBIRTH.....</b>	<b>531</b>	<b>21.7</b>
143	Puerperal septicemia.....	267	10.9
144	Puerperal convulsions.....	81	3.3
145	Other causes incident to childbirth.....	183	7.5
	<b>VIII. DISEASES OF THE SKIN.....</b>	<b>172</b>	<b>7.0</b>
146	Gangrene.....	98	4.0
147	Carbuncle.....	12	0.5
148, 149	Abscess.....	38	1.6
	Other diseases of skin.....	24	1.0
	<b>IX. DISEASES OF THE ORGANS OF LOCOMOTION.....</b>	<b>46</b>	<b>1.9</b>
149	Diseases of bones.....	41	1.7
	Diseases of joints.....	3	0.1
	Other diseases of locomotor system.....	2	0.1

Table 16.—Concluded.—Deaths in Michigan during the year 1901, statistically classified by the International system, with rates per 100,000 population.

Classification number.	Causes of death.	Number of deaths.	Death rates per 100,000 population.
	<b>X. MALFORMATIONS.....</b>	<b>306</b>	<b>12.5</b>
150	{ Hydrocephalus.....	54	2.2
	{ Congenital malformation of heart (cyanosis).....	101	4.1
	{ Other congenital malformations.....	151	6.2
	<b>XI. EARLY INFANCY.....</b>	<b>1,201</b>	<b>49.0</b>
(151)	Premature birth.....	524	21.4
151, 152, 153	Congenital debility.....	677	27.6
	<b>XII. OLD AGE.....</b>	<b>1,193</b>	<b>48.7</b>
154	Old age.....	1,193	48.7
	<b>XIII. VIOLENCE.....</b>	<b>2,251</b>	<b>91.8</b>
155	Suicide by poison.....	76	3.1
156	Suicide by asphyxia.....	0	.....
157	Suicide by hanging.....	50	2.0
158	Suicide by drowning.....	20	0.8
159	Suicide by fire arms.....	54	2.2
160	Suicide by cutting instruments.....	18	0.7
161	Suicide by jumping from high places.....	1	0.0
162	Suicide by crushing.....	2	0.1
163	Suicide by other or unspecified means.....	17	0.7
164, 165	Fractures and dislocations.....	223	9.1
167	Burns and scalds.....	178	7.3
169	Heat and sunstroke.....	55	2.2
170	Cold and freezing.....	14	0.6
(171)	Lightning.....	28	1.1
172	Drowning.....	299	12.2
174	Inhalation of poisonous gases.....	16	0.7
175	Other accidental poisonings.....	79	3.2
	{ Accidental gunshot wounds.....	99	4.0
	{ Injuries by machinery.....	57	2.3
166	{ Injuries in mines and quarries.....	97	4.0
	{ Railroad accidents and injuries.....	244	10.0
	{ Injuries by vehicles and horses.....	70	2.9
	{ Injuries by electric cars.....	21	0.9
(176)	Suffocation.....	30	1.2
(166, 168, 171.)	Other accidental injuries.....	391	16.0
173, 176 {	Injuries at birth.....	77	3.1
(176)	Homicide.....	35	1.4
(176)			
	<b>XIV. ILL-DEFINED DISEASES.....</b>	<b>1,051</b>	<b>42.9</b>
177	Dropsy.....	192	7.8
(179)	Heart failure.....	128	5.2
178, 179	Other ill-defined diseases.....	420	17.1
Unknown	Unknown or unspecified.....	311	12.7



Table 17. Causes of death in Michigan, by months and ages,

Line number.	Causes of death, 1901.	Total deaths, 1901.	Rate per 100,000 estimated population.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	
1	ALL CAUSES.....	32,834	1,339.7	3,128	3,089	3,390	2,894	2,720	2,354	2,395	2,573	2,847	2,435	2,354	2,655
2	Typhoid fever.....	645	26.3	73	36	45	35	31	24	26	49	96	91	83	56
3	Malarial fever.....	109	4.4	4	6	6	6	11	9	10	14	15	14	6	8
4	Smallpox.....	27	1.1	1	1	3	1	1	6	2	1	4	2	2	3
5	Measles.....	79	3.2	3	5	10	6	5	12	10	1	3	2	8	14
6	Scarlet fever.....	312	12.7	33	42	45	21	31	17	8	17	6	21	29	42
7	Whooping cough.....	163	6.7	15	13	20	15	14	10	14	16	18	4	10	14
8	Diphtheria and croup.....	502	20.5	71	47	36	41	41	18	16	22	49	50	60	51
9	Influenza.....	1,099	44.8	179	343	292	117	65	22	13	4	6	13	13	32
10	Dysentery.....	212	8.6	5	4	4	3	3	7	17	54	73	25	14	3
11	Erysipelas.....	116	4.7	8	12	21	16	15	9	5	4	7	3	12	3
12	Other epidemic diseases.....	50	2.0	1	2	3	1	1	3	4	12	16	3	2	2
13	Tuberculosis of lungs.....	2,152	87.8	246	176	217	209	210	178	165	159	145	159	141	147
14	Other forms of tuberculosis.....	380	15.5	31	21	41	45	40	29	25	26	36	30	30	30
15	Cancer.....	1,484	60.5	110	122	123	103	142	110	125	129	134	124	129	133
16	Rheumatism.....	221	9.0	24	20	30	29	17	18	15	12	17	13	14	12
17	Diabetes.....	264	10.8	31	23	28	23	18	20	19	14	16	21	26	25
18	Other general diseases.....	586	23.9	42	41	50	52	59	61	44	43	55	48	47	44
19	Meningitis.....	427	17.4	37	21	46	41	42	36	51	37	42	25	20	29
20	Apoplexy.....	1,243	50.7	109	111	125	110	108	93	73	91	97	105	99	122
21	Paralysis.....	799	32.6	76	81	86	76	61	63	56	41	67	68	56	68
22	Convulsions.....	550	22.4	49	46	68	49	45	58	56	34	39	30	39	37
23	Other nervous diseases.....	993	40.5	82	98	101	87	87	81	81	71	78	65	79	83
24	Heart disease.....	2,691	109.8	246	240	236	259	246	212	201	193	209	183	222	241
25	Other circulatory diseases.....	600	24.5	50	56	60	42	67	52	42	35	51	46	57	42
26	Bronchitis.....	869	35.5	133	116	134	99	64	52	24	22	36	40	65	84
27	Bronchopneumonia.....	489	20.0	74	69	101	50	32	24	10	9	10	31	29	50
28	Pneumonia.....	2,412	98.4	334	397	372	311	197	121	54	39	68	96	155	268
29	Other respiratory diseases.....	607	24.8	76	61	56	66	50	31	32	31	39	60	42	63
30	Diseases of stomach.....	508	20.7	45	33	48	48	71	34	40	39	41	36	36	37
31	Diarrhea and enteritis, under 2 years.....	1,768	72.1	47	40	55	57	61	107	255	430	451	169	50	46
32	Diarrhea and enteritis, over 2 years.....	526	21.5	30	28	35	33	31	32	40	81	100	58	31	27
33	Hernia and obstr. of bowels.....	332	13.5	28	26	28	26	26	32	29	18	30	29	27	33
34	Cirrhosis of liver.....	211	8.6	17	17	16	23	21	17	19	24	13	17	15	12
35	Other liver diseases.....	287	11.7	25	25	23	27	13	22	23	23	31	28	20	27
36	Peritonitis.....	277	11.3	26	22	28	23	28	24	20	23	25	22	16	20
37	Appendicitis.....	263	10.7	21	15	23	29	26	17	19	34	19	25	16	19
38	Other digestive diseases.....	182	7.4	13	15	15	23	14	10	8	14	25	19	11	15
39	Bright's disease.....	1,050	42.8	106	82	100	79	100	84	75	89	82	77	78	98
40	Other genito-urin'y diseases.....	598	24.4	55	38	47	51	60	54	53	55	42	46	46	51
41	Puerperal septicemia.....	267	10.9	19	24	45	34	27	16	18	15	15	18	17	19
42	Other puerperal diseases.....	264	10.8	28	28	31	22	34	15	14	19	14	16	19	24
43	Skin diseases.....	172	7.0	12	17	16	15	21	14	13	7	20	8	8	21
44	Diseases locomotor system.....	46	1.9	4	3	6	6	4	3	3	4	4	3	2	4
45	Malformations.....	306	12.5	27	26	33	25	29	28	25	29	19	18	24	23
46	Premature birth.....	524	21.4	62	38	46	53	44	39	41	35	36	40	47	43
47	Congenital debility.....	677	27.6	62	58	68	59	52	62	60	53	62	51	44	46
48	Old age.....	1,193	48.7	114	121	128	119	94	85	92	84	78	92	77	109
49	Suicides.....	238	9.7	13	16	16	21	11	23	23	25	16	34	20	20
50	Accidents.....	1,978	80.7	137	98	114	123	167	185	253	188	209	160	197	147
51	Homicides.....	35	1.4	.....	.....	4	3	1	6	2	2	4	7	4	2
52	Causes ill-defined.....	1,051	42.9	94	109	106	82	82	69	72	99	92	80	69	97

## CAUSES OF DEATH.

xlix

for the State and geographical sections, 1901.—STATE.

Ages of decedents, 1901.																					Line number.		
Ages in years under five.					Ages for five-year periods.																		
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.		80 +	Unknown.
6,319	1121	1530	348	253	8,571	786	675	1056	1301	1262	1151	1163	1196	1189	1374	1561	1740	2249	2241	2222		2980	117
2	4	3	9	5	23	30	46	89	109	86	62	61	29	31	20	12	12	16	6	8	4	1	2
1	2	3	4	2	12	4	8	6	9	12	5	3	4	4	6	4	5	4	7	8	7	1	3
5				1	6	2	1		3	3	2	2	1	2				3	1		1		4
22	17	16	3	2	60	7		2	2				2	2			1						5
30	43	54	36	30	193	80	12	10	6	2	4	3	1				1						6
98	39	10	3	5	155	7	1																7
36	44	59	57	50	246	140	63	20	9	10	5	2	2	2	1		1	1					8
113	17	10	3	3	146	12	9	19	17	17	22	26	27	27	48	55	82	112	98	159	222	1	9
41	23	8	5	1	78	3		1	3	1	3	2	2	2	6	5	10	16	20	21	41		10
23	1		1		25		3	3	2	2	5	5	9	7	9	7	7	7	8	7	10		11
6	3	2	1	1	13	7		2					1	1	3	1	3	5	3	5	6		12
25	11	11	3	4	54	19	48	250	324	308	248	181	169	124	111	102	82	53	31	39	8	1	13
36	28	8	7	3	82	19	16	31	38	29	33	16	17	20	21	18	10	15	1	11	3		14
4		4	3		11	4	4	6	13	16	35	69	111	120	155	181	186	207	163	109	86	3	15
1	1	2	2		6	14	19	11	6	5	7	9	13	6	6	12	25	23	26	15	18		16
5		3		1	9	12	17	11	14	15	12	15	12	14	18	18	21	37	20	11	8		17
91	9	6	3	2	111	9	9	20	27	27	43	49	41	42	34	33	27	41	38	21	11	3	18
138	62	23	18	16	257	40	15	23	17	11	12	13	8	9	3	4	1	5	3	4	2		19
37	8	5	5	1	56	5	12	4	14	11	18	17	23	45	71	108	122	191	187	169	185	5	20
6		1	1	1	9		6	3	5	4	6	14	24	25	33	66	69	96	135	130	172	2	21
458	46	18	1	2	525	7	2	2	4	1		1	1		1	2			2		2		22
78	16	14	10	6	124	31	26	40	28	37	32	51	58	71	53	67	74	88	84	64	57	8	23
58	7	1	7	2	75	12	41	27	35	37	53	73	105	123	171	227	279	379	372	355	321	6	24
28	4	3	5	3	43	7	7	16	23	13	22	19	21	20	35	53	55	74	68	64	60		25
326	86	20	10	10	442	8	2	3	5	13	7	10	5	8	14	26	23	54	63	78	95	3	26
228	51	23	7	9	318	15	5	4	3	2	6	6	5	4	9	12	13	21	22	16	28		27
486	116	49	24	30	705	61	54	84	73	93	84	99	104	103	115	110	122	150	155	138	158	4	28
115	20	10	15	7	167	15	10	15	21	13	17	18	19	21	31	27	36	44	48	47	56	2	29
121	23	3	2		149	9	7	5	7	11	7	11	25	21	22	24	30	44	42	46	47		30
1,474	293				1,767																		31
		77	30	12	119	22	14	15	14	23	8	12	12	10	28	29	40	40	43	42	54	1	32
44	3	6	4	1	58	5	5	12	12	11	11	8	14	24	14	23	22	36	35	25	17		33
3					3		1	2	1	3	5	6	12	18	24	17	27	39	28	18	7		34
7	3	1		1	12	2	4	4	7	8	13	12	10	21	28	24	34	34	33	23	18		35
17	9	3	3	3	35	12	17	31	28	25	19	9	18	14	7	13	8	10	14	9	7		36
	2		1	4	7	20	45	52	31	29	16	21	11	5	4	8	4	5	2	1	2		37
50	15	9	4	1	79	12	6	4	3	6	3	4	2	5	9	4	7	12	7	5	14		38
20	7	4	4		35	9	9	20	30	35	36	35	51	58	74	96	109	123	111	122	95	2	39
24	1	3	6	3	37	7	6	7	18	31	29	33	41	29	37	24	35	51	74	53	86		40
								21	72	71	49	33	16	4									41
							1	15	70	49	59	38	24	7									42
25	4	1		2	32	2	1	3		2	4	5	1	5	6	8	8	16	14	25	40		43
11	4	2	1		18	5	3	6		1	1		1			4	4	1		1			44
280	10	6	3		299	3		2	1			1											45
524					524																		46
677					677																		47
													1			2	6	46	108	223	799	8	48
						1		11	17	19	21	22	21	26	21	22	17	16	10	10	3		49
140	55	41	40	28	304	94	109	136	168	150	110	122	102	85	96	77	67	60	73	63	111	51	50
						3	2	3	1	1	5	4	3	3	2	3			1	1			51
405	34	8	7	1	455	10	9	7	9	19	12	22	17	23	28	34	54	74	79	77	117	5	52

## VITAL STATISTICS OF MICHIGAN, 1901.

Table 17.—Continued.—Causes of death in Michigan, by months and ages,

Line number.	Causes of death, 1901.	Total deaths, 1901.	Rate per 100,000 estimated population.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	ALL CAUSES.....	3,388	1,252.5	277	286	268	266	278	260	230	369	371	282	253	248
2	Typhoid fever.....	88	32.5	7	5	5	4	3	3	1	7	16	14	11	12
3	Malarial fever.....	4	1.5	1	1	1	1	2	7	8	1	1	1	1	1
4	Smallpox.....	1	0.4	1	1	1	1	2	7	8	1	1	1	1	1
5	Measles.....	31	11.5	13	11	1	3	2	7	8	6	1	1	3	4
6	Scarlet fever.....	64	23.7	13	11	1	2	7	7	8	6	1	1	5	5
7	Whooping cough.....	24	8.9	1	3	5	1	2	3	4	6	1	1	3	3
8	Diphtheria and croup.....	81	29.9	16	6	5	4	4	1	2	6	14	6	12	5
9	Influenza.....	26	9.6	1	12	5	2	2	1	1	2	1	1	1	1
10	Dysentery.....	18	6.7	1	1	1	1	1	1	1	9	4	1	1	1
11	Erysipelas.....	6	2.2	1	1	1	1	1	1	2	1	1	1	1	1
12	Other epidemic diseases.....	3	1.1	1	1	1	1	1	1	2	3	1	1	1	1
13	Tuberculosis of lungs.....	246	90.9	28	21	17	23	21	27	20	23	21	12	22	11
14	Other forms of tuberculosis.....	48	17.7	4	5	5	6	5	3	2	1	4	4	4	5
15	Cancer.....	95	35.1	5	12	5	4	9	12	4	11	8	13	7	5
16	Rheumatism.....	13	4.8	1	1	2	1	1	3	1	1	1	2	2	2
17	Diabetes.....	23	8.5	2	1	1	3	1	2	4	3	1	3	1	2
18	Other general diseases.....	53	19.6	8	2	3	3	5	2	2	6	5	9	4	4
19	Meningitis.....	46	17.0	4	1	5	5	4	2	4	3	4	5	6	3
20	Apoplexy.....	55	20.3	5	8	4	6	4	2	4	4	3	6	5	4
21	Paralysis.....	20	7.4	3	1	2	2	2	1	1	1	2	1	5	1
22	Convulsions.....	98	36.2	3	6	12	7	11	11	8	6	11	8	7	8
23	Other nervous diseases.....	60	22.2	8	4	7	7	6	2	1	8	2	6	4	5
24	Heart disease.....	135	49.9	10	10	9	13	22	10	8	7	11	16	12	7
25	Other circulatory diseases.....	48	17.7	3	8	4	4	6	3	1	3	5	3	4	4
26	Bronchitis.....	123	45.5	10	18	26	14	8	10	2	4	5	8	8	10
27	Bronchopneumonia.....	68	25.1	7	8	14	9	5	8	2	1	1	7	5	3
28	Pneumonia.....	220	81.3	26	31	25	24	21	14	5	8	12	8	17	29
29	Other respiratory diseases.....	48	17.7	5	5	2	7	3	3	4	3	3	6	3	4
30	Diseases of stomach.....	48	17.7	5	6	3	3	3	3	4	4	2	6	3	6
31	Diarrhea and enteritis, under 2 years.....	342	126.4	10	8	10	15	13	14	36	121	85	15	11	4
32	Diarrhea and enteritis, over 2 years.....	41	15.2	1	1	3	1	2	2	2	8	13	5	3	1
33	Hernia and obstr. of bowels.....	18	6.7	1	2	2	2	2	2	2	2	1	2	1	1
34	Cirrhosis of liver.....	18	6.7	1	1	3	1	2	2	1	2	1	3	1	2
35	Other liver diseases.....	9	3.3	1	2	1	1	1	1	1	1	1	1	1	1
36	Peritonitis.....	28	10.4	6	1	2	1	1	1	2	1	2	5	5	3
37	Appendicitis.....	26	9.6	1	1	1	2	6	3	1	2	4	2	1	5
38	Other digestive diseases.....	26	9.6	2	3	2	2	2	3	1	5	4	3	1	1
39	Bright's disease.....	62	22.9	4	3	2	1	7	4	9	5	4	7	5	11
40	Other genito-urinary diseases.....	26	9.6	2	1	1	3	4	2	1	1	1	5	5	1
41	Puerperal septicemia.....	29	10.7	3	5	3	5	5	2	2	3	4	2	2	2
42	Other puerperal diseases.....	30	11.1	6	3	1	5	4	4	1	1	1	2	3	3
43	Skin diseases.....	19	7.0	1	1	1	1	5	1	1	1	3	2	1	3
44	Diseases locomotor system.....	10	3.7	1	2	4	1	1	1	1	1	1	1	1	1
45	Malformations.....	33	12.2	2	2	1	6	2	4	4	3	2	5	2	2
46	Premature birth.....	68	25.1	9	5	7	7	7	7	7	5	7	6	4	4
47	Congenital debility.....	120	44.4	11	14	13	12	10	8	7	10	13	9	4	9
48	Old age.....	52	19.2	5	6	2	3	1	7	5	5	6	4	3	5
49	Suicides.....	26	9.6	1	1	1	3	1	1	3	2	2	5	3	3
50	Accidents.....	418	154.5	35	20	15	27	41	47	43	45	54	34	29	28
51	Homicides.....	14	5.2	1	1	1	1	1	1	1	1	1	4	3	2
52	Causes ill-defined.....	181	66.9	7	14	20	18	9	13	7	20	26	19	13	15

## CAUSES OF DEATH.

li

for the State and geographical sections, 1901.—Upper Peninsula.

Ages of decedents, 1901.																							Line number.
Ages in years under five.					Ages by five years periods.																		
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.	
1,042	187	106	59	47	1,441	140	95	117	169	179	147	167	131	99	111	102	103	106	98	64	86	33	
.....	1	1	1	.....	3	2	7	8	17	17	15	8	3	5	1	.....	.....	2	.....	.....	.....	.....	2
8	8	7	3	1	27	4	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	2	.....	.....	.....	3	
6	14	15	6	5	46	14	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	
16	4	1	1	1	23	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	
6	6	11	11	10	44	27	7	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	
9	.....	2	.....	.....	11	2	.....	.....	1	1	.....	1	.....	1	1	.....	1	1	3	.....	8	7	
5	1	1	.....	.....	7	1	.....	.....	2	1	.....	.....	.....	1	1	.....	1	1	1	2	2	8	
1	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	2	.....	1	1	.....	.....	.....	.....	9	
2	.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	10	
5	3	5	1	.....	14	7	5	30	37	33	25	25	29	9	10	8	6	2	2	4	.....	13	
5	3	.....	3	1	12	4	5	5	5	4	4	2	1	3	.....	1	1	.....	.....	1	.....	14	
1	.....	1	1	.....	3	1	.....	1	1	1	6	3	9	9	12	10	14	10	7	4	4	15	
.....	.....	1	.....	.....	1	1	1	.....	2	1	.....	1	.....	.....	.....	.....	3	1	.....	.....	2	16	
7	1	.....	.....	.....	1	2	4	.....	1	1	3	1	.....	1	1	3	3	1	1	.....	.....	17	
1	1	.....	1	1	10	.....	.....	3	.....	3	6	9	8	3	2	3	2	2	1	.....	.....	18	
20	6	.....	2	3	31	4	2	1	1	.....	1	3	1	.....	.....	.....	1	1	.....	.....	.....	19	
7	1	.....	2	1	11	.....	.....	.....	1	1	2	.....	1	4	5	7	2	5	9	3	2	20	
81	7	8	.....	.....	96	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	21	
8	4	2	2	3	19	3	2	1	4	3	3	5	4	2	4	.....	2	.....	2	.....	2	22	
4	1	.....	.....	.....	5	2	8	4	5	7	5	10	4	8	9	13	13	12	14	7	5	23	
6	1	1	.....	.....	8	2	2	1	3	1	2	3	3	2	.....	4	6	4	4	2	1	24	
69	24	7	.....	2	102	1	.....	.....	1	.....	.....	1	.....	.....	.....	2	1	4	5	4	1	25	
40	7	3	4	2	56	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1	.....	.....	26	
49	9	10	6	5	79	12	6	9	8	10	9	15	11	6	10	10	13	11	5	3	3	27	
9	1	1	2	3	16	3	3	2	1	1	.....	2	.....	1	2	6	2	1	2	3	2	28	
14	5	1	.....	.....	20	2	2	1	.....	3	1	2	3	2	1	4	.....	5	1	.....	1	29	
299	43	.....	.....	.....	342	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	
.....	.....	9	4	2	15	3	.....	2	4	.....	.....	.....	2	.....	3	.....	2	3	5	2	.....	31	
3	2	.....	.....	.....	5	.....	1	.....	2	1	.....	.....	1	1	1	2	1	2	2	.....	.....	32	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	1	4	1	3	4	1	.....	33	
1	1	.....	.....	.....	2	.....	.....	1	.....	1	1	1	.....	1	.....	.....	1	2	.....	.....	.....	34	
3	3	1	.....	.....	7	2	3	4	1	4	.....	1	1	1	.....	2	1	1	1	.....	.....	35	
.....	.....	.....	.....	.....	3	.....	5	2	3	4	6	1	.....	.....	.....	1	.....	1	.....	.....	.....	36	
10	5	2	1	.....	18	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....	1	37	
1	2	2	2	.....	7	2	2	1	.....	1	4	6	2	4	5	4	5	3	4	6	6	38	
3	.....	.....	1	.....	4	.....	1	.....	2	3	2	2	1	2	3	.....	1	1	1	2	1	39	
.....	.....	.....	.....	.....	.....	.....	.....	4	9	7	2	5	1	1	.....	.....	.....	.....	.....	.....	.....	40	
.....	.....	.....	.....	.....	.....	.....	.....	1	6	5	8	4	3	3	.....	.....	.....	.....	.....	.....	.....	41	
6	1	.....	.....	.....	7	1	.....	.....	.....	.....	.....	1	.....	1	2	.....	2	1	2	.....	2	42	
2	.....	1	.....	.....	3	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	43	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44	
28	4	1	.....	.....	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	
68	.....	.....	.....	.....	68	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46	
120	.....	.....	.....	.....	120	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47	
.....	.....	.....	.....	.....	.....	.....	.....	1	3	7	3	3	1	1	2	3	1	1	.....	.....	.....	48	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49	
16	9	9	5	6	45	17	24	27	43	52	39	42	32	22	20	9	9	5	3	5	1	50	
.....	.....	.....	.....	.....	.....	1	1	2	.....	.....	1	.....	1	2	2	2	.....	.....	.....	.....	2	51	
103	10	3	1	.....	117	3	3	1	5	1	.....	2	3	3	5	3	5	8	7	6	8	52	

VITAL STATISTICS OF MICHIGAN, 1901.

Table 17.—Continued.—Causes of death in Michigan, by months and ages,

Line number.	Causes of death, 1901.	Total deaths, 1901.	Rate per 100,000 estimated population.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	ALL CAUSES.....	3,654	1,205.1	361	332	399	332	334	260	238	289	328	249	253	279
2	Typhoid fever.....	87	28.7	11	3	4	1	1	5	4	9	17	14	12	6
3	Malarial fever.....	12	4.0					4	2		1	1	2	1	1
4	Smallpox.....	6	2.0			1		1	1			2		1	
5	Measles.....	1	0.3			1									
6	Scarlet fever.....	50	16.5	4	6	6	6	6	2	1	3	1	2	7	6
7	Whooping cough.....	22	7.3	2	1	1	1	5	1		4			5	2
8	Diphtheria and croup.....	81	26.7	10	4	4	7	11	2	6	4	9	7	7	10
9	Influenza.....	103	34.0	14	29	34	10	9	1	1		1	2	1	1
10	Dysentery.....	19	6.3	2	1					2	5	8	1		
11	Erysipelas.....	12	4.0	1		1	4	1	2				1	1	1
12	Other epidemic diseases.....	6	2.0									5	1		
13	Tuberculosis of lungs.....	233	76.8	31	15	28	31	28	17	13	18	9	20	11	12
14	Other forms of tuberculosis.....	34	11.2	2		6	5	2	2	3	1	3	2	4	4
15	Cancer.....	127	41.9	12	7	12	13	12	8	15	17	14	2	8	7
16	Rheumatism.....	20	6.6	1	2	3	4		1	1	2	2		2	2
17	Diabetes.....	27	8.9	5		3	2	1	5	1	1	2	2	2	3
18	Other general diseases.....	62	20.4	3	6	5	5	10	4	5	4	2	8	5	6
19	Meningitis.....	57	18.8	3	2	6	5	5	2	7	6	9	5	1	
20	Apoplexy.....	94	31.0	7	11	8	8	4	9	4	5	11	8	10	9
21	Paralysis.....	72	23.7	3	11	5	6	7	4	8	3	8	6	5	6
22	Convulsions.....	65	21.4	4	4	8	5	4	4	8	5	6	3	8	6
23	Other nervous diseases.....	125	41.2	11	14	9	12	11	8	11	12	7	5	12	13
24	Heart disease.....	216	71.2	19	30	17	19	25	18	10	21	14	11	18	14
25	Other circulatory diseases.....	65	21.4	7	6	9	3	6	8	6	4	2	5	3	6
26	Bronchitis.....	95	31.3	18	15	14	15	6	5	2	2	4		8	6
27	Bronchopneumonia.....	45	14.8	6	7	12	5	5	1	2	1	1	2	1	2
28	Pneumonia.....	317	104.5	43	48	46	46	33	22	4	5	9	9	18	34
29	Other respiratory diseases.....	66	21.8	9	6	11	5	5	3	4	4	3	4	4	8
30	Diseases of stomach.....	55	18.1	9	8	2	3	9	4	2	6	4	3	3	2
31	Diarrhea and enteritis, under 2 years.....	213	70.2	6	4	10	6	7	13	15	42	73	23	9	5
32	Diarrhea and enteritis, over 2 years.....	54	17.8	3	3	6	2	4	4	3	9	8	8	3	1
33	Hernia and obstr. of bowels.....	34	11.2	3	1	3	1	5	5	3	1	4	4	1	3
34	Cirrhosis of liver.....	14	4.6	1			2	2	1		2	2	2		2
35	Other liver diseases.....	35	11.5		6	3	2	3	3	2	2	3	3	5	3
36	Peritonitis.....	28	9.2		3	3	1	3	2	1	4	4	3	1	3
37	Appendicitis.....	23	7.6	1	1	3	1	4	2	1	1	1	3	2	3
38	Other digestive diseases.....	33	10.9	2	2	3	4	5	1	2	2	6	1	2	3
39	Bright's disease.....	91	30.0	9	8	12	6	8	7	7	11	6	3	4	10
40	Other genito-urinary diseases.....	59	19.5	9	5	5	10	4	4	4	7	2	3	4	2
41	Puerperal septicemia.....	40	13.2	1	3	11		8	2	2	1	1	3	4	4
42	Other puerperal diseases.....	43	14.2	6	4	5	2	8	2	2	2	2	2	4	4
43	Skin diseases.....	15	4.9	1		2	2	1		1	2	3		1	2
44	Diseases locomotor system.....	7	2.3	2		1	1	1				2			
45	Malformations.....	55	18.1	6	4	7	6	1	3	7	3	3	4	7	4
46	Premature birth.....	74	24.4	12	8	5	9	5	6	3	8	2	3	7	6
47	Congenital debility.....	85	28.0	11	4	8	10	2	9	12	4	7	5	6	7
48	Old age.....	136	44.9	14	14	14	17	15	13	8	8	3	12	9	9
49	Suicides.....	17	5.6				2	1	3	2	1	3	1	1	3
50	Accidents.....	250	82.4	14	9	17	12	21	24	34	27	31	28	13	20
51	Homicides.....	4	1.3						3				1		
52	Causes ill-defined.....	170	56.1	23	17	25	15	15	12	9	9	8	12	12	13

## CAUSES OF DEATH.

liii

for the State and geographical sections, 1901.—Northern Counties.

Ages of decedents, 1901.																								
Ages in years under five.					Ages for five-year periods.																			Line number.
0.	1.	2.	3.	4.	0. to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80+	Unk.		
881	169	69	54	33	1,206	120	97	143	163	155	138	117	120	146	163	152	161	191	192	155	214	21	1	1
2	...	...	2	...	4	8	5	12	21	11	9	5	...	3	3	1	1	...	2	1	...	1	2	3
2	...	...	...	1	3	2	2	1	...	1	1	...	1	...	2	1	1	...	...	...	...	...	4	3
1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	6
4	4	13	7	2	30	13	...	2	1	...	1	1	1	...	...	...	1	...	...	...	...	...	6	7
16	4	1	...	...	21	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	8
6	2	7	10	9	34	22	11	5	4	4	1	...	...	...	...	...	1	...	...	...	...	...	8	9
16	7	2	1	1	27	1	2	1	2	3	2	1	2	4	4	4	6	5	11	13	15	...	9	10
8	5	...	...	1	14	...	...	...	1	...	...	...	...	...	...	...	...	1	1	1	1	...	10	11
3	...	...	...	...	3	...	...	...	...	...	2	...	1	1	...	1	2	...	1	...	...	...	11	12
1	...	1	...	...	2	1	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	12	13
6	1	...	...	2	9	3	8	32	34	33	27	11	15	19	11	10	9	4	4	2	2	...	13	14
4	4	2	...	...	10	1	1	3	3	2	3	...	1	2	3	...	1	3	...	1	...	...	14	15
...	...	...	...	...	...	...	2	...	...	2	1	6	13	11	21	19	12	17	13	7	2	1	15	16
...	...	...	2	...	2	1	2	...	1	...	...	2	...	1	1	...	...	5	3	...	2	...	16	17
1	...	1	...	...	2	...	1	...	2	1	3	1	...	2	3	1	2	6	2	...	1	...	17	18
8	2	...	...	...	10	4	1	4	2	3	2	5	3	3	7	4	3	1	6	1	1	2	18	19
17	14	4	3	2	40	6	3	4	2	...	...	...	...	2	...	...	...	...	...	...	...	...	19	20
7	1	2	1	...	11	...	2	1	3	1	3	4	4	5	...	6	15	11	9	10	7	1	21	22
...	...	...	1	...	1	...	...	...	1	...	1	2	2	5	2	9	11	7	7	10	14	...	23	24
50	9	1	...	...	60	2	1	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	25	26
16	3	2	3	...	24	5	6	4	7	6	3	7	3	13	8	13	7	9	5	1	4	...	27	28
7	1	...	...	...	8	...	2	1	2	3	5	7	11	17	16	19	24	35	28	21	16	1	29	30
5	...	...	1	1	7	3	2	3	6	1	3	1	4	1	7	4	3	5	4	7	4	...	31	32
42	8	4	1	1	56	...	...	1	1	3	...	2	1	...	1	4	2	6	3	7	6	2	33	34
23	8	...	1	1	33	3	1	...	...	...	...	...	...	1	...	...	2	1	1	1	2	...	35	36
87	18	12	1	5	123	12	7	15	13	11	12	10	11	14	15	13	10	18	16	9	8	...	37	38
19	4	...	2	...	25	1	2	1	1	3	1	1	2	1	2	1	4	7	4	6	...	...	39	40
16	5	1	...	...	22	1	2	...	2	...	1	...	2	3	3	4	2	4	7	1	1	...	41	42
168	45	...	...	...	213	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	43	44
...	9	7	1	...	17	2	5	1	...	1	1	1	1	2	5	3	4	2	5	3	1	...	45	46
10	1	1	...	...	12	1	1	1	3	...	...	2	...	2	1	3	3	...	7	...	...	...	47	48
...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	49	50
2	1	...	...	...	1	1	...	...	1	1	1	2	...	4	5	2	5	5	...	4	2	...	51	52
...	...	...	...	...	3	3	...	5	3	4	4	...	...	1	1	1	...	...	1	...	...	...	53	54
2	1	...	...	...	1	1	5	3	2	3	...	4	3	1	...	...	...	...	...	...	...	...	55	56
8	1	...	2	...	11	5	...	3	3	1	...	1	2	1	2	...	1	...	2	...	1	...	57	58
4	...	2	...	...	6	1	...	1	3	3	4	2	9	8	14	8	4	9	8	6	5	...	59	60
4	...	2	...	...	6	...	...	2	3	4	2	4	2	1	2	3	2	6	10	4	8	...	61	62
...	...	...	...	...	...	...	...	5	8	12	8	5	1	1	...	...	...	...	...	...	...	...	63	64
...	...	...	...	...	...	...	...	4	10	7	10	7	3	1	...	...	...	...	...	...	...	...	65	66
4	...	...	...	...	4	...	...	1	...	...	1	...	...	...	2	...	1	...	1	3	2	...	67	68
4	...	...	...	...	4	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	69	70
52	3	...	...	...	55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	71	72
74	...	...	...	...	74	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	73	74
85	...	...	...	...	85	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	75	76
...	...	...	...	...	...	...	...	...	...	...	2	1	3	1	...	3	3	2	...	1	1	...	77	78
20	10	2	4	6	42	12	20	24	17	24	18	16	12	11	11	10	7	2	10	1	6	7	79	80
...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	81	82
79	8	1	2	...	90	1	1	3	...	3	5	3	4	4	3	5	12	8	8	9	9	2	83	84



Table 17.—Continued.—Causes of death in Michigan, by months and ages,

Line number.	Causes of death, 1901.	Total deaths, 1901.	Rate per 100,000 estimated population.	Months of deaths, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	ALL CAUSES .....	5,461	1,236.8	506	533	590	485	475	357	375	437	507	405	364	407
2	Typhoid fever.....	97	22.0	9	2	5	5	5	3	3	8	20	14	15	8
3	Malarial fever.....	27	6.1	2	3	2	2	2	2	1	6	4	3	1	1
4	Smallpox.....	7	1.6	1	1	1	1	1	1	1	1	1	1	1	2
5	Measles.....	8	1.8	1	2	2	2	2	2	1	1	1	1	1	1
6	Scarlet fever.....	69	15.6	6	11	17	4	7	5	1	1	1	3	5	8
7	Whooping cough.....	32	7.2	6	3	4	6	2	1	1	1	3	1	1	3
8	Diphtheria and croup.....	97	22.0	8	9	13	6	7	6	3	4	4	14	12	9
9	Influenza.....	222	50.3	33	84	52	25	11	4	2	1	1	7	3	7
10	Dysentery.....	31	7.0	2	1	1	1	1	1	2	4	10	7	3	1
11	Erysipelas.....	19	4.3	3	4	1	5	2	1	1	1	1	1	1	1
12	Other epidemic diseases.....	7	1.6	1	1	1	1	1	1	1	3	1	1	1	1
13	Tuberculosis of lungs.....	372	84.3	40	32	39	35	43	32	33	28	22	28	16	24
14	Other forms of tuberculosis.....	71	16.1	3	3	10	11	7	7	4	7	6	4	3	6
15	Cancer.....	226	51.2	16	21	15	16	23	14	18	15	22	25	18	23
16	Rheumatism.....	41	9.3	6	6	8	3	5	3	2	2	4	1	1	1
17	Diabetes.....	42	9.5	2	4	5	4	1	1	3	3	6	8	2	3
18	Other general diseases.....	97	22.0	5	3	12	7	10	10	7	10	15	4	7	7
19	Meningitis.....	77	17.4	6	6	8	7	9	9	6	10	10	3	3	1
20	Apoplexy.....	199	45.1	15	10	14	13	26	13	19	22	13	21	12	21
21	Paralysis.....	131	29.7	10	6	14	19	11	11	9	10	11	11	11	8
22	Convulsions.....	80	18.1	9	9	6	7	10	9	7	8	3	5	4	3
23	Other nervous diseases.....	126	28.5	11	17	11	9	5	9	10	7	12	11	15	9
24	Heart disease.....	417	94.4	35	36	42	38	36	25	37	28	37	29	36	38
25	Other circulatory diseases.....	87	19.7	10	4	8	5	11	8	7	7	7	7	10	3
26	Bronchitis.....	119	27.0	21	19	15	18	6	6	1	3	5	9	7	9
27	Bronchopneumonia.....	69	15.6	15	9	12	6	3	3	1	2	5	4	1	9
28	Pneumonia.....	472	106.9	61	83	83	66	40	18	11	6	12	20	27	45
29	Other respiratory diseases.....	104	23.6	14	10	10	5	14	5	8	3	7	9	6	13
30	Diseases of stomach.....	100	22.6	2	2	15	14	20	8	10	5	14	3	3	4
31	Diarrhea and enteritis, under 2 years.....	308	69.8	13	9	8	13	7	9	20	81	92	40	8	8
32	Diarrhea and enteritis, over 2 years.....	100	22.6	4	3	7	5	6	6	7	13	26	12	4	7
33	Hernia and obstr. of bowels.....	68	15.4	5	6	2	7	8	10	9	8	5	3	5	5
34	Cirrhosis of liver.....	39	8.8	3	5	1	3	3	2	1	7	5	2	4	3
35	Other liver diseases.....	46	10.4	2	3	3	8	4	3	3	5	4	3	4	4
36	Peritonitis.....	53	12.0	8	3	5	7	7	3	4	3	3	6	4	7
37	Appendicitis.....	39	8.8	3	4	3	7	2	2	4	8	1	1	2	2
38	Other digestive diseases.....	25	5.7	2	2	3	3	2	2	1	1	5	4	4	2
39	Bright's disease.....	171	38.7	22	14	16	18	22	10	14	8	13	7	11	16
40	Other genito-urin'y diseases.....	94	21.3	5	4	11	4	6	11	14	13	6	3	9	8
41	Puerperal septicemia.....	52	11.8	3	5	9	10	2	5	4	3	3	2	3	3
42	Other puerperal diseases.....	64	14.5	3	9	7	6	9	2	2	5	8	5	6	2
43	Skin diseases.....	16	3.6	1	1	1	1	2	3	2	2	1	1	1	2
44	Diseases locomotor system.....	5	1.1	1	1	1	1	1	1	1	2	1	1	1	1
45	Malformations.....	49	11.1	5	7	4	5	7	3	7	7	1	4	1	5
46	Premature birth.....	100	22.6	10	11	7	9	6	11	10	5	6	7	9	9
47	Congenital debility.....	74	16.8	5	3	13	6	5	5	8	7	7	4	6	5
48	Old age.....	199	45.1	23	23	22	18	13	12	15	13	17	15	17	11
49	Suicides.....	31	7.0	2	1	3	2	8	4	4	4	3	3	1	1
50	Accidents.....	281	63.6	21	12	18	15	27	18	35	23	30	28	32	22
51	Homicides.....	5	1.1	1	1	3	1	1	1	1	1	1	1	1	1
52	Causes ill-defined.....	196	44.4	18	37	17	12	18	13	9	18	17	8	10	19

## CAUSES OF DEATH.

lv

for the State and geographical sections, 1901.—Central Counties.

Ages of decedents, 1901.																								
Ages in years under five.					Ages by five-year periods.																			
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.	Line number.	
1,069	204	99	66	45	1,483	146	117	195	227	192	178	170	203	190	222	266	256	410	373	366	454	13		
.....	2	.....	1	2	5	2	7	19	15	13	8	7	4	10	2	3	1	.....	.....	1	.....	2	2	
.....	.....	1	3	.....	4	1	1	1	3	2	2	1	.....	2	.....	2	.....	2	3	1	2	.....	3	
2	2	2	.....	.....	2	.....	1	.....	1	1	1	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	4	
9	7	10	6	9	41	22	2	3	1	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	5	
20	7	2	1	2	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	
7	7	13	10	9	46	27	16	4	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	
34	3	3	2	1	43	.....	2	2	.....	4	6	8	6	1	6	8	12	14	23	16	38	34	8	
13	7	.....	1	.....	21	.....	.....	2	1	.....	.....	1	.....	1	.....	2	1	1	2	2	1	1	9	
6	1	.....	.....	.....	7	1	.....	.....	1	.....	.....	.....	.....	1	1	.....	2	1	2	1	1	1	10	
1	1	.....	.....	.....	2	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	1	11	
2	1	.....	.....	.....	3	.....	5	51	71	48	46	24	25	31	16	13	14	9	5	7	3	1	13	
10	5	1	.....	.....	16	5	4	8	5	8	5	2	4	3	2	1	2	3	.....	1	2	.....	14	
1	.....	.....	.....	.....	1	.....	.....	1	1	3	3	13	20	14	17	34	21	40	24	18	16	.....	15	
.....	.....	.....	.....	.....	.....	4	5	3	.....	3	.....	2	1	.....	.....	5	4	2	4	4	4	16	16	
.....	.....	.....	.....	.....	.....	1	4	.....	4	4	.....	6	2	2	2	.....	4	5	5	3	.....	.....	17	
15	1	.....	1	.....	17	2	1	1	5	5	8	4	9	4	5	7	3	13	8	3	2	.....	18	
21	12	7	4	2	46	8	1	7	4	1	2	3	2	.....	1	1	.....	1	.....	.....	.....	.....	19	
4	2	2	.....	.....	8	2	2	2	1	1	2	2	3	4	14	23	18	29	32	29	26	1	20	
2	.....	1	.....	1	4	.....	1	3	1	.....	1	1	2	2	3	12	7	18	30	27	19	1	21	
60	9	5	.....	1	75	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	22	
8	5	1	1	1	16	6	5	5	4	4	1	3	4	13	9	10	10	9	14	5	8	.....	23	
12	1	.....	4	.....	17	2	6	2	3	3	8	9	15	17	29	31	39	71	66	53	45	1	24	
5	.....	.....	1	1	7	1	1	4	1	1	4	3	3	3	7	8	10	7	11	5	11	.....	25	
46	8	3	.....	.....	57	2	1	.....	.....	.....	1	2	1	1	2	2	2	10	11	16	11	.....	26	
33	10	5	1	.....	49	.....	2	.....	2	.....	.....	.....	.....	.....	1	2	2	2	3	3	.....	.....	27	
103	32	7	2	3	147	14	8	16	15	19	14	22	26	16	28	24	25	30	17	31	19	1	28	
27	2	3	4	1	37	2	1	1	4	1	5	3	2	2	5	3	7	8	7	9	7	.....	29	
22	6	.....	.....	.....	28	1	1	.....	.....	1	2	3	8	4	3	6	7	14	8	9	5	.....	30	
251	56	.....	.....	.....	307	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	31	
.....	18	7	2	.....	27	5	3	3	2	6	.....	.....	2	2	7	6	9	8	8	2	10	.....	32	
7	5	.....	1	.....	13	1	1	4	3	3	1	2	4	3	4	5	3	7	7	4	3	.....	33	
1	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	1	1	3	5	4	2	9	3	4	1	.....	34	
2	.....	.....	.....	.....	2	.....	.....	.....	2	1	4	2	4	1	3	7	3	7	6	5	1	2	.....	35
5	1	.....	1	.....	7	2	3	4	7	6	4	4	5	3	.....	.....	1	2	3	1	1	.....	36	
.....	.....	.....	.....	2	2	3	5	13	7	.....	2	1	1	3	.....	2	.....	.....	.....	.....	.....	.....	37	
8	1	1	.....	1	11	2	2	.....	.....	2	.....	1	.....	1	1	.....	1	.....	2	2	.....	.....	38	
1	1	1	.....	.....	3	3	3	3	3	6	3	4	8	11	14	20	15	27	19	12	17	.....	39	
6	1	.....	1	.....	8	1	2	1	1	4	4	1	8	5	7	5	2	11	8	11	15	.....	40	
.....	.....	.....	.....	.....	.....	.....	.....	3	16	13	7	6	6	1	.....	.....	.....	.....	.....	.....	.....	.....	41	
.....	.....	.....	.....	.....	.....	.....	.....	4	22	9	12	9	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	
3	.....	.....	.....	.....	3	.....	1	.....	.....	.....	.....	1	.....	1	.....	1	1	3	.....	1	4	.....	43	
1	.....	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	44	
47	.....	.....	.....	.....	47	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	
100	.....	.....	.....	.....	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46	
74	.....	.....	.....	.....	74	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	5	22	35	134	2	48	
.....	.....	.....	.....	.....	.....	.....	1	2	2	4	2	4	4	3	4	1	2	1	3	2	.....	.....	49	
29	9	7	12	6	63	21	17	19	17	14	12	10	10	9	15	11	10	12	10	10	17	4	50	
.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	51	
69	5	1	2	.....	77	1	2	.....	1	4	1	6	2	5	3	6	11	19	18	15	24	1	52	



## VITAL STATISTICS OF MICHIGAN, 1901.

Table 17.—Concluded.—Causes of Death in Michigan, by months and ages,

Line number.	Causes of death, 1901.	Total deaths, 1901.	Rate per 100,000 estimated population.	Months of deaths, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1	ALL CAUSES.....	20,331	1,416.2	1,984	1,918	2,133	1,811	1,633	1,477	1,552	1,478	1,641	1,499	1,484	1,721
2	Typhoid fever.....	373	26.0	46	26	31	25	22	13	18	25	43	49	45	30
3	Malarial fever.....	70	4.9	2	3	4	4	5	5	10	7	10	9	4	7
4	Smallpox.....	10	0.7			1			5	1		2	1		
5	Measles.....	39	2.7	1	3	6	3	3	5	2		1	1		9
6	Scarlet fever.....	129	9.0	10	14	15	9	11	5	3	7	4	16	12	23
7	Whooping cough.....	85	5.9	6	6	10	7	5	5	9	10	14	3	4	6
8	Diphtheria and croup.....	243	16.9	37	28	14	22	19	9	5	8	22	23	29	27
9	Influenza.....	748	52.1	131	218	201	80	43	16	9	4	4	10	9	23
10	Dysentery.....	144	10.0	1	3	3	3	1	6	11	36	51	16	10	3
11	Erysipelas.....	79	5.5	7	8	16	11	9	4	2	3	4	5	1	9
12	Other epidemic diseases.....	34	2.4	1	2	3	1		2	4	6	10	1	2	2
13	Tuberculosis of lungs.....	1,301	90.6	147	108	133	120	118	102	99	90	93	99	92	100
14	Other forms of tuberculosis	227	15.8	22	13	20	23	26	17	16	17	13	26	19	15
15	Cancer.....	1,036	72.2	77	82	91	70	98	76	88	86	90	84	96	98
16	Rheumatism.....	147	10.2	16	11	17	21	11	11	8	10	13	9	9	
17	Diabetes.....	172	12.0	22	19	19	14	15	12	11	7	7	8	21	17
18	Other general diseases.....	374	26.1	26	30	30	37	34	45	30	23	33	27	31	28
19	Meningitis.....	247	17.2	24	12	27	24	24	23	34	18	19	12	10	20
20	Apoplexy.....	895	62.3	82	82	99	83	74	67	48	60	70	70	72	88
21	Paralysis.....	576	40.1	60	63	65	51	41	47	38	27	46	50	35	53
22	Convulsions.....	307	21.4	33	27	42	30	20	34	33	15	19	14	20	20
23	Other nervous diseases.....	682	47.5	52	63	74	59	65	62	59	44	57	43	48	56
24	Heart disease.....	1,923	133.9	182	164	168	189	163	159	146	140	147	127	156	182
25	Other circulatory diseases.	400	27.9	30	38	39	30	44	33	28	21	37	31	40	29
26	Bronchitis.....	532	37.1	84	64	79	52	44	31	19	13	22	23	42	59
27	Bronchopneumonia.....	307	21.4	46	45	63	30	19	12	8	5	3	18	22	36
28	Pneumonia.....	1,403	97.7	204	235	218	175	103	67	34	20	35	59	93	160
29	Other respiratory diseases.	389	27.1	48	40	33	49	28	20	16	21	26	41	29	38
30	Diseases of stomach.....	305	21.2	29	17	28	28	39	19	24	24	21	24	27	25
31	Diarrhea and enteritis, under 2 years.....	905	63.0	18	19	27	23	34	71	184	186	201	91	22	29
32	Diarrhea and enteritis, over 2 years.....	331	23.1	22	21	19	25	19	20	28	51	53	33	21	19
33	Hernia and obstr. of bowels	212	14.8	19	17	21	16	13	15	15	12	20	20	20	24
34	Cirrhosis of liver.....	140	9.8	13	11	12	17	14	12	17	13	6	10	10	5
35	Other liver diseases.....	197	13.7	22	14	16	17	5	16	17	16	23	22	10	19
36	Peritonitis.....	168	11.7	18	10	19	20	17	18	13	16	16	8	6	7
37	Appendicitis.....	175	12.2	17	9	16	21	14	10	13	23	13	19	11	9
38	Other digestive diseases.....	98	6.8	7	8	10	14	7	6	6	6	10	11	4	9
39	Bright's disease.....	726	50.6	71	57	70	54	63	63	45	65	59	60	58	61
40	Other genito-urinary diseases	419	29.2	39	28	30	34	46	37	35	34	33	35	28	40
41	Puerperal septicemia.....	146	10.2	12	11	22	19	17	7	12	9	8	9	10	10
42	Other puerperal diseases.....	127	8.8	13	12	18	9	13	7	9	11	4	7	9	15
43	Skin diseases.....	122	8.5	9	15	14	11	13	10	9	3	13	5	6	14
44	Diseases locomotor system.	24	1.7	1	1	1	5	3	2	1	2	1	3	1	3
45	Malformations.....	169	11.8	16	20	17	14	17	16	11	15	12	8	11	12
46	Premature birth.....	282	19.6	31	14	27	28	26	22	21	17	21	24	27	24
47	Congenital debility.....	398	27.7	35	37	34	31	35	40	33	32	35	33	28	25
48	Old age.....	806	56.1	72	78	90	81	65	53	64	58	52	61	48	84
49	Suicides.....	164	11.4	10	14	12	14	9	11	14	18	11	25	13	13
50	Accidents.....	1,029	71.7	67	57	64	69	78	96	141	93	94	70	123	77
51	Homicides.....	12	0.8			1	2	1	2	1	1	2	1	1	
52	Causes ill-defined.....	504	35.1	46	41	44	37	40	31	47	52	41	41	34	50

## CAUSES OF DEATH.

lvii

for the State and geographical sections, 1901.—Southern Counties.

Ages of decedents, 1901.																									
Ages in years under five.					Ages for five-year periods.																				Line number.
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.			
3,327	561	256	169	128	4,441	380	366	601	742	736	688	709	742	754	878	1041	1220	1542	1578	1637	2226	50			
1	1	2	5	3	11	18	27	50	56	45	30	41	22	13	14	8	10	14	4	6	4	4	2		
1	2	2	1	2	8	1	5	4	6	9	2	2	3	2	4	1	4	2	4	7	5	1	3		
11	7	7	1	1	26	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	4		
46	18	16	17	14	76	31	7	5	3	2	3	2	2	2	2	2	2	2	2	2	2	2	5		
17	29	28	26	22	122	64	29	9	4	4	4	2	2	2	1	1	1	1	1	1	1	1	8		
54	7	3	1	1	65	9	5	16	14	9	14	16	19	16	35	39	61	82	68	108	171	1	9		
15	10	7	4	1	36	2	1	1	1	2	3	2	1	1	5	5	8	13	16	18	34	1	10		
13	1	1	1	1	14	1	2	1	1	2	3	3	6	6	7	3	4	5	6	7	9	1	11		
2	2	1	1	1	7	4	1	1	1	1	1	1	1	1	1	1	3	4	3	3	5	1	12		
12	6	6	2	2	28	9	30	137	182	194	150	121	100	65	74	71	53	38	20	26	3	13	14		
17	16	5	4	2	44	9	6	15	25	15	21	12	11	12	16	16	6	9	1	8	1	14	15		
2	3	2	2	2	7	3	2	4	11	10	25	47	69	86	105	118	139	140	124	80	64	2	15		
1	1	1	1	1	3	8	11	8	3	4	4	5	11	5	5	7	18	15	19	11	10	1	16		
3	2	2	1	1	6	9	8	11	7	9	6	7	10	9	12	14	12	25	12	8	7	1	17		
61	5	6	1	1	74	3	7	12	20	16	27	31	21	32	20	19	19	25	23	17	8	1	18		
80	30	12	9	9	140	22	9	11	10	10	9	7	5	7	2	3	3	3	4	2	2	1	19		
19	4	1	2	2	26	3	8	1	9	8	11	11	15	32	51	72	87	146	137	127	150	1	20		
4	1	1	1	1	4	1	5	1	3	4	4	9	20	17	25	42	50	70	94	93	134	2	21		
267	21	4	1	1	294	2	1	1	4	1	1	1	1	1	1	1	2	1	1	1	1	1	22		
46	4	9	4	2	65	17	13	30	13	24	25	36	47	43	32	44	55	70	63	58	43	4	23		
35	4	1	3	2	45	8	25	20	25	24	35	47	75	81	117	164	203	261	264	274	255	1	24		
12	3	2	3	1	21	1	2	8	13	10	13	12	11	14	21	37	36	58	49	50	44	1	25		
169	46	6	9	7	237	5	1	2	4	9	6	5	3	7	11	18	18	34	44	51	77	1	26		
132	26	15	1	6	180	7	2	4	1	1	6	6	5	3	7	10	8	17	17	12	21	1	27		
247	57	20	15	17	356	23	33	44	37	53	49	52	56	67	62	63	74	91	117	95	123	3	28		
60	13	6	7	3	89	9	4	11	15	8	11	12	15	17	22	17	23	31	32	31	41	1	29		
69	7	1	2	1	79	5	2	4	5	7	3	6	12	12	15	10	21	21	26	36	40	1	30		
756	149	1	1	1	905	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	31		
24	1	1	1	1	60	12	6	11	10	12	7	11	7	6	13	20	25	27	25	35	43	1	32		
2	1	1	1	1	28	3	2	7	6	6	9	4	10	19	6	13	18	20	26	21	14	1	33		
4	1	1	1	1	7	1	3	3	4	6	7	7	9	13	16	19	21	21	28	18	14	1	34		
7	5	1	2	3	18	5	11	18	17	11	11	4	12	10	6	10	6	7	9	8	5	1	35		
1	1	1	1	2	4	13	35	31	20	23	10	10	6	1	4	5	4	4	2	1	2	1	36		
24	8	6	1	1	39	1	4	1	3	3	2	2	3	3	6	4	5	9	5	3	10	1	37		
14	4	1	1	1	19	3	4	15	24	25	25	23	32	35	41	64	85	84	80	98	67	2	38		
11	1	1	5	2	19	6	3	4	12	20	21	26	30	21	25	16	30	33	55	36	62	1	39		
12	3	1	1	2	18	1	1	1	2	3	3	3	1	3	2	7	4	12	11	21	32	1	40		
4	4	1	1	1	10	1	1	3	1	1	1	1	1	1	1	4	2	1	1	1	1	1	41		
153	3	5	3	1	164	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	42		
282	1	1	1	1	282	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	43		
398	1	1	1	1	398	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	44		
75	27	23	12	10	154	44	48	66	85	60	41	54	48	43	50	47	41	41	50	47	87	23	50		
154	11	3	2	1	171	5	3	3	3	11	6	11	8	11	17	20	26	39	46	47	76	1	51		

## DISCUSSION OF INDIVIDUAL CAUSES OF DEATH, 1901.

The basis of this discussion will consist of the condensed list of causes shown in Table 17, by months and ages, for the State and the four geographical sections into which it is divided. For convenience a summary derived from these tables will be presented in connection with each cause.

## DEATHS FROM ALL CAUSES.

The total number of deaths registered by means of certificates of deaths during the year 1901 was 32,834, corresponding to a mortality of 1,339.7 per 100,000 estimated population. This number is exclusive of 1,501 stillbirths returned as deaths. Compared with the immediately preceding years, which are given in all cases exclusive both of stillbirths and of a small number of deaths in nonregistration districts enumerated under an act repealed in 1901, we have:

Years.	Total deaths registered.	Death rates per 100,000 population.
1901 .....	32,834	1,339.7
1900 .....	32,453	1,340.5
1899 .....	32,289	1,353.4
1898 .....	28,174	1,199.0

The rates, more conveniently expressed as rates per 1,000 population, would be 13.4, 13.4, 13.5 and 12.0. We thus note that the registered mortality was almost exactly the same for the past three years, 1899-1901, and that it was somewhat higher than that shown for 1898. While 1898 was certainly a very favorable year, the fact that it was the first year of the operation of the registration law may have caused a somewhat less perfect return of deaths than during the following years.

The general distribution of deaths among the four geographical sections was as follows:

Geographical sections.	Total deaths, 1901.	Death rates per 1,000 population.
STATE OF MICHIGAN .....	32,834	13.4
I.—UPPER PENINSULA .....	3,388	12.5
II.—NORTHERN COUNTIES .....	3,664	12.1
III.—CENTRAL COUNTIES .....	5,461	12.4
IV.—SOUTHERN COUNTIES .....	20,331	14.2

Nearly two-thirds of the total number of deaths occurred in the Southern counties, and the general death rate of this section was somewhat higher than that of any other. This might be expected, as the Southern counties comprise the oldest-settled portion of the State, with an age-distribution of population less favorable than the newly-settled portions of the State. Possibly, also, registration is somewhat more accurate in the

more densely-settled parts of the State. All of the rates are very low, and a few years ago would have been regarded as quite certain evidences of imperfect registration. The fact, however, that the general death rates of some large cities have reached quite unexampled degrees of depression in recent years makes such rates as these more likely to be accepted as reasonable, and the thorough test given to the accuracy of the Michigan returns in 1900, precedent to its recognition as a registration State by the U. S. Census, would indicate that the peculiar combination of a vigorous and sturdy stock, a most healthful and agreeable climate, and a "campaign of education" as to the prevention and restriction of dangerous communicable diseases conducted by our progressive State Board of Health for many years, have in fact resulted in a phenomenal condition of well-being as respects the general health of the commonwealth, and especially a freedom from those devastating epidemics that raise the death rates in other less favored localities.

## TYPHOID FEVER.

The total number of deaths compiled in this report from typhoid fever is 645, which number includes 30 deaths reported from the so-called "typho-malarial fever," a term which is undoubtedly equivalent to nothing more or less than typhoid fever in the vast majority of cases. Probably many of the 109 deaths reported directly from malarial fever were actually due to typhoid fever. It is curious how some physicians and persons otherwise intelligent will misrepresent or accept misrepresentations relative to the occurrence of certain diseases, thereby directly jeopardizing the health of the community through less careful disinfection and prevention of contact with the sick. The attack of fever beginning with a "touch of malaria" or as "biliousness," when it has continued a certain period without abatement, "runs into typhoid" or was "typho-malarial fever" from the start. Malarial fever does not "run into typhoid," any more than a seeding of wheat is likely to come up as a crop of oats. The two diseases are very rarely associated, as found by actual occurrence of the plasmodia of malaria and the bacillus typhosus in the same case, but the great majority of instances of what was supposed to be mixed infection or typhoid fever modified by malarial influences are pure and simple typhoid fever, whose protean forms and departure from the classical types of severity and order of symptoms may readily account for its failure to be recognized.

Following is a comparative statement of deaths and death rates from this disease, according to the final compilation of the returns as given in the registration reports, for the first four years of registration of deaths under the law of 1897:

Year.	Deaths from typhoid fever.	Death rates per 100,000 population.
1901 .....	645	26.3
1900 .....	889	35.9
1899 .....	580	24.3
1898 .....	572	24.3

It will thus be seen that the mortality from this cause was markedly less than for the preceding year, although somewhat higher than for either the years 1898 or 1899.

The maximum number of deaths in any month, 96, occurred in September, and the least number, 24, in June. By geographical sections, the highest death rate, 32.5 per 100,000, was in the Upper Peninsula, and the lowest, 22.0, in the Central counties. The rate of the Southern counties, 26.0, was slightly below the general rate for the State.

Table 18.—Deaths from typhoid fever in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	645	26.3	73	36	45	35	31	24	26	49	96	91	83	56
I.—Upper Peninsula....	88	32.5	7	5	5	4	3	3	1	7	16	14	11	12
II.—Northern counties..	87	28.7	11	3	4	1	1	5	4	9	17	14	12	6
III.—Central counties..	97	22.0	9	2	5	5	5	3	3	8	20	14	15	8
IV.—Southern counties..	373	26.0	46	26	31	25	22	13	18	25	43	49	45	30
Deaths by sex, 1901.			Deaths by ages, 1901.*											
Males.	Females.		Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
389	256		2	23	30	53	135	195	123	60	32	28	14	4

\* Includes one death at unknown age.

#### SMALLPOX.

The distribution of deaths from smallpox is shown in Table 19. Although of small numerical importance as a cause of death, the remembrance of its fatality in the past still clings around this disease, and no epidemic cause attracts so much public attention and is considered worthy of so much effort and expense for the sake of immediate restriction as smallpox among all of the causes ordinarily prevalent in this State. There were 27 deaths during the year 1901, 9 in 1900, 6 in 1899, and only 1 in 1898. The character of the disease during its present appearance is one of extreme mildness, compared to what is usually the case, and the result is the more ready spread since public opinion will not always support thorough enforcement of the only effective restrictive measure, i. e., general vaccination and re-vaccination until immunity is secured.

# CAUSES OF DEATH.

lxi

**Table 19.—Deaths from smallpox in Michigan, 1901.**

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	27	1.1	1	1	3	1	1	6	2	1	4	2	2	3
I. Upper Peninsula.....	4	1.5	1	.....	.....	1	.....	.....	.....	.....	.....	.....	1	1
II. Northern counties..	6	2.0	.....	.....	1	.....	1	1	.....	.....	2	.....	1	.....
III. Central counties..	7	1.6	.....	1	1	.....	.....	.....	1	1	.....	1	.....	2
IV. Southern counties..	10	0.7	.....	.....	1	.....	.....	5	1	.....	2	1	.....	.....

Deaths by sex, 1901.		Deaths by ages, 1901.											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
14	13	5	6	2	8	1	6	4	3	.....	3	1	1

**Table 20.—Deaths from measles in Michigan, 1901.**

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	79	3.2	3	5	10	6	5	12	10	1	3	2	8	14
I. Upper Peninsula.....	31	11.5	1	.....	1	3	2	7	8	.....	1	1	3	4
II. Northern counties..	1	0.3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
III. Central counties..	8	1.8	1	2	2	.....	.....	.....	.....	1	1	.....	.....	1
IV. Southern counties..	39	2.7	1	3	6	3	3	5	2	.....	1	1	5	9

Deaths by sex, 1901.		Deaths by ages, 1901.											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
42	37	22	60	7	67	2	2	1	4	1	.....	1	1

**MEASLES.**

Measles was unusually low as a cause of death during 1901, contrasted with the high fatality of the preceding year. There were only 79 deaths, while there were 342 in 1900, 187 in 1899, and 131 in 1898. The Upper Peninsula rate rose from 8.4 to 11.5 per 100,000, but all other parts of the State had very low death rates from this disease for the year. Distribution by ages, sex and months may be seen in Table 20.

**SCARLET FEVER.**

Scarlet fever showed an increase of mortality for the year compared with that for 1900, and both years were higher in this respect than the years preceding (1898-99). Deaths increased from 91 in 1898, 144 in 1899 and 272 in 1900 to 312 in 1901, the corresponding rates being, in order, 3.9, 6.0, 11.2 and 12.7 per 100,000 population. The order of mortality among the sections was the same in each of the years 1900 and 1901, but while the death rate fell considerably in the Upper Peninsula, it rose in the other sections.

**Table 21.—Deaths from scarlet fever in Michigan, 1901.**

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State .....	312	12.7	33	42	45	21	31	17	8	17	6	21	29	42
I. Upper Peninsula.....	64	23.7	13	11	7	2	7	5	3	6	.....	.....	5	5
II. Northern counties....	50	16.5	4	6	6	6	6	2	1	3	1	2	7	6
III. Central counties...	69	15.6	6	11	17	4	7	5	1	1	1	3	5	8
IV. Southern counties...	129	9.0	10	14	15	9	11	5	3	7	4	16	12	23
Deaths by sex, 1901.			Deaths by ages, 1901.											
Males	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.	
146	166	30	193	80	273	22	8	7	1	.....	1	.....	.....	

**WHOPPING COUGH.**

Deaths from whooping cough decreased from 208 in 1900 to 163 in 1901. Very little attention is given to the restriction of this disease, whose mortality is almost entirely confined to the early years of life. The mortality, like that of most other children's diseases, was highest in the Upper Peninsula. For exact comparisons, rates based upon susceptible populations of early age must be employed.

Table 22.—Deaths from whooping cough in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State .....	163	6.7	15	13	20	15	14	10	14	16	18	4	10	14
I. Upper Peninsula. ....	24	8.9	1	3	5	1	2	3	4	1	1	.....	.....	3
II. Northern counties...	22	7.3	2	1	1	1	5	1	.....	4	.....	.....	5	2
III. Central counties ..	32	7.2	6	3	4	6	2	1	1	1	3	1	1	3
IV. Southern counties...	85	5.9	6	6	10	7	5	5	9	10	14	3	4	6

Deaths by sex, 1901.		Deaths by ages, 1901.											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
74	89	98	155	7	162	1	.....	.....	.....	.....	.....	.....	.....

## DIPHTHERIA AND CROUP.

Deaths and death rates from diphtheria and croup for the past four years were as follows:

Years.	Deaths from diphtheria and croup.	Death rates per 100,000 population.
1901.....	502	20.5
1900.....	529	21.9
1899.....	435	18.2
1898.....	456	19.4

There has thus been some tendency toward an increased mortality from this disease in recent years, but the year 1901 showed a more favorable rate than that of the preceding year. About half of the deaths were those of children under five years of age, and, like scarlet fever and whooping cough, the death rates decreased in passing from the Upper Peninsula to the Southern counties. January showed the largest number of deaths from this cause, 71, and the smallest number occurred in July, 16. As compared with the preceding year, the slight decline in mortality was due to a lower death rate in the Southern counties, which fell from 20.0 to 16.9 per 100,000 population, the other sections all showing increased prevalence.



## VITAL STATISTICS OF MICHIGAN, 1901.

Table 23.—Deaths from diphtheria and croup in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	502	20.5	71	47	36	41	41	18	16	22	49	50	60	51
I. Upper Peninsula.....	81	29.9	16	6	5	4	4	1	2	6	14	6	12	5
II. Northern counties...	81	26.7	10	4	4	7	11	2	6	4	9	7	7	10
III. Central counties...	97	22.0	8	9	13	8	7	6	3	4	4	14	12	9
IV. Southern counties...	243	16.9	37	28	14	22	19	9	5	8	22	23	29	27

Deaths by sex, 1901.		Deaths by ages, 1901.											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
262	240	36	246	140	366	83	19	7	4	1	2	.....	.....

Table 24.—Deaths from influenza in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	1,099	44.8	179	343	292	117	65	22	13	4	6	13	13	32
I. Upper Peninsula.....	26	9.6	1	12	5	2	2	1	1	.....	.....	1	.....	1
II. Northern counties...	103	34.0	14	29	34	10	9	1	1	.....	1	2	1	1
III. Central counties...	222	50.3	33	84	52	25	11	4	2	.....	1	.....	3	7
IV. Southern counties...	748	52.1	131	218	201	80	43	16	9	4	4	10	9	23

Deaths by sex, 1901.		Deaths by ages, 1901.*											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
527	572	113	146	12	158	28	34	48	54	103	194	257	222

\* Includes one death at unknown age.

## INFLUENZA.

This disease again prevailed with almost epidemic prevalence, according to the reports received, during certain months of the year 1901. The total number of deaths was more than double the number recorded for the preceding year, although considerably lower than the number registered for 1899. Following is a comparative statement of deaths and death rates from this cause for the last four years:

Years.	Deaths from influenza.	Death rates per 100,000 population.
1901.....	1,099	44.8
1900.....	500	20.7
1899.....	1,673	70.1
1898.....	455	19.4

The deaths from influenza are usually recorded in a very few months of the years, rapidly rising in winter and declining with the coming of warm weather. Thus in 1901, there were 179 deaths from "grippe" in January, 343 in February, the maximum monthly number for the year, 292 in March, from which time the number rapidly declined until August with only 4 deaths from this cause, some of which may have been of very remote duration. From the minimum in August, the number of deaths slowly increased until December, for which 32 deaths from this cause were compiled. For December, 1900, there were only 29 deaths, or less than one-sixth of the number in the following month. In the epidemic year 1899 also the maximum mortality from influenza, 690 deaths, was in February, and the rapid rise from 49 deaths in December, 1898, to 400 deaths in January, 1899, quite corresponds to the situation during the present year.

It should be remembered in studying the variations of the mortality from influenza that the term is not always a very definite statement of cause of death. As returned, it frequently accompanies statements of deaths from diseases of the respiratory system, such as pneumonia, bronchopneumonia, bronchitis, and the like, which may or may not have been, in fact, due to actual infection with the specific germ of influenza. A prevalent disorder of this character, especially one which may affect almost every organ and system of the body as profoundly as genuine influenza may do, is bound to obtain the credit for a good deal of damage that it may actually not be responsible for. It may, of course, be said that the presence of influenza has influenced the course and termination of many other diseases, and in this sense, as a contributory cause, the total number of deaths chargeable to this disease may not only not be overestimated but may be even less than the truth. It would be desirable, although this has not been very commonly done, that influenza should be studied in connection with all of the diseases of the respiratory system, including also pulmonary tuberculosis, before any final opinion as to its effect upon general mortality be formed.

As to sex, males suffer a greater numerical loss, while the age-distribution is characterized, as is usually the case, by the large percentage of elderly persons who succumb.

#### TUBERCULOSIS.

There were 2,532 deaths in Michigan during the year 1901 from all forms of tuberculosis, according to the returns made by physicians. This represents a slight increase from the number compiled for the preceding year, but a general decrease of both years as compared with 1898 and 1899 in the following statement:

Years.	Total deaths from all forms of tuberculosis.	Death rates per 100,000 population.
1901 .....	2,532	103.3
1900 .....	2,478	102.4
1899 .....	2,694	112.9
1898 .....	2,826	120.2

The fact that the mortality from all forms of tuberculosis was considerably greater in 1898 than in any of the last three years, although the general death rate for 1898 was unusually low, is of interest. It may, perhaps, point to a tendency among physicians to report deaths really due to tuberculosis more frequently from the immediate cause or complication than formerly, or it may be that the increasing mortality from pneumonia has removed individuals whose deaths would ordinarily have occurred from tuberculosis. The violent fluctuations of mortality from influenza during the past four years do not appear to have been accompanied by corresponding changes in the incidence of deaths from tuberculosis.

When we come to the more detailed study of the forms of tuberculosis, we find difficulty in making comparisons for the four years on account of an important change in classification in 1901 and also to enhanced care in obtaining additional statements from physicians in regard to certain facts affecting the statistics of 1899 and 1900.

The primary cause of the trouble was the carelessness with which physicians not infrequently fill out the medical certificate of cause of death. In many cases of death from tuberculosis, as from cancer, the organ or part of the body affected is not stated. When a death occurs from pulmonary tuberculosis or tuberculosis of the lungs, it is desirable to state that fact exactly, instead of merely reporting "tuberculosis," without any additional explanation as to the seat of the disease. A death so reported might be confined to the meninges (tuberculous meningitis), to the peritoneum (tuberculous peritonitis), or to many other organs or parts of the body. We have found that the great majority of deaths so reported, without proper specification, are in reality, at least in this country, nothing more or less than deaths from pulmonary tuberculosis, but this fact was not accepted at the time when the original form of the

Bertillon system was framed. This system of classification was adopted in the first Michigan report under the new law, namely, that for the year 1898, and continued to be in force up to the completion of the compilation for the year 1900. This system did not include a death returned from "tuberculosis," without qualification, under pulmonary tuberculosis, but relegated it to another title of the classification, namely, "general tuberculosis." Beginning with 1901, the revised Bertillon system, now known as the International classification, was adopted. The revised classification, recognizing the fact that the great majority of deaths returned from "tuberculosis" are due to pulmonary tuberculosis, places them under that title. The result is, evidently, that pulmonary tuberculosis is relatively higher and other forms of tuberculosis, including under the latter title all varieties of tuberculosis not pulmonary, is relatively lower for the year 1901 than for the years 1898, 1899 and 1900.

