

VITAL STATISTICS.

Registration of Births, Deaths, and Marriages.

The present official system of compulsory registration of births, deaths, and marriages in Victoria has been in force since 1853, and the registers—framed on the best models—are replete with all necessary information bearing on the family history of the people. The statutory duties under the Registration Acts are performed by the Government Statist, who has control over the local registrars of births and deaths, and the registrars of marriages, and (so far as regards their registration duties) over the clergymen who celebrate marriages. Copies of entries certified by him or by the Assistant Government Statist are *prima facie* evidence in the Courts of Australia of the facts to which they relate. At the head office in Melbourne there is kept for reference a complete collection of all registrations effected since 1st July, 1853, as well as originals or certified copies of all existing church records relating to earlier periods, as far back as 1837.

Applicants for searches or certificates of births, deaths, or marriages should, in applying to the Government Statist, furnish particulars of the date and place of the event; also the names of the parties in the case of a marriage, and the name, age (if a death), and parentage in the case of a birth or death. The fee for a search in the Official Records, or an extract of an entry, is 2s. 6d., and for a certificate, including the cost of search, 7s. 6d. (except where the case appears in the records of the current quarter, when 5s. only is charged). For a search in the early church records, prior to 1st July, 1853, the fee is only 1s., a further sum of 1s. being payable if a certificate is required.

The *Year-Book* for 1916-17 contains on pages 301 to 303 a statement of the law relating to marriages and the registration of births and deaths in Victoria. Since 1915, when the Acts were consolidated, minor validating and other Acts (Nos. 2775, 2998, 3127, and 3282) have been passed.

MARRIAGES.

Marriages.

Marriages in Victoria in 1924 numbered 13,296. This was the third highest number for one year in the history of the State, being 1,602 less than the greatest number previously

recorded—that for 1920. The figures for each of the last twenty years are as follows :—

MARRIAGES IN EACH YEAR, 1905 TO 1924.

Year.	No. of Marriages.	Year.	No. of Marriages.
1905	8,774	1915	12,832
1906	8,930	1916	11,341
1907	9,575	1917	9,506
1908	9,334	1918	9,156
1909	9,431	1919	11,706
1910	10,240	1920	14,898
1911	11,088	1921	13,676
1912	11,738	1922	12,996
1913	11,324	1923	13,126
1914	11,830	1924	13,296

The marriages in Australia for 1924 numbered 45,869, as against 44,541 in the previous year, 44,731 in 1922, 46,869 in 1921, 51,552 in 1920, and 40,540 in 1919. Of the total for 1924, 13,296 took place in Victoria, 18,072 in New South Wales, 6,234 in Queensland, 4,121 in South Australia, 2,596 in Western Australia, 1,529 in Tasmania, 17 in the Northern Territory, and 4 in the Federal Capital Territory.

Marriage rates. The ordinary marriage rate—per 1,000 of the total population—like birth and death rates similarly estimated, is somewhat unreliable in comparatively newly settled countries like Australia, especially in earlier periods, but, as it affords a ready and approximate comparison between years not widely separated, the figures relating to Victoria are given in the following table for the last ten years :—

MARRIAGE RATES, 1915 TO 1924.

Year.	Marriage Rate.	Year.	Marriage Rate.
1915	8·96	1920	9·85
1916	8·02	1921	8·90
1917	6·73	1922	8·27
1918	6·43	1923	8·16
1919	7·95	1924	8·10

The rates in the other States, New Zealand, and England and Wales in 1924 were as follows:—New South Wales, 8·11; Queensland, 7·55; South Australia, 7·78; Western Australia, 7·22; Tasmania, 7·12; New Zealand, 7·90; and England and Wales, 7·65.

The marriage rate for 1920 was the highest recorded in the history of the State. This was mainly due to the marriages of a large number of returned soldiers who had settled down to ordinary civilian life.

Marriages to marriageable men and women. The marriages in proportion to the population, to the unmarried men and widowers aged 21 to 55, and to the unmarried women and widows aged 18 to 50, in each census year, 1857 to 1921, are given in the following table:—

MARRIAGES PER 1,000 OF POPULATION AND OF SINGLE MEN AND WOMEN, 1857 TO 1921.

Year of Census.	Exclusive of Chinese and Aborigines.						
	Enumerated Population.	Number of Unmarried and Widowed.		Marriages.	Proportion of Marriages per 1,000 of the—		
		Men (aged 21 to 55).	Women (aged 18 to 50).		Population.	Unmarried and Widowed Men (aged 21 to 55).	Unmarried and Widowed Women (aged 18 to 50).
1857 ..	383,668	88,456	18,128	4,465	11·64	50·48	246·30
1861 ..	513,896	98,665	24,009	4,528	8·81	45·89	188·60
1871 ..	712,263	77,078	40,836	4,715	6·62	61·17	115·46
1881 ..	849,438	77,250	75,098	5,732	6·75	74·20	76·33
1891 ..	1,130,463	133,576	113,276	9,007	7·97	67·43	79·51
1901 ..	1,193,340	123,691	137,267	8,468	7·10	68·46	61·69
1911 ..	1,309,950	132,642	158,556	10,984	8·39	82·81	69·28
1921 ..	1,531,280	136,569	163,488	14,009	9·15	102·57	85·69

NOTE.—The figures in this table relate to the twelve months of which the date of census is the central point.