In the following statement may be found the comparative figures compiled for pulmonary tuberculosis and other forms of tuberculosis for the past four years:

Years.	Deaths compiled from pulmonary tuber- culosis.	Deaths compiled from other forms of tuber- culosis.
1901 .....	2,152	380
1900 .....	2,018	460
1899 .....	2,098	596
1898 .....	2,153	673

The total number of deaths from pulmonary tuberculosis in 1901 is only one less than the number compiled for this cause in 1898, but the number for 1901 includes a considerable number of deaths from "tuberculosis" which the number for 1898 excludes. Consequently there has been a more considerable numerical decrease in the number of deaths from pulmonary tuberculosis between the two years than the figures would indicate. On the other hand, the decrease of deaths from other forms of tuberculosis from 673 in 1898 to 380 in 1901 is much greater than the facts will warrant, since a certain number of deaths from "tuberculosis" raise the number for the former year. And even for the three years 1898, 1899 and 1900, the data for which were compiled according to the old Bertillon system with exclusion of deaths from "tuberculosis" from pulmonary tuberculosis, direct comparisons cannot be made on account of the increased accuracy of the returns in the last two years, and particularly in 1900, as compared with 1898, where the original certificates were accepted without attempt at correction. As stated in the report for 1899, p. lxiii, letters asking for more specific information were sent to all physicians reporting deaths from "tuberculosis," and the result was that many such cases were definitely stated to be pulmonary tuberculosis and were so compiled. Probably also the knowledge thus diffused among the profession as to the necessity of such statement resulted in a decreased number of such original returns, so that the later years showed a marked amount of improvement. While such changes and irregularities are annoying, they

are necessary incidents of improvements or revisions of existing methods, and cannot always be avoided unless we could possess knowledge of what future opinions and information would be.

The distribution of mortality from pulmonary tuberculosis and from the forms of tuberculosis not reported as pulmonary may be seen for the year 1901 in Tables 25 and 26. The latter group, comprising a total of 380 deaths for the year, includes 22 deaths reported from tuberculosis of the larynx, 93 deaths from tuberculous meningitis, 132 deaths from abdominal tuberculosis, 29 deaths from Pott's disease of the spine, 3 deaths from tuberculous abscess, 17 deaths from "white swelling," that is, tuberculosis of the knee-joint chiefly, 38 deaths from tuberculosis of other organs, and 46 deaths from general tuberculosis. The last item includes only deaths so returned, and does not include deaths in which two or more organs or parts of the body were stated to be affected by the tuberculous process. Ordinarily such cases involve pulmonary tuberculosis, and are compiled under that head as being of greater practical use in that form of statement. The exact progression of tuberculous infection from one part of the body to another can rarely be learned from certificates of death, and when the most common and thoroughly-studied form of the disease is present, it would seem to be of first importance to compile under this head.

The death rates from tuberculosis of the lungs were about the same in the Upper Peninsula and Southern counties, and considerably lower in the Northern and Central counties. More females than males succumbed to the disease during the year, and the largest number of deaths, 632, occurred during the ten-year period of life from 20 to 29 years, both inclusive. The maximum monthly number of deaths was 246 in January, while the minimum fell in November, with only 141 recorded.

Table 25.—Deaths from tuberculosis of lungs in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	2,152	87.8	246	176	217	209	210	178	165	159	145	159	141	147
I. Upper Peninsula.....	246	90.9	28	21	17	23	21	27	20	23	21	12	22	11
II. Northern counties...	233	76.8	31	15	28	31	28	17	13	18	9	20	11	12
III. Central counties...	372	84.3	40	32	39	35	43	32	33	28	22	28	16	24
IV. Southern counties...	1,301	90.6	147	108	133	120	118	102	99	90	93	99	92	100

Deaths by sex, 1901.		Deaths by ages, 1901.*											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
968	1,194	25	54	19	73	298	632	429	293	213	135	70	8

\* Includes one death at unknown age.

From other forms of tuberculosis the highest death rate was in the Upper Peninsula as in the pulmonary form, but the Southern counties showed a somewhat lower mortality than the Central counties, contrary to the indications for the latter. There were more deaths of males than of females, and the deaths in the first decade of life, 101, bore a larger ratio to the total number than the deaths in the corresponding period of pulmonary tuberculosis. In general, the forms included under this group are characterized by prevalence among children, some of them, in fact, being probably obscure forms of marasmic disease not demonstrable as tuberculosis, and the conclusions from examination of the tables must be qualified to some extent by the uncertainty as to diagnosis in these cases.

Table 26.—Deaths from other forms of tuberculosis in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	380	15.5	31	21	41	45	40	29	25	26	26	36	30	30
I. Upper Peninsula.....	48	17.7	4	5	5	6	5	3	2	1	4	4	4	5
II. Northern counties...	34	11.2	2	.....	6	5	2	2	3	1	3	2	4	4
III. Central counties...	71	16.1	3	3	10	11	7	7	4	7	6	4	3	6
IV. Southern counties...	227	15.8	22	13	20	23	26	17	16	17	13	26	19	15

Deaths by sex, 1901.		Deaths by ages, 1901.											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
198	182	36	82	19	101	47	67	49	37	39	25	12	3

## CANCER.

A slight increase may be noted in the mortality compiled from cancer for 1901 over that of the preceding year. The deaths and death rates for the past four years are as follows:

Years.	Deaths from cancer.	Death rates per 100,000 population.
1901 .....	1,484	60.5
1900 .....	1,460	60.3
1899 .....	1,334	55.9
1898 .....	1,321	56.2

The mortality by months was quite uniform for the year, as indicated in Table 27; the maximum number of deaths, 142, was in May, while the minimum number, 103, was in April. As usual the death rate of the Southern counties from this disease was much higher than that of any other section of the State, owing largely to a more unfavorable age distribution of the population. As shown in the table, the largest numbers of deaths occur at advanced ages, so that where there is an excess of elderly persons, as in the Southern counties, the mortality from cancer may be expected to run higher than in the newly-settled portions of the State where the majority of the inhabitants are younger.

Table 27.—Deaths from cancer in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	1,484	60.5	110	122	123	103	142	110	125	129	134	124	129	133
I. Upper Peninsula.....	95	35.1	5	12	5	4	9	12	4	11	8	13	7	5
II. Northern counties...	127	41.9	12	7	12	13	12	8	15	17	14	2	8	7
III. Central counties...	226	51.2	16	21	15	16	23	14	18	15	22	25	18	23
IV. Southern counties...	1,036	72.2	77	82	91	70	98	76	88	86	90	84	96	98

Deaths by sex, 1901.		Deaths by ages, 1901.*											
ales.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
637	847	4	11	4	15	10	29	104	231	336	393	277	86

\* Includes three deaths at unknown ages.

The comparative rates for the past four years of registration as given above would seem to show some tendency toward an increase in the death rate from cancer in this State, although the very short period of time covered by the statistics is not sufficient to base any definite opinion upon. It is unfortunate that we cannot go backward in this State for a long series of years, or, at least, for the entire time covered by the operation of the old registration law which was enacted in 1867, and from comparison of the statistics collected thereunder with our present returns be enabled to present some conclusive evidence as whether this disease is or is not increasing in prevalence in Michigan. According to statistics compiled in many parts of the world cancer is on the increase, at least as a factor in the gross mortality. The question as to whether cancer is actually increasing in prevalence after full allowance has been made for changes in the age and sex distribution of population and for more accurate diagnosis on the part of the reporting physicians is a more difficult one. In Michigan the question presents peculiar embarrassments from the fact that the returns of deaths under the old law providing for their enumeration annually by supervisors and assessors, which law was in force from 1867 to

1897, were on a quite different basis from the physicians' certificates which constitute the returns of deaths under the registration law of 1897. There was a very considerable increase in the mortality from cancer from 1897 (death rate of 32.6 per 100,000 population) to 1898 (death rate of 55.9), but it is certain that this was largely due to increased accuracy of registration in general, many deaths being recorded under the new law that would have otherwise failed to be put upon record. The ratio of deaths from this disease to deaths from all causes, stillbirths excluded, shows a slight increase as may be noted in Table 28, but one which is in keeping with the fairly uniform tendency in this direction as shown by the comparison of the five-year averages in this table.

Table 28.—Ratio of deaths from cancer to deaths from all causes registered in Michigan, exclusive of stillbirths, for the years 1870-1902.

Years and periods.	Deaths from all causes, stillbirths excluded.	Deaths from cancer.	Per cent.
<i>Years:</i>			
1870.....	10,540	120	1.1
1871.....	9,480	105	1.1
1872.....	13,167	133	1.0
1873.....	13,984	172	1.2
1874.....	12,036	188	1.6
1875.....	11,361	203	1.8
1876.....	11,930	241	2.0
1877.....	12,199	266	2.2
1878.....	11,973	269	2.2
1879.....	13,658	272	2.0
1880.....	15,364	284	1.8
1881.....	18,547	310	1.7
1882.....	15,635	301	1.9
1883.....	16,022	383	2.4
1884.....	17,137	361	2.1
1885.....	15,638	403	2.6
1886.....	17,278	391	2.3
1887.....	18,585	463	2.4
1888.....	20,406	480	2.4
1889.....	19,113	492	2.6
1890.....	20,245	533	2.6
1891.....	20,989	534	2.5
1892.....	20,715	558	2.7
1893.....	20,963	644	3.1
1894.....	19,957	677	3.4
1895.....	21,648	757	3.5
1896.....	20,729	780	3.8
1897.....	19,150	760	4.0
1898*.....	28,248	1,321	4.7
1899*.....	32,500	1,334	4.1
1900*.....	32,559	1,460	4.5
1901*.....	32,834	1,484	4.5
1902*.....	31,472	1,483	4.7
<i>Five-year periods:</i>			
1872-76.....	12,496	187	1.5
1877-81.....	14,348	280	2.0
1882-86.....	16,342	368	2.3
1887-91.....	19,868	498	2.5
1892-96.....	20,802	583	3.3
1898-1902.....	31,523	1,416	4.5
<i>Twenty-five year period:</i>			
1872-96.....	16,771	403	2.4

Under new law.



The study of mortality from cancer is further complicated by the fact that a certain number of deaths from this disease are returned from "tumor," so that it is advisable to consider the mortality from this indefinite return in connection with the deaths from cancer. In the Michigan Registration Report for 1897, Appendix B, pages 234-241, the deaths compiled from cancer and from tumor are given for all of the years included under the operation of the old law, 1867-97, and in Tables 29 and 30 certain comparisons with population and other ratios are given on the basis of these data, together with the corresponding results derived from the first five years of registration under the new law, 1898-1902. Before proceeding to these tables, however, it may be of interest to examine certain exhibits derived from them and originally published in the Michigan Monthly Bulletin of Vital Statistics for November, 1902, and also a paper read before the Sixth General Conference of the Health Officials in Michigan at Ann Arbor, January 15-16, 1903, on the same subject, the latter containing a diagram which enables the course and variations in age distribution of cancer to be seen graphically represented.

### INCREASE OF CANCER IN MICHIGAN.\*

For some years the attention of statisticians and sanitarians has been directed to the apparent increase of the mortality from cancer in various parts of the world. In the Michigan registration reports the diagrams showing the death rates from various diseases indicate a constant increase in the mortality from cancer. The steady upward march of this disease contrasts remarkably with the sharp fluctuations from year to year of most of the other diseases represented. A somewhat similar appearance is presented by the diagram showing the monthly mortality from cancer as registered in the *Bulletin of Vital Statistics* for the two years 1899-1900 (frontispiece to Vol. III). Here, while the increase is of course less than in the diagrams showing the annual rates, one can almost see cancer increasing in this State from month to month. The opinion is general that there has been a remarkable increase in the death rate from this disease, although some evidence has been adduced by eminent statisticians to the effect that the increased mortality may be partly owing to differences in reporting. Without entering into the merits of this discussion, it seemed desirable to present some of the statistics relating to the subject in Michigan, more especially as a committee of the State Board of Health has recently been appointed to investigate this subject. This paper is, however, only to be regarded as a preliminary note showing the general character of the data and the indications resulting from the first and possibly somewhat cursory study of the subject.

The material upon which this analysis is based may be found in the appendix to the Thirty-first Registration Report of Michigan, 1897, pages 234-241, with the addition of data from the registration reports since 1897. In the report for 1897, the deaths from cancer and "tumor" are tabulated from all of the Michigan registration reports from 1867 to 1897. "Tumors" are included because, as will appear in this discussion, they bear a certain relation to the deaths from cancer more or less dependent upon the accuracy of the original returns. Probably many such deaths are, in fact, deaths from cancer, and hence should be considered in connection with this subject.

\* Article in Michigan Monthly Bulletin of Vital Statistics, November, 1902.

## CAUSES OF DEATH.

lxxiii

**EXHIBIT A. - Deaths in Michigan from cancer and "tumor," by sex, for years and periods of years, 1870-1900.**

Years and periods.	Cancer.			"Tumor."		
	Total.	Males.	Females.	Total.	Males.	Females.
<i>Years:</i>						
1870.....	120	47	73	23	6	17
1871.....	105	48	57	32	11	21
1872.....	133	58	75	31	7	24
1873.....	172	75	97	48	18	30
1874.....	188	84	104	34	14	20
1875.....	203	73	130	55	13	42
1876.....	241	118	123	41	12	29
1877.....	266	125	141	45	16	29
1878.....	269	116	153	56	14	42
1879.....	272	124	148	65	23	42
1880.....	284	111	173	76	29	47
1881.....	310	112	198	86	24	62
1882.....	301	139	162	68	16	52
1883.....	383	160	223	58	14	44
1884.....	361	173	188	85	26	59
1885.....	403	183	220	104	30	74
1886.....	391	171	220	91	23	68
1887.....	453	185	268	92	21	71
1888.....	480	193	287	108	35	73
1889.....	492	202	290	102	28	74
1890.....	533	235	298	123	33	90
1891.....	534	214	320	157	38	119
1892.....	558	246	312	139	36	103
1893.....	644	284	360	156	43	113
1894.....	677	269	408	149	41	108
1895.....	757	312	445	172	48	124
1896.....	780	325	455	161	43	118
1897.....	760	333	427	135	49	86
1898*.....	1,321	549	772	79	22	57
1899*.....	1,334	560	774	45	8	37
1900*.....	1,460	599	861	46	15	31
<i>Five-year periods:</i>						
1872-76.....	937	408	529	209	64	145
1877-81.....	1,401	588	813	328	106	222
1882-86.....	1,839	826	1,013	406	109	297
1887-91.....	2,492	1,029	1,463	582	155	427
1892-96.....	3,416	1,436	1,980	777	211	566
1898-1900*.....	4,115	1,708	2,407	170	45	125
<i>Twenty-five year period:</i>						
1872-96.....	10,085	4,287	5,798	2,302	645	1,657

\* Deaths for the years 1898-1900 registered under law requiring certificates of death by physicians and burial permits before interment. Aggregate of three years is given.

In Exhibit A may be seen the total number of deaths by sex for each of the years 1870-1900, with the aggregate for five consecutive quinquennial periods from 1872 to 1896, and also the aggregate number of deaths registered under the new law from the years 1898 to 1900. The total number of deaths for the twenty-five years 1872-96 is also shown, amounting to 10,085 deaths from cancer and 2,302 deaths from "tumor."

In most of the tables following, the twenty-five years 1872-96, inclusive, are selected as the basis for discussion for the reason that prior to 1872 the statistics of deaths, were not tabulated by quinquennial periods and

ages throughout, so that the rates by ages cannot be obtained uniformly prior to that date. It seemed advisable to terminate with the year 1896, omitting the year 1897, because we thus have a complete quarter-century, readily divisible into five quinquennial periods, and also because for the last three months of the year 1897 certificates of death were on file in all the township, village and city registration offices of the state, and *might* have been consulted by supervisors in making their returns. It is desirable to preserve a sharp line of demarcation between the returns under the old and imperfect law, and the returns under the present approximately correct system of registration.

**EXHIBIT B.—Death rates in Michigan from cancer and "tumor," by sex, per 100,000 estimated population, for years and periods of years, 1870-1900.**

Years and periods.	Cancer.			"Tumor."		
	Total.	Males.	Females.	Total.	Males.	Females.
<i>Years:</i>						
1870.....	10.1	7.6	12.9	1.9	1.0	3.0
1871.....	8.6	7.5	9.8	2.6	1.7	3.6
1872.....	10.6	8.8	12.5	2.5	1.1	4.0
1873.....	13.3	11.1	15.7	3.7	2.7	4.8
1874.....	14.1	12.0	16.3	2.5	2.0	3.1
1875.....	14.7	10.1	19.7	4.0	1.8	6.4
1876.....	16.8	15.7	18.0	2.9	1.6	4.2
1877.....	17.9	16.0	20.0	3.0	2.1	4.1
1878.....	17.5	14.4	21.0	3.6	1.7	5.8
1879.....	17.1	14.9	19.7	4.1	2.8	5.6
1880.....	17.3	12.9	22.3	4.6	3.4	6.1
1881.....	18.3	12.6	24.7	5.1	2.7	7.7
1882.....	17.2	15.1	19.6	3.6	1.7	6.3
1883.....	21.3	16.9	26.1	3.2	1.5	5.2
1884.....	19.5	17.8	21.4	4.6	2.7	6.7
1885.....	21.3	18.4	24.5	5.5	3.0	8.2
1886.....	20.2	16.9	23.9	4.7	2.3	7.4
1887.....	23.0	17.9	28.5	4.7	2.0	7.5
1888.....	23.8	18.3	29.9	5.4	3.3	7.6
1889.....	24.0	18.8	29.5	5.0	2.6	7.5
1890.....	25.5	21.5	29.7	5.9	3.0	9.0
1891.....	25.1	19.3	31.3	7.3	3.4	11.6
1892.....	25.7	21.8	30.0	6.4	3.2	9.9
1893.....	29.2	24.8	33.9	7.1	3.8	10.6
1894.....	30.2	23.2	37.7	6.6	3.5	10.0
1895.....	33.3	26.5	40.6	7.6	4.1	11.3
1896.....	33.9	27.3	40.9	7.0	3.6	10.6
1897.....	32.6	27.6	37.9	5.8	4.1	7.6
1898*.....	55.9	45.0	67.6	3.3	1.8	5.0
1899*.....	55.8	45.4	66.9	1.9	0.6	3.2
1900*.....	60.3	48.0	73.5	1.9	1.2	2.6
<i>Five-year periods:</i>						
1872-76.....	14.0	11.6	16.5	3.1	1.8	4.5
1877-81.....	17.7	14.1	21.6	4.1	2.5	5.9
1882-86.....	19.9	17.0	23.1	4.4	2.2	6.8
1887-91.....	24.3	19.2	29.8	5.7	2.9	8.7
1892-96.....	30.5	24.8	36.7	6.9	3.6	10.5
1898-1900*.....	57.3	46.1	69.3	2.4	1.2	3.6
<i>Twenty-five year period:</i>						
1872-96.....	22.3	18.1	26.8	5.1	2.7	7.7

\* Deaths for the years 1898-1900 registered under the law requiring certificates of death by physicians and burial permits before interment. Average of the three-year period is taken for comparison with preceding quinquennial periods.

In examining Exhibit A, the large increase in the number of deaths yearly reported (from 120 in 1870 to 1,460 in 1900) may be accounted for largely by two factors besides that of a possible increase in the mortality from cancer. These are, first, the large increase in the population of the state, and, second, the increased accuracy of registration. As to the latter, it is probable that the percentage of imperfect returns did not vary markedly from 1870 to 1897, but with the operation of the present registration law in 1898 it appears that a very great increase of accuracy took place, so that the statistics for the years 1898-1900 cannot be compared directly with those for the preceding years. As regards the factor of increased population, this may be removed to a certain extent by examining, not the returns of deaths for each year, but the death rates based upon enumerated and estimated populations, as shown in Exhibit B.

It will be observed in Exhibit A that the number of deaths from cancer registered for only three years under the new law, 4,115, is over 40 per cent of the total number of deaths from cancer registered for a quarter of a century under the old law, while the number of deaths from "tumor" for the three years under the new law is less than the number for any quinquennial period under the old law, even the first, 1872-76, when the population was much smaller than it is at present. This possibly indicates that physicians, who are now responsible for certificates of death, are much less apt to use the objectionable term "tumor" than the supervisors who formerly collected the mortality statistics.

Exhibit B shows the death rates for males, females, and for the aggregate of both sexes, per 100,000 population, from cancer and "tumor" for the same years and periods as the original deaths were shown in Exhibit A. It is evident that the gross death rates have increased for these diseases, although not nearly as much as the deaths themselves as shown in the preceding table.

The steady increase in the death rates from cancer may be followed from year to year, and in the five-year periods it will be seen that for both sexes, the death rates from cancer and "tumor" are higher for each quinquennial period than for the preceding one. To this statement there is only a single exception, of slight importance, namely, that the death rate of males from "tumor" for the period 1882-86 was only 2.2 per 100,000 population, and 2.5 for the preceding period. Otherwise the increase is general. In making this statement, no reference is made to the rates under the new law, which affords a very large increase of deaths from cancer owing to the increased accuracy of registration and a decrease in the rates from "tumor" owing to the greater precision of physicians in reporting causes of death.

Another important element to be considered in discussing the question of the increase of cancer is the variations of the age constitution of the population. Exhibit C has been prepared in order to show the death rates from cancer per 100,000 population at certain periods of age, namely, under 15 years, 15-29 years, 30-44 years, 45-64 years, and 65 years and over. The deaths occurring at each of these ages are compared with the corresponding population, the distinction of sex being made in each case.

Cancer is a disease that is seldom found in the young, so that the first two groups of ages shown in Exhibit C are of little consequence, except as they show the insignificance of the rates at these ages. Beginning with the group of 30-44 years, the mortality from cancer rapidly increases.

**EXHIBIT C.—Death rates in Michigan from cancer per 100,000 population of same sex and period of age, for periods of years, 1872-1900.**

Quinquennial periods.	Sex.	All ages.	Periods of age.				
			Under 15 years.	15 to 29.	30 to 44.	45 to 64.	65 years and over.
1872-76 .....	Males.....	11.6	2.7	1.2	6.9	35.8	114.0
	Females...	16.5	2.3	2.6	15.4	65.4	131.0
1877-81 .....	Males.....	14.1	1.7	1.8	7.3	43.7	148.1
	Females...	21.6	2.4	2.6	21.6	86.5	144.0
1882-86 .....	Males.....	17.0	2.3	1.5	8.7	49.3	178.6
	Females...	23.1	1.9	3.6	24.2	82.9	156.9
1887-91 .....	Males.....	19.2	1.9	2.2	9.6	53.6	178.6
	Females...	29.8	2.2	3.9	31.3	100.6	187.5
1892-96 .....	Males.....	24.8	1.0	2.5	11.5	70.7	219.1
	Females...	36.7	0.9	4.1	34.2	129.1	224.1
1898-1900* .....	Males.....	46.1	2.9	3.6	21.0	119.6	463.7
	Females...	69.3	1.9	7.7	57.1	218.3	476.7

\* Three-year period under new law.

As a convenient means of comparison, Exhibit D has been constructed showing the percentage of increase of the mortality at each age and sex in one quinquennial period as compared with the corresponding items of the preceding quinquennial period, and also the percentage of increase of the death rates of the final period, 1892-96, over the first quinquennial period, 1872-76. The latter comparison shows what may be called the net increase of the twenty years.

**EXHIBIT D.—Per cents of increase\* of death rates in Michigan from cancer per 100,000 population of same sex and periods of age in preceding quinquennial periods, 1872-96.**

Quinquennial periods compared.	Sex.	All ages.	Periods of age.—Per cents of increase* over preceding periods.				
			Under 15 years.	15 to 29.	30 to 44.	45 to 64.	65 years and over.
From 1872-76 to 1877-81 .....	Males.....	21.6	*37.0	50.0	5.8	22.1	29.9
	Females...	30.9	4.3	0.0	40.3	32.3	9.9
From 1877-81 to 1882-86 .....	Males.....	20.6	35.3	*16.7	19.2	12.8	20.6
	Females...	6.9	*20.8	38.5	12.0	*4.2	9.0
From 1882-86 to 1887-91 .....	Males.....	12.9	*17.4	46.7	10.3	8.7	0.0
	Females...	29.0	15.8	8.3	29.3	21.4	19.5
From 1887-91 to 1892-96 .....	Males.....	29.2	*47.4	13.6	19.8	31.9	22.7
	Females...	23.2	*59.1	5.1	9.3	28.3	19.5
From 1872-76 to 1892-96 .....	Males.....	113.8	*63.0	108.3	66.7	97.5	92.2
	Females...	122.4	*60.9	57.7	122.1	97.4	71.1

\* Decrease from the corresponding rate for the preceding five-year period is indicated by an asterisk (\*).

We observe in Exhibit D that the per cents of increase for the first two age periods are very irregular, and that in a considerable proportion of cases, no increase, but rather a decrease, was shown. These results are of no significance. In the latter three age periods, however, embracing all

ages from 30 years upwards, we observe that an increase is shown for each age and period considered, with only two exceptions, one of which shows an equality between the rates at two consecutive quinquennial periods. In the latter case, which occurs in the period 1887-91, we observe a general lessening of the amounts of increase for males as compared with the preceding period. This proportion appears to increase with age. It is possible that this irregularity may be due to the abnormal number of deaths of elderly males during the prevalence of the great influenza epidemic which occurred in this period. As a consequence, there would be fewer deaths reported from cancer.

In comparing the net amount of increase of the last quinquennial period, 1892-96, over the first period, 1872-76, we note that the mortality of both males and females has more than doubled, and that with the exception of the insignificant rates under 15 years of age, the death rates at each age period have regularly increased in the neighborhood, approximately, of 100 per cent.

The preceding observations of Exhibits C and D show that the mortality from cancer in Michigan has increased, not only for the population as a whole, but at each of the important age periods. In Exhibit E an attempt is made to measure the probable effect of this increase with reference to the distribution of the population. The method employed is substantially that used by Dr. Körösi for the computation of the mortality index with reference to the varying distribution of the population in different countries. Comparing the percentages of population of Michigan according to the United States Census of 1870 with the corresponding figures for 1890, we observe that there has been a decrease in the proportion of children under fifteen years of age from 1870 to 1890. This, in itself, would favor an increased rate from cancer in the latter year, since this age period shows an extremely low death rate from this disease. On the other hand, the marked increase in the percentage of population over 65 years would also favor an increased death rate in the latter year. Taking the actual death rates at each of the several age periods in 1890 and multiplying by the percentages of the corresponding age periods in 1870, we find by the summation of the coefficients that the death rate from cancer in Michigan in 1890, which was 21.5 per 100,000 population for males, would have been approximately 17.2 per 100,000 if the population had been as favorably distributed in 1890 as it was in 1870. In like manner, the death rate from cancer for females in 1890, 29.7 per 100,000 population, would have been only 23.7 if the population had been as favorably distributed in 1890 as it was in 1870. The actual death rates in 1890 for both males and females were about 25 per cent higher than they would have been if the age distribution of 1870 had been maintained. Now we find, on referring to Exhibit B, that the actual death rates from cancer in 1870 were only 7.6 per 100,000 population and 12.9 per 100,000 population, so that the increase of the death rates in 1890 over 1870 would be 182.9 per cent and 130.2 per cent respectively. It is thus seen that the per cents of increase (25.0 and 25.3), due to the variations in the age distribution of the population, would only partially explain the large per cents of increase.

EXHIBIT E.—Mortality index for cancer in Michigan, by sex, 1890, on basis of age distribution of population in 1870.

Periods of age.	Population of Michigan, 1870.				Population in Michigan, 1890.				Deaths from cancer, 1890.		Death rates from cancer per 100,000 population, 1890.		Products.		
	Males.		Females.		Males.		Females.		Males.	Females.	Males. (b)	Females. (b')	Males. (a+b)	Females. (a'+b')	
	Number.	Percent. (a)	Number.	Percent. (a')	Number.	Percent.	Number.	Percent.							
ALL AGES*.....	617,738	100.0	566,309	100.0	1,088,697	100.0	1,000,765	100.0	235	298	21.5	29.7	.....	.....	
Under 15 years.....	238,986	37.1	221,805	39.2	352,055	32.3	343,026	31.3	7	7	2.0	2.0	0.7430	0.7840	
15 to 29 years.....	173,227	28.0	162,969	28.8	301,575	27.7	285,093	28.5	5	5	1.7	3.2	0.4760	0.9216	
30 to 44 ".....	115,858	18.8	103,268	18.2	223,136	20.5	189,943	19.0	35	58	15.7	30.5	2.9516	5.5510	
45 to 64 ".....	81,633	13.2	63,758	11.3	161,900	14.9	140,477	14.0	91	142	56.2	101.1	7.4184	11.4243	
65 years and over.....	18,034	2.9	14,479	2.6	50,031	4.6	42,236	4.2	96	81	191.9	191.8	5.5651	4.9868	
Unknown age*.....	7	.....	5	.....	3,083	0.3	1,344	0.1	1	1	.....	.....	.....	.....	
Mortality index for deaths from cancer in 1890 based on age distribution of population in 1870.....														17.1531	23.6677

\* Population and deaths at unknown ages excluded.

In considering the age periods employed in this discussion, it should be remembered that quite a large number of years is included in each, and that there may be some internal variations in the periods themselves that would require attention. This is especially true of the period 65 years and over, in which an alteration of a few years in the average ages of the persons composing it would very considerably affect the rate of mortality. It may be necessary to employ more numerous age periods, or at any rate to check the validity of those employed by considering such variations in the average ages.

Among the arguments that have been used to explain the apparent increase of cancer, without admitting that there has been as large an increase in the mortality as would appear on the face of the statistics, is the supposition that various forms of cancer are more fully reported by physicians at the present time than formerly. It would seem that for the period of twenty-five years included in the Michigan statistics, upon which this paper is chiefly based, that there could not have been a very radical change in the accuracy of the returns in this respect, especially as the data are filtered from the physicians through the families and then from the families through the supervisors, so that only the most striking facts would probably be reported. Where statistics are based directly upon the certificates of physicians, it seems reasonable to suppose that changes in medical opinions would more rapidly affect the compilation of the data than when they pass through several hands. In this whole discussion of cancer, it may be remarked that the term is used in what would be called the general sense to include all classes of malignant diseases due to new growths. As Henry Morris defines it in a recent discussion before the section of surgery of the British Medical Association, "the term 'cancer' is used in the general sense to include all forms of malignant new growths, and therefore embraces rodent ulcer, sarcoma, and lympho-sarcoma, as well as epithelioma and the other varieties of carcinoma." This is fully as great a degree of refinement as is warranted by the condition of returns for the compilation of mortality statistics. Objection has been made by some to the International Classification from the fact that it does not separately tabulate carcinoma and sarcoma, but it would be useless and misleading to attempt to introduce distinctions which only very few of the returns attempt to make. The quality of the statistics generally may be inferred from examination of Exhibit F, which shows the proportional deaths from each form of cancer as classified by the Revised International Classification for each of the quinquennial periods from 1872 to 1896 under the old law, and for the three years, 1898 to 1900 under the new law. We observe that the relative number of deaths of each sex from the various forms of cancer shows little variation during the twenty-five years, with the exception of cancer of the breast in females, which shows a considerable decrease. The proportion of deaths from cancer of other or unspecified organs is in the neighborhood of 50 per cent of the whole number returned for both sexes, running somewhat higher for females. This proportion is in marked contrast to the per cents under the new law, which were only about one-half as great, and less for females than for males. Even as it is, however, the fact that over one-quarter of all of the deaths from cancer returned by physicians in Michigan do not specify the organs affected is a serious discredit to the accuracy and capability of the physicians who make these returns.



**EXHIBIT F.—Per cent of deaths from cancer in Michigan by sex and organ or parts of body affected for periods of years, 1872-1900.**

Classification number.	Organ or part of body affected. (International Classification, Revision of Paris, 1900.)	Sex.	Twenty-five years. 1872-96.	Five-year periods, 1872-96.					Three years, 1898 to 1900 (new law).
				1872 to 1876.	1877 to 1881.	1882 to 1886.	1887 to 1891.	1892 to 1896.	
	<b>TOTAL DEATHS FROM CANCER</b>	Males....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		Females.	100.0	100.0	100.0	100.0	100.0	100.0	100.0
39	Cancer of mouth.....	Males....	2.5	5.6	2.6	2.2	1.4	2.5	4.2
		Females.	0.8	1.7	0.9	1.0	0.8	0.6	1.4
40	Cancer of stomach and liver	Males....	37.7	38.7	38.4	36.1	38.5	37.5	49.1
		Females.	20.8	18.3	17.6	17.3	23.4	22.6	29.2
41	Cancer of intestines.....	Males....	2.5	1.7	2.4	2.3	2.2	3.0	9.2
		Females.	2.5	2.1	3.1	3.0	1.6	2.9	7.4
42	Cancer of genital organs*....	Males....	0.1	.....	.....	.....	0.3	0.1	.....
		Females.	7.1	6.2	8.5	7.1	5.2	8.3	21.4
43	Cancer of breast.....	Males....	0.4	1.0	0.3	0.8	0.5	0.1	0.2
		Females.	8.7	15.9	12.3	7.5	8.1	6.5	12.7
44	Cancer of skin.....	Males....	4.7	6.1	5.2	4.7	5.2	3.7	9.2
		Females.	1.2	0.2	1.1	1.5	1.2	0.9	2.5
45	Cancer of other or unspecified organs.....	Males....	52.1	46.8	51.0	53.9	51.9	53.2	28.0
		Females.	58.8	53.9	56.6	62.7	59.6	58.3	25.4
	(a) External.....	Males....	4.8	5.6	5.4	5.1	4.8	4.1	.....
		Females.	2.1	4.2	2.3	2.3	2.3	1.0	.....
	(b) Internal.....	Males....	1.3	0.5	1.0	1.3	1.7	1.5	.....
		Females.	0.7	0.8	0.5	0.5	1.0	0.6	.....
	(c) Unspecified.....	Males....	46.0	40.7	44.6	47.5	45.5	47.6	.....
		Females.	56.0	49.0	53.8	59.3	56.4	56.8	.....

\* Including the few deaths from cancer of the male genital organs that the International Classification places under (45).

## MORTALITY FROM CANCER IN MICHIGAN.\*

BY CRESSY L. WILBUR, M. D., CHIEF OF DIVISION OF VITAL STATISTICS, DEPARTMENT OF STATE, LANSING.

I was considerably alarmed when I first saw the program for this morning's session and observed that a post-mortem was to be immediately held on my paper,—not that I have any objections to post-mortems in themselves—they are just as important in vital statistics as in pathology—but you will readily see that one may feel at first a slight degree of reluctance in personally providing the corpse, and I knew in a moment, when I saw that the junior professor of pathology was to hold the scalpel, that even the very title of my paper would constitute some degree of offense to a modern pathologist—"The Mortality from Cancer in Michigan;" why not the mortality from "carcinoma," "sarcoma," or some exact expression, instead of the very indefinite term "cancer"?

Well, I can only say that in writing a paper on the mortality from cancer without attempting to distinguish the component elements of this somewhat indefinite term, that I am limited by the necessary restrictions and imperfections of vital statistics as applied to the practical compilation of causes of death received in a registration office. The pathologist is at liberty to apply the very latest scientific distinctions to his cases. He may divide and subdivide deaths from neoplasms so that not only

\* From Proceedings and Addresses of the Sixth General Conference of the Health Officials in Michigan, Ann Arbor, January 15-18, 1903.

the exact organs and parts of the body affected are definitely stated, but also the essential character of the new growths in the strictest pathological sense may be indicated. If all deaths from new growths were reported by competent pathologists, then there would be no reason why these distinctions should not be fully carried out in vital statistics, but, on the contrary, the statements in regard to causes of death are reported by physicians, many of whom have been for years out of college, some of whom have not kept up to the latest advances of pathological knowledge, and a not inconsiderable portion of whom, I regret to say, have little knowledge of pathology and never had. Although we now have a law for the registration of physicians in this State, there are still some loopholes in it, and, even at its best, it must be remembered that the bars were absolutely down until a very short time past. As a consequence, the returns of deaths from cancer, including all forms of malignant neoplasms, are very unsatisfactory from the point of view of exact pathological knowledge.

Going back a few years to the period before the operation of the present registration law under which physicians are now required to report causes of death, we come to an even more unsatisfactory condition of affairs. From 1867 until 1897 the registration law in this State merely required that supervisors should go about in the spring at the time of making their annual assessments and inquire of the families with whom they came into contact whether any deaths had occurred during the preceding calendar year. From the families they obtained such statements as they could in regard to the cause of death, so that the original process of information was substantially as follows: The attending physician diagnosed the case and gave more or less information to the family in regard to its nature. After waiting a considerable period after the death of the individual, varying from three to fifteen months, the family of the decedent gave as correct an account of the cause of death, based more or less remotely on the physician's statement, as they could to the supervisor, and the supervisor, who was, of course, entirely ignorant of medical terms, copied this statement and turned it over to the county clerk, who was likewise presumably ignorant of such matters. The result was finally sent to the State Department for compilation, the medical statements being based on hearsay testimony, and having been distorted more or less by being copied several times by persons unfamiliar with medical terms. The question arises, are such reports of any value whatever, and can any dependence be placed on them for any accurate information in regard to the prevalence of disease?

In spite of the very unsatisfactory methods used for the compilation of mortality statistics—and I may say that the same unsatisfactory methods still persist in this State for the collection of births—I am inclined to think that we may use the information collected in this way to a limited extent, provided we use it very guardedly, and with a thorough knowledge of its inherent defects. The method of collection by enumeration after the close of the year and by unqualified persons is the method pursued by the last United States census in non-registration states, and the vital statistics collected in this way under the Michigan State law are the only statistics that we have covering the last third of the last century. We may, perhaps, assume in using these statistics that if the amount of imperfections was relatively constant, then the results, although imperfect, may safely be taken for internal comparisons,

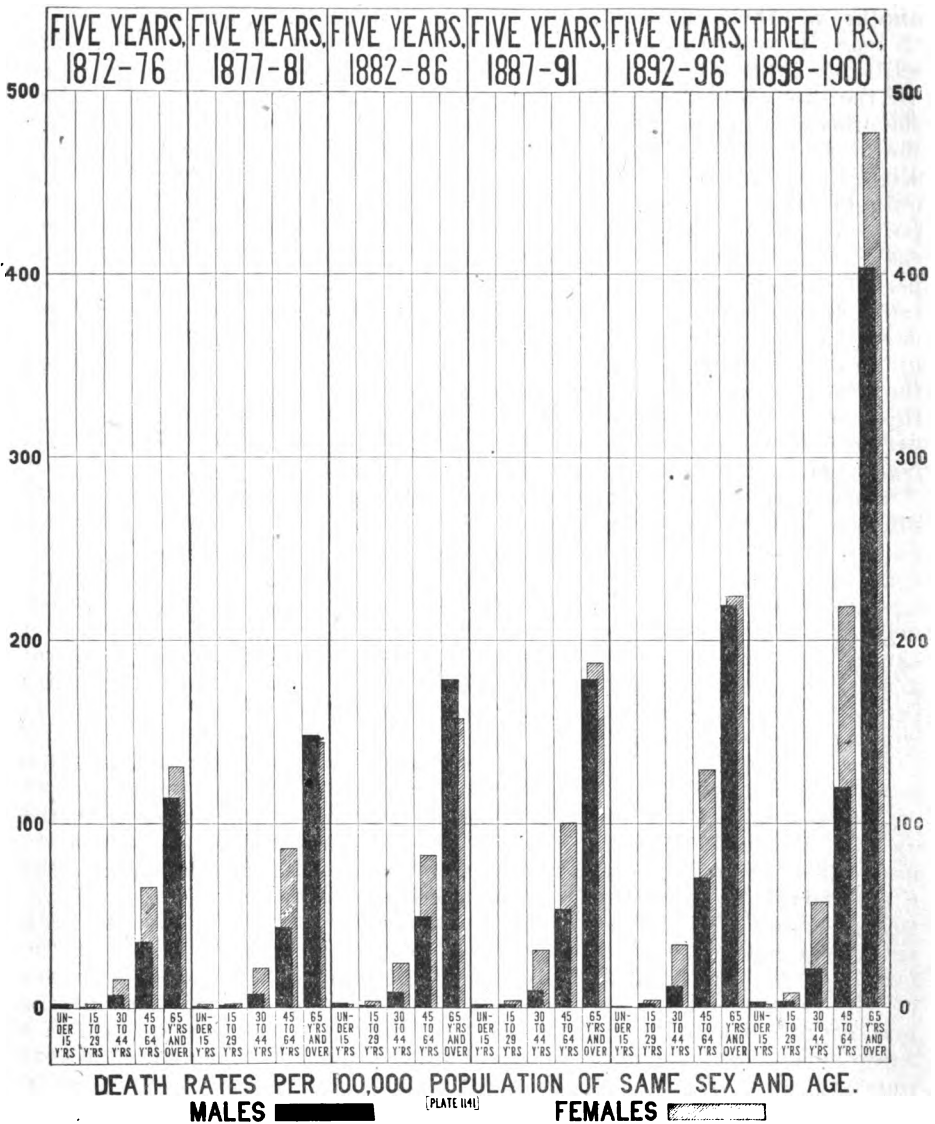
although the rates based on such grossly inaccurate returns cannot, of course, be compared with fairly reliable death rates in other localities. When we have considered the great imperfections belonging to the methods of collection of data, then it is at once apparent that an attempt to make the definite pathological distinctions, such as deaths from "carcinoma," "sarcoma," etc., would be utterly absurd. We are fortunate if we can get an approximate idea of the general variations of total deaths from all forms of malignant neoplasms.

The condensed results of an analysis of the returns of deaths from cancer in Michigan for some thirty years past are graphically shown in the diagram [Plate 1141] kindly prepared by Mr. H. B. Turner of the office of the State Board of Health from statistics collected by the Department of State. As a preliminary step in the preparation of these statistics, the deaths from cancer and tumor stated separately were abstracted from all of the Michigan registration reports beginning with that ending April 5, 1868, and closing with the statistics for 1897, the last year under the old law. These primary figures were printed as an appendix to the Thirty-first Registration Report of Michigan for the year 1897. Examining the figures given, it appears that there was a change made in the method of compilation beginning with the year 1872. Prior to that time, the ages of decedents were stated in decennial periods only. From 1872 to 1897 the ages were given for each five-year period of age. In the estimates of population used in the Michigan reports, the following convenient divisions were employed: Under 15 years; 15-29 years, inclusive; 30-44 years; 45-64 years, and 65 years and over. It thus appears that without considerable inconvenience comparison of age periods could be made only for the years beginning with 1872. It also appears that the age periods thus chosen are substantially the same as those employed by the United States Census in the discussion of cancer, and as will appear by consideration of the diagram and the figures upon which it is based, these periods are well fitted to show the salient facts in regard to the increase of the disease.

We observe that for the period under fifteen years of age the rates both for males and females are so low as to be quite insignificant. Possibly some of the deaths returned and compiled for this period from "cancer" are in reality those of infants dying from "canker" or "cancrum oris," the terms being confused by unqualified reporters. At any rate, the number of deaths and death rates at this period are altogether insignificant. The same is practically true of the following period, including the ages 15-29 years, inclusive, although we may note a slight excess of the death rates of females at these ages.

In the November issue of the *Michigan Monthly Bulletin of Vital Statistics*, in which some of the statistics relating to the increase of cancer have been presented in condensed form, the per cents of increase of the death rates of each sex from cancer may be compared from one quinquennial period to another. These per cents are irregular and sometimes show decreases for the age periods under thirty years. When, however, we come to the age periods from thirty years upwards, we observe that the rates are higher, and that their character as showing a more or less uniform tendency is more definitely pronounced. In these periods, the general rule is that the death rates of females are higher than those of males. The only exceptions are the death rates of females over sixty-five years of age in both of the quinquennial periods of 1877-81 and 1882-86.

# CANCER IN MICHIGAN, 1872-1900.



NOTE.—The statistics for the three years 1898-1900 are the results under the law requiring the immediate registration of deaths (in effect August 29, 1897), and hence cannot be compared directly with the quinquennial periods without making allowance for the increased accuracy of registration.

In general, a fairly uniform amount of increase is shown from one quinquennial period to another for each age period and sex. The only exceptional cases showing a decrease in the rates from one period to another are those of females aged 45-64 years in 1882-86, and of males over 65 years in 1887-91 as compared with the preceding five-year periods. You will note that in this comparison I have not referred to the rates given for the three years, 1898-1900. These rates, which are distinguished from the others by the heading of the column (red),\* are those collected under the present registration law and are approximately accurate. It will be seen at a glance how large an increase there is as compared with the last quinquennial period under the old law, but it is evident that a large proportion of this increase is fictitious, the difference being due simply to the greater accuracy of registration. The general relations of the age periods shown in the statistics collected under the new law resemble those indicated under the old system, and if we should apply some uniform percentage of increase to the old statistics so that they might be brought up to a basis of comparable equality with the new data, it would seem that the general tendency of increase would be confirmed; that is, the three years, 1898-1900, would probably show a slight increase for each age period over the preceding five years, although the increase would not be nearly as large as that indicated on the diagram.

The general conformity of the figures collected by these two entirely different methods and the general upward tendency for each age period and each sex in the statistics collected under the old law are strongly confirmatory of the belief in their general validity, although the exact amounts are not directly comparable with more accurate statistics. We may say, with considerable certainty, that each age period at which cancer is sufficiently prevalent to give fairly reliable statistics has shown a marked and progressive increase from year to year during the entire period of registration in Michigan under the old law, and this increase is continuing during the present time.

Here we may note that it is necessary to take into consideration the natural variations in the population of the State as affecting the death rates from cancer and other diseases which bear a close relation to the age distribution. We have seen that the death rates for the age periods under thirty years are quite insignificant, hence, if the population of the State should increase largely by the birth of children or by the immigration of young adults, there would be no tendency to an increasing death rate from cancer, but rather the reverse. On the other hand, if the people of the State continue to grow older and in the increase in age of the present population is not compensated by the increase in the number of children, if also the young adults who immigrated into this State some years ago have increased in age, while the amount of recent immigration has fallen off, then we should have a relative increase of persons in the population at the older age periods, with a consequent greater liability to deaths from cancer. In fact, the operation of sanitary measures, whereby the number of deaths of infants and children from acute infectious diseases is diminished, and, later, the number of deaths of young and middle aged adults from tuberculosis is also checked, would have a tendency in itself to increase the mortality from cancer, since it is chiefly from the survivors at the older ages that this mortality

\* In the original diagram.

is recruited. It thus appears that an increase in the deaths from cancer may possibly be a sign of a favorable sanitary condition in the community, although it would be very desirable, of course, if the prevalence of this disease could be checked in the same manner as other admittedly infectious diseases have been restrained.

The general indications relative to the increase of the mortality from cancer in Michigan for each sex and age period, as derived from the study of the State registration returns, are confirmed by comparisons of the death rates from this disease at the last two United States censuses. Here we may note that in 1900, for the first time, Michigan appears in the census volumes as a registration State, and I desire especially to call the attention of the health officers present to the fact that very valuable statistical information can be found in these census volumes, not only in regard to the prevalence of cancer, but also in regard to the mortality from all other diseases in this State during the census year. For each important disease a special map is given showing the distribution of the mortality in this State by counties. Through the kindness of Mr. W. A. King, Chief Statistician for Vital Statistics of the Census, I have some copies of the map showing the distribution of deaths from "cancer and tumor." As in previous censuses it was "impossible to distinguish them as they are commonly reported," that is to say, it is well known that many of the deaths reported from "tumor" are in reality due to cancer, so that for many purposes it is desirable to combine the two terms.

In the maps you will observe that the highest rates of mortality are in the Southern counties of the State. This does not necessarily indicate that these counties are less favorable than those of the Upper Peninsula and of the Northern section of the Lower Peninsula in regard to this disease, but simply that the age distribution of the population is more conducive to a high death rate from cancer in the southern and oldest settled part of the State. It is probable that the few counties in the upper part of the State that show an unusually high death rate from cancer may do so from the fact that very few deaths from all causes are reported and that consequently the volume of returns was probably not large enough to give entirely satisfactory results for a single year. I hope that the health officers will get in the habit of making frequent use of these statistics of Michigan as presented by the census office, and am very glad to say that under the permanent organization of the census office, we shall have annual reports of the statistics of Michigan for each disease in connection with those of all the other registration States.

As Michigan was not a registration State in 1890, the mortality from cancer in the two census years 1890 and 1900 cannot be directly compared, so that we can only note the general tendency of the increase of cancer in the registration area.

The age periods chosen by the census for the study of cancer are five, namely, under 5 years; 5-14 years; 15-44 years; 45-64 years and 65 years and over, thus closely agreeing with the age periods represented in the diagram for Michigan.

For these ages, excluding the rates under fifteen years of age, which are too low to be of any special significance, a marked increase was shown from 1890 to 1900 for the total registration area, for all cities, for the registration states as a whole, the cities included in them, and rural

population and for cities not in the registration states, so that without exception in every class of population covered by the exact registration of deaths, a marked increase of mortality from cancer and tumor occurred from 1890 to 1900.

The average age of decedents from cancer and tumor in 1900 was 57.2 years as compared with 56.1 years in 1890. From cancer alone the percentage of deaths to all known causes was 29.5 in 1900 as compared with 22.5 in 1890. The death rate for the registration area for cancer alone rose from 47.9 per 100,000 population in 1890 to 60.0 in 1900. In England and Wales the corresponding death rates were 67.6 and 82.9 respectively.

While there can be no doubt as to the marked increase in reported cancer not only in Michigan but also in the United States as a whole, and many other countries, there has been considerable questioning and uncertainty as to whether this increase might not be more apparent than real. I have referred to the increase that naturally attends the preponderance of older ages in the population. It is difficult to make an exact allowance for this factor, but comparing two individual years, 1870 and 1890, with an interval of twenty years between them, and employing a method similar to that of computing the mortality index, I showed in the *Bulletin of Vital Statistics*, for November, 1902, that if the population of Michigan in 1890 had approximately the same distribution as that in 1870, then the death rates from cancer per 100,000 population in 1890 instead of being for males 21.5 per 100,000 population and for females 29.7 per 100,000 population, would have been about 17.2 and 23.7, respectively. That is to say, the less favorable distribution of the population in Michigan by ages after a lapse of twenty years would account for an increase of about twenty-five per cent for each sex in the total mortality from cancer. As the mortality from cancer increased from 1872-76 to 1892-96, a twenty year interval, 113.8 per cent for males and 122.4 per cent for females, it appears that there is a very large difference, amounting to perhaps 80 or 90 per cent, that cannot be accounted for on the ground of less favorable age distribution.

Another consideration that has led some to believe that cancer has not increased to the extent that the figures would at first view indicate, is that there may have been a change in the accuracy with which this disease is reported as a cause of death by physicians. This probability is strongly suggested by the fact that in some places, while the total deaths from cancer have increased, and also deaths from cancers in inaccessible parts of the body, as in the stomach and liver, the death rates of accessible cancers, as of the breast, tongue, uterus, etc., have not increased, but have even actually diminished.

A table was given in the November *Bulletin* showing the per cents of cancer of the various organs as returned under the old registration law, and also the corresponding results of the first three years under the new law. The most marked change in the proportional deaths during the twenty-five year period under the old law is the diminution in the percentage of deaths from cancer of the breast in females. Only about one-half of the total number of deaths from cancer have the organ or part of the body affected assigned, a condition in which the present law shows a very marked improvement, only about one-fourth of the total number of deaths being thus carelessly returned. But this proportion is far too high, and I may, perhaps, properly call the attention of the health officers at this

point to the necessity of seeing that returns of deaths from cancer state the organ of the body affected in all cases. It is desirable also that the organ primarily affected should be known. Very possibly the diminution in the proportion of deaths from cancer of the breast may arise from the fact that such cases are more frequently operated upon than formerly, so that death may result, not from cancer in its primary seat, but from secondary infection.

The United States census statistics for the registration area show that the mortality from cancer of the breast in females was practically stationary from 1890 to 1900 for the very important age period 45-64 years, although it rose from 47.3 per 100,000 population to 59.6 per 100,000 population for decedents aged 65 years and over.

Cancer of the liver and cancer of the stomach show greater amounts of increase for both sexes from 1890 to 1900 and cancer of the uterus also shows a considerable increase for the age period sixty-five years and over. For the period forty-five to sixty-four years the amount of increase was rather less than the average, rising from 54.0 to 59.1 per 100,000 population.

Besides the variations in the mortality from cancer of various organs as tending to show more or less improvement in the accuracy of returns, there are other indefinite causes whose fluctuations must be taken into consideration in making a complete analysis of the subject. Thus, if the mortality from cancer of the stomach shows a marked increase while the mortality from indefinite diseases of the stomach or digestive system diminishes, there is room for a presumption that deaths from some of these indefinite causes have been more accurately reported in recent years. It is for this reason and because all of the possible complications have not yet been studied that I hesitate to emphasize as much as I might otherwise do, the apparent marked increase in the mortality from this disease. It is probable that there has been an increase. I think from an examination of the statistics of Michigan and comparisons with those of the registration area and with other countries that there has been a large increase, but until further studies have been undertaken in this connection, I should hesitate to say that the mortality from cancer had actually doubled during the past twenty years, as the figures would apparently indicate, or that it has actually increased in approximately as large a proportion.

Vital statistics relating to cancer are among the most difficult that we have to deal with, and in concluding this paper, which must be regarded as a mere preliminary statement of statistical results, but which I hope may be of some interest, and at least suggestive value, I desire to urge as strongly as possible that greater care and precision be used by physicians, as far as possible, in returning deaths from all forms of neoplasms. If possible, the proper scientific term should be used, as "carcinoma," "sarcoma," etc., and in connection with the form of the cancer, its primary seat, when known, and also the parts of the body secondarily affected should be given.

In the system of nomenclature recently prepared by Dr. Tatham for the use of the English Registrar-General, deaths from cancer are stated under three titles: (1) "Carcinoma;" (2) "Sarcoma;" (3) "*Cancer, Malignant Disease* (not otherwise defined)." Probably in this State and also in many others, the majority of returns would go under the third title, so that deaths included under "carcinoma," and especially "sarcoma," would



be too few to give reliable results. Nevertheless, this distinction is important and by insisting upon it in certificates of death some progress might be made.

It is, perhaps, of more importance, and this point seems to have been omitted by the Registrar-General's classification, to state the location of the malignant neoplasms. While we cannot be sure of the exact nature of the new growth in many cases reported, it is important to know what organs or parts of the body are affected.

As Dr. Guilfooy, Registrar of New York City, said in a recent paper before the New York State Conference of Health Officers at Albany:

"Within the past few years the question has arisen as to the increase of cancer since 1880, and the statisticians have debated among themselves as to whether this increase was a real one or a statistical one; the gross figures show an immense increase, in some cities the figures being trebled; naturally the cause was sought for; the influence of medical and surgical progress would seem to account partly for the increase, especially the operation of laparotomy; another cause was probably due to more careful certification as to the cause of death; the question then revolves around the seat of the cancer. Was the cancer in the accessible parts, or vice versa? Some few of the cities and states of continental Europe were in a position to furnish death rates of cancers of the face, tongue, mouth, breast and uterus, on the one hand, and of the liver, stomach, kidney and bladder on the other hand; the death rates of the accessible cancers had not increased; some had diminished; the rates of the inaccessible ones had all increased. The figures produced served to throw considerable light upon the question. The Bertillon classification specifies the seat of all cancers. I simply mention this as an argument in favor of this system."

I sincerely hope that in a few years we may have statistics of a more satisfactory character, and which will afford a sufficient basis for more definite statements in regard to the increase from cancer. This can certainly be brought about if the physicians and the organized health associations of the State take especial interest in the accuracy of returns of deaths made from this cause.

In many cases the State Department has corresponded directly with physicians who reported deaths from cancer, and, as a rule, more definite and satisfactory information has been obtained, so that it is usually within the power of the reporting physician to make a fairly definite and accurate statement. If the local registrars and health officers acting as registrars can be educated to insist upon such reports, the results will be of greatly increased statistical and medical value.

Table 29.—Distribution of deaths from cancer in Michigan by part or organ affected, according to returns under old law (1872-96) and on basis of physicians' certificates under new law (1898-1902), by five-year periods and with average for twenty-five year period under old law.

Classification No.	Organ affected.	Sex.	Twenty-five years, 1872-96.		Five years, 1872-76.		Five years, 1877-81.		Five years, 1882-86.		Five years, 1887-91.		Five years, 1892-96.		Five years, 1898-1902. (New law.)	
			Aver- age deaths.	Per cent.	Aver- age deaths.	Per cent.	Aver- age deaths.	Per cent.	Aver- age deaths.	Per cent.	Aver- age deaths.	Per cent.	Aver- age deaths.	Per cent.	Aver- age deaths.	Per cent.
	CANCER, ALL FORMS—TOTAL DEATHS.....	{ Total..... Males..... Females.....	403.40 171.48 231.92	100.0 100.0 100.0	187.4 81.6 105.8	100.0 100.0 100.0	280.2 117.6 162.6	100.0 100.0 100.0	377.8 165.2 212.6	100.0 100.0 100.0	498.4 205.8 292.6	100.0 100.0 100.0	683.2 287.2 396.0	100.0 100.0 100.0	1418.4 594.8 823.6	100.0 100.0 100.0
39	Cancer of mouth.....	{ Total..... Males..... Females.....	6.20 4.24 1.96	1.5 2.5 0.8	6.4 4.6 1.8	3.4 5.6 1.7	4.4 3.0 1.4	1.6 2.6 0.9	5.6 3.6 2.0	1.5 2.2 1.0	5.2 2.8 2.4	1.0 1.4 0.8	9.4 7.2 2.2	1.4 2.6 0.6	38.6 29.0 9.6	2.7 2.0 0.7
40	Cancer of stomach and liver	{ Total..... Males..... Females.....	112.84 64.64 48.20	28.0 37.7 30.8	51.0 31.6 19.4	27.2 38.7 18.3	73.8 45.2 28.6	26.2 38.4 17.6	94.6 59.6 35.0	25.7 36.1 17.3	147.8 79.2 68.6	29.7 33.5 28.4	197.0 107.6 89.4	28.8 37.5 22.6	556.4 303.4 253.0	38.2 21.4 17.9
41	Cancer of intestines.....	{ Total..... Males..... Females.....	10.12 4.24 5.88	2.5 2.5 2.5	3.6 1.4 2.2	1.9 1.7 2.1	7.8 2.8 5.0	2.8 2.4 3.1	9.8 3.8 6.0	2.7 2.3 3.0	9.4 4.6 4.8	1.9 2.2 1.6	20.0 8.6 11.4	2.9 3.0 2.9	120.6 57.0 63.6	8.5 4.0 4.5
42	Cancer of genital organs.....	{ Total..... Males..... Females.....	16.72 0.16 16.56	4.1 0.1 7.1	6.6 0.6 6.6	3.5 0.6 6.2	13.8 0.4 13.8	4.9 0.3 8.5	14.4 0.4 14.4	3.9 0.2 7.1	15.8 0.6 15.2	3.2 0.3 5.2	33.0 0.2 32.8	4.8 0.1 8.3	183.4 1.0 192.4	13.7 0.1 13.6
43	Cancer of breast.....	{ Total..... Males..... Females.....	21.00 0.76 20.24	5.2 0.4 8.7	17.6 0.8 16.8	9.4 1.0 15.9	20.4 0.4 20.0	7.3 0.3 12.3	16.6 0.8 15.8	4.5 0.8 7.3	24.6 1.0 23.6	4.9 0.5 8.1	23.8 0.2 23.6	3.8 0.1 6.5	118.0 2.0 116.0	8.3 0.1 8.2
44	Cancer of skin.....	{ Total..... Males..... Females.....	10.88 8.08 2.80	2.7 4.7 1.2	7.0 5.0 2.0	3.7 6.1 0.2	8.0 6.2 1.8	2.9 5.3 1.1	10.8 7.8 3.0	2.9 4.7 1.5	14.4 10.8 3.6	2.9 5.2 1.2	14.2 10.6 3.6	2.1 3.7 0.9	72.4 52.4 20.0	5.1 3.7 1.4
45	Cancer of other organs or unspecified organs.....	{ Total..... Males..... Females.....	225.64 89.36 136.28	55.9 52.1 59.8	95.2 38.2 57.0	50.8 46.8 53.9	132.0 60.0 92.0	54.2 51.0 56.6	216.0 89.0 127.0	59.7 53.9 62.7	281.2 106.8 174.4	56.4 51.9 59.6	363.8 152.8 211.0	56.2 53.2 58.3	317.0 149.8 167.2	22.4 10.8 11.8
	(a) External.....	{ Total..... Males..... Females.....	13.08 8.20 4.88	3.2 4.8 2.1	9.0 4.6 4.4	4.8 5.6 4.2	10.2 6.4 3.8	3.6 5.4 2.3	14.2 8.4 5.8	3.9 5.1 2.9	16.4 9.8 6.6	3.3 4.8 2.3	15.6 11.8 3.8	2.3 4.1 1.0	.....	.....
	(b) Internal.....	{ Total..... Males..... Females.....	3.84 2.28 1.56	1.0 1.3 0.7	1.2 0.4 0.8	0.6 0.5 0.8	2.0 1.2 0.8	0.7 1.0 0.5	3.2 2.2 1.0	0.9 1.3 0.5	6.2 3.4 2.8	1.2 1.7 0.6	6.6 4.2 2.4	1.0 1.5 0.6	.....	.....
	(c) Unspecified.....	{ Total..... Males..... Females.....	204.72 78.88 125.84	51.7 46.0 56.0	85.0 33.2 51.8	45.4 40.7 49.0	130.8 52.4 87.4	49.9 44.6 53.8	198.6 78.4 120.2	54.0 47.5 59.3	258.6 103.6 165.0	51.9 46.5 56.4	361.6 136.8 224.8	52.9 47.6 56.8	.....	.....

Table 30.—Deaths and death rates per 100,000 population of same age and sex from physicians' certificates under new law (1898-1902), with five-year

Years.	Sex.	All ages.				Under 15 years.				15 to 29 years.						
		Popula- tion.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.	
			Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.
1870.....	Total.....	1,184,059	120	10.1	23	1.9	450,791	.....	.....	.....	.....	336,226	.....	.....	.....	.....
	Males.....	617,745	47	7.6	6	1.0	228,986	.....	.....	.....	.....	173,227	.....	.....	.....	.....
	Females..	566,314	73	12.9	17	3.0	221,805	.....	.....	.....	.....	162,999	.....	.....	.....	.....
1871.....	Total.....	1,221,552	105	8.6	32	2.6	463,573	.....	.....	.....	.....	349,880	.....	.....	.....	.....
	Males.....	637,605	48	7.5	11	1.7	235,514	.....	.....	.....	.....	181,004	.....	.....	.....	.....
	Females..	583,947	57	9.8	21	3.6	228,059	.....	.....	.....	.....	168,876	.....	.....	.....	.....
1872.....	Total.....	1,259,045	133	10.5	31	2.5	476,355	15	3.1	4	0.8	363,536	8	2.2	3	0.8
	Males.....	657,465	58	8.8	7	1.1	242,042	9	3.7	1	0.4	188,782	4	2.1	1	0.5
	Females..	601,581	75	12.5	24	4.0	234,313	6	2.6	3	1.3	174,754	4	2.3	2	1.1
1873.....	Total.....	1,296,538	172	13.3	48	3.7	489,137	8	1.6	14	2.9	377,190	7	1.9	8	2.1
	Males.....	677,324	75	11.1	18	2.7	248,570	4	1.6	8	3.2	196,559	.....	.....	1	0.5
	Females..	619,214	97	15.7	30	4.8	240,567	4	1.7	6	2.5	180,631	7	3.9	7	3.9
1874.....	Total.....	1,334,031	188	14.1	34	2.5	501,919	7	1.4	3	0.6	390,846	4	1.0	7	1.8
	Males.....	697,194	84	12.0	14	2.0	255,098	6	2.4	3	1.2	204,337	1	0.5	1	0.5
	Females..	636,847	104	16.3	20	3.1	246,821	1	0.4	.....	.....	186,509	3	1.6	6	3.2
1875.....	Total.....	1,384,515	203	14.7	55	4.0	514,701	15	2.9	7	1.4	404,500	7	1.7	7	1.7
	Males.....	724,713	73	10.1	13	1.8	261,626	3	1.1	1	0.4	212,114	3	1.4	1	0.5
	Females..	659,803	130	19.7	42	6.4	253,075	12	4.7	6	2.4	192,386	4	2.1	6	3.1
1876.....	Total.....	1,435,000	241	16.8	41	2.9	527,481	18	3.4	9	1.7	418,154	10	2.4	5	1.2
	Males.....	752,241	118	15.7	12	1.6	268,153	13	4.8	5	1.9	219,891	4	1.8	1	0.5
	Females..	682,759	123	18.0	29	4.2	259,328	5	1.9	4	1.5	198,263	6	3.0	4	2.0
1877.....	Total.....	1,485,484	266	17.9	45	3.0	540,263	14	2.6	4	0.7	431,810	11	2.5	2	0.5
	Males.....	779,770	125	16.0	16	2.1	274,681	8	2.9	3	0.4	227,669	4	1.8	1	0.4
	Females..	705,715	141	20.0	29	4.1	265,582	6	2.3	3	1.1	204,141	7	3.4	1	0.5
1878.....	Total.....	1,535,968	269	17.5	56	3.6	553,045	7	1.3	12	2.2	445,464	9	2.0	8	1.8
	Males.....	807,298	116	14.4	14	1.7	281,209	4	1.4	5	1.8	235,446	4	1.7	1	0.4
	Females..	728,670	153	21.0	42	5.8	271,836	3	1.1	7	2.6	210,018	5	2.4	7	3.3
1879.....	Total.....	1,586,453	272	17.1	65	4.1	565,827	13	2.3	7	1.2	459,120	8	1.7	9	2.0
	Males.....	834,827	124	14.9	23	2.8	287,737	4	1.4	3	1.0	243,224	6	2.5	3	1.2
	Females..	751,626	148	19.7	42	5.6	278,090	9	3.2	4	1.4	215,896	2	0.9	6	2.8
1880.....	Total.....	1,636,937	284	17.3	76	4.6	578,609	12	2.1	5	0.9	472,774	11	2.3	10	2.1
	Males.....	862,355	111	12.9	29	3.4	294,265	4	1.4	1	0.3	251,001	4	1.6	3	1.2
	Females..	774,582	173	22.3	47	6.1	284,344	8	2.8	4	1.4	221,773	7	3.2	7	3.2
1881.....	Total.....	1,691,117	310	18.3	86	5.1	593,912	12	2.0	2	0.3	488,690	11	2.3	10	2.0
	Males.....	890,399	112	12.6	24	2.7	301,908	4	1.3	.....	.....	258,813	4	1.5	3	1.2
	Females..	800,718	198	24.7	62	7.7	292,004	8	2.7	2	0.7	229,877	7	3.0	7	3.0
1882.....	Total.....	1,745,298	301	17.2	68	3.9	609,214	7	1.1	4	0.7	504,606	9	1.8	12	2.4
	Males.....	918,444	139	15.1	16	1.7	309,551	3	1.0	1	0.3	266,626	5	1.9	2	0.8
	Females..	826,854	162	19.6	52	6.3	299,663	4	1.3	3	1.0	237,980	4	1.7	10	4.2
1883.....	Total.....	1,799,478	383	21.3	58	3.2	624,516	15	2.4	8	1.3	520,522	20	3.8	7	1.3
	Males.....	946,488	160	16.9	14	1.5	317,193	6	1.9	6	1.9	274,438	4	1.5	1	0.4
	Females..	852,990	223	26.1	44	5.2	307,323	9	2.9	2	0.6	246,084	16	6.5	6	2.4
1884.....	Total.....	1,853,658	361	19.5	85	4.6	639,818	14	2.2	8	1.3	536,437	10	1.9	12	2.2
	Males.....	974,532	173	17.8	26	2.7	324,836	12	3.7	4	1.2	282,250	6	2.1	5	1.8
	Females..	879,126	188	21.4	59	6.7	314,982	2	0.6	4	1.3	254,187	4	1.6	7	2.8
1885.....	Total.....	1,893,697	403	21.3	104	5.5	649,029	17	2.6	9	1.4	544,869	12	2.2	15	2.8
	Males.....	991,073	183	18.4	30	3.0	329,373	9	2.7	4	1.2	285,471	2	0.7	4	1.4
	Females..	899,623	220	24.5	74	8.2	319,656	8	2.5	5	1.6	259,338	10	3.9	11	4.2
1886.....	Total.....	1,933,735	391	20.2	91	4.7	658,239	13	2.0	3	0.5	553,181	15	2.7	10	1.8
	Males.....	1,013,615	171	16.9	23	2.3	333,909	7	2.1	1	0.3	288,692	4	1.4	2	0.7
	Females..	920,120	220	23.9	68	7.4	324,330	6	1.8	2	0.6	264,489	11	4.2	8	3.0

\* For footnote see end of table.

## CAUSES OF DEATH.

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cancer and tumor, in Michigan, as enumerated under old law (1870-97) and as registered by averages and average for twenty-five year period under old law.\*

30 to 44 years.					45 to 64 years.					65 years and over.					Unknown ages.		
Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.	Tumor.
	Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.			
219,128	....	....	....	....	145,391	....	....	....	....	32,518	....	....	....	....	12	....	....
115,858	....	....	....	....	81,633	....	....	....	....	18,034	....	....	....	....	7	....	....
103,288	....	....	....	....	63,758	....	....	....	....	14,479	....	....	....	....	5	....	....
228,365	....	....	....	....	152,530	....	....	....	....	34,988	....	....	....	....	11	....	....
120,962	....	....	....	....	85,362	....	....	....	....	19,358	....	....	....	....	6	....	....
107,403	....	....	....	....	67,168	....	....	....	....	15,630	....	....	....	....	5	....	....
237,604	17	7.2	7	2.9	159,669	60	37.6	15	9.4	37,461	29	77.4	2	5.3	10	4	....
126,066	4	3.2	....	....	89,091	22	24.7	4	4.5	20,681	15	72.5	1	4.8	6	4	....
111,538	13	11.7	7	6.3	70,578	38	53.8	11	15.6	16,780	14	83.4	1	6.0	4	....	....
246,843	27	10.9	5	2.0	166,808	73	43.8	12	7.2	39,936	52	130.2	8	20.0	9	5	1
131,169	10	7.6	1	0.8	92,820	35	37.7	5	5.4	22,005	25	113.6	3	13.6	5	1	....
115,674	17	14.7	4	3.5	73,988	38	51.4	7	9.5	17,931	27	150.6	5	27.9	4	4	1
256,082	20	7.8	8	3.1	173,947	96	55.2	9	5.2	42,410	60	141.5	7	16.5	7	1	....
136,273	8	5.9	3	2.2	96,549	39	40.4	2	2.1	23,328	30	128.6	5	21.4	4	....	....
119,809	12	10.0	5	4.2	77,398	57	73.6	7	9.0	19,082	30	157.2	2	10.5	3	1	....
265,321	37	13.9	13	4.9	181,087	86	47.5	19	10.5	44,885	56	124.8	9	20.1	7	2	....
141,377	10	7.1	....	....	100,278	32	31.9	7	7.0	24,652	34	97.4	4	16.2	4	1	....
123,944	27	21.8	13	10.5	80,809	54	66.8	12	14.8	20,233	32	158.2	5	24.7	3	1	....
274,560	38	13.8	8	2.9	188,226	111	59.0	13	6.9	47,359	61	128.8	4	8.4	5	3	2
146,481	15	10.2	2	1.4	104,007	45	43.3	4	3.8	25,976	39	150.1	....	....	3	2	....
128,079	23	18.0	6	4.7	84,219	66	78.4	9	10.7	21,383	22	102.9	4	18.7	2	1	2
283,799	32	11.3	11	3.9	195,365	118	60.4	18	9.2	49,833	86	172.6	10	20.1	4	5	....
151,585	10	6.6	....	....	107,736	44	40.8	7	6.5	27,299	56	205.1	7	25.6	2	3	....
132,214	22	16.6	11	8.3	87,629	74	84.4	11	12.6	22,534	30	133.1	3	13.3	2	2	....
293,038	41	14.0	13	4.4	202,504	128	63.2	14	6.9	52,308	76	145.3	9	17.2	2	8	....
156,688	8	5.1	2	1.3	111,465	59	52.9	3	2.7	28,623	37	129.3	3	10.5	1	4	....
136,350	33	24.2	11	8.1	91,039	69	75.8	11	12.1	23,685	39	164.7	6	25.3	1	4	....
302,277	42	13.9	16	5.3	209,643	128	61.1	28	13.4	54,781	78	142.4	8	5.5	2	3	2
161,792	14	8.7	3	1.9	115,194	53	46.0	12	10.4	29,946	45	150.3	2	6.7	1	2	....
140,485	28	19.9	13	9.3	94,449	75	79.4	16	16.9	24,836	33	132.9	1	4.0	1	1	2
311,516	46	14.8	13	4.2	216,782	135	62.3	32	14.8	57,258	77	134.5	15	26.2	....	3	1
188,896	12	7.2	2	1.2	118,823	48	40.4	16	13.5	31,270	43	137.5	7	22.4	....	....	....
144,820	34	23.5	11	7.6	97,859	87	88.9	16	16.4	25,986	34	130.8	8	30.8	....	3	1
323,110	50	15.5	20	6.2	224,948	152	67.6	36	16.0	60,042	84	139.9	17	28.3	365	1	1
173,587	15	8.6	3	1.7	123,021	48	39.0	10	8.1	32,766	41	125.1	8	24.4	277	....	....
149,523	35	23.4	17	11.4	101,927	104	102.0	26	25.5	27,276	43	157.6	9	33.0	88	1	1
334,705	46	13.7	16	4.8	233,116	122	52.3	21	9.0	62,829	109	173.5	13	20.7	728	8	2
180,279	13	7.2	3	1.7	127,120	49	38.5	4	3.1	34,263	66	192.6	5	14.6	553	3	1
154,426	33	21.4	13	8.4	105,996	73	68.9	17	16.0	28,566	43	150.5	8	28.0	175	5	1
346,299	55	15.9	7	2.0	241,282	182	75.4	25	10.4	65,614	102	155.5	11	16.8	1,093	9	....
186,970	10	5.3	....	....	131,218	76	57.9	6	4.6	35,759	59	165.0	1	2.8	830	5	....
159,329	45	28.2	7	4.4	110,064	106	96.3	19	17.3	29,855	43	144.0	10	33.5	263	4	....
357,893	65	18.2	21	5.9	249,448	146	58.5	26	10.4	68,400	123	179.8	16	23.4	1,458	3	2
193,661	26	13.4	3	1.5	135,318	62	45.8	7	5.2	37,255	66	177.2	7	18.8	1,108	1	....
164,232	39	23.7	18	11.0	114,132	84	73.6	19	16.6	31,145	57	183.0	9	28.9	360	2	2
367,091	53	14.4	18	4.9	258,269	183	70.9	43	16.6	72,376	130	179.6	18	24.9	1,952	8	1
198,574	20	10.1	5	2.5	139,747	75	53.7	10	7.2	39,384	75	190.4	7	17.8	1,486	2	....
168,517	33	19.6	13	7.7	118,522	108	91.1	33	27.8	32,992	55	166.7	11	33.3	516	6	1
376,288	63	16.7	22	5.8	267,090	175	65.5	36	13.5	76,353	119	155.9	20	26.2	2,446	6	....
203,486	15	7.4	5	2.5	144,177	72	49.9	8	5.5	41,514	70	168.6	7	16.9	1,765	3	....
172,802	48	27.8	17	9.8	122,913	108	83.8	28	22.8	34,839	49	140.6	13	37.3	681	3	....