Factors in marriage rates. An examination of the figures for the eight census periods shows how the crude marriage rate is affected by the proportion of marriageable persons in the community. The maximum marriage rate (per 1,000 of population), which occurred in 1857, was co-incidental with the highest proportion of marriageable

persons, while the minimum rate—in 1871—was associated with the lowest proportion of such persons. A further examination of the figures shows that the ordinary marriage rate is more directly affected by the proportion of eligible men than by that of eligible women in the population. Thus, the percentage of single women aged 18 to 50 rose from 4·7 in 1857 to 10·7 in 1921, while that of single men aged 21 to 55 fell from 23 to 8·9 in the same period. After allowing for the more uniform distribution of males and females of marriageable ages in the later years, the decrease in the percentage of marriageable men coincides fairly closely with the decline in the ordinary marriage rate. The female marriage rates show that, of females aged 18 to 50, the proportion entering wedlock each year fell from about 1 in 4 in 1857, and nearly 1 in 5 in 1861, to 1 in 16 in 1901, 1 in 15 in 1911, and nearly 1 in 12 in 1921.

The large number of discharged soldiers, who were settling down to civilian life was, responsible to a great extent for the high crude marriage rate recorded in 1921. This factor, however, only partially accounts for the very high proportion of marriageable men and women who entered wedlock in that year in comparison with the years 1901 and 1911, as, quite apart from the effect produced by the marriages of discharged soldiers, the improvement in the rate shown in 1911 became more prominent in the next decennial year.

Marriages
to marriage-
able males
in Austral-
asia.

The following statement shows for the period 1900-02 and for the years 1911 and 1921 the number of marriages per 1,000 marriageable males in Victoria, the other States of Australia, and New Zealand. It has been assumed that marriageable males are unmarried men and widowers aged 21 to 55 :—

MARRIAGES PER 1,000 MARRIAGEABLE MALES IN AUSTRALASIA.

—	1900-02.	1911.	1921.	Increase per cent. in 20 Years.
Victoria	56·0	67·3	81·7	45·9
New South Wales	58·3	68·0	73·9	26·8
Queensland	41·6	54·9	62·1	49·3
South Australia	56·8	81·3	88·7	56·2
Western Australia	41·9	45·8	62·5	49·2
Tasmania	65·7	69·3	81·9	24·7
Australia	55·7	64·7	77·2	38·6
New Zealand	55·1	58·8	78·9	43·2

In each State the proportion of marriageable men who married during the year 1921 was greater than that for the period 1900-02 or for 1911, the excess over the proportion for the earlier period, expressed as a percentage, being 56 in South Australia, 49 in Western Australia, 49 in Queensland, 46 in Victoria, nearly 27 in New South Wales, and nearly 25 in Tasmania. The comparatively low marriage rates for men in Western Australia and Queensland were due to the unequal distribution of marriageable men and women. At the 1921 census, to every 1,000 unmarried and widowed women aged 18 to 50 the numbers of bachelors and widowers between 21 and 55 years of age in each State and Australia were as follows :—Victoria, 837; New South Wales, 1,015; Queensland, 1,230; South Australia, 892; Western Australia, 1,330; Tasmania, 889; and Australia, 984.

Marriageable persons in Metropolis and Country. An examination of the sex distribution of persons residing in Greater Melbourne and the rest of the State discloses the fact that, whether the comparison be made for all ages or for marriageable ages only, there is a great preponderance of women over men in the metropolis, while in the remainder of the State the men are in excess. In Greater Melbourne in 1921 there were 63,337 marriageable men aged 21 to 55, as compared with 95,024 marriageable women aged 18 to 50. In the rest of the State the eligible men and women at those ages numbered 73,232 and 68,464 respectively. It is thus seen that, while there was a surplus of 31,687 marriageable females in the metropolis as compared with males, there was a deficiency of 4,768 in the country.

The number of such males to 1,000 marriageable females in the metropolis was 667, while in the rest of the State the corresponding number was 1,070.

The following statement shows the proportions of marriageable men and women per 1,000 of the respective populations in Greater Melbourne and the rest of the State :—

MARRIAGEABLE MEN AND WOMEN PER 1,000 OF POPULATION IN GREATER MELBOURNE AND THE REST OF THE STATE, 1921.

District.	Males.	Females.
Greater Melbourne ..	82·6	124·0
Rest of the State ..	95·8	89·5

The marriage rates of marriageable men and women at different periods of life have been computed for various age groups at each of four census periods, and are shown in the following table :—

MARRIAGES PER 1,000 MARRIAGEABLE MEN AND WOMEN IN AGE GROUPS.

Age Group.	Men.				Women.			
	1891.	1901.	1911.	1921.	1891.	1901.	1911.	1921.
15-21 ..	..	..	..	..	23·6	18·8	23·3	25·7
21-25* ..	44·3	44·6	55·2	64·9	106·0	87·2	105·6	129·8
25-30 ..	85·9	90·5	118·6	148·2	100·5	84·7	112·1	135·3
30-35 ..	75·2	82·1	101·1	126·0	66·4	57·9	66·0	79·6
35-40 ..	51·1	62·6	72·9	91·1	46·4	37·2	43·0	43·3
40-45 ..	33·4	39·9	44·7	50·5	27·7	22·3	20·7	22·2
45-50 ..	25·9	29·8	34·9	35·0	17·8	14·3	5·5	13·5
50 and upwards	9·1	9·1	12·1	12·8	4·2	2·4	2·6	3·1

* In the case of men, 20-25.

The probabilities of bachelors and spinsters marrying and of widowers and widows re-marrying have been obtained by comparing their marriages at specified ages with the respective numbers in the community at those ages at the census of 1921. The marriages per 1,000 of the above-mentioned persons are given in the following table for the year mentioned —

MARRIAGES PER 1,000 BACHELORS, WIDOWERS, SPINSTERS, AND WIDOWS, 1921.

Age Group.	Marriages to every 1,000—			
	Bachelors.	Widowers.	Spinsters.	Widows.
15-21 ..	..	..	25·7	..
21-25* ..	64·8	114·3	129·5	179·4
25-30 ..	147·4	165·2	134·1	132·2
30-35 ..	123·3	170·4	77·5	84·4
35-40 ..	85·4	129·4	37·5	64·8
40-45 ..	40·8	105·6	18·9	31·3
45-50 ..	25·7	71·5	10·6	18·9
50 and upwards	6·7	20·2	3·3	2·9

* In the case of men, 20-25.

The figures show that the probability of a widower marrying within a year is greater than that of a bachelor of similar age, and further, that the difference in favour of the former is much greater at ages

over 30 than at earlier ages. Comparing the marriage rates for widows with those for spinsters it is seen that at every age under 50, except the age group 25-30, the chance of a widow marrying is considerably greater than that of a spinster of the same age. As 78 per cent. of both widowers and widows are over 50 years—a period of life when the chance of re-marrying is small—and the great majority of the bachelors and spinsters are under that age—a period when the probability of marrying is much greater—it was to be expected that the rates for the two former would be much lower than those for the two latter sections. In proportion to their respective numbers, the marriages of widowers were only slightly more than half as numerous as those of bachelors, and the marriages of widows were less than one-fourth of those of spinsters.

The ages of bridegrooms and brides who were married in 1924 are shown in combination for various groups in the table which follows :—

AGES OF BRIDEGROOMS AND BRIDES IN COMBINATION IN VICTORIA, 1924.

Ages of Bride- grooms.	Ages of Brides.																			Total Bridegrooms.
	13.	14.	15.	16.	17.	18.	19.	20.	21 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 and over.	
15	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
16	1	...	...	...	...	...	...	...	...	...	...	3
17	1	2	3	4	3	1	2	...	...	...	...	...	...	...	...	...	...	16
18	5	15	17	10	3	7	...	...	...	...	...	...	...	...	...	...	57
19	...	1	2	12	23	38	32	16	38	...	3	...	...	...	...	...	...	...	...	165
20	12	30	45	36	37	65	9	...	...	...	...	...	...	...	...	...	234
21 to 25	5	54	112	263	327	355	1,951	501	75	13	3	...	...	...	...	...	...	3,659
25 to 30	12	37	85	148	201	1,842	1,700	345	55	9	2	...	...	...	...	...	4,436
30 to 35	1	2	10	22	31	63	605	883	552	125	23	4	1	1	...	...	...	2,323
35 to 40	1	5	9	12	6	144	298	305	193	53	15	3	2	...	...	...	1,046
40 to 45	4	6	8	56	87	133	123	55	27	5	1	...	...	...	507
45 to 50	2	...	19	35	63	90	49	44	16	5	...	...	1	324
50 to 55	5	14	20	41	42	41	28	11	6	...	...	208
55 to 60	3	7	7	22	24	35	21	11	5	...	...	135
60 to 65	1	4	5	11	18	18	10	11	5	...	83
65 to 70	2	4	4	5	15	10	10	13	9	2	74
70 to 75	2	...	2	1	2	5	2	...	14
75 and over	1	...	...	...	2	...	1	2	1	2	2	11
Total Brides	1	1	10	101	235	487	607	690	4,739	3,540	1,510	673	276	203	104	55	41	18	5	13,296

Although age inequalities among contracting parties were relatively few, they were striking in degree. Thus two men between 45 and 50 married women under 21, while sixteen women between 35 and 45

were married to men who were under 25 years. The great majority of the parties were, however, of suitable ages. Of every 1,000 men married during the year, 706 were older and 195 younger than their brides, and 99 were of the same age as their partners.