## VITAL STATISTICS OF MICHIGAN, 1901.

Table 30.—Continued.—Deaths and

Years.	Sex.	Popula- tion.	All ages.				Under 15 years.				15 to 29 years.					
			Cancer.		Tumor.		Popula- tion.	Cancer.		Tumor.		Popula- tion.	Cancer.		Tumor.	
			Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.
1887.....	{ Total..... Males..... Females..	1,973,774 1,033,156 940,618	453 185 268	23.0 17.9 28.5	92 21 71	4.7 2.0 7.5	667,450 338,446 329,004	15 5 10	2.2 1.5 3.0	8 5 3	1.2 1.5 0.9	561,552 291,912 269,640	15 5 10	2.7 1.7 3.7	6 1 5	1.1 0.3 1.9
1888.....	{ Total..... Males..... Females..	2,013,812 1,052,697 961,115	480 193 287	23.8 18.3 29.9	108 35 73	5.4 3.3 7.6	676,660 342,982 333,678	14 8 6	2.1 2.3 1.8	9 3 5	1.3 1.2 1.5	569,924 295,133 274,791	19 4 15	3.3 1.4 5.5	16 1 13	2.8 0.7 4.0
1889.....	{ Total..... Males..... Females..	2,053,851 1,072,239 981,612	492 202 290	24.0 18.8 29.5	102 28 74	5.0 2.6 7.5	685,871 347,519 338,352	14 6 8	2.0 1.7 2.4	8 6 3	1.2 1.5 0.9	578,296 298,354 279,942	28 14 14	4.8 4.7 5.0	6 1 5	1.0 0.3 1.8
1890.....	{ Total..... Males..... Females..	2,093,889 1,091,780 1,002,109	533 235 298	25.5 21.5 29.7	123 33 90	5.9 3.0 9.0	695,081 352,055 343,026	14 7 7	2.0 2.0 2.0	17 5 12	2.4 1.4 3.5	586,668 301,575 285,093	14 5 9	2.4 1.7 3.2	11 3 8	1.9 1.0 2.8
1891.....	{ Total..... Males..... Females..	2,130,827 1,108,970 1,021,857	534 214 320	25.1 19.3 31.3	157 38 119	7.4 3.4 11.6	706,969 358,283 348,686	14 7 7	2.0 2.0 2.0	14 7 7	2.0 2.0 2.0	594,157 304,156 290,001	11 5 6	1.9 1.6 2.1	12 2 10	2.0 0.7 3.4
1892.....	{ Total..... Males..... Females..	2,167,765 1,126,160 1,041,605	558 246 312	25.7 21.8 30.0	139 36 103	6.4 3.2 9.9	718,859 364,512 354,347	7 5 2	1.0 1.4 0.6	13 1.8 9	1.8 1.1 2.5	601,646 306,737 294,909	13 5 8	2.2 1.6 2.7	18 6 12	3.0 2.0 4.1
1893.....	{ Total..... Males..... Females..	2,204,703 1,143,350 1,061,353	644 284 360	29.2 24.8 33.9	156 44 113	7.1 3.8 10.6	730,747 370,740 360,007	7 6 1	1.0 1.6 0.3	11 1.5 7	1.5 1.1 1.9	609,134 309,318 299,816	22 8 14	3.6 2.6 4.7	13 5 8	2.1 1.6 2.7
1894.....	{ Total..... Males..... Females..	2,241,641 1,160,540 1,081,101	677 269 408	30.2 23.2 37.7	149 41 108	6.6 3.5 10.0	742,635 376,968 365,667	6 1 5	0.8 0.3 1.4	12 7 5	1.6 1.9 1.4	616,623 311,899 304,724	18 8 10	2.9 2.6 3.3	20 7 13	3.2 2.2 4.3
1895.....	{ Total..... Males..... Females..	2,271,531 1,175,298 1,096,264	757 312 445	33.3 26.5 40.6	172 48 124	7.6 4.1 11.3	747,585 379,263 368,322	10 3 7	1.3 0.8 1.9	13 9 4	1.7 2.4 1.1	622,809 314,831 307,978	21 10 11	3.4 3.2 3.6	20 4 16	3.2 1.3 5.2
1896.....	{ Total..... Males..... Females..	2,301,421 1,189,995 1,111,426	780 325 455	33.9 27.3 40.9	161 43 118	7.0 3.6 10.6	752,535 381,557 370,978	6 4 2	0.8 1.0 0.5	22 14 8	2.9 3.7 2.2	628,995 317,763 311,232	27 8 19	4.3 2.5 6.1	19 3 17	3.0 0.6 5.5
1897.....	{ Total..... Males..... Females..	2,331,311 1,204,723 1,126,589	760 333 427	32.6 27.6 37.9	135 49 86	5.8 4.1 7.6	757,485 383,852 373,633	10 4 6	1.3 1.0 1.6	16 11 5	2.1 2.9 1.3	635,180 320,695 314,485	23 9 14	3.6 2.8 4.5	14 6 8	2.2 1.9 2.5
1898.....	{ Total..... Males..... Females..	2,361,201 1,219,450 1,141,752	1,321 549 772	55.9 45.0 67.6	79 22 57	3.3 1.8 5.0	762,434 386,146 376,288	23 12 11	3.0 3.1 2.9	6 4 2	0.8 1.0 0.5	641,367 323,628 317,739	35 12 23	5.5 3.7 7.2	9 5 4	1.4 1.2 1.6
1899.....	{ Total..... Males..... Females..	2,391,091 1,234,176 1,156,914	1,334 560 774	55.8 45.4 66.9	45 8 37	1.9 0.6 3.2	767,385 388,441 378,944	11 7 4	1.4 1.8 1.1	3 2 1	0.4 0.5 0.3	647,553 326,560 320,993	38 12 26	5.9 3.7 8.1	2 ..... 2	0.3 ..... 0.6
1900.....	{ Total..... Males..... Females..	2,420,982 1,248,905 1,172,077	1,460 599 861	60.3 48.0 73.7	46 15 31	1.9 1.2 2.6	772,334 390,735 381,599	21 15 6	2.7 3.8 1.6	1 ..... .....	0.1 0.3 .....	653,739 329,492 324,247	36 11 25	5.5 3.3 7.7	5 3 2	0.6 0.6 0.6
1901.....	{ Total..... Males..... Females..	2,450,872 1,263,633 1,187,239	1,484 637 847	60.5 50.4 71.3	40 14 26	1.6 1.1 2.2	777,284 393,080 384,254	19 8 11	2.4 2.0 2.9	..... ..... .....	..... ..... .....	650,925 332,424 327,501	35 20 15	5.3 6.0 4.6	1 ..... 1	0.2 ..... 0.3
1902.....	{ Total..... Males..... Females..	2,480,762 1,278,360 1,202,402	1,483 628 855	59.8 49.1 71.1	39 13 26	1.6 1.0 2.2	782,234 395,324 386,910	10 8 2	1.3 2.0 0.5	1 ..... .....	0.1 0.3 .....	666,111 335,356 330,755	29 13 16	4.4 3.9 4.8	1 ..... .....	0.2 0.3 .....

death rates from cancer and tumor.

30 to 44 years.				45 to 64 years.				65 years and over.				Unknown ages.		
Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.	
	Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.
385,487	59	15.3	26	6.7	275,912	207	75.0	33	12.0	80,328	148	184.2	19	23.7
208,399	15	7.2	4	1.9	148,608	78	52.5	6	4.0	43,643	78	178.7	5	11.5
177,088	44	24.8	22	12.4	127,304	129	101.3	27	21.2	36,685	70	190.8	14	38.2
394,684	78	19.8	22	5.6	284,734	209	73.4	34	11.9	84,304	156	185.0	26	30.8
213,311	19	8.9	5	2.3	153,039	81	52.9	12	7.8	45,772	81	177.0	11	24.0
181,373	59	32.5	17	9.4	131,695	128	97.2	22	16.7	38,532	75	194.6	15	38.9
408,882	82	20.3	23	5.7	293,555	202	68.8	49	16.7	88,281	163	184.6	16	18.1
218,224	16	7.3	5	2.3	157,469	75	47.6	12	7.6	47,902	90	187.9	5	10.4
186,668	66	35.5	18	9.7	136,086	127	93.3	37	27.2	40,379	73	180.8	11	27.2
413,079	93	22.5	28	6.8	302,377	233	77.1	45	14.9	82,257	177	191.9	22	23.8
223,136	35	15.7	5	2.1	161,800	91	56.2	12	7.4	50,031	96	191.9	8	16.0
188,943	58	30.5	23	12.1	140,477	142	101.1	33	23.5	42,226	81	191.8	14	33.2
421,843	84	19.9	40	9.5	309,783	255	82.3	59	19.0	94,391	159	168.4	28	29.7
227,159	20	8.8	5	2.1	165,692	97	58.5	14	8.4	51,130	81	158.4	9	17.6
194,684	64	32.9	35	18.0	144,091	158	109.7	45	31.2	43,261	78	180.3	19	43.9
430,608	70	16.3	39	9.1	317,187	275	86.7	43	13.6	96,526	189	195.8	23	23.8
231,183	24	10.4	9	3.9	169,483	110	64.3	11	6.5	52,230	101	193.4	6	11.5
199,425	46	23.1	30	15.0	147,704	166	111.7	32	21.7	44,296	88	198.7	17	38.4
439,372	100	23.8	34	7.7	324,593	275	84.7	64	19.7	98,659	233	236.2	33	33.4
235,206	54	14.5	10	4.3	173,275	104	60.0	14	8.1	53,329	129	241.9	10	18.8
204,166	66	32.3	24	11.8	151,318	171	113.0	50	33.0	45,330	104	229.4	23	50.7
448,136	115	25.7	39	8.7	331,897	323	97.3	48	14.5	100,793	208	206.4	30	29.8
238,229	28	11.7	7	2.9	177,068	125	70.6	9	5.1	54,428	106	194.8	11	20.2
208,907	87	41.6	32	15.3	154,831	198	127.8	39	25.2	48,365	102	220.0	19	41.0
455,314	100	22.0	48	10.5	339,835	379	111.5	59	17.4	104,187	240	230.4	32	30.7
242,524	22	9.1	8	3.3	181,335	144	79.4	17	9.4	56,113	131	233.5	10	17.8
212,790	78	36.7	40	18.8	158,500	235	148.3	42	26.5	48,074	109	226.7	22	45.8
462,491	108	23.4	34	7.4	347,673	375	107.9	58	16.7	107,582	254	236.1	28	26.0
245,812	29	11.8	4	1.6	185,604	144	77.6	11	5.9	57,799	133	230.1	12	20.8
216,673	79	36.5	30	13.8	162,069	231	142.5	47	29.0	49,783	121	243.1	16	32.1
469,668	94	20.0	24	5.1	355,509	354	99.6	43	12.1	110,976	269	242.4	36	32.4
249,113	31	12.4	9	3.6	189,872	150	79.0	11	5.8	59,484	135	227.0	12	20.2
220,555	63	28.6	15	6.8	165,637	204	123.2	32	19.3	51,492	134	260.2	24	46.6
476,845	186	39.0	17	3.6	363,347	593	163.2	27	7.4	114,371	482	421.4	20	17.5
252,407	59	23.4	3	1.2	194,141	224	115.4	6	3.1	61,169	241	394.0	5	8.2
224,438	127	56.6	14	6.2	169,206	369	218.1	21	12.4	53,202	241	463.0	15	28.2
484,023	183	37.8	8	1.7	371,185	591	159.2	14	3.8	117,766	508	431.4	18	15.3
255,702	44	17.2	1	0.4	198,410	254	128.0	2	1.0	62,855	241	383.4	3	4.8
228,321	139	60.9	7	3.1	172,775	337	195.1	12	6.9	54,911	267	486.2	15	27.3
491,200	188	37.3	9	1.8	379,023	660	174.1	13	3.4	121,160	558	460.5	19	15.7
258,996	58	22.4	2	0.8	202,679	234	115.5	4	2.0	64,540	280	433.8	6	9.3
232,204	125	53.8	7	3.0	176,344	426	241.6	9	5.1	56,620	278	491.0	13	23.0
498,377	215	43.1	5	1.0	386,861	642	166.0	22	5.7	124,555	570	457.6	16	9.6
262,291	64	24.4	1	0.4	206,948	258	124.7	10	4.8	66,225	286	431.9	4	6.0
236,066	151	64.0	5	2.1	179,913	381	213.4	12	6.7	58,329	284	486.9	8	13.7
505,556	200	39.6	5	1.0	394,698	682	172.8	18	4.6	127,949	557	435.3	14	10.9
265,585	53	20.0	2	0.8	211,217	267	126.4	5	2.4	67,911	263	416.7	5	7.4
239,970	147	61.3	3	1.3	183,482	415	226.2	13	7.1	60,038	274	456.4	9	15.0

Table 30.—Concluded.—Deaths and

Years.	Sex.	All ages.						Under 15 years.						15 to 29 years.					
		Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.	
			Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.
1872-76.....	Total.....	1,341,825.8	187.4	14.0	41.8	3.1	501,918.6	12.6	2.5	7.4	1.5	390,845.2	7.2	1.8	6.0	1.5			
	Males.....	701,785.4	81.6	11.6	12.8	1.8	255,097.8	7.0	2.7	3.6	1.4	204,336.6	2.4	1.2	1.0	0.5			
	Females..	640,040.8	105.8	16.5	29.0	4.5	246,820.8	5.6	2.3	3.8	1.5	186,508.6	4.8	2.6	5.0	2.7			
1877-81.....	Total.....	1,587,191.8	280.2	17.7	65.6	4.1	566,331.2	11.6	2.0	6.0	1.1	459,571.6	10.0	2.2	7.8	1.7			
	Males.....	834,929.8	117.6	14.1	21.2	2.5	287,960.0	4.8	1.7	2.0	0.7	243,230.6	4.4	1.8	2.2	0.9			
	Females..	752,262.2	162.6	21.6	44.4	5.9	278,371.2	6.8	2.4	4.0	1.4	216,341.0	5.6	2.6	5.6	2.6			
1882-86.....	Total.....	1,845,173.2	367.8	19.9	81.2	4.4	636,163.2	13.2	2.1	6.4	1.0	531,911.0	13.2	2.5	11.2	2.1			
	Males.....	969,430.4	165.2	17.0	21.8	2.2	322,972.4	7.4	2.3	3.2	1.0	279,495.4	4.2	1.5	2.8	1.0			
	Females..	875,742.6	202.6	23.1	59.4	6.8	313,190.8	5.8	1.9	3.2	1.0	252,415.6	9.0	3.6	8.4	3.3			
1887-91.....	Total.....	2,053,230.6	498.4	24.3	116.4	5.7	686,406.2	14.2	2.1	11.2	1.6	578,119.4	17.4	3.0	10.2	1.8			
	Males.....	1,071,765.4	205.8	19.2	31.0	2.9	347,857.0	6.6	1.9	5.2	1.5	298,226.0	6.6	2.2	2.0	0.7			
	Females..	981,462.2	292.6	29.8	85.4	8.7	338,549.2	7.6	2.2	6.0	1.8	279,893.4	10.8	3.9	8.2	2.9			
1892-96.....	Total.....	2,237,412.2	683.2	30.5	155.4	6.9	738,472.2	7.2	1.0	14.2	1.9	615,841.4	20.2	3.3	18.0	2.9			
	Males.....	1,159,062.6	287.2	24.8	42.2	3.6	374,608.0	3.8	1.0	7.6	2.0	312,109.6	7.8	2.5	4.8	1.5			
	Females..	1,078,349.8	396.0	36.7	113.2	10.5	363,864.2	3.4	0.9	6.6	1.8	303,731.8	12.4	4.1	13.2	4.3			
1872-96.....	Total.....	1,812,966.72	403.40	22.3	92.08	5.1	625,858.28	11.76	1.9	9.04	1.4	515,257.72	13.6	2.6	10.64	2.1			
	Males.....	947,395.32	171.48	18.1	25.80	2.7	317,697.64	5.92	1.9	4.32	1.4	267,479.64	5.08	1.9	2.56	1.0			
	Females..	865,571.52	231.92	26.8	66.28	7.7	308,159.24	5.84	1.9	4.72	1.5	247,778.08	8.52	3.4	8.08	3.3			
1898-1902...	Total.....	2,420,981.6	1,416.4	58.5	49.8	2.1	772,334.2	16.8	2.2	2.2	0.3	653,730.0	34.6	5.3	3.4	0.5			
	Males.....	1,248,905.2	594.6	47.6	14.4	1.2	390,735.2	10.0	2.6	1.6	0.4	329,492.0	13.6	4.1	1.4	0.4			
	Females..	1,172,076.8	821.8	70.1	35.4	3.0	381,599.0	6.8	1.8	0.6	0.2	324,247.0	21.0	6.5	2.0	0.1			

\* The age distribution of deaths is not given for the years 1870-71 because compilation was made only by decennial age periods prior to 1872. The year 1896 is taken as the end of the old series, because the new law was in effect during the latter part of the year. Total and partial populations are separately estimated by the method of average annual increase, with no adjustment to balance to total. Census data are in bold-face type; only the total population was available by State census of 1874. Unknown ages are not distributed. Also 206 persons of unknown sex, of whom only 6 were of specified ages, are not included in the distribution of population according to the State census of 1884.

## CAUSES OF DEATH.

XCV

death rates from cancer and tumor.

30 to 34 years.					45 to 64 years.					65 years and over.					Unknown ages.		
Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.		Tumor.		Popu- lation.	Cancer.	Tumor.
	Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.		Deaths.	Death rates.	Deaths.	Death rates.			
256,082.0	27.8	10.9	8.2	3.2	173,947.4	85.2	49.0	13.6	7.8	42,410.2	51.6	121.7	6.0	14.1	7.6	3.0	0.6
136,273.2	9.4	6.9	1.2	0.9	96,549.0	34.6	35.8	4.4	4.6	23,328.4	26.6	114.0	2.6	11.1	4.4	1.6	....
119,808.8	18.4	15.4	7.0	5.8	77,398.4	50.6	65.4	9.2	11.9	19,081.8	25.0	131.0	3.4	17.8	3.2	1.4	0.6
302,748.0	42.2	13.9	14.6	4.8	209,848.4	132.2	63.0	25.6	12.2	54,844.0	80.2	146.2	10.8	19.7	74.6	4.0	0.8
162,109.6	11.8	7.3	2.0	1.2	115,267.8	50.4	43.7	9.6	8.3	29,980.8	44.4	148.1	5.4	18.0	56.2	1.8	....
140,638.4	30.4	21.6	12.6	9.0	94,580.6	81.8	86.5	16.0	16.9	24,863.2	35.8	144.0	5.4	21.7	18.4	2.2	0.8
356,455.2	56.4	15.8	16.8	4.7	249,841.0	161.6	64.7	30.2	12.1	69,114.4	116.6	168.7	15.6	22.6	1,535.0	6.8	1.0
192,594.0	16.8	8.7	3.2	1.7	135,515.6	66.8	49.3	7.0	5.2	37,635.0	67.2	178.6	5.4	14.3	1,138.0	2.8	0.2
163,861.2	39.6	24.2	13.6	8.3	114,325.4	94.8	82.9	23.2	20.3	31,479.4	49.4	156.9	10.2	32.4	397.0	4.0	0.8
403,795.0	79.2	19.6	27.8	6.9	293,272.2	221.2	75.4	44.0	15.0	87,912.2	160.6	182.7	22.2	25.3	3,684.6	5.8	1.0
218,045.8	21.0	9.6	4.8	2.2	157,341.6	84.4	53.6	11.2	7.1	47,695.6	85.2	178.6	7.6	15.9	2,581.2	2.0	0.2
185,749.2	58.2	31.3	23.0	12.4	135,930.6	136.8	100.6	32.8	24.1	40,216.6	75.4	187.5	14.6	36.3	1,103.4	3.8	0.8
447,184.2	98.6	22.0	38.8	8.7	332,257.0	325.4	97.9	54.4	16.4	101,549.4	224.8	221.4	29.2	28.8	2,109.4	7.0	0.8
238,792.0	27.4	11.5	7.6	3.2	177,352.6	125.4	70.7	12.4	7.0	54,779.8	120.0	219.1	9.8	17.9	1,421.2	2.8	....
206,392.2	71.2	34.2	31.2	15.0	154,904.4	200.0	129.1	42.0	27.1	46,769.6	104.8	224.1	19.4	41.5	688.2	4.2	0.8
353,252.88	60.84	17.2	21.24	6.0	251,833.20	185.12	73.5	33.56	13.3	71,166.04	126.76	178.1	16.76	23.6	1,482.24	5.32	0.84
189,562.92	17.28	9.1	3.76	2.0	136,405.32	72.32	53.0	8.92	6.5	38,683.92	68.68	177.5	6.16	15.9	1,040.20	2.20	0.08
163,689.96	43.56	26.6	17.48	10.7	115,427.88	112.80	97.7	24.64	21.3	32,482.12	58.08	178.8	10.6	32.6	442.04	3.12	0.76
491,200.0	193.4	39.4	8.8	1.8	379,022.8	633.6	167.2	18.8	5.0	121,160.2	535.0	441.6	16.6	13.7	3,526.2	3.0	....
258,996.2	55.6	21.5	1.6	0.6	202,679.0	247.4	122.1	5.4	2.7	64,540.0	266.2	412.5	4.6	7.1	2,463.0	1.8	....
232,203.8	137.8	59.3	7.2	3.1	176,344.0	386.2	219.0	13.4	7.6	56,620.0	268.8	474.7	12.0	21.2	1,063.0	1.2	....



## DISEASES OF THE NERVOUS SYSTEM.

The following comparative statement shows the number of deaths and the death rates per 100,000 population as compiled from diseases affecting the nervous system:

	<i>Deaths.</i>			
	<i>1901.</i>	<i>1900.</i>	<i>1899.</i>	<i>1898.</i>
Total diseases of the nervous system.....	4,012	4,056	4,568	3,963
Meningitis.....	427	514	1,051	671
Apoplexy.....	1,243	1,259	1,225	1,144
Paralysis.....	799	788	842	789
Convulsions.....	550	542	474	540
Other nervous diseases.....	993	953	976	819
<i>Death rates per 100,000 population.</i>				
Total diseases of the nervous system.....	163.6	167.4	191.4	168.7
Meningitis.....	17.4	21.2	44.1	28.5
Apoplexy.....	50.7	52.0	51.3	48.7
Paralysis.....	32.6	32.5	35.3	33.6
Convulsions.....	22.4	22.4	19.9	23.0
Other nervous diseases.....	40.5	39.3	40.8	34.9

It would appear that the mortality from this class of diseases has rather declined during the past four years, and that excepting the epidemic prevalence of meningitis in 1899 no remarkable amounts of mortality have been recorded from any of the constituent causes.

This group undoubtedly includes many deaths not correctly assignable, in their true etiology, to diseases of the nervous system. Thus deaths from meningitis may be in part from "simple" or "idiopathic" meningitis, from epidemic cerebrospinal meningitis, or from meningitis following pneumonia, typhoid fever, and other acute infectious diseases. It may also include some deaths from tuberculous meningitis, the element of tuberculosis not having been properly specified in the physician's certificate; when known to be such these cases are included under tuberculous diseases. Apoplexy and paralysis may stand for deaths due to an identical cause, namely, arterial degeneration and rupture of cerebral vessels, with consequent hemorrhage in the brain. It is evident that the disease in such a case is primarily one of the circulatory and not of the nervous system, and this fact is recognized by the latest classification adopted by the Registrar-General of England. "Paralysis" is an indefinite term; the cause of the paralysis should always be given by the reporting physician, which fact would enable many deaths so reported to be properly

classified. "Convulsions" also is a most unsatisfactory term, being based upon a mere symptom common to many diseases and conditions. Many of these deaths are due to infantile diarrhea and enteritis, but the distribution by months throughout the year, as shown in a following table, would indicate that other causes were responsible for the majority of cases, as the maximum mortality does not occur in the months most susceptible to cholera infantum in all sections of the State, but in the Southern counties may be found in March.

Following is a detailed statement, by months, geographical sections and ages, of the mortality for the year from the more important diseases of the nervous system:

**Table 31.—Deaths from meningitis in Michigan, 1901.**

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	427	17.4	37	21	46	41	42	36	51	37	42	25	20	29
I. Upper Peninsula.....	46	17.0	4	1	5	5	4	2	4	3	4	5	6	3
II. Northern counties...	57	18.8	3	2	6	5	5	2	7	6	9	5	1	6
III. Central counties...	77	17.4	6	6	8	7	9	9	6	10	10	3	3	.....
IV. Southern counties...	247	17.2	24	12	27	24	24	23	34	18	19	12	10	20
Deaths by sex, 1901.		Deaths by ages, 1901.												
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.	
233	194	138	257	40	297	38	28	25	17	7	6	7	2	

M

## VITAL STATISTICS OF MICHIGAN, 1901.

Table 32.—Deaths from apoplexy in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	1,243	50.7	109	111	125	110	108	93	73	91	97	105	99	122
I. Upper Peninsula.....	55	20.3	5	8	4	6	4	4	2	4	3	6	5	4
II. Northern counties...	94	31.0	7	11	8	8	4	9	4	5	11	8	10	9
III. Central counties...	199	45.1	15	10	14	13	26	13	19	22	13	21	12	21
IV. Southern counties..	895	62.3	82	82	99	83	74	67	48	60	70	70	72	88

Deaths by sex, 1901.		Deaths by ages, 1901.*											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
668	575	37	56	5	61	16	25	35	68	179	313	356	185

\* Includes five deaths at unknown ages.

Table 33.—Deaths from paralysis in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	799	32.6	76	81	86	76	61	63	56	41	67	68	56	68
I. Upper Peninsula.....	20	7.4	3	1	2	.....	2	1	1	1	2	1	5	1
II. Northern counties...	72	23.7	3	11	5	6	7	4	8	3	8	6	5	6
III. Central counties...	131	29.7	10	6	14	19	11	11	9	10	11	11	11	8
IV. Southern counties...	576	40.1	60	63	65	51	41	47	38	27	46	50	35	53

Deaths by sex, 1901.		Deaths by ages, 1901.*											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
421	378	6	9	.....	9	9	9	20	49	99	165	265	172

\* Includes two deaths at unknown ages.

Table 34.—Deaths from convulsions in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	550	22.4	49	46	68	49	45	58	56	34	39	30	39	37
I. Upper Peninsula.....	98	36.2	3	6	12	7	11	11	8	6	11	8	7	8
II. Northern counties..	65	21.4	4	4	8	5	4	4	8	5	6	3	8	6
III. Central counties..	80	18.1	9	9	6	7	10	9	7	8	3	5	4	3
IV. Southern counties..	307	21.4	33	27	42	30	20	34	33	15	19	14	20	20

Deaths by sex, 1901.		Deaths by ages, 1901.											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
301	249	458	525	7	532	4	5	1	1	1	2	2	2

## DISEASES OF THE CIRCULATORY SYSTEM.

The total number of deaths, together with death rates per 100,000 population, from the causes here compiled may be seen in the following statement, which merely attempts to distinguish two varieties of returns, namely, deaths reported for some definite form of organic heart disease and deaths from endocarditis, pericarditis, diseases of the arteries and veins, and other and indefinitely reported diseases of the circulatory system, including deaths reported from "hemorrhage" with unspecified cause.

	Deaths.			
	1901.	1900.	1899.	1898.
Total diseases of the circulatory system.....	3,291	3,059	2,776	2,540
Heart disease.....	2,691	2,472	2,227	2,016
Other circulatory disease.....	600	587	549	524
	Death rates per 100,000 population.			
	1901.	1900.	1899.	1898.
Total diseases of the circulatory system.....	134.3	126.3	116.3	108.1
Heart disease.....	109.8	102.1	93.3	85.8
Other circulatory diseases.....	24.5	24.2	23.0	22.3

This class does not include deaths from "heart failure," which are regarded as too worthless, so far as nosological statistics are concerned, to be included among deaths from diseases of any specified organ.

The marked and steady increase in the registered mortality from heart diseases is a feature of great interest. If deaths from "heart failure," a portion of which may be due to actual organic disease of the heart, were included, the number of deaths from this cause would be still higher, but even as it is, the number of deaths from organic heart disease in Michigan in 1901 exceeded those from any other single cause recorded, although the total number of deaths from all forms of pneumonia was somewhat greater.

The distribution of deaths from organic heart disease during the year 1901 may be seen in Table 35, according to which it appears that the death rate from this disease increased progressively in passing from the Upper Peninsula to the Southern counties. This might have been expected as the deaths from heart disease are chiefly those of elderly persons, and the general age distribution of the population is more favorable to a high ratio of deaths from this cause in the older and more thickly settled portion of the State.

Table 35.—Deaths from heart disease in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	2,601	109.8	246	240	236	259	246	212	201	196	209	183	222	241
I. Upper Peninsula.....	135	49.9	10	10	9	43	22	10	8	7	11	16	12	7
II. Northern counties..	216	71.2	19	30	17	19	25	18	10	21	14	11	18	14
III. Central counties..	417	94.4	35	36	42	38	36	25	37	28	37	29	36	38
IV. Southern counties..	1,923	133.9	182	164	168	189	163	159	146	140	147	127	156	182
Deaths by sex, 1901.			Deaths by ages, 1901.*											
Males.	Females.		Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
1,521	1,170		58	75	12	87	68	72	126	228	398	658	727	321

\* Includes six deaths at unknown ages.

## CAUSES OF DEATH.

ci

## DISEASES OF THE RESPIRATORY SYSTEM.

Diseases of the respiratory system are among the most important causes of death in Michigan. In this group may be found the following figures for deaths and death rates per 100,000 population during the past four years:

	<i>Deaths.</i>			
	<i>1901.</i>	<i>1900.</i>	<i>1899.</i>	<i>1898.</i>
Total diseases of the respiratory system.....	4,377	3,877	3,900	3,226
Bronchitis.....	869	802	785	643
Pneumonia (total).....	2,901	2,388	2,479	2,047
Bronchopneumonia.....	489	353	287	242
Pneumonia.....	2,412	2,035	2,192	1,805
Pleurisy.....	89	159	134	107
Other respiratory diseases.....	518	528	592	439
	<i>Death rates per 100,000 population.</i>			
	<i>1901.</i>	<i>1900.</i>	<i>1899.</i>	<i>1898.</i>
Total diseases of the respiratory system.....	178.7	160.2	167.2	137.7
Bronchitis.....	35.5	33.1	32.9	27.4
Pneumonia (total).....	118.4	98.7	103.9	87.1
Bronchopneumonia.....	20.0	14.6	12.0	10.3
Pneumonia.....	98.4	84.1	91.9	76.8
Pleurisy.....	3.4	6.6	5.6	4.5
Other respiratory diseases.....	21.4	21.8	24.8	18.7

The total given above does not include, however, the entire list of diseases chiefly affecting the respiratory organs. Pulmonary tuberculosis is a disease chiefly affecting the lungs, and many deaths registered from influenza are in their onset, course and termination chiefly confined to the respiratory tract. Fatal cases of measles are frequently the results of pneumonia as a complication, and many deaths from organic heart, liver or kidney disease present terminal pneumonias as the closing incident of life. In order to compare the chief causes of death affecting the respiratory tract, we may consider the total compiled under this group above in connection with deaths from influenza and pulmonary tuberculosis:

	Deaths.			
	1901.	1900.	1899.	1898.
Total diseases of the respiratory system, influenza and pulmonary tuberculosis.....	7,628	6,395	7,761	5,844
Per cent to deaths from all causes.....	23.2	19.7	24.0	20.7
Diseases of the respiratory system.....	4,377	3,877	3,990	3,236
Influenza.....	1,099	500	1,673	455
Pulmonary tuberculosis.....	2,152	2,018	2,098	2,153
Death rates per 100,000 population.				
Total diseases of the respiratory system, influenza and pulmonary tuberculosis.....	311.3	264.3	325.2	248.7
Diseases of the respiratory system.....	178.7	160.2	167.2	137.7
Influenza.....	44.8	20.7	70.1	19.4
Pulmonary tuberculosis.....	87.8	83.4	87.9	91.6

Table 36.—Deaths from bronchitis in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	869	35.5	133	116	134	99	64	52	24	22	36	40	65	84
I. Upper Peninsula.....	123	45.5	10	18	26	14	8	10	2	4	5	8	8	10
II. Northern counties..	95	31.3	18	15	14	15	6	5	2	2	4	.....	8	6
III. Central counties..	119	27.0	21	19	15	18	6	6	1	3	5	9	7	9
IV. Southern counties..	532	37.1	84	64	79	52	44	31	19	13	22	23	42	59
Deaths by sex, 1901.			Deaths by ages, 1901.*											
Males.	Females.		Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
406	463		326	452	8	460	5	18	17	13	40	77	141	95

\* Includes three deaths at unknown ages.

## CAUSES OF DEATH.

ciii

**Table 37.—Deaths from bronchopneumonia in Michigan, 1901.**

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	489	20.0	74	69	101	50	32	24	10	9	10	31	29	50
I. Upper Peninsula....	68	25.1	7	8	14	9	5	8	.....	1	1	7	5	3
II. Northern counties..	45	14.8	6	7	12	5	5	1	2	1	1	2	1	2
III. Central counties..	69	15.6	15	9	12	6	3	3	.....	2	5	4	1	9
IV. Southern counties..	307	21.4	46	45	63	30	19	12	8	5	3	18	22	36
Deaths by sex, 1901.			Deaths by ages, 1901.											
Males.	Females.		Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
239	250		228	318	15	333	9	5	12	9	21	34	38	28

**Table 38.—Deaths from pneumonia in Michigan, 1901.**

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	2,412	98.4	334	397	372	311	197	121	54	39	68	96	155	268
I. Upper Peninsula....	220	81.3	26	31	25	24	21	14	5	8	12	8	17	29
II. Northern counties..	317	104.5	43	48	46	46	33	22	4	5	9	9	18	34
III. Central counties..	472	106.9	61	83	83	66	40	18	11	6	12	20	27	45
IV. Southern counties..	1,403	97.7	204	235	218	175	103	67	34	20	35	59	93	160
Deaths by sex, 1901.			Deaths by ages, 1901.*											
Males.	Females.		Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
1,352	1,060		486	705	61	766	138	166	183	207	225	272	293	158

\* Includes four deaths at unknown ages.



It appears, from comparison of the ratios of the deaths from diseases affecting the respiratory organs, that from one-fifth to one-quarter of the total number of deaths in Michigan for each of the past four years were from this class of causes. The mortality was highest in 1899 and 1901 chiefly from the epidemic prevalence of influenza; pulmonary tuberculosis showed comparatively little variation, while the total deaths from other respiratory diseases, including pneumonia followed the tendency of influenza.

## DISEASES OF THE DIGESTIVE SYSTEM.

Disease affecting the digestive system are of great numerical importance as causes of death, in one year, 1900, out of the past four exceeding the deaths from any other region of the organism, and in the other three years standing second in number. While the titles included are not all of the same precision and definite value, we may consider the movement of these diseases in Michigan for the past four years in the following statement:

	<i>Deaths.</i>			
	1901.	1900.	1899.	1898.
Total diseases of the digestive system.....	4,354	5,224	4,293	3,956
Diseases of stomach.....	508	650	550	484
Diarrhea and enteritis, under two years.....	1,768	2,338	1,720	1,633
Diarrhea and enteritis, aged two years and over.....	526	611	588	463
Hernia and obstruction of bowels.....	332	243	241	254
Cirrhosis of liver.....	211	190	145	148
Other liver diseases.....	287	404	351	329
Peritonitis.....	277	343	306	284
Appendicitis.....	263	221	223	165
Other digestive diseases.....	182	224	169	196
<i>Death rates per 100,000 population.</i>				
Total diseases of the digestive system.....	177.5	215.7	180.0	168.3
Diseases of stomach.....	20.7	26.8	23.1	20.6
Diarrhea and enteritis, under two years.....	72.1	96.6	72.2	69.5
Diarrhea and enteritis, aged two years and over.....	21.5	25.2	24.6	19.7
Hernia and obstruction of bowels.....	13.5	10.0	10.1	10.8
Cirrhosis of liver.....	8.6	7.8	6.1	6.3
Other liver diseases.....	11.7	16.7	14.7	14.0
Peritonitis.....	11.3	14.2	12.8	12.1
Appendicitis.....	10.7	9.1	9.3	7.0
Other digestive diseases.....	7.4	9.3	7.1	8.3

The year 1901 was evidently more favorable than either 1900 or 1899 as regards mortality from this class of diseases. The high death rate from diarrheal diseases of children under two years of age should be considered in connection with the fact that the other diseases given are not limited to any particular age periods, excepting only the complementary statement of diarrhea and enteritis over two years of age. Even on this basis, the mortality from infantile diarrhea is much greater than that of any other disease in this group, and if comparison were made of the deaths of infants from diarrhea per 100,000 population of the same age, it would be found that the death rates would be enormously increased. Such a comparison may be found in the preceding Registration Report, p. lxx, for the year 1900, where it appeared that the general death rate from infantile diarrhea under five years of age was 103.4 per 100,000 general population, while the rate for infants under one year of age to population under one year was 4,319.9 per 100,000 or over 40 times as great, while that for children under five years was 959.9 per 100,000, or over nine times as great as the crude rate based on gross population.

In Tables 39, 40 and 41 the monthly prevalence, age, sex and geographical distribution are shown for diseases of the stomach, diarrhea and enteritis under two years of age and over that age:

Table 39.—Deaths from diseases of stomach in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	508	20.7	45	33	48	48	71	34	40	39	41	36	36	37
I. Upper Peninsula.....	48	17.7	5	6	3	3	3	3	4	4	2	6	3	6
II. Northern counties..	55	18.1	9	8	2	3	9	4	2	6	4	3	3	2
III. Central counties..	100	22.6	2	2	15	14	20	8	10	5	14	3	3	4
IV. Southern counties..	305	21.2	29	17	28	28	39	19	24	24	21	24	27	25

Deaths by sex, 1901.		Deaths by ages, 1901.*											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
250	258	121	149	9	158	12	18	18	46	46	74	88	47

\* Includes one death at unknown age.

N

## VITAL STATISTICS OF MICHIGAN, 1901.

Table 40.—Deaths from diarrhea and enteritis, under 2 years, in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	1,768	72.1	47	40	55	57	61	107	255	430	451	169	50	46
I. Upper Peninsula.....	342	126.4	10	8	10	15	13	14	36	121	85	15	11	4
II. Northern counties..	213	70.2	6	4	10	6*	7	13	15	42	73	23	9	5
III. Central counties..	308	69.8	13	9	8	13	7	9	20	81	92	40	8	8
IV. Southern counties..	905	63.0	18	19	27	23	34	71	184	186	201	91	22	29
Deaths by sex, 1901.			Deaths by ages, 1901.*											
Males.	Females.		Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
988	779		1,474	1,767	.....	1,767	.....	.....	.....	.....	.....	.....	.....	.....

\* Includes one death at unknown age, and one of unknown sex.

Table 41.—Deaths from diarrhea and enteritis, over 2 years, in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	526	21.5	30	28	35	33	31	32	40	81	100	58	31	27
I. Upper Peninsula.....	41	15.2	1	1	3	1	2	2	2	8	13	5	3	.....
II. Northern counties..	54	17.8	3	3	6	2	4	4	3	9	8	8	3	1
III. Central counties..	100	22.6	4	3	7	5	6	6	7	13	26	12	4	7
IV. Southern counties..	331	23.1	22	21	19	25	19	20	28	51	53	33	21	19
Deaths by sex, 1901.			Deaths by ages, 1901.*											
Males.	Females.		Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
268	258	.....	119	22		141	29	37	20	22	57	80	85	54

\* Includes one death at unknown age.

## DISEASES OF THE GENITO-URINARY SYSTEM.

The principal cause of death in this group is Bright's disease, from which 1,050 deaths were returned for the year 1901, corresponding to a rate of 42.8 per 100,000 population. All other diseases of this class amounted to 598 or 24.4 per 100,000 population. "Bright's disease" includes acute and chronic nephritis, in various forms, besides a considerable number of deaths from "uremia" or "uremic poisoning," which terms cannot be regarded as very definite. It would seem from comparison with preceding years that there has been some tendency to increase of late in the number of deaths compiled under Bright's disease:

Years.	Deaths from Bright's disease.	Death rates per 100,000 population.
1901 .....	1,050	42.8
1900 .....	852	35.2
1899 .....	965	40.4
1898 .....	915	38.9

In Table 42 may be found a statement of the incidence of the mortality from Bright's disease in the different sections of the State and by age and sex for the year:

Table 42.—Deaths from Bright's disease in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	1,050	42.8	106	82	100	79	100	84	75	89	82	77	78	98
I. Upper Peninsula.....	62	22.9	4	3	2	1	7	4	9	5	4	7	5	11
II. Northern counties..	91	30.0	9	8	12	6	8	7	7	11	6	3	4	10
III. Central counties..	171	38.7	22	14	16	18	22	10	14	8	13	7	11	16
IV. Southern counties..	726	50.6	71	57	70	54	63	63	45	65	59	60	58	61
Deaths by sex, 1901.			Deaths by ages, 1901.*											
Males.	Females.		Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
617	433		20	35	9	44	29	65	71	109	170	232	233	95

\* Includes two deaths at unknown ages.

## DEATHS FROM VIOLENCE.

Deaths from accidents and all other forms of violence, including suicides and homicides, so far as the returns distinguish the causes of violent deaths, may be found in the following statement for the past four years:

	<i>Deaths.</i>			
	1901.	1900.	1899.	1898.
Total deaths from violence.....	2,251	1,966	1,796	1,677
Accidental.....	1,978	1,740	1,579	1,455
Suicidal.....	238	211	189	189
Homicidal.....	35	15	28	33
	<i>Death rates per 100,000 population.</i>			
	1901.	1900.	1899.	1898.
Total deaths from violence.....	91.8	81.2	75.3	71.3
Accidental.....	80.7	71.9	66.2	61.9
Suicidal.....	9.7	8.7	7.9	8.0
Homicidal.....	1.4	0.6	1.2	1.4

Table 43.—Deaths from suicide in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	238	9.7	13	16	16	21	11	23	23	25	16	34	20	20
I. Upper Peninsula.....	26	9.6	1	1	1	3	1	1	3	2	2	5	3	3
II. Northern counties..	17	5.6	.....	.....	.....	2	1	3	2	1	3	1	1	3
III. Central counties..	31	7.0	2	1	3	2	.....	8	4	4	.....	3	3	1
IV. Southern counties..	164	11.4	10	14	12	14	9	11	14	18	11	25	13	13

Deaths by sex, 1901.		Deaths by ages, 1901.*											
Males.	Females	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
176	62	.....	.....	1	1	11	36	43	47	43	33	20	3

\* Includes one death at unknown age.

Table 44.—Deaths from accidents in Michigan, 1901.

Geographical sections.	Total deaths, 1901.	Death rate per 100,000 estimated population.	Deaths by months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
State.....	1,978	80.7	137	98	114	123	167	185	253	188	209	160	197	147
I. Upper Peninsula.....	418	154.5	35	20	15	27	41	47	43	45	54	34	29	28
II. Northern counties..	250	82.4	14	9	17	12	21	24	34	27	31	28	13	20
III. Central counties..	281	63.6	21	12	18	15	27	18	35	23	30	28	32	22
IV. Southern counties..	1,029	71.7	67	57	64	69	78	96	141	98	94	70	123	77

Deaths by sex, 1901.		Deaths by ages, 1901.*											
Males.	Females.	Under 1 year.	Under 5 years.	5 to 9.	Under 10 years.	10 to 19.	20 to 29.	30 to 39.	40 to 49.	50 to 59.	60 to 69.	70 to 79.	80 and over.
1,540	424	140	304	94	398	245	318	232	187	173	127	136	111

\* Includes fifty-one deaths at unknown ages and fourteen of unknown sex.

The age, sex and geographic distribution of the deaths reported from suicide and accidental violence may be found in Tables 43 and 44. The number of deaths compiled as due to homicide is so small that it was not considered necessary to present a similar table, but full details may be found in the primary tables under this item in the classified list of causes of deaths.

#### SOME MINOR AND INDEFINITE CAUSES OF DEATH.

Various forms of skin affections, not including the infectious exanthemata, caused 172 deaths during the year, diseases of the locomotor system, exclusive of tuberculosis and rheumatism, caused 46 deaths, and malformations were responsible for 306 deaths. The latter term includes congenital malformation of the heart (cyanosis, nonclosure of foramen ovale) formerly classified under organic heart disease, which fact accounts for the increase in 1901 as compared with the preceding years. Premature births numbered 524, these being children born alive but who died before the completion of the third month. There were also 677 deaths compiled from "congenital debility" or similar indefinite causes of death of young infants (under three months), while the return of "old age," "senile debility," and other expressions, practically valueless as indicating the cause of death but merely indicating that the decedent was an old person who died from some unknown cause, accounted for no less than 1,193 cases. This term is never selected in compilation in preference to any more definite cause, and for years prior to 1900 was even made to yield to such indefinite causes as "dropsy" and "heart fail-

ure" in the hope that the term was destined to disappear from the classification after its revision. As it was retained, it is now treated like all other terms occurring outside of the ill-defined and indefinite class, to which it strictly belongs, and the result is a somewhat increased apparent prevalence of this cause of death for 1901. The total deaths from ill-defined causes, 1,051, should include the ill-defined causes of infants under three months of age, 677, and those of elderly persons over 65 years ("old age," 1,193), making a total of 2,921 deaths from causes practically uncertified, so worthless are they for statistical compilation, and which must be considered as a possible factor of correction in studying the deaths reported from more definite causes.

## PART III.—MARRIAGES IN MICHIGAN DURING THE YEAR 1901.

There were 24,079 marriages returned to the State Department as having occurred in Michigan during the year 1901. This number exceeds that registered for the preceding year by 784, and corresponds to a rate of 19.6 persons married per 1,000 estimated population. These figures may be compared in Table 2, page xi, with the corresponding figures for previous years of registration, from which it appears that the number of marriages for the year was the largest and the marriage rate the highest ever recorded in the State.

## SUMMARY OF THE REGISTRATION OF MARRIAGES IN MICHIGAN, 1901.

Some of the most important facts relative to the registration of marriages in Michigan during the year 1901 are herewith presented:

Total number of marriages returned, 1901.....	24,079
Persons married per 1,000 population, 1901.....	19.6

The above statement does not include 40 marriages performed by Judges of Probate under the act authorizing secret marriages in certain cases. Twenty of these secret marriages were at illegal ages according to the general laws of the State and others gave legal sanction to common-law unions, the couples being supposed to have been regularly married by the communities in which they live. A table showing the age distribution of these marriages may be found on page 73.

As compared with the preceding year of registration, we have:

Increase of marriages registered for the year 1901, (24,079) over the number for 1900 (23,295) 784

As to the occurrence of marriages by months, we have:

More than average number.....	June, September, October, November, December
Less than average number.....	January, February, March, April, May, July, August
Favorite month for marriages, 1901.....	October, 2,642 or 25.4 per 1,000
Month of fewest marriages and lowest rate, 1901.....	March, 1,360 or 13.1 per 1,000

Of the 24,079 marriages, there were with respect to nativity:

Both bridegroom and bride of native birth.....	15,606 or 64.8 per cent
Both bridegroom and bride of foreign birth.....	3,102 or 12.9 per cent

Including mixed marriages, that is, marriages in which bridegroom and bride were of different nativities there were:

Males of native birth married, 1901.....	17,837 or 74.1 per cent
Males of foreign birth married, 1901.....	6,231 or 25.9 per cent
Females of native birth married, 1901.....	18,685 or 77.6 per cent
Females of foreign birth married, 1901.....	5,011 or 20.8 per cent

As to age at marriage, the most important groups were:

Males aged 20 to 24 years, both inclusive.....	8,951 or 37.2 per cent
Males aged 25 to 29 years, both inclusive.....	7,304 or 30.3 per cent
Females under 20 years of age.....	6,560 or 27.2 per cent
Females aged 20 to 24 years, both inclusive.....	9,800 or 47.0 per cent



## MARRIAGES AND MARRIAGE RATES BY COUNTIES, 1901.

Besides the primary tables giving a full statement of the marriages returned from each county by months and periods of ages of persons married (Table I, page 63 and Table II, page 65) together with the statement of nativity of persons married by counties (Table III, page 70), reference may be made to Table 6, which shows the marriage rates for each county for the year. These rates are stated, as is the preferable statistical custom, as the number of *persons married* per 1,000 estimated population. In general such comparisons of marriages or persons married to the population are subject to further analysis on the basis of the number of unmarried persons in the population and their age-distribution. Such an exceptional rate as that of Berrien county, 59.9 per 1,000, is not comparable with the figures for other counties, owing to the special conditions. As stated elsewhere this remarkably high rate of Berrien county is due to the large and increasing number of marriages of persons who are nonresidents of the State. Aside from this exception, the rates of the other counties show considerable uniformity.

## MARRIAGES RETURNED BY MONTHS, 1892-1901.

In Table 45 the marriages returned in Michigan for the past ten years are shown according to the months in which the ceremonies were performed. For 1901 the largest number occurred in October, 2,642, and the least number, 1,360, was in March. The distribution of marriages through the year must be considerably affected, however, by the large number of foreign marriages in Berrien county, most of which occurred during the summer excursion season.

Table 45.—Marriages returned, by months, for the years 1892-1901; with average for the ten-year period.

Years.	Total marriages.	Months of marriage.												
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
1892.....	20,107	<i>1,335</i>	1,455	1,542	1,543	1,590	1,751	1,386	1,407	1,286	2,037	<b>2,181</b>	2,049	5
1893.....	19,197	1,452	<i>1,273</i>	1,318	1,663	1,574	1,769	1,408	1,356	1,730	2,018	<b>2,060</b>	1,574	2
1894.....	18,220	1,366	<i>1,060</i>	1,403	1,552	1,348	1,486	1,262	1,256	1,704	<b>2,034</b>	1,992	1,754	3
1895.....	18,952	1,389	1,342	<i>1,324</i>	1,536	1,456	1,690	1,367	1,349	1,658	<b>2,110</b>	2,036	1,694	1
1896.....	18,897	1,443	1,271	1,368	1,684	1,361	1,762	1,305	<i>1,238</i>	1,759	1,826	<b>2,028</b>	1,846	6
1897.....	18,579	<i>1,179</i>	1,273	1,426	1,441	1,354	1,828	1,235	1,258	1,719	1,887	<b>2,044</b>	1,935	.....
1898.....	20,138	1,397	<i>1,302</i>	1,400	1,613	1,482	2,056	1,315	1,487	1,793	2,043	<b>2,264</b>	1,979	7
1899.....	21,877	1,343	<i>1,311</i>	1,324	1,765	1,581	2,185	1,681	1,767	2,095	2,323	<b>2,464</b>	2,038	.....
1900.....	23,295	1,717	1,541	<i>1,322</i>	1,765	1,779	2,398	1,800	1,876	2,192	<b>2,496</b>	2,332	2,075	2
1901.....	24,079	1,624	1,372	<i>1,360</i>	1,922	1,779	2,537	1,934	1,897	2,376	<b>2,642</b>	2,421	2,211	4
Av. 1892-1901.	20,334	1,425	1,320	1,379	1,648	1,530	1,946	1,469	1,489	1,831	2,142	<b>2,182</b>	1,916	3

Maxima in bold face type; minima in *italics*.

Comparisons of the results of the year 1901 may be made with the preceding ten years of registration by means of the same table, which has been corrected for the estimated increase of population. The total number of marriages for the year 1901 is somewhat greater than the corrected average for the ten years preceding, but if the additional foreign marriages in Berrien county be deducted, the increase will not be especially marked, when it is considered that the period 1892-1901 includes several years of very serious financial depression, a condition which is always attended with a marked reduction in the marriage rate. The month of greatest frequency of marriages in the ten-year period was November, while the largest number in 1901 occurred in October. The month of least frequency of marriages was February, while the fewest number in 1901 occurred in the month of March.

## MARRIAGES BY MONTHS AND QUARTERS, 1901.

The distribution of marriages during the year 1901 is further shown in Table 46, where figures are given, not only for the numbers returned, but also showing the average number per day for each month, the rank on a standard scale and the rate per 1,000 persons married by months for the year. The month of highest rank, considered as to the choice for marriage, was October, while March was the least frequently chosen.

Table 46.—Marriages in Michigan, by months and quarters, 1901.

Year and months.	Number of marriages, 1901.		Average number per day, 1901.	Rank.	Persons married per 1,000 population, 1901.	Ten-year period, 1892-1901.		
	By months.	By quarters.				Average number.*	Average daily number.*	Rank.
Year, 1901...	24,079	.....	66.0	1,200	19.6	21,534	56.3	1,200
January.....	1,624	4,356	52.4	79	15.6	1,509	48.6	86
February.....	1,372		49.0	74	14.6	1,898	49.9	89
March.....	1,360		43.9	67	13.1	1,460	47.1	84
April.....	1,922	6,238	64.1	97	19.1	1,745	58.2	103
May.....	1,779		57.4	87	17.1	1,620	52.3	93
June.....	2,537		84.6	128	25.3	2,061	68.7	122
July.....	1,934	6,207	62.4	95	18.6	1,556	50.2	89
August.....	1,897		61.2	93	18.3	1,577	50.9	90
September.....	2,376		79.2	120	23.7	1,939	64.6	115
October.....	2,642	7,274	85.2	129	25.4	1,268	40.9	73
November.....	2,421		80.7	122	24.1	2,311	77.0	137
December.....	2,211		71.3	108	21.3	2,029	65.5	116
Unknown.....	4	4	.....	.....	.....	3	.....	.....
Average....	2,007	6,020	66.0	100	.....	.....	.....	100

\* Numbers given in Table 45 multiplied by 1.0590, the ratio between the population of Michigan in 1900 and the average estimated population of the period 1892-1901. The monthly and daily numbers are, therefore, directly comparable for the year and ten-year period.

## NATIVITY OF PERSONS MARRIED IN MICHIGAN, 1901.

The facts in regard to the nativity of persons married in Michigan during the year 1901, which may be found in detail in Table III, page 70, for each county of the State, are summarized in Table 47 and are compared by means of five-year averages with the corresponding figures for preceding years of registration in Table 48.

Out of the 24,079 marriages during the year, 15,606 were those in which both the bridegroom and bride were of native birth. This corresponds to a percentage of 64.8. The number of foreign born couples was 3,102, or 12.9 per cent. The percentage of native born couples increased somewhat, on the whole, from the earlier years of registration until 1899, but a decrease is noted from 1899 to 1900, and an increase from 1900 to 1901. The percentage of foreign born couples, which has decreased since the earlier years of registration, is correspondingly noted to rise from 13.3 per cent in 1899 to 13.5 per cent in 1900, dropping again, however, to 12.9 for 1901.

Table 47.—By nativity, the number and per cent of brides and bridegrooms returned for the year 1901.

Bridegrooms and brides—nativity specified.		Brides, 1901.			Bridegrooms, 1901.	
		Native born.	Foreign born.	Unknown.	Total of each nativity.	Percent of each nativity.
Bridegrooms....	{ Native born.....	15,606	1,909	322	17,837	74.1
	{ Foreign born.....	3,071	3,102	58	6,231	25.9
	{ Unknown.....	8	.....	3	11	.04
Brides.....	{ Total of each nativity.....	18,685	5,011	383	24,079	.....
	{ Per cent of each nativity.....	77.6	20.8	1.6	.....	100.0

Table 48.—Nativity of marriages in Michigan for the years 1896-1901; compared with averages for six successive quinquennial periods, 1871-1900.

Years and periods averaged.	Nativity of marriages.—Per cent of total.				
	Both native born.	Both foreign born.	Foreign groom and native bride.	Native groom and foreign bride.	One or both unknown.
Average, 1871-75.....	59.7	18.5	12.3	7.0	2.6
Average, 1876-80.....	63.2	14.0	13.3	7.4	2.2
Average, 1881-85.....	58.2	19.4	12.4	8.7	1.3
Average, 1886-90.....	56.4	20.3	13.2	8.1	2.0
Average, 1891-95.....	58.0	18.2	13.2	7.9	2.6
Average, 1896-1900.....	63.1	14.0	12.5	8.0	2.3
Year 1901.....	64.8	12.9	12.8	7.9	1.6

## AGES OF PERSONS MARRIED IN MICHIGAN, 1901.

Table II, beginning on page 65, shows the age distribution of persons married in Michigan by counties during the year, and Table IV, on page 72, shows the various age combinations of persons married, by sex; that is to say, how many males under 20 married females of the same age period; how many married females aged 20-24 years, 25-29 years, and so on in order. The group of ages at which the greatest number of marriages occurred is that in which both the males and females were aged from 20-24 years, the number of marriages at these ages being 4,420. Next in order comes the group of males aged 20-24 years and females under 20, of which the number was 4,006 and then the group of males aged 25-29 years, with females aged 20-24 years, numbering 3,555. These three groups include 11,981 marriages or nearly 50 per cent of the total number recorded. The proportions of males and females married at each age period may be seen in Tables 49 and 50, respectively, with comparisons of six quinquennial periods.

In 1901 the favorite marriage age for males was the period 20-24 years, at which 37.2 per cent of males were married. This is a decrease from the preceding year, corresponding to a slight decrease observed in the following period, 25-29 years.

With females the proportion of marriages under 20 years of age is very markedly less than it was during the earlier years of registration, being only 27.2 per cent. On the other hand the proportion at the age period 20-24 years, or 40.7 per cent, is somewhat greater than that recorded for the earlier years of registration, while the percentage at the age period 25-29 years, 16.5 per cent, is greater than formerly. From 1871 to 1880, the proportion of females married under 20 years of age was greater than those married at the age period 20-24 years, but at present the ratios for these periods are about as 5 to 8. A general shifting of the distribution of ages at marriage may be observed towards the later periods.

Table 49.—Percentage of males married in Michigan at specified periods of age for the year 1901; compared with averages for six quinquennial periods, 1871-1900.

Years and periods averaged.	Ages of males married, 1871-1901.														
	Under 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.
Average, 1871-75..	2.8	41.2	28.5	10.6	5.5	3.3	2.3	1.7	1.0	0.8	0.5	0.3	0.1	....	0.6
Average, 1876-80..	2.8	40.8	28.8	10.8	5.6	3.2	2.2	1.6	1.1	0.8	0.5	0.3	0.1	....	0.5
Average, 1881-85..	2.3	30.5	30.7	11.4	5.7	3.2	2.2	1.6	1.0	0.9	0.5	0.3	0.1	....	0.4
Average, 1886-90..	2.1	37.7	32.4	12.2	5.7	3.0	2.4	1.5	1.1	0.8	0.6	0.3	0.1	....	0.1
Average, 1891-95..	1.8	38.1	30.8	12.7	6.0	3.2	2.3	1.7	1.2	0.9	0.7	0.3	0.1	....	.....
Average, 1896-1900	1.8	37.7	30.6	12.5	6.6	3.4	2.5	1.7	1.2	0.9	0.6	0.3	0.2	0.1	.....
Year 1901.....	1.9	37.2	30.3	13.0	6.6	3.8	2.4	1.6	1.2	0.9	0.6	0.3	0.1	....	.....

**Table 50.—Percentages of females married in Michigan at specified periods of age for the year 1901; compared with averages for six quinquennial periods, 1871-1900.**

Years and periods averaged.	Ages of females married, 1871-1901.														
	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.
Average, 1871-75..	36.9	36.5	12.7	5.0	3.0	2.0	1.3	0.8	0.5	0.3	0.2	....	....	....	0.9
Average, 1876-80..	37.4	37.4	11.7	4.7	3.1	1.6	1.3	0.8	0.5	0.3	0.2	....	....	....	0.7
Average, 1881-85..	33.8	38.7	13.7	4.9	3.1	1.9	1.3	0.8	0.5	0.3	0.2	0.1	....	....	0.6
Average, 1886-90..	32.8	39.5	14.2	5.2	2.9	1.9	1.3	0.9	0.6	0.4	0.2	0.1	....	....	0.2
Average, 1891-95..	39.8	40.6	14.3	5.3	3.1	2.0	1.4	1.0	0.6	0.5	0.2	0.1	....	....	.....
Average, 1896-1900	28.1	41.3	15.5	5.7	3.4	2.0	1.5	1.0	0.7	0.5	0.2	0.1	....	....	.....
Year 1901.....	27.2	40.7	16.5	6.2	3.4	2.1	1.4	0.9	0.6	0.4	0.3	0.1	....	....	.....

## PART IV.—DIVORCES IN MICHIGAN DURING THE YEAR 1901.

There were 2,448 divorces granted in Michigan during the year 1901, according to the returns of the county clerks to the Secretary of State. This number, as shown in Table 6, corresponds to a rate of 2.0, persons divorced per 1,000 living population, which, it will be noted, is about one-tenth of the marriage rate for the year; in other words, there was about 1 divorce granted to every 10 marriages in the State during the year. It should be observed, however, that the marriages are based on the unmarried population at marriageable ages, while the divorces are drawn from the number of married couples in Michigan, hence there can be no direct comparison between the frequency of marriage and divorce considered with reference to the population capable of contributing to these events without further analysis of the figures.

It might be interesting, however, to compare these figures with those of certain other States which collect and compile similar data.

Connecticut, which was once regarded as the worst of the Eastern states in respect to divorce, now shows a ratio of only 1 divorce to 15.8 marriages. Rhode Island now has the highest ratio of any of the Eastern states in which these statistics are collected, namely, 1 divorce to about 8 marriages. In Massachusetts, there is about 1 divorce to every 20 marriages. Among the interior States, Oklahoma shows a ratio of about 1 divorce to every 11 marriages; and in Indiana, about 1 to every 6 marriages.

The number of divorces returned for Michigan during the year was greater than the number for any previous year, the number for 1900 being 2,418; for 1899, 2,218; and for 1898, 1,808, although some part of this increase of 1901 over previous years may be due, perhaps, to greater care on the part of county clerks in making complete returns.

## CHILDREN AFFECTED BY DISSOLUTION OF FAMILIES, 1901.

From Table II, page 80, which, however, is presented in condensed form in Table 51 herewith, it will be noted that of the 2,448 divorces granted during the year, 646 or 26.4 per cent were granted on the application of the husband, and 1,802, or 73.6 per cent, on application of the wife. 1,961 of the couples were married in Michigan. It is noticeable that in 1,130 cases of divorce granted during the year, or about 46 per cent of the total number there were no children in the families broken up by divorce. The percentage of applications of wives in these cases is somewhat lower than the average, as is also true of families having two, three and four children. For families with one child, the percentage of applications of wives is greater than the average. The total number of children affected by divorces granted was 2,825 or an average of over one child to each divorce granted in the State.

**Table 51.—Children affected by divorces in Michigan during the year 1901, showing the relation of sex of complainant to size of family.**

Complainants.	Total divorces granted, 1901.	Number of children in family.																
		None.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	Unk.	
Total divorces.....	2,448	1,130	620	310	154	80	52	28	15	12	3	5	3	2	2	1	31	
Husbands.....	646	349	123	79	36	22	7	10	2	2	1	2	2	1	1	.....	9	
Wives.....	1,802	781	497	231	118	58	45	18	13	10	2	3	1	1	1	1	22	
Per cent of husbands...	26.4	30.9	19.8	25.5	23.4	27.5	13.5	35.7	13.3	16.7	33.3	40.0	66.7	50.0	50.0	.....	29.0	
Per cent of wives.....	73.6	69.1	80.2	74.5	76.6	72.5	86.5	64.3	86.7	83.3	66.7	60.0	33.3	50.0	50.0	100.0	71.0	
Total number of children affected.....	2,825	0	620	620	462	320	260	168	105	96	27	50	33	24	26	14	....	

**DURATION OF MARRIAGE PRIOR TO DIVORCE, 1901.**

According to Table 52 there were 730 divorces granted in which the couples had been married less than five years; then follows the group 5-9 years, inclusive, 694; 10-14 years, 337; 15-19 years, 288. The number of divorces granted decreases very rapidly from this point, until the period 50-54 years is reached, which shows only 2 divorces. According to the returns, there were no divorces granted after this period.

The percentage of applications of husbands is above the average for marriages severed by divorce within five years, and also for those lasting from ten to fourteen years. The percentage of wives applying for divorce is higher than the average for marriages that lasted from fifteen to nineteen years; while for the period five to nine years, the percentage is the same as the average. Above the lower periods the number of marriages is too small to give any accurate deductions from a single year.

**Table 52.—Duration of marriages terminated by divorces granted in Michigan during 1901, showing the relation of sex of complainant to lapse of time before divorce.**

Complainants.	Divorces granted, 1901.	Duration of marriage before divorce.																
		Years under five.					Five year periods.											
		Under 1 year.	1.	2.	3.	4.	Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	Unk.
Total divorces.....	2,448	62	155	174	161	178	730	694	337	288	187	92	58	28	12	5	2	15
Husbands.....	646	26	36	47	47	45	195	186	81	67	50	22	22	11	6	4	1	1
Wives.....	1,802	42	119	127	114	133	535	508	256	221	137	70	36	17	6	1	1	14
Per cent of husbands...	26.4	32.3	23.2	27.0	29.2	25.3	26.7	26.8	24.0	23.3	26.7	23.9	37.9	39.3	50.0	80.0	50.0	6.7
Per cent of wives.....	73.6	67.7	76.8	73.0	70.8	74.7	73.3	73.2	76.0	76.0	73.3	76.1	62.1	60.7	50.0	20.0	50.0	93.3

# DIVORCES.

cxix

## CAUSES OF DIVORCES GRANTED IN MICHIGAN, 1901.

According to the returns, as shown in Table III and summarized in Table 53, "cruelty" was the leading cause, as usual, for divorces granted in this State during the year, 881 divorces, or 36.0 per cent of the total number granted, being attributable to it, as compared with 47.5 per cent for 1900. Of this number, 270 were granted on complaint of the husband, and 611 on complaint of the wife. The next in order as a leading cause for divorce was "desertion," with 562 divorces, 262 being granted on complaint of the husband and 300 on complaint of the wife. "Nonsupport" would follow next in order, there being 328 divorces from this cause, 327 being on complaint of the wife. "Drunkenness" shows 33 divorces granted, 4 being on complaint of the husband and 29 on complaint of the wife.

Table 53.—Principal causes of divorce in Michigan during the year 1901, showing, by sex, the percentage of complainants from each cause.

Causes alleged.	Number of divorces granted, 1901.			Per cent of total.		
	Total.	To husbands.	To wives.	Total.	To husbands.	To wives.
All causes.....	2,448	646	1,802	100.0	100.0	100.0
<i>Adultery</i> .....	88	64	24	3.6	9.9	1.3
Adultery (sole cause alleged).....	64	50	14	2.6	7.7	0.8
Adultery (with other causes) .....	24	14	10	1.0	2.2	0.6
<i>Cruelty</i> .....	1,271	307	964	51.9	47.5	53.5
Cruelty (sole cause alleged).....	881	270	611	36.0	41.8	33.9
Cruelty (with other causes).....	390	37	353	15.9	5.7	19.6
<i>Desertion</i> .....	747	293	454	30.5	45.4	25.2
Desertion (sole cause alleged).....	562	262	300	23.0	40.6	16.6
Desertion (with other causes).....	185	31	154	7.6	4.8	8.5
<i>Drunkenness</i> .....	111	7	104	4.5	1.1	5.8
Drunkenness (sole cause alleged).....	33	4	29	1.3	0.6	1.6
Drunkenness (with other causes).....	78	3	75	3.2	0.5	4.2
<i>Nonsupport</i> .....	731	7	724	29.9	1.1	40.2
Nonsupport (sole cause alleged).....	328	1	327	13.4	0.2	18.1
Nonsupport (with other causes).....	403	6	397	16.5	0.9	22.0



# PART V.—BIRTHS IN MICHIGAN DURING THE YEAR 1901.

The number of births in Michigan during the year 1901 according to the returns received from the county clerks, was 43,221, a decrease of 478 births, as compared with the returns of the preceding year. The birth rate for 1901 was 17.6 per 1,000 estimated population. This rate includes stillbirths and may be compared with the rates given in Table 2, page xi, from which it appears that it is lower than the birth rate of any previous year of registration in the State, with the single exception of 1899, which had the particularly low rate of 17.5.

If these statistics are of any value whatever as indicating the number of children born in the State, it would certainly seem that there has been a considerable decrease in the fecundity of the population.

The rate of living births per 1,000 population is shown in Table 2 to be 17.5. This is exclusive of 451 stillbirths returned in births, but for 1901, as for the two preceding years, the stillbirths returned in deaths are not compared with nor added to the stillbirths returned in births, as was customary during the years 1874-97, inclusive, when both births and deaths were returned under the same general law.

As will be noted by examination of Table 2, there were 1,501 stillbirths registered in deaths, or 1,050 more than were returned with births under the old law.

## SUMMARY OF THE ENUMERATION OF BIRTHS FOR THE YEAR 1901.

The following statements include the more important features of the enumeration of births in Michigan for the year 1901:

Total number of births returned, 1901.....	43,221
Birth rate per 1,000 population, 1901.....	17.6

Exclusive of stillbirths, there were:

Children born alive, 1901.....	42,770
Children born alive per 1,000 population, 1901.....	17.5

Compared with the previous year, we have:

Decrease of births returned for 1901 (43,221) from number returned for 1900 (43,699).....	478
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The following is the distribution of births returned according to sex:

Male children born, 1901.....	22,279
Female children born, 1901.....	20,491
Sex unknown or unspecified (33 of these stillborn).....	104
Males born per 100 births of females.....	107

The parent nativity of children born in 1901, exclusive of births to parents of different nativities, may be stated:

Born of parents both of native birth, 1901.....	20,336
Born of parents both of foreign birth, 1901.....	13,563

# BIRTHS.

cxix

The reported rate of illegitimacy is low for Michigan. In 1901 there were returned:

Illegitimate births (males, 173; females, 173).....	346
Illegitimate births per 1,000 births, 1901.....	8.0

Table 54.—Births returned, by months, for the years 1892-1901 inclusive, with average for the ten-year period. (Stillbirths included.)

Years.	Total for year.	Months.												
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
1892.....	46,221	3,226	3,315	3,745	3,928	3,977	3,681	3,929	4,168	4,088	3,918	3,853	4,344	49
1893.....	47,722	3,346	3,391	4,069	3,934	3,924	3,901	4,158	4,351	4,246	4,165	3,916	4,263	58
1894.....	44,596	2,889	3,020	3,854	3,896	3,866	3,735	3,917	3,981	3,778	3,750	3,684	4,204	22
1895.....	46,273	3,204	3,240	3,827	3,742	4,022	3,745	3,989	4,346	4,214	3,997	3,750	4,159	38
1896.....	46,302	3,322	3,184	3,781	3,862	3,918	3,697	3,879	4,405	4,208	3,994	3,842	4,155	55
1897.....	43,688	3,295	3,207	3,777	3,654	3,794	3,423	3,739	3,863	3,853	3,717	3,571	3,767	28
1898.....	43,462	3,043	3,173	3,856	3,534	3,724	3,554	3,612	3,894	3,807	3,801	3,492	3,920	52
1899.....	41,818	3,089	3,134	3,681	3,652	3,494	3,199	3,633	3,785	3,758	3,454	3,262	3,636	31
1900.....	43,699	3,069	3,106	3,821	3,930	3,755	3,501	3,777	3,863	3,880	3,658	3,415	3,762	43
1901.....	43,221	2,974	3,087	3,782	3,682	3,594	3,492	3,745	3,926	3,853	3,633	3,438	3,881	34
Av. 1892-1901 ..	44,700	3,147	3,186	3,819	3,781	3,807	3,593	3,838	4,070	3,979	3,809	3,622	4,009	41

Maxima in bold face; minima in italics.

Table 55.—Parent nativity of children born in Michigan, during 1901. (Stillbirths included.)

Nativity of parents of children born, 1901.	Number of births, 1901.				Per cent of total.			
	Total.	Males.	Females.	Un-known.	Total.	Males.	Females.	Un-known.
All nativities.....	43,221	22,279	20,838	104	100.0	100.0	100.0	100.0
Both parents native born.....	20,336	10,429	9,875	32	47.1	46.8	47.4	30.8
Both parents foreign born.....	13,563	7,061	6,489	13	31.4	31.7	31.1	12.5
Foreign father and native mother.	5,270	2,713	2,550	8	12.2	12.2	12.2	7.7
Foreign mother and native father	3,193	1,648	1,540	5	7.4	7.4	7.4	4.8
Unknown mother, father native..	116	61	55	.....	0.3	0.3	0.3	.....
Unknown mother, father foreign.	51	29	21	1	0.1	0.1	0.1	1.0
Unknown father, mother native..	178	84	91	3	0.4	0.4	0.4	2.9
Unknown father, mother foreign.	38	16	22	.....	0.1	0.1	0.1	.....
Both unknown.....	476	239	195	42	1.1	1.1	0.9	40.4
One or both native.....	29,093	14,934	14,111	48	67.3	34.6	32.6	0.1
One or both foreign.....	22,115	11,466	10,622	27	51.2	26.5	24.6	0.1

**Table 56.—Parent nativity of children born in Michigan for each of the years 1892-1901, inclusive; with average for the ten-year period. (Stillbirths included.)**

Years.	Nativity of parents of children.—per cent of total.												
	Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	One or both unknown.	Father—			Mother—			One or both parents native born.*	One or both parents foreign born *
						Native.	Foreign.	Unknown.	Native.	Foreign.	Unknown.		
1892 .....	39.7	39.7	10.9	6.3	3.3	46.7	51.0	2.3	51.3	46.2	2.5	58.2	57.5
1893 .....	41.1	38.5	11.0	6.6	2.9	48.0	50.0	2.1	52.6	45.3	2.1	59.5	56.7
1894.....	43.0	35.6	11.4	6.8	3.3	50.4	47.9	1.7	54.9	42.5	2.6	62.3	54.8
1895.....	43.4	35.5	11.3	6.8	3.0	50.7	47.0	2.2	55.3	42.5	2.2	62.6	54.1
1896.....	43.0	35.5	11.8	6.8	3.0	50.0	47.5	2.5	55.3	42.5	2.3	62.3	54.5
1897.....	43.6	34.3	11.7	7.2	3.0	51.2	46.2	2.6	55.9	41.8	2.4	63.3	53.6
1898.....	44.8	32.9	12.0	7.3	3.0	52.4	45.2	2.4	57.5	40.6	2.0	65.1	52.8
1899.....	44.3	33.4	12.0	7.5	2.9	52.0	45.6	2.4	56.8	41.0	2.2	64.5	53.2
1900.....	45.6	32.5	12.1	7.3	2.5	53.2	44.7	2.0	58.1	39.9	2.0	65.7	52.0
1901.....	47.1	31.4	12.2	7.4	1.1	54.7	43.7	1.6	59.7	38.9	1.5	67.3	51.2
Average, 1892-1901.	43.6	34.9	11.6	7.0	2.8	50.9	46.9	2.2	55.7	42.1	2.2	63.1	54.0

\* Including cases where nativity of either parent is unknown.

**Table 57.—Parent nativity of children born in Michigan during the year 1901, compared with averages for six quinquennial periods, 1871-1900. (Stillbirths included.)**

Years and periods averaged.	Nativity of parents,—Per cent of total.				
	Both native born.	Both foreign born.	Foreign father and native mother.	Native father and foreign mother.	One or both unknown.
Average, 1871-75 .....	44.8	34.3	9.5	5.2	6.2
Average, 1876-80 .....	46.0	34.1	11.0	5.7	3.1
Average, 1881-85 .....	43.7	35.5	11.5	6.2	2.8
Average, 1886-90 .....	42.7	37.6	10.7	6.2	2.1
Average, 1891-95 .....	41.5	37.8	11.1	6.5	3.1
Average, 1896-1900 .....	44.3	33.7	11.9	7.2	2.9
Year 1901 .....	47.1	31.4	12.2	7.4	1.1

## CLIMATOLOGICAL DATA FOR MICHIGAN, 1901.

The following data relating to the meteorological conditions in Michigan for the year 1901 have been kindly supplied to this Department by Mr. C. F. Schneider, Director of the Michigan State Weather Service, in cooperation with the Climate and Crop Service of the Weather Bureau, U. S. Department of Agriculture. Fuller details may be found in the annual report of the State Weather Service for the year, but the data herewith presented will be found convenient for comparing with the mortality statistics contained in this report.

In connection with the text and tables on this subject, two maps are presented, reduced from those which appeared in the publication of the Weather Service, and showing the annual mean isotherms and prevailing winds (Map I), and the amount of precipitation in various parts of the State (Map II). It will be observed that the very important data contained in Table 60 are arranged according to the same geographical sections employed in the study of causes of death, thus making the comparison of mortality statistics and meteorological data very convenient.

In Table 58 the temperature and amount of precipitation for the year are compared with the years 1888-1900, both inclusive, this period extending back to the formation of the State Weather Service. The average of the statistics for these years constitutes the "normal" which is used as a basis of reference in making comparisons of the meteorology of the current year.

## REVIEW OF THE YEAR, 1901.

*Annual Temperature.*—The mean annual temperature for 1901 was 44.6 degrees, or 0.6 of a degree below the normal, which is computed by averaging the yearly mean temperatures of the 13 preceding years. February was the coldest month of the year and its mean temperature also shows the greatest departure from the normal—a deficiency of 5.7 degrees; the mean temperature of February, 14.2 degrees, was only 0.1 of a degree higher than the coldest February on record.

July was the warmest month of the year, and also much warmer than usual, its mean temperature, 72.8 degrees, being 4.3 in excess of the normal, making it the warmest July on record since 1887 when the mean temperature was 74.0 degrees.

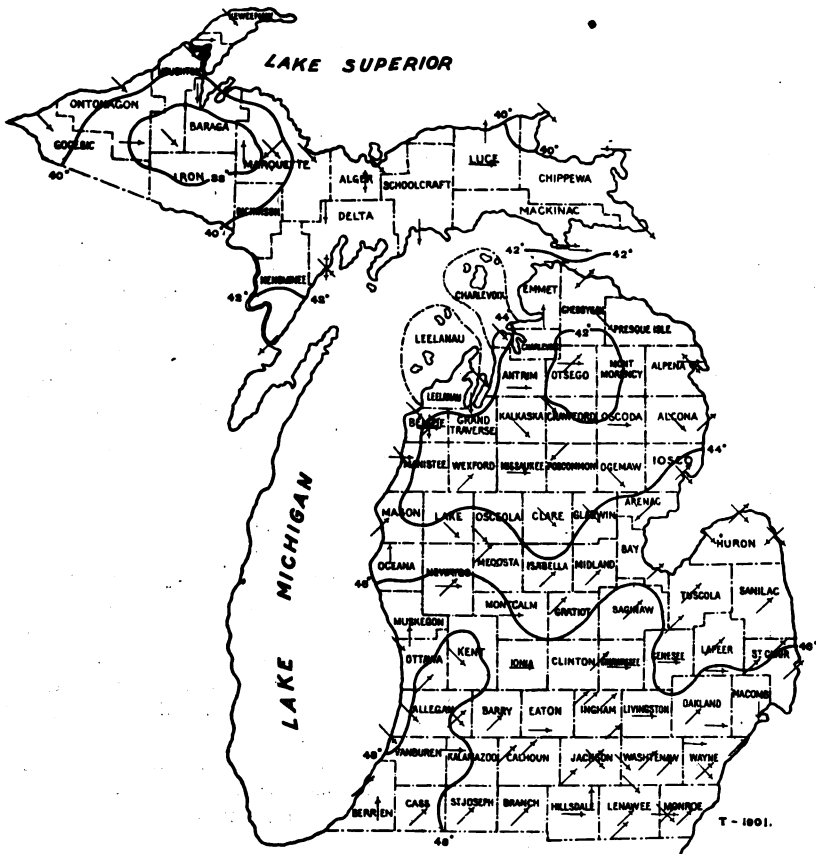
Altogether the mean temperature of five months were below the normal; the other seven were above; the winter months had the greatest deficiency of the temperature and the summer months the greatest excess, so that it may be said the winter of 1901 was comparatively cold while the summer was comparatively hot.

The highest temperature of the year, 108 degrees, occurred on July 15 at Marquette; the lowest, —28 degrees, occurred on January 3 and December 21 at Humboldt.

*Annual Precipitation.*—The annual mean total precipitation was 28.06 inches, or 2.72 inches below the normal and 4.25 inches less than fell in

The year on the whole was deficient in precipitation at the most inopportune times—during planting and seeding in April, May and June and during the latter part of October and most of November, when more moisture was needed for the germination of winter wheat and rye.

MAP I.—ANNUAL MEAN ISOTHERMS AND PREVAILING WINDS IN MICHIGAN, 1901.

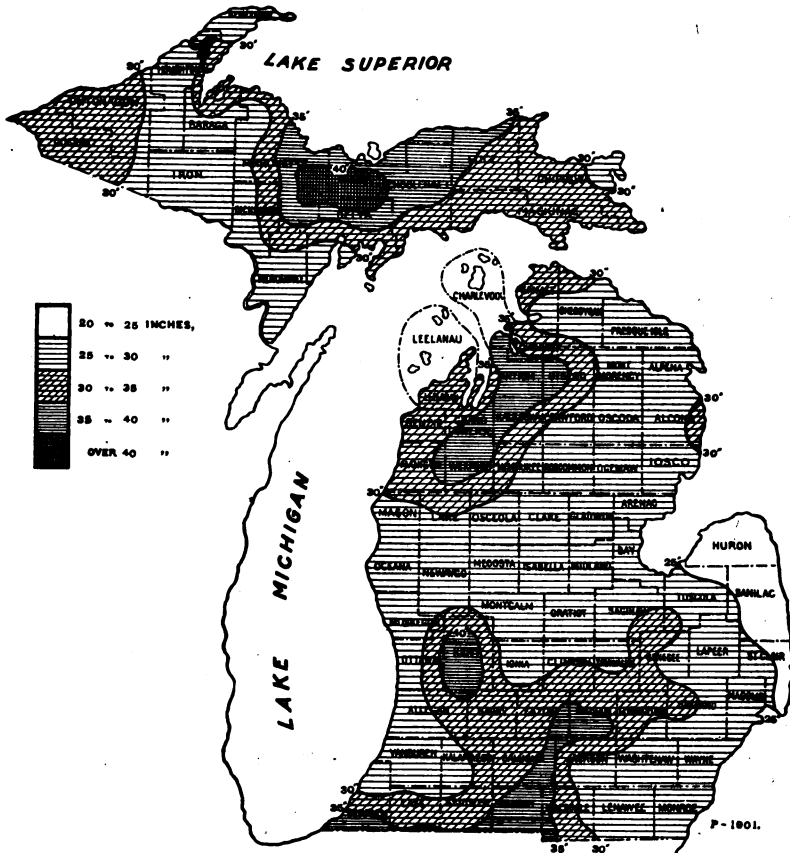


The average total precipitation was 1.77 inches, or 0.52 of an inch below the normal. The greatest monthly amount was 5.40 inches at Berrien Springs; the least monthly amount was 0.65 of an inch at Port Austin.

January weather was mostly favorable to winter wheat, which was covered with snow most of the month; at the close of the month its general condition was uneven and rather poor.

*February.*—The mean temperature was 14.2 degrees, or 5.7 degrees below the normal. The highest temperature was 44 degrees on the 28th at Houghton and Baraga; the lowest was —26 degrees on the 3d at Humboldt.

MAP II.—TOTAL PRECIPITATION IN MICHIGAN, 1901.



The average total precipitation was 1.39 inches, or 0.57 of an inch below the normal. The greatest monthly amount was 4.60 inches at Berrien Springs; the least monthly amount was 0.00 at Thomaston.

Winter wheat was well protected during the entire month by snow and not subjected to any alternate thawing and freezing. At the close of the month its condition could not be determined on account of snow, but was supposed to be fairly good.

*March.*—The mean temperature was 28.0 degrees, or 0.8 of a degree above the normal. The highest temperature was 72 degrees on the 25th at Adrian; the lowest was —20 degrees on the 3d at Lake City and on the 6th at Humboldt.

The average total precipitation was 2.65 inches, or 0.31 of an inch above the normal. The greatest monthly amount was 5.32 inches at Charlevoix; the least monthly amount was 0.68 of an inch at Eagle Harbor.

Warm rains during the latter part of month carried away snow in Central and Southern Counties and caused very high water in Lower Peninsula streams and lakes which flooded many cities and villages, doing great damage.

Frost in Southern Counties was mostly out of ground at close of month but soil was too wet for plowing; sugar making was in progress and some clover seeding begun; condition of winter wheat was very uneven, some being reported good while other fields are very poor. Considerable snow still remained on ground in Northern Counties and Upper Peninsula.

*April.*—The mean temperature was 44.4 degrees, or 0.9 of a degree above the normal. The highest temperature was 88 degrees on the 27th at Houghton; the lowest was 0 on the 1st at Thomaston.

The average total precipitation was 1.34 inches, or 0.71 of an inch below the normal. The greatest monthly amount was 3.30 inches at Arbela; the least monthly amount was 0.10 of an inch at Ewen.

The advance of the season was quite steady and equable during April; the early part of the month was dry, but sufficient rainfall occurred during the period extending from the 16th to the 24th to generally benefit wheat, rye, clover, meadows, pastures and plowing. At the close of the month all fruit buds were in excellent condition, not having been forced by any early warm waves, and promised abundant yields; oat seeding was well advanced and plowing for corn, beans and potatoes was general.

*May.*—The mean temperature was 54.2 degrees, or 0.5 of a degree below the normal. The highest temperature was 90 degrees on the 8th at Ewen; the lowest was 18 degrees on the 15th at Gaylord.

The average total precipitation was 2.47 inches, or 0.70 of an inch below the normal. The greatest monthly amount was 5.65 inches at Fitchburg; the least monthly amount was 0.40 of an inch at Ontonagon.

May was generally an unfavorable month for much crop growth and especially for the germination of spring seeding. There were no wide departures from either normal temperature or normal precipitation, but the month was practically devoid of any hot spells, which are so valuable in seed germination, while the nights were almost uniformly cool. Corn has suffered most, some seed rotting and much of it taking from 10 to 14 days to germinate.

*June.*—The mean temperature was 66.0 degrees, or 1.5 degrees above the normal. The highest temperature was 102 degrees on the 26th and 27th at Traverse City; the lowest was 22 degrees on the 1st, 3d and 9th at Ludington.

The average total precipitation was 2.51 inches, or 0.72 of an inch below the normal. The greatest monthly amount was 6.93 inches at Calumet; the least monthly amount was a trace at Lake City.

The first half of the month was cool and retarded the germination and growth of corn, sugar beets, oats and garden truck, although favorable for wheat, rye and grass. During the latter half the temperature was above the normal and much more favorable for spring seeding. The precipitation was generally ample for most crops. High winds and frosts during the first decade did some damage to fruit. Frosts also injured some early sown potatoes, but the damage was not serious or general.

*July.*—The mean temperature was 72.8 degrees, or 4.3 degrees above the normal. The highest temperature was 108 degrees on the 15th at Marquette; the lowest was 29 degrees on the 7th at Humboldt.

The average total precipitation was 4.20 inches, or 1.22 inches above the normal. The greatest monthly amount was 10.40 inches at Iron River; the least monthly amount was 1.32 inches at Fennville.

The month was characterized by high temperatures and, in many counties, by heavy rainfall. Most crops have made good growth and hay, wheat and rye were generally well secured. Hot and dry weather prevailed during the second decade, greatly shortening the berry and early potato crops. Corn, sugar beets, beans and late potatoes have made fine progress during the month and were in a very promising condition. In the extreme southwestern portion of the Lower Peninsula the conditions have been unfavorable to oats, which matured on a short straw and were mostly harvested by close of month.

*August.*—The mean temperature was 67.9 degrees, or 0.3 of a degree above the normal. The highest temperature was 96 degrees on the 15th at Stanton and on the 9th at Grape; the lowest was 29 degrees on the 31st at Thomaston.

The average total precipitation was 2.52 inches, or 0.10 of an inch below the normal. The greatest monthly amount was 6.46 inches at Mackinaw City; the least monthly amount was 0.42 of an inch at Grand Haven.

The month as a whole was favorable, and with the exception of a small area in southwestern Michigan all crops made good progress during the month. The first half of the month was quite dry and slightly delayed fall plowing; the rains which fell after the 17th greatly revived pasturage and improved the soil for plowing. At the close of the month all outstanding crops, principally corn, late potatoes, sugar beets and beans, were in promising condition.

*September.*—The mean temperature was 60.5 degrees, or 0.1 of a degree above the normal. The highest temperature was 95 degrees on the 6th at Alma and on the 7th at Jackson; the lowest was 29 degrees on the 18th at Humboldt.

The average total precipitation was 2.13 inches, or 0.74 of an inch below the normal. The greatest monthly amount was 5.90 inches at Mancelona; the least monthly amount was 0.23 of an inch at Bay City.

Generally, the weather conditions during September were very favorable to the maturity of late crops, but not so favorable for field work. The wet and cool weather extending throughout most of the second decade of the month delayed the maturity of sugar beets and late potatoes and the harvesting of late beans and other field work, but the much drier and warmer weather of the last decade was very beneficial. At the close of the month corn, late beans and buckwheat had been mostly secured in good condition; the corn crop was an exceptionally good one. Late potatoes had improved considerably and indicated a fair yield, while sugar beets were very promising. Fall plowing was nearly completed and wheat and rye seeding in the Northern and Central counties well advanced; in the Southern counties very little seeding had been done, this work being delayed as much as possible in that section to avoid the ravages of the Hessian fly.



*October.*—The mean temperature was 49.6 degrees, or 0.1 of a degree above the normal. The highest temperature was 86 degrees on the 30th at Cheboygan and Mio and on the 31st at South Haven; the lowest was 7 degrees on the 18th at Humboldt.

The average total precipitation was 3.24 inches, or 0.42 of an inch above the normal. The greatest monthly amount was 7.77 inches at Whitefish Point; the least monthly amount was 0.70 of an inch at Birmingham.

The weather conditions during October were generally favorable to field operations and in most counties sufficient rain had fallen to nicely germinate winter wheat and rye. Corn husking and potato digging advanced rapidly during the entire month; corn and sugar beets were generally good crops, but late potato yields were only fair. Farmers, as a rule had been sowing their wheat and rye much later than usual and consequently very little complaint of the Hessian fly had been heard at the close of the month because wheat had hardly advanced far enough to enable the fly to begin its work.

*November.*—The mean temperature was 33.5 degrees, or 1.7 degrees below the normal. The highest temperature was 70 degrees on the 11th at Plymouth; the lowest was —4 on the 5th at Humboldt.

The average total precipitation was 1.36 inches, or 1.45 inches below the normal. The greatest monthly amount was 4.72 inches at Lathrop; the least monthly amount was 0.10 of an inch at Lincoln.

The weather conditions during November were too dry for the best growth of winter wheat, which at the end of the month was small, but healthy and well colored. The lack of precipitation dried up pastures quite rapidly so that farmers were obliged to feed their stock; the dry conditions, however, were very favorable for corn husking and the delivery of sugar beets to the factories. Wheat seeding has averaged later than ever before, the late seeding being done to avoid the Hessian fly; early winter wheat has some fly in it, but the later seeding seemed to be affected very little.

*December.*—The mean temperature was 22.3 degrees, or 3.5 degrees below the normal. The highest temperature was 62 degrees on the 1st at Grape; the lowest was —18 degrees on the 21st at Humboldt.

The average total precipitation was 2.48 inches, or 0.46 of an inch above the normal. The greatest monthly amount was 5.95 inches at Lathrop; the least monthly amount was 0.20 of an inch at Humboldt.

At the close of the month winter wheat looked generally strong and healthy, but it had rather a small top, little or no growth having been made since the close of November. It has been generally well protected with a snow blanket during and after the cold wave of the 14th to 22d. Although there was some complaint of Hessian fly much less of this pest was reported than during the two preceding years, which was probably due to the fact that winter wheat was generally sown considerably later this year than usual.

## CLIMATOLOGICAL DATA.

cxxxix

**Table 58.—Temperature and amount of precipitation in Michigan during the year 1901, compared with previous years.**

Year.	Temperature.					Average yearly precipitation (inches).	Average total snowfall (inches).
	Yearly mean.	Highest.	Date.	Lowest.	Date.		
1888.....	43.8	102	June 17.....	—36	{ January 21..... {	28.68	67.9
1889.....	45.3	102	July 8.....	—33	February 9..... {	26.86	57.7
1890.....	45.6	104	August 3.....	—35	March 6.....	34.23	44.6
1891.....	46.2	103	August 8.....	—28	February 4.....	30.65	42.8
1892.....	44.6	101	July 26.....	—26	January 20.....	33.69	50.1
1893.....	43.6	100	{ June 20..... {	—31	January 15.....	34.55	81.2
			{ July 13..... {				
			August 10.....				
1894.....	46.8	102	July 27.....	—31	February 24.....	28.00	45.2
1895.....	44.6	101	July 7.....	—38	February 6.....	26.90	71.4
1896.....	45.8	100	June 6.....	—29	February 17.....	31.74	42.8
1897.....	44.9	104	July 19.....	—43	February 26.....	31.23	57.0
1898.....	46.0	101	{ July 24..... {	—35	December 31.....	32.29	61.5
			{ August 23..... {				
1899.....	44.9	100	July 24.....	—49	February 7.....	28.99	48.8
1900.....	46.0	100	{ August 19-20..... {	—38	February 25-26.....	32.31	59.8
			August 4-5.....				
Normal..	45.2	102	July 23.....	—35	February 9.....	30.78	56.2
1901.....	44.6	108	July 15.....	—28	Jan. 3, Dec. 21....	28.06	60.6

**Table 59.—Relative humidity, wind movement and atmospheric pressure in Michigan during the year 1901.**

Year and months, 1901.	Mean relative humidity (per cent).	Wind movement (in miles).			Atmospheric pressure reduced to 32° and sea level.					
		Average total movement.	Average hourly velocity.	Highest velocity with direction from and date.	Mean.	Highest.	Date.	Lowest.	Date.	Absolute range.
Year, 1901...	79	7,808	10.0	68-s w-July 2	30.01	30.74	Jan. 3	28.96	Mar. 3	1.78
January.....	87	8,492	11.4	50-w-16	30.01	30.74	3	29.03	16	1.71
February.....	86	6,935	10.3	36-n-4	30.05	30.64	12	29.55	17, 24	1.09
March.....	83	9,528	12.8	62-w-3	29.90	30.32	29	28.96	3	1.36
April.....	70	6,944	9.7	52-n e-20	30.15	30.62	10	29.46	5	1.16
May.....	76	7,047	9.5	44-w-12	29.92	30.56	25	29.54	12	1.02
June.....	75	6,094	8.5	44-w-25	29.93	30.27	8	29.46	28	0.81
July.....	74	6,565	8.8	68-s w-2	29.94	30.24	13	29.55	6	0.69
August.....	77	5,790	7.8	41-n w-29	30.00	30.30	31	29.66	9	0.64
September...	78	7,034	9.8	45-s w-15	30.02	30.52	25	29.25	15	1.27
October.....	77	7,806	10.5	56-s-12	30.06	30.50	7	29.24	13	1.26
November...	81	8,298	11.5	41-n w-14	30.10	30.58	27	29.43	11	1.15
December...	86	7,161	9.6	54-n w-31	30.03	30.44	21, 31	29.29	22	1.15

Table 60.—Temperature, precipitation, sky and direction of wind in Michigan for the State and geographical sections, 1901.

Year and months by geographical sections.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.					Sky.			Prevailing direction of wind.	
	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total	Departure from the normal.	Greatest in 24 hours.	Total snowfall (un- melted).	Number of days with precipitation.	Number of clear days.	Number of partly cloudy days.		Number of cloudy days.
Year, 1901—STATE	44.6	−0.3	108	July 15	−28	Jan. 3 Dec. 21	55	28.06	−3.10	5.30	60.6	95	135	99	131	s w
January.....	21.4	−0.1	55	20	−28	3	65	1.77	−0.52	1.20	14.8	10	6	7	18	n w
February.....	14.2	−5.7	44	28	−26	3	54	1.39	−0.57	1.80	13.4	8	9	9	10	n w
March.....	28.0	+0.8	72	25	−2	3-6	61	2.65	+0.31	2.05	11.5	10	9	7	15	s w
April.....	44.4	+0.9	89	27	Zero	1	56	1.34	0.71	1.75	1.6	5	14	7	9	n e
May.....	54.2	−0.5	90	8	18	15	56	2.47	−0.70	1.85	T	9	11	10	10	n e
June.....	66.0	+1.5	102	26-27	20	3	52	2.51	−0.72	2.45	T	8	15	11	4	s w
July.....	72.8	+4.3	108	15	29	7	55	4.20	+1.22	4.70	T	9	16	9	6	s w
August.....	67.9	+0.3	98	18	29	31	50	2.52	−0.10	3.19	0	7	16	8	7	s w
September.....	60.5	+0.1	95	6-7	20	18	53	2.13	−0.74	2.28	T	6	13	8	9	s w
October.....	49.6	+0.1	88	4	7	18	57	3.24	+0.42	5.30	0.2	8	13	8	10	n w
November.....	33.8	−1.7	70	1-11	4	5	48	1.36	−1.45	1.40	4.1	7	6	8	16	n w
December.....	22.3	−3.5	62	1	−28	21	48	2.48	+0.46	2.32	15.0	8	7	7	17	s w
Year, 1901—I. UPPER PENINSULA	40.4	+0.3	108	July 15	−28	Jan. 3 Dec. 21	65	30.04	−0.32	3.75	77.8	97	155	75	135	n w
January.....	16.0	−0.6	43	9	−28	3	65	1.43	−0.54	1.00	14.6	9	9	6	16	n w
February.....	10.6	−3.1	44	28	−26	3	50	0.76	−0.95	0.60	8.0	6	12	7	9	n w
March.....	21.5	+0.1	55	31	−20	6	49	2.46	+0.62	1.40	20.9	7	12	6	13	n w
April.....	40.5	+2.3	88	27	Zero	1	47	1.06	−0.93	1.33	0.7	3	18	5	7	n
May.....	51.0	+2.3	90	8	20	13-14-29	51	2.29	−0.29	1.50	T	7	15	7	9	n-n w
June.....	61.8	+4.0	101	26	20	3	50	3.60	−0.06	1.58	T	10	15	8	7	s
July.....	66.5	+2.1	108	15	29	7	49	5.21	+2.44	3.75	T	9	16	6	9	w
August.....	64.7	+0.7	98	18	29	31	50	2.41	−0.52	1.80	0	7	20	5	6	s
September.....	56.0	−1.2	90	5	20	18	52	3.04	−0.64	2.28	T	8	11	7	12	w
October.....	46.1	−0.8	81	21	7	18	57	3.53	+0.55	2.75	0.5	11	13	6	12	n w
November.....	30.5	−0.5	64	2	4	5	48	2.01	−0.15	1.22	11.1	10	6	6	18	n w
December.....	19.2	−1.8	46	1	−28	21	48	2.24	+0.15	1.90	22.0	10	8	6	17	s w-n w
Year, 1901—II. NORTHERN CO'S.	43.7	+0.2	103	July 1	−26	Jan. 19	49	28.46	−2.62	3.28	67.7	93	127	94	144	s w
January.....	20.3	−0.2	55	20	−26	19	48	2.01	0.47	1.20	19.2	10	5	7	19	n w
February.....	14.7	−3.3	40	18	−22	14	54	1.25	−0.41	1.00	12.8	7	9	8	11	n w
March.....	26.2	+0.9	57	23	−20	3	57	3.18	+1.01	2.00	18.0	9	11	6	14	s w
April.....	44.4	+2.5	89	27	12	1-19-21	52	0.89	1.33	1.51	2.5	4	15	7	8	n e
May.....	53.3	+0.5	85	6-18	18	15	54	2.48	−0.43	1.50	0.1	9	10	11	10	n e
June.....	64.8	+1.6	102	26-27	25	9	46	1.73	−1.34	1.50	0	6	14	12	4	s w
July.....	71.5	+4.3	103	1	36	22	53	4.19	+1.16	3.28	0	10	15	9	7	s w
August.....	66.1	+0.3	93	28-29	36	5	45	3.08	+0.18	2.30	0	8	15	8	8	s w
September.....	59.4	+0.2	93	6	28	17-19	53	2.89	−0.24	2.14	T	7	12	7	11	n w
October.....	48.2	−0.6	86	30	13	25	53	3.43	+0.43	2.00	0.6	9	11	7	13	s w
November.....	33.2	−1.2	70	1	−1	28	39	1.23	−1.25	1.40	4.4	7	4	6	20	n w
December.....	22.1	−3.1	55	2	−17	18	35	2.10	+0.07	1.70	10.1	7	6	6	19	s w

## CLIMATOLOGICAL DATA.

cxxxix

**Table 60.—Concluded.—Temperature, precipitation, sky and direction of wind in Michigan for the State and geographical sections, 1901.**

Year and months by geographical sections.	Temperature, in degrees Fahrenheit .						Precipitation, in inches.					Sky.			Prevailing direction of wind.	
	Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall (un- melted).	Number of days with precipitation.	Number of clear days.	Number of partly cloudy days.		Number of cloudy days.
Year, 1901—III. CENTRAL CO'S...	45.5	—0.6	101	July 1	—15	Feb. 14	61	24.42	—4.70	4.70	39.3	80	129	111	125	s w
January.....	22.3	—1.1	48	8	—12	19	50	1.51	—1.01	0.66	12.4	9	7	7	17	n w
February.....	15.0	—5.3	35	18-25	—15	14	45	1.27	—0.70	1.20	12.8	6	8	8	12	n w
March.....	29.3	+1.0	69	7	—8	5	61	2.48	+0.10	2.05	5.5	8	8	8	15	s w
April.....	45.7	+0.5	86	30	17	1-19	56	1.51	—0.53	1.75	1.6	5	14	8	8	n e
May.....	55.0	—1.2	87	2	20	13-15	55	2.13	—0.88	1.52	T	9	8	12	11	n e
June.....	67.4	+1.6	98	25-27	28	9	52	1.66	—0.71	1.43	0	6	17	10	3	s w
July.....	74.8	+5.0	101	1	40	14	55	4.41	+1.58	4.70	0	10	15	12	4	s w
August.....	67.8	—0.7	96	15	38	14-21	50	2.45	—0.04	2.10	0	6	15	9	7	s w
September.....	61.2	—0.1	95	6	25	18	51	1.67	—0.82	1.55	0	5	13	8	9	s w
October.....	50.4	—0.1	88	4	18	19	50	2.47	—0.33	2.00	T	5	13	10	8	s w
November.....	34.0	—3.0	68	1	8	28	42	0.91	—1.58	0.86	0.8	5	5	10	15	n w
December.....	23.2	—4.0	58	1	—10	19-21	38	1.95	+0.22	1.22	6.2	6	6	9	16	s w
Year, 1901—IV. SOUTHERN CO'S.	46.9	—0.7	104	July 21	—22	Feb. 14	48	27.85	—3.54	5.30	46.8	94	130	108	127	s w
January..	24.3	—0.5	54	9-20	—13	3	54	1.87	—0.38	1.02	13.1	11	6	7	18	n w-s w
February.....	15.5	—7.7	41	25	—22	14	47	1.80	—0.48	1.80	18.2	9	7	11	10	w
March.....	32.2	+1.1	72	25	—7	6	42	2.47	—0.09	1.67	3.9	11	7	8	16	s w
April.....	46.1	—0.4	86	29-30	18	1	54	1.69	—0.39	1.34	1.3	6	12	7	11	n e
May.....	56.0	—1.6	87	2	27	15	56	2.65	—0.89	1.85	T	10	9	11	11	n e
June.....	68.4	—0.8	98	24-25-28-30	31	9	45	2.62	—0.60	2.45	0	8	14	12	4	s w
July.....	76.2	+4.6	104	21	40	8	49	3.63	+0.77	3.68	0	9	17	10	4	s w
August.....	70.1	—0.5	96	9	35	31	45	2.27	—0.13	3.19	0	6	14	9	8	n w
September.....	62.9	+0.3	95	7	28	18-19	47	1.39	—0.99	1.50	T	5	14	9	7	s w
October.....	51.9	+0.7	85	1	22	17-18	56	3.24	+0.63	5.30	T	6	15	9	7	s w
November.....	35.6	—1.8	70	11	7	27	42	1.24	—1.84	1.16	1.0	6	7	8	15	n w
December.....	23.8	—4.2	62	1	—19	21	42	2.98	—0.85	2.32	9.3	7	8	7	16	s w



TABLES  
RELATING TO  
DEATHS  
AND  
CAUSES OF DEATH  
IN  
MICHIGAN  
DURING THE  
YEAR 1901.

## PRIMARY TABLES RELATING TO DEATHS AND CAUSES OF DEATH IN MICHIGAN DURING THE YEAR 1901.

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**TABLE I.**—Deaths in Michigan, by months, counties and sex, during the year 1901. (Stillbirths excluded.)

**TABLE II.**—Deaths in Michigan, by ages, counties and sex, during the year 1901. (Stillbirths excluded.)

**TABLE III.**—Causes of death in Michigan, by months, ages and sex, during the year 1901. (Stillbirths excluded.)

**TABLE IV.**—Causes of death in Michigan, by counties, during the year 1901. (Stillbirths excluded.)

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**NOTE.**—*Secondary tables*, containing death rates and other ratios, and *comparative tables*, displaying the mortality of Michigan for the year 1901 in connection with previous years and other States and countries, may be found on preceding pages of this Report, together with the descriptive text.

## DEATHS.

3

TABLE I.—Deaths in Michigan by months, counties and sex, during the year 1901.  
(Stillbirths excluded.)

State and counties.	Sex.	Year, 1901.	Months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
STATE....	(Totals..	32,834	3,128	3,089	3,390	2,894	2,720	2,354	2,395	2,573	2,847	2,435	2,354	2,655
	Males...	17,540	1,642	1,611	1,741	1,508	1,446	1,271	1,364	1,393	1,560	1,327	1,250	1,427
	Fem....	15,273	1,486	1,478	1,647	1,386	1,274	1,082	1,031	1,178	1,286	1,108	1,091	1,226
	Unk....	21	.....	.....	2	.....	.....	1	.....	2	1	.....	13	2
Alcona....	(Totals..	63	6	8	7	6	7	7	1	.....	5	2	7	7
	Males...	34	3	4	4	5	3	3	1	.....	3	2	3	3
	Fem....	29	3	4	3	1	4	4	.....	.....	2	.....	4	4
Alger.....	(Totals..	48	4	1	6	5	3	4	4	3	5	3	5	5
	Males...	33	4	1	5	1	3	2	3	1	3	3	2	5
	Fem....	14	.....	.....	1	4	.....	2	1	1	2	.....	3	.....
Allegan....	(Totals..	496	44	47	48	51	39	40	36	37	36	37	50	31
	Males...	282	27	28	22	25	27	19	24	22	20	23	27	18
	Fem....	214	17	19	26	26	12	21	12	15	16	14	23	13
Alpena....	(Totals..	210	28	20	16	20	13	17	12	18	18	15	8	25
	Males...	113	14	14	7	8	7	10	2	9	11	10	5	16
	Fem....	97	14	6	9	12	6	7	10	9	7	5	3	9
Antrim....	(Totals..	209	18	24	28	10	20	10	12	19	28	19	13	8
	Males...	108	10	15	13	3	13	7	8	8	12	12	4	3
	Fem....	101	8	9	15	7	7	3	4	11	16	7	9	5
Arenac....	(Totals..	120	11	17	19	14	6	7	8	9	6	12	1	10
	Males...	67	7	9	12	9	1	3	4	7	3	5	1	6
	Fem....	53	4	8	7	5	5	4	4	2	3	7	.....	4
Baraga....	(Totals..	60	1	8	5	2	4	6	8	6	5	5	5	5
	Males...	26	1	5	4	1	2	3	5	4	3	2	2	4
	Fem....	24	.....	3	1	1	2	3	3	2	2	3	3	1
Barry.....	(Totals..	267	17	37	22	27	29	20	16	21	16	18	19	25
	Males...	137	13	24	8	16	19	13	5	7	4	12	5	11
	Fem....	130	4	13	14	11	10	7	11	14	12	6	14	14
Bay.....	(Totals..	782	72	94	73	68	76	51	40	69	70	64	42	63
	Males...	380	38	43	33	36	31	25	23	32	33	33	22	31
	Fem....	402	34	51	40	32	45	26	17	37	37	31	20	32
Benzie....	(Totals..	136	8	13	17	15	10	14	4	14	17	9	7	8
	Males...	65	3	8	6	7	4	10	1	7	8	3	5	3
	Fem....	71	5	5	11	8	6	4	3	7	9	6	2	5
Berrien....	(Totals..	659	65	48	70	65	65	65	37	50	56	43	42	53
	Males...	367	32	24	43	33	36	38	28	22	33	31	23	24
	Fem....	292	33	24	27	32	29	27	9	28	23	12	19	29
Branch....	(Totals..	381	41	46	46	25	38	27	36	19	33	23	28	19
	Males...	195	22	24	15	12	15	15	24	8	23	12	11	14
	Fem....	186	19	22	31	13	23	12	12	11	10	11	17	5
Calhoun....	(Totals..	736	66	97	87	54	58	47	52	49	65	48	49	64
	Males...	351	30	44	39	30	33	19	17	25	37	22	25	30
	Fem....	385	36	53	48	24	25	28	35	24	28	26	24	34
Cass.....	(Totals..	269	32	23	21	25	23	24	24	18	21	18	17	23
	Males...	140	19	7	11	16	12	11	14	8	9	11	10	12
	Fem....	128	13	16	10	9	11	13	10	10	12	7	6	11
Charlevoix..	(Totals..	176	19	15	15	13	14	7	13	22	21	11	10	16
	Males...	109	10	10	9	7	7	6	12	13	16	6	4	9
	Fem....	67	9	5	6	6	7	1	1	9	5	5	6	7
Cheboygan..	(Totals..	201	23	29	9	14	21	12	16	15	20	10	15	17
	Males...	107	9	16	5	6	13	7	9	5	12	5	9	11
	Fem....	94	14	13	4	8	8	5	7	10	8	5	6	6



TABLE I.—Continued.—Deaths in Michigan, by months, counties and sex, 1901.

Counties.	Sex.	Year, 1901.	Months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Chippewa....	Totals..	313	17	32	15	25	13	30	23	38	48	15	24	33
	Males..	174	10	18	9	11	9	17	13	24	24	9	17	13
	Fem... 139		7	14	6	14	4	13	10	14	24	6	7	20
Clare.....	Totals..	90	9	6	8	13	10	6	8	5	8	4	3	10
	Males..	49	6	2	6	6	6	3	3	3	7	2	1	4
	Fem... 41		3	4	2	7	4	3	5	2	1	2	2	6
Clinton.....	Totals..	337	34	30	37	37	31	36	22	18	21	23	25	23
	Males..	167	13	13	22	18	14	22	13	10	9	8	14	11
	Fem... 170		21	17	15	19	17	14	9	8	12	15	11	12
Crawford....	Totals..	26	2	1	2	5	.....	2	1	2	7	1	3	.....
	Males..	15	1	.....	2	.....	.....	1	1	2	4	1	3	.....
	Fem... 11		1	1	.....	5	.....	1	.....	.....	3	.....	.....	.....
Delta.....	Totals..	297	21	28	31	28	35	15	21	31	26	18	22	21
	Males..	165	11	18	14	14	24	8	13	20	14	11	9	9
	Fem... 132		10	10	17	14	11	7	8	11	12	7	13	12
Dickinson...	Totals..	253	24	19	19	22	23	24	20	29	22	25	19	7
	Males..	163	14	9	10	15	15	16	16	18	13	16	14	7
	Fem... 90		10	10	9	7	8	8	4	11	9	9	5	.....
Eaton.....	Totals..	403	36	39	45	33	31	33	32	35	25	28	29	37
	Males..	221	18	17	25	18	17	20	19	20	12	17	19	19
	Fem... 181		18	22	19	15	14	13	13	15	13	11	10	18
Emmet.....	Totals..	214	21	23	13	17	11	14	17	23	23	18	20	14
	Males..	109	6	10	9	9	3	8	6	16	12	10	13	7
	Fem... 105		15	13	4	8	8	6	11	7	11	8	7	7
Genesee.....	Totals..	572	61	53	66	52	41	51	38	36	42	41	37	54
	Males..	307	31	23	37	25	26	29	24	13	22	24	19	34
	Fem... 265		30	30	29	27	15	22	14	23	20	17	18	20
Gladwin.....	Totals..	63	3	8	4	3	4	7	2	6	11	4	3	8
	Males..	39	3	5	3	3	1	1	2	6	7	2	2	4
	Fem... 24		.....	3	1	.....	3	6	.....	.....	4	2	1	4
Gogebic.....	Totals..	257	31	18	14	17	25	25	24	27	15	18	20	23
	Males..	149	19	10	7	8	16	18	19	13	7	11	11	10
	Fem... 108		12	8	7	9	9	7	5	14	8	7	9	13
G'd Traverse	Totals..	342	38	30	39	42	23	27	22	18	35	20	20	28
	Males..	190	20	16	21	24	9	21	12	11	14	12	13	17
	Fem... 152		18	14	18	18	14	6	10	7	21	8	7	11
Gratiot.....	Totals..	361	41	28	39	33	28	23	25	26	31	29	24	34
	Males..	188	21	16	21	12	16	12	13	9	12	22	11	23
	Fem... 173		20	12	18	21	12	11	12	17	19	7	13	11
Hillsdale....	Totals..	422	32	41	43	40	43	37	32	29	32	39	24	30
	Males..	216	16	25	19	16	18	20	19	20	13	16	13	21
	Fem... 206		16	16	24	24	25	17	13	9	19	23	11	9
Houghton...	Totals..	892	75	78	89	68	77	61	59	99	98	74	67	47
	Males..	524	42	48	51	41	43	28	38	68	55	42	40	28
	Fem... 368		33	30	38	27	34	33	21	31	43	32	27	19
Huron.....	Totals..	373	44	38	48	23	27	23	25	34	31	18	31	31
	Males..	192	26	23	19	14	10	10	12	16	19	9	16	18
	Fem... 180		18	15	29	9	17	13	13	17	12	9	15	13
Ingham.....	Totals..	512	51	56	69	51	60	28	33	36	51	31	27	49
	Males..	272	26	26	34	25	29	13	21	22	26	16	15	19
	Fem... 270		25	30	35	26	31	15	12	14	25	15	12	30
Ionia.....	Totals..	464	43	35	48	38	33	29	36	30	43	46	35	48
	Males..	235	27	16	18	23	12	18	24	16	28	18	17	18
	Fem... 228		16	19	30	15	21	10	12	14	15	28	18	30
Unk.....	Totals..	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Males..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fem... 1		.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

## DEATHS.

5

TABLE I.—Continued.—Deaths in Michigan, by months, counties and sex, 1901.

Counties.	Sex.	Year, 1901.	Months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Iosco.....	Totals..	135	6	6	20	14	27	10	12	8	12	13	2	5
	Males..	75	2	4	13	4	21	6	6	2	6	6	1	4
	Fem...	60	4	2	7	10	6	4	6	6	6	7	1	1
Iron.....	Totals..	105	10	6	2	7	4	6	7	18	13	11	11	10
	Males..	56	7	1	2	3	2	4	5	8	9	6	3	6
	Fem...	49	3	5	.....	4	2	2	2	10	4	5	8	4
Isabella.....	Totals..	243	25	20	20	24	25	17	18	16	32	13	11	22
	Males..	127	7	11	9	9	10	14	7	7	21	10	10	12
	Fem... 1	115	18	9	11	15	15	3	11	9	11	3	1	9
	Unk... 1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Jackson.....	Totals..	615	77	54	74	53	41	44	46	48	54	47	32	45
	Males..	305	34	25	31	25	25	27	28	26	25	22	16	21
	Fem... 1	310	43	29	43	28	16	17	18	22	29	25	16	24
Kalamazoo..	Totals..	740	60	74	88	63	58	42	45	70	86	49	46	59
	Males..	376	30	31	54	34	37	17	25	30	41	26	19	32
	Fem... 1	364	30	43	34	29	21	25	20	40	45	23	27	27
Kalkaska....	Totals..	88	8	6	13	3	14	10	4	4	9	2	12	3
	Males..	50	4	2	8	1	10	5	2	4	5	1	6	2
	Fem... 1	38	4	4	5	2	4	5	2	.....	4	1	6	1
Kent.....	Totals..	1,769	179	156	233	145	144	128	115	111	135	154	115	154
	Males..	961	98	85	118	86	67	69	61	64	86	78	60	89
	Fem... 1	807	81	71	114	59	77	59	54	47	49	76	55	65
	Unk... 1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Keweenaw..	Totals..	41	3	4	8	.....	3	3	2	2	2	4	4	6
	Males..	26	2	3	3	.....	2	2	1	2	1	3	2	5
	Fem... 1	15	1	1	5	.....	1	1	1	.....	1	1	2	1
Lake.....	Totals..	58	4	5	8	8	7	3	.....	3	9	4	4	3
	Males..	37	1	4	6	6	5	1	.....	2	6	3	2	1
	Fem... 1	21	3	1	2	2	2	2	.....	1	3	1	2	2
Lapeer.....	Totals..	415	45	44	43	32	24	25	22	35	38	41	22	44
	Males..	237	20	29	27	22	16	13	12	18	21	23	13	23
	Fem... 1	178	25	15	16	10	8	12	10	17	17	18	9	21
Leelanau....	Totals..	122	8	7	22	11	10	8	14	10	12	4	12	4
	Males..	73	6	2	12	8	8	5	10	7	6	2	5	2
	Fem... 1	49	2	5	10	3	2	3	4	3	6	2	7	2
Lenawee....	Totals..	704	72	71	66	64	47	44	48	43	67	60	62	60
	Males..	367	34	44	31	30	27	22	31	20	33	32	27	36
	Fem... 1	325	38	27	35	34	20	22	17	23	34	28	23	24
	Unk... 1	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Livingston..	Totals..	252	28	25	29	17	20	17	19	17	18	17	19	26
	Males..	152	17	14	16	9	13	7	14	9	13	11	12	17
	Fem... 1	100	11	11	13	8	7	10	5	8	5	6	7	9
Luce.....	Totals..	43	3	3	1	4	2	2	8	10	2	2	3	3
	Males..	30	2	3	1	3	.....	1	6	6	2	1	3	2
	Fem... 1	13	1	.....	.....	1	2	1	2	4	.....	1	.....	1
Mackinac....	Totals..	82	4	10	1	4	7	8	.....	10	14	14	8	2
	Males..	49	3	6	1	2	3	3	.....	6	9	8	6	2
	Fem... 1	33	1	4	.....	2	4	5	.....	4	5	6	2	.....
Macomb.....	Totals..	483	38	52	46	46	35	33	38	45	40	32	33	45
	Males..	247	11	21	28	25	21	17	20	20	25	20	16	23
	Fem... 1	236	27	31	18	21	14	16	18	25	15	12	17	22
Manistee....	Totals..	305	34	20	34	26	31	25	28	26	14	21	29	17
	Males..	169	20	11	17	13	17	15	18	15	7	14	14	8
	Fem... 1	136	14	9	17	13	14	10	10	11	7	7	15	9
Marquette...	Totals..	507	47	39	34	40	42	43	26	54	63	50	28	41
	Males..	306	33	22	17	24	26	25	16	34	39	28	18	24
	Fem... 1	201	14	17	17	16	16	18	10	20	24	22	10	17

TABLE I.—Continued.—Deaths in Michigan, by months, counties and sex, 1901.

Counties.	Sex.	Year, 1901.	Months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Mason.....	Totals..	255	24	19	30	31	24	15	15	25	18	9	23	22
	Males..	128	14	11	14	13	9	7	7	18	6	4	11	14
	Fem... 127	10	8	16	18	15	8	8	7	12	5	12	8	
Mecosta.....	Totals..	275	19	22	43	24	21	28	21	26	21	21	10	19
	Males..	153	12	7	26	14	13	15	8	16	12	12	4	14
	Fem... 122	7	15	17	10	8	13	13	10	9	9	6	5	
Menominee..	Totals..	294	19	29	23	33	21	19	19	24	34	26	17	30
	Males..	172	13	14	12	20	10	11	12	15	23	18	7	17
	Fem... 122	6	15	11	13	11	8	7	9	11	8	10	13	
Midland.....	Totals..	193	13	23	16	16	15	10	15	18	25	18	13	11
	Males..	104	6	14	9	6	10	5	10	8	11	13	8	4
	Fem... 88	7	9	7	10	5	5	5	10	13	5	5	7	
Missaukee....	Totals..	86	10	6	11	6	14	4	9	5	6	6	5	4
	Males..	47	4	4	6	3	6	2	4	4	4	4	3	3
	Fem... 39	6	2	5	3	8	2	5	1	2	2	2	1	
Monroe.....	Totals..	418	52	36	56	33	33	30	22	24	37	35	27	33
	Males..	227	29	18	24	20	21	15	12	17	23	16	13	19
	Fem... 191	23	18	32	13	12	15	10	7	14	19	14	14	
Montcalm....	Totals..	419	29	56	54	39	32	24	29	20	44	30	33	29
	Males..	233	16	30	27	21	19	12	19	11	22	20	18	18
	Fem... 186	13	26	27	18	13	12	10	9	22	10	15	11	
Montmor'ney	Totals..	32	3	2	2	6	4	.....	3	4	.....	4	2	2
	Males..	14	3	.....	2	2	2	.....	2	2	.....	1	.....	.....
	Fem... 18	.....	2	.....	4	2	.....	1	2	.....	3	2	.....	2
Muskegon....	Totals..	446	30	37	42	45	53	23	31	28	46	36	36	39
	Males..	246	22	19	24	20	29	15	14	16	25	21	19	22
	Fem... 200	8	18	18	25	24	8	17	12	21	15	17	17	
Newaygo....	Totals..	209	12	24	28	21	13	15	12	13	20	15	21	15
	Males..	123	4	14	19	14	9	10	7	9	9	6	12	10
	Fem... 86	8	10	9	7	4	5	5	4	11	9	9	5	
Oakland.....	Totals..	664	80	78	79	61	56	34	45	41	48	44	41	57
	Males..	343	38	40	39	27	38	19	19	27	22	22	24	23
	Fem... 321	42	38	40	34	18	15	26	14	21	22	17	34	
Oceana.....	Totals..	211	17	14	15	17	17	20	14	14	26	28	16	13
	Males..	129	11	7	10	10	10	13	10	9	11	17	11	10
	Fem... 82	6	7	5	7	7	7	4	5	15	11	5	3	
Ogemaw.....	Totals..	99	20	6	14	10	3	8	5	2	5	4	13	9
	Males..	52	14	4	7	4	1	4	3	2	3	2	4	4
	Fem... 47	6	2	7	6	2	4	2	.....	2	2	9	5	
Ontonagon...	Totals..	83	4	9	6	3	10	4	5	8	11	9	8	6
	Males..	50	3	5	3	4	2	3	2	10	5	6	2	2
	Fem... 33	1	4	1	.....	6	2	2	6	1	4	2	4	
Osceola.....	Totals..	185	18	19	19	14	16	12	12	15	9	24	12	15
	Males..	105	8	10	13	10	8	8	7	10	7	11	5	8
	Fem... 80	10	9	6	4	8	4	5	5	2	13	7	7	
Oscoda.....	Totals..	6	2	2	1	.....	.....	.....	.....	1	.....	.....	.....	.....
	Males..	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fem... 4	.....	2	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
Otsego.....	Totals..	83	3	8	6	8	7	8	3	10	11	4	4	11
	Males..	49	2	6	4	4	6	4	1	8	5	3	1	5
	Fem... 34	1	2	2	4	1	4	2	2	6	1	3	6	
Ottawa.....	Totals..	487	40	43	53	36	34	39	38	42	40	40	41	41
	Males..	231	19	23	27	24	17	19	17	16	22	18	15	14
	Fem... 256	21	20	26	12	17	20	21	21	26	18	22	26	27

## DEATHS.

7

TABLE I.—Concluded.—Deaths in Michigan, by months, counties and sex, 1901.

Counties.	Sex.	Year, 1901.	Months, 1901.											
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Presque Isle.	Totals..	108	4	9	11	6	9	11	6	7	6	11	9	19
	Males..	59	1	3	6	2	6	8	3	4	2	7	5	12
	Fem...	48	3	6	5	4	3	3	3	3	4	4	4	6
	Unk....	1												1
Roscommon..	Totals..	27	4	1	3	3	5	1	3	.....	2	2	2	1
	Males..	14	2	.....	2	2	2	1	1	.....	1	1	1	1
	Fem...	13	2	1	1	1	3	.....	2	.....	1	1	1	.....
Saginaw.....	Totals..	1,091	123	104	115	90	84	73	70	106	99	76	76	75
	Males..	562	72	47	58	34	45	38	37	58	53	43	39	38
	Fem...	529	51	57	57	56	39	35	33	48	46	33	37	37
St. Clair.....	Totals..	770	72	77	55	78	76	53	58	68	62	58	49	64
	Males..	384	36	36	27	41	34	24	34	27	29	31	27	38
	Fem...	386	36	41	28	37	42	29	24	41	33	27	22	26
St. Joseph...	Totals..	356	33	39	43	44	35	26	17	18	26	26	19	30
	Males..	184	18	22	18	20	17	11	8	12	19	14	10	15
	Fem...	172	15	17	25	24	18	15	9	6	7	12	9	15
Sanilac.....	Totals..	349	26	40	36	38	35	17	31	22	26	23	27	28
	Males..	181	10	15	20	23	18	5	17	16	16	14	12	15
	Fem...	168	16	25	16	15	17	12	14	6	10	9	15	13
Schoolcraft..	Totals..	113	14	2	14	8	9	10	4	10	13	8	12	9
	Males..	68	8	1	6	6	6	8	1	7	7	4	9	5
	Fem...	45	6	1	8	2	3	2	3	3	6	4	3	4
Shiawassee..	Totals..	457	54	36	43	37	41	34	27	39	35	32	42	37
	Males..	234	23	20	24	19	16	17	14	20	21	16	25	19
	Fem...	223	31	16	19	18	25	17	13	19	14	16	17	18
Tuscola.....	Totals..	509	55	53	61	47	49	33	44	45	36	34	24	28
	Males..	249	29	28	30	23	19	10	25	21	17	21	8	18
	Fem...	260	26	25	31	24	30	23	19	24	19	13	16	10
Van Buren...	Totals..	495	47	47	51	51	33	33	35	31	49	51	29	38
	Males..	233	24	19	23	23	16	16	19	14	22	24	18	15
	Fem...	262	23	28	28	28	17	17	16	17	27	27	11	23
Washtenaw..	Totals..	655	54	60	66	70	59	51	53	43	58	52	47	42
	Males..	342	26	34	34	26	31	28	31	30	37	20	23	22
	Fem...	313	28	26	32	44	28	23	22	13	21	32	24	20
Wayne.....	Totals..	5,503	531	474	506	483	406	407	530	425	407	366	478	490
	Males..	2,942	277	256	250	266	203	226	301	218	222	198	265	260
	Fem...	2,561	254	218	256	217	203	181	229	207	185	168	213	230
Wexford.....	Totals..	215	27	22	28	14	24	15	8	18	16	16	14	13
	Males..	138	13	15	18	7	17	9	8	11	11	9	9	11
	Fem...	77	14	7	10	7	7	6	.....	7	5	7	5	2

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE II.—Deaths in Michigan by ages, counties

State and counties.	Sex.	Total deaths at all ages, 1901.	Ages in years.				
			Under 1 year.	1.	2.	3.	4.
STATE.....	Totals.....	32,834	6,319	1,121	590	348	253
	Males.....	17,540	3,583	594	274	163	135
	Females.....	15,273	2,730	526	256	185	118
	Unknown.....	21	6	1			
Alcona.....	Totals.....	63	12	4		1	
	Males.....	34	4				
	Females.....	29	8	4		1	
Alger.....	Totals.....	48	21	4	1		
	Males.....	33	15	3	1		
	Females.....	14	6				
	Unknown.....	1		1			
Allegan.....	Totals.....	496	66	18	6	4	3
	Males.....	282	45	11	5	1	2
	Females.....	214	21	7	1	3	1
Alpena.....	Totals.....	210	63	4	3	2	
	Males.....	113	42	3		1	
	Females.....	97	21	1	3	1	
Antrim.....	Totals.....	209	46	11	4	5	5
	Males.....	108	22	5	2	2	2
	Females.....	101	24	6	2	3	3
Arenac.....	Totals.....	120	28	11	5	2	3
	Males.....	67	21	4	2		1
	Females.....	53	7	7	3	2	2
Baraga.....	Totals.....	60	15	5	4	1	3
	Males.....	36	7	1	4	1	1
	Females.....	24	8	4			2
Barry.....	Totals.....	267	30	1	3	3	2
	Males.....	137	18	1	3		1
	Females.....	130	12			3	1
Bay.....	Totals.....	782	167	27	21	11	6
	Males.....	380	77	13	13	6	2
	Females.....	402	90	14	8	5	4
Benzie.....	Totals.....	136	37	6	5	2	1
	Males.....	65	19		2		1
	Females.....	71	18	6	3	2	
Berrien.....	Totals.....	659	101	12	9	4	6
	Males.....	367	54	4	3		2
	Females.....	292	47	8	6	4	4
Branch.....	Totals.....	381	40	9	6	4	2
	Males.....	195	20	6	2	2	2
	Females.....	186	20	3	4	2	
Calhoun.....	Totals.....	736	87	9	5	5	3
	Males.....	351	47	1	1	3	2
	Females.....	385	40	8	4	2	1
Cass.....	Totals.....	269	25	2	3		
	Males.....	140	13	1	3		
	Females.....	128	11	1			
	Unknown.....	1	1				
Charlevoix.....	Totals.....	176	42	11	4	2	
	Males.....	109	24	5	2	1	
	Females.....	67	18	6	2	1	
Cheboygan.....	Totals.....	201	53	10	4	2	1
	Males.....	107	27	7	3	1	1
	Females.....	94	26	3	1	1	

## DEATHS.

9

and sex, during the year 1901. (Stillbirths excluded.)

## Ages in five-year periods.

Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 and over.	Unk.
8,571	786	675	1,056	1,301	1,262	1,151	1,163	1,196	1,189	1,374	1,561	1,740	2,249	2,241	2,222	2,980	117
4,749	390	380	522	631	585	515	586	633	637	736	860	947	1,240	1,253	1,204	1,583	80
3,815	387	295	534	670	677	636	577	563	552	638	701	793	1,009	988	1,018	1,397	23
7																	14
17	2	1	4	5	5	2	1	.....	3	2	4	7	3	3	2	2	..
4	2	.....	2	4	3	2	.....	.....	3	2	3	4	2	1	1	1	..
13	.....	1	2	1	2	.....	1	.....	.....	.....	1	3	1	2	1	1	..
26	1	1	3	.....	.....	1	4	2	2	2	.....	.....	2	2	1	1	..
19	1	.....	2	.....	.....	.....	2	2	1	1	.....	.....	2	1	1	1	..
6	.....	1	1	.....	.....	1	2	.....	1	1	.....	.....	.....	1	.....	.....	..
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
97	6	9	17	16	16	16	14	14	20	21	17	30	50	47	45	59	2
64	3	3	9	6	12	6	4	7	10	11	9	15	30	29	27	35	2
33	3	6	8	10	4	10	10	7	10	10	8	15	20	18	18	24	..
72	5	4	9	7	10	8	3	11	12	10	8	9	12	9	10	11	..
46	3	1	2	4	6	1	1	4	7	4	6	7	6	5	4	6	..
26	2	3	7	3	4	7	2	7	5	6	2	2	6	4	6	5	..
71	7	6	5	5	12	13	12	4	12	10	8	10	10	10	4	8	2
33	3	3	4	4	6	8	4	2	8	5	5	6	3	8	1	4	1
38	4	3	1	1	6	5	8	2	4	5	3	4	7	2	3	4	1
49	6	6	6	2	2	.....	1	4	3	3	2	4	4	8	8	12	..
28	2	2	3	.....	1	.....	.....	3	3	1	2	4	3	3	6	6	..
21	4	4	3	2	1	.....	1	1	.....	2	.....	.....	1	5	2	6	..
28	.....	2	3	3	3	4	3	3	.....	2	2	.....	3	4	.....	.....	..
14	.....	2	2	2	1	3	3	.....	1	2	.....	.....	2	.....	.....	.....	..
14	.....	1	1	1	2	1	.....	1	.....	1	.....	.....	1	2	.....	.....	..
39	4	5	3	11	11	5	4	10	10	11	15	16	23	26	33	41	..
23	3	2	.....	2	6	.....	1	2	1	5	10	7	18	13	19	25	..
16	1	3	3	9	5	5	3	8	9	6	5	9	5	13	14	16	..
232	26	18	30	33	30	20	23	36	26	41	43	33	51	45	42	51	2
111	14	12	10	10	16	8	5	20	10	24	24	18	29	24	18	23	2
121	12	6	18	23	14	12	18	16	17	19	15	22	21	24	28	.....	..
51	4	2	6	5	4	5	6	2	4	9	4	1	8	10	6	9	..
22	1	.....	2	3	1	1	5	.....	2	7	2	1	3	3	4	8	..
29	3	2	4	2	3	4	1	2	2	2	2	.....	5	7	2	1	..
132	8	14	15	23	29	27	24	19	23	35	31	48	51	61	53	64	2
63	5	9	6	9	11	9	13	11	14	19	18	29	36	30	30	44	2
69	3	5	9	14	18	18	11	8	9	16	13	19	15	22	23	20	..
61	7	7	9	12	10	17	7	10	7	14	18	22	31	45	43	61	..
32	5	4	4	3	5	8	3	4	5	8	9	8	21	22	25	29	..
2	2	3	5	9	5	9	4	6	2	6	9	14	10	23	18	32	..
109	6	15	14	21	25	27	36	25	33	22	51	55	72	68	65	92	..
54	4	8	6	8	10	8	11	12	16	11	26	24	37	36	38	42	..
55	2	7	8	13	15	19	25	13	17	11	25	31	35	32	27	50	..
30	6	5	6	9	11	14	5	11	9	10	22	12	27	27	25	40	..
17	2	4	4	4	8	5	2	5	7	5	11	7	10	16	14	19	..
12	4	1	2	5	3	9	3	6	2	5	11	5	17	11	11	21	..
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
59	7	2	8	10	5	11	7	5	8	7	4	9	9	6	9	7	3
32	3	2	3	6	2	7	4	4	5	5	3	5	7	5	8	5	3
27	4	.....	5	4	3	4	3	1	3	2	1	4	2	1	1	2	..
70	4	5	7	9	12	9	8	8	3	9	8	10	10	10	6	11	2
39	2	2	5	2	4	4	5	6	2	1	5	6	6	5	4	8	1
31	2	3	2	7	8	5	3	2	1	8	3	4	4	5	2	3	1

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE II.—Continued.—Deaths in Michigan by ages,

Counties.	Sex.	Total deaths at all ages, 1901.	Ages in years.				
			Under 1 year.	1.	2.	3.	4.
Chippewa.	Totals.	313	86	17	11	5	4
	Males.	174	40	11	5	2	1
	Females.	139	46	6	6	3	3
Clare.	Totals.	90	16	3		4	
	Males.	49	11	2		4	
	Females.	41	5	1			
Clinton	Totals.	337	44	9	5	5	3
	Males.	167	21	5	3	2	2
	Females.	170	23	4	2	3	1
Crawford.	Totals.	26	7	2	2	1	
	Males.	15	2	1		1	
	Females.	11	5	1	2		
Delta.	Totals.	297	86	10	12	4	4
	Males.	165	44	5	4	3	1
	Females.	132	42	5	8	1	3
Dickinson	Totals.	253	87	12	6		2
	Males.	163	51	8	3		1
	Females.	90	36	4	3		1
Eaton.	Totals.	403	29	9	3	5	1
	Males.	221	25	6	2	4	1
	Females.	181	3	3	1	1	
	Unknown.	1	1				
Emmet.	Totals.	214	50	7	4	2	2
	Males.	109	26	3		1	
	Females.	105	24	4	4	1	2
Genesee.	Totals.	572	78	16	6	2	5
	Males.	307	53	10	1	1	4
	Females.	265	25	6	5	1	1
Gladwin.	Totals.	63	19	4	4	1	
	Males.	39	12	3	1		
	Females.	24	7	1	3	1	
Gogebic.	Totals.	257	93	25	11	6	10
	Males.	149	53	11	9	3	6
	Females.	108	40	14	2	3	4
Grand Traverse.	Totals.	342	69	9	5	3	1
	Males.	190	38	5	4		
	Females.	152	31	4	1	3	1
Gratiot.	Totals.	361	54	11	6	4	3
	Males.	188	30	8	4	1	1
	Females.	173	24	3	2	3	2
Hillsdale.	Totals.	422	36	8	2	1	2
	Males.	216	22	5	1		2
	Females.	206	14	3	1	1	
Houghton.	Totals.	892	295	57	24	15	9
	Males.	524	170	33	14	6	6
	Females.	368	125	24	10	9	3
Huron.	Totals.	373	96	13	6	3	7
	Males.	192	49	7	5		4
	Females.	180	47	6	1	3	3
	Unknown.	1					
Ingham.	Totals.	542	53	12	5	4	1
	Males.	272	26	8	2	3	
	Females.	270	27	4	3	1	1
Ionia.	Totals.	464	62	9	4	2	2
	Males.	235	27	4	3	2	1
	Females.	228	34	5	1		1
	Unknown.	1	1				

## DEATHS.

11

counties and sex, during the year 1901. (Stillbirths excluded.)

## Ages in five-year periods.

Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 and over.	Unk.
123	13	4	12	16	18	5	17	10	9	17	10	10	18	11	5	11	4
59	9	2	3	9	9	3	13	7	7	11	5	7	12	5	2	7	4
64	4	2	9	7	9	2	4	3	2	6	5	3	6	6	3	4	..
23	1	1	6	4	3	7	1	6	2	3	3	3	8	8	7	4	..
17	1	..	2	1	2	2	1	3	1	3	1	2	5	4	3	1	..
6	..	1	4	3	1	5	..	3	1	..	2	1	3	4	4	3	..
66	8	5	10	12	9	10	8	5	13	9	21	19	32	35	35	40	..
33	4	4	4	4	3	5	4	2	8	5	7	11	11	22	21	19	..
33	4	1	6	8	6	5	4	3	5	4	14	8	21	13	14	21	..
12	..	2	..	3	..	1	..	..	2	1	3	..	..	..	2	..	..
4	..	2	..	..	..	1	..	..	2	1	2	..	..	..	1	..	..
8	..	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..
116	10	10	15	17	16	14	15	8	9	12	9	11	8	4	9	11	3
57	3	6	8	10	11	10	9	3	7	7	7	6	6	3	3	6	3
59	7	4	7	7	5	4	6	5	2	5	2	5	2	1	6	5	..
107	9	7	11	15	14	13	10	13	12	10	5	9	7	1	7	2	1
63	9	3	6	10	10	9	6	9	9	7	5	7	5	1	2	1	1
44	..	4	5	5	4	4	4	4	3	3	..	2	2	..	5	1	..
47	8	7	11	19	12	9	17	8	15	26	22	27	46	35	40	54	..
38	4	5	4	10	3	5	10	5	6	15	9	15	20	19	22	31	..
8	4	2	7	9	9	4	7	3	9	11	13	12	26	16	18	23	..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
65	5	5	7	6	9	13	8	6	12	11	3	14	14	14	9	13	..
30	1	3	5	3	3	6	5	4	6	4	1	8	8	11	6	7	..
35	4	2	2	3	6	7	3	2	6	7	2	8	6	3	3	6	..
107	12	12	17	24	16	11	19	11	19	25	38	42	41	51	46	80	1
69	6	6	12	13	6	6	11	5	10	9	19	18	24	26	23	44	..
38	6	6	5	11	10	5	8	6	9	16	19	24	17	25	25	36	1
28	3	2	2	5	2	..	3	1	2	1	3	1	..	5	3	2	..
16	1	1	2	2	..	..	2	1	2	..	2	1	..	5	2	2	..
12	2	1	..	3	2	..	1	..	..	1	1	..	..	..	1	..	..
145	16	4	6	11	8	14	13	6	5	7	5	4	6	2	1	3	1
82	6	3	3	9	4	9	9	5	2	5	3	2	3	..	1	3	..
63	10	1	3	2	4	5	4	1	3	2	2	2	3	2	..	..	..
87	9	5	10	21	11	10	13	11	16	21	25	15	32	18	16	21	1
47	4	2	6	11	6	2	7	6	9	9	16	12	19	10	9	14	1
40	5	3	4	10	5	8	6	5	7	12	9	3	13	8	7	7	..
78	12	6	14	11	15	15	16	14	12	10	22	17	42	20	26	31	..
44	6	2	5	4	8	4	3	6	4	5	14	10	26	12	15	20	..
34	6	4	9	7	7	11	13	8	8	5	8	7	16	8	11	11	..
49	4	5	12	9	16	5	10	17	16	20	17	31	40	32	54	85	..
30	2	4	6	4	4	3	4	9	6	9	6	14	21	17	26	51	..
19	2	1	6	5	12	2	6	8	10	11	11	17	19	15	28	34	..
400	36	22	29	43	57	34	41	29	22	27	33	20	27	29	12	16	12
229	19	14	14	29	36	24	26	19	15	11	18	13	17	16	6	7	11
171	17	8	15	14	21	10	15	10	7	16	15	7	10	13	6	12	1
125	11	11	6	17	14	8	3	17	13	9	14	16	20	20	30	36	3
65	4	4	3	7	5	4	..	7	8	4	6	9	7	15	17	26	1
60	7	7	3	10	9	4	3	10	5	5	8	7	13	5	13	10	1
75	12	5	25	24	17	18	20	23	23	20	32	34	52	33	56	72	1
39	5	4	14	12	8	3	12	10	8	13	16	15	31	17	27	37	1
36	7	1	11	12	9	15	8	13	15	7	16	19	21	16	29	35	..
79	7	7	13	19	17	15	16	15	12	25	30	31	31	46	44	57	..
37	3	3	9	8	6	5	5	9	2	11	17	12	17	34	28	29	..
41	4	4	4	11	11	10	11	6	10	14	13	19	14	12	16	28	..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..



## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE II.—Continued.—Deaths in Michigan by ages,

Counties.	Sex.	Total deaths at all ages, 1901.	Ages in years.				
			Under 1 year.	1.	2.	3.	4.
Iosco.....	Totals.....	135	24	4	4	4	3
	Males.....	75	13	3	2	1	2
	Females.....	60	11	1	2	3	1
Iron.....	Totals.....	105	26	4	3	3	1
	Males.....	56	13	1	2	2	1
	Females.....	49	13	3	1	1	1
Isabella.....	Totals.....	243	59	13	3	3	1
	Males.....	127	37	4	2	1	1
	Females.....	115	21	9	1	2	1
	Unknown.....	1	1				
Jackson.....	Totals.....	615	69	11	7	9	1
	Males.....	305	41	8	4	4	1
	Females.....	310	28	3	3	5	1
Kalamazoo.....	Totals.....	740	88	15	6	5	2
	Males.....	376	44	6	1	1	1
	Females.....	364	44	9	5	4	1
Kalkaska.....	Totals.....	88	20	8	2	1	1
	Males.....	50	11	5	1	1	1
	Females.....	38	9	3	1	1	1
Kent.....	Totals.....	1,769	289	49	27	21	13
	Males.....	961	166	31	12	9	7
	Females.....	807	122	18	15	12	6
	Unknown.....	1	1				
Keweenaw.....	Totals.....	41	10	2	4	1	1
	Males.....	26	6	2	2	1	1
	Females.....	15	4		2		1
Lake.....	Totals.....	58	6	6	2	1	1
	Males.....	37	4	5	1	1	1
	Females.....	21	2	1	1		1
Lapeer.....	Totals.....	415	54	7	8	3	3
	Males.....	237	37	2	5	1	2
	Females.....	178	17	5	3	2	1
Leelanau.....	Totals.....	122	36	2	1	2	1
	Males.....	73	16	1	1	1	1
	Females.....	49	20	1		2	1
Lenawee.....	Totals.....	704	78	12	9	1	1
	Males.....	367	46	5	2	1	1
	Females.....	325	32	7	7		1
	Unknown.....	12					
Livingston.....	Totals.....	252	17	2	2		2
	Males.....	152	5	2	2		2
	Females.....	100	12				2
Luce.....	Totals.....	43	11	2			
	Males.....	30	8	1			
	Females.....	13	3	1			
Mackinac.....	Totals.....	82	17	1		2	3
	Males.....	49	10	1		1	1
	Females.....	33	7			1	3
Macomb.....	Totals.....	483	81	12	6	8	6
	Males.....	247	42	9	3	6	2
	Females.....	236	39	3	3	2	4
Manistee.....	Totals.....	305	76	16	5	6	3
	Males.....	169	43	6	2	3	1
	Females.....	136	33	10	3	3	2
Marquette.....	Totals.....	507	148	26	12	11	7
	Males.....	306	85	8	6	5	6
	Females.....	201	63	18	6	6	1

counties and sex, during the year 1901. (Stillbirths excluded.)