Proportion of
marriages
at various
ages.

The proportions of both sexes marrying in the various age groups are shown in the succeeding table for the periods 1881-90 and 1911-20, and the year 1924:—

PROPORTIONS OF MALES AND FEMALES MARRYING AT DIFFERENT AGES, 1881-90, 1911-20, AND 1924.

Age Group.			Proportion per 1,000 of total—					
			Bridegrooms.			Brides.		
			1881-90.	1911-20.	1924.	1881-90.	1911-20.	1924.
Under 15	...	...	...	...	...	·15	·07	·16
15 to 16	...	...	...	...	·08	1·17	·75	·75
16 to 17	...	...	·03	·16	·23	6·53	3·79	7·60
17 to 18	...	...	·29	·62	1·20	20·32	12·65	17·67
18 to 19	...	...	1·46	3·81	4·29	42·94	29·53	36·63
19 to 20	...	...	5·62	9·53	12·41	65·03	44·34	45·65
20 to 21	...	...	15·19	16·82	17·60	73·84	54·41	51·89
21 to 25	...	...	321·02	255·25	275·20	432·34	360·34	356·42
25 to 30	...	...	365·48	356·68	333·63	223·83	286·34	266·24
30 to 35	...	...	134·57	166·37	174·71	62·07	105·01	113·57
35 to 40	...	...	58·29	84·52	78·67	29·53	50·44	50·62
40 to 45	...	...	32·54	42·03	38·13	17·10	24·21	20·76
45 to 50	...	...	24·77	28·21	24·37	12·23	15·13	15·27
50 to 55	...	...	18·40	16·55	15·64	6·74	6·60	7·82
55 to 60	...	...	11·49	9·65	10·15	3·40	3·29	4·14
60 and over	...	...	10·85	9·80	13·69	2·78	3·10	4·81
Not stated	...	...	...	...	...	...	...	...
Total	...	...	1,000·00	1,000·00	1,000·00	1,000·00	1,000·00	1,000·00

Of every 1,000 women who were married during 1924, 517 were under 25 years, and 266 were aged 25-30, as against 506 and 236 at corresponding ages in the years 1911 to 1920, and 642 and 224 in the years 1881 to 1890.

Age at
marriage.

A high proportion of re-marriages has the effect of increasing the average marrying age of bridegrooms and brides. This is readily seen by comparing for 1924 the mean

age at marriage of bachelors, 28·51, with that of divorced men, and of widowers—38·68 and 47·24 respectively. The average age of spinsters marrying was 25·66, as against 35·00 for divorced women and 41·04 for widows. The average age of men marrying women under 45 and of their brides for certain periods since 1870 is shown in the following table :—

MEAN AGES AT MARRIAGE.

Period.	Average Age of—	
	Brides under 45.	Bridegrooms of Brides under 45.
	Years.	Years.
1870-74	24·13	29·93
1880-84	23·83	28·61
1890-94	24·66	28·66
1900-04	25·44	29·70
1905-09	25·88	29·80
1910	25·88	29·58
1911	25·81	29·46
1912	25·75	29·17
1913	25·66	29·01
1914	25·71	29·01
1915	25·68	28·75
1916	26·07	29·48
1917	26·03	29·69
1918	25·95	29·66
1919	26·14	29·64
1920	26·00	29·21
1921	25·92	29·26
1922	26·05	29·31
1923	25·91	29·20
1924	25·73	29·01

The mean age of women under 45 who married in 1924 differed very slightly from the average of the previous five years. In Victoria in 1924 the mean marrying age of all brides was 26·59, and of all bridegrooms, 29·86.

Marriage records show that, of the persons married in Victoria during 1924, 88·7 per cent. were born in Australia, 9·4 per cent. in the United Kingdom, and ·9 per cent. in other British Possessions, and that only small proportions, about 1·5 per cent. of the bridegrooms and ·6 per cent. of the brides, were natives of foreign countries. The numbers born in

Birthplaces
of persons
marrying.

Australia and other countries are shown in the subjoined table for the years 1913 and 1924 :—

BIRTHPLACES OF PERSONS MARRIED, 1913 AND 1924.