## Ages in five-year periods.

Under 5 years.	5 to 9.	10 to 14.	15 to 19.	19 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 and over.	Unk.
39	12	6	6	6	6	7	2	10	5	6	4	4	3	9	5	5	..
21	5	3	3	3	4	2	..	7	4	3	2	2	3	7	4	2	..
18	7	3	3	3	2	5	..	3	1	3	2	2	..	2	1	3	..
37	9	5	2	7	10	9	5	2	7	2	2	1	2	..	3	2	..
18	3	2	1	4	7	6	3	..	7	2	1	..	..	..	..	2	..
19	6	3	1	3	3	3	2	2	..	..	1	1	2	..	3	2	..
79	7	6	9	7	9	3	10	10	7	7	15	11	10	18	12	22	1
45	4	2	1	4	6	2	5	2	3	5	10	5	5	10	4	14	..
33	3	4	8	3	3	1	5	8	4	2	5	6	5	8	8	8	1
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
96	8	8	13	28	23	17	23	30	30	27	31	38	53	51	65	74	..
57	4	4	4	17	8	3	13	15	13	16	13	19	27	29	26	37	..
39	4	4	9	11	15	14	10	15	17	11	18	19	26	22	39	37	..
116	10	13	18	20	27	32	34	36	28	44	40	52	57	56	64	87	6
53	7	7	12	13	13	15	15	19	13	23	27	26	28	37	36	44	3
63	10	6	11	8	14	19	19	17	15	21	13	26	29	19	28	43	3
32	6	..	7	2	4	3	2	3	6	2	5	4	1	1	4	5	1
18	4	..	3	1	2	2	1	1	4	..	5	3	1	..	3	1	1
14	2	..	4	1	2	1	1	2	2	2	..	1	..	1	1	4	..
399	34	27	58	71	77	50	57	65	66	77	104	113	133	141	117	178	2
225	17	19	34	31	30	21	30	28	26	45	57	68	84	84	65	95	2
173	8	24	40	47	29	27	37	37	40	32	47	45	49	57	52	83	..
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	2	1	1	2	3	1	..	1	3	1	1	..	2	3	..	1	2
11	1	1	..	2	1	..	..	1	2	1	1	..	1	2	..	..	2
6	1	..	1	2	1	..	..	..	1	..	..	..	1	1	..	1	..
15	..	1	1	3	4	2	..	3	6	2	5	2	2	5	1	5	1
11	..	1	..	2	3	..	..	1	3	..	5	1	2	4	1	2	1
4	..	..	1	1	1	2	..	2	3	2	..	1	..	1	..	3	..
75	12	22	20	20	11	9	4	17	13	18	18	29	28	25	39	54	1
47	7	10	14	10	3	6	1	9	5	10	9	15	16	16	24	34	1
28	5	12	6	10	8	3	3	8	8	8	9	14	12	9	15	20	..
42	..	5	2	4	5	3	4	5	5	6	1	5	7	6	13	9	..
18	..	2	1	2	3	2	4	4	3	2	..	5	6	5	11	5	..
24	..	3	1	2	2	1	..	1	2	4	1	..	1	1	2	4	..
101	11	11	12	29	27	21	20	16	21	37	48	39	43	76	71	107	14
55	4	6	2	19	11	11	7	8	10	17	23	25	28	50	38	51	2
46	7	5	10	10	16	10	13	8	11	20	25	14	15	26	33	56	12
23	4	4	12	6	8	11	8	8	6	9	14	21	19	35	29	35	..
9	2	3	9	5	5	4	5	7	3	8	10	13	8	17	23	21	..
14	2	1	3	1	3	7	3	1	3	1	4	8	11	18	6	14	..
13	1	2	..	1	2	2	3	4	..	1	3	1	2	..	3	2	3
9	1	1	..	1	2	..	3	3	..	..	3	1	..	..	2	2	3
4	1	1	..	..	2	2	..	1	..	1	..	..	2	..	1	..	..
23	1	3	3	9	6	5	8	4	1	1	1	2	5	3	..	4	3
12	1	2	2	6	3	3	7	2	..	..	1	2	4	1	..	2	1
11	..	1	1	3	3	2	1	2	1	..	..	..	1	2	..	2	2
113	6	12	12	17	16	10	13	14	19	17	21	34	44	39	42	54	..
62	4	6	6	8	7	6	9	7	8	7	7	15	23	20	21	31	..
51	2	6	6	9	9	4	4	7	11	10	14	19	21	19	21	23	..
106	13	14	9	11	12	7	10	12	10	15	15	14	14	10	14	17	2
55	9	9	5	4	4	1	7	7	5	12	12	11	9	5	7	5	2
51	4	5	4	7	8	6	3	5	5	3	3	3	5	5	7	12	..
204	22	18	17	20	25	23	36	21	13	12	16	22	12	22	9	14	1
110	13	12	12	14	17	17	27	13	11	7	10	15	5	8	6	8	1
94	9	6	5	6	8	6	9	8	2	5	6	7	7	14	3	6	..

TABLE II.—Continued.—Deaths in Michigan by ages,

Counties.	Sex.	Total deaths at all ages, 1901.	Ages in years.				
			Under 1 year.	1.	2.	3.	4.
Mason.....	Totals.....	255	64	9	3	4	2
	Males.....	128	38	3	3	1	2
	Females.....	127	26	6	.....	3	.....
Mecosta.....	Totals.....	275	48	14	7	2	1
	Males.....	153	20	10	1	.....	.....
	Females.....	122	28	4	6	2	1
Menominee.....	Totals.....	294	94	8	9	4	2
	Males.....	172	51	3	6	4	1
	Females.....	122	43	5	3	.....	1
Midland.....	Totals.....	193	51	6	7	4	.....
	Males.....	104	32	4	5	2	.....
	Females.....	88	18	2	2	2	.....
	Unknown.....	1	1	.....	.....	.....	.....
Missaukee.....	Totals.....	86	29	6	1	2	4
	Males.....	47	15	3	1	.....	3
	Females.....	39	14	3	.....	2	1
Monroe.....	Totals.....	418	61	8	4	4	2
	Males.....	227	41	5	1	2	.....
	Females.....	191	20	3	3	2	2
Montcalm.....	Totals.....	419	64	18	7	4	2
	Males.....	233	40	11	4	3	1
	Females.....	186	24	7	3	1	1
Montmorency.....	Totals.....	32	10	1	1	.....	.....
	Males.....	14	6	.....	.....	.....	.....
	Females.....	18	4	1	1	.....	.....
Muskegon.....	Totals.....	446	81	19	5	3	2
	Males.....	246	53	10	3	3	1
	Females.....	200	28	9	2	.....	1
Newaygo.....	Totals.....	209	44	9	6	3	2
	Males.....	123	32	4	3	1	2
	Females.....	86	12	5	3	2	.....
Oakland.....	Totals.....	664	75	18	4	6	2
	Males.....	343	48	9	4	3	2
	Females.....	321	27	9	.....	3	.....
Oceana.....	Totals.....	211	52	13	4	4	.....
	Males.....	129	33	8	2	2	.....
	Females.....	82	19	5	2	2	.....
Ogemaw.....	Totals.....	99	28	3	.....	1	1
	Males.....	52	15	.....	.....	.....	.....
	Females.....	47	13	3	.....	1	1
Ontonagon.....	Totals.....	83	22	3	4	5	.....
	Males.....	50	15	1	1	4	.....
	Females.....	33	7	2	3	1	.....
Osceola.....	Totals.....	185	38	9	4	2	.....
	Males.....	105	24	6	1	1	.....
	Females.....	80	14	3	3	1	.....
Oscoda.....	Totals.....	6	.....	.....	.....	.....	.....
	Males.....	2	.....	.....	.....	.....	.....
	Females.....	4	.....	.....	.....	.....	.....
Otsego.....	Totals.....	83	18	10	.....	1	1
	Males.....	49	9	6	.....	.....	1
	Females.....	34	9	4	.....	1	.....
Ottawa.....	Totals.....	487	96	17	6	7	7
	Males.....	231	51	8	4	3	3
	Females.....	256	45	9	2	4	4

## DEATHS.

15

counties and sex, during the year 1901. (Stillbirths excluded.)

## Ages in five-year periods.

Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 and over.	DEA.
82	6	5	10	16	7	9	5	4	6	11	17	13	15	22	11	16	..
47	3	1	6	3	1	3	3	2	3	4	6	8	8	12	8	10	..
35	3	4	4	13	6	6	2	2	3	7	11	5	7	10	3	6	..
72	5	4	17	15	6	12	6	12	13	8	10	18	17	20	14	24	2
31	4	3	11	4	5	7	2	5	11	6	4	14	7	12	10	15	2
41	1	1	6	11	1	5	4	7	2	2	6	4	10	8	4	9	..
117	11	8	12	20	7	13	5	16	11	13	9	14	5	11	9	12	1
65	7	4	5	10	4	8	2	12	7	8	6	10	2	7	6	8	1
52	4	4	7	10	3	5	3	4	4	5	3	4	3	4	3	4	..
68	8	3	3	10	7	3	7	12	14	5	9	10	12	8	5	8	1
43	3	3	1	5	5	2	3	5	5	2	5	7	3	5	2	5	..
24	5	....	2	5	2	1	4	7	9	3	4	3	9	3	3	3	1
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
42	1	1	2	6	3	2	4	3	4	3	2	1	4	2	3	1	2
22	1	1	2	3	2	2	1	1	3	1	1	1	2	2	..	1	..
20	....	....	....	3	1	....	3	2	1	2	1	....	2	....	3	....	1
79	9	9	12	16	20	15	10	14	6	16	20	19	27	40	55	50	1
49	4	4	10	10	7	7	5	7	2	10	14	11	15	19	23	30	..
30	5	5	2	6	13	8	5	7	4	6	6	8	12	21	32	20	1
95	7	5	11	17	11	13	10	16	13	22	18	24	40	40	36	41	..
59	2	3	3	6	4	5	4	8	3	13	11	13	25	28	26	20	..
36	5	2	8	11	7	8	6	8	10	9	7	11	15	12	10	21	..
12	1	1	1	1	3	1	3	....	2	....	2	....	1	....	2	2	..
6	1	....	....	1	1	....	2	....	2	....	1	....	....	....	....	....	..
6	....	1	1	....	2	1	1	....	....	....	1	....	1	....	2	2	..
110	14	16	17	23	15	14	18	13	11	21	25	17	37	37	31	26	1
70	6	8	15	14	9	7	10	4	6	8	12	8	22	23	20	13	1
40	8	8	12	9	6	7	8	9	5	13	13	9	15	14	11	13	..
64	6	3	9	5	6	9	6	5	7	8	7	11	19	12	13	18	1
42	4	3	7	1	2	2	3	2	5	5	4	3	13	5	9	6	..
22	2	....	2	4	4	7	3	3	2	3	3	8	6	7	4	....	..
105	8	8	18	18	22	28	23	35	24	31	41	41	44	60	66	90	2
66	4	4	11	7	8	10	8	18	10	15	24	26	30	25	36	41	..
39	4	4	7	11	14	18	15	17	14	16	17	15	14	35	30	49	2
73	5	5	7	5	6	6	7	7	3	5	7	13	18	12	11	21	..
45	5	3	4	....	3	3	3	4	5	2	4	7	11	9	8	14	..
28	....	2	3	5	3	3	3	2	1	3	3	6	7	3	3	7	..
33	4	5	6	5	4	....	5	4	3	2	5	5	5	5	3	4	1
15	3	1	3	2	1	....	2	2	2	1	5	1	5	2	3	3	1
18	1	4	3	3	3	....	3	2	1	1	....	4	....	3	....	1	..
34	1	4	3	1	4	3	2	6	3	....	3	5	3	3	4	3	1
21	1	2	....	1	3	1	2	6	1	....	2	....	3	1	4	1	1
13	....	2	3	....	1	2	....	....	2	....	1	5	....	2	....	2	..
6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
32	6	5	12	2	8	8	7	3	6	11	8	9	9	9	6	22	1
21	5	2	4	1	3	4	6	2	2	6	3	4	3	3	1	10	..
....	....	....	1	....	1	1	....	....	1	....	....	....	2	....	....	....	..
....	....	....	1	....	1	1	....	....	1	....	....	....	1	....	....	....	..
30	2	3	2	1	5	3	4	5	3	3	2	1	6	3	2	5	3
16	1	3	2	....	3	2	2	5	3	....	2	....	2	1	1	3	2
14	1	....	....	....	2	1	2	....	....	3	....	1	4	2	1	2	1
133	8	7	11	19	21	17	17	8	14	15	24	29	28	36	38	62	..
69	3	2	8	10	8	7	6	3	6	8	13	11	17	20	29	..	..
64	5	5	3	9	13	10	11	5	8	7	11	18	17	19	18	33	..

TABLE II.—Concluded.—Deaths in Michigan by ages,

Counties.	Sex.	Total deaths at all ages, 1901.	Ages in years.				
			Under 1 year.	1.	2.	3.	4.
Presque Isle.....	Totals.....	108	33	3	1	3	1
	Males.....	59	19	3	1	1	1
	Females.....	48	14	.....	.....	2	.....
	Unknown.....	1	.....	.....	.....	.....	.....
Roscommon.....	Totals.....	27	3	.....	.....	.....	1
	Males.....	14	2	.....	.....	.....	1
	Females.....	13	1	.....	.....	.....	.....
Saginaw.....	Totals.....	1,091	184	31	16	19	12
	Males.....	562	111	20	8	10	5
	Females.....	529	73	11	8	9	7
St. Clair.....	Totals.....	770	125	31	10	8	7
	Males.....	384	76	18	3	3	5
	Females.....	386	49	13	7	5	2
St. Joseph.....	Totals.....	356	27	4	.....	.....	1
	Males.....	184	12	2	.....	.....	1
	Females.....	172	15	2	.....	.....	.....
Sanilac.....	Totals.....	349	73	10	1	2	5
	Males.....	181	42	7	.....	1	1
	Females.....	168	31	3	1	1	4
Schoolcraft.....	Totals.....	113	31	11	5	2	2
	Males.....	68	20	8	2	.....	1
	Females.....	45	11	3	3	2	1
Shiawassee.....	Totals.....	457	70	8	6	4	.....
	Males.....	234	39	5	2	3	.....
	Females.....	223	31	3	4	1	.....
Tuscola.....	Totals.....	509	96	20	10	4	4
	Males.....	249	44	11	4	2	1
	Females.....	260	52	9	6	2	3
Van Buren.....	Totals.....	495	69	11	7	3	3
	Males.....	233	43	7	3	1	2
	Females.....	262	26	4	4	2	1
Washtenaw.....	Totals.....	655	69	10	3	3	6
	Males.....	342	45	6	1	1	5
	Females.....	313	24	4	2	2	1
Wayne.....	Totals.....	5,503	1,408	232	94	48	43
	Males.....	2,942	792	108	54	24	23
	Females.....	2,561	616	124	40	24	20
Wexford.....	Totals.....	215	54	10	5	1	1
	Males.....	138	33	8	2	1	1
	Females.....	77	21	2	3	.....	.....

## DEATHS.

17

counties and sex, during the year 1901. (Stillbirths excluded.)

## Ages in five-year periods.

Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 and over.	Unc.
41	7	.....	7	7	5	6	1	5	2	3	2	7	3	3	2	5	2
25	3	.....	4	4	3	4	.....	3	2	2	2	2	1	.....	1	2	1
16	4	.....	3	3	2	2	1	2	.....	1	.....	5	2	3	1	3	1
4	.....	.....	1	2	2	.....	1	1	1	4	1	1	2	3	.....	4	..
8	.....	.....	1	1	1	.....	1	1	1	2	1	1	1	1	.....	2	..
1	.....	.....	1	1	1	.....	1	.....	2	2	.....	1	1	2	.....	2	..
262	21	28	45	43	40	46	41	38	39	44	54	51	73	73	87	97	..
154	13	15	16	18	17	21	24	20	20	21	31	21	39	34	46	52	..
108	8	13	29	25	32	25	17	18	19	23	23	30	34	39	41	45	..
181	23	17	32	22	21	22	24	21	33	33	32	34	47	61	62	93	2
105	10	9	12	11	7	3	14	5	14	26	16	18	28	34	27	45	..
76	13	8	20	11	14	19	10	16	19	17	16	16	19	27	35	48	2
32	5	3	13	5	6	6	15	12	13	9	20	30	42	42	41	61	1
15	4	2	4	5	1	3	6	8	5	5	10	21	21	23	16	34	1
17	1	1	9	.....	5	3	9	4	8	4	10	9	21	19	25	27	..
91	4	6	13	18	11	8	8	10	9	19	22	20	25	28	27	29	..
51	1	6	4	7	3	5	5	6	4	9	12	11	13	14	18	11	1
40	3	.....	9	11	8	3	3	4	5	10	10	9	12	14	9	18	..
51	8	4	.....	4	6	6	5	6	2	4	3	4	4	3	1	1	1
31	4	1	.....	3	3	2	3	5	1	3	2	4	3	2	.....	1	1
20	4	3	.....	1	3	4	2	1	1	1	1	.....	1	1	1	1	..
88	7	8	8	13	10	17	27	14	22	21	16	27	50	35	42	49	3
49	5	6	3	5	3	4	10	6	9	12	10	14	27	19	21	29	2
39	2	2	5	8	7	13	17	8	13	9	6	13	23	16	21	20	1
134	20	6	14	23	13	21	15	13	23	23	20	15	46	40	32	50	1
62	10	3	8	10	3	7	5	6	18	12	11	7	22	20	17	28	..
72	10	3	6	13	10	14	10	7	5	11	9	8	24	20	15	22	1
93	6	7	14	12	13	15	14	13	13	28	23	32	45	53	41	69	4
56	2	2	8	4	4	4	5	5	7	10	6	12	21	25	21	37	4
37	4	5	6	8	9	11	9	8	6	18	17	20	24	28	20	32	..
91	17	15	23	27	16	33	26	30	26	32	35	40	58	46	57	81	2
58	6	7	10	11	8	15	13	13	20	17	13	20	33	27	34	36	1
33	11	8	13	16	8	18	13	17	6	15	22	20	25	19	23	45	1
1,825	124	99	173	220	229	211	214	241	220	216	240	275	328	276	269	337	6
1,001	65	62	88	104	108	103	110	140	129	128	139	154	162	148	132	163	6
824	59	37	85	116	121	108	104	101	91	88	101	121	166	128	137	174	..
71	9	10	6	15	11	7	6	4	7	8	8	12	7	13	7	14	..
45	5	7	3	9	8	4	4	1	5	4	3	11	6	8	5	10	..
28	4	3	3	6	3	3	2	3	2	4	5	1	1	5	2	4	..

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE III.—Causes of death in Michigan, by months.

Classification No.	Causes of death, 1901.	Sex.	Total deaths, 1901.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	ALL CAUSES*	Total.	32,834	3,128	3,089	3,390	2,894	2,720	2,354	2,395	2,573	2,847	2,435	2,354	2,655
		Males.	17,540	1,642	1,611	1,741	1,508	1,446	1,271	1,364	1,393	1,560	1,327	1,250	1,427
		Fem.	15,273	1,486	1,478	1,647	1,386	1,274	1,082	1,031	1,178	1,286	1,108	1,091	1,226
		Unk.	21			2			1		2	1		13	2
1	Typhoid fever....	Total.	615	71	36	44	31	31	23	25	47	91	85	79	52
		Males.	373	45	20	30	20	17	14	16	29	55	53	47	27
		Fem.	242	26	16	14	11	14	9	9	18	36	32	32	25
1a	Typho-malarial fever.....	Total.	30	2		1	4		1	1	2	5	6	4	4
		Males.	16	1		1	3		1		1	3	2	3	1
		Fem.	14	1			1			1	1	2	4	1	3
4	Malarial fever....	Total.	109	4	6	6	6	11	9	10	14	15	14	6	8
		Males.	47		3	3		6	4	4	6	9	4	3	5
		Fem.	62	4	3	3	6	5	5	6	8	6	10	3	3
5	Smallpox.....	Total.	27	1	1	3	1	1	6	2	1	4	2	2	3
		Males.	14	1	1	1	1	1	2	1		3	1	1	1
		Fem.	13			2			4	1	1	1	1	1	2
6	Measles.....	Total.	79	3	5	10	6	5	12	10	1	3	2	8	14
		Males.	42	2	2	5	4	2	7	7		2	1	3	7
		Fem.	37	1	3	5	2	3	5	3	1	1	1	5	7
7	Scarlet fever....	Total.	312	33	42	45	21	31	17	8	17	6	21	29	42
		Males.	146	17	22	23	8	15	8	3	6	3	10	13	18
		Fem.	166	16	20	22	13	16	9	5	11	3	11	16	24
8	Whooping cough.	Total.	163	15	13	20	15	14	10	14	16	18	4	10	14
		Males.	74	6	7	12	6	4	2	4	8	10	1	5	9
		Fem.	89	9	6	8	9	10	8	10	8	8	3	5	5
	Diphtheria.....	Total.	359	40	30	22	35	34	14	14	14	42	40	42	32
		Males.	184	16	15	13	20	20	6	6	11	21	17	25	14
		Fem.	175	24	15	9	15	14	8	8	3	21	23	17	18
9	Croup.....	Total.	55	12	8	5	3	3	2	2	1	3	5	7	4
		Males.	32	7	3	2	3	3	2		1	2	2	5	2
		Fem.	23	5	5	3				2		1	3	2	2
	Membranous croup.....	Total.	88	19	9	9	3	4	2		7	4	5	11	15
		Males.	46	10	2	6	2	1	2		2	3	4	4	10
		Fem.	42	9	7	3	1	3			5	1	1	7	5
10	Influenza.....	Total.	1,099	179	343	292	117	65	22	13	4	6	13	13	32
		Males.	527	88	157	143	45	31	17	8	2	4	6	8	18
		Fem.	572	91	186	149	72	34	5	5	2	2	7	5	14
13	Cholera nostras..	Total.	38		1		1	1	2	4	10	16	2	1	
		Males.	17							1	7	8	1		
		Fem.	21		1		1	1	2	3	3	8	1	1	
14	Dysentery.....	Total.	212	5	4	4	3	3	7	17	54	73	25	14	3
		Males.	102	4	3	2	3	2	4	10	25	34	8	6	1
		Fem.	110	1	1	2		1	3	7	29	39	17	8	2
18	Erysipelas.....	Total.	116	8	12	21	16	15	9	5	4	4	7	3	12
		Males.	61	2	9	13	10	7	3	4	2		4	1	6
		Fem.	55	6	3	8	6	8	6	1	2	4	3	2	6
19a	Chickenpox.....	Total.	2								1			1	
		Males.	2								1				
		Fem.													
19b	German measles..	Total.	2			1			1						
		Males.													
		Fem.	2			1			1						

\* Stillbirths not included.

## CAUSES OF DEATH.

19

ages and sex, during the year 1901. (Stillbirths excluded.)

Ages in years under five.					Ages by five-year periods.																	Unk.	Classification No.
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +		
6,319	1121	530	348	253	8,571	786	675	1056	1301	1262	1151	1163	1196	1189	1374	1561	1740	2249	2241	2222	2980	117	80
3,583	594	274	163	135	4,749	399	380	522	631	585	515	586	633	637	736	860	947	1240	1253	1204	1583	23	
2,730	526	256	185	118	3,815	387	295	534	670	677	636	577	563	552	638	701	793	1009	988	1018	1397	14	
-6	1	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	2	2	8	5	19	30	45	85	103	83	61	60	29	30	19	11	12	15	5	5	3	}	
1	2	2	4	3	8	18	28	44	71	47	43	43	14	19	11	8	3	7	3	3	1		
...	2	1	1	...	4	...	1	4	6	3	1	1	...	1	1	1	...	1	1	3	1	} 1a	
...	2	1	1	...	4	...	1	4	4	2	1	1	...	1	1	1	...	1	1	1	1		
1	2	3	4	2	12	4	8	6	9	12	5	3	4	4	6	4	5	4	7	8	7	}	
1	2	3	1	1	5	2	3	3	3	5	2	1	2	1	2	3	2	1	3	4	5		
...	2	3	1	1	7	2	5	3	6	7	3	2	2	3	4	1	3	3	4	4	2	}	
5	...	...	...	1	6	2	1	...	2	3	2	2	1	2	...	...	...	3	1	...	1		
2	...	...	...	...	2	...	...	...	2	3	1	2	...	1	...	...	...	2	1	...	...	}	
3	...	...	...	1	4	2	1	...	1	...	1	...	1	1	...	...	...	1	...	...	1		
22	17	16	3	2	60	7	...	2	2	...	...	1	2	2	...	1	...	...	1	...	1	}	
15	6	9	2	...	32	5	...	2	1	...	...	1	...	2	...	...	...	...	1	...	...		
7	11	7	1	2	28	2	...	...	1	...	...	...	2	2	...	1	...	...	...	...	1	}	
30	43	54	36	30	193	80	12	10	6	2	4	3	1	...	...	...	1	...	...	...	...		
17	22	23	16	15	93	34	6	7	3	1	1	...	...	...	...	...	...	...	...	...	...	}	
13	21	31	20	15	100	46	6	3	3	1	3	3	1	...	...	...	...	...	...	...	...		
98	39	10	3	5	155	7	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	}	
45	21	4	...	1	71	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
53	18	6	3	4	84	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	}	
11	24	34	36	34	139	112	59	18	8	10	5	2	2	2	...	...	1	1	...	...	...		
7	11	23	17	20	78	51	28	12	4	5	1	1	1	2	...	...	1	...	...	...	...	}	
4	13	11	19	14	61	61	31	6	4	5	4	1	1	...	...	...	...	1	...	...	...		
21	8	6	4	9	48	6	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	}	
12	6	4	2	5	29	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
9	2	2	2	4	19	3	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	}	
4	12	19	17	7	59	22	4	2	1	...	...	...	...	...	...	...	...	...	...	...	...		
4	5	13	9	3	34	11	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	}	
...	7	6	8	4	25	11	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...		
113	17	10	3	3	146	12	9	19	17	17	22	26	27	27	48	55	82	112	98	159	222	}	
57	10	5	1	2	75	7	6	12	7	9	6	11	19	12	24	16	40	53	47	80	102		1
56	7	5	2	1	71	5	3	7	10	8	16	15	8	15	24	39	42	59	51	79	120	...	
4	1	1	1	1	8	5	...	...	1	...	...	...	...	...	1	3	1	3	4	3	4	5	}
4	1	1	1	...	7	1	...	...	...	...	...	...	...	...	2	1	...	2	2	2	...	...	
...	...	...	...	1	1	4	...	...	1	...	...	...	...	...	1	1	...	3	2	1	2	5	}
41	23	8	5	1	78	3	...	1	3	1	3	2	2	...	6	5	10	16	20	21	41	...	
22	17	2	2	1	44	2	...	...	2	1	2	...	2	...	1	4	5	6	8	11	16	...	}
19	6	6	3	...	34	1	...	1	1	...	1	2	2	...	5	1	5	10	12	10	25	...	
23	1	...	1	...	25	...	3	3	2	2	5	5	9	7	9	7	7	7	8	7	10	...	}
10	...	...	...	...	11	...	2	1	...	1	...	3	6	4	5	4	3	5	4	5	7	...	
13	...	...	1	...	14	...	1	2	2	1	5	2	3	3	4	3	4	2	4	2	3	...	}
1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	}
...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	}
...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	



TABLE III.—Continued.—Causes of death in Michigan, by months,

Classification No.	Causes of death, 1901.	Sex.	Total deaths, 1901.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
19c	Mumps.....	{ Total. Males. Fem..	5 2 3	.....	1	1	.....	.....	.....	.....	.....	.....	1	.....	2
(19)	Other epidemic diseases.....	{ Total. Males. Fem..	3 1 2	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
20	Septicemia.....	{ Total. Males. Fem..	116 62 54	4 2 2	13 7 6	14 5 9	13 9 4	15 10 5	8 3 5	6 1 5	8 3 5	15 9 6	10 7 3	4 4 .....	6 2 4
27	Tuberculosis of lungs.....	{ Total. Males. Fem..	2,152 958 1,194	246 114 132	176 81 95	217 105 112	209 82 127	210 96 114	178 76 102	165 77 88	159 68 91	145 63 82	159 69 90	141 66 75	147 61 86
26	Tuberculosis of larynx.....	{ Total. Males. Fem..	22 11 11	1 1 .....	2 1 1	5 2 3	3 2 1	2 ..... 2	1 1 .....	3 2 1	.....	.....	2	1	1
28	Tuberculous meningitis.....	{ Total. Males. Fem..	93 50 43	4 2 2	3 1 2	7 4 3	11 5 6	12 7 5	9 5 4	2 2 .....	7 4 3	7 5 2	11 7 4	11 3 8	9 5 4
29	Abdominal tuberculosis.....	{ Total. Males. Fem..	132 58 74	15 3 12	7 3 4	11 4 7	15 6 6	12 6 6	7 3 4	10 5 5	13 5 8	9 3 6	14 5 9	10 6 4	9 6 3
30	Pott's disease.....	{ Total. Males. Fem..	29 20 9	1 .....	.....	3 2 2	2 .....	4 .....	1 .....	2 .....	2 .....	2 .....	2 .....	.....	5 2 3
31	Tuberculous abscess.....	{ Total. Males. Fem..	3 1 2	1 1 .....	.....	.....	.....	1 .....	.....	.....	.....	.....	.....	.....	1 .....
32	White swelling.....	{ Total. Males. Fem..	17 12 5	3 2 1	2 2 .....	1 .....	1 .....	1 1	1 1	1 .....	1 1	1 1	1 .....	2 2	2 2
33	Tuberculosis of other organs.....	{ Total. Males. Fem..	38 24 14	3 2 1	2 2 .....	6 4 2	3 1 2	4 1 3	6 3 1	3 2 1	2 1 .....	3 3 .....	3 3 1	3 2 .....	3 .....
34	General tuberculosis.....	{ Total. Males. Fem..	46 22 24	3 2 1	5 2 3	6 2 4	8 4 4	4 2 2	3 2 1	4 3 1	1 .....	4 3 1	3 .....	2 1 1	3 1 2
35	Scrofula.....	{ Total. Males. Fem..	16 7 9	.....	.....	1 .....	.....	6 3	1 .....	1 1	1 1	.....	2 1	3 .....	1 1
36-38	Venereal diseases.....	{ Total. Males. Fem..	88 56 32	8 7 1	7 3 4	4 3 1	3 1 2	9 7 2	6 4 2	5 2 3	6 5 1	9 5 4	10 5 5	13 7 6	8 7 1
39	Cancer of mouth.....	{ Total. Males. Fem..	38 31 7	4 4 .....	4 3 1	5 4 .....	3 3 .....	2 2 .....	3 3 .....	1 .....	2 2	3 1	4 2	3 3	4 4
40	Cancer of stomach and liver.....	{ Total. Males. Fem..	612 351 261	41 24 17	47 24 23	56 25 31	48 25 23	59 36 23	41 22 19	55 33 22	47 33 22	57 37 20	51 37 14	56 29 27	54 34 20
41	Cancer of intestines.....	{ Total. Males. Fem..	137 56 81	11 6 5	13 7 6	6 2 4	10 2 8	13 4 9	9 5 4	17 8 9	18 6 12	10 7 3	9 5 7	13 5 8	8 2 6
42	Cancer of genital organs.....	{ Total. Males. Fem..	237 4 233	20 .....	16 .....	15 .....	17 .....	24 .....	20 1	13 .....	21 1	23 2	23 .....	21 .....	24 .....

## CAUSES OF DEATH.

21

ages and sex, during the year 1901. (Stillbirths excluded.)

Ages in years under five.					Ages by five-year periods.																		Classification No.
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.	
1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	19c
1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	(19)
12	2	3	3	2	19	2	1	7	9	10	11	11	6	5	2	4	4	6	12	5	1	1	20
6	1	2	2	2	11	1	1	2	3	4	3	6	3	3	1	3	5	10	3	1	1	1	27
6	1	1	1	1	8	1	1	5	6	6	8	5	3	2	1	1	1	1	2	2	1	1	28
25	11	11	3	4	54	19	48	250	324	308	248	181	169	124	111	102	82	53	31	39	8	1	30
12	5	4	1	1	23	5	16	71	134	125	111	81	97	71	55	51	42	32	18	20	5	1	31
13	6	7	2	3	31	14	32	179	190	183	137	100	72	53	56	51	40	21	13	19	3	1	32
1	1	1	1	1	1	1	1	2	2	1	4	1	3	1	1	4	1	1	1	1	1	1	33
1	1	1	1	1	1	1	1	1	2	1	4	1	2	1	1	3	1	1	1	1	1	1	34
25	23	5	6	3	62	14	5	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	35
13	15	3	3	2	36	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	36
12	8	2	3	1	26	6	4	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	37
9	3	1	1	1	12	2	4	11	17	14	10	10	4	11	9	6	4	11	6	1	1	1	38
6	2	1	1	1	8	1	3	1	9	6	3	3	1	6	4	2	3	6	1	1	1	1	39
3	1	1	1	1	4	1	1	10	8	8	7	7	3	5	5	4	1	5	5	1	1	1	40
1	1	1	1	1	1	1	1	3	2	3	5	2	2	2	3	2	1	1	1	1	1	1	41
1	1	1	1	1	1	1	1	2	2	2	3	2	1	1	3	1	1	1	1	1	1	1	42
1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	43
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	44
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	45
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	46
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	47
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	48
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	49
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	50
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	51
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	52
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	53
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	54
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	55
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	56
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	57
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	58
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	59
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	60
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	61
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	62
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	63
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	64
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	65
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	66
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	67
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	68
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	69
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	70
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	71
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	72
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	73
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	74
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	75
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	76
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	77
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	78
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1</		

TABLE III.—Continued.—Causes of death in Michigan, by months,

Classification No.	Causes of death, 1901.	Sex.	Total deaths, 1901.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
43	Cancer of breast	Total.	149	11	20	12	9	8	14	9	16	12	12	13	13
		Males.	5	1	.....	.....	.....	1	.....	1	.....	1	.....	.....	1
		Fem..	144	10	20	12	9	7	14	8	16	11	12	13	12
44	Cancer of skin...	Total.	76	6	3	4	2	5	7	8	8	9	8	6	10
		Males.	53	3	.....	2	1	5	6	7	5	6	7	4	7
		Fem..	23	3	3	2	1	.....	1	1	3	3	1	2	3
45	Cancer of other organs.....	Total.	235	17	19	25	14	31	16	22	17	20	17	17	20
		Males.	137	9	13	13	6	18	9	10	10	11	16	12	11
		Fem..	98	8	6	12	8	13	7	13	7	9	1	5	9
46	Tumors.....	Total.	40	1	2	3	4	3	8	.....	4	4	5	4	2
		Males.	14	1	.....	.....	1	2	3	.....	2	1	3	.....	.....
		Fem..	26	.....	2	3	3	1	5	.....	2	3	2	4	1
47, 48	Rheumatism.....	Total.	221	24	20	30	29	17	18	15	12	17	13	14	12
		Males.	105	7	6	18	14	11	6	9	4	7	10	7	6
		Fem..	116	17	14	12	15	6	12	6	8	10	3	7	6
50	Diabetes.....	Total.	264	31	23	28	23	18	20	19	14	16	21	26	25
		Males.	142	19	17	15	8	12	12	8	4	11	12	9	15
		Fem..	122	12	6	13	15	6	8	11	10	5	9	17	10
53, 54	Anemia.....	Total.	195	19	14	20	23	18	22	19	13	14	8	14	11
		Males.	76	10	5	7	9	3	7	5	5	6	4	8	7
		Fem..	119	9	9	13	14	15	15	14	8	8	4	6	4
56	Alcoholism.....	Total.	62	8	.....	2	6	1	5	7	3	7	7	6	10
		Males.	55	7	.....	2	6	1	4	6	2	7	7	6	7
		Fem..	7	1	.....	.....	.....	.....	1	1	1	.....	.....	.....	3
57-59	Chronic poison-ings.....	Total.	18	1	1	2	.....	1	4	1	3	.....	1	1	3
		Males.	9	1	1	.....	.....	.....	2	1	2	.....	.....	1	1
		Fem..	9	.....	.....	2	.....	1	2	.....	1	.....	1	.....	2
55, etc.	Other general diseases.....	Total.	51	1	4	4	3	6	7	5	5	6	5	2	3
		Males.	18	.....	1	3	2	2	1	1	2	1	1	1	3
		Fem..	33	1	3	1	1	4	6	4	3	5	4	1	.....
60	Encephalitis.....	Total.	82	5	10	6	6	8	13	4	7	6	6	3	8
		Males.	44	2	6	2	2	5	8	3	4	2	4	1	5
		Fem..	38	3	4	4	4	3	5	1	3	4	2	2	3
61	Meningitis.....	Total.	427	37	21	46	41	42	36	51	37	42	25	20	29
		Males.	233	19	13	23	25	16	21	33	21	27	12	8	15
		Fem..	194	18	8	23	16	26	15	18	16	15	13	12	14
62	Locomotor ataxia	Total.	39	4	2	6	2	3	7	.....	2	4	2	3	4
		Males.	27	2	.....	6	1	3	5	.....	1	2	2	2	3
		Fem..	12	2	2	.....	1	.....	2	.....	1	2	.....	1	1
63	Other diseases of spinal cord..	Total.	131	13	11	9	11	13	9	14	13	12	9	12	5
		Males.	79	6	6	6	6	7	6	9	7	9	5	8	4
		Fem..	52	7	5	3	5	6	3	5	6	3	4	4	1
64	Apoplexy.....	Total.	1,243	109	111	125	110	108	93	73	91	97	105	99	122
		Males.	688	63	64	64	62	55	48	37	47	58	58	46	66
		Fem..	575	46	47	61	48	53	45	36	44	39	47	53	56
65	Softening of brain.....	Total.	105	9	13	8	9	9	6	9	8	12	7	9	6
		Males.	63	5	10	6	5	6	3	5	2	7	4	7	3
		Fem..	42	4	3	2	4	3	3	4	6	5	3	2	3
66	Paralysis.....	Total.	799	76	81	86	76	61	63	56	41	67	68	56	68
		Males.	421	33	43	46	50	28	36	34	18	35	35	27	36
		Fem..	378	43	38	40	26	33	27	22	23	32	33	29	32
67	General paralysis of insane....	Total.	139	10	14	22	11	14	8	14	7	6	7	12	14
		Males.	98	8	10	17	6	10	5	10	5	6	2	8	11
		Fem..	41	2	4	5	5	4	3	4	2	.....	5	4	3

## CAUSES OF DEATH.

23

ages and sex, during the year 1901. (Stillbirths excluded.)

Ages in years under five.					Ages by five-year periods.																	Unk.	Classification No.
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	43
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	44
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	45
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	46
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	47
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	48
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	50
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	53-54
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	56
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	57-59
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	55, etc.
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	60
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	61
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	62
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	63
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	64
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	65
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	66
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	67

TABLE III.—Continued.—Causes of death in Michigan, by months,

Classification No.	Causes of death, 1901.	Sex.	Total deaths, 1901.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
68	Other forms of mental disease	Total.	80	5	7	10	9	4	3	6	3	9	8	6	10
		Males.	40	2	2	2	6	1	3	3	2	7	4	3	5
		Fem..	40	3	5	8	3	3	.....	3	1	2	4	3	5
(74)	Other diseases of the brain...	Total.	98	10	11	8	11	9	3	12	9	8	4	7	6
		Males.	56	7	5	5	3	5	1	4	9	7	2	3	5
		Fem..	42	3	6	3	8	4	2	8	.....	1	2	4	1
69	Epilepsy.....	Total.	177	12	19	15	18	15	17	12	13	13	7	16	20
		Males.	99	6	11	8	13	11	7	10	7	3	4	8	11
		Fem..	78	6	8	7	5	4	10	2	6	10	3	8	9
70, 71	Convulsions.....	Total.	550	49	46	68	49	45	58	56	34	39	30	39	37
		Males.	301	31	29	38	35	23	29	27	16	19	17	23	14
		Fem..	249	18	17	30	14	22	29	29	18	20	13	16	23
72	Tetanus.....	Total.	31	3	3	3	1	1	4	4	2	2	4	2	2
		Males.	23	3	1	2	1	1	4	3	1	2	2	2	1
		Fem..	8	.....	2	1	.....	.....	.....	1	1	.....	2	.....	1
73-76	Other diseases of nervous system.....	Total.	111	11	8	14	9	11	11	6	7	6	11	9	8
		Males.	61	5	4	9	7	5	6	3	4	4	6	5	3
		Fem..	50	6	4	5	2	6	5	3	3	2	5	4	5
77	Pericarditis.....	Total.	55	4	7	8	7	4	5	3	2	5	2	3	5
		Males.	35	2	5	5	6	2	3	2	2	2	.....	2	4
		Fem..	20	2	2	3	1	2	2	1	.....	3	2	1	1
78	Endocarditis....	Total.	102	9	7	4	12	12	9	8	8	9	9	8	7
		Males.	52	5	1	.....	4	6	5	6	6	6	6	4	3
		Fem..	50	4	6	4	8	6	4	2	2	3	3	4	4
79	Heart disease....	Total.	2,691	246	240	236	259	246	212	201	196	209	183	222	241
		Males.	1,521	127	154	128	146	135	116	116	118	116	99	120	146
		Fem..	1,170	119	86	108	113	111	96	85	78	93	84	102	95
80	Angina pectoris	Total.	192	14	16	21	11	23	20	10	10	19	17	15	16
		Males.	108	8	9	15	6	13	8	6	7	11	9	7	9
		Fem..	84	6	7	6	5	10	12	4	3	8	8	8	7
81	Diseases of arteries.	Total.	117	8	11	9	8	8	8	10	7	12	11	17	8
		Males.	80	4	10	7	5	6	4	6	4	8	7	14	5
		Fem..	37	4	1	2	3	2	4	4	3	4	4	3	3
82	Embolism and thrombosis....	Total.	60	7	7	9	2	8	3	5	4	4	6	4	1
		Males.	31	3	3	3	2	6	1	3	2	2	4	2	.....
		Fem..	29	4	4	6	.....	2	2	2	2	2	2	2	1
83	Diseases of veins	Total.	14	3	3	.....	.....	2	2	.....	1	.....	1	1	1
		Males.	6	2	1	.....	.....	1	1	.....	.....	.....	1	.....	1
		Fem..	8	1	2	.....	.....	2	1	.....	1	.....	.....	.....	.....
84	Diseases of lymphatics....	Total.	5	.....	.....	1	.....	2	.....	.....	.....	1	.....	.....	1
		Males.	4	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	1
		Fem..	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
85, 86	Other diseases of circulatory system.....	Total.	55	5	5	8	2	8	5	6	3	1	.....	9	3
		Males.	29	4	3	4	2	5	.....	2	2	1	.....	3	3
		Fem..	26	1	2	4	.....	3	5	4	1	.....	.....	6	.....
88a	Laryngitis.....	Total.	31	2	4	2	3	2	.....	2	.....	2	6	4	4
		Males.	23	.....	2	2	3	2	.....	2	.....	1	4	4	3
		Fem..	8	2	2	.....	.....	.....	.....	.....	.....	1	2	.....	1
(88)	Other diseases of the larynx.	Total.	29	4	2	1	5	2	.....	4	1	1	5	2	2
		Males.	16	2	.....	1	5	.....	.....	3	1	1	2	.....	1
		Fem..	13	2	2	.....	.....	2	.....	1	.....	.....	3	2	1
89	Diseases of the thyroid body..	Total.	11	4	1	1	1	1	1	.....	.....	.....	1	1	.....
		Males.	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Fem..	10	3	1	1	1	1	1	.....	.....	.....	1	1	.....

## CAUSES OF DEATH.

25

ages and sex, during the year 1901. (Stillbirths excluded.)

Ages in years under five.					Ages by five-year periods.																	Classification No.
0.	1.	2.	3.	4.	0 to 4.	5 to 6.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	
.....	.....	.....	.....	.....	.....	.....	1	4	2	.....	2	6	8	3	7	5	6	11	15	5	5	68
.....	.....	.....	.....	.....	.....	.....	.....	2	1	.....	1	4	1	1	3	4	3	7	7	4	2	
.....	.....	.....	.....	.....	.....	.....	1	2	1	.....	1	2	7	2	4	1	3	4	8	1	3	(74)
9	1	.....	.....	.....	10	9	2	5	2	3	6	3	6	10	6	10	5	5	8	2	5	
7	1	.....	.....	.....	8	6	1	2	1	2	2	.....	3	6	4	5	4	3	3	1	4	69
2	.....	.....	.....	.....	2	3	1	3	1	1	4	3	3	4	2	5	1	2	5	1	1	
9	1	.....	2	.....	12	4	11	12	14	22	9	17	13	10	9	9	7	5	10	7	3	70
5	1	.....	1	.....	7	3	6	9	10	11	3	7	6	5	5	5	3	4	6	4	2	
4	.....	.....	1	.....	5	1	5	3	4	11	6	10	7	5	4	4	4	1	4	3	1	71
458	46	18	1	2	525	7	2	2	4	1	.....	1	1	.....	1	.....	2	.....	2	.....	2	
261	19	8	1	1	290	5	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	2	72
197	27	10	.....	1	235	2	1	2	3	1	.....	1	.....	.....	1	.....	2	.....	1	.....	1	
12	1	.....	.....	.....	13	3	4	2	1	1	1	1	.....	1	.....	1	1	1	.....	.....	1	73
8	1	.....	.....	.....	9	2	3	2	.....	1	1	1	.....	1	.....	1	1	.....	.....	.....	1	
4	.....	.....	.....	.....	4	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	76
13	3	2	1	2	21	7	3	8	2	3	2	8	3	8	7	8	11	6	5	4	5	
7	2	1	1	2	13	2	1	4	1	2	1	5	1	5	3	6	8	3	2	1	3	77
6	1	1	.....	.....	8	5	2	4	1	1	1	3	2	3	4	2	3	3	3	1	2	
1	.....	.....	1	1	3	3	2	1	2	1	2	2	2	1	2	6	.....	7	4	12	5	78
1	.....	.....	1	1	2	2	.....	1	2	1	2	1	1	1	1	4	.....	4	3	9	3	
1	.....	.....	1	2	2	2	.....	.....	.....	.....	.....	1	1	1	1	2	.....	3	1	3	2	79
1	1	3	1	6	2	4	4	8	1	7	7	4	7	2	5	7	15	9	9	9	3	
1	1	1	1	4	1	3	3	1	.....	2	2	2	1	.....	4	4	8	5	6	6	2	80
.....	.....	2	.....	2	2	1	1	7	1	5	5	2	6	2	1	3	7	4	3	3	1	
58	7	1	7	2	75	12	41	27	35	37	53	73	105	123	171	227	279	379	372	355	321	81
35	4	1	2	1	43	4	20	14	18	13	29	34	57	75	95	125	162	227	216	200	184	
23	3	.....	5	1	32	8	21	13	17	24	24	39	48	48	76	102	117	152	156	155	137	82
1	.....	1	.....	.....	2	.....	2	7	6	4	6	7	11	18	22	19	30	25	17	16	.....	
1	.....	1	.....	.....	1	.....	.....	1	3	1	3	1	5	5	11	16	11	17	13	13	10	83
.....	.....	1	.....	.....	1	.....	2	6	3	3	5	2	6	7	6	8	13	12	4	6	.....	
1	.....	.....	.....	.....	1	.....	2	.....	1	1	2	2	4	4	10	9	16	19	18	28	.....	84
1	.....	.....	.....	.....	1	.....	1	.....	1	.....	1	2	2	2	3	6	9	11	13	21	.....	
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	6	5	7	.....	85
2	.....	.....	.....	.....	2	1	1	3	1	2	4	1	3	1	2	4	7	6	7	8	7	
1	.....	.....	.....	.....	1	1	.....	2	1	1	1	1	2	.....	1	2	3	5	4	5	3	86
1	.....	.....	.....	.....	1	1	1	1	1	1	3	1	1	1	1	2	4	1	3	3	4	
.....	.....	.....	.....	.....	.....	.....	1	1	1	2	2	.....	.....	.....	1	1	3	.....	1	.....	1	87
.....	.....	.....	.....	.....	.....	.....	1	1	1	1	1	2	.....	.....	.....	1	1	1	.....	.....	1	
2	2	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	88
2	1	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	89
20	2	1	1	1	25	1	.....	3	4	1	2	2	.....	1	2	3	2	6	3	.....	.....	
8	1	1	1	1	12	.....	.....	3	1	.....	2	2	.....	.....	.....	2	.....	4	3	.....	.....	88a
12	1	.....	.....	.....	13	1	.....	.....	1	.....	.....	.....	.....	1	2	1	2	2	.....	.....	.....	
5	2	1	6	2	16	6	2	2	2	.....	.....	.....	1	.....	.....	1	.....	.....	1	.....	.....	(88)
3	1	.....	5	2	11	5	2	1	2	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	
2	1	1	1	.....	5	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	89
7	6	2	4	.....	19	6	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	1	
5	4	.....	.....	.....	9	3	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	1	89
2	2	2	4	.....	10	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....	4	1	.....	.....	1	89
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....	4	1	.....	.....	1	
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	4	1	.....	.....	1	89
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	

TABLE III.- Continued.—Causes of death in Michigan, by months,

Classification No.	Causes of death, 1901.	Sex.	Total deaths, 1901.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
90	Acute bronchitis	Total.	535	92	89	93	63	32	22	11	7	18	17	42	49
		Males.	276	50	39	47	37	20	14	7	4	6	7	21	24
		Fem..	259	42	50	46	26	12	8	4	3	12	10	21	25
91	Chronic bronchitis.....	Total.	334	41	27	41	36	32	30	13	15	18	23	23	35
		Males.	130	15	10	17	13	10	17	7	2	12	8	6	13
		Fem..	204	26	17	24	23	22	13	6	13	6	15	17	22
92	Broncho-pneumonia.....	Total.	489	74	69	101	50	32	24	10	9	10	31	29	50
		Males.	239	39	40	49	19	18	8	5	5	6	14	13	23
		Fem..	250	35	29	52	31	14	16	5	4	4	17	16	27
93	Pneumonia.....	Total.	2,412	334	397	372	311	197	121	54	39	68	96	155	268
		Males.	1,352	174	230	213	171	119	72	28	23	35	59	78	150
		Fem..	1,060	160	167	159	140	78	49	26	16	33	37	77	118
94	Pleurisy.....	Total.	89	10	7	7	11	8	6	8	4	5	8	6	9
		Males.	41	6	2	3	3	4	4	4	4	5	4	4	3
		Fem..	48	4	5	4	8	4	2	4	.....	5	4	2	6
95	Congestion of lungs.....	Total.	194	26	21	24	23	15	12	3	10	12	15	12	21
		Males.	102	14	4	11	13	10	7	3	6	9	7	6	12
		Fem..	92	12	17	13	10	5	5	.....	4	3	8	6	9
96	Gangrene of lungs.....	Total.	11	.....	2	3	2	1	.....	1	1	1	.....	.....	.....
		Males.	8	.....	1	3	2	1	.....	.....	1	.....	.....	.....	.....
		Fem..	3	.....	1	.....	.....	.....	.....	1	.....	1	.....	.....	.....
97,98	Asthma and emphysema....	Total.	122	20	10	9	13	7	6	4	6	8	13	8	18
		Males.	60	10	5	5	6	5	2	4	5	1	8	3	6
		Fem..	62	10	5	4	7	2	4	.....	1	7	5	5	12
99a	Hemorrhage of lungs.....	Total.	39	2	3	1	3	6	3	7	4	2	4	3	1
		Males.	26	.....	2	.....	2	5	3	3	4	2	2	3	.....
		Fem..	13	2	1	1	1	1	.....	4	.....	.....	2	.....	1
(99)	Other diseases of respiratory organs.....	Total.	81	8	11	8	5	8	3	3	5	8	8	6	8
		Males.	44	3	6	3	5	5	2	1	2	3	6	4	4
		Fem..	37	5	5	5	.....	3	1	2	3	5	2	2	4
100	Diseases of the mouth.....	Total.	28	1	1	.....	4	2	2	1	1	9	3	3	1
		Males.	20	.....	1	.....	1	2	.....	1	.....	9	3	2	1
		Fem..	8	1	.....	.....	3	.....	2	.....	1	.....	.....	1	.....
101a	Tonsillitis.....	Total.	30	2	1	3	4	1	1	1	3	7	2	2	3
		Males.	14	.....	1	1	3	.....	1	1	1	2	1	1	2
		Fem..	16	2	.....	2	1	1	.....	.....	2	5	1	1	1
(101)	Other diseases of pharynx.....	Total.	29	2	2	3	4	4	1	2	2	3	2	1	3
		Males.	14	1	2	2	2	1	.....	1	1	2	1	.....	2
		Fem..	15	1	.....	1	2	3	1	2	1	1	1	1	1
103	Ulcer of stomach	Total.	75	9	5	7	5	11	4	5	5	10	4	7	3
		Males.	36	3	3	4	3	6	2	3	3	5	1	2	2
		Fem..	39	6	2	3	2	5	2	3	2	5	3	5	1
104a	Gastritis.....	Total.	189	15	16	16	18	29	8	14	16	12	17	13	15
		Males.	84	4	7	7	10	14	.....	3	12	4	7	7	9
		Fem..	105	11	9	9	8	15	8	11	4	8	10	6	6
(104)	Other diseases of stomach.....	Total.	244	21	12	25	25	31	22	21	18	19	15	16	19
		Males.	130	13	6	13	10	15	11	13	11	10	8	13	7
		Fem..	114	8	6	12	15	16	11	8	7	9	7	3	12
	Dentition .....	Total.	9	1	1	1	1	1	.....	.....	.....	1	1	1	1
		Males.	5	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
		Fem..	4	.....	.....	1	1	1	.....	.....	.....	.....	.....	1	.....
105	Diarrhea and enteritis (under 2 years).....	Total.	1,768	47	40	55	57	61	107	255	430	451	169	50	46
		Males.	988	29	21	23	33	38	57	157	244	240	93	26	27
		Fem..	779	18	19	32	24	23	50	98	185	211	76	24	19
		Unk...	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....



## CAUSES OF DEATH.

27

ages and sex, during the year 1901. (Stillbirths excluded.)

Ages in years under five.					Ages by five-year periods.																	Classification No.	
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +		Unk.
321	81	19	9	9	439	4	2	1	1	1	...	3	...	2	1	3	6	12	13	14	31	2	90
179	43	8	4	7	241	...	1	...	1	1	...	...	...	...	1	2	2	5	6	4	11	1	
142	38	11	5	2	198	4	1	1	...	...	...	3	...	2	...	1	4	7	7	10	20	1	
5	5	1	1	1	13	4	...	2	4	12	7	7	5	6	13	23	17	42	50	64	64	1	91
1	2	1	1	1	6	3	...	1	2	3	4	1	1	2	5	10	6	18	17	25	25	1	
4	3	...	...	...	7	1	...	1	2	9	3	6	4	4	8	13	11	24	33	39	39	...	
228	51	23	7	9	318	15	5	4	3	2	6	6	5	4	9	12	13	21	22	16	28	...	92
126	30	9	5	5	175	5	3	2	2	1	2	3	2	...	2	5	6	10	8	1	12	...	
102	21	14	2	4	143	10	2	2	1	1	4	3	3	4	7	7	7	11	14	15	16	...	
486	116	49	24	30	705	61	54	84	73	93	84	99	104	103	115	110	122	150	155	138	158	4	93
268	60	27	11	16	382	35	31	53	46	53	44	68	68	61	70	71	64	76	77	66	85	2	
218	56	22	13	14	323	26	23	31	27	40	40	31	36	42	45	39	58	74	78	72	73	2	
3	1	2	...	...	6	1	2	4	7	5	5	4	5	8	3	8	5	10	3	6	7	...	94
2	1	...	...	...	3	...	1	...	4	3	4	1	3	7	1	2	1	5	2	1	3	...	
1	...	2	...	...	3	1	1	4	3	2	1	3	2	1	2	6	4	5	1	5	4	...	
77	11	4	3	4	99	1	3	...	5	2	2	3	...	5	9	2	7	10	8	16	21	1	95
45	4	3	2	3	57	...	1	...	2	...	1	3	...	4	4	1	4	7	5	6	6	1	
22	7	1	1	1	42	1	2	...	3	2	1	...	...	1	5	1	3	3	3	10	15	...	
...	...	...	1	...	1	...	1	...	...	...	2	1	...	1	3	...	...	2	...	...	...	...	96
...	...	...	1	...	1	...	1	...	...	...	1	1	...	...	3	...	...	1	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	1	...	...	...	...	
...	...	1	...	...	1	1	...	4	...	2	2	3	5	4	8	7	12	12	23	20	18	...	97, 98
...	...	1	...	...	1	1	...	1	...	1	1	1	1	2	4	5	6	5	12	9	10	...	
...	...	...	...	...	...	...	3	...	1	1	1	2	4	2	4	2	6	7	11	11	8	...	
3	...	...	...	...	3	...	1	...	1	1	1	6	...	2	3	5	4	2	4	2	4	...	99a
1	...	...	...	...	1	...	1	...	1	...	...	5	...	2	3	3	4	1	2	1	2	...	
2	...	...	...	...	2	...	...	...	...	1	1	1	...	...	2	...	2	1	2	1	2	...	
18	...	...	1	1	20	...	5	6	3	5	...	1	7	1	3	3	4	7	9	2	5	...	(99)
12	...	...	...	...	12	...	2	2	1	3	...	...	4	1	3	2	3	4	5	...	...	...	
6	...	...	1	1	8	...	3	4	2	2	...	1	3	...	1	...	1	3	4	2	3	...	
21	2	2	...	...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	100
16	1	1	...	...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	
5	1	1	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
5	2	2	2	1	12	6	3	3	2	2	...	1	...	...	1	...	...	...	...	...	...	...	101a
4	1	2	1	...	8	...	2	1	2	...	...	1	...	...	...	...	...	...	...	...	...	...	
1	1	...	1	1	4	6	1	2	...	2	...	...	...	...	1	...	...	...	...	...	...	...	
2	2	1	2	...	7	4	1	...	...	...	1	...	1	3	2	2	4	2	1	...	1	...	(101)
...	...	1	1	...	...	...	1	...	...	...	1	...	...	3	...	1	4	1	1	...	...	...	
2	2	...	1	...	5	4	...	...	...	...	...	...	1	...	2	1	...	1	...	...	1	...	
...	...	...	...	...	3	1	...	3	2	1	...	5	6	7	5	6	9	10	6	7	4	...	103
...	...	...	...	...	1	1	...	1	1	...	2	2	2	6	...	4	7	2	4	3	2	...	
...	...	...	...	...	2	...	...	...	2	1	1	3	4	1	5	2	2	8	4	4	2	...	
39	7	2	2	...	50	2	5	4	2	4	3	3	11	7	9	9	11	16	18	14	21	...	104a
21	4	2	1	...	28	1	...	...	...	1	...	2	7	3	5	4	7	6	6	4	10	...	
18	3	...	1	...	22	1	5	4	2	3	3	1	4	4	4	5	4	10	12	10	11	...	
82	16	1	...	...	99	4	1	1	2	5	3	3	8	7	8	9	10	18	18	25	22	1	(104)
45	10	...	...	...	55	2	1	1	1	3	...	2	4	2	3	5	8	8	10	12	12	1	
37	6	1	...	...	44	2	...	...	1	2	3	1	4	5	5	4	2	10	8	13	10	...	
4	4	1	...	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	105
2	2	1	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	2	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1474	293	...	...	...	1767	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	105
832	156	...	...	...	988	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
642	136	...	...	...	778	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	



TABLE III.- Continued.—Causes of death in Michigan, by months,

Classification No.	Causes of death, 1901.	Sex.	Total deaths, 1901.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
106	Diarrhea and enteritis (over 2 years).....	(Total. Males. Fem..	526 268 258	30 18 12	28 16 12	35 18 17	33 16 17	31 12 19	32 17 15	40 23 17	81 36 45	100 53 47	58 30 28	31 14 17	27 15 12
108a	Hernia.....	(Total. Males. Fem..	93 52 41	10 7 3	8 6 2	9 2 7	10 5 5	5 4 1	9 5 5	10 5 1	7 6 1	5 2 3	5 4 1	11 7 4	4 2 2
(108)	Obstruction of intestines.....	(Total. Males. Fem..	239 116 123	18 7 11	18 7 11	19 10 9	16 7 9	21 10 11	23 13 10	19 11 8	11 2 9	25 14 11	24 10 14	16 8 8	29 17 12
107, 109	Other diseases of intestines....	(Total. Males. Fem..	76 36 40	7 4 3	10 4 6	7 3 4	8 3 5	5 2 3	5 2 3	3 2 1	7 5 1	5 4 3	11 8 2	3 1 2	5 1 4
110	Acute yellow atrophy of liver	(Total. Males. Fem..	18 8 10	1 ..... 1	2 ..... 1	..... ..... .....	2 ..... 2	..... ..... .....	3 1 2	2 1 1	2 2 1	1 ..... 1	4 2 2	1 1 .....	..... ..... .....
111	Hydatid tumors of liver.....	(Total. Males. Fem..	0 0 0	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
112	Cirrhosis of liver.	(Total. Males. Fem..	211 129 82	17 9 8	17 12 5	16 9 7	23 13 10	21 13 8	17 10 7	19 12 7	24 11 13	13 7 6	17 13 4	15 12 3	12 8 4
113	Biliary calculi....	(Total. Males. Fem..	49 13 36	2 1 1	6 3 3	3 1 2	4 ..... 4	3 1 2	5 1 2	4 1 3	5 2 3	8 1 7	3 1 2	2 1 1	4 ..... 4
114	Other diseases of liver.....	(Total. Males. Fem..	220 121 99	22 13 9	17 10 7	20 10 10	21 11 10	10 5 5	14 11 8	17 11 6	16 6 10	22 11 11	21 11 10	17 10 10	23 15 8
115	Diseases of spleen.....	(Total. Males. Fem..	7 3 4	..... ..... .....	..... ..... .....	1 1 1	1 ..... 1	1 1 .....	1 1 .....	..... ..... .....	1 ..... 1	..... ..... .....	..... ..... .....	1 ..... 1	1 ..... 1
116	Peritonitis.....	(Total. Males. Fem..	277 121 156	26 9 17	22 11 11	28 7 21	23 5 18	28 9 19	24 16 8	20 10 10	23 12 11	25 13 12	22 10 12	16 8 8	20 11 9
118	Appendicitis.....	(Total. Males. Fem..	263 155 108	21 12 9	15 5 10	23 12 11	29 15 14	26 19 7	17 13 4	19 10 9	34 20 14	19 11 8	25 17 8	16 11 5	19 10 9
117	Other diseases of digestive system	(Total. Males. Fem..	3 2 1	..... ..... .....	..... ..... .....	..... ..... .....	1 1 .....	..... ..... .....	..... ..... .....	1 ..... 1	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	1 1 .....
119	Acute nephritis..	(Total. Males. Fem..	71 42 29	9 6 3	2 1 1	9 6 3	6 4 2	8 2 6	7 4 3	2 2 .....	6 4 2	4 3 1	5 4 1	5 3 2	8 3 5
120	Bright's disease..	(Total. Males. Fem..	1,050 617 433	106 65 41	82 44 38	100 56 44	79 46 33	100 56 44	84 52 32	75 39 36	89 45 44	82 48 34	77 45 32	78 53 25	98 68 30
121	Other diseases of kidneys.....	(Total. Males. Fem..	107 71 36	16 9 7	11 5 6	1 ..... 1	15 13 2	5 4 1	8 5 3	8 6 2	8 7 2	9 7 2	10 8 2	8 4 4	8 4 4
122	Calculi of urinary tract.....	(Total. Males. Fem..	14 11 3	2 1 1	..... ..... .....	1 1 .....	1 ..... .....	..... ..... .....	4 3 1	2 ..... 1	2 ..... .....	1 1 .....	1 1 .....	..... ..... .....	..... ..... .....
123	Diseases of bladder.....	(Total. Males. Fem..	138 123 15	12 11 1	9 7 2	16 14 2	9 9 .....	14 13 1	13 11 2	15 12 3	11 9 2	11 10 1	7 7 .....	8 7 1	13 13 .....

## CAUSES OF DEATH.

29

ages and sex, during the year 1901. (Stillbirths excluded.)

Ages in years under five.					Ages by five-year periods.																	Classification No.	
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +		Unk.
.....	.....	77	30	12	119	22	14	15	14	23	8	12	12	10	28	29	40	40	43	42	54	1	106
.....	.....	45	13	5	63	12	6	7	10	11	2	7	4	4	10	15	16	20	29	19	32	1	
.....	.....	32	17	7	56	10	8	8	4	12	6	5	8	6	18	14	24	20	14	23	22	.....	108a
15	.....	.....	.....	.....	15	.....	.....	.....	1	1	4	2	3	4	5	6	4	15	15	10	8	.....	
15	.....	.....	.....	.....	15	.....	.....	.....	1	1	3	1	.....	.....	1	1	4	7	6	7	5	.....	(108)
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	3	4	4	5	8	9	3	3	.....		
29	3	6	4	1	43	5	5	12	11	10	7	6	11	20	9	17	18	21	20	15	9	.....	(107, 109)
16	1	3	.....	1	21	2	2	6	6	4	1	3	4	12	3	12	7	10	11	8	4	.....	
13	2	3	4	.....	22	3	3	6	5	6	6	3	7	8	6	5	11	11	9	7	5	.....	110
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
18	3	3	.....	.....	24	2	1	1	1	3	2	2	1	1	5	2	3	9	6	2	11	.....	111
4	1	2	.....	.....	7	1	1	1	1	3	.....	.....	.....	.....	3	1	1	5	1	2	8	.....	
14	2	1	.....	.....	17	1	.....	.....	.....	.....	2	1	1	1	2	1	2	4	5	.....	3	.....	112
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	113
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
3	.....	.....	.....	.....	3	.....	1	2	1	3	5	6	12	18	24	17	27	39	28	18	7	.....	114
1	.....	.....	.....	.....	1	.....	1	1	1	2	3	5	10	11	19	7	18	24	14	9	4	.....	
2	.....	.....	.....	.....	2	.....	1	1	.....	1	2	1	2	7	5	10	9	15	14	9	3	.....	115
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	116
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
7	3	1	.....	1	12	2	3	3	5	6	8	9	8	12	19	18	27	25	28	19	16	.....	117
4	1	1	.....	1	7	1	1	.....	2	2	6	5	4	6	12	10	16	14	18	6	11	.....	
3	2	.....	.....	.....	5	1	2	3	3	4	2	4	4	6	7	8	11	11	10	13	5	.....	118
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	2	.....	.....	.....	2	.....	.....	.....	.....	1	.....	1	.....	.....	1	.....	.....	1	.....	1	.....	.....	119
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
17	9	3	3	3	35	12	17	31	28	25	19	9	18	14	7	13	8	10	14	9	7	1	120
7	4	1	1	3	16	6	8	14	10	11	2	4	5	7	1	7	4	6	10	5	4	1	
10	5	2	2	.....	19	6	9	17	18	14	17	5	13	7	6	6	4	4	4	4	3	.....	121
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	2	.....	1	4	7	20	45	52	31	29	16	21	11	5	4	8	4	5	2	1	2	.....	122
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	2	.....	1	3	6	9	16	24	15	13	6	8	3	.....	1	3	3	.....	1	.....	.....	.....	123
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	124
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
4	1	3	4	3	15	5	5	1	2	4	1	2	6	5	4	2	5	5	2	6	1	.....	125
2	1	1	2	2	8	2	3	1	1	1	.....	2	1	4	2	2	4	4	2	4	1	.....	
2	.....	2	2	1	7	3	2	.....	1	3	1	.....	5	1	2	.....	1	1	.....	2	.....	.....	126
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
20	7	4	4	.....	35	9	9	20	30	35	36	35	51	58	74	96	109	123	111	122	95	2	127
12	5	3	1	.....	21	5	4	6	13	12	11	21	26	34	45	54	59	82	72	89	63	.....	
8	2	1	3	.....	14	4	5	14	17	23	25	14	25	24	29	42	50	41	39	33	32	2	128
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
11	.....	.....	2	.....	13	2	.....	.....	.....	6	3	3	5	4	5	7	10	3	16	10	20	.....	129
8	.....	.....	.....	.....	10	.....	.....	.....	.....	2	1	2	1	4	2	4	7	3	11	9	15	.....	
3	.....	.....	.....	.....	3	2	.....	.....	4	4	2	1	4	.....	3	3	3	.....	5	1	5	.....	130
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	1	.....	.....	2	.....	.....	1	3	1	.....	1	1	.....	2	1	.....	1	.....	131
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	2	1	.....	1	1	.....	2	1	.....	1	.....	
5	.....	.....	.....	.....	5	.....	.....	1	1	1	1	.....	3	.....	5	5	11	24	32	12	37	.....	132
4	.....	.....	.....	.....	4	.....	.....	1	1	1	1	.....	3	.....	4	3	10	23	29	11	34	.....	
1	.....	.....	.....	.....	1	.....	.....	.....	.....	1	1	.....	.....	.....	1	2	1	1	3	1	3	.....	133
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

TABLE III.—Continued.—Causes of death in Michigan, by months,

Classification No.	Causes of death, 1901.	Sex.	Total deaths, 1901.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
129	Uterine tumor...	Total.	42	3	3	2	2	6	5	2	6	5	1	2	5
		Males.	42	3	3	2	2	6	5	2	6	5	1	2	5
127-128, 130	Other diseases of uterus.....	Total.	58	2	3	4	7	5	6	6	5	2	9	5	4
		Males.	58	2	3	4	7	5	6	6	5	2	9	5	4
131	Ovarian tumor....	Total.	49	2	4	3	1	6	3	7	6	2	3	8	4
		Males.	49	2	4	3	1	6	3	7	6	2	3	8	4
132a	Diseases of tubes	Total.	2							1			1		
		Males.	2							1			1		
124-126, (132) 133	Other diseases of genito-urinary system.....	Total.	117	9	6	11	10	16	8	10	11	8	9	10	9
		Males.	83	7	4	10	5	14	5	7	5	6	9	6	6
137	Puerperal septi-cemia.....	Total.	267	19	24	45	34	27	16	18	15	15	18	17	19
		Males.	267	19	24	45	34	27	16	18	15	15	18	17	19
138	Puerperal-con-vulsions.....	Total.	81	7	7	7	5	11	5	6	9	3	4	9	8
		Males.	81	7	7	7	5	11	5	6	9	3	4	9	8
134-136, 139-141	Other causes in-cident to child-birth.....	Total.	183	21	21	24	17	23	10	8	10	11	12	10	16
		Males.	183	21	21	24	17	23	10	8	10	11	12	10	16
142	Gangrene.....	Total.	98	5	12	10	8	14	9	4	2	14	4	3	13
		Males.	56	3	7	3	4	7	5	4	1	11	1	1	10
143	Carbuncle.....	Total.	12	1		1	4		2	1	2	1			
		Males.	7				3		2	1	1				
144	Abscess.....	Total.	38	4	4	3	3	3	3	7	1	1	2	4	3
		Males.	22	3	2	2	3	2	1	3		1	1	3	1
145	Other diseases of skin.....	Total.	16	1	2	1		1	2	4	1		1	1	2
		Males.	10												
146	Diseases of bones	Total.	24	2	1	2		4		1	2	4	2	1	5
		Males.	14	2		2		3		1	1	2		1	2
147	Diseases of joints.....	Total.	10		1			1			1	2	2		3
		Males.	41	4	2	6	5	3	3	2	4	4	2	2	4
148, 149	Other diseases of locomotor sys-tem.....	Total.	21	2	1	2	2	3	1	1	2	1	2	1	3
		Males.	20	2	1	4	3		2	1	2	3		1	1
150a	Hydrocephalus..	Total.	3		1			1		1					
		Males.	2		1			1							
150b	Congenital mal-formation of heart (cyanosis)	Total.	1							1					
		Males.	54	5	4	5	5	5	5	6	3	5	4	2	5
(150)	Other congenital malformations.	Total.	27	3	1	1	3	3	3	4	1	1	2	1	4
		Males.	27	2	3	4	2	2	2	2	2	4	2	1	1
150c	Congenital mal-formation of heart (cyanosis)	Total.	101	8	11	11	6	9	7	9	12	9	8	5	6
		Males.	56	5	6	5	4	6	5	5	3	5	6	2	4
(150)	Other congenital malformations.	Total.	45	3	5	6	2	3	2	4	9	4	2	3	2
		Males.	151	14	11	17	14	15	16	10	14	5	6	17	12
(150)	Other congenital malformations.	Total.	81	10	4	7	9	7	9	8	6	3	4	10	4
		Males.	70	4	7	10	5	8	7	7	2	2	2	7	8

## CAUSES OF DEATH.

31

ages and sex, during the year 1901. (Stillbirths excluded.)

Ages in years under five.					Ages by five-year periods.																	Classification No.	
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +		Unk.
										2	2	5	9	7	10	1	1	3			2		} 129
										2	2	5	9	7	10	1	1	3			2		
							1	2	7	7	11	8	8	3	5	1	1	1		3			} 127, 128, 130
							1	2	7	7	11	8	8	3	5	1	1	1		3			
									3	2	2	7	5	6	4	6	6	1	3	2	2		} 131
									3	2	2	7	5	6	4	6	6	1	3	2	2		
										1	1												} 132a
										1	1												
3					3		1	5	8	7	7	5	4	4	3	1	1	12	20	20	23		} 124-126, (132), 133
2					2		1	5	8	7	7	5	2	1	3	1	1	11	20	19	23		
1					1									3				1					
							21	72	71	49	33	16	4									1	} 137
							21	72	71	49	33	16	4									1	
							1	11	26	12	16	9	5	1									} 138
							1	11	26	12	16	9	5	1									
							4	44	37	43	29	19	6									1	} 134-136, 139-141
							4	44	37	43	29	19	6									1	
2				1	3		1		1			2		2	2	5	5	11	11	18	37		} 142
2				1	3		1		1			1		2	1	3	5	6	4	6	14		
														2	2		1	2	2	2	1		} 143
														2	2		1	2	2	2	1		
7	4			1	12	2	1	1		1	4	1	1	1	2	2	2	2		5	1		} 144
6	1				7		1	1			3	1	1	1	1	2	2	2		3			
1	3			1	5	2				1	1		1		1	2				2	1		
16		1			17		1					2				1		1	1		1		} 145
8		1			9		1									1		1					
8					8													1					
10	4	2	1		17	4	3	6			1		1			4	2	1			1	1	} 146
3	1				4	3	5						1			3	2	1			1	1	
7	3	2	1		13	1	3	1			1					1							
1					1	1											1						} 147
1					1												1						
										1							1						} 148
										1							1						
43	2	2	2		49	3		1	1														} 150a
20	1	1	1		22	3		1	1														
23	1	1	2		27																		
96	2	1	1		100			1															} 150b
54					55																		
42	2	1			45																		
141	6	3			150							1											} (150)
73	5	2			80							1											
68	1	1			70																		

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE III.—Continued.—Causes of death in Michigan, by months,

Classification No.	Causes of death, 1901.	Sex.	Total deaths, 1901.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
151a	Premature birth.	Total.	524	62	38	46	53	44	39	41	35	36	40	47	43
		Males.	308	34	26	29	29	27	25	19	21	21	26	24	27
		Fem..	215	28	12	16	24	17	14	22	14	15	14	23	16
		Unk...	1			1									
(151) 152 153	Congenital debility.....	Total.	677	62	58	68	59	52	62	60	53	62	51	44	46
		Males.	405	35	34	42	32	27	47	40	37	39	28	23	21
		Fem..	270	27	24	25	27	25	15	20	16	22	23	21	25
		Unk...	2			1						1			
154	Old age.....	Total.	1,193	114	121	128	119	94	85	92	84	78	92	77	109
		Males.	573	51	62	67	57	42	38	49	44	32	44	38	49
		Fem..	620	63	59	61	62	52	47	43	40	46	48	39	60
155	Suicide by poison.	Total.	76	2	7	4	6	1	11	5	10	6	13	4	7
		Males.	47	2	3	2	4		11	2	7	2	7	3	4
		Fem..	29		4	2	2	1		3	3	4	6	1	3
156	Suicide by asphyxia.....	Total.													
		Males.													
		Fem..													
157	Suicide by hanging.....	Total.	50	1	3	7	6	3	4	4	4	2	7	4	5
		Males.	38	1	3	4	4	2	3	3	3	1	7	4	3
		Fem..	12			3	2	1	1	1	1	1			2
158	Suicide by drowning.....	Total.	20				1		2	3	4	3	4	3	
		Males.	14						2	3	3	1	3	1	
		Fem..	6				1				1	2	1	2	
159	Suicide by firearms.....	Total.	54	6	3	2	5	5	2	6	4	5	6	6	4
		Males.	51	6	3	2	5	5	2	5	4	4	6	5	4
		Fem..	3							1		1		1	
160	Suicide by cutt'g instruments....	Total.	18	2	1	3	2	1	2	2	1		1	1	2
		Males.	13	2	1	2	1	1	2	1	1			1	1
		Fem..	5			1	1			1			1		1
161	Suicide by jumping from high places.....	Total.	1												1
		Males.	1												1
		Fem..													
162	Suicide by crushing.....	Total.	2					1	1						
		Males.	1					1							
		Fem..	1						1						
163	Suicide by other or unspecified means.....	Total.	17	2	2		1		1	3	2		3	2	1
		Males.	11	2	1				1	1	1		3	1	1
		Fem..	6		1		1			2	1			1	
164. 165	Fractures and dislocations....	Total.	223	19	16	16	13	23	12	15	25	19	21	17	27
		Males.	168	11	14	8	8	19	8	12	23	11	18	13	23
		Fem..	55	8	2	8	5	4	4	3	2	8	3	4	4
167	Burns and scalds.	Total.	178	15	17	10	8	20	13	9	11	12	17	23	23
		Males.	80	12	8	5	2	10	2	5	5	5	3	12	11
		Fem..	98	3	9	5	6	10	11	4	6	7	14	11	12
169	Heat and sun-stroke.....	Total.	55						12	37	1	5			
		Males.	36						8	24		4			
		Fem..	19						4	13	1	1			
170	Cold and freezing	Total.	14	1	3	2	1					1	1	1	4
		Males.	14	1	3	2	1					1	1	1	4
		Fem..													
(171)	Lightning.....	Total.	28					2	7	15	3	1			
		Males.	21					1	6	13	1				
		Fem..	7					1	1	2	2	1			

## 33

Ages in years under five.					Ages by five-year periods.																	Classification No.	
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +		Unk.
524					524																		151a
308					308																		
215					215																		
1					1																		(151) 152 153
677					677																		
405					405																		
270					270																		154
2					2																		
																							155
																							156
																							157
																							158
																							159
																							160
																							161
																							162
																							163

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE III.—Concluded.—Causes of death in Michigan, by months.