Where Born.	Bridegrooms.		Brides.	
	1913.	1924.	1913.	1924.
Australia	9,628	11,484	10,274	12,102
New Zealand	155	79	82	84
England and Wales	972	1,100	644	771
Scotland	213	269	141	182
Ireland	126	119	83	57
Other British Possessions	40	43	24	27
Germany	46	30	19	8
Russia	17	13	3	2
Italy	15	33	12	13
United States	30	22	14	9
Other Foreign Countries	82	104	28	41
Total	11,324	13,296	11,324	13,296

Marriages in quarters. Victorian experience shows that, prior to 1919, the Autumn quarter was the most frequently selected season for marrying. During the years 1919 to 1924, however, the greatest proportion of marriages took place in the Spring, except in the year 1920. The numbers celebrated in the different seasons in 1924 were—3,596 in the Spring, 3,581 in the Autumn, 3,125 in the Winter, and 2,994 in the Summer.

Conjugal condition of persons marrying. The following statement shows the percentages of persons in each conjugal condition who have married in different periods since 1870 :—

CONJUGAL CONDITION OF PERSONS MARRYING, 1871-1924.

Conjugal Condition.	Percentage of total Marriages.					
	1871-80.	1881-90.	1891-1900.	1901-10.	1911-20.	1924.
Bachelors and Spinsters..	80·59	85·84	87·22	88·46	90·31	90·48
Bachelors and Widows ..	7·10	4·72	4·23	3·66	3·15	3·10
Widowers and Spinsters..	7·75	6·17	6·07	5·70	4·81	4·47
Widowers and Widows ..	4·56	3·27	2·48	2·18	1·73	1·95

NOTE.—In this table divorced men and women are included with bachelors and spinsters respectively.

Of every 1,000 persons of each sex married in Victoria during 1924, 64 were widowers and 51 were widows, as against 65 and 47 respectively in 1923, 71 and 55 in 1922, 64 and 54 in 1921, and 61 and 55 in 1920.

**Divorced
persons
re-marrying.**

The number of divorced persons re-married during 1924 was 397, which was 4 less than the number for the preceding year. Of the 135,984 persons married during the last five years, divorced persons numbered 1,816, or 1 in every 75 persons, as compared with 1 in every 103 in the preceding five-year period. The following are the numbers of divorced persons who have re-married since 1919 :—

DIVORCED PERSONS RE-MARRYING, 1920 TO 1924.

Year.				Males.	Females.	Total.
1920	..	..	..	158	146	304
1921	..	..	..	188	165	353
1922	..	..	..	182	179	361
1923	..	..	..	209	192	401
1924	..	..	..	196	201	397

The divorced persons in the State at the census of 1921 numbered 2,313, of whom 1,092 were men and 1,221 women. A comparison of the re-marriages of divorced males and females during 1921 with these numbers shows that, according to the experience of that year, 17·2 per cent. of the males and 13·5 per cent. of the females re-marry each year. As these proportions greatly exceed the rates for other sections of the community, it is evident that many divorces are obtained with a view to early re-marriage.

**Marriages of
minors.**

The proportions of bridegrooms and brides under 21 years of age are given in the subjoined table for the years 1920 to 1924 :—

Year.				Percentage under 21 years of age.	
				Bridegrooms.	Brides.
1920	..	..	..	2·66	13·46
1921	..	..	..	2·83	14·09
1922	..	..	..	3·29	13·63
1923	..	..	..	3·51	15·14
1924	..	..	..	3·58	16·03

Marriages in
religious
denomina-
tions.

The numbers and proportions of marriages solemnized according to the rites of the principal religious denominations and of those performed by registrars of marriages, for the years 1923 and 1924, are shown in the following table:—

MARRIAGES IN VARIOUS DENOMINATIONS.

Denomination.	1923.		1924.	
	Number.	Percentage of Total Marriages.	Number.	Percentage of Total Marriages.
Church of England	3,756	28·61	3,863	29·06
Roman Catholic Church	2,399	18·28	2,461	18·51
Presbyterian Church	2,528	19·26	2,474	18·61
Methodist Church	1,852	14·11	1,830	13·76
Congregational Church	850	6·48	885	6·66
Baptist Church	641	4·88	597	4·49
Lutheran Church	47	·36	63	·47
Church of Christ	272	2·07	279	2·10
Salvation Army	57	·43	43	·32
Hebrew	46	·35	59	·44
Other Sects	170	1·30	84	·63
Registrars of Marriages	508	3·87	658	4·95
Total	13,126	100·00	13,296	100·00

Marriages by Anglican clergymen represented 29·06 per cent. of the total in 1924, as compared with 28·61 per cent. in the previous year, 29·02 per cent. in 1922, 29·10 per cent. in 1921, 29·56 per cent. in 1920, 25·44 per cent. in 1911 and 21·18 per cent. in the period 1904-08. Excepting the ratios for the Roman Catholic, Presbyterian and Methodist churches, there were great disparities between the proportion of marriages celebrated according to the rites of each of the principal denominations and the proportionate number of adherents possessed by it in the community.

In 1924, 4·95 per cent., in 1923, 3·87 per cent., in 1922, 3·35 per cent., in 1921, 2·85 per cent., and, in 1914 and 1913, 2·6 per cent. of the total marriages in Victoria were celebrated by lay registrars, as against 1 per cent. in 1909, and about 7 per cent. in the decade ended 1890. The decrease which occurred between the earlier period and 1909 was due to the competition of matrimonial agencies which sprang up about 1894, and the increase since 1909 has probably been due to the *Marriage Act*

Civil
marriages.

1909 (now incorporated in the *Marriage Act* 1915—No. 2691) permitting the removal from the list of registered clergymen of the names of those who make a business of celebrating marriages. The proportion of civil marriages in Victoria is only about one-seventh of the proportion in England and Wales (according to the latest available figures), and is approximately one-fourth of the proportion in New Zealand.

Registered clergymen. The ministers qualified by registration to celebrate marriages in Victoria numbered 1,645 on 31st December, 1924. The numbers of ministers in each denomination (excepting Jews and Quakers) and lay registrars of marriages were as follows :—

REGISTERED MINISTERS OF EACH DENOMINATION.

Denomination.	Number of Registered Ministers.	Denomination.	Number of Registered Ministers.
Church of England ..	423	Ballarat Town Mission ..	1
Roman Catholic ..	342	New Church ..	1
Presbyterian ..	304	Greek Orthodox Church ..	1
Methodist ..	272	Unitarian ..	1
Congregational ..	68	International Bible	
Baptist ..	90	Students' Association ..	1
Church of Christ ..	71	Latter Day Saints (Mor-	
Lutheran ..	23	mons) ..	1
Salvation Army ..	29	Open Brethren ..	1
Latter Day Saints (Re-			
organized) ..	4	Total Clergymen ..	1,645
Seventh Day Adventist ..	7	Lay Registrars of Mar-	
Catholic Apostolic ..	2	riages ..	23
Free Christian ..	2		
Australian Church ..	1	Grand Total ..	1,668

Marriages of Jews and Quakers are exempted from the law relating to marriages in Victoria, and are deemed legal and valid if celebrated according to their respective usages.

BIRTHS.

Number of births. The number of births registered in Victoria during the year 1924 was 36,139, of which 18,500 were of males and 17,639 of females. This was 263 more than the number recorded for the preceding year. Still-births, which are excluded from

both births and deaths, numbered 1,089, and corresponded to a ratio of 3·0 per 100 infants born alive in 1924. There were 1,049 male to every 1,000 female births in 1924, as compared with 1,073 in 1923, 1,068 in 1922, 1,057 in 1921, and 1,062 in 1920. The figures for each year since 1904 are as follows :—

BIRTHS IN VICTORIA, 1905 TO 1924.

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1905 ..	15,523	14,584	30,107	1915 ..	17,821	17,189	35,010
1906 ..	15,716	15,128	30,844	1916 ..	17,625	16,614	34,239
1907 ..	15,989	15,380	31,369	1917 ..	17,222	15,813	33,035
1908 ..	16,073	15,028	31,101	1918 ..	16,176	15,425	31,601
1909 ..	16,092	15,457	31,549	1919 ..	16,227	15,394	31,621
1910 ..	16,411	15,026	31,437	1920 ..	18,648	17,566	36,214
1911 ..	16,944	16,100	33,044	1921 ..	18,289	17,304	35,593
1912 ..	18,244	17,573	35,817	1922 ..	18,740	17,548	36,288
1913 ..	18,436	17,542	35,978	1923 ..	18,567	17,303	35,876
1914 ..	18,549	17,676	36,225	1924 ..	18,500	17,639	36,139

The births in Australia were fewer by 3,057 in 1924 than in 1914, although in the intervening period the population had increased by 17·4 per cent. The number in 1924 was 134,926, as compared with 135,221 in 1923, 137,496 in 1922, 136,200 in 1921, 136,407 in 1920, 122,290 in 1919, 125,739 in 1918, 129,965 in 1917, 131,426 in 1916, 134,871 in 1915, and 137,983 in 1914. Of the total recorded for 1924, 36,139 occurred in Victoria, 53,705 in New South Wales, 19,708 in Queensland, 11,592 in South Australia, 8,301 in Western Australia, 5,383 in Tasmania, 57 in the Northern Territory, and 41 in the Federal Capital Territory.

Birth rates. In young communities, birth rates calculated per 1,000 of the population are to some extent unreliable and misleading. In the earlier periods, when, owing to immigration, the population consists for the most part of men and women at the reproductive period of life, the rates are obviously high. As time proceeds, however, notwithstanding that immigration of reproductive adults may be maintained, the proportion of such adults to the total population must diminish, and with it, of necessity, the birth rate. The