Classification No.	Causes of death, 1901.	Sex.	Total deaths, 1901.	Months of death, 1901.											
				Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
172	Drowning .....	Total.	299	7	3	6	12	32	49	74	41	40	9	17	9
		Males.	264	6	3	4	11	24	45	68	36	36	7	15	9
		Fem..	34	1	.....	2	1	8	4	6	4	4	2	2	.....
		Unk..	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
173	Inanition.....	Total.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Fem..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
174	Inhalation of poisonous gases	Total.	16	.....	.....	2	2	1	1	.....	1	3	.....	6	.....
		Males.	10	.....	.....	1	2	.....	1	.....	1	3	.....	2	.....
		Fem..	6	.....	.....	1	.....	1	.....	.....	.....	.....	.....	4	.....
175	Other accidental poisonings.....	Total.	79	5	9	6	6	9	7	5	7	8	7	3	7
		Males.	47	4	8	3	4	3	5	2	4	4	3	2	5
		Fem..	32	1	1	3	2	6	2	3	3	4	4	1	2
166a	Accidental gun- shot wounds....	Total.	99	8	6	7	6	4	6	5	6	21	12	11	7
		Males.	90	8	6	6	6	4	4	4	5	18	12	10	7
		Fem..	9	.....	.....	1	.....	.....	2	1	1	3	.....	1	.....
166b	Injuries by machinery.....	Total.	57	4	.....	4	2	2	.....	2	4	6	1	28	4
		Fem..	57	4	.....	4	2	2	.....	2	4	6	1	28	4
166c	Injuries in mines and quarries....	Total.	97	14	6	6	6	9	13	7	12	4	13	4	3
		Males.	96	14	6	6	6	9	13	7	12	4	13	3	3
		Fem..	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
166d	Railroad acci- dents and inju- ries.....	Total.	244	19	10	17	16	18	17	19	28	31	17	35	17
		Males.	208	16	6	16	15	16	12	18	27	30	17	21	14
		Fem..	24	3	4	1	1	2	5	1	1	1	.....	2	3
		Unk..	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....
166e	Injuries by ve- hicles and horses.....	Total.	70	5	1	2	2	4	6	11	8	7	11	8	5
		Males.	63	4	1	2	2	3	5	10	6	7	10	8	5
		Fem..	7	1	.....	.....	.....	1	1	1	2	.....	1	.....	.....
166f	Injuries by elec- tric cars.....	Total.	21	3	.....	.....	1	2	5	1	4	3	.....	1	1
		Males.	20	3	.....	.....	1	2	4	1	4	3	.....	1	1
		Fem..	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
(166) 168, [171] (176)	Other accidental injuries.....	Total.	391	33	21	29	37	33	27	44	30	37	38	30	32
		Males.	292	26	15	19	25	25	15	36	24	25	34	24	24
		Fem..	99	7	6	10	12	8	12	8	6	12	4	6	8
176a	Suffocation.....	Total.	30	2	1	3	4	4	3	1	1	4	3	1	3
		Males.	21	1	1	2	4	3	2	1	1	3	1	1	1
		Fem..	9	1	.....	1	.....	1	1	.....	.....	1	2	.....	2
176b	Injuries at birth..	Total.	77	2	5	4	7	4	7	8	6	7	10	12	5
		Males.	53	2	3	1	6	3	4	7	3	3	10	7	4
		Fem..	23	.....	2	3	1	1	3	1	3	4	.....	4	1
		Unk..	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
176c	Homicide.....	Total.	35	.....	.....	4	3	1	6	2	2	4	7	4	2
		Males.	19	.....	.....	3	1	1	1	2	2	3	2	2	2
		Fem..	16	.....	.....	1	2	.....	5	.....	.....	1	5	2	.....
177	"Dropsy".....	Total.	192	16	23	19	12	19	14	20	12	12	13	14	18
		Males.	104	8	11	10	10	11	10	11	6	7	5	6	9
		Fem..	88	8	12	9	2	8	4	9	6	5	8	8	9
179a	"Heart failure" ..	Total.	128	15	21	15	11	12	13	9	6	4	7	5	10
		Males.	67	7	10	5	6	8	8	5	3	3	4	3	5
		Fem..	61	8	11	10	5	4	5	4	3	1	3	2	5
179b	Other ill-defined diseases.....	Total.	420	35	30	27	26	31	21	36	53	50	36	33	42
		Males.	213	18	15	9	13	19	9	17	32	28	16	18	19
		Fem..	207	17	15	18	13	12	12	19	21	22	20	15	23
178, (179)	Unknown (or un- specified) .....	Total.	311	28	35	45	33	20	21	7	28	26	24	17	27
		Males.	165	16	14	26	17	13	10	3	8	12	19	12	15
		Fem..	143	12	21	19	16	7	10	4	20	14	5	5	10
		Unk..	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2



## CAUSES OF DEATH.

35

ages and sex, during the year 1901. (Stillbirths excluded.)

Ages in years under five.					Ages by five-year periods.																	Unk.	Classification No.
0	1.	2.	3.	4.	0 to 4.	5	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +		
22	1165	963	963	532	362313		40391	48444	34313	19181	12102	14122	1010	1091	1010	431	838	211	431	22	321	16151	172
																						1	
																							173
1						1	1	2	2	1	1	2		2			2	1	1			1	174
1						1		1	2	1	1			2			1	1				1	
826	1082	633	422	1	291613	532	431	313	431	531	533	431	322	422	44	1	1	1	4	1	1	1	175
11	1					2	651	1918	1211	1514	108	337	22	42	74	54		321		33		22	166a
								4	8	13	9	5	3	5	1	4	2	2		1			166b
								8	16	20	12	15	11	5	5	4		1					166c
		1	1	1	1	422	532	75	1918	2525	2725	1615	1817	1616	1413	1917	1411	108	65	65	64	725	166d
						2	2	2	1		2	1	1		1	2	3	2	1	1	2	613	
																						12	166e
11	1	1	1		32	651	1010	972	22	1		33	54	13	43	65	55	77	43		22	2	166e
						1	1	2					4	1	1	5	5	7	3		2		
																							166f
		1				1	1			3	1	1	3	1		1	2	1	2	1	1	1	166f
176	94	65	32	2	371918	1512	1613	1613	3024	3431	2320	2322	1914	1713	2217	2222	1713	1511	2315	179	4322	2	(166)
11	5	1	1				3	3	6	3	3	1	5	4	5		4	4	8	8	21	2	(171)
25169	22					27189		1		1		1											176a
7753231						7753231																	176b
							312	32	1	1	53	43	32	33	23	2	3					3	176c
							12	2	1		3	3	1	3		1					1	2	
																							177
211	1					321	14		2	2	1	1	4	2	6	3	1310	216	2914	3619	2515	3821	177
271215		1				281315		2	1	3	62	22	64	31	73	53	83	107	117	147	189		179a
18110279	20713	312	31	1	20811296	624	21	1	1	64	33	93	33	63	92	117	168	3217	2210	3115	5325	1	179b
19510291	13458	412	42		216110104	331	15	32	32	53	63	33	62	86	96	57	93	310	75	82	42	1	178, (179)



TABLE IV.—Causes of death in Michigan, by counties,

Classification No.	Causes of death, 1901.	Counties—Alcona																
		State.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.
	ALL CAUSES*.....	32,834	63	48	496	210	209	120	60	267	782	136	659	381	736	269	176	201
	I. GENERAL DISEASES																	
	(A. Epidemic Diseases)																	
1	Typhoid fever.....	615	1	1	4	1	7			5	9	1	6	7	21	6	7	2
	Typho-malarial fever.....	30									1						2	
4	Malarial fever.....	109			4			1			2		4		5	1	1	1
5	Smallpox.....	27									1			1				
6	Measles.....	79			3			10		1			1	1	1			
7	Scarlet fever.....	312				1	2	6		2	14	5	5		1		2	6
8	Whooping cough.....	163					1	1		1	11		8	2	1	1	3	4
	Diphtheria.....	359				2	3	5		1	14		4	2	3	2	3	4
9	Croup.....	55				2		1	1		3		1				1	
	Membranous croup.....	88					2				2		1	1				1
10	Influenza.....	1,099	2		28	2	10	6		15	45	2	23	25	25	12	5	6
13	Cholera nostras.....	38			1	2	2				1							
14	Dysentery.....	212			1	1	2			5	8	3	3	1	6	3	2	
18	Erysipelas.....	116				1	2		1	1	3	1	2		6			
	Chicken pox.....	2																
	German measles.....	2																
19*	Mumps.....	5																
	Other epidemic diseases.....	3																
	(B. Other General Diseases)																	
20	Septicemia.....	116			3	1	1	2			1		1	1	4	1	4	
27	Tuberculosis of lungs.....	2,152	5	5	40	15	9	2	7	11	55	15	43	22	37	20	12	13
26	Tuberculosis of larynx.....	22									2					1		
28	Tuberculous meningitis.....	93			1	1	1				7	1	1	2	2			
29	Abdominal tuberculosis.....	132				1	1	1			5		3	3	1	1		1
30	Pott's disease.....	29			1						1							
31	Tuberculous abscess.....	3																
32	White swelling.....	17	1			1					1			1				1
33	Tuberculosis of other organs	38			2	2	1				1		2		1			
34	General tuberculosis.....	46		1	2			1			1		1	2	2			
35	Scrofula.....	16					1											1
36-38	Venereal diseases.....	88									5		5		3	1		
39	Cancer of mouth.....	38	1							1	4		1	2	3			

\* Stillbirths not included.

## CAUSES OF DEATH.

37

during the year 1901. (Stillbirths excluded.)

to Keweenaw.

Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.	G'd Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.	Keweenaw.	Classification No.
313	90	337	26	297	253	403	214	572	63	257	342	361	422	892	373	542	464	135	105	243	615	740	88	1769	41	
14	..	6	3	11	3	8	4	6	1	6	8	11	8	28	4	17	6	2	2	5	16	13	...	35	..	} 1
...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	2	...	...	1	1	...	...	2	...	
...	...	1	...	...	...	2	1	3	...	...	1	2	...	...	2	2	...	...	...	3	4	1	6	..	4	
1	1	...	...	2	...	...	1	1	...	2	...	...	...	...	...	...	...	...	...	2	...	...	...	...	5	
1	..	1	...	2	6	1	...	...	...	7	...	1	3	...	...	...	...	...	...	...	...	7	1	1	..	6
7	..	4	3	1	1	1	1	3	1	11	7	4	1	17	13	1	4	3	2	2	...	5	1	10	5	7
8	1	2	...	...	2	...	2	2	...	2	5	2	1	7	...	2	...	...	...	2	...	...	...	8	..	8
8	1	3	..	1	3	5	3	5	..	7	2	2	...	8	2	9	7	11	9	4	...	2	7	11	..	} 9
...	...	1	...	...	1	...	1	1	...	1	1	...	3	...	...	3	...	...	...	1	1	1	...	1	..	
2	1	4	...	4	...	...	...	1	...	1	2	...	...	1	...	1	3	3	...	...	...	...	...	22	..	
2	3	19	1	2	1	20	2	22	2	...	9	9	24	7	16	25	16	2	1	8	32	19	5	63	..	10
...	...	...	1	1	...	...	2	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	13	
1	..	3	..	1	3	4	...	4	..	1	2	1	1	4	...	4	1	...	...	2	10	23	1	11	..	14
...	1	...	...	1	1	...	2	5	...	...	...	...	...	...	1	1	1	...	1	1	2	5	1	11	..	18
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	} 19*
...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	
2	1	3	..	2	2	1	1	1	...	...	...	2	2	3	1	3	1	1	1	1	...	3	...	3	..	20
19	5	16	1	25	18	18	17	30	2	14	24	22	22	65	27	33	34	6	6	16	37	45	8	115	1	27
1	1	...	...	...	...	...	...	1	...	1	...	...	1	1	...	...	...	...	...	...	...	1	...	2	..	26
2	..	1	..	1	2	...	...	...	...	2	...	1	...	2	1	3	...	...	1	...	2	3	1	8	..	28
1	..	2	..	1	4	3	...	1	..	1	1	2	3	3	1	3	2	1	...	2	2	2	...	6	1	29
...	...	1	...	...	1	1	...	...	...	...	...	...	1	2	...	2	1	...	...	...	1	2	...	2	..	30
1	..	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
...	...	...	1	...	1	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	1	1	..	32
...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2	1	...	4	..	33
...	...	1	...	...	...	...	...	3	...	...	...	1	...	...	1	1	1	...	...	...	2	...	2	..	34	
...	...	...	...	...	...	1	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	...	1	..	35	
1	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	3	...	5	..	36-38	
1	..	...	...	...	...	1	...	...	...	...	...	...	1	1	1	1	1	...	...	1	1	1	...	...	39	

TABLE IV.—Continued.—Causes of death in Michigan,

Classification No.	Causes of death, 1901.	Counties—Alcona																
		State.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.
40	Cancer of stomach and liver.	612	...	7	3	4	2	...	5	7	2	7	9	22	3	4	...	...
41	Cancer of intestines.....	137	...	5	...	1	...	...	3	5	...	3	1	4	2	1	2	...
42	Cancer of genital organs.....	237	...	1	3	...	2	...	4	5	...	8	4	11	2	...	2	...
43	Cancer of breast.....	149	...	2	1	...	...	...	3	...	...	3	4	6	...	1	1	...
44	Cancer of skin.....	76	...	3	...	...	...	...	1	1	1	2	3	3	1	1	...	...
45	Cancer of other organs.....	235	1	6	3	1	2	...	2	5	...	9	2	7	2	1	2	...
46	Tumors.....	40	...	...	1	...	...	...	...	1	...	1	...	2	1	...	1	...
47-48	Rheumatism.....	221	1	5	...	2	2	...	3	6	...	5	7	7	1	...	...	...
50	Diabetes.....	264	...	2	4	1	...	...	4	2	...	8	4	5	4	1	1	...
53-54	Anemia.....	195	...	2	4	1	1	...	1	2	2	2	3	7	4	2	1	...
56	Alcoholism.....	62	...	...	1	1	...	...	...	1	...	2	...	1	1	1	...	...
57-59	Chronic poisonings.....	18	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	...
55*, etc.	Other general diseases.....	51	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
II. DISEASES OF NERVOUS SYSTEM																		
60	Encephalitis.....	82	1	...	1	1	...	...	...	1	1	...	1	1	1	...	2	...
61	Meningitis.....	427	...	2	2	2	...	1	1	10	1	7	4	8	3	1	3	...
62	Locomotor ataxia.....	39	...	2	...	...	...	...	...	1	...	...	1	2	1	...	...	...
63	Other diseases of spinal cord.	131	...	2	...	1	...	...	2	2	...	2	1	2	...	2	...	...
64	Apoplexy.....	1,243	2	122	4	7	1	...	16	27	3	28	19	41	13	4	7	...
65	Softening of brain.....	105	...	5	...	1	...	...	3	...	...	5	3	6	3	...	...	...
66	Paralysis.....	799	1	13	7	1	2	1	9	14	2	34	19	28	13	3	5	...
67	General paralysis of insane...	139	...	...	...	...	...	...	2	4	...	1	2	2	1	...	...	...
68	Other forms of mental disease	80	...	...	1	1	...	...	...	1	1	...	1	1	1	...	...	...
(74)	Other diseases of the brain...	98	...	...	...	1	1	...	...	1	1	5	5	2	...	...	1	...
69	Epilepsy.....	177	...	6	2	1	1	...	2	2	2	6	...	3	3	...	1	...
70-71	Convulsions.....	550	1	2	5	2	4	3	1	7	1	10	3	5	3	1	5	...
72	Tetanus.....	31	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...
73-76	Other diseases of nervous system.....	111	2	...	...	1	...	...	2	3	2	2	6	4	...	1	...	...
III. DISEASES OF CIRCULATORY SYSTEM																		
77	Pericarditis.....	55	...	1	...	1	...	...	1	1	...	1	1	1	...	...	1	...
78	Endocarditis.....	102	...	...	1	1	...	...	...	...	...	...	...	...	...	1	1	...
79	Heart disease.....	2,691	8	159	14	19	4	...	38	53	4	77	48	76	39	7	12	...
80	Angina Pectoris.....	192	...	4	1	1	...	...	2	3	1	6	3	6	2	2	...	...
81	Diseases of arteries.....	117	...	6	...	1	2	...	3	3	1	5	1	5	...	...	...	...

\*Stillbirths not included.

## CAUSES OF DEATH.

39

by counties, during the year 1901. (Stillbirths excluded.)

to Keweenaw.

Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.	G'd Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.	Keweenaw.	Classification	N
2	1	8	3	4	11	3	10	...	2	4	9	5	16	8	11	7	2	...	1	16	14	...	43	...	40		
1	1	1	...	...	...	3	3	...	...	...	...	...	3	5	1	3	2	...	...	...	1	4	...	7	...	41	
...	1	1	2	2	1	3	...	...	4	5	5	3	2	2	2	2	1	...	2	6	9	1	18	...	42		
1	...	3	...	...	3	2	3	1	...	1	2	6	...	...	...	2	1	...	...	6	4	...	9	...	43		
1	...	1	...	1	...	...	...	...	...	1	1	3	...	2	...	3	2	...	...	...	2	...	3	...	44		
1	...	...	2	4	1	4	...	3	3	...	6	5	2	3	4	2	...	2	3	4	...	20	...	45			
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	2	1	...	...	3	...	2	...	46			
...	4	...	1	1	2	1	8	...	3	2	2	...	2	4	5	6	1	1	2	6	3	...	13	...	47-48		
1	...	1	...	...	3	3	9	...	1	5	5	6	6	4	3	5	3	...	3	6	10	...	20	1	50		
1	1	1	...	2	3	2	1	...	...	4	4	3	3	3	2	2	...	1	3	3	3	...	17	...	53-54		
5	...	...	...	1	...	...	...	...	...	1	...	1	...	3	1	2	2	...	...	2	1	...	6	...	56		
...	...	...	1	1	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	1	1	1	...	1	...	57-59	
...	...	...	1	1	...	1	...	2	1	...	1	...	1	2	1	1	2	...	...	...	3	...	2	...	55*, etc.		
1	...	2	...	2	1	1	...	1	...	1	...	1	...	4	2	1	1	1	...	2	2	...	9	...	60		
...	2	2	...	5	2	5	5	8	2	6	3	8	7	13	2	3	3	3	1	4	5	3	...	21	1	61	
...	...	...	...	2	...	1	...	...	...	...	...	...	1	...	...	2	3	...	1	...	...	2	...	3	...	62	
1	...	6	1	5	...	2	2	1	...	2	3	1	3	2	...	8	7	...	...	2	2	6	1	7	...	63	
5	4	16	...	5	3	19	7	30	1	4	11	17	34	19	11	19	30	1	1	5	36	60	5	78	3	64	
...	...	3	...	...	2	...	4	...	...	...	...	3	2	1	...	5	1	...	...	2	6	...	4	...	65		
3	4	10	...	3	1	19	4	20	...	1	10	11	17	2	9	20	12	5	...	6	15	20	...	54	1	66	
...	...	...	...	...	3	...	2	...	...	...	16	1	1	3	1	1	3	...	...	3	23	...	6	...	67		
...	...	...	1	1	...	1	...	1	...	4	...	...	...	1	...	...	1	...	...	2	8	...	2	...	68		
1	...	1	1	1	...	3	1	3	1	...	2	...	1	...	...	4	...	...	...	1	2	5	...	3	...	(74)	
...	...	...	...	2	2	2	2	...	...	8	1	2	2	3	4	4	1	...	...	2	10	...	5	...	69		
8	1	3	...	7	7	1	...	8	1	7	4	4	2	31	7	4	4	3	...	1	4	4	3	13	1	70-71	
...	1	...	...	1	...	...	...	...	...	...	...	...	...	3	1	...	...	...	1	...	3	...	4	...	72		
...	...	...	2	2	1	2	...	1	3	1	3	1	3	1	...	1	2	...	...	2	2	3	...	7	...	73-76	
...	2	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	2	...	77		
...	1	...	3	3	2	...	...	...	...	1	...	...	2	5	1	1	3	2	...	...	2	4	2	12	...	78	
9	7	47	2	15	16	52	11	52	...	5	33	38	55	46	19	89	58	3	2	14	67	70	3	159	2	79	
...	1	5	...	...	5	1	5	...	...	1	3	5	3	1	4	9	...	...	2	4	3	...	6	...	80		
1	...	...	...	...	3	1	2	...	...	3	...	6	5	1	2	2	...	...	...	3	2	...	8	...	81		

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE IV.—Continued.—Causes of death in Michigan.

Classification No.	Causes of death, 1901.	Counties—Alcona																
		State.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.
82	Embolism and thrombosis....	60		1	3								1	3	3		1	
83	Diseases of veins.....	14											1				1	
84	Diseases of lymphatics.....	5																
85-86	Other diseases of circulatory system.....	55			1						1	2	2	2			1	1
	IV. DISEASES OF RESPIRATORY SYSTEM.																	
88	{ Laryngitis.....	31			1	3				1		2						
	{ Other diseases of larynx....	29								2								
89	Diseases of thyroid body....	11								1					1			
90	Acute bronchitis.....	535	1		8	7	7	1	3	3	11	1	5	4	5	3	7	5
91	Chronic bronchitis.....	334			3	3	2	2		5	9	1	4	1	12	1		2
92	Bronchopneumonia.....	490	2	4	10	4	2	3		1	8	4	4	1	10	2		2
93	Pneumonia.....	2,411	10	2	33	13	21	9	6	17	73	16	32	13	46	15	6	19
94	Pleurisy.....	89									1	1	2		1			1
95	Congestion of lungs.....	194			6		2		2	3	2	1	1	7				1
96	Gangrene of lungs.....	11			1											1		
97, 98	Asthma and emphysema....	122		1	3	2	1			7		1	1		2			
87, 99	{ Hemorrhage of lungs.....	39			1							1	1					
	{ Other diseases of respiratory system.....	81					1			2	2	3	1	3	1	1		
	V. DISEASES OF DIGESTIVE SYSTEM.																	
100	Diseases of mouth.....	28																1
101, 102	{ Tonsillitis.....	30				1					1	2		1				
	{ Other diseases of pharynx....	29		1										1	2		1	
103	Ulcer of stomach.....	75			1						1		2	1	2			1
104	{ Gastritis.....	189			6	2	1		1	1	10	1	5		6	2		1
	{ Other diseases of stomach....	244	1		3	1	1		1	4	14		3	4	12	4	2	3
(314)	Dentition.....	9						1			1	1						
105	Diarrhea and enteritis (under 2 years).....	1,768		5	12	13	8	9	2	5	54	16	28	9	9	6	10	13
106	Diarrhea and enteritis (over 2 years).....	526		1	7	5	4	2	2	6	13	3	19	10	15	4	2	3
108	{ Hernia.....	93			5	1		1		1	2		3		3	1		
	{ Obstruction of intestines....	239			5		1			2	4	1	6	6	5	3	2	1
107, 109	Other diseases of intestines..	76			2	1		1		2	1		1					
110	Acute yellow atrophy of liver	18						1										

# CAUSES OF DEATH.

41

by counties, during the year 1901. (Stillbirths excluded.)

to Keweenaw.

to Keweenaw.																									Classification No.	
Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.	G'd Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.		Keweenaw.
2				1				1		1	1			2	1	1					1	2		4		82
														2												83
																										84
2							1			1		1		3		3					1	1		3		85-86
				1	2							1		5		1					2					88
1			2			1							1			1		1				1		1		
				1											1								2			89
9	3	2	7	9	1	12	1	10	7	3		31	9	2	5	2	3	5	7	7	1	31				90
1	2	3	1	2	2	2	8	1		3	7	5	2	1	3	7		2	2	10	10		27	1		91
5	1			5	4	4	5	7	1	7	4	23	6	4	7	5	1	1	3	14	2	29				92
21	4	33	2	15	19	35	21	56	5	15	16	36	26	57	26	38	24	12	5	12	38	34	6	104	1	93
	1	2		2	1		2		1	1		2	1	1							1	1	1	2		94
	1	2	1	2		2	1		1	2	3	1	2	1	3	2	1		4	5	4	1	39			95
					1									3										1		96
1	2				2	2	2	1						2	3	1	2				6			5	1	97, 98
						1									1	1										87, 99
2					2	2	2	1	1						1	1	2				3			4		
1				1				1	1					1	1	1	1	1		2		1		1		100
1					3		1	1	1					1				1	1				1	1		101, 102
												2	1					1	1	1		1	1	1		
1				1	1	3	3	1		1		1	1		2	1	2			2	2			5		103
1	1		3	1		2	6		2	3		6		4		1		2		3	1		10			104
3	1	3		1	3	2	6		4	2	5	4	3	4	2	2	2	1	1	7	4		13	1		
				1												1										(314)
28	2	7	2	23	28	7	15	15	10	37	19	12	14	98	21	14	14	3	11	24	18	38	8	77	5	105
3	2	2	1	2	1	6	5	8	3	1	5	7	4	9	3	6	5	3	1	7	8	12		29		106
1					2					2	1			3	1		1			1	1	1	1	5		108
1	4		3	1	2	2	5	1	1	2	2	2	1	3	6	2	1		1	4	6		7			
2	2		1	1	2	2				2		1	2				1				5	2	1	8		107, 109
																2			1			1		1		110

TABLE IV.—Continued.—Causes of death in Michigan,

Classification No.	Causes of death, 1901.	State.	Counties—Alcona															
			Alcona.	Alger.	Alegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.
111	Hydatid tumors of liver.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
112	Cirrhosis of liver.....	211	2	..	1	2	..	1	..	..	5	1	5	1	2	3	..	..
113	Biliary calculi.....	50	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
114	Other diseases of liver.....	219	..	..	3	2	1	1	..	2	7	..	7	4	7	2	..	2
115	Diseases of spleen.....	7	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
116	Peritonitis.....	277	..	..	4	3	1	2	..	4	4	1	2	7	1	1	1	4
118	Appendicitis.....	263	1	1	5	2	1	..	..	1	4	1	4	2	10	2	..	..
117	Other diseases of digestive system.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	VI. DISEASES OF GENITO-URINARY SYSTEM.																	
119	Acute nephritis.....	71	..	..	1	..	..	..	..	1	4	1	..	1	3	1	..	..
120	Bright's disease.....	1,050	3	1	11	5	1	..	2	8	25	2	26	14	23	15	6	2
121	Other diseases of kidneys.....	107	..	..	1	..	2	1	..	1	3	..	2	7	3	..	..	1
122	Calculi of urinary tract.....	14	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..
123	Diseases of bladder.....	133	..	..	2	..	1	..	..	3	..	..	3	..	6	1	..	1
129	Uterine tumor.....	42	..	..	..	..	1	..	..	..	1	..	1	..	3	1	..	..
127, 128, 130	Other diseases of uterus.....	58	2	..	1	..	1	..	..	1	1	..	..	..	..	..	..	..
131	Ovarian tumor.....	49	..	..	1	..	..	..	..	1	1	..	..	..	1	..	..	..
124-126, 132, 133	Diseases of tubes.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Other diseases of genito-urinary system.....	117	..	1	2	..	..	..	..	..	2	1	..	1	4	1	..	..
	VII. CHILDBIRTH.																	
137	Puerperal septicemia.....	267	1	..	3	3	3	..	..	6	9	2	14	1	5	1	1	5
138	Puerperal convulsions.....	81	1	..	3	1	..	..	..	..	4	1	4	2	..	1	1	..
134-136, 139-141	Other causes incident to childbirth.....	183	..	..	1	1	2	..	1	3	6	..	..	..	3	..	2	1
	VIII. DISEASES OF SKIN.																	
142	Gangrene.....	98	1	..	3	1	..	..	1	1	2	..	2	..	4	..	..	1
143	Carbuncle.....	12	..	..	1	..	..	..	..	..	2	..	..	..	..	1	..	..
144	Abscess.....	38	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..
145	Other diseases of skin.....	24	..	..	..	1	1	..	..	..	..	..	..	..	2	..	..	..
	IX. DISEASES OF LOCOMOTOR SYSTEM.																	
146	Diseases of bones.....	41	..	..	..	..	..	..	..	..	2	..	..	..	1	..	..	..
147	Diseases of joints.....	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
148-149	Other diseases of locomotor system.....	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..



by counties, during the year 1901. (Stillbirths excluded.)

to Keweenaw.

Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.	Gd. Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.	Keweenaw.	Classification No.
																										111
1	1	1	1	2	4	1	1	2	2	2	1	2	4	4	3	6	5	1	1	4	4	4	14	14	1	112
		3		1	1	2	2	2			2						1				1			2		113
		3	4			4	1	4		1	1	1	4	3	1	2	6	1		1	3	5	1	14	1	114
																								1		115
6	1	5		3	1	3	5	1			1	2	4	5	7	7	2				10	2	2	14		116
2		3		1	2	5	2	5	1	1	2	1	2	9	7	3			1	4	5	11		10		118
																								1		117
1	1				1	2						2	2	2				1			3	1		6	1	119
5	5	13		9	6	18	5	17	1	1	14	10	20	13	17	25	14	4	1	10	28	23	1	67		120
		2					3	2			2	3	4	1		2	2			3		3		6		121
											1			1							1					122
1	1			1	2	4	7	1			1	3	5		2	3	2	2		1	2	8		8		123
												1		1							2	1		4		129
1				2											1		1			1	1	3		4		{ 127, 128, 130
	1			2	2	2						1	1	1		3	1		1		3	3		5		131
1	1			1	2	1	1				1	1		3	2	2	5		1	1	1		6			{ 124-126, 132, 133
5	1			5	1	3	2	2			1	3	3	4	6	9	6	1	2	4	5	2		8	1	137
1				2	3	1	1		1			1	3	1	2					1	1	1		5		138
1	2			2	2	1	1		1		1	2		7	2	2	1			2	5		1	*9	1	{ 134-136, 139-141
1	1			1	4					1				1			1	3	1			2	1	5		142
				1									2								1	1				143
	2			1	1	1	1		2						1		1				1	2		3		144
				2					1	1				1	1		1				1					145
				1	1				1					1		2				1				2	2	146
				1																						147
																										148-149



## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE IV.—Continued.—Causes of death in Michigan,

Classification No.	Causes of death, 1901.	State.	Counties—Alcona															
			Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.
150	X. MALFORMATIONS.																	
	Hydrocephalus.....	54	..	..	..	..	..	..	1	1	...	2	...	1	1	...	...	...
	Congenital malformation of heart (cyanosis).....	101	1	...	1	4	1	...	2	3	...	7	...	3	2	3	1	...
	Other congenital malformations.....	151	..	1	2	..	1	...	1	2	1	3	1	3	...	2	...	...
151-153	XI. EARLY INFANCY.																	
	Premature birth.....	524	2	..	1	6	3	2	..	2	3	2	11	7	15	1	3	5
	Congenital debility.....	677	1	7	14	6	2	6	1	2	13	4	11	6	5	4	14	6
154	XII. OLD AGE.																	
	Old age.....	1,193	..	1	27	9	7	6	..	4	18	4	14	18	19	14	5	4
155	XIII. VIOLENCE.																	
	Suicide by poison.....	76	..	2	..	..	..	..	2	1	...	1	1	3	1	...	...	...
156	Suicide by asphyxia.....																	
157	Suicide by hanging.....	50	..	1	..	1	..	..	..	2	..	1	...	1	...	1	...	...
158	Suicide by drowning.....	20	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
159	Suicide by firearms.....	54	..	1	3	..	..	..	1	..	..	4	...	1	2	...	1	...
160	Suicide by cutting instruments	18	..	1	..	..	..	..	..	..	..	..	..	3	...	..	..	..
161	Suicide by jumping from high places.....	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
162	Suicide by crushing.....	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
163	Suicide by other or unspecified means.....	17	..	..	..	1	..	..	..	..	..	..	1	2	...	..	..	..
164,165	Fractures and dislocations..	223	..	1	..	1	..	..	..	2	...	3	7	7	2	1	1	...
167	Burns and scalds.....	178	1	..	2	2	4	3	..	2	7	...	5	1	3	...	2	...
169	Heat and sunstroke.....	55	..	..	1	1	..	..	..	..	..	2	...	2	...	..	1	...
170	Cold and freezing.....	14	..	..	..	..	..	..	..	2	..	..	..	..	..	1	...	...
(171)	Lightning.....	28	..	4	..	1	..	..	..	..	..	..	..	..	1	...	..	...
172	Drowning.....	299	..	2	2	3	..	2	...	8	3	8	1	2	1	5	6	...
174	Inhalation of poisonous gases	16	..	..	..	..	..	..	..	..	..	..	..	1	...	..	..	...
175	Other accidental poisonings.	79	..	1	3	1	1	..	1	...	..	1	1	2	...	1	...	...
166	Accidental gunshot wounds..	99	..	2	..	2	1	...	..	1	...	2	...	1	1	...	...	...
	Injuries by machinery.....	57	..	..	..	..	..	..	..	2	1	...	..	1	...	..	..	...
	Injuries in mines and quarries	97	..	..	..	..	1	...	..	..	..	..	..	..	..	..	..	...
	Railroad accidents and injuries.....	244	..	4	1	3	..	1	...	3	1	4	...	1	1	3	1	...
	Injuries by vehicles and horses.....	70	..	5	..	..	1	...	3	...	1	...	1	...	..	..	1	...
	Injuries by electric cars.....	21	..	..	..	..	..	..	..	..	..	..	..	1	...	..	..	...

by counties, during the year 1901. (Stillbirths excluded.)

to Keweenaw.																										Classification No.
Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.	G'd Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.	Keweenaw.	
1				1			1					1	1		4	3					1	1	1		2	150
		1		2	1	1	2	4	1		1			4	1	3	1		1		3			7		
	1	1	1	1	1	1	1	1	1	1	3	3	3	3	2		1	1			3	2	2	3	2	
4	4	2		3	8	5	5	4	1	7	8	4	2	24	9	3	8	2	3	6	8	7	1	26		151-153
11	4	4	1	12	14	3	8	6		12	4	3	2	33	5	7	6		3	5	10	8	2	36		
8	5	11		6	2	12	6	35	3	1	9	14	20	11	15	19	17	7	2	13	20	18	2	71	1	
2		2						3								1	1	1				2	4		8	155
																										156
	1					1		1		1	1	1	1		2		4					2		2		157
1					1						1			1		1	1	1						5		158
1	1				2	1	1	1			1		2	2			1		1		2	2	1	4		159
1					1									2							1	1		1	1	160
										1																161
																										162
													1		1										1	163
1	1		4	4	5		6		3			1	3	14	1	5	2	1	4		7	4		9	1	164, 165
2	2	2		3		2	2	1	3	2	2	2	1	6	2	1	1		1	1	4	3		8		167
1				1										4	1		1					2		3		169
						1							1							1	1					170
					2						1	2				1	1	1			1					(171)
16	1	1		9	4	2	1	5		3				33	3	2	6	12	2			7		6	2	172
1								3						2							1	1		2		174
1				1		3		2	1			2				1	2	1			2	2		7		175
1				1				1		1	1	4	2	4	2	3			3	1	1	1		2	1	166
	1			1										1									1			
				19				1	17					31					3			1				
1	3	1		6	5	2	4	9		1	1		1	3	1	5	1		1		4	9		10		
1	1	1	1	1		1	1	2			2	1	1	1	3		2		1					3		
																1						1		1		

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE IV.—Continued.—Causes of death in Michigan,

Classification No.	Causes of death, 1901.	State.	Counties—Alcona															
			Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.
166, 168, [171], 176	Suffocation.....	30	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..
	Other accidental injuries....	391	1	..	5	3	7	2	1	6	7	..	4	5	9	2	5	5
	Injuries at birth.....	77	..	..	..	2	..	1	1	1	4	..	1	1	2	1	1	1
	Homicide.....	35	..	..	1	..	1	..	..	..	..	..	1	..	..	..	..	..
	XIV. ILL-DEFINED DISEASES.																	
177	"Dropsy".....	192	1	1	2	1	..	1	2	1	6	1	6	..	5	2	3	1
178, 179	"Heart failure".....	128	2	..	7	3	1	..	..	2	10	1	3	1	7	..	..	2
	Other ill-defined diseases....	420	..	3	4	2	1	..	..	5	8	2	8	1	9	2	..	5
	Unknown (or unspecified)...	311	2	3	..	9	3	4	6	..	7	1	3	..	3	1	4	..

# CAUSES OF DEATH.

47

by counties, during the year 1901. (Stillbirths excluded.)

to Keweenaw.																									Classification No.	
Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.	G'd Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.		Keweenaw.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	166, 168 [171], 176
8	2	5	2	8	7	4	3	5	...	3	5	7	5	13	2	3	6	2	1	5	4	8	3	20	...	
...	...	...	...	5	...	2	4	...	...	...	1	1	...	...	1	...	1	...	2	...	...	...	...	4	...	
1	...	...	...	...	1	...	1	1	2	1	...	...	...	3	...	...	...	...	...	5	2	...	...	...	1	177
...	...	...	...	2	3	3	3	...	...	...	4	6	2	4	2	1	3	...	...	1	5	1	2	3	...	
3	...	...	...	1	...	1	...	...	...	...	1	1	2	2	...	1	3	1	...	1	1	1	...	1	...	
6	2	10	...	4	4	2	...	7	2	5	3	4	2	14	4	3	...	1	4	1	7	6	1	21	...	178, 179
16	2	1	1	11	2	...	4	4	4	11	1	1	...	11	18	2	1	1	2	10	...	3	1	2	1	

TABLE IV.—Continued.—Causes of death in Michigan,

Classification No.	Causes of death, 1901.	Counties—Lake													
		Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	Mackinac.	Macomb.	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.
	ALL CAUSES.....	58	415	122	704	252	43	82	483	305	507	255	275	294	193
	I. GENERAL DISEASES.														
	(A. Epidemic Diseases.)														
1	{ Typhoid fever.....	2	10	2	18	8	1	2	13	6	8	5	4	9	9
	{ Typho-malarial fever.....		1												1
4	Malarial fever.....				6	1			2	2		1	2		1
5	Smallpox.....				1						1				
6	Measles.....								1		4				
7	Scarlet fever.....		1		3				9	7	10	1		3	1
8	Whooping cough.....		1	2	2				3				2	7	1
	Diphtheria.....		13	1	4	2	1		5	1	10		1	5	5
9	{ Croup.....									2	1			1	1
	{ Membranous croup.....		1		1				3	1	1			1	
10	Influenza.....	2	19	2	38	14	2		16	7	1	6	18	5	7
13	Cholera nostras.....			1	2				1						
14	Dysentery.....		4		2	3	1		4	1	4	2		2	1
18	Erysipelas.....				3	2	1		1	1	1				
	Chicken pox.....														1
19	German measles.....														
	Mumps.....														
	Other epidemic diseases.....								1						
	B. (Other General Diseases.)														
20	Septicemia.....	2	1		4	2			4	1	2	1	1	1	
27	Tuberculosis of lungs.....	4	26	6	48	17	2	11	36	16	42	24	13	16	11
26	Tuberculosis of larynx.....													1	
28	Tuberculous meningitis.....		2		2					1	3			2	
29	Abdominal tuberculosis.....		2		2	1					1	3	1	1	
30	Pott's disease.....		1								1		2	1	
31	Tuberculous abscess.....								1						
32	White swelling.....										1				
33	Tuberculosis of other organs.....					1			1	1			1	1	
34	General tuberculosis.....		1			1									1
35	Scrofula.....		1						1		1				
36-38	Venereal diseases.....		2	1			1			1					
39	Cancer of mouth.....				1										1

## CAUSES OF DEATH.

49

by counties, during the year 1901. (Stillbirths excluded.)

to Wexford.																									Classification No.
Montmorency.	Muskegon.	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Oseola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.	Saginaw.	St. Clair.	St. Joseph.	Sanilac.	Schoolcraft.	Shiawassee.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.		
32	446	209	664	211	99	83	185	6	83	487	108	27	1,091	770	356	349	113	457	509	495	655	5,503	215		
1	8	6	6	3	4	2	4	4	4	11	4	....	20	22	3	3	1	4	7	4	7	70	13	} 1	
..	1	1	2	...	1	..	...	..	2	...	...	...	1	1	...	1	...	...	...	...	...	6	...		
..	2	...	2	2	1	..	...	...	1	2	...	...	8	2	...	3	...	...	6	2	...	10	2	4	
..	...	...	...	...	...	...	1	...	...	...	...	...	4	2	...	...	...	1	...	3	...	1	1	5	
..	...	1	3	1	2	...	...	1	1	...	2	...	1	1	...	...	...	...	1	...	14	...	6		
..	2	1	...	...	2	...	1	...	2	...	2	...	3	1	...	...	...	1	...	6	1	37	2	8	
..	3	1	3	2	2	...	...	1	3	5	...	...	29	10	...	6	6	5	7	6	7	51	4		
..	1	...	...	2	...	...	...	...	3	3	...	...	5	2	...	1	...	1	1	...	7	...		} 9	
..	...	1	...	1	1	1	...	5	1	...	...	...	3	...	...	3	2	1	...	2	...	6	1		
1	11	9	32	12	8	3	3	1	17	2	...	...	31	40	12	13	2	23	19	10	25	117	11	10	
..	2	2	1	...	...	...	...	1	...	...	...	...	2	2	...	...	...	1	...	2	...	7	...	13	
..	6	3	4	2	1	1	1	1	5	...	...	...	1	2	...	1	...	6	2	4	3	23	2	14	
..	1	1	9	2	1	...	...	...	1	...	1	...	5	2	1	1	...	...	3	...	3	20	1	18	
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	} 19	
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...		
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...		
1	...	1	3	...	...	...	1	...	2	1	...	...	6	3	2	1	...	3	...	3	4	10	1	20	
4	37	12	37	9	3	9	15	1	3	30	5	4	74	30	26	21	6	31	38	31	42	395	13	27	
1	...	...	...	...	...	...	1	...	1	...	...	...	1	...	...	...	...	2	...	...	1	2	...	26	
..	4	2	2	...	...	...	1	1	...	...	...	...	...	2	1	1	...	1	...	...	...	19	1	28	
..	4	2	6	...	...	...	...	3	...	...	...	...	6	2	2	2	...	4	2	3	3	19	1	29	
..	1	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...	30	
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
..	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	31	
..	...	1	1	1	...	...	1	...	1	...	...	...	1	2	...	1	...	1	...	2	...	3	...	32	
..	...	1	...	1	...	...	...	...	...	...	...	...	3	3	1	...	1	...	1	2	...	8	...	33	
..	1	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	2	1	35	
..	1	1	...	...	...	...	1	...	...	...	...	...	1	...	...	1	2	...	...	1	...	48	...	36-38	
..	1	2	...	...	...	...	...	...	...	...	...	...	3	1	1	...	...	...	...	1	1	4	...	39	

TABLE IV.—Continued.—Causes of death in Michigan,

Classification No.	Causes of death, 1901	Counties—Lake													
		Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	Mackinac.	Macomb.	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.
40	Cancer of stomach and liver.....	11	4	12	8	..	..	1	10	12	13	5	2	6	..
41	Cancer of intestines.....	..	..	4	1	..	..	..	..	..	..	..	1	3	..
42	Cancer of genital organs.....	2	2	1	11	2	..	..	6	2	..	1	3	2	3
43	Cancer of breast.....	..	..	9	1	..	..	..	1	1	1	1	..	..	1
44	Cancer of skin.....	..	1	1	3	2	..	..	4	..	1	..	..	..	..
45	Cancer of other organs.....	..	3	1	11	2	..	..	..	3	3	2	1	2	2
46	Tumors.....	..	..	1	..	1	..	..	..	..	..	1	..	..	1
47-48	Rheumatism.....	1	3	2	4	..	..	1	3	2	2	4	4	1	1
50	Diabetes.....	..	2	2	8	1	1	2	2	2	8	3	1	2	..
53-54	Anemia.....	..	..	1	5	2	..	..	2	..	2	1	2	..	1
56	Alcoholism.....	1	..	..	..	1	..	..	2	1	2	1	..	1	..
57-59	Chronic poisonings.....	..	1	..	..	..	..	..	..	..	..	..	..	..	..
55, etc.	Other general diseases.....	..	2	..	1	..	..	..	1	..	2	..	..	..	2
II. DISEASES OF NERVOUS SYSTEM.															
60	Encephalitis.....	..	..	..	2	..	..	..	..	4	1	..	2	..	1
61	Meningitis.....	1	..	..	3	1	..	1	4	5	8	5	5	5	2
62	Locomotor ataxia.....	..	..	1	2	..	..	..	..	..	1	..	..	..	..
63	Other diseases of spinal cord.....	..	..	2	3	2	..	1	3	2	..	..	1	3	1
64	Apoplexy.....	1	24	2	24	16	1	..	25	4	6	10	9	4	1
65	Softening of brain.....	1	5	..	4	5	..	..	3	..	..	1	..	..	..
66	Paralysis.....	1	10	4	25	8	3	2	14	2	1	4	7	2	4
67	General paralysis of insane.....	..	4	..	5	3	2	..	1	1	..	..	1	..	..
68	Other forms of mental disease.....	..	..	..	..	1	..	..	1	..	2	1	..	..	..
(74)	Other diseases of the brain.....	..	..	..	1	2	..	..	1	2	3	..	1	1	1
69	Epilepsy.....	..	14	1	4	1	1	..	3	..	1	1	1	..	..
70-71	Convulsions.....	..	5	7	5	..	..	..	5	12	17	5	7	12	2
72	Tetanus.....	..	..	..	..	..	..	..	..	2	..	..	..	..	..
73-76	Other diseases of nervous system.....	..	2	1	1	1	..	1	4	..	..	1	1	..	1
III. DISEASES OF CIRCULATORY SYSTEM.															
77	Pericarditis.....	1	..	1	2	..	..	..	2	1	1	1	1	..	..
78	Endocarditis.....	..	..	..	1	..	..	..	3	..	1	..	..	2	..
79	Heart disease.....	4	39	9	64	31	2	5	51	12	17	17	25	9	14
80	Angina Pectoris.....	2	2	..	6	3	..	1	4	..	..	..	2	2	..
81	Diseases of arteries.....	..	2	..	2	..	..	1	..	..	..	..	2	..	..

## CAUSES OF DEATH.

51

by counties, during the year 1901. (Stillbirths excluded.)

to Wexford.																								Classification No.
Montmorency.	Muskegon.	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Oscoda.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.	Saginaw.	St. Clair.	St. Joseph.	Sanilac.	Schoolcraft.	Shiawassee.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.	
11	3	17	3	...	...	4	3	...	...	12	...	...	27	19	3	4	3	8	7	9	13	92	2	40
1	1	1	4	...	...	...	...	...	1	2	...	...	3	3	2	1	...	3	4	6	5	28	...	41
1	1	8	3	...	...	...	1	...	...	3	...	1	4	5	5	...	...	3	1	5	10	36	...	42
4	1	4	...	...	...	...	...	...	...	2	...	...	5	3	1	1	1	1	3	6	3	24	1	43
2	3	...	...	...	...	...	...	...	1	...	...	...	1	5	1	3	1	...	1	...	2	5	...	44
2	4	2	...	...	...	...	1	...	...	6	...	1	6	8	1	3	...	1	4	3	6	37	1	45
...	...	1	...	...	...	...	...	...	...	1	...	...	3	3	...	2	...	...	1	1	1	4	...	46
4	1	5	3	...	...	...	1	...	...	6	...	...	5	5	1	2	1	5	2	3	2	32	...	47-48
7	1	3	1	...	...	1	...	...	...	3	...	...	9	4	4	1	...	4	4	6	7	38	2	50
3	2	4	1	1	...	...	...	...	1	6	...	...	5	9	4	4	...	4	5	3	3	30	...	53-54
...	2	...	...	...	...	1	...	...	...	...	1	...	1	1	...	1	1	...	...	...	2	9	...	56
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	3	...	57-59
1	2	2	...	...	...	...	1	...	...	2	...	...	2	...	...	1	...	...	1	1	3	6	1	55
1	...	1	2	...	...	...	1	...	...	1	1	...	3	2	...	1	...	1	...	1	1	10	...	60
1	6	2	8	1	1	1	7	...	1	9	3	...	18	11	3	2	2	2	9	3	8	105	5	61
...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	2	...	...	...	5	...	62
3	2	1	...	...	...	...	1	...	...	3	...	...	1	2	1	1	...	1	2	2	7	10	...	63
18	5	24	9	1	1	10	...	...	5	18	1	1	33	31	18	18	2	25	25	23	37	145	1	64
1	...	...	...	...	...	1	...	...	...	...	1	...	2	3	3	1	...	5	1	3	3	1	...	65
11	4	14	6	1	...	...	2	...	3	7	...	1	22	28	15	10	...	6	16	20	13	93	10	66
...	6	1	...	...	...	1	2	...	...	1	...	...	5	2	...	...	...	3	...	...	1	21	2	67
2	14	...	...	...	...	...	1	...	...	...	...	...	5	1	2	1	...	...	2	3	1	14	...	68
2	1	2	...	...	...	...	1	...	...	...	...	...	3	3	2	1	1	3	1	4	3	7	1	(74)
...	4	10	1	1	...	...	2	...	...	5	...	...	5	...	2	2	...	4	3	1	4	22	3	69
8	2	10	3	2	1	1	...	...	12	3	2	...	31	14	3	5	4	3	1	7	4	167	2	70-71
1	1	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	1	...	...	...	...	6	...	72
1	2	3	1	...	...	...	1	...	1	2	...	...	1	3	1	1	...	3	3	...	2	9	...	73-76
2	2	1	...	...	...	...	...	...	...	...	...	...	...	3	5	1	...	1	3	...	1	7	3	77
1	3	...	1	2	...	...	...	...	1	...	...	...	3	7	2	1	...	...	1	2	1	19	...	78
33	11	56	20	6	1	13	...	...	7	41	6	...	97	43	43	27	5	50	38	65	68	341	10	79
5	2	1	...	...	...	...	2	...	...	3	1	1	6	5	3	2	...	3	1	4	3	29	1	80
4	1	...	2	...	...	...	...	...	2	...	...	...	4	3	1	1	...	1	1	3	3	18	...	81



TABLE IV.—Continued.—Causes of death in Michigan,

Classification No.	Causes of death, 1901.	Counties—Lake																
		Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	Mackinac.	Macomb.	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.	Missaukee.	Monroe.	Montcalm.
82	Embolism and thrombosis.....	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..
83	Diseases of veins.....	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..
84	Diseases of lymphatics.....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
85-86	Other diseases of circulatory system .....	..	1	1	..	..	..	1	..	2	..	2	..	..	..	1	1	..
	IV. DISEASES OF RESPIRATORY SYSTEM.																	
88	{ Laryngitis.....	..	..	3	..	..	..	..	..	1	..	..	..	..	..	..	..	..
	{ Other diseases of larynx.....	..	..	..	..	..	..	..	..	2	..	1	1	..	1	..	..	..
89	Diseases of thyroid body.....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
90	Acute bronchitis.....	3	6	2	6	..	1	5	2	26	..	4	5	1	1	1	1	3
91	Chronic bronchitis.....	1	3	1	13	2	..	..	4	3	6	2	2	1	1	1	6	4
92	Bronchopneumonia.....	..	5	..	4	6	..	1	6	6	13	1	4	3	..	4	7	1
93	Pneumonia.....	5	26	5	49	19	3	7	27	36	30	28	33	22	22	14	26	23
94	Pleurisy.....	1	1	..	4	..	1	..	2	1	1	2	..	..	1	..	..	..
95	Congestion of lungs.....	..	4	..	3	..	..	..	3	..	2	..	..	1	4	1	3	2
96	Gangrene of lungs.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
97, 98	Asthma and emphysema.....	2	..	2	1	..	..	..	1	..	3	1	2	..	..	..	1	..
87, 99	{ Hemorrhage of lungs.....	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	{ Other diseases of respiratory system .....	1	..	..	..	..	..	..	3	1	1	2	1	1	..	..	2	2
	V. DISEASES OF DIGESTIVE SYSTEM.																	
100	Diseases of mouth.....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
101, 102	{ Tonsillitis.....	..	..	..	..	..	..	..	2	..	..	1	..	1	..	..	..	1
	{ Other diseases of pharynx.....	..	..	..	..	..	..	..	2	..	1	..	..	..	1	..	..	..
103	Ulcer of stomach.....	..	2	..	1	..	..	..	1	1	1	..	1	1	2	..	1	3
104	{ Gastritis.....	..	3	..	2	1	..	..	1	2	5	6	3	..	3	1	4	..
	{ Other diseases of stomach.....	..	..	..	3	2	2	..	5	1	2	1	2	4	3	1	5	6
(314)	Dentition.....	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
105	Diarrhea and enteritis (under 2 years).....	5	18	11	20	3	6	7	25	13	52	13	13	20	20	6	15	18
106	Diarrhea and enteritis (over 2 years).....	1	10	2	7	8	1	4	2	2	4	1	4	4	7	1	7	10
108	{ Hernia.....	..	1	..	4	2	..	..	1	2	2	1	..	..	..	1	1	1
	{ Obstruction of intestines.....	..	2	6	..	..	1	6	1	2	3	2	1	9	2	2	1	..
107, 109	Other diseases of intestines.....	..	1	..	3	2	..	..	1	..	1	1	..	..	1	..	..	..
110	Acute yellow atrophy of liver.....	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..

## CAUSES OF DEATH.

53

by counties, during the year 1901. (Stillbirths excluded.)

to Wexford.

to Wexford.																								
Montmorency	Muskegon.	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Oscola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.	Saginaw.	St. Clair.	St. Joseph.	Sanilac.	Schoolcraft.	Shiawassee.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.	Classification No.
3	1	4	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	4	1	7	7	82	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	83	
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	84		
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	85-86		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	88		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	89		
6	4	3	2	3	1	6	1	13	1	7	6	4	2	1	7	11	2	4	145	2	90			
1	2	5	1	1	1	1	1	9	1	14	7	3	4	1	6	4	5	11	62	2	91			
2	6	3	14	1	2	2	1	6	1	8	8	2	6	1	4	19	8	6	133	3	92			
4	37	19	63	13	11	8	16	8	31	9	1	109	60	30	32	9	30	37	36	47	415	19	93	
3	1	1	1	1	1	1	1	1	2	1	2	1	5	6	2	2	1	1	1	2	22	1	94	
2	2	5	1	1	1	1	1	8	1	4	2	2	3	1	4	5	5	5	16	2	95			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	96		
1	1	1	1	1	2	1	1	1	1	1	1	1	7	5	1	1	2	1	1	2	34	97, 98		
1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	1	1	1	1	2	16	87, 99		
1	1	2	1	1	1	1	1	4	3	1	1	2	1	1	2	1	1	1	1	17	100			
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	101, 102		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	103		
1	1	4	2	2	1	1	1	1	3	1	1	6	3	5	1	6	2	3	4	29	3	104		
2	3	2	1	1	1	1	1	4	1	1	5	7	4	3	1	5	3	3	7	26	2	(314)		
2	24	11	19	22	1	8	9	11	20	3	49	39	1	13	12	22	27	15	16	419	11	105		
1	4	11	9	7	1	2	3	1	7	1	12	15	9	2	6	8	13	16	15	77	2	106		
2	2	2	1	1	1	1	1	2	1	2	1	2	1	2	1	2	1	4	20	1	108			
9	2	5	1	1	1	1	1	5	1	1	16	6	3	4	1	5	1	4	4	37	2	107, 109		
1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	2	1	1	1	1	1	9	110		

TABLE IV.—Continued.—Causes of death in Michigan,

Classification No.	Causes of death, 1901.	Counties—Lake																
		Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	Mackinac.	Macomb.	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.	Missaukee.	Monroe.	Montcalm.
111	Hydatid tumors of liver.....																	
112	Cirrhosis of liver.....	1	2	5				2	1	3	2	4	6	1			3	6
113	Biliary calculi.....							3	2								1	
114	Other diseases of liver.....		4	9	3			1	4	1	2		1	1	1	2	7	
115	Diseases of spleen.....			1	1	1												
116	Peritonitis.....		4	2	8	1	2	2		4	4	4	5	2	1	4	3	
118	Appendicitis.....	3	7	2	4	6		1	6	4	4	1	3	2		1	2	1
117	Other diseases of digestive system.....																	
	VI. DISEASES OF GENITO-URINARY SYSTEM.																	
119	Acute nephritis.....							1	1			1	1				2	
120	Bright's disease.....		12	5	16	13		3	19	13	15	7	9	1	2	1	13	13
121	Other diseases of kidneys.....				3	2			1	1	1	1			2	1	3	
122	Calculi of urinary tract.....			1								1						1
123	Diseases of bladder.....		3	1	8				3	2	1	5		1			2	3
129	Uterine tumor.....				1	1			2				1					1
127, 128, 130	Other diseases of uterus.....	1		1	3							1						1
131	Ovarian tumor.....		1	1	1				1			1						
124-126, 132, 133	Diseases of tubes.....																	
	Other diseases of genito-urinary system.....	2		5	1				3	1	1	1	1				3	3
	VII. CHILDBIRTH.																	
137	Puerperal septicemia.....		3	1	4	1		2	4	2	4	6	5	3			4	4
138	Puerperal convulsions.....			2	1	1			1	1	1		2	1		1	1	4
134-136, 139-141	Other causes incident to childbirth.....	1		6				2	1	6	2	1	1	4	2	2	2	4
	VIII. DISEASES OF SKIN.																	
142	Gangrene.....		2		4	2			3		2	1		2	1		2	
143	Carbuncle.....											1						
144	Abscess.....	1		2					1				2	1			1	
145	Other diseases of skin.....										1	1		1				
	IX. DISEASES OF LOCOMOTOR SYSTEM.																	
146	Diseases of bones.....			4					2	3	2	2		1			1	
147	Diseases of joints.....													1				
148-149	Other diseases of locomotor system.....																	

by counties, during the year 1901. (Stillbirths excluded.)

to Wexford.																								Classification No.	
Montmorency.	Muskegon.	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Osceola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.	Saginaw.	St. Clair.	St. Joseph.	Sanilac.	Schoolcraft.	Shiawassee.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.		
..	..	..	..	..	..	..	..	..	..	1	5	1	..	7	4	5	..	1	2	2	1	1	49	..	111
..	2	2	6	1	..	..	..	..	..	..	..	..	..	4	1	1	..	..	..	..	3	2	12	..	112
..	3	3	..	..	2	..	3	..	1	..	..	..	..	7	4	..	2	..	2	4	5	4	43	1	113
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	114
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	115
1	2	3	7	2	..	..	2	..	..	..	..	..	..	12	4	3	5	1	7	7	1	10	47	1	116
..	3	8	1	..	..	1	1	..	..	..	..	..	..	9	8	..	1	1	2	5	3	13	48	1	117
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	118
..	1	1	..	..	..	..	..	..	..	1	..	..	..	1	3	1	1	..	..	..	..	20	1	..	119
2	14	7	19	5	8	3	1	..	2	21	..	..	33	39	11	16	2	21	10	17	22	181	3	..	120
..	4	1	2	..	..	..	1	..	..	1	..	..	4	3	5	1	..	1	..	..	1	13	1	..	121
..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	1	1	1	..	..	122
..	1	1	3	..	..	..	2	..	..	..	..	..	3	4	1	..	..	3	1	..	2	17	..	..	123
..	..	1	..	..	..	..	..	..	..	1	..	..	2	3	1	..	..	..	..	1	4	7	..	..	129
..	1	1	..	..	..	..	..	..	..	..	..	..	4	2	..	1	..	1	1	1	1	18	..	..	127, 128, 130
..	..	1	..	..	..	1	..	..	..	..	..	..	1	1	..	1	..	..	..	3	3	4	1	..	131
..	..	2	2	1	..	..	..	..	..	2	..	..	7	4	2	2	..	1	2	1	2	26	..	..	124, 126, 132, 133
..	3	7	1	2	..	4	..	1	4	1	1	1	6	7	3	6	2	1	5	2	4	36	..	..	137
..	1	2	3	..	..	..	..	..	..	1	..	..	3	..	1	..	..	1	1	..	2	5	3	..	138
..	4	3	1	2	..	1	1	3	1	1	1	1	7	5	..	6	1	2	5	1	5	34	2	..	134-136, 139-141
..	..	4	..	..	..	1	..	..	..	5	..	..	4	5	1	..	..	3	..	3	2	12	..	..	142
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	143
..	..	2	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	..	..	..	1	5	..	..	144
..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	1	..	1	3	..	..	145
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	7	2	..	146
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	147
..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	148-149

TABLE IV.—Continued.—Causes of death in Michigan,

Classification No.	Causes of death, 1901.	Counties—Lake																
		Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	Mackinac.	Macomb.	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.	Missaukee.	Monroe.	Montcalm.
150	X. MALFORMATIONS.																	
	Hydrocephalus.....	1	1	1				4	2			2	2				2	1
	Congenital malformation of heart (cyanosis).....		1	1	1			1	2									4
	Other congenital malformations.....	3	5	2	2		1	1	1	1	3	1	1	3	2	3		
151-153	XI. EARLY INFANCY.																	
	Premature birth.....	7		9	3	1	1	8	8	6	5	4	8	5	2	4	8	
	Congenital debility.....	6	2	3	2			8	4	12	5	1	13	4	2			
154	XII. OLD AGE.																	
	Old age.....	2	22	6	33	7	1	3	12	12	6	13	6	6	5	3	15	11
155	XIII. VIOLENCE.																	
	Suicide by poison.....	1	1	2			1	1		1								1
156	Suicide by asphyxia.....																	
157	Suicide by hanging.....			3	1	1		1		1	1			1				
158	Suicide by drowning.....	1														1		
159	Suicide by firearms.....	1		1		1		1				1		1				
160	Suicide by cutting instruments.....	1						1			1							
161	Suicide by jumping from high places.....																	
162	Suicide by crushing.....																1	
163	Suicide by other or unspecified means.....							1				1	1					1
164, 165	Fractures and dislocations.....	2		6			1		3	11	1	1	4			3	3	
167	Burns and scalds.....	1	1	2	2			2	5	4	3	2	1	1		1	4	
169	Heat and sunstroke.....	1		1						2	1						2	2
170	Cold and freezing.....							1										
(171)	Lightning.....	1		1									1	1			1	
172	Drowning.....	1	1	5	3	1	1	3	7	10		3	7	2		3	2	
174	Inhalation of poisonous gases.....												1					
175	Other accidental poisonings.....			2				1	1					1		2		
166	Accidental gunshot wounds.....	5		1		3	4	1	2		2	2	2		1	1	3	
	Injuries by machinery.....		1	1							1			1			1	
	Injuries in mines and quarries.....									19								
	Railroad accidents and injuries.....	1		22	1		1		3	2	1	1	6		1	5	3	
	Injuries by vehicles and horses.....	3		3				1				1		1		1	1	
	Injuries by electric cars.....															1		

## CAUSES OF DEATH.

57

by counties, during the year 1901. (Stillbirths excluded.)

to Wexford.

Montmorency.	Muskegon.	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Osceola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.	Saginaw.	St. Clair.	St. Joseph.	Sanilac.	Schoolcraft.	Shiawassee.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.	Classification No.
...	1	4	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	5	1	150
...	...	...	...	...	...	1	2	...	...	1	...	...	2	3	2	...	...	...	1	1	1	15	1	
1	2	4	2	...	...	3	3	...	...	1	...	...	4	2	...	3	1	2	3	5	3	29	1	
...	7	5	3	7	5	...	3	...	...	9	1	1	23	9	7	9	3	9	10	6	7	99	5	151-153
1	6	1	5	4	2	...	1	...	1	3	2	...	12	12	4	9	2	8	11	9	13	201	7	
2	22	10	33	5	...	2	16	...	4	27	3	2	44	46	14	13	2	15	23	21	22	220	6	154
...	...	1	2	...	...	...	...	...	1	...	...	...	2	1	...	1	...	...	1	2	2	19	1	155
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	156
...	...	1	...	...	...	...	...	...	...	...	...	...	1	2	2	...	...	...	1	...	1	9	...	157
...	...	1	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	1	...	158
...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	1	...	...	...	...	3	5	...	159
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	160
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	161
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	162
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	...	163
...	2	8	2	1	...	...	...	...	1	...	1	...	7	4	1	2	1	7	1	2	10	36	1	164, 165
...	4	2	4	...	...	1	1	...	...	3	...	1	6	4	...	2	1	4	1	...	1	33	...	167
...	1	...	...	...	...	...	...	...	1	...	1	...	1	1	2	...	1	1	1	1	1	14	...	169
...	...	...	...	...	...	2	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	2	...	170
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...	...	2	1	...	2	...	(171)
...	8	1	3	3	2	...	2	...	...	7	1	...	10	8	...	...	...	1	1	4	4	36	1	172
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	174
...	1	1	...	...	...	...	...	...	1	...	1	...	4	4	2	...	1	2	1	1	...	15	1	175
1	2	1	1	1	1	1	...	...	2	...	...	...	1	3	1	1	1	1	1	3	3	9	1	166
...	2	...	...	1	...	1	...	...	1	...	1	...	1	...	1	1	1	...	2	...	1	31	...	
...	...	...	...	...	...	1	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	
...	2	10	...	...	...	1	2	...	...	6	...	...	12	3	6	1	2	2	2	...	6	39	3	
...	...	4	...	...	...	...	1	...	...	3	...	...	...	2	2	2	...	1	1	2	1	6	...	166
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	...	

TABLE IV.—Concluded.—Causes of death in Michigan,

Classification No.	Causes of death, 1901.	Counties—Lake																
		Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	Mackinac.	Macomb.	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.	Missaukee.	Monroe.	Montcalm.
166, 168, [171], 176	Suffocation.....				1				1				2	1	1		1	
	Other accidental injuries....	1	1	2	11	3	2	1	4	6	20	4	1	6	1	1	3	8
	Injuries at birth.....								1	1	2						1	3
	Homicide.....				1	1					1		1	1				
	XIV. ILL-DEFINED DISEASES.																	
177	"Dropsy".....		3	3	6	1			4	1			3	3			3	5
	"Heart failure".....					2	1		3									1
178, 179	Other ill-defined diseases ....	4	11	1	8			1	7	8	6	4	8	4	1		3	7
	Unknown (or unspecified)...	1	1	1	2		2	5	1	8	14	2	2	17	2	2	3	4

# CAUSES OF DEATH.

59

by counties, during the year 1901. (Stillbirths excluded.)

to Wexford.

Montmorency.	Muskegon.	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Oscoda.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.	Saginaw.	St. Clair.	St. Joseph.	Sanilac.	Schoolcraft.	Shiawassee.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.	Classification No.
..	..	1	2	..	..	..	..	..	..	..	..	..	2	1	2	..	1	..	1	1	..	2	..	166, 168, [171] 176
1	8	3	10	1	3	1	5	..	1	3	2	2	9	4	2	4	1	8	5	4	7	36	3	
1	2	1	1	..	..	..	..	..	2	1	..	..	1	1	..	..	..	1	1	3	2	14	1	
..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	4	..	177
1	2	2	5	1	1	..	1	..	..	4	1	..	3	3	1	4	..	1	3	3	3	41	2	
..	3	..	7	2	1	3	1	..	..	2	..	1	2	6	5	1	..	3	1	3	4	14	3	
..	2	4	8	4	..	1	..	..	1	7	..	..	21	10	5	9	2	3	4	1	9	91	2	178, 179
..	3	3	2	1	..	1	2	3	1	3	28	..	6	5	1	1	3	..	1	4	3	16	1	





T A B L E S  
RELATING TO  
MARRIAGES  
IN  
MICHIGAN  
DURING THE  
YEAR 1901.

## PRIMARY TABLES RELATING TO MARRIAGES IN MICHIGAN DURING THE YEAR 1901.

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**TABLE I.**—Marriages in Michigan, by months and counties, during the year 1901.

**TABLE II.**—Persons married in Michigan, by ages, counties and sex, during the year 1901.

**TABLE III.**—Marriages and persons married in Michigan, by nativity and counties, during the year 1901.

**TABLE IV.**—Marriages in Michigan, by ages of males and females married, during the year 1901.

**TABLE V.**—Probate marriages in Michigan, by ages of males and females married during the year 1901.

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**NOTE.**—*Secondary tables* containing marriage rates and other ratios, and *comparative tables*, displaying the facts relative to marriages in Michigan for the year 1901 in connection with previous years and other states and countries, may be found on preceding pages of this report, together with the descriptive text.

## MARRIAGES.

63

TABLE I.—Marriages in Michigan, by months and counties, during the year 1901.

State and counties.	Year, 1901.	Months, 1901.												
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
STATE....	24,079	1,624	1,372	1,360	1,922	1,779	2,537	1,934	1,897	2,376	2,642	2,321	2,211	4
Alcona.....	43	5	3	4	3	5	2	7	2	3	1	5	3	.....
Alger.....	39	3	2	1	3	2	3	8	2	2	3	4	6	.....
Allegan.....	302	18	19	32	28	25	28	18	22	20	31	22	39	.....
Alpena.....	160	10	10	6	13	13	18	10	18	23	22	11	6	.....
Antrim.....	175	18	8	10	10	21	12	15	15	13	12	19	22	.....
Arenac.....	101	5	2	7	11	14	8	8	6	9	10	11	10	.....
Baraga.....	31	2	1	1	1	3	3	4	.....	4	5	3	4	.....
Barry.....	219	20	13	27	11	14	12	11	18	19	32	23	19	.....
Bay.....	560	57	35	18	68	43	62	38	31	42	65	55	46	.....
Benzie.....	87	1	9	3	13	8	5	7	2	8	12	7	12	.....
Berrien.....	1,490	46	52	40	65	84	197	265	254	215	104	82	86	.....
Branch.....	298	17	17	19	27	26	35	22	20	24	28	38	25	.....
Calhoun.....	493	39	24	35	34	38	55	37	35	27	64	58	47	.....
Cass.....	201	6	14	25	14	19	17	15	16	16	18	16	25	.....
Charlevoix.....	130	11	6	7	11	12	9	9	8	16	14	15	12	.....
Cheboygan.....	143	7	8	2	12	13	11	12	9	17	19	16	17	.....
Chippewa.....	271	19	21	13	17	11	24	25	27	24	30	29	31	.....
Clare.....	83	7	4	3	3	3	4	9	7	9	11	9	14	.....
Clinton.....	243	17	23	14	23	17	23	7	18	17	28	30	26	.....
Crawford.....	27	1	3	1	.....	1	.....	4	4	3	6	4	.....	.....
Delta.....	239	20	16	7	23	21	26	21	21	20	24	23	17	.....
Dickinson.....	214	15	11	8	26	23	24	18	16	22	23	17	11	.....
Eaton.....	357	18	19	31	21	21	34	23	29	23	48	47	43	.....
Emmet.....	188	15	6	7	12	17	18	14	18	21	19	14	27	.....
Genesee.....	401	27	25	26	23	36	43	20	34	50	45	45	27	.....
Gladwin.....	68	2	4	4	6	6	5	7	2	8	6	8	10	.....
Gogebic.....	221	14	8	10	22	20	26	22	22	18	24	21	14	.....
Gr'd Traverse.....	229	16	10	13	20	18	25	16	13	25	29	22	22	.....
Gratiot.....	331	20	22	23	18	19	26	28	21	27	43	34	50	.....
Hillsdale.....	317	23	17	38	20	11	22	18	26	33	43	29	37	.....
Houghton.....	757	49	54	31	63	51	75	63	84	68	86	84	49	.....
Huron.....	265	28	23	12	24	15	24	13	10	26	33	31	26	.....
Ingham.....	395	23	26	34	36	23	40	25	24	39	45	41	39	.....
Ionia.....	382	33	22	23	20	23	35	30	25	32	47	50	42	.....
Iosco.....	71	5	3	3	7	8	8	8	7	5	5	9	3	.....
Iron.....	81	6	4	4	6	9	6	6	11	5	6	10	8	.....
Isabella.....	218	8	18	21	22	19	13	10	19	12	27	30	19	.....
Jackson.....	508	43	36	39	41	38	55	28	36	45	40	57	50	.....
Kalamazoo.....	495	36	20	33	33	40	70	49	31	49	45	49	40	.....
Kalkaska.....	78	4	2	9	5	3	8	7	9	9	4	6	12	.....
Kent.....	1,398	74	75	87	124	131	142	104	95	138	164	142	119	3
Keweenaw.....	25	1	.....	2	3	3	.....	2	2	3	5	3	1	.....
Lake.....	50	1	1	3	6	2	3	9	1	2	5	7	10	.....
Lapeer.....	276	14	14	16	25	15	18	18	20	30	31	32	43	.....
Leelanau.....	79	2	5	6	10	3	9	3	9	8	3	11	10	.....
Lenawee.....	423	27	33	19	28	25	40	30	34	37	44	54	52	.....
Livingston.....	163	14	11	18	12	13	9	11	5	14	13	21	22	.....
Luce.....	34	4	1	2	7	2	3	5	1	1	2	.....	6	.....
Mackinac.....	73	2	7	1	7	6	5	5	8	10	10	8	4	.....
Macomb.....	265	33	10	14	27	17	24	9	9	31	36	29	26	.....
Manistee.....	207	19	10	8	19	17	16	10	19	14	23	30	21	1
Marquette.....	366	28	23	18	27	33	41	33	33	38	48	29	15	.....
Mason.....	157	13	7	9	12	13	14	18	15	8	13	15	20	.....
Mecosta.....	174	13	8	22	16	5	16	12	9	14	17	22	20	.....
Menominee.....	322	20	16	12	32	35	30	32	19	46	33	24	23	.....
Midland.....	125	8	8	8	14	7	14	17	7	5	15	7	15	.....
Missaukee.....	84	6	4	7	11	5	7	7	5	6	.....	7	19	.....
Monroe.....	410	27	19	13	40	22	34	18	37	33	57	69	41	.....
Montcalm.....	308	22	14	28	42	18	21	18	13	27	31	28	46	.....
Montmorency.....	26	2	1	2	7	2	2	2	1	1	4	.....	2	.....