following table shows the birth rates in Victoria from 1870 to 1924 :—

**BIRTH RATES IN VICTORIA PER 1,000 OF POPULATION,
1870 TO 1924.**

Year.	Birth Rate.	Year.	Birth Rate.	Year.	Birth Rate.
1870 ..	38·07	1899 ..	26·14	1912 ..	26·38
1875 ..	33·94	1900 ..	25·79	1913 ..	25·77
1880 ..	30·75	1901 ..	25·72	1914 ..	25·37
1885 ..	31·33	1902 ..	25·05	1915 ..	24·45
1890 ..	33·60	1903 ..	24·28	1916 ..	24·20
1891 ..	33·57	1904 ..	24·42	1917 ..	23·40
1892 ..	32·51	1905 ..	24·57	1918 ..	22·19
1893 ..	31·18	1906 ..	24·91	1919 ..	21·46
1894 ..	29·05	1907 ..	25·03	1920 ..	23·95
1895 ..	28·46	1908 ..	24·56	1921 ..	23·15
1896 ..	27·19	1909 ..	24·62	1922 ..	23·10
1897 ..	26·49	1910 ..	24·20	1923 ..	22·31
1898 ..	25·51	1911 ..	25·03	1924 ..	22·01

The births per 1,000 of the population in the other States, New Zealand, and England and Wales in 1924 were as follows :—New South Wales, 24·11; Queensland, 23·87; South Australia, 21·88; Western Australia, 23·09; Tasmania, 25·07; New Zealand, 21·57; and England and Wales, 18·8.

The birth rate of a community is almost wholly dependent upon the proportion of wives at the reproductive period of life and their internal age distribution. As these elements, especially the former, differ widely in certain Australian States, the crude rates of the different States are scarcely comparable. The figures for the census of 1921 showed that in every 1,000 of the respective populations of each State and the Commonwealth the married women aged 15 to 45 numbered 116·1 in Victoria, 127·5 in New South Wales, 119·3 in Queensland, 125·3 in South Australia, 118·0 in Western Australia, 117·3 in Tasmania, and 121·9 in Australia. In the case of Victoria, the deficiency in the proportion of married women at the ages mentioned was accentuated by a comparatively small proportion of them being at the younger and more fertile ages. During the years 1920–22 the crude legitimate birth rate per 1,000 of the population was lower in Victoria than in any other State. When, however, the rates for the other States were adjusted to Victorian conditions by eliminating the differences referred to, they were altered as follows :—New South Wales was reduced by 2·7 per 1,000 of the population, Queensland by 1·4, South Australia by 1·6, Tasmania by 1·1, and Australia by 1·3, while the rate for Western Australia was increased by ·4. The result was that, according to the adjusted figures, the legitimate rate for Victoria was more satisfactory than the rates for two of the other States, viz., New South Wales and South Australia.

**Births to
wives in
Australasia
and England.**

The next table shows the legitimate births per 1,000 married women under 45 (not allowing for their differing age distribution) in each State, New Zealand, and England and Wales in the four census years 1891, 1901, 1911, and 1921 :—

**LEGITIMATE BIRTHS PER 1,000 MARRIED WOMEN UNDER
45 YEARS OF AGE.**

Country.	Legitimate Births per 1,000 Married Women aged 15 to 45.				Decrease per cent. in 20 years.
	1891.	1901.	1911.	1921.	
Victoria	297·0	229·0	223·0	190·5	16·8
New South Wales ..	298·9	235·6	235·4	194·2	17·6
Queensland	315·0	251·0	244·8	213·6	14·9
South Australia ..	311·1	235·0	235·9	186·9	20·5
Western Australia ..	352·8	244·0	221·8	190·9	21·8
Tasmania	315·9	254·6	244·8	216·9	14·8
New Zealand	279·1	246·1	211·7	181·0	26·9
England and Wales ..	268·8	234·2	196·2	176·3	24·7

**Birthplaces
of parents
of legitimate
children.**

The birth records of children born in wedlock show that, in Victoria, in 1924, 82 out of every 100 children were born to Australian parents, and 95 out of every 100 to one or both parents born in Australia. Of the total fathers, the percentages born in the States or countries mentioned hereafter were as follows :—79·4 in Victoria ; 87·6 in Australia ; ·8 in New Zealand ; 7·5 in England and Wales ; 1·6 in Scotland ; ·8 in Ireland ; ·3 in other British Possessions ; and 1·4 in foreign countries. The corresponding percentages for mothers were : Victoria, 81·2 ; Australia, 89·3 ; New Zealand, ·5 ; England and Wales, 7·0 ; Scotland, 1·5 ; Ireland, ·6 ; other British Possessions, ·3 ; and foreign countries, ·8.

**Standardized
birth rates
per 1,000
wives in
Victoria.**

An accurate view of the alteration in the fertility of wives is obtained by comparing the ratio of legitimate births to wives at reproductive ages, and allowing for the difference in their age distribution at each period. The following

table shows for Victoria the distribution of married women in six five-year groups in the last six census years :—

PROPORTION OF MARRIED WOMEN IN AGE GROUPS TO TOTAL BETWEEN 15 AND 45 IN THE LAST SIX CENSUS YEARS.