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE I.—Concluded.—Marriages in Michigan, by months and counties, during the year 1901.

Counties.	Year, 1901.	Months, 1901.												
		Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
Muskegon.....	334	19	17	22	22	35	46	31	24	26	34	32	26	.....
Newaygo.....	161	8	10	10	16	9	14	16	10	20	14	11	24	.....
Oakland.....	298	13	14	19	32	17	25	30	27	31	29	35	26	.....
Oceana.....	146	4	7	9	13	14	15	12	10	19	9	23	11	.....
Ogemaw.....	69	4	4	4	9	7	8	8	4	6	5	4	6	.....
Ontonagon.....	51	3	4	1	4	2	7	5	4	5	6	4	6	.....
Osceola.....	170	11	9	12	23	16	14	10	6	15	15	12	27	.....
Oscoda.....	12	2	1	.....	1	1	1	.....	.....	.....	.....	3	3	.....
Otsego.....	73	4	2	4	3	8	10	5	6	10	8	6	7	.....
Ottawa.....	362	22	13	25	21	25	40	30	38	36	38	37	37	.....
Presque Isle..	80	6	3	.....	9	8	8	9	2	7	10	11	7	.....
Roscommon.....	13	.....	.....	1	3	.....	1	2	3	1	1	.....	1	.....
Saginaw.....	804	53	39	29	74	59	101	57	64	73	123	65	67	.....
St. Clair.....	483	46	40	29	39	28	48	33	31	45	46	46	53	.....
St. Joseph.....	188	14	8	10	13	14	17	9	14	16	22	25	21	.....
Sanilac.....	296	28	18	20	24	17	20	21	17	24	40	30	37	.....
Schoolcraft...	83	6	3	2	6	4	13	7	13	4	9	10	6	.....
Shiawassee.....	351	28	22	36	16	25	32	30	22	40	36	29	35	.....
Tuscola.....	316	20	29	25	24	21	31	21	23	24	32	26	40	.....
Van Buren.....	332	25	21	21	20	28	36	28	25	40	32	36	20	.....
Washtenaw....	340	23	20	25	19	21	45	17	16	44	44	29	37	.....
Wayne.....	3,066	223	185	110	229	242	432	218	209	361	365	314	178	.....
Wexford.....	180	18	16	7	19	11	14	15	15	15	13	12	25	.....

# MARRIAGES.

65

TABLE II.—Persons married in Michigan, by ages, counties and sex, during the year 1901.

State and counties.	Total marriages, 1901.	Sex.	Number of persons married, by periods of age, 1901.															
			Under 20 years.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 to 84.	85 to 89.	90 and over.
STATE.....	24,079	{ Total..	7,025	18,751	11,284	4,621	2,407	1,418	921	619	441	231	200	100	30	7	3	
		{ Males..	465	8,951	7,304	3,130	1,578	909	574	397	291	227	137	82	27	6	1	
		{ Fem... 6,560	9,800	3,980	1,491	829	509	347	222	150	104	63	18	3	1	2		
Alcona.....	43	{ Total..	20	42	11	4	.....	1	2	3	1	2	.....	.....	.....	.....	.....	.....
		{ Males..	1	27	7	3	.....	.....	1	2	.....	2	.....	.....	.....	.....	.....	.....
		{ Fem... 19	15	4	1	.....	1	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Alger.....	39	{ Total..	14	32	14	13	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		{ Males..	.....	13	11	12	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		{ Fem... 14	19	3	1	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Allegan.....	302	{ Total..	97	220	121	53	32	28	20	7	7	10	7	2	.....	.....	.....	.....
		{ Males..	8	110	81	28	23	19	12	3	4	8	4	2	.....	.....	.....	.....
		{ Fem... 89	110	40	25	9	9	8	4	3	2	3	.....	.....	.....	.....	.....	.....
Alpena.....	160	{ Total..	53	128	60	33	15	12	13	3	.....	1	1	1	.....	.....	.....	.....
		{ Males..	.....	56	47	25	10	9	8	2	.....	1	1	1	.....	.....	.....	.....
		{ Fem... 53	72	13	8	5	3	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Antrim.....	175	{ Total..	81	129	76	26	15	15	2	.....	.....	1	1	1	1	.....	.....	.....
		{ Males..	7	69	53	22	7	9	2	2	.....	1	1	1	1	.....	.....	.....
		{ Fem... 74	60	23	4	8	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arenac.....	101	{ Total..	51	72	32	20	7	9	2	4	3	.....	1	.....	1	.....	.....	.....
		{ Males..	3	38	26	18	3	6	1	3	.....	.....	1	.....	1	.....	.....	.....
		{ Fem... 48	34	6	2	4	3	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....
Baraga.....	31	{ Total..	12	26	12	8	1	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....
		{ Males..	.....	12	8	8	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
		{ Fem... 12	14	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Barry.....	219	{ Total..	74	161	90	36	15	19	11	11	10	6	2	2	1	1	.....	.....
		{ Males..	10	83	60	23	6	11	5	6	7	4	2	1	1	.....	.....	.....
		{ Fem... 64	78	30	13	9	8	6	5	3	2	.....	1	.....	.....	.....	.....	.....
Bay.....	560	{ Total..	176	425	278	111	65	20	18	8	4	6	7	.....	1	1	.....	.....
		{ Males..	8	213	171	76	51	14	10	4	2	4	5	.....	1	1	.....	.....
		{ Fem... 168	212	107	35	14	6	8	4	2	2	2	.....	.....	.....	.....	.....	.....
Benzie.....	87	{ Total..	42	59	34	16	8	7	4	3	.....	1	.....	.....	.....	.....	.....	.....
		{ Males..	3	33	21	14	6	4	3	2	.....	1	.....	.....	.....	.....	.....	.....
		{ Fem... 39	26	13	2	2	3	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Berrien.....	1,490	{ Total..	339	1,044	736	371	223	118	63	40	21	8	9	6	2	.....	.....	.....
		{ Males..	21	485	434	220	146	78	42	29	15	6	6	6	2	.....	.....	.....
		{ Fem... 318	559	302	151	77	40	21	11	6	2	3	.....	.....	.....	.....	.....	.....
Branch.....	298	{ Total..	95	240	112	52	35	14	7	11	9	14	5	2	.....	.....	.....	.....
		{ Males..	7	122	78	33	21	7	7	3	4	9	5	2	.....	.....	.....	.....
		{ Fem... 88	118	34	19	14	7	.....	8	5	.....	.....	.....	.....	.....	.....	.....	.....
Calhoun.....	493	{ Total..	136	352	224	106	46	41	32	13	15	17	3	1	.....	.....	.....	.....
		{ Males..	16	171	141	65	27	19	23	7	9	11	3	1	.....	.....	.....	.....
		{ Fem... 120	181	83	41	19	22	9	6	6	.....	.....	.....	.....	.....	.....	.....	.....
Cass.....	201	{ Total..	79	143	61	42	22	15	11	9	10	5	5	.....	.....	.....	.....	.....
		{ Males..	9	78	40	25	14	10	7	3	8	4	3	.....	.....	.....	.....	.....
		{ Fem... 70	65	21	17	8	5	4	6	2	1	2	.....	.....	.....	.....	.....	.....
Charlevoix...	130	{ Total..	53	91	54	22	16	6	7	6	4	.....	1	.....	.....	.....	.....	.....
		{ Males..	1	46	39	17	11	4	3	5	3	.....	1	.....	.....	.....	.....	.....
		{ Fem... 52	45	15	5	5	2	4	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Cheboygan...	143	{ Total..	62	107	60	25	9	9	6	3	1	4	.....	.....	.....	.....	.....	.....
		{ Males..	5	59	42	17	5	7	2	2	1	3	.....	.....	.....	.....	.....	.....
		{ Fem... 57	48	18	8	4	2	4	1	.....	1	.....	.....	.....	.....	.....	.....	.....
Chippewa....	271	{ Total..	77	188	161	69	28	11	4	4	.....	.....	.....	.....	.....	.....	.....	.....
		{ Males..	1	77	113	47	19	7	3	4	.....	.....	.....	.....	.....	.....	.....	.....
		{ Fem... 76	111	48	22	9	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE II.—Continued.—Persons married in Michigan, by ages, counties and sex, during the year 1901.

Counties.	Total marriages, 1901.	Sex.	Number of persons married, by periods of age, 1901.																
			Under 20 years.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 to 84.	Unk.		
Clare.....	83	{ Total.. Males.. Fem...	43 2 41	60 38 22	29 21 8	7 5 2	9 5 4	11 7 4	3 3 2	4 2 2									
Clinton.....	243	{ Total.. Males.. Fem...	82 5 77	208 102 106	86 65 21	46 29 17	21 14 7	11 7 4	8 6 2	7 3 4	7 4 3	5 5 2	4 2 2	1 1 2					
Crawford.....	27	{ Total.. Males.. Fem...	9 ..... 9	15 9 6	12 7 5	7 4 3	3 2 1		3 1 2	2 1 1	1 1 1		1 1 1						
Delta.....	239	{ Total.. Males.. Fem...	82 2 80	180 82 98	126 89 37	48 36 12	20 16 5	8 5 3	3 5 3	3 2 1	3 2 1								
Dickinson.....	214	{ Total.. Males.. Fem...	66 1 65	177 81 96	110 79 31	40 27 13	25 18 7	9 7 2		1 1 .....									
Eaton.....	357	{ Total.. Males.. Fem...	131 13 118	303 165 138	131 79 52	48 37 11	26 16 10	20 12 8	16 12 4	10 7 6	12 4 5	5 7 1	7 3 4	3 3 .....	2 2 .....				
Emmet.....	188	{ Total.. Males.. Fem...	54 6 48	143 68 75	88 57 31	40 25 15	22 14 8	13 8 5	4 1 3	5 3 2	2 1 1	2 1 2	2 2 .....			1 1			
Genesee.....	401	{ Total.. Males.. Fem...	129 9 120	318 162 156	168 114 54	61 40 21	43 25 18	25 13 12	19 13 6	9 4 5	9 6 3	11 6 5	6 5 1	2 2 .....					
Gladwin.....	68	{ Total.. Males.. Fem...	38 ..... 36	46 29 17	22 17 5	12 8 5	8 5 3	2 2 .....	2 1 1	2 2 2	3 ..... .....		1 1 .....						
Gogebic.....	221	{ Total.. Males.. Fem...	67 2 65	160 69 91	116 80 36	54 40 14	29 19 10	9 7 2	5 2 3	1 1 .....		1 1 .....							
G'd Traverse..	229	{ Total.. Males.. Fem...	80 ..... 75	166 75 91	109 79 30	43 30 13	22 17 5	8 4 4	11 6 5	11 8 3	3 2 1	4 2 2	1 1 .....						
Gratiot.....	331	{ Total.. Males.. Fem...	135 13 122	274 151 123	121 79 42	43 31 12	20 12 8	20 14 6	13 6 7	13 6 7	11 10 1	5 5 .....	6 3 3	1 1 .....					
Hillsdale.....	317	{ Total.. Males.. Fem...	102 11 91	254 129 125	133 83 50	64 40 24	22 19 3	19 10 9	15 9 6	9 6 3	8 3 5	2 2 .....	3 2 1	3 2 .....					
Houghton.....	757	{ Total.. Males.. Fem...	181 9 172	630 273 357	438 277 161	142 110 32	74 53 21	23 18 5	8 5 3	8 6 2	2 2 .....	6 3 3	1 ..... 1	1 1 .....					
Huron.....	265	{ Total.. Males.. Fem...	80 ..... 80	214 94 120	126 96 30	49 35 14	20 15 5	12 5 7	11 6 5	3 3 .....	4 4 .....	6 3 3	3 2 1	1 1 .....					
Ingham.....	395	{ Total.. Males.. Fem...	99 ..... 94	355 173 182	167 105 62	66 45 21	39 21 18	23 17 3	17 12 5	6 3 3	4 2 2	7 1 3	1 1 .....	5 3 2	.....	1			
Ionia.....	382	{ Total.. Males.. Fem...	101 7 94	334 159 175	148 100 48	66 45 21	32 20 12	23 10 13	18 12 8	15 12 3	11 5 6	8 7 1	2 1 1	4 4 .....	2 2 .....				
Iosco.....	71	{ Total.. Males.. Fem...	24 ..... 23	65 35 30	26 18 8	3 ..... .....	5 4 1	1 3 .....	3 2 1	8 3 5	3 2 1	2 1 2	1 ..... .....	1 1 .....		1			

# MARRIAGES.

67

**TABLE II.—Continued.—Persons married in Michigan, by ages, counties and sex, during the year 1901.**

Counties.	Total marriages, 1901.	Sex.	Number of persons married, by periods of age, 1901.																Unk.
			Under 20 years.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +			
Iron.....	81	{ Total.. Males.. Fem...	30 2 28	59 25 34	46 35 11	17 14 3	6 4 2	4 1 3											
Isabella.....	218	{ Total.. Males.. Fem...	91 9 82	162 84 78	82 58 24	36 26 10	19 10 9	11 9 2	12 6 6	9 6 3	6 4 2	1 1 3	5 3 2	2 2 2					
Jackson.....	508	{ Total.. Males.. Fem...	133 16 117	388 179 209	229 146 83	108 66 42	55 36 19	27 13 14	28 19 9	17 11 6	14 11 3	5 3 2	8 4 4	2 2 4	2 1 1	1 1 1			
Kalamazoo....	495	{ Total.. Males.. Fem...	121 9 112	377 182 195	232 138 94	93 60 33	60 32 28	45 32 13	24 15 9	14 11 3	11 6 5	5 4 1	3 2 1	4 2 1	1 1 1				
Kalkaska.....	78	{ Total.. Males.. Fem...	36 3 33	61 34 27	27 19 8	11 9 2	6 4 2	6 3 3	5 4 1	4 3 2									
Kent.....	1,398	{ Total.. Males.. Fem...	347 26 321	1,094 504 590	705 429 276	256 174 82	148 104 44	98 64 30	50 30 20	31 23 8	29 20 9	15 10 5	11 6 5	7 3 4	3 3 4	2 2 2			
Keweenaw....	25	{ Total.. Males.. Fem...	13 1 12	22 14 8	8 4 4	3 2 1	2 2 .....	1 1 .....	1 1 .....										
Lake.....	50	{ Total.. Males.. Fem...	22 1 21	41 26 15	17 12 5	10 4 6	2 2 .....	3 3 .....	3 .....		2 .....								
Lapeer.....	276	{ Total.. Males.. Fem...	103 7 96	248 131 117	94 70 21	33 21 12	15 10 5	11 8 3	11 6 5	14 7 7	8 5 2	7 4 3	4 4 3	4 3 1					
Leelanau.....	79	{ Total.. Males.. Fem...	34 2 32	60 26 34	39 31 8	16 13 3	5 5 .....			2 1 1			1 1 .....	1 .....	1 1				
Lenawee.....	423	{ Total.. Males.. Fem...	109 9 100	351 180 171	188 107 81	73 47 26	37 20 17	27 19 8	18 14 8	15 11 7	14 8 3	5 2 3	6 4 2	3 2 1					
Livingston....	163	{ Total.. Males.. Fem...	49 3 46	125 58 67	75 55 20	27 17 9	17 9 8	9 6 3	7 4 3	4 4 1	2 1 1	7 3 4	4 3 1						
Luce.....	34	{ Total.. Males.. Fem...	11 1 10	17 7 10	18 11 7	11 7 4	7 5 2	1 1 .....		1 1 .....	2 1 1								
Mackinac.....	73	{ Total.. Males.. Fem...	24 ..... 24	55 ..... 28	34 ..... 12	15 ..... 4	9 ..... 3	8 ..... 2		1 .....									
Macomb.....	265	{ Total.. Males.. Fem...	60 5 55	220 86 134	139 94 45	45 33 12	19 15 4	13 9 5	11 6 4	7 4 3	7 5 2	2 2 .....	5 5 .....						
Manistee.....	207	{ Total.. Males.. Fem...	75 3 72	167 87 80	89 61 28	40 28 12	20 14 6	12 7 5	4 2 2	5 4 .....		1 .....	1 1 .....						
Marquette.....	366	{ Total.. Males.. Fem...	67 2 65	296 117 179	217 135 82	79 61 18	37 26 11	22 16 6	6 3 3	1 1 1	1 4 .....	5 1 1	1 4 .....						
Mason.....	157	{ Total.. Males.. Fem...	48 4 44	114 50 64	72 47 25	37 25 12	17 13 4	11 7 4	6 5 1	4 3 1	3 3 .....	1 .....	1 1 .....						



## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE II.—Continued.—Persons married in Michigan, by ages, counties and sex, during the year 1901.

Counties.	Total marriages, 1901.	Sex.	Number of persons married, by periods of age, 1901.																
			Under 20 years.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.		
Mecosta.....	174	{ Total.. Males.. Fem....	83 10 73	116 66 50	62 40 22	29 20 9	23 15 8	10 5 5	7 6 1	8 6 2	5 1 4	3 3 4	.....	2 2 .....	.....	.....	.....		
Menominee....	322	{ Total.. Males.. Fem....	105 9 96	263 122 141	125 90 35	63 42 21	32 23 9	17 13 4	12 6 6	10 7 4	9 6 2	6 2 4	.....	2 2 .....	.....	.....	.....		
Midland.....	125	{ Total.. Males.. Fem....	57 3 54	95 53 42	54 40 14	19 14 5	8 3 5	3 2 1	4 3 1	2 3 .....	6 2 3	2 2 .....	.....	.....	.....	.....	.....		
Missaukee.....	84	{ Total.. Males.. Fem....	47 7 40	64 38 26	16 11 5	16 11 5	9 6 3	5 2 3	5 4 1	4 3 1	1 1 .....	.....	.....	.....	.....	.....	.....		
Monroe.....	410	{ Total.. Males.. Fem....	113 6 107	320 159 161	197 123 74	71 45 26	51 33 18	20 10 10	21 14 7	8 4 4	5 5 1	6 5 .....	6 5 2	1 4 .....	1 1 .....	.....	.....		
Montcalm.....	308	{ Total.. Males.. Fem....	123 6 117	235 132 103	112 79 33	44 31 13	19 10 9	22 12 10	24 15 9	9 4 5	11 7 4	8 6 2	.....	7 4 3	1 1 .....	1 1 .....	.....		
Montmorency..	26	{ Total.. Males.. Fem....	14 ..... 14	11 7 4	14 12 2	6 2 4	2 2 .....	2 1 1	1 1 .....	1 ..... .....	.....	.....	.....	1 ..... 1	.....	.....	.....		
Muskegon.....	334	{ Total.. Males.. Fem....	82 13 69	270 113 157	148 100 48	52 32 20	41 26 15	39 27 12	12 5 7	7 5 2	6 4 2	10 8 2	.....	1 ..... .....	.....	.....	.....		
Newaygo.....	161	{ Total.. Males.. Fem....	68 3 65	122 61 61	66 53 13	26 19 7	10 7 3	8 6 2	5 2 3	7 4 3	3 1 2	2 2 .....	.....	4 2 2	1 1 .....	.....	.....		
Oakland.....	298	{ Total.. Males.. Fem....	67 1 66	228 102 126	137 87 50	61 43 18	41 22 19	22 17 5	10 8 2	7 4 3	8 3 5	6 4 2	.....	5 5 .....	4 2 2	.....	.....		
Oceana.....	146	{ Total.. Males.. Fem....	49 1 48	100 52 48	71 40 31	29 25 4	18 14 4	7 3 4	4 3 1	4 2 2	2 1 .....	.....	.....	2 ..... 2	4 3 1	.....	.....		
Ogemaw.....	69	{ Total.. Males.. Fem....	31 ..... 31	49 26 23	21 16 5	18 14 4	5 4 1	.....	6 2 4	4 3 1	2 2 .....	.....	.....	.....	1 1 .....	.....	.....		
Ontonagon....	51	{ Total.. Males.. Fem....	19 1 18	35 15 20	18 15 3	20 13 7	6 4 2	4 3 1	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Osceola.....	170	{ Total.. Males.. Fem....	85 7 78	116 68 48	70 48 22	26 18 8	12 9 3	9 5 4	5 2 3	7 6 1	5 3 2	3 3 .....	.....	1 1 .....	1 ..... 1	.....	.....		
Oscoda.....	12	{ Total.. Males.. Fem....	6 ..... 6	5 4 1	5 3 2	1 .....	1 .....	2 1 1	1 1 .....	1 .....	1 1 .....	.....	.....	.....	.....	.....	.....		
Otsego.....	73	{ Total.. Males.. Fem....	36 2 34	50 32 18	25 17 8	10 6 6	9 6 3	3 2 1	9 6 3	3 2 .....	2 1 .....	1 1 .....	.....	.....	.....	.....	.....		
Ottawa.....	362	{ Total.. Males.. Fem....	103 11 92	274 127 147	182 120 62	62 39 23	44 24 20	18 12 6	12 9 3	5 4 1	11 7 4	4 4 .....	.....	5 3 2	1 1 .....	2 1 1	.....		
Presque Isle...	80	{ Total.. Males.. Fem....	40 1 39	80 49 31	29 21 8	5 .....	4 5 1	1 .....	.....	1 .....	.....	.....	.....	.....	.....	.....	.....		

# MARRIAGES.

69

**TABLE II.—Concluded. —Persons married in Michigan, by ages, counties and sex, during the year 1901.**

Counties.	Total marriages, 1901.	Sex.	Number of persons married, by periods of age, 1901.															
			Under 20 years.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.	
Roscommon ...	13	{ Total.. Males.. Fem...	4 ..... 4	4 1 3	7 5 2	5 4 1	1 ..... 1	..... ..... .....	1 1 .....	2 1 .....	1 1 .....	1 1 .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	
Saginaw .....	804	{ Total.. Males.. Fem...	227 15 212	643 294 349	388 245 143	159 117 42	82 58 24	46 31 15	23 15 8	21 16 5	3 10 .....	3 5 .....	1 1 .....	2 4 .....	4 1 .....	..... ..... .....	..... ..... .....	
St. Clair.....	483	{ Total.. Males.. Fem...	99 5 94	366 155 211	282 173 109	101 73 28	47 31 16	28 11 12	15 8 4	13 3 5	5 7 2	7 3 2	3 5 .....	3 3 .....	..... ..... .....	..... ..... .....	..... ..... .....	
St. Joseph.....	183	{ Total.. Males.. Fem...	66 6 60	154 72 82	76 54 22	32 25 7	12 9 3	8 6 2	7 3 4	3 2 .....	2 3 1	2 2 .....	2 1 .....	1 1 .....	2 2 .....	1 ..... 1	..... ..... .....	
Sanilac .....	296	{ Total.. Males.. Fem...	102 8 94	246 119 127	131 96 35	47 32 15	30 19 11	7 5 2	12 5 7	4 4 .....	5 3 2	3 2 1	4 2 2	1 2 .....	4 1 .....	..... ..... .....	..... ..... .....	
Schoolcraft ...	83	{ Total.. Males.. Fem...	24 ..... 24	56 26 30	47 29 18	17 14 3	8 5 3	2 2 .....	6 2 4	2 2 1	2 2 .....	1 2 .....	1 1 .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	
Shiawassee....	351	{ Total.. Males.. Fem...	99 8 91	275 140 135	143 90 53	71 45 26	29 19 10	25 15 10	14 7 7	14 10 4	11 6 5	10 4 6	6 3 3	3 3 .....	1 1 .....	1 ..... 1	..... ..... .....	
Tuscola.....	316	{ Total.. Males.. Fem...	94 6 88	261 119 142	152 108 44	41 29 12	27 16 11	18 13 5	14 9 5	12 7 5	7 6 1	5 2 3	..... ..... .....	1 ..... .....	..... 1 .....	..... ..... .....	..... ..... .....	
Van Buren.....	332	{ Total.. Males.. Fem...	116 10 106	261 139 122	145 92 53	54 35 19	20 12 8	23 14 9	10 7 3	9 6 3	7 5 2	6 2 4	6 5 1	7 5 2	..... 5 .....	..... 5 .....	..... ..... .....	
Washtenaw....	340	{ Total.. Males.. Fem...	52 3 49	236 101 135	212 124 88	78 48 30	27 15 12	22 13 9	21 13 8	11 7 4	10 8 2	3 2 1	2 1 .....	4 3 1	2 3 .....	..... 2 .....	..... ..... .....	
Wayne.....	3,066	{ Total.. Males.. Fem...	616 26 590	2,463 1,085 1,378	1,674 1,030 644	674 452 222	312 208 104	160 103 57	94 62 32	58 39 19	37 26 11	33 33 7	8 6 2	2 1 .....	1 2 .....	..... 1 .....	..... ..... .....	
Wexford.....	180	{ Total.. Males.. Fem...	61 1 60	135 71 64	72 52 20	28 17 11	15 10 5	12 8 4	14 6 6	9 3 3	8 3 5	3 1 .....	1 1 .....	2 1 1	2 1 1	1 1 .....	..... ..... .....	

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE III.—Marriages and persons married in Michigan, by nativity and counties, during the year 1901.

State and counties.	Total marriages, 1901.	(a) Marriages, by nativity, 1901.										(b) Persons married, by nativity, 1901.					
		Both native born.	Both foreign born.	Foreign male, native female.	Foreign female, native male.	Female unk.		Male unk.	Both unknown.	Native born.		Foreign born.		Unk.			
						Male.	Female.			Males.	Females.	Males.	Females.				
								Native.	Foreign born.					Native.	Foreign born.		
STATE.....	24,079	15,606	3,102	3,071	1,909	322	58	8	.....	3	17,837	18,685	6,231	5,011	11	383	
Alcona.....	43	19	11	7	6	.....	.....	.....	.....	.....	25	26	18	17	.....	.....	
Alger.....	39	15	13	7	4	.....	.....	.....	.....	.....	19	22	20	17	.....	.....	
Allegan.....	302	254	7	17	23	1	.....	.....	.....	.....	278	271	24	30	.....	1	
Alpena.....	160	71	27	29	27	2	4	.....	.....	.....	100	100	60	54	.....	6	
Antrim.....	175	119	8	21	11	15	1	.....	.....	.....	145	140	30	19	.....	16	
Arenac.....	101	56	11	27	6	1	.....	.....	.....	.....	63	83	38	17	.....	1	
Baraga.....	31	16	6	7	2	.....	.....	.....	.....	.....	18	23	13	8	.....	.....	
Barry.....	219	206	1	9	1	2	.....	.....	.....	.....	209	215	10	2	.....	2	
Bay.....	560	313	79	105	57	5	1	.....	.....	.....	375	418	185	136	.....	6	
Benzie.....	87	62	5	12	5	3	.....	.....	.....	.....	70	74	17	10	.....	3	
Berrien.....	1,490	1,021	156	152	146	13	2	.....	.....	.....	1,180	1,173	310	302	.....	15	
Branch.....	298	273	1	13	9	2	.....	.....	.....	.....	284	286	14	10	.....	2	
Calhoun.....	493	426	7	31	20	8	.....	1	.....	.....	454	458	38	27	1	8	
Cass.....	201	184	3	3	4	6	1	.....	.....	.....	194	187	7	7	.....	7	
Charlevoix.....	130	89	7	19	5	9	1	.....	.....	.....	103	108	27	12	.....	10	
Cheboygan.....	143	81	16	31	15	.....	.....	.....	.....	.....	96	112	47	31	.....	.....	
Chippewa.....	271	59	127	47	37	.....	1	.....	.....	.....	96	106	175	164	.....	1	
Clare.....	83	57	1	15	7	3	.....	.....	.....	.....	67	72	16	8	.....	3	
Clinton.....	243	216	3	15	9	.....	.....	.....	.....	.....	225	231	18	12	.....	.....	
Crawford.....	27	11	6	7	3	.....	.....	.....	.....	.....	14	18	13	9	.....	.....	
Delta.....	239	101	75	37	21	3	2	.....	.....	.....	125	138	114	96	.....	5	
Dickinson.....	214	48	121	33	12	.....	.....	.....	.....	.....	60	81	154	133	.....	.....	
Eaton.....	357	328	1	18	10	.....	.....	.....	.....	.....	338	346	19	11	.....	.....	
Emmet.....	188	136	13	20	17	2	.....	.....	.....	.....	155	156	33	30	.....	2	
Genesee.....	401	317	12	40	20	10	2	.....	.....	.....	347	357	54	32	.....	12	
Gladwin.....	68	41	9	8	8	1	1	.....	.....	.....	50	49	18	17	.....	2	
Gogebic.....	221	47	131	24	18	.....	1	.....	.....	.....	65	71	156	149	.....	1	
Grand Traverse.....	229	175	8	21	22	3	.....	.....	.....	.....	200	196	29	30	.....	3	
Gratiot.....	331	278	5	12	15	19	2	.....	.....	.....	312	290	19	20	.....	21	
Hillsdale.....	317	273	1	10	3	29	1	.....	.....	.....	305	283	12	4	.....	30	
Houghton.....	757	203	380	124	42	5	2	1	.....	.....	250	328	506	422	1	7	
Huron.....	265	121	55	55	33	.....	.....	.....	.....	.....	154	176	111	88	.....	1	
Ingham.....	395	324	14	30	22	5	1	.....	.....	.....	351	354	44	36	.....	5	
Ionia.....	382	327	8	25	14	8	.....	.....	.....	.....	349	352	33	22	.....	8	
Iosco.....	71	34	11	17	6	2	1	.....	.....	.....	42	51	29	17	.....	3	
Iron.....	81	15	54	9	3	.....	.....	.....	.....	.....	18	24	63	57	.....	.....	
Isabella.....	218	153	8	25	25	5	2	.....	.....	.....	183	178	35	33	.....	7	
Jackson.....	508	414	14	33	26	20	1	.....	.....	.....	460	447	48	40	.....	21	
Kalamazoo.....	495	385	17	38	28	25	2	.....	.....	.....	438	423	57	45	.....	27	
Kalkaska.....	78	66	.....	9	2	1	.....	.....	.....	.....	69	75	9	2	.....	1	
Kent.....	1,398	937	165	190	102	3	.....	1	.....	.....	1,042	1,128	355	267	1	3	
Keweenaw.....	25	8	.....	6	3	.....	.....	.....	.....	.....	11	14	14	11	.....	.....	
Lake.....	50	34	1	8	7	.....	.....	.....	.....	.....	41	42	9	8	.....	.....	
Lapeer.....	276	216	13	31	16	.....	.....	.....	.....	.....	232	247	44	29	.....	.....	
Leelanau.....	79	61	2	12	4	.....	.....	.....	.....	.....	65	73	14	6	.....	.....	
Lenawee.....	423	359	5	28	16	14	1	.....	.....	.....	389	387	34	21	.....	15	
Livingston.....	163	147	3	5	5	3	.....	.....	.....	.....	155	152	8	8	.....	3	
Luce.....	34	8	14	7	4	1	.....	.....	.....	.....	13	15	21	18	.....	1	
Mackinac.....	73	42	12	9	7	2	1	.....	.....	.....	51	51	22	19	.....	3	
Macomb.....	265	206	12	31	13	2	1	.....	.....	.....	221	237	44	25	.....	3	

# MARRIAGES.

71

**TABLE III.—Concluded.—Marriages and persons married in Michigan, by nativity and counties, during the year 1901.**

Counties.	Total marriages, 1901.	(a) Marriages, by nativity, 1901.										(b) Persons married, by nativity, 1901.					
		Both native born.	Both foreign born.	Foreign male, native female.	Foreign female, native male.	Female unk.		Male unk.		Both unknown.	Native born.		Foreign born.		Unk.		
						Male.	Female.	Males.	Females.		Males.	Females.					
Manistee.....	207	101	40	44	20	2	.....	.....	.....	123	145	84	60	.....	2		
Marquette.....	366	110	159	73	23	.....	1	.....	.....	133	183	233	182	.....	1		
Mason.....	157	109	13	17	11	6	1	.....	.....	126	126	31	24	.....	7		
Mecosta.....	174	135	7	22	8	2	.....	.....	.....	145	157	29	15	.....	2		
Menominee.....	322	143	73	61	35	6	4	.....	.....	184	204	138	108	.....	10		
Midland.....	125	86	5	23	10	1	.....	.....	.....	97	109	28	15	.....	1		
Missaukee.....	84	54	4	16	10	.....	.....	.....	.....	64	70	20	14	.....	.....		
Monroe.....	410	352	9	28	17	3	1	.....	.....	372	380	38	26	.....	4		
Montcalm.....	308	250	11	29	16	1	1	.....	.....	267	279	41	27	.....	2		
Montmorency...	26	10	4	8	3	1	.....	.....	.....	14	18	12	7	.....	1		
Muskegon.....	334	207	37	55	33	2	.....	.....	.....	242	262	92	70	.....	2		
Newaygo.....	161	129	5	20	7	.....	.....	.....	.....	136	149	25	12	.....	.....		
Oakland.....	298	208	10	39	20	15	4	2	.....	243	249	53	30	2	19		
Oceana.....	146	114	5	12	8	7	.....	.....	.....	129	126	17	13	.....	7		
Ogemaw.....	69	32	9	15	8	2	3	.....	.....	42	47	27	17	.....	5		
Ontonagon.....	51	28	10	8	4	1	.....	.....	.....	33	36	18	14	.....	1		
Osceola.....	170	111	7	33	13	6	.....	.....	.....	130	144	40	20	.....	6		
Oscoda.....	12	6	.....	2	1	2	1	.....	.....	9	8	3	1	.....	3		
Otsego.....	73	46	12	10	5	.....	.....	.....	.....	51	56	22	17	.....	.....		
Ottawa.....	362	247	27	48	35	1	1	1	2	283	296	76	62	3	4		
Presque Isle....	80	50	8	15	3	1	3	.....	.....	54	65	26	11	.....	4		
Roscommon.....	13	9	1	3	.....	.....	.....	.....	.....	9	12	4	1	.....	.....		
Saginaw.....	804	502	67	146	89	.....	.....	.....	.....	591	648	213	156	.....	.....		
St. Clair.....	483	278	58	83	61	2	1	.....	.....	341	361	142	119	.....	3		
St. Joseph.....	183	166	1	9	3	4	.....	.....	.....	173	175	10	4	.....	4		
Sanilac.....	296	125	50	76	42	1	1	1	.....	168	202	127	92	1	2		
Schoolcraft.....	83	27	25	14	14	2	1	.....	.....	43	41	40	39	.....	3		
Shiawassee.....	351	279	8	29	26	9	.....	.....	.....	314	308	37	34	.....	9		
Tuscola.....	316	204	20	66	19	4	3	.....	.....	227	270	89	39	.....	7		
Van Buren.....	332	305	4	13	10	.....	.....	.....	.....	315	318	17	14	.....	.....		
Washtenaw.....	340	269	12	37	17	5	.....	.....	.....	291	306	49	29	.....	5		
Wayne.....	3,066	1,435	716	512	403	.....	.....	.....	.....	1,838	1,947	1,228	1,119	.....	.....		
Wexford.....	180	127	18	16	14	3	.....	1	.....	144	144	34	32	2	4		

## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE IV.—Marriages in Michigan, by ages of males and females married, during the year 1901.

Ages of males married, 1901.	Ages of females married, 1901.															Total males.	Per cent of males at each age.
	Under 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.		
Under 20.....	363	100	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	465	1.9
20 to 24.....	4,006	4,420	451	59	9	3	.....	2	.....	.....	.....	1	.....	.....	.....	8,951	37.2
25 to 29.....	1,652	3,555	1,800	235	50	8	2	1	.....	.....	.....	.....	.....	.....	1	7,304	30.3
30 to 34.....	379	1,123	1,001	498	112	15	1	1	.....	.....	.....	.....	.....	.....	.....	3,130	13.0
35 to 39.....	104	382	438	333	229	71	15	2	3	1	.....	.....	.....	.....	.....	1,578	6.6
40 to 44.....	30	132	183	193	190	128	43	7	1	2	.....	.....	.....	.....	.....	909	3.8
45 to 49.....	18	46	70	92	114	116	88	23	4	2	1	.....	.....	.....	.....	574	2.4
50 to 54.....	6	21	22	46	68	86	62	58	19	8	1	.....	.....	.....	.....	397	1.6
55 to 59.....	2	12	6	15	34	44	62	56	40	15	4	1	.....	.....	.....	291	1.2
60 to 64.....	.....	6	5	14	11	24	43	44	41	31	6	1	1	.....	.....	227	0.9
65 to 69.....	.....	2	2	3	6	5	21	17	25	30	23	2	.....	1	.....	137	0.6
70 to 74.....	.....	1	.....	2	4	7	5	7	12	11	24	8	1	.....	.....	82	0.3
75 to 79.....	.....	.....	.....	1	1	2	3	2	5	3	4	5	1	.....	.....	27	0.1
80 and over.....	.....	.....	.....	.....	1	.....	2	2	.....	1	.....	.....	.....	.....	.....	6	.....
Unknown.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Total females.	6,560	9,800	3,980	1,491	829	509	347	222	150	104	63	18	3	1	2	24,079	.....
Per cent. ....	27.2	40.7	16.5	6.2	3.4	2.1	1.4	0.9	0.6	0.4	0.3	0.1	.....	.....	.....	.....	100.0

**TABLE V.—Probate marriages in Michigan, by ages of males and females married, during the year 1901.**

Ages of males married by judges of probate, 1901.		Ages of females married by judges of probate, 1901.										Total males.	Per cent of males at each age.		
		Ages under 20 years.							Under 20.	20 to 24.	25 to 29.			30 to 34.	35 to 39.
		13.	14.	15.	16.	17.	18.	19.							
Ages under 20 years.....	16.....								1				1	2.5	
	17.....						1	1		1			2	5.0	
	18.....		2	1		1		4					4	10.0	
	19.....			2			1	1	4	1			5	12.5	
Under 20.....			2	3		1	2	1	9	2	1		12	30.0	
20 to 24.....			3	4	2	2			11	1			12	30.0	
25 to 29.....				4	1				5	3	1		9	22.5	
30 to 34.....				1					1	1	1		3	7.5	
35 to 39.....							1		1				1	2.5	
40 to 44.....												1	1	2.5	
45 to 49.....												1	1	2.5	
50 to 54.....						1			1				1	2.5	
55 to 59.....															
Total females.....			5	12	3	4	3	1	28	7	3	2	40		
Per cent.....			12.5	30.0	7.5	10.0	7.5	2.5	70.0	17.5	7.5	5.0		100.0	

NOTE.—Figures in bold face indicate marriages at illegal ages, under the general laws of the State, for one or both parties. The 40 marriages performed by judges of probate during the year 1901 were distributed by months as follows:—January, 2; February, 2; March, 5; April, 5; May, 4; June, 5; July, 3; August, 5; October, 4; November, 4; December, 1. All were white with the exception of 1 couple. By nativity, there were 31 couples both native born; 2 couples both foreign born; 5 couples with foreign foreign male and native female; 2 couples with foreign female and native male. These marriages were returned from 27 counties, the largest number reported from a county being 5. They are not included in the preceding tables of marriages.



TABLES  
RELATING TO  
DIVORCES  
AND  
CAUSES OF DIVORCE  
IN  
MICHIGAN  
DURING THE  
YEAR 1901.





## PRIMARY TABLES RELATING TO DIVORCES AND CAUSES OF DIVORCE IN MICHIGAN DURING THE YEAR 1901.

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**TABLE I.**—Divorce business in Michigan, by counties, during the year 1901, showing, according to the "Summaries" filed by the county clerks, the number of bills for divorce pending at the beginning and end of the year, number filed during the year, number withdrawn or otherwise disposed of, number contested, and the number of divorces granted and refused.

**TABLE II.**—Divorces in Michigan, by counties and sex of complainant, during the year 1901, showing place of marriage, number of children in family, and duration of marriage before divorce.

**TABLE III.**—Causes of divorce in Michigan, by sex of complainant, during the year 1901, showing place of marriage, number of children in family, and duration of marriage before divorce.

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**NOTE.**—*Secondary tables*, containing divorce rates, etc., will be found on preceding pages of this Report, together with the descriptive text.

TABLE I.—Divorce business in Michigan, by counties, during the year 1901, showing, according to the "Summaries" filed by the county clerks, the number of bills for divorce pending at the beginning and end of the year, number filed during the year, number withdrawn or otherwise disposed of, number contested, and the number of divorces granted and refused.

State and counties.	Number of bills pending on January 1, 1901.	Number of bills filed during 1901.	Number of divorces granted, 1901.	Number of divorces refused, 1901.	Number of cases withdrawn, etc., 1901.	Number of bills pending on December 31, 1901.	Total number of cases, 1901.	Number of cases contested, 1901.
STATE.....	3,907	3,883	2,448	47	256	5,039	7,790	389
Alcona.....	3	2	1			4	5	
Alger.....	11	11	6		1	15	22	
Allegan.....	71	52	33			90	123	2
Alpena.....	30	16	8		1	37	46	
Antrim.....	16	36	15		4	33	52	
Arenac.....	9	6	1		2	12	15	2
Baraga.....	1	3	1			3	4	
Barry.....	55	58	37	2	26	48	113	
Bay.....	65	62	40	4	13	70	127	
Benzie.....	15	10	14			11	25	1
Berrien.....	93	83	57		4	115	176	
Branch.....	54	52	30		3	73	106	1
Calhoun.....	135	101	83	1	2	150	236	13
Cass.....	20	55	31		1	43	75	1
Charlevoix.....	27	20	10			37	47	5
Cheboygan.....	24	14	14			24	38	
Chippewa.....	37	20	13	1	4	39	57	7
Clare.....	10	15	9		5	11	25	1
Clinton.....	89	35	22	2	8	92	124	8
Crawford.....	2	1	2		1		3	
Delta.....	19	24	11		1	31	43	
Dickinson.....	7	11	8			10	18	
Eaton.....	47	84	60	1	3	67	131	32
Emmet.....	33	27	20			40	60	
Genesee.....	155	128	61	2	10	210	283	10
Gladwin.....	3	9	6			6	12	
Gogebic.....	37	12	5			44	49	
Grand Traverse.....	46	40	32			54	86	5
Gratiot.....	56	77	35		9	89	138	
Hillsdale.....	37	50	41		2	44	87	3
Houghton.....	30	36	14		2	50	66	9
Huron.....	13	22	14		2	19	35	
Ingham.....	100	58	27	1		130	158	
Ionia.....	89	85	42	1	4	127	174	17
Iosco.....	5	9	4			10	14	1
Iron.....	9	6	5			10	15	
Isabella.....	24	23	25		2	20	47	
Jackson.....	44	125	83		10	76	169	
Kalamazoo.....	49	126	90		7	78	175	18
Kalkaska.....	27	17	16		2	26	44	
Kent..... { Circuit.....	328	292	190		5	425	620	36
{ Superior.....	30	22	17		4	31	52	4
Keweenaw.....								
Lake.....	8	7	5		1	9	15	
Lapeer.....	43	35	23			55	78	4
Leelanau.....	4	4	6			2	8	
Lenawee.....	105	77	61		2	119	182	1
Livingston.....	13	30	15		12	16	43	
Luce.....	10	2	3			9	12	
Mackinac.....	5	4	2			7	9	
Macomb.....	76	47	29	1	1	92	123	11
Manistee.....	31	23	15	2	4	33	54	2
Marquette.....	28	19	8		1	38	47	2
Mason.....	13	15	10		3	15	28	2
Mecosta.....	29	27	18		1	37	56	1

# DIVORCES.

79

TABLE I.—Concluded.—Divorce business in Michigan, by counties, during the year 1901.

Counties.	Number of bills pending on January 1, 1901.	Number of bills filed during 1901.	Number of divorces granted, 1901.	Number of divorces refused, 1901.	Number of cases with- drawn, etc., 1901.	Number of bills pending on December 31, 1901.	Total number of cases, 1901.	Number of cases con- tested, 1901.
Menominee.....	18	17	8	.....	.....	27	35	.....
Midland.....	13	11	8	1	4	11	24	2
Missaukee.....	16	17	10	.....	5	18	33	.....
Monroe.....	32	41	22	1	5	45	73	7
Montcalm.....	54	59	37	4	.....	72	113	16
Montmorency.....	5	7	6	.....	.....	6	12	.....
Muskegon.....	55	64	44	.....	1	74	119	4
Newaygo.....	6	35	23	1	.....	17	41	.....
Oakland.....	21	56	35	1	3	38	77	.....
Oceana.....	38	34	27	.....	2	43	72	4
Ogemaw.....	6	5	3	1	.....	7	11	.....
Ontonagon.....	1	5	4	.....	1	1	6	.....
Osceola.....	19	21	17	.....	.....	23	40	.....
Oscoda.....	1	.....	1	.....	.....	.....	1	.....
Otsego.....	.....	6	.....	.....	.....	6	6	.....
Ottawa.....	31	23	15	.....	.....	39	54	.....
Presque Isle.....	8	10	5	.....	.....	13	18	.....
Roscommon.....	3	5	7	.....	1	.....	8	.....
Saginaw.....	165	131	96	.....	3	197	296	12
St. Clair.....	207	112	54	.....	.....	265	319	14
St. Joseph.....	46	38	29	.....	5	50	84	.....
Sanilac.....	23	18	10	.....	.....	31	41	.....
Schoolcraft.....	7	18	6	.....	3	16	25	3
Shiawassee.....	57	83	57	1	4	78	140	8
Tuscola.....	60	47	31	.....	2	74	107	.....
Van Buren.....	63	69	44	.....	4	84	132	4
Washtenaw.....	51	71	45	2	6	69	122	17
Wayne.....	406	614	350	17	42	611	1,020	90
Wexford.....	175	41	28	.....	2	188	216	10

TABLE II.—Divorces in Michigan, by counties and sex of complainant, during the year before

State and counties.	Sex of complainants.	Complainants in divorces granted, 1901.	Place of marriage.							Number of chil-							
			Michigan.	Ohio, Indiana, Wisconsin.	Other states.	Canada.	Other foreign countries.	Unknown.	0.	1.	2.	3.	4.	5.	6.	7.	8.
STATE....	{ Total. 2,448 Males. 646 Fem.. 1,802	1,961 495 1,466	91 23 68	160 57 103	164 42 122	26 10 16	46 19 27	1,130 349 781	620 123 497	310 79 231	154 36 118	80 22 58	52 7 45	28 10 18	15 2 13	12 2 10	
Alcona.....	{ Total. 1 Males. 1 Fem.. 1	1 1 1	1 1 1	.....	.....	.....	.....	.....	1 1 1	.....	.....	.....	.....	.....	.....	.....	
Alger.....	{ Total. 6 Males. 2 Fem.. 4	4 2 2	4 2 2	.....	2 .....	.....	.....	3 2 1	1 1 1	.....	.....	.....	1 .....	.....	.....	.....	
Allegan.....	{ Total. 33 Males. 10 Fem.. 23	29 8 21	2 1 1	2 1 1	.....	.....	.....	12 5 10	4 1 9	3 1 2	2 .....	1 1 2	.....	1 1 .....	.....	.....	
Alpena.....	{ Total. 8 Males. 4 Fem.. 4	8 4 4	8 4 4	.....	.....	.....	.....	4 2 2	2 1 1	.....	.....	.....	.....	.....	.....	1 .....	
Antrim.....	{ Total. 15 Males. 7 Fem.. 8	13 6 7	.....	.....	.....	2 1 1	.....	7 4 3	3 1 2	2 1 1	.....	1 .....	2 .....	.....	.....	.....	
Arenac.....	{ Total. 1 Males. 1 Fem.. 1	.....	.....	.....	1 1 .....	.....	.....	.....	.....	.....	.....	.....	1 1 .....	.....	.....	.....	
Baraga.....	{ Total. 1 Males. 1 Fem.. 1	1 1 1	1 1 1	.....	.....	.....	.....	.....	1 1 1	.....	.....	.....	.....	.....	.....	.....	
Barry.....	{ Total. 37 Males. 17 Fem.. 20	34 14 20	1 1 .....	1 1 .....	.....	.....	1 .....	22 12 10	6 2 4	7 2 5	1 .....	.....	.....	.....	1 .....	.....	
Bay.....	{ Total. 40 Males. 11 Fem.. 29	32 9 23	3 .....	4 .....	2 .....	1 .....	21 8 13	8 6 8	6 3 5	3 1 1	2 .....	.....	2 .....	.....	.....	.....	
Benzie.....	{ Total. 14 Males. 6 Fem.. 8	14 6 8	.....	.....	.....	.....	.....	5 2 3	3 1 2	2 .....	1 .....	.....	.....	.....	.....	1 1	
Berrien.....	{ Total. 57 Males. 15 Fem.. 42	40 10 30	4 1 3	10 3 7	.....	1 1 1	2 .....	25 12 13	15 1 14	9 2 7	4 1 4	1 1 2	2 .....	.....	.....	.....	
Branch.....	{ Total. 30 Males. 7 Fem.. 23	26 7 19	2 .....	1 1 .....	.....	.....	1 .....	13 4 9	11 3 8	2 .....	1 1 1	1 1 1	.....	.....	.....	.....	
Calhoun.....	{ Total. 83 Males. 19 Fem.. 64	68 17 51	5 .....	7 .....	2 1 1	.....	1 .....	44 10 34	23 3 20	9 4 5	4 1 3	1 1 .....	1 1 1	.....	.....	.....	
Cass.....	{ Total. 31 Males. 4 Fem.. 27	25 3 22	1 .....	2 2 .....	2 .....	.....	1 .....	9 1 8	14 2 12	2 2 2	3 .....	.....	.....	.....	.....	1 1	
Charlevoix...	{ Total. 10 Males. 3 Fem.. 7	6 1 5	.....	1 .....	.....	.....	3 .....	3 .....	.....	1 1 1	1 1 .....	.....	.....	1 .....	.....	.....	
Cheboygan...	{ Total. 14 Males. 5 Fem.. 9	10 3 7	2 1 1	.....	2 1 .....	.....	.....	4 2 2	5 .....	.....	1 .....	.....	2 1 1	1 1 .....	.....	1 1	
Chippewa....	{ Total. 13 Males. 13 Fem.. 13	8 .....	.....	3 .....	2 .....	.....	.....	6 .....	2 .....	1 .....	1 .....	3 .....	.....	.....	.....	.....	

## 81.

Children in family.							Duration of marriage before divorce.																		
9.	10.	11.	12.	13.	14.	Unknown.	Under 1 year.	1.	2.	3.	4.	Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	Unknown.	
312	523	321	211	211	1....1	31922	6242	155119	17447127	16147114	17845133	730195535	694186508	33781256	28867221	18750137	922270	582236	281117	1266	541	211	....	1511	
..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	1	..	..	1	..	2	1	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	1	..	..	1	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	1	..	..	1	..	..	..	..	..	..	
..	..	..	..	..	..	..	413	1	2	1	3	1110	945	211	3	1	413	22	1	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	2	1	..	3	1	2	1	1	..	..	..	1	..	..	..	..	
..	..	..	..	..	..	..	..	2	1	2	1	633	431	1	2	1	..	..	..	..	..	..	1	..	
..	..	..	..	..	..	..	..	2	..	..	1	33	31	..	..	..	..	..	..	..	..	..	1	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	44	431	1	5	1486	1064	743	..	1	2	1	2	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	211	1	6	3	1248	17611	3	513	1	..	1	1	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	2	..	..	1	1	..	211	523	1	2	3	1	1	..	..	..	..	..	..	
..	..	..	..	..	..	2	..	..	1	..	..	1	3	..	..	2	2	..	..	..	..	..	..	..	
..	..	..	..	..	..	1	312	312	4	5	54	2010	1147	11	6	3	4	1	1	..	..	..	..	1	
..	..	..	..	..	..	1	..	..	..	3	2	716	12210	312	422	1	1	..	1	..	..	..	..	1	
..	..	..	..	..	..	1	..	2	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	1	
..	..	..	..	..	..	..	211	3	4	10	96	2824	2217	1147	98	725	2	1	2	..	1	..	..	..	
..	..	..	..	..	..	..	1	312	..	5	2	1110	826	1	5	2	1	2	1	..	..	..	..	..	
..	..	..	..	..	..	321	1	1	1	..	..	312	413	1	1	..	1	..	1						

TABLE II.—Continued.—Divorces in Michigan, by counties and sex of com-

Counties.	Sex of complain- ants.	Complainants in divorces grant- ed, 1900.	Place of marriage.						Number of chil-								
			Michigan.	Ohio, Indi- ana, Wis- consin.	Other states.	Canada.	Other for- eign coun- tries.	Unknown.	0.	1.	2.	3.	4.	5.	6.	7.	8.
Clare.....	Total..	9	8			1			5	3	1						
	Males..	5							3	2							
	Fem..	4	3			1			2	1	1						
Clinton.....	Total..	22	21		1				6	4	5	2	1	1			
	Males..	6	5		1				2	1	1	1	1				
	Fem..	16	16						4	3	4	1	1	1			
Crawford....	Total..	2	2								1	1					
	Males..	2															
	Fem..	2	2								1	1					
Delta.....	Total..	11	5	1		2	1	2	3	3	2	2			1		
	Males..	2						2	1		1						
	Fem..	9	5	1		2	1		2	3	1	2			1		
Dickinson....	Total..	8	5	2			1		4	2		1	1				
	Males..																
	Fem..	8	5	2			1		4	2		1	1				
Eaton.....	Total..	60	54	3	2			1	37	11	4	4	3			1	
	Males..	21	19		2				13	5	2		1				
	Fem..	39	35	3				1	24	6	2	4	2			1	
Emmet.....	Total..	20	19			1			7	5	4	2	1	1			
	Males..	3	3						2	1							
	Fem..	17	16			1			5	4	4	2	1	1			
Genesee.....	Total..	61	54	1	5	1			24	19	10	6	1			1	
	Males..	16	16						6	6	2	2					
	Fem..	45	38	1	5	1			18	13	8	4	1			1	
Gladwin.....	Total..	6	4					2	2	3							1
	Males..																
	Fem..	6	4					2	2	3							1
Gogebic.....	Total..	5	3	2					2	2	1						
	Males..	1		1						1							
	Fem..	4	3	1					2	1	1						
Gd. Traverse.	Total..	32	27	1	2			2	19	4	5	3	1				
	Males..	7	7						4	1	1		1				
	Fem..	25	20	1	2			2	15	3	4	3					
Gratiot.....	Total..	35	30	2	3				20	5	4	3		1	1	1	
	Males..	5	4		1				5								
	Fem..	30	26	2	2				15	5	4	3		1	1	1	
Hillsdale....	Total..	41	29	3	1			8	18	11	5	1					
	Males..	10	7	2				1	6		2	1					
	Fem..	31	22	1	1			7	12	11	3						
Houghton....	Total..	14	8	1		1	1	3	4	5	1	1		1	1		
	Males..	1						1	1	1							
	Fem..	13	8	1		1	1	2	3	5	1	1		1	1		
Huron.....	Total..	14	8		3	2		1	7	3	2	1		1			
	Males..	2	1		1				1			1					
	Fem..	12	7		2	2		1	6	3	2			1			
Ingham.....	Total..	27	22		3	2			14	6	2	2	1	1	1		
	Males..	9	7			2			7	1		1					
	Fem..	18	15		3				7	5	2	1	1	1	1		
Ionia.....	Total..	42	40				1	1	20	7	8	3		2	1		
	Males..	11	10					1	5	2	2	1					
	Fem..	31	30				1		15	5	6	2		2	1		
Iosco.....	Total..	4	4						1	2	1						
	Males..	2	2						1		1						
	Fem..	2	2							2							

plainant, number of children in family and duration of marriage before divorce.

Children in family.							Duration of marriage before divorce.																			
9.	10.	11.	12.	13.	14.	Unknown.	Under 1 year.	1.	2.	3.	4.	Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	Unknown.		
									1		1	2	4		3											
									1		1	2	3		1											
		1	1			2	1				3	4	4	5	1	4	2	2								
		1				2	1				2	3	2	4	1	3	2	2								
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TABLE II.—Continued.—Divorces in Michigan, by counties and sex of com-

Counties.	Sex of complainants.	Complainants in divorces granted, 1901.	Place of marriage.							Number of children.								
			Michigan.	Ohio, Indiana, Wisconsin.	Other states.	Canada.	Other foreign countries.	Unknown.		0.	1.	2.	3.	4.	5.	6.	7.	8.
Iron .....	Total.	5	3	1	1				1	1			1	1			1	
	Males.	1	1						1									
	Fem.	4	2	1	1					1			1	1			1	
Isabella .....	Total.	25	20		4	1			8	7	3	2	3	1	1			
	Males.	10	8		2				4	1	2	1	2					
	Fem.	15	12		2	1			4	6	1	1	1	1	1			
Jackson .....	Total.	83	73	3	2	4		1	40	17	14	4	6	1				
	Males.	18	13	1	1	2		1	8	3	4	1	2					
	Fem.	65	60	2	1	2			32	14	10	3	4	1				
Kalamazoo ..	Total.	90	76	2	9	1	1	1	41	24	14	6	3	1	1			
	Males.	23	16		6		1		12	7	3					1		
	Fem.	67	60	2	3	1		1	29	17	11	6	3	1				
Kalkaska .....	Total.	16	14	2					10	2	2	1					1	
	Males.	3	3						2	1								
	Fem.	13	11	2					8	1	2	1					1	
Kent .....	Total.	207	178	5	16	4	3	1	104	59	25	5	3	5	3			
	Males.	51	41	1	6	1	2		29	9	7	2		2	1			
	Fem.	156	137	4	10	3	1	1	75	50	18	3	3	3	2			
Keweenaw ..	Total.																	
	Males.																	
	Fem.																	
Lake .....	Total.	5	5						1	2		2						
	Males.																	
	Fem.	5	5						1	2		2						
Lapeer .....	Total.	23	20	1		1		1	9	4	2	3	1	2	1			
	Males.	5	4					1	2		1	1				1		
	Fem.	18	16	1		1			7	4	1	2	1	2				
Leelanau .....	Total.	6	6						2	3			1					
	Males.	1	1							1								
	Fem.	5	5						2	2			1					
Lenawee .....	Total.	61	48	7	2	1		3	23	20	11	5	1	1				
	Males.	9	5	2	1			1	4	3	2							
	Fem.	52	43	5	1	1		2	19	17	9	5	1	1				
Livingston ..	Total.	15	13		1	1			5	3	3	2	1				1	
	Males.	7	6			1			3	1		2	1					
	Fem.	8	7		1				2	2	3						1	
Luce .....	Total.	3	2			1			2	1								
	Males.																	
	Fem.	3	2			1			2	1								
Mackinac .....	Total.	2	2						1	1								
	Males.	2	2						1	1								
	Fem.																	
Macomb .....	Total.	29	23	1	3	1	1		5	7	4	1	1	1	2			
	Males.	5	4		1				1	2						1		
	Fem.	24	19	1	2	1	1		4	5	4	1	1	1	1			
Manistee .....	Total.	15	14	1					7	5	2							1
	Males.	2	2						1	1								
	Fem.	13	12	1					6	4	2							1
Marquette ..	Total.	8	6	1		1			4	2		1	1					
	Males.	3	2	1					2	1								
	Fem.	5	4			1			2	1		1	1					
Mason .....	Total.	10	7	2			1		5	3		2						
	Males.	2	2						1									
	Fem.	8	5	2			1		4	3		1						

plainant, number of children in family and duration of marriage before divorce.

Children in family.							Duration of marriage before divorce.																			
9.	10.	11.	12.	13.	14.	Unknown.	Under 1 year.	1.	2.	3.	4.	Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	Unknown.		
									1			1	2	1	1											
									1			1	1	1	1											
								1	1	2	2	6	7	2	4	2	1	1	1	1	1					
								1	1	1	2	3	2	1	1	2	1	1	1	1	1					
												3	5	1	3	2	1									
1							4	6	6	3	4	23	24	14	10	5	5	1	1							
1							2	1	2		1	3	3	2	3	2	2	2								
							5	4	3	3	17	21	12	7	3	3	3	1	1							
								9	8	3	6	26	19	16	13	8	3	2	2							
								1	3	2	2	8	3	5	2	2	2	1	1			1				
								8	5	1	4	18	16	11	11	6	1	2	1		1					
								1	2	2	1	6	4	3		1	2									
								1	2		1	6	1	3		1	2									
	1						2	8	21	13	15	14	71	65	25	17	13	8	5		1	1	1			
	1						1	2	3	4	3	4	16	11	6	8	3	2	3							
										1		1	2	1	1											
										1		1	2	1	1											
			1				1	1	1	2	1	6	7	2	2	2	1	3								
			1				1	1	1	2	1	6	5	1	2	1	1	2								
											1	1	1	3		1										
											1	1	1	1	2		1									
							1	3	4	5	8	21	17	8	7	5	1	1	1							
							1	1	2	2	3	16	5	8	7	4	1	1	1							
									3	1		4	4	2	3	1		1								
									1	1		2	1	2	1	1										
									2			2	3		2		1									
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													2	1												
													1		1											
													1		1											
							8		1	1	5	8	9	9	1	2										
							1		1		1	2	1	1	1	1										
									1	1	4	6	8	9		1										
									4	1	2	7	3	2	1	1									1	
									3	1	2	1	1	1	1	1									1	
								1			1	2	3	3												
											1	1	1	2												
										2	1	3	5	1	1											
										2	1	3	3	1	1											

TABLE II.—Continued.—Divorces in Michigan, by counties and sex of com-

Counties.	Sex of complainants.	Complainants in divorces granted, 1900.	Place of marriage.						Number of chil-								
			Michigan.	Ohio, Indiana, Wisconsin.	Other states.	Canada.	Other foreign countries.	Unknown.	0.	1.	2.	3.	4.	5.	6.	7.	8.
Mecosta .....	Total.	18	16	.....	.....	2	.....	.....	8	4	2	2	1	1	.....	.....	.....
	Males.	4	3	.....	.....	1	.....	.....	2	.....	1	.....	.....	1	.....	.....	.....
	Fem..	14	13	.....	.....	1	.....	.....	6	4	1	2	1	.....	.....	.....	.....
Menominee .....	Total.	8	2	3	2	1	.....	.....	4	.....	1	1	.....	1	.....	1	.....
	Males.	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
	Fem..	7	2	2	2	1	.....	.....	3	.....	1	1	.....	1	.....	1	.....
Midland .....	Total.	8	7	.....	.....	.....	1	.....	3	3	1	.....	.....	.....	1	.....	.....
	Males.	2	2	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....
	Fem..	6	5	.....	.....	.....	1	.....	2	2	1	.....	.....	.....	1	.....	.....
Missaukee .....	Total.	10	8	1	.....	1	.....	.....	4	2	2	.....	1	.....	.....	.....	1
	Males.	5	4	1	.....	.....	.....	.....	2	1	2	.....	.....	.....	.....	.....	.....
	Fem..	5	4	.....	.....	1	.....	.....	2	1	.....	.....	1	.....	.....	.....	1
Monroe .....	Total.	22	16	3	1	2	.....	.....	11	5	3	2	.....	1	.....	.....	.....
	Males.	5	3	1	1	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....
	Fem..	17	13	2	.....	2	.....	.....	6	5	3	2	.....	1	.....	.....	.....
Montcalm .....	Total.	37	35	1	1	.....	.....	.....	15	10	4	3	3	.....	1	1	.....
	Males.	6	6	.....	.....	.....	.....	.....	2	2	.....	2	.....	.....	.....	.....	.....
	Fem..	31	29	1	1	.....	.....	.....	13	8	4	1	3	.....	1	1	.....
Montmorency .....	Total.	6	5	.....	1	.....	.....	.....	3	2	.....	1	.....	.....	.....	.....	.....
	Males.	2	2	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....
	Fem..	4	3	.....	1	.....	.....	.....	2	2	.....	.....	.....	.....	.....	.....	.....
Muskegon .....	Total.	44	39	.....	4	1	.....	.....	25	7	4	3	1	2	1	.....	.....
	Males.	10	9	.....	.....	1	.....	.....	7	1	.....	1	.....	.....	.....	.....	.....
	Fem..	34	30	.....	4	.....	.....	.....	18	6	4	2	1	2	1	.....	.....
Newaygo .....	Total.	23	22	1	.....	.....	.....	.....	16	2	3	.....	.....	.....	1	1	.....
	Males.	7	7	.....	.....	.....	.....	.....	6	.....	1	.....	.....	.....	.....	.....	.....
	Fem..	16	15	1	.....	.....	.....	.....	10	2	2	.....	.....	.....	1	1	.....
Oakland .....	Total.	35	27	2	3	2	.....	1	16	8	6	2	1	1	1	.....	.....
	Males.	15	12	.....	3	.....	.....	.....	8	2	1	2	1	.....	1	.....	.....
	Fem..	20	15	2	.....	2	.....	1	8	6	5	.....	.....	1	.....	.....	.....
Oceana .....	Total.	27	23	2	2	.....	.....	.....	9	11	3	.....	.....	1	.....	1	.....
	Males.	9	8	.....	1	.....	.....	.....	4	3	1	.....	.....	1	.....	.....	.....
	Fem..	18	15	2	.....	.....	.....	.....	5	8	2	.....	.....	.....	.....	1	.....
Ogemaw .....	Total.	3	3	.....	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....
	Males.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fem..	3	3	.....	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....
Ontonagon .....	Total.	4	3	.....	1	.....	.....	.....	1	1	1	.....	1	.....	.....	.....	.....
	Males.	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fem..	3	2	.....	1	.....	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....
Osceola .....	Total.	17	12	1	2	2	.....	.....	8	5	1	2	.....	.....	.....	.....	.....
	Males.	8	6	.....	1	1	.....	.....	4	2	.....	1	.....	.....	.....	.....	.....
	Fem..	9	6	1	1	1	.....	.....	4	3	1	1	.....	.....	.....	.....	.....
Oscoda .....	Total.	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Males.	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	Fem..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Otsego .....	Total.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Males.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	Fem..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ottawa .....	Total.	15	14	.....	1	.....	.....	.....	6	7	1	.....	.....	.....	.....	1	.....
	Males.	7	6	.....	1	.....	.....	.....	4	2	.....	.....	.....	.....	.....	1	.....
	Fem..	8	8	.....	.....	.....	.....	.....	2	5	1	.....	.....	.....	.....	.....	.....
Presque Isle .....	Total.	5	5	.....	.....	.....	.....	.....	2	.....	.....	1	.....	.....	2	.....	.....
	Males.	3	3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....
	Fem..	2	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....



TABLE II.—Concluded.—Divorces in Michigan, by counties and sex of com-

Counties.	Sex of complainants.	Complainants in divorces granted, 1901.	Place of marriage.						Number of chil-								
			Michigan.	Ohio, Ind- ana, Wis- consin.	Other states.	Canada.	Other for- eign coun- tries.	Unknown.	0.	1.	2.	3.	4.	5.	6.	7.	8.
Rosecommon..	{ Total.	7	6			1			3	2							
	{ Males.	3	3						2								
	{ Fem..	4	3			1			1	2							
Saginaw.....	{ Total.	96	77	4	5	8	2		46	25	10	5	1	4	1	2	
	{ Males.	27	20	2	1	3	1		19	2	3				1		
	{ Fem..	69	57	2	4	5	1		27	23	7	5	1	4		2	
St. Clair.....	{ Total.	54	38	1	4	10		1	21	15	7	3	4	1			1
	{ Males.	12	7		2	3			6	2	2	1	1				
	{ Fem..	42	31	1	2	7		1	15	13	5	2	3	1			1
St. Joseph....	{ Total.	29	28		1				11	10	3	4	1				
	{ Males.	4	4						2	1	1						
	{ Fem..	25	24		1				9	9	2	4	1				
Sanilac.....	{ Total.	10	8			2			7	1	1			1			
	{ Males.	6	4			2			5					1			
	{ Fem..	4	4						2	1	1						
Schoolcraft..	{ Total.	6	6						1		1	2	1				
	{ Males.	2	2											1			
	{ Fem..	4	4						1		1	2					
Shiawassee...	{ Total.	57	52		3	1		1	29	17	5	4	1	1			
	{ Males.	15	14		1				5	6	2	2					
	{ Fem..	42	38		2	1		1	24	11	3	2	1	1			
Tuscola.....	{ Total.	31	26			4	1		16	6	5	4					
	{ Males.	8	7			1			5	3							
	{ Fem..	23	19			3	1		11	3	5	4					
Van Buren...	{ Total.	44	42	1	1				23	9	4	4	2	1			1
	{ Males.	12	12						8	1	2			1			
	{ Fem..	32	30	1	1				15	8	2	4	1	1			1
Washtenaw..	{ Total.	45	39	1	2	2		1	24	5	8	5	3				
	{ Males.	8	6	1				1	6	1	1						
	{ Fem..	37	33		2	2			18	4	7	5	3				
Wayne.....	{ Total.	350	207	7	40	83	8	5	173	86	48	15	13	4	3		3
	{ Males.	105	53	4	19	20	5	4	52	21	15	5	4	2	2		1
	{ Fem..	245	154	3	21	63	3	1	121	65	33	10	9	2	1		2
Wexford.....	{ Total.	26	22	1	1	1	1		10	9	3	2		1			1
	{ Males.	5	4	1					4		1						
	{ Fem..	21	18		1	1	1		6	9	2	2		1			1

plainant, number of children in family and duration of marriage before divorce.

Children in family.							Duration of marriage before divorce.																									
9.	10.	11.	12.	13.	14.	Unknown.	Under 1 year.	1.	2.	3.	4.	Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	Unknown.								
..	..	1	..	1	..	..	..	..	2	..	2	4	1	..	..	1	..	..	1	..	..	..	..	..	..							
..	..	1	..	..	..	..	..	..	1	..	..	1	1	..	..	1	..	..	..	..	..	..	..	..	..							
..	1	..	1	..	..	..	7	7	3	4	7	28	21	14	12	12	1	4	2	2	..	..	..	..								
..	1	..	1	..	..	..	4	2	2	..	2	10	6	1	3	4	..	1	1	1	..	..	..	..								
..	1	1	..	..	..	..	3	5	1	4	5	18	15	13	9	8	1	3	1	1	..	..	..	..								
..	..	..	..	..	..	..	2	2	4	3	3	14	15	7	8	4	3	2	1	..	..	..	..	..								
..	1	1	..	..	..	..	1	1	1	2	3	3	2	2	4	..	1	..	..	..	..	..	..	..								
..	..	..	..	..	..	..	..	..	..	3	..	3	9	4	6	2	4	1	..	..	..	..	..	..								
..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	4	1	..	..	..	..	..	..								
..	..	..	..	..	..	..	..	..	..	3	..	3	8	3	5	1	4	1	..	..	..	..	..	..								
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								
..	..	..	..	1	..	..	..	..	..	..	..	..	2	1	1	..	..	1	..	1	..	..	..	..								
..	..	..	..	1	..	..	..	..	..	..	..	..	2	1	1	..	..	1	..	1	..	..	..	..								
..	..	..	..	..	..	..	2	5	9	2	5	23	17	3	5	4	2	2	..	..	..	..	..	1								
..	..	..	..	..	..	..	2	5	5	2	4	18	12	2	5	2	2	2	..	..	..	..	..	1								
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								
..	..	..	..	..	..	..	2	2	3	2	9	10	5	4	..	2	1	..	..	..	..	..	..	..								
..	..	..	..	..	..	..	1	1	2	1	2	3	5	2	2	..	2	1	..	..	..	..	..	..								
..	..	..	..	..	..	..	..	..	..	..	..	6	7	..	..	..	..	..	..	..	..	..	..	..								
..	..	..	..	..	..	..	2	3	5	2	1	13	13	5	4	4	3	1	..	1	..	..	..	..								
..	..	..	..	..	..	..	1	3	5	1	1	11	8	4	3	4	1	..	..	1	..	..	..	..								
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..								
..	..	..	..	..	..	..	2	6	3	3	14	9	6	4	7	1	3	..	..	..	..	..	..	1								
..	..	..	..	..	..	..	..	..	2	1	3	2	6	2	2	7	1	2	..	..	..	..	..	1								
2	1	..	..	..	..	3	10	24	25	18	28	105	97	51	52	25	10	5	3	1	..	..	..	1								
1	..	..	..	..	..	2	2	5	11	6	9	33	30	14	12	9	3	1	2	1	..	..	..	..								
1	..	..	..	..	..	1	8	19	14	12	19	72	67	37	40	16	7	4	1	..	..	..	..	1								
..	..	..	..	..	..	..	..	2	1	2	3	8	10	2	4	1	..	1	..	..	..	..	..	..								
..	..	..	..	..	..	..	..	1	1	2	2	6	8	1	4	1	..	1	..	..	..	..	..	..								

TABLE III.—Causes of divorce in Michigan, by sex of complainant, during the year 1901, before

Causes alleged in petitions for divorces granted in 1901.	Sex of complainant.	Complainants in divorces granted, 1901.	Place of marriage.						Number of children.								
			Michigan.	Ohio, Indiana, Wisconsin.	Other states.	Canada.	Other foreign countries.	Unknown.	0.	1.	2.	3.	4.	5.	6.	7.	8.
ALL CAUSES.....	Total.	2,448	1,961	91	160	164	26	46	1,130	620	310	154	80	52	28	15	12
	Males.	646	495	23	57	42	10	19	349	123	79	36	22	7	10	2	2
	Fem.	1,802	1,466	68	103	122	16	27	781	497	231	118	58	45	18	13	10
Adultery.....	Total.	64	53	2	3	5	1	1	31	12	10	2	4	1	1	1	1
	Males.	50	43	1	2	3	1	1	27	8	8	2	2	1	1	1	1
	Fem.	14	10	1	1	2	1	1	4	4	2	1	2	1	1	1	1
Adultery and cruelty.....	Total.	14	11	1	1	2	1	1	8	3	1	1	1	1	1	1	1
	Males.	8	6	1	1	2	1	1	5	2	1	1	1	1	1	1	1
	Fem.	6	5	1	1	1	1	1	3	1	1	1	1	1	1	1	1
Adultery, cruelty and desertion.....	Total.	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Males.	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adultery, cruelty and non-support.....	Total.	3	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
	Males.	3	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Adultery and desertion.....	Total.	5	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1
	Males.	4	3	1	1	1	1	1	1	2	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Annulment of marriage.....	Total.	4	4	1	1	1	1	1	3	1	1	1	1	1	1	1	1
	Males.	4	4	1	1	1	1	1	3	1	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bigamy.....	Total.	5	5	1	1	1	1	1	4	1	1	1	1	1	1	1	1
	Males.	5	5	1	1	1	1	1	4	1	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cruelty.....	Total.	881	712	38	50	54	9	18	398	208	121	56	29	26	13	7	6
	Males.	270	208	11	19	18	4	10	140	50	44	16	5	2	5	2	1
	Fem.	611	504	27	31	36	5	8	258	158	77	40	24	24	8	5	5
Cruelty and desertion.....	Total.	53	42	2	2	5	1	1	28	12	8	2	1	1	1	1	1
	Males.	21	18	1	1	2	1	1	14	4	1	1	1	1	1	1	1
	Fem.	32	24	1	1	3	1	1	14	8	7	1	1	1	1	1	1
Cruelty, desertion and drunkenness.....	Total.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Males.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cruelty, desertion and neglect.....	Total.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Males.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cruelty, desertion and non-support.....	Total.	15	12	2	2	1	1	1	7	2	2	1	1	1	1	1	1
	Males.	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1
	Fem.	14	11	1	1	1	1	1	6	1	1	1	1	1	1	1	1
Cruelty and drunkenness.....	Total.	45	39	2	3	1	1	1	19	12	6	6	1	1	1	1	1
	Males.	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Fem.	43	38	1	2	1	1	1	18	11	5	5	1	1	1	1	1
Cruelty, drunkenness and non-support.....	Total.	6	6	1	1	1	1	1	4	1	1	1	1	1	1	1	1
	Males.	6	6	1	1	1	1	1	4	1	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cruelty and fraud.....	Total.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Males.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cruelty and neglect.....	Total.	5	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1
	Males.	5	4	1	1	1	1	1	3	2	1	1	1	1	1	1	1
	Fem.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cruelty and non-support.....	Total.	244	197	8	11	22	3	3	106	69	39	12	8	3	1	2	1
	Males.	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	Fem.	242	196	7	10	21	2	2	104	67	37	10	6	1	1	1	1

# DIVORCES.

91

showing place of marriage, number of children in family and duration of marriage divorce.

Children in family.							Duration of marriage before divorce.																		
9.	10.	11.	12.	13.	14.	Unknown.	Under 1 year.	1.	2.	3.	4.	Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	Unknown.	
31	52	31	21	21	11	31	62	155	174	161	178	730	694	337	288	187	92	58	28	12	5	2	15		
12	23	11	11	11	11	29	20	36	47	47	45	195	186	81	67	50	22	22	11	6	4	1	1		
23	31	11	11	11	11	11	42	119	127	114	133	535	508	256	221	137	70	36	17	6	1	1	14		
...	...	...	...	...	...	...	3	3	5	3	4	17	25	5	12	3	1	1	...	...	...	...	...	...	
...	...	...	...	...	...	...	3	3	5	3	4	17	21	2	9	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	...	...	...	...	4	3	3	3	1	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	1	2	...	3	6	2	...	2	...	...	1	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	1	1	...	2	4	1	...	1	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	1	...	1	1	2	1	...	1	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	...	2	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	...	2	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	...	...	...	1	2	1	...	1	...	...	1	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	...	...	1	1	2	1	...	1	...	...	1	...	...	...	...	...	...	
2	2	2	1	1	1	9	23	82	38	54	59	286	231	117	106	57	36	28	11	5	1	1	2		
1	1	1	1	1	1	1	13	24	21	23	22	103	66	28	22	12	9	4	3	1	...	...	...		
2	1	1	...	...	...	8	10	58	47	31	37	183	165	89	84	35	24	19	7	2	...	1	2		
...	...	...	...	...	...	...	1	3	6	5	1	16	7	4	1	6	1	...	...	...	...	...	...	1	
...	...	...	...	...	...	...	1	4	2	...	...	7	8	4	...	...	...	...	...	...	...	...	...	1	
...	...	...	...	...	...	...	1	2	2	3	1	9	13	3	1	4	1	...	...	...	...	...	...	1	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	
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...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	...	2	...	2	7	1	2	2	...	1	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	...	2	...	2	6	1	2	2	...	1	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	2	4	1	2	10	14	7	5	4	4	1	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	2	4	1	2	10	12	7	5	4	4	1	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	1	...	...	2	4	1	...	...	...	1	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	1	...	...	2	4	1	...	...	...	1	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	1	...	1	...	1	...	...	...	...	...	
...	...	...	...	...	...	...	...	1	...	...	...	1	...	1	1	...	1	...	1	...	...	...	...	...	
...	...	...	...	...	...	...	3	8	17	23	13	24	85	74	27	22	22	9	3	...	1	...	...	1	
...	...	...	...	...	...	...	3	8	17	23	13	24	85	74	27	21	21	9	3	...	1	...	...	1	



TABLE III.—Continued.—Causes of divorce in Michigan, during the year 1901,

Causes alleged in petitions for divorces granted in 1901.	Sex of complainant.	Complainants in divorces granted, 1901.	Place of marriage.							Number of children.							
			Michigan.	Ohio, Indiana, Wisconsin.	Other states.	Canada.	Other foreign countries.	Unknown.	0.	1.	2.	3.	4.	5.	6.	7.	8.
Deception.....	Total.	1	1						1								
	Males.	1	1						1								
	Fem.																
Deception and fraud.....	Total.	2	2						2								
	Males.	2	2						2								
	Fem.																
Deception and non-support	Total.	1	1						1								
	Males.																
	Fem.	1	1						1								
Desertion.....	Total.	502	432	16	50	45	7	12	274	148	47	37	24	11	8		1
	Males.	262	195	8	30	17	5	7	143	55	20	14	13	4	5		
	Fem.	300	237	8	20	28	2	5	131	93	27	23	11	7	3		1
Desertion and drunkenness	Total.	3	3						2		1						
	Males.	1	1														
	Fem.	2	2						1		1						
Desertion, drunkenness and non-support.....	Total.	1				1			1								
	Males.																
	Fem.	1				1			1								
Desertion and non-support	Total.	104	85	3	7	5	3	1	42	29	13	10	2	3	1	1	1
	Males.	2	1						1								
	Fem.	102	84	3	7	5	2	1	42	29	12	10	2	2	1	1	1
Drunkenness.....	Total.	33	29	1	1		1	1	9	7	7	5	1	3			
	Males.	4	2	1	1				3	1	1						
	Fem.	29	27				1	1	6	7	6	5	1	3			
Drunkenness and non-support	Total.	22	20		2				7	5	4	4	1				
	Males.																
	Fem.	22	20		2				7	5	4	4	1				
Fraud.....	Total.	5	3		2				5								
	Males.	3	1		2				3								
	Fem.	2	2						2								
Fraud and duress.....	Total.	2	1		1				1	1							
	Males.	1			1					1							
	Fem.	1	1						1								
Fraud and insanity.....	Total.	1	1						1								
	Males.	1	1						1								
	Fem.																
Illegal age.....	Total.	3	2	1					3								
	Males.																
	Fem.	3	2	1					3								
Illegal marriage.....	Total.	1	1						1								
	Males.																
	Fem.	1	1						1								
Imprisonment.....	Total.	9	8		1				5	2	2						
	Males.																
	Fem.	9	8		1				5	2	2						
Imprisonment and non-support.....	Total.	1	1								1						
	Males.	1	1								1						
	Fem.																
Incompetency.....	Total.	1	1						1								
	Males.																
	Fem.	1	1						1								
Incompetency, mental.....	Total.	2	2						1	1							
	Males.	1	1							1							
	Fem.	1	1						1								

## 93

[illegible]

**TABLE III.—Concluded.—Causes of Divorce in Michigan, by sex of complainant, during of marriage**

Causes alleged in petitions for divorces granted in 1901.	Sex of complainant.	Complainants in divorces granted, 1901.	Place of marriage.						Number of chil-								
			Michigan.	Ohio. Ind- ana. Wis- consin.	Other states.	Canada.	Other for- eign coun- tries.	Unknown.	0.	1.	2.	3.	4.	5.	6.	7.	8.
Incompetency, physical...	Total.	1	1							1							
	Males.																
Neglect.....	Total.	3	3							1	1	1					
	Males.																
Neglect and non-support..	Total.	5	5							1	3	1					
	Males.																
Non-support.....	Total.	328	264	15	22	22	2	3	153	99	43	14	8	3	3	4	
	Males.	1	1						1								
Non-support and immoral- ity towards complain- ant's children.....	Total.	327	263	15	22	22	2	3	152	99	43	14	8	3	3	4	
	Males.																
Rape.....	Total.	1	1							1							
	Males.																
Syphilis at marriage.....	Total.	1	1							1							
	Males.																
Unknown.....	Total.	5							5								
	Males.	1							1								
	Fem..	4							4								

the year 1901, showing place of marriage, number of children in family and duration before divorce.

Children in family.							Duration of marriage before divorce.																	
9.	10.	11.	12.	13.	14.	Unknown.	Under 1 year.	1.	2.	3.	4.	Under 5 years.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	Unknown.
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...	...	...	...	...	...	...	...	...	1	1	...	2	3	...	...	...	...	...	...	...	...	...	...	...
...	1	...	...	...	...	...	10	28	30	32	27	127	81	40	37	25	9	4	2	...	...	...	...	3
...	1	...	...	...	...	...	10	28	29	32	27	126	81	40	37	25	9	4	2	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...
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TABLES  
RELATING TO  
BIRTHS  
IN  
MICHIGAN  
AS ENUMERATED BY  
SUPERVISORS AND ASSESSORS  
FOR THE  
YEAR 1901.

13

## PRIMARY TABLES RELATING TO BIRTHS IN MICHIGAN ACCORDING TO THE ENUMERATION BY SUPER- VISORS AND ASSESSORS FOR THE YEAR 1901.

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**TABLE I.**—Births in Michigan, by months, counties and sex, as enumerated by supervisors and assessors for the year 1901. (Stillbirths included.)

**TABLE II.**—Births in Michigan by nativity of parents, counties and sex, as enumerated by supervisors and assessors for the year 1901. (Stillbirths included.)

**TABLE III.**—Stillbirths, twins and illegitimate births in Michigan, by counties, as enumerated by supervisors and assessors for the year 1901. Also number of stillbirths registered as deaths and returned by registrars for same year.

**TABLE IV.**—Stillbirths, twins and illegitimate births in Michigan, by months and sex, as enumerated by supervisors and assessors for the year 1901.

**TABLE V.**—Stillbirths, twins and illegitimate births in Michigan, by nativity of parents, as enumerated by supervisors and assessors for the year 1901. Also number of stillbirths registered as deaths and returned by registrars for same year.

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**NOTE.**—*Secondary tables*, containing birth rates and comparisons with previous years, may be found on preceding pages of this Report, together with the descriptive text. It may be noted that no comparisons with other States or countries are given for the reason that the returns of births, obtained by means of enumeration after the close of the year by supervisors and assessors, are grossly inaccurate. Perhaps one-third of all the births that actually occur in the State escape enumeration. The returns are valuable for certain internal comparisons, as pointed out in the text on this subject, but they should be used with great caution for all purposes, and especially for the comparative study of birth rates. The tables relating to births are placed last because of their unreliable character and also because the tardiness of the returns under the old law (last amended in 1869) causes them to be received at the Department of State long after the deaths, marriages and divorces have been compiled.

## BIRTHS.

99

**TABLE I.—Births in Michigan, by months, counties and sex, as enumerated by supervisors and assessors for the year 1901. (Stillbirths included.)**

State and counties.	Sex.	Year, 1901.	Months, 1901.												Unk.
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
STATE....	Total	43,221	2,974	3,087	3,782	3,682	3,594	3,492	3,745	3,926	3,953	3,633	3,438	3,881	34
	Males	22,279	1,533	1,630	1,968	1,897	1,819	1,841	1,909	1,955	2,040	1,887	1,789	1,995	16
	Fem.	20,888	1,434	1,449	1,804	1,777	1,771	1,647	1,830	1,961	1,906	1,736	1,638	1,868	17
	Unk...	104	7	8	10	8	4	4	6	10	7	10	11	18	1
Alcona....	Total	81	3	2	4	6	10	7	5	10	7	6	4	17	..
	Males	40	2	1	3	3	4	4	3	6	3	3	3	5	..
	Fem..	41	1	1	1	3	6	3	2	4	4	3	1	12	..
	Unk...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Alger.....	Total	101	4	8	10	10	9	3	12	14	8	6	8	9	..
	Males	55	3	5	6	3	6	1	7	7	5	1	6	5	..
	Fem..	45	1	3	3	7	3	2	5	7	3	5	2	4	..
	Unk...	1	..	..	1	..	..	..	..	..	..	..	..	..	..
Allegan...	Total	574	42	41	51	43	54	50	48	57	58	52	35	42	1
	Males	278	25	16	25	19	24	25	21	25	40	24	15	19	..
	Fem..	294	17	25	26	24	30	25	27	30	18	28	20	23	1
	Unk...	2	..	..	..	..	..	..	..	2	..	..	..	..	..
Alpena....	Total	472	34	43	57	27	43	37	46	40	35	36	32	42	..
	Males	230	16	20	34	14	23	12	25	19	15	16	11	25	..
	Fem..	240	18	23	23	13	20	25	21	21	20	19	21	16	..
	Unk...	2	..	..	..	..	..	..	..	..	..	1	..	1	..
Antrim....	Total	219	15	14	13	20	13	24	23	34	22	20	11	9	1
	Males	112	6	5	8	11	7	11	12	18	12	15	5	2	..
	Fem..	107	9	9	5	9	6	13	11	16	10	5	6	7	1
	Unk...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Arenac....	Total	200	15	14	20	24	12	23	15	11	21	18	10	16	1
	Males	90	7	6	9	12	7	8	12	3	8	7	4	7	..
	Fem..	109	7	8	11	12	5	15	3	8	13	11	6	9	1
	Unk...	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Baraga....	Total	104	8	7	5	7	7	7	8	8	10	10	12	15	..
	Males	58	7	4	2	5	3	5	3	4	4	7	6	8	..
	Fem..	46	1	3	3	2	4	2	5	4	6	3	6	7	..
	Unk...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barry.....	Total	319	14	24	20	32	38	28	32	23	29	29	24	25	1
	Males	156	8	11	12	14	19	10	17	9	16	11	13	16	..
	Fem..	163	6	13	8	18	19	18	15	14	13	18	11	9	1
	Unk...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bay.....	Total	1,362	97	85	129	135	119	96	97	139	135	116	95	119	..
	Males	720	48	48	70	79	62	58	45	79	64	67	50	50	..
	Fem.	642	49	37	59	56	57	38	52	60	71	49	45	69	..
	Unk...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Benzie....	Total	219	7	11	23	14	16	19	20	26	28	19	17	18	1
	Males	120	6	9	10	8	7	10	12	16	14	10	10	7	1
	Fem..	98	1	2	12	6	9	9	8	10	14	9	7	11	..
	Unk...	1	..	..	1	..	..	..	..	..	..	..	..	..	..
Berrien...	Total	572	39	27	49	46	43	56	48	53	59	58	50	43	1
	Males	303	20	13	25	24	25	28	25	26	34	32	25	25	1
	Fem..	269	19	14	24	22	18	28	23	27	25	26	25	18	..
	Unk...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Branch....	Total	337	17	23	30	26	28	30	26	32	36	27	26	36	..
	Males	158	8	11	12	12	9	19	14	14	19	14	12	14	..
	Fem..	179	9	12	18	14	19	11	12	18	17	13	14	22	..
	Unk...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Calhoun...	Total	623	40	51	58	59	42	48	53	57	66	51	48	49	1
	Males	333	17	33	29	33	18	25	31	31	33	23	28	32	..
	Fem..	287	23	18	29	25	24	23	21	26	33	28	19	17	1
	Unk...	3	..	..	..	1	..	..	1	..	..	..	..	..	..
Cass.....	Total	235	12	15	20	18	36	25	20	17	15	23	20	14	..
	Males	121	7	8	10	6	17	18	11	7	8	10	10	9	..
	Fem..	114	5	7	10	12	19	7	9	10	7	13	10	5	..
	Unk...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Charlevoix	Total	247	13	26	19	24	19	25	22	21	16	20	23	19	..
	Males	116	5	12	8	13	9	12	9	10	5	8	11	14	..
	Fem..	131	8	14	11	11	10	13	13	11	11	12	12	5	..
	Unk...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cheboygan	Total	291	16	25	23	34	25	23	29	19	31	20	19	27	..
	Males	151	10	12	11	18	15	13	10	6	19	10	10	17	..
	Fem..	138	6	12	12	16	10	10	19	13	12	10	9	9	..
	Unk...	2	..	1	..	..	..	..	..	..	..	..	..	1	..



## VITAL STATISTICS OF MICHIGAN, 1901.

TABLE I.—Continued.—Births in Michigan, by months, counties and sex, 1901.

Counties.	Sex.	Year, 1901.	Months, 1901.												Unk.
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Chippewa.	Total.	399	26	32	34	34	32	32	30	29	31	38	38	42	1
	Males.	216	14	17	23	22	13	21	17	16	14	19	20	20	
	Fem..	183	12	15	11	12	19	11	13	13	17	19	18	22	1
Clare.....	Total.	160	17	10	8	18	16	12	15	16	7	12	13	15	1
	Males.	83	10	5	5	8	9	8	9	7	3	6	6	6	1
	Fem..	77	7	5	3	10	7	4	6	9	4	6	7	9	
Clinton.....	Total.	371	22	19	29	41	29	23	37	40	36	33	33	29	..
	Males.	190	9	10	15	21	14	12	21	21	14	22	19	12	..
	Fem..	181	13	9	14	20	15	11	16	19	22	11	14	17	..
Crawford..	Total.	36	.....	2	4	1	3	5	4	2	7	4	1	3	..
	Males.	19	.....	1	2	.....	.....	3	3	1	5	3	1	.....	..
	Fem..	15	.....	1	2	1	3	2	1	1	2	1	.....	1	..
Delta.....	Total.	656	44	57	54	61	49	57	55	41	66	63	50	57	2
	Males.	345	21	33	26	34	23	38	32	20	32	27	29	28	2
	Fem..	306	23	24	28	26	26	19	22	21	34	34	21	28	..
Dickinson..	Total.	618	32	43	61	58	48	64	59	51	53	50	39	59	1
	Males.	320	13	20	28	36	26	31	32	29	29	26	21	29	..
	Fem..	298	19	23	33	22	22	33	27	22	24	24	18	30	1
Eaton.....	Total.	385	21	31	35	33	32	34	39	48	33	24	29	26	..
	Males.	207	12	14	21	18	14	25	20	21	18	16	13	15	..
	Fem..	178	9	17	14	15	18	9	19	27	15	8	16	11	..
Emmet.....	Total.	271	21	20	18	29	15	19	31	27	20	29	25	17	..
	Males.	134	15	11	11	14	9	11	13	8	9	7	14	12	..
	Fem..	137	6	9	7	15	6	8	18	19	11	22	11	5	..
Genesee....	Total.	471	33	34	43	40	38	44	47	43	42	32	28	46	1
	Males.	249	18	20	24	23	19	21	25	24	22	21	14	18	..
	Fem..	220	15	14	19	17	19	22	22	19	20	11	14	28	..
Gladwin....	Total.	166	13	15	11	15	22	12	18	6	14	10	15	15	..
	Males.	95	11	7	7	10	9	7	12	2	7	6	6	11	..
	Fem..	71	2	8	4	5	13	5	6	4	7	4	9	4	..
Gogebic....	Total.	558	49	42	39	50	64	47	44	38	42	35	49	59	..
	Males.	291	29	22	24	20	31	26	21	23	24	18	25	28	..
	Fem..	267	20	20	15	30	33	21	23	15	18	17	24	31	..
Grand Traverse.	Total.	285	17	20	19	26	27	25	35	23	39	20	21	13	..
	Males.	133	9	9	6	11	9	13	16	12	18	11	13	6	..
	Fem..	152	8	11	13	15	18	12	19	11	21	9	8	7	..
Gratiot.....	Total.	379	27	21	35	30	31	29	42	34	36	37	27	30	..
	Males.	199	14	11	19	17	20	13	21	19	18	16	12	19	..
	Fem..	180	13	10	16	13	11	16	21	15	18	21	15	11	..
Hillsdale..	Total.	312	29	17	27	33	23	18	19	19	40	20	32	31	..
	Males.	157	17	7	14	22	5	10	9	7	27	12	15	12	..
	Fem..	154	12	10	13	11	17	13	9	12	13	8	17	19	..
Houghton..	Total.	2,682	210	221	257	219	220	212	221	210	251	224	203	231	3
	Males.	1,429	114	108	136	127	111	117	111	104	134	129	112	125	1
	Fem..	1,253	96	113	121	92	109	95	110	106	117	95	91	106	2
Huron.....	Total.	818	44	63	85	85	65	66	69	60	79	75	66	60	1
	Males.	440	22	27	51	45	30	38	30	36	45	50	35	31	..
	Fem..	377	22	36	34	40	35	28	39	24	33	25	31	29	1
Ingham.....	Total.	431	24	40	22	35	35	30	33	56	34	38	38	43	3
	Males.	221	10	23	12	16	13	19	20	28	14	19	21	24	2
	Fem..	207	14	17	10	19	22	11	13	27	20	19	16	18	1
	Total.	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
	Males.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
	Fem..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..

TABLE I.—Continued.—Births in Michigan, by months, counties and sex, 1901.

Counties.	Sex.	Year 1901.	Months, 1901.												Unk.
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Ionia.....	Total.	408	29	29	30	27	30	33	46	41	33	35	38	37	..
	Males.	209	18	16	17	11	19	15	21	12	20	20	22	18	..
	Fem..	199	11	13	13	16	11	18	25	29	13	15	16	19	..
Iosco.....	Total.	224	20	16	17	25	19	21	18	24	23	19	9	13	..
	Males.	114	10	8	9	14	9	11	9	7	13	9	6	9	..
	Fem..	110	10	8	8	11	10	10	9	17	10	10	3	4	..
Iron.....	Total.	215	20	14	17	14	14	17	22	21	18	20	18	20	..
	Males.	117	18	7	8	6	4	8	11	11	8	11	10	15	..
	Fem..	97	2	7	9	8	10	9	10	10	10	9	8	5	..
Isabella....	Total.	455	22	36	40	33	38	39	38	50	44	39	37	39	..
	Males.	225	10	18	18	17	21	22	16	31	22	17	16	17	..
	Fem..	228	12	18	22	16	17	17	22	19	22	22	21	20	..
Jackson....	Total.	696	43	63	58	65	46	69	48	70	56	65	52	61	..
	Males.	364	23	34	29	36	26	30	27	35	23	32	32	37	..
	Fem..	332	20	29	29	29	20	39	21	35	33	33	20	24	..
Kalamazoo	Total.	557	46	61	62	50	46	32	31	41	41	54	41	51	1
	Males.	277	15	27	39	20	22	19	17	21	15	31	23	27	1
	Fem..	269	28	33	22	30	23	13	14	19	26	22	17	22	..
Kalamazoo	Total.	11	3	1	1	1	1	1	1	1	1	1	1	2	..
Kalamazoo	Total.	116	8	4	10	9	11	11	18	13	10	9	7	6	..
	Males.	66	5	1	2	5	8	6	11	9	8	4	4	3	..
	Fem..	50	3	3	8	4	3	5	7	4	2	5	3	3	..
Kalamazoo	Total.	1,924	146	134	173	154	151	153	173	153	175	173	164	175	..
	Males.	990	73	66	78	82	80	83	99	79	91	89	83	87	..
	Fem..	932	73	68	95	72	71	69	74	73	84	84	81	88	..
Kent.....	Total.	2	..	..	..	..	..	1	..	1	..	..	..	..	..
Keweenaw	Total.	107	9	10	10	13	8	5	8	8	11	9	11	5	..
	Males.	54	5	6	4	7	4	3	5	6	4	2	6	2	..
	Fem..	53	4	4	6	6	4	2	3	2	7	7	5	3	..
Lake.....	Total.	100	3	10	5	14	9	9	8	7	16	8	4	12	..
	Males.	46	2	4	2	7	7	5	3	2	7	1	..	6	..
	Fem..	54	1	6	3	7	2	4	5	5	9	2	4	6	..
Lapeer....	Total.	342	18	19	33	30	32	30	28	27	30	26	39	30	..
	Males.	185	12	15	17	18	18	19	14	9	17	14	16	16	..
	Fem..	157	6	4	16	12	14	11	14	18	13	12	23	14	..
Leelanau...	Total.	159	13	15	13	13	17	14	22	9	12	7	15	9	..
	Males.	66	4	5	5	6	9	6	9	6	1	3	8	4	..
	Fem..	93	9	10	8	7	8	8	13	3	11	4	7	5	..
Lenawee...	Total.	565	33	35	52	43	40	52	54	58	67	34	38	59	..
	Males.	293	17	15	29	25	21	33	27	30	34	15	16	31	..
	Fem..	271	16	20	23	18	19	19	27	27	33	19	22	28	..
Livingston.	Total.	237	15	12	14	25	18	17	18	32	19	19	35	13	..
	Males.	125	6	7	10	11	9	10	10	16	10	10	18	8	..
	Fem..	111	9	5	3	14	9	7	8	16	9	9	17	5	..
Luce.....	Total.	74	2	3	12	8	6	8	2	7	5	6	6	6	3
	Males.	39	1	3	6	2	4	3	1	4	4	5	2	3	1
	Fem..	35	1	..	6	6	2	5	1	3	1	1	4	3	2
Mackinac..	Total.	121	14	9	13	10	11	10	7	15	11	9	7	4	1
	Males.	66	8	4	6	4	5	6	6	10	5	5	6	..	..
	Fem..	56	6	5	7	6	6	4	1	5	6	4	1	4	1
Macomb....	Total.	468	29	25	44	44	41	41	46	36	35	38	39	50	..
	Males.	223	17	10	17	17	22	19	25	17	22	19	21	17	..
	Fem..	245	12	15	27	27	19	22	21	19	13	19	18	33	..

TABLE I.—Continued.—Births in Michigan, by months, counties and sex, 1901.

Counties.	Sex.	Year 1901.	Months, 1901.												Unk.
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Manistee...	Total.	470	35	27	34	45	47	31	55	44	47	39	35	31	..
	Males.	237	21	11	18	22	21	19	22	17	23	21	20	17	..
	Fem..	233	14	16	16	23	26	12	33	27	19	18	15	14	..
Marquette..	Total.	1,429	121	100	134	110	114	117	129	118	116	112	111	147	..
	Males.	728	56	52	66	62	58	51	64	61	66	58	61	73	..
	Fem..	700	65	48	67	48	56	66	65	57	50	54	50	74	..
	Unk...	1			1										..
Mason.....	Total.	376	20	30	43	31	37	21	30	34	36	30	25	39	..
	Males.	176	9	12	18	10	18	13	12	14	16	17	13	24	..
	Fem..	198	11	18	25	21	19	8	18	19	19	13	12	15	..
	Unk...	2								1	1				..
Mecosta....	Total.	332	26	15	38	24	32	34	29	29	33	37	19	16	..
	Males.	161	9	6	20	12	17	17	11	12	19	16	13	9	..
	Fem..	169	17	9	18	12	15	17	17	17	14	21	5	7	..
	Unk...	2							1				1		..
Menominee..	Total.	585	45	39	52	63	54	40	52	49	62	46	30	53	..
	Males.	300	22	25	27	31	23	19	26	17	40	29	11	30	..
	Fem..	285	23	14	25	32	31	21	26	32	22	17	19	23	..
Midland....	Total.	252	10	13	23	23	26	26	23	28	18	25	15	21	1
	Males.	128	2	10	17	10	12	14	11	16	5	14	6	10	1
	Fem..	124	8	3	6	13	14	12	12	12	13	11	9	11	..
Missaukee..	Total.	220	15	12	25	16	15	15	18	19	20	19	23	22	1
	Males.	122	11	4	18	9	9	8	7	10	9	12	12	12	1
	Fem..	98	4	8	7	7	6	7	11	9	11	7	11	10	..
Monroe.....	Total.	543	43	39	28	39	41	31	53	51	46	60	45	67	..
	Males.	281	20	25	16	19	24	17	27	29	25	32	19	28	..
	Fem..	262	23	14	12	20	17	14	26	22	21	28	26	39	..
Montcalm..	Total.	442	18	29	35	37	32	43	42	47	36	43	29	51	..
	Males.	216	7	14	12	17	15	23	19	22	21	19	19	28	..
	Fem..	224	11	15	23	19	17	20	23	25	15	24	10	23	..
	Unk...	2			1									1	..
Montmorency.	Total.	32	1	1	4	2	2	5	5	3	1	3	2	3	..
	Males.	13	1	1	1	1	2	3	3		1		2		..
	Fem..	19		1	3	2		2	2	3		3		3	..
Muskegon..	Total.	691	46	47	60	71	66	36	54	61	76	58	54	62	..
	Males.	344	22	22	35	37	36	21	21	27	38	27	24	34	..
	Fem..	347	24	25	25	34	30	15	33	34	38	31	30	28	..
Newaygo..	Total.	225	4	13	15	22	17	18	28	27	30	18	11	22	..
	Males.	116	4	9	10	10	7	12	14	12	14	9	3	12	..
	Fem..	109		4	5	12	10	6	14	15	16	9	8	10	..
Oakland....	Total.	540	45	33	43	40	44	50	44	51	37	61	43	49	..
	Males.	283	24	15	22	22	19	28	27	23	22	32	23	26	..
	Fem..	257	21	18	21	18	25	22	17	28	15	29	20	23	..
Oceana....	Total.	276	10	16	37	21	30	21	23	32	20	19	21	26	..
	Males.	143	7	8	27	10	17	10	11	12	13	11	5	12	..
	Fem..	133	3	8	10	11	13	11	12	20	7	8	16	14	..
Ogemaw....	Total.	113	8	5	15	8	10	6	6	16	11	5	12	11	..
	Males.	61	4	2	11	2	6	2	4	9	5	2	7	7	..
	Fem..	52	4	3	4	6	4	4	2	7	6	3	5	4	..
Ontonagon.	Total.	173	13	16	27	20	16	8	12	7	18	9	9	18	..
	Males.	96	9	10	13	13	12	3	7	3	11	5	3	7	..
	Fem..	71	3	4	14	7	4	5	4	3	6	4	6	11	..
	Unk...	6	1	2					1	1	1				..
Osceola....	Total.	334	14	17	20	25	30	37	39	34	31	32	18	36	1
	Males.	165	9	9	10	12	13	21	16	15	17	16	9	17	1
	Fem..	169	5	8	10	13	17	16	23	19	14	16	9	19	..
Oscoda....	Total.	21	1	1	3	1	1	1	4	3			3	3	..
	Males.	12	1	1	2				4	1			2	2	..
	Fem..	9		1	1	1	1	1		2			1	1	..

TABLE I.—Concluded.—Births in Michigan, by months, counties and sex, 1901.

Counties.	Sex.	Year, 1901.	Months, 1901.												Unc.
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Otsego.....	Totals	121	10	7	7	11	21	13	9	7	7	10	7	12	..
	Males	58	5	3	4	3	13	7	5	4	3	3	4	4	..
	Fem..	62	5	4	3	8	8	6	3	3	4	7	3	8	..
	Unk...	1							1						..
Ottawa....	Totals	718	43	51	69	56	59	56	54	68	74	68	66	54	..
	Males	374	17	31	39	32	25	33	30	32	37	37	32	29	..
	Fem..	342	26	20	30	24	34	23	24	36	37	30	33	25	..
	Unk...	2										1	1		..
Presque Isle	Totals	227	11	11	15	27	24	21	21	25	23	13	18	18	..
	Males	136	5	5	15	16	15	14	9	12	16	8	11	10	..
	Fem..	91	6	6		11	9	7	12	13	7	5	7	8	..
Roscom- mon	Totals	40	1	4	2	8	6	2	3	4	4	2	2	2	..
	Males	23	1	2	1	5	3	2	1	2	3	1	1	1	..
	Fem..	17		2	1	3	3		2	2	1	1	1	1	..
Saginaw...	Totals	1,636	128	155	166	135	145	99	125	142	145	116	123	157	..
	Males	864	75	87	87	68	71	58	65	74	66	59	65	89	..
	Fem..	771	53	67	79	67	74	41	60	68	79	57	58	68	..
	Unk...	1		1											..
St. Clair....	Totals	871	44	46	74	58	69	67	78	88	90	97	84	76	..
	Males	465	25	34	43	28	30	34	42	37	52	56	49	35	..
	Fem..	406	19	12	31	30	39	33	36	51	38	41	35	41	..
St. Joseph.	Totals	286	21	25	26	19	25	32	27	30	19	13	26	23	..
	Males	157	12	15	13	11	11	19	13	19	11	10	12	11	..
	Fem..	129	9	10	13	8	14	13	14	11	8	3	14	12	..
Sanilac....	Totals	710	37	51	53	52	63	53	67	78	71	66	63	55	1
	Males	374	15	27	28	27	35	21	36	43	35	44	32	29	1
	Fem..	334	22	24	23	25	28	32	31	35	35	22	31	26	..
	Unk...	2			2										..
School- craft	Totals	193	21	13	15	17	14	12	17	21	18	13	16	16	..
	Males	85	7	7	8	7	2	7	8	8	8	4	9	10	..
	Fem..	108	14	6	7	10	12	5	9	13	10	9	7	6	..
Shia- wassee	Totals	417	23	29	34	38	30	41	49	37	39	24	30	40	3
	Males	208	14	18	17	19	15	16	20	16	25	14	14	18	2
	Fem..	209	9	11	17	19	15	25	29	21	14	10	16	22	1
Tuscola....	Totals	548	21	37	47	57	45	49	54	69	53	39	35	42	..
	Males	270	11	17	26	28	21	23	18	28	32	24	17	25	..
	Fem..	278	10	20	21	29	24	26	36	41	21	15	18	17	..
Van Buren.	Totals	391	29	29	38	44	27	31	36	42	34	25	30	26	..
	Males	203	15	20	13	15	16	17	25	19	20	13	18	12	..
	Fem..	187	14	9	25	29	11	13	11	23	14	12	12	14	..
	Unk...	1						1							..
Wash- tenaw	Totals	516	40	32	39	26	39	42	40	48	56	58	40	56	..
	Males	267	18	18	18	16	16	22	17	28	32	27	23	32	..
	Fem..	249	22	14	21	10	23	20	23	20	24	31	17	24	..
Wayne.....	Totals	7,439	573	523	614	590	572	612	611	664	644	629	667	738	2
	Males	3,811	288	298	307	295	311	300	328	350	298	303	355	378	..
	Fem..	3,588	283	222	304	290	259	311	283	312	342	321	306	353	2
	Unk...	40	2	3	3	5	2	1		2			6	7	..
Wexford...	Totals	332	22	23	32	36	41	26	20	34	26	24	25	23	..
	Males	175	10	9	12	23	28	17	6	20	15	11	11	13	..
	Fem..	157	12	14	20	13	13	9	14	14	11	13	14	10	..

TABLE II.—Births in Michigan, by nativity of parents, counties and sex, as enumerated by supervisors and assessors for the year 1901. (Stillbirths included.)

State and counties.	Sex.	Children born, 1901.	Nativity of parents of children born in 1901.									
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		Both unknown.	
							Father—		Mother—			
							Na- tive.	For- eign.	Na- tive.	For- eign.		
STATE.....	{ Totals. Males.. Fem... Unk....	43,221 22,279 20,888 104	20,336 10,429 9,875 32	13,563 7,061 6,489 13	5,270 2,712 2,550 8	3,193 1,648 1,540 5	116 61 55 .....	51 29 21 1	178 84 91 3	38 16 22 .....	476 239 195 42	
Alcona .....	{ Totals. Males.. Fem...	81 40 41	23 14 9	23 9 14	18 7 11	16 9 7	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....	1 1 .....
Alger .....	{ Totals. Males.. Fem.. Unk....	101 55 45 1	45 24 20 1	40 25 15 .....	10 3 7 .....	5 2 3 .....	..... ..... ..... .....	1 1 ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....
Allegan.....	{ Totals. Males.. Fem.. Unk....	574 278 294 2	467 225 242 .....	35 14 21 .....	38 22 15 1	25 13 12 .....	4 2 2 .....	..... ..... ..... .....	2 ..... 1 1	1 1 ..... .....	..... ..... ..... .....	2 1 1 .....
Alpena.....	{ Totals. Males.. Fem.. Unk....	472 230 240 2	102 53 49 .....	221 107 113 1	95 45 49 1	53 24 29 .....	..... ..... ..... .....	..... ..... ..... .....	1 1 ..... .....	..... ..... ..... .....	..... ..... ..... .....	..... ..... ..... .....
Antrim.....	{ Totals. Males.. Fem...	219 112 107	111 58 53	38 18 20	44 23 21	19 9 10	2 1 1	5 3 2	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
Arenac.....	{ Totals. Males.. Fem.. Unk....	200 90 109 1	81 32 49 .....	55 28 27 .....	41 21 19 1	16 7 9 .....	1 1 ..... .....	..... ..... ..... .....	1 ..... 1 .....	..... ..... ..... .....	..... ..... ..... .....	5 1 4 .....
Baraga.....	{ Totals. Males.. Fem...	104 58 46	35 19 16	40 20 20	15 11 4	7 3 4	..... ..... .....	1 1 .....	3 2 1	..... ..... .....	..... ..... .....	..... ..... .....
Barry .....	{ Totals. Males.. Fem...	319 156 163	287 135 152	9 7 2	16 9 7	6 5 1	..... ..... .....	..... ..... .....	1 ..... 1	..... ..... .....	..... ..... .....	..... ..... .....
Bay .....	{ Totals. Males.. Fem...	1,362 720 642	475 252 223	528 279 249	207 112 95	141 72 69	5 4 1	2 1 1	2 ..... 2	1 ..... 1	1 ..... 1	1 ..... 1
Benzie.....	{ Totals. Males.. Fem.. Unk....	219 120 98 1	145 81 63 1	31 16 15 .....	18 11 7 .....	15 8 7 .....	1 ..... 1 .....	1 1 ..... .....	6 2 4 .....	1 1 ..... .....	1 ..... ..... .....	1 ..... 1 .....
Berrien.....	{ Totals. Males.. Fem...	572 303 269	376 201 175	119 64 55	40 20 20	22 9 13	1 1 .....	6 4 2	4 3 1	..... ..... .....	..... ..... .....	4 1 3
Branch.....	{ Totals. Males.. Fem...	337 158 179	298 133 165	9 5 4	15 9 6	10 7 3	..... ..... .....	..... ..... .....	2 1 1	..... ..... .....	..... ..... .....	3 3 .....
Calhoun.....	{ Totals. Males.. Fem.. Unk....	623 333 287 3	518 286 230 2	25 11 14 .....	43 18 24 1	30 13 17 .....	1 1 ..... .....	..... ..... ..... .....	2 2 ..... .....	..... ..... ..... .....	..... ..... ..... .....	4 2 2 .....
Cass.....	{ Totals. Males.. Fem...	235 121 114	208 106 102	2 1 1	12 4 8	8 7 1	3 1 2	..... ..... .....	1 1 .....	..... ..... .....	..... ..... .....	1 ..... .....

TABLE II.—Continued.—Births by counties, parent nativity and sex, 1901.

Counties.	Sex.	Children born, 1901.	Nativity of parents of children born in 1901.								Both unknown.
			Both native born.	Both foreign born.	Foreign father and native mother	Foreign mother and native father.	Mother unknown.		Father unknown.		
							Father—		Mother—		
							Na-tive.	For-eign.	Na-tive.	For-eign.	
Charlevoix.....	Totals..	247	159	31	32	20			2		3
	Males..	116	75	13	16	8			2		2
	Fem... 131	84	18	16	12						1
Cheboygan.....	Totals..	291	119	94	50	25	1		1		1
	Males..	151	70	44	22	15					
	Fem... 138	49	49	28	10	1		1			
	Unk... 2		1								1
Chippewa.....	Totals..	399	61	187	77	46		4	4	7	13
	Males..	216	30	108	40	24			2	3	7
	Fem... 183	31	79	37	22		2	2	2	4	6
Clare.....	Totals..	160	101	20	24	6	2		5		2
	Males..	83	48	14	12	3	1		3		2
	Fem... 77	53	6	12	3	1		2			
Clinton.....	Totals..	371	326	12	17	16					
	Males..	190	170	4	10	6					
	Fem... 181	156	8	7	10						
Crawford.....	Totals..	36	17	8	8	3					
	Males..	19	11	5	2	1					
	Fem... 15	6	3	5	1						
	Unk... 2			1	1						
Delta.....	Totals..	656	155	328	96	41	4	6	5		21
	Males..	345	81	181	47	18	1	3	4		10
	Fem... 306	73	144	49	23	3	3				11
	Unk... 5	1	3					1			
Dickinson....	Totals..	618	64	485	46	22				1	
	Males..	320	33	257	20	9				1	
	Fem... 298	31	228	26	13						
Eaton.....	Totals..	385	344	8	18	14			1		
	Males..	207	191	2	6	8					
	Fem... 178	153	6	12	6			1			
Emmet.....	Totals..	271	181	37	26	21			4		2
	Males..	134	91	19	12	9			1		2
	Fem... 137	90	18	14	12			3			
Genesee.....	Totals..	471	373	24	40	31	2		1		
	Males..	249	195	10	24	17	2		1		
	Fem... 220	177	13	16	14						
	Unk... 2	1	1								
Gladwin....	Totals..	166	88	27	32	17	1		1		
	Males..	95	53	17	16	9					
	Fem... 71	35	10	16	8	1		1			
Gogebic.....	Totals..	553	59	466	21	11					1
	Males..	291	26	242	17	6					
	Fem... 267	33	224	4	5						1
G'd Traverse..	Totals..	285	214	19	32	18	1		1		
	Males..	133	100	8	16	8	1				
	Fem... 152	114	11	16	10			1			
Gratiot.....	Totals..	379	318	8	24	28			1		
	Males..	199	168	4	13	14					
	Fem... 180	150	4	11	14			1			
Hillsdale....	Totals..	312	281	4	11	9	3				4
	Males..	157	140	3	6	6	2				
	Fem... 154	140	1	5	3	1					4
	Unk... 1	1									

TABLE II.—Continued.—Births by counties, parent nativity and sex, 1901.

Counties.	Sex.	Children born, 1901.	Nativity of parents of children born in 1901.								Both unknown.
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		
							Father—		Mother—		
							Na-tive.	For-eign.	Na-tive.	For-eign.	
Houghton.....	{ Totals..	2,682	412	1,510	337	119	.....	.....	1	2	1
	{ Males..	1,429	217	974	170	66	.....	.....	1	.....	1
	{ Fem... 1,253	195	836	167	53	.....	.....	.....	.....	2	.....
Huron.....	{ Totals..	818	268	267	169	104	3	1	1	2	3
	{ Males..	440	159	138	86	55	.....	1	1	.....	.....
	{ Fem... 377	169	129	82	49	.....	3	.....	.....	2	3
	{ Unk... 1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Ingham.....	{ Totals..	431	308	54	25	19	15	.....	3	.....	7
	{ Males..	231	152	29	13	13	8	.....	2	.....	4
	{ Fem... 207	153	25	12	6	7	.....	1	.....	.....	3
	{ Unk... 3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ionia.....	{ Totals..	408	336	20	30	15	.....	.....	1	.....	.....
	{ Males..	209	173	14	12	9	.....	.....	1	.....	.....
	{ Fem... 199	163	6	24	6	.....	.....	.....	.....	.....	.....
Iosco.....	{ Totals..	224	76	82	32	32	1	.....	1	.....	.....
	{ Males..	114	36	43	19	14	1	.....	1	.....	.....
	{ Fem... 110	40	39	13	18	.....	.....	.....	.....	.....	.....
Iron.....	{ Totals..	215	27	163	20	5	.....	.....	.....	.....	.....
	{ Males..	117	15	89	11	2	.....	.....	.....	.....	.....
	{ Fem... 97	12	74	8	3	.....	.....	.....	.....	.....	.....
	{ Unk... 1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Isabella.....	{ Totals..	455	327	21	88	18	.....	.....	.....	.....	1
	{ Males..	225	166	10	38	10	.....	.....	.....	.....	1
	{ Fem... 228	161	9	50	8	.....	.....	.....	.....	.....	.....
	{ Unk... 2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
Jackson.....	{ Totals..	696	512	78	44	49	4	1	2	.....	6
	{ Males..	364	276	42	18	24	2	1	.....	.....	1
	{ Fem... 332	236	36	26	25	2	.....	2	.....	.....	5
Kalamazoo....	{ Totals..	557	330	122	52	40	2	1	5	.....	5
	{ Males..	277	168	57	25	20	1	1	2	.....	3
	{ Fem... 269	155	63	27	19	1	.....	3	.....	.....	1
	{ Unk... 11	7	2	.....	1	.....	.....	.....	.....	.....	1
Kalkaska.....	{ Totals..	116	87	5	15	7	1	.....	1	.....	.....
	{ Males..	66	50	3	6	5	1	.....	1	.....	.....
	{ Fem... 50	37	2	9	2	.....	.....	.....	.....	.....	.....
Kent.....	{ Totals..	1,924	814	665	235	151	2	2	25	2	38
	{ Males..	990	420	335	125	78	1	.....	9	.....	22
	{ Fem... 932	393	330	100	73	73	1	2	15	2	16
	{ Unk... 2	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Keweenaw....	{ Totals..	107	23	71	12	1	.....	.....	.....	.....	.....
	{ Males..	54	9	38	6	1	.....	.....	.....	.....	.....
	{ Fem... 53	14	35	6	.....	.....	.....	.....	.....	.....	.....
Lake.....	{ Totals..	100	59	12	16	10	.....	.....	3	.....	.....
	{ Males..	46	26	5	7	6	.....	.....	2	.....	.....
	{ Fem... 54	33	7	9	4	.....	.....	1	.....	.....	.....
Lapeer.....	{ Totals..	342	227	27	43	44	.....	.....	1	.....	.....
	{ Males..	185	121	17	23	24	.....	.....	.....	.....	.....
	{ Fem... 157	106	10	20	20	.....	.....	1	.....	.....	.....
Leelanau.....	{ Totals..	159	86	36	24	13	.....	.....	.....	.....	.....
	{ Males..	66	33	16	10	7	.....	.....	.....	.....	.....
	{ Fem... 93	53	20	14	6	.....	.....	.....	.....	.....	.....
Lenawee.....	{ Totals..	565	433	22	35	21	1	.....	3	.....	.....
	{ Males..	293	257	7	19	10	.....	.....	.....	.....	.....
	{ Fem... 271	225	15	16	11	1	.....	3	.....	.....	.....
	{ Unk... 1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE II.—Continued.—Births by counties, parent nativity and sex, 1901.

Counties.	Sex.	Children born, 1901.	Nativity of parents of children born in 1901.									
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		Both unknown.	
							Father—		Mother—			
							Na-tive.	For-eign.	Na-tive.	For-eign.		
Livingston.....	{ Totals.	237	203	11	10	13						
	{ Males..	125	109	4	5	7						
	{ Fem...	111	93	7	5	6						
	{ Unk...	1	1									
Luce.....	{ Totals.	74	16	48	3	7						
	{ Males..	39	6	29	1	3						
	{ Fem...	35	10	19	2	4						
Mackinac.....	{ Totals.	121	46	44	13	6	4	3	1		4	
	{ Males..	65	24	23	7	4	3	2			2	
	{ Fem...	56	22	21	6	2	1	1	1		2	
Macomb.....	{ Totals.	468	311	65	46	45	1					
	{ Males..	223	146	33	25	19						
	{ Fem...	245	165	32	21	26	1					
Manistee.....	{ Totals.	470	130	244	62	31	1		2			
	{ Males..	237	66	121	33	15	1		1			
	{ Fem...	233	64	123	29	16			1			
Marquette.....	{ Totals.	1,429	241	907	212	57			6	4	2	
	{ Males..	728	133	461	98	31			1	2	2	
	{ Fem...	700	107	446	114	26			5	2		
	{ Unk...	1	1									
Mason.....	{ Totals.	376	149	138	59	26	1	1	2			
	{ Males..	176	69	65	30	10	1		1			
	{ Fem...	198	79	73	28	16		1	1			
	{ Unk...	2	1		1							
Mecosta.....	{ Totals.	332	223	44	42	17	2		2		2	
	{ Males..	161	106	18	24	6	2		1		2	
	{ Fem...	169	113	26	18	11			1			
	{ Unk...	2	2									
Menominee.....	{ Totals.	585	131	324	86	39			2	1	2	
	{ Males..	300	67	170	40	21			1		1	
	{ Fem...	285	64	154	46	18			1	1	1	
Midland.....	{ Totals.	252	139	43	38	29			2		1	
	{ Males..	128	68	24	19	15			2			
	{ Fem...	124	71	19	19	14					1	
Missaukee.....	{ Totals.	220	100	63	35	21			1			
	{ Males..	122	57	35	20	10						
	{ Fem...	98	43	28	15	11			1			
Monroe.....	{ Totals.	543	461	22	38	19			3			
	{ Males..	281	243	10	20	7			1			
	{ Fem...	262	218	12	18	12			2			
Montcalm.....	{ Totals.	442	294	72	41	25	3				7	
	{ Males..	216	145	32	16	15	1				7	
	{ Fem...	224	148	39	25	10	2					
	{ Unk...	2	1	1								
Montmorency..	{ Totals.	32	10	11	6	2			2		1	
	{ Males..	13	4	3	4				1		1	
	{ Fem...	19	6	8	2	2			1			
Muskegon.....	{ Totals.	691	275	262	95	58			1			
	{ Males..	344	135	129	50	30						
	{ Fem...	347	140	133	45	28			1			
Newaygo.....	{ Totals.	225	161	26	22	15					1	
	{ Males..	116	86	11	10	8					1	
	{ Fem...	109	75	15	12	7						
Oakland.....	{ Totals.	540	361	60	53	55	2		4		5	
	{ Males..	283	185	32	34	28			2		2	
	{ Fem...	257	176	28	19	27	2		2		3	



TABLE II.—Continued.—Births by counties, parent nativity and sex, 1901.

Counties.	Sex.	Children born. 1901.	Nativity of parents of children born in 1901.								Both unknown.
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown		Father unknown.		
							Father—		Mother—		
							Na-tive.	For-eign.	Na-tive.	For-eign.	
Oceana .....	{ Totals.	276	191	32	30	21	.....	.....	2	.....	.....
	{ Males..	143	101	17	16	8	.....	.....	1	.....	.....
	{ Fem...	133	90	15	14	13	.....	.....	1	.....	.....
Ogemaw .....	{ Totals.	113	46	26	20	10	.....	1	1	.....	9
	{ Males..	61	20	13	14	8	.....	.....	.....	.....	6
	{ Fem...	52	26	13	6	2	.....	1	1	.....	3
Ontonagon.....	{ Totals.	173	37	58	20	15	12	7	1	.....	23
	{ Males..	96	22	31	11	8	5	3	1	.....	15
	{ Fem...	71	13	27	9	6	7	3	.....	.....	6
	{ Unk...	6	2	.....	.....	1	.....	1	.....	.....	2
Osceola .....	{ Totals.	334	188	55	62	29	.....	.....	.....	.....	.....
	{ Males..	165	94	24	26	21	.....	.....	.....	.....	.....
	{ Fem...	169	94	31	36	8	.....	.....	.....	.....	.....
Oscoda .....	{ Totals.	21	16	.....	4	1	.....	.....	.....	.....	.....
	{ Males..	12	9	.....	2	1	.....	.....	.....	.....	.....
	{ Fem...	9	7	.....	2	.....	.....	.....	.....	.....	.....
Otsego .....	{ Totals.	121	51	36	21	13	.....	.....	.....	.....	.....
	{ Males..	58	20	19	13	6	.....	.....	.....	.....	.....
	{ Fem...	62	30	17	8	7	.....	.....	.....	.....	.....
	{ Unk...	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Ottawa .....	{ Totals.	718	341	174	119	79	3	.....	2	.....	.....
	{ Males..	374	172	92	67	42	1	.....	.....	.....	.....
	{ Fem...	342	167	82	52	37	2	.....	2	.....	.....
	{ Unk...	2	2	.....	.....	.....	.....	.....	.....	.....	.....
Presque Isle...	{ Totals.	227	111	53	43	18	1	1	.....	.....	.....
	{ Males..	136	62	35	25	13	.....	1	.....	.....	.....
	{ Fem...	91	49	18	18	5	1	.....	.....	.....	.....
Roscommon...	{ Totals.	40	29	2	5	3	.....	.....	1	.....	.....
	{ Males..	23	16	2	2	2	.....	.....	1	.....	.....
	{ Fem...	17	13	.....	3	1	.....	.....	.....	.....	.....
Saginaw .....	{ Totals.	1,636	800	369	274	191	.....	.....	1	.....	1
	{ Males..	864	403	200	158	102	.....	.....	1	.....	.....
	{ Fem...	771	397	169	116	88	.....	.....	.....	.....	1
	{ Unk...	1	1	.....	.....	1	.....	.....	.....	.....	.....
St. Clair.....	{ Totals.	871	460	187	127	93	2	.....	2	.....	.....
	{ Males..	465	253	92	64	53	2	.....	1	.....	.....
	{ Fem...	406	207	95	63	40	.....	.....	1	.....	.....
St. Joseph.....	{ Totals.	286	248	5	21	8	1	.....	1	.....	2
	{ Males..	157	137	4	9	5	1	.....	.....	.....	1
	{ Fem...	129	111	1	12	3	.....	.....	1	.....	1
Sanilac .....	{ Totals.	710	242	200	171	95	.....	.....	1	1	.....
	{ Males..	374	119	114	97	42	.....	.....	1	1	.....
	{ Fem...	334	123	84	74	53	.....	.....	.....	.....	.....
	{ Unk...	2	.....	2	.....	.....	.....	.....	.....	.....	.....
Schoolcraft...	{ Totals.	193	53	98	30	12	.....	.....	.....	.....	.....
	{ Males..	85	25	41	15	4	.....	.....	.....	.....	.....
	{ Fem...	108	28	57	15	8	.....	.....	.....	.....	.....
Shiawassee....	{ Totals.	417	327	29	35	15	1	.....	6	.....	4
	{ Males..	208	171	9	17	6	1	.....	3	.....	1
	{ Fem...	209	156	20	18	9	.....	.....	8	.....	3
Tuscola .....	{ Totals.	548	315	68	96	61	1	.....	5	1	1
	{ Males..	270	159	36	40	31	.....	.....	4	.....	.....
	{ Fem...	278	156	32	56	30	1	.....	1	1	1

TABLE II.—Concluded.—Births by counties, parent nativity and sex, 1901.

Counties.	Sex.	Children born, 1901.	Nativity of parents of children born in 1901.								Both unknown.
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		
							Father—		Mother—		
							Na-tive.	For-eign.	Na-tive.	For-eign.	
Van Buren.....	Totals.	391	337	15	14	13	2	1	7	.....	2
	Males..	203	179	9	6	5	1	.....	3	.....	.....
	Fem....	187	157	6	8	8	1	1	4	.....	2
	Unk....	1	1	.....	.....	.....	.....	.....	.....	.....	.....
Washtenaw ...	Totals.	516	340	66	57	34	2	.....	7	.....	1
	Males..	267	168	36	34	23	.....	.....	6	.....	.....
	Fem....	249	181	30	23	11	2	.....	1	.....	1
	Unk....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wayne.....	Totals.	7,439	2,355	3,240	884	639	14	5	13	17	278
	Males..	3,811	1,174	1,692	456	335	8	3	5	5	133
	Fem....	3,588	1,180	1,548	428	303	6	2	8	6	107
	Unk....	40	1	.....	.....	1	.....	.....	.....	.....	38
Wexford.....	Totals.	332	183	78	37	29	2	1	2	.....	.....
	Males..	175	95	43	22	11	2	1	1	.....	.....
	Fem....	157	88	35	15	18	.....	.....	1	.....	.....
	Unk....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE III.—Stillbirths, twins and illegitimate births in Michigan, by counties, as enumerated by supervisors and assessors for the year 1901. Also number of stillbirths registered as deaths and returned by registrars for the same year.

State and counties.	Number of stillbirths in 1901, as returned in births.	Number of twins born in 1901.*	Number of illegitimate children born in 1901.*	Number of stillbirths in 1901, registered as deaths.
STATE.....	451	817	365	1,501
Alcona.....	3			1
Alger.....	2		2	2
Allegan.....	13	10	2	15
Alpena.....	8	12	2	6
Antrim.....	8	4	2	8
Arenac.....	6	4	2	3
Baraga.....	2	2	7	2
Barry.....	7	4	1	10
Bay.....	13	20	2	41
Benzie.....	3		3	8
Berrien.....	4	6	3	25
Branch.....	5	12	4	9
Calhoun.....	3	10	1	21
Cass.....	4	2	3	4
Charlevoix.....	4	2	1	6
Cheboygan.....	4	9	1	33
Chippewa.....	3	2	13	23
Clare.....	1	4		1
Clinton.....	4	4		7
Crawford.....	2			2
Delta.....	5	10	2	18
Dickinson.....	12	16		30
Eaton.....	10	6	1	14
Emmet.....	1	10	3	9
Genesee.....	8	8	1	15
Gladwin.....	4	2		3
Gogebic.....	6	10	2	25
Grand Traverse.....	1	6		16
Gratiot.....	4	4	3	7
Hillsdale.....	1	4	1	4
Houghton.....	26	38	5	44
Huron.....	8	28	3	13
Ingham.....	5	2	6	11
Ionia.....	5	8	1	11
Iosco.....		2	1	3
Iron.....	2			3
Isabella.....	4	10	6	6
Jackson.....	5	10		23
Kalamazoo.....	2	6	2	22
Kalkaska.....	2	4	1	2
Kent.....	15	24	24	99
Keweenaw.....	6	4		2
Lake.....			3	
Lapeer.....	2	6	1	6
Leelanau.....		8	2	9
Lenawee.....	4	6	1	16
Livingston.....	5	4		5
Luce.....		2		1
Mackinac.....	1		1	4
Macomb.....	4	14	1	20
Manistee.....	7	8		22
Marquette.....	37	22	10	49
Mason.....	4	6	3	6
Mecosta.....	5	6	1	9
Ménominee.....	10	11	1	30
Midland.....	4	6	3	4
Missaukee.....	2	6	1	5

TABLE III.—Concluded.—Stillbirths, twins and illegitimate births, by counties, year 1901.

Counties.	Number of stillbirths in 1901, as returned in births.	Number of twins born in 1901. *	Number of illegitimate children born in 1901. *	Number of stillbirths in 1901, registered as deaths.
Monroe.....	2	18	3	12
Montcalm.....	2	4	2	20
Montmorency.....	4	4	2	2
Muskegon.....	10	14	1	24
Newaygo.....	1	8	.....	7
Oakland.....	4	16	1	8
Oceana.....	3	8	3	8
Ogemaw.....	2	4	.....	4
Ontonagon.....	1	8	.....	1
Osceola.....	1	14	4	5
Oscoda.....	.....	.....	.....	.....
Otsego.....	3	2	.....	3
Ottawa.....	4	12	1	32
Presque Isle.....	1	4	.....	5
Roscommon.....	.....	.....	1	1
Saginaw.....	13	28	1	60
St. Clair.....	12	28	3	45
St. Joseph.....	4	8	.....	11
Sanilac.....	6	18	3	12
Schoolcraft.....	1	2	3	6
Shiawassee.....	3	16	3	8
Tuscola.....	9	15	6	16
Van Buren.....	2	4	3	6
Washtenaw.....	5	18	3	16
Wayne.....	38	132	180	384
Wexford.....	4	8	3	12

TRIPLETS.—There were three cases of triplets reported in 1901, as follows: Cheboygan county, males, foreign parents, born in January; Menominee county, male and two females, foreign parents, born in January; Tuscola county, male and two females, native parents, born in June.

\* Stillbirths included.

**TABLE IV.—Stillbirths, twins and illegitimate births in Michigan, by months and sex, as enumerated by supervisors and assessors for the year 1901. Also number of stillbirths registered as deaths and returned by registrars for the same year.**

Condition.	Sex.	Year 1901.	Months of births, 1901.												Unk.
			Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
Stillbirths (from re- turns of births.)	Total..	451	23	29	40	29	30	37	35	40	46	38	39	63	2
	Males..	252	15	16	21	22	17	20	21	21	28	21	22	27	1
	Fem... 166	7	12	13	6	13	14	12	17	16	14	14	14	27	1
	Unk....	33	1	1	6	1	.....	3	2	2	2	3	3	9	..
Twins*....	Total..	817	53	47	72	74	76	93	80	76	70	44	48	82	2
	Males..	423	28	31	35	33	42	52	47	45	25	25	21	38	1
	Fem... 385	25	16	35	39	34	41	33	31	44	19	25	25	42	1
	Unk....	9	.....	2	2	.....	.....	.....	.....	.....	1	.....	2	2	..
Illegiti- mates*..	Total..	365	39	23	35	30	31	32	31	33	25	20	30	34	2
	Males..	173	13	13	19	15	11	15	16	15	14	10	15	16	1
	Fem... 173	25	9	14	13	19	17	15	16	10	7	7	13	14	1
	Unk....	19	1	2	2	.....	.....	.....	.....	.....	1	3	2	4	..
Stillbirths (from re- turns of deaths.)	Total..	1,501	90	109	147	132	130	135	124	138	90	129	141	136	..
	Males..	824	43	55	89	72	77	78	70	83	41	78	64	73	..
	Fem... 649	45	52	53	58	52	55	53	54	46	47	75	60	60	..
	Unk....	28	2	2	5	2	1	2	1	1	3	4	2	3	..

\* Stillbirths included.

**TABLE V.—Stillbirths, twins and illegitimate births in Michigan, by nativity of parents, as enumerated by supervisors and assessors for the year 1901.**

Nativity of parents.	Number of stillborn children, 1901.				Number of twins, 1901.*				Number of illegitimate children, 1901.*			
	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.
All nativities.....	451	252	166	33	817	423	385	9	365	173	173	19
Both native born.....	219	120	82	17	388	198	190	.....	39	17	22	.....
Both foreign born.....	138	84	48	6	265	147	114	4	5	1	4	.....
Foreign father and native mother.	39	22	11	6	88	42	45	1	6	2	4	.....
Foreign mother and native father.	36	17	17	2	60	32	28	.....	5	1	4	.....
Unknown mother, father native...	1	1	.....	.....	.....	.....	.....	.....	3	2	1	.....
Unknown mother, father foreign..	.....	.....	.....	.....	6	2	4	.....	.....	.....	.....	.....
Unknown father, mother native...	5	3	2	.....	.....	.....	.....	.....	78	40	35	3
Unknown father, mother foreign..	2	1	1	.....	2	.....	2	.....	18	7	11	.....
Both unknown.....	11	4	5	2	8	2	2	4	211	103	92	16
One or both native.....	300	163	112	25	536	272	263	1	131	62	66	3
One or both foreign.....	215	124	77	14	421	263	193	5	34	11	23	.....

\* Stillbirths included.

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# INDEX.

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# INDEX.

	PAGE.		PAGE.
ACCIDENTS:		CANCER—Continued.	
deaths from, 1901 .....	cix	diagram, cancer in Michigan, 1872-1900 .....	lxxxiii
APPENDICITIS:		deaths and death rates, same age and sex, 1870-1902 .....	xc
deaths from, 1901 .....	civ	CAUSES OF DEATH:	
APOPLEXY:		by geographical sections and groups of cities as published in <i>Monthly Bulletin</i> , 1901 .....	xxx
deaths from, 1901 .....	xvii	for State and geographical sections, by months and ages, 1901 .....	xlvi
BIRTHS:		discussion of .....	lviii
registered in Michigan, 1867-1901.....	xi	by months, ages and sex, 1901.....	18
by counties, 1901 .....	xvii	by counties, 1901 .....	36
by counties, 1901 compared with 1900.	xx	See also individual causes, as CANCER, PNEUMONIA, etc.	
summary of enumeration of, 1901.....	cxx	CAUSES OF DIVORCE:	
returns by months, 1892-1901.....	cxxi	by sex, percentage of complainants, 1901 .....	cxix
parent nativity of, 1901.....	cxxi	by sex of complainants, place of marriage, children in family and duration of marriage, 1901 .....	90
parent nativity of, 1892-1901.....	cxxii	CAUSES ILL-DEFINED:	
parent nativity of, 1871-1901.....	cxxii	deaths from, 1901 .....	cix
by months, counties and sex, 1901.....	99	CEREBRAL CONGESTION AND HEMORRHAGE (Apoplexy):	
by nativity of parents, county and sex, 1901 .....	104	deaths from, 1901 .....	xvii
See also STILLBIRTHS, TWINS, and ILLEGITIMATES.		CLIMATOLOGICAL DATA:	
BIRTH RATES:		review of the year, 1901 .....	cxx
Michigan, 1867-1901, (stillbirths not included) .....	xi	See also TEMPERATURE, PRECIPITATION, etc.	
Michigan compared with other states and countries, 1887-1901 .....	xlv	CONSUMPTION. See TUBERCULOSIS.	
by counties, 1901 .....	xx	CONVULSIONS OF INFANTS:	
decreasing in Michigan .....	cxx	deaths from, 1901 .....	xvii
BRIGHT'S DISEASE:		CROUP. See DIPHTHERIA AND CROUP.	
deaths from, 1901 .....	cvi	DEATHS:	
BRONCHITIS:		registered in Michigan, 1867-1901.....	xi
deaths from, 1901 .....	ci, cii	by counties, 1901 .....	xvii
BRONCHIOPNEUMONIA:		by counties, 1901 compared with 1900.	xx
deaths from, 1901 .....	ci, ciii	by months and quarters, 1901.....	xxv
CANCER:		delayed returns of, by months, 1901..	xxv
deaths from, 1901 .....	lxix	by sex, 1890-1901 .....	xxvi
ratio of deaths from, 1870-1902.....	lxxi	by sex and age, 1901 .....	xxvii
increase of cancer in Michigan.....	lxxii	by age periods and sex, 1901, compared with population .....	xxviii
deaths from cancer and "tumor," by sex, 1870-1900 .....	lxxiii		
death rates from cancer and "tumor," by sex, 1870-1900.....	lxxiv		
death rates, same sex and age periods, 1872-1900 .....	lxxvi		
increase of death rates from, by quinquennial periods, 1872-96 .....	lxxvi		
mortality index, 1890 .....	lxxviii		
part of body affected, 1872-1900.....	lxxx, lxxxix		
mortality from cancer in Michigan..	lxxx		



DEATHS—Continued.	PAGE.		PAGE.
ratio of at certain periods of age, 1870-1901 .....	xxix	GEOGRAPHICAL SECTIONS:	
by geographical sections, 1901 .....	xxx, xlii	deaths returned by .....	xlvi
in cities of Michigan, 1901 .....	xliii	climatological data by .....	cxix
statistically classified by the Inter- national system, 1901 .....	xlv	HEART DISEASES—ORGANIC:	
by months, counties and sex, 1901....	3	deaths from, 1901 .....	xcix, c
by ages, counties and sex, 1901 .....	8	HOMICIDE:	
See also DEATH RATES AND CAUSES OF DEATH.		deaths from, 1901 .....	cviii
DEATH RATES:		ILL-DEFINED CAUSES:	
Michigan, 1867-1901 (stillbirths not included) .....	xi	deaths from, 1901 .....	clx
compared with other states and countries, 1887-1901 .....	xv	ILLEGITIMATES:	
by counties, 1901 .....	xvii	by counties, 1901' .....	110
monthly, based on prompt returns..	xxv	by months and sex, 1901 .....	112
by sex, 1890-1901 (stillbirths includ- ed) .....	xxvi	parent nativity of, 1901 .....	112
by sex and age periods, 1901.....	xxviii	INFLUENZA:	
at certain periods of age, 1870-1901 (stillbirths excluded) .....	xxix	deaths from, 1901 .....	lxiv
by age periods, 1870-1901 .....	xxix	ISOTHERMS:	
by geographical sections and groups of cities as published in <i>Monthly Bulletin</i> , 1901 .....	xxx	annual mean, 1901 .....	cxix
cities of Michigan, 1901 .....	xliii	LIVER DISEASES:	
of causes of death statistically class- ified by the International system, 1901 .....	xlv	deaths from, 1901 .....	clv
DIARRHEA AND ENTERITIS:		MALFORMATIONS:	
deaths from, 1901 .....	civ, cvl	deaths from, 1901 .....	clx
DIPHTHERIA AND CROUP:		MARRIAGES:	
deaths from, 1901 .....	lxiii, lxiv	registered in Michigan, 1867-1901....	xi
DISEASES OF INFANCY:		by counties, 1901 .....	xvii
deaths from, 1901 .....	clx	by counties, 1901 compared with 1900	xx
DISEASES OF THE LOCOMOTOR SYSTEM:		summary of registration, 1901.....	cxl
deaths from, 1901 .....	clx	by months, 1892-1901 .....	cxli
DIVORCES:		by months and quarters, 1901.....	cxlii
by counties, 1901 .....	xvii	nativity of persons married, 1901....	cxliii
by counties, 1901 compared with 1900	xx	nativity of persons married, 1871-1901	cxliv
children affected thereby, 1901.....	cxviii	ages of males married, 1871-1901 .....	cxv
duration of marriage prior to .....	cxviii	ages of females married, 1871-1901....	cxvi
causes of divorces granted .....	cxix	by months and counties, 1901 .....	63
the percentage of complainants from each cause, by sex .....	cxviii	persons married, by ages, counties and sex, 1901 .....	65
by counties, 1901 .....	78, 80	persons married, by nativity and counties, 1901 .....	70
number filed during year, 1901 .....	78	by ages of males and females, 1901..	72
pending at beginning and end of year, 1901 .....	78	probate marriages, by ages of males and females married, 1901 .....	73
contested, 1901 .....	78	MARRIAGE RATES:	
granted, 1901 .....	78	Michigan, 1867-1901 .....	xi
refused, 1901 .....	78	Michigan compared with other states and countries, 1887-1901 .....	xiii
withdrawn or otherwise disposed of, 1901 .....	78	by counties, 1901 .....	xvii
by counties and sex of complainant, 1901 .....	78	MEASLES:	
See also CAUSES OF DIVORCE.		deaths from, 1901 .....	lxli
DIVORCE RATES:		MENINGITIS:	
by counties, 1901 .....	xx	deaths from, 1901 .....	xcvi
See also CAUSES OF DIVORCE.		METEOROLOGICAL CONDITIONS:	
ENTERITIS. See DIARRHEA AND ENTERITIS.		by months, 1901 .....	cxliii
		OLD AGE:	
		deaths from, 1901 .....	clx
		PARALYSIS:	
		deaths from, 1901 .....	xcvi, xcvi
		PERITONITIS:	
		deaths from, 1901 .....	clv
		PLEURISY:	
		deaths from, 1901 .....	cl
		PNEUMONIA:	
		deaths from, 1901 .....	cl, cxli
		POPULATION:	
		estimated, 1867-1901 .....	xi
		returns compared with, by counties.	xvii

PRECIPITATION:	PAGE.	TUBERCULOSIS:	PAGE.
amount of, 1901 .....	cxxix	deaths from, 1901 .....	lxvi
by State and geographical sections, 1901 .....	cxxx	TWINS:	
SCARLET FEVER:		by counties, 1901 .....	110
deaths from, 1901 .....	lxii	by months and sex, 1901 .....	112
SKY:		by parent nativity, 1901 .....	112
by State and geographical sections, 1901 .....	cxxx	TYPHOID FEVER:	
STILLBIRTHS:		deaths from, 1901 .....	lix
by counties, 1901 .....	110	VITAL STATISTICS:	
by months and sex, 1901 .....	112	returned for 1901 .....	ix
by parent nativity, 1901 .....	112	returns, by months, 1901 .....	x
STOMACH DISEASES:		comparison of 1901 with previous years of registration in Michigan..	xi
deaths from, 1901 .....	civ	compared with other states and countries, 1901 .....	xlii
SUICIDE:		by counties, 1901 compared with 1900	xx
deaths from, 1901 .....	cvi	WHOOPING COUGH:	
TEMPERATURE:		deaths from, 1901 .....	lxli
in Michigan, 1901 .....	cxxix	WIND:	
by State and geographical sections, 1901 .....	cxxx	prevailing winds in Michigan, 1901.	cxxix
		direction of, by State and geograph- ical sections, 1901 .....	cxxx

ERRATA.

In the last column of Table 29, p. lxxxix, the per cents of deaths of *males* and *females* (not of the totals) to total deaths of each sex are incorrectly stated. Following are the correct figures: *Males*: Cancer of mouth, 4.9; cancer of stomach and liver, 51.0; cancer of intestines, 9.6; cancer of genital organs, 0.2; cancer of breast, 0.3; cancer of skin, 8.8; cancer of other organs or unspecified organs, 25.2. *Females*: Cancer of mouth, 1.2; cancer of stomach and liver, 30.8; cancer of intestines, 7.7; cancer of genital organs, 23.4; cancer of breast, 14.1; cancer of skin, 2.4; cancer of other organs or unspecified organs, 20.3.





AM





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ML 58

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