Census Year.	Proportion in each Age Group to Every 1,000 Married Women between 15 and 45.					
	15-20.	20-25.	25-30.	30-35.	35-40.	40-45.
1871	20·3	130·4	211·4	230·7	233·2	174·0
1881	17·3	159·5	204·6	206·0	209·7	202·9
1891	13·5	156·9	275·2	244·1	172·1	138·2
1901	8·1	99·0	198·3	249·6	249·2	195·8
1911	12·4	113·8	206·9	226·6	221·2	219·1
1921	9·2	105·3	222·5	247·9	221·1	194·0

To estimate the effect which the alteration in age distribution has on the birth rate, the proportion in each of the above groups was multiplied by the average natality rate for the group according to a standard table—the standard used for this purpose being the Swedish table of 1891. The sum of the products for each census year represented the number of births which would have occurred in that year per 1,000 married women between 15 and 45 had the fertility of these women remained unaltered, i.e., the potential births. The year 1871 was used as a basis with which to compare the five subsequent census years, and adjustments were applied to the actual births (per 1,000) occurring in those years, so as to make them conform to the age constitution in the first-mentioned year. The correction factors were obtained by taking the number of births per 1,000 married women aged 15-45 which would have occurred in 1871 had the standard natality rates prevailed, and dividing this number by the corresponding numbers of potential births for 1881, 1891, 1901, 1911, and 1921. The above method was applied to find what proportion of the alteration in the ratio of births to married women under 45 was due to causes other than varying age constitution. The last mentioned factor has been taken into account in the computation of the birth rates appearing in column (5) of the subjoined table :—

STANDARDIZED LEGITIMATE BIRTH RATES.

(1) Census Year.	(2) Married Women between 15 and 45 years of age.	(3) Legitimate Births.	(4) Legitimate Births per 1,000 Married Women 15-45.	(5) Standardized Legitimate Births per 1,000 Married Women 15-45.	(6) Factor for Correction of Rate in Column 4.
1871 ..	88,561	26,805	302·67	..	..
1881 ..	84,831	25,675	302·66	303·14	1·0016
1891 ..	120,700	35,853	297·04	281·98	0·9493
1901 ..	127,858	29,279	229·00	238·75	1·0426
1911 ..	139,398	31,080	222·96	231·50	1·0383
1921 ..	177,803	33,879	190·50	195·47	1·0261

An inspection of the rates in column (5) shows that there was a fall of 7 per cent. in 1891 as compared with 1881, a further serious decline of over 15 per cent. in 1901 as compared with 1891, a decrease of 3 per cent. in 1911 as compared with 1901, and a further decline of nearly 16 per cent. in 1921 as compared with 1911, which were not due to variations in the age distribution of the married women between 15 and 45 in the community. A further examination of the standardized legitimate birth rates appearing in this column shows that the births in 1921 to every 1,000 married women of reproductive ages were 108 fewer than in 1881, 87 fewer than in 1891, 43 fewer than in 1901, and 36 fewer than in 1911.

Legitimate birth rates (per 1,000 of the total population) for widely separated periods do not give a correct indication of the relative fertilities of those periods, unless the number of married women at reproductive ages in proportion to the population and the age constitution of such women have remained unchanged. In order to allow for the disturbance which may have been introduced through variations in these elements it is necessary that adjustments be made in the crude rates. The factor to correct the result of changes in the proportion of married women between 15 and 45 is obtained by comparing the number of such women in the community at the period of observation with the number in a standard population. The method of obtaining the correcting factor for the disturbance due to the second element was explained in a previous paragraph.

The following table shows the crude legitimate birth rates in six census years, the adjustments to be applied thereto for the reasons mentioned above, the amended birth rates, and the difference between these and the crude rates. The standard used in the computation of the correction factors was the Victorian population of 1871. Standardized birth rates per 1,000 of the population in the years 1881, 1891, 1901, 1911, and 1921 are as follows :—

STANDARDIZED LEGITIMATE BIRTH RATES PER 1,000 OF POPULATION.

Year.	Enu- merated Population.	Legiti- mate Births.	Legitimate Births per 1,000 of Population (crude Rates).	Wives aged 15-45 per 1,000 of Population.	Correction Factor for variations in—		Stan- dardized Birth Rate.	Difference between crude and stan- dardized Rates.
					Proportion of Wives aged 15-45.	Age Distribu- tion of Wives aged 15-45.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1871	731,528	26,805	36.64	121.1	..	1.0016	36.69	6.92
1881	862,346	25,675	29.77	98.4	1.2307	0.9493	34.39	2.95
1891	1,140,405	35,853	31.44	105.8	1.1446	1.0426	28.77	4.40
1901	1,201,341	29,279	24.37	106.4	1.1382	1.0383	27.89	4.26
1911	1,315,551	31,080	23.63	106.0	1.1425	1.0261	23.68	1.56
1921	1,531,280	33,879	22.12	116.1	1.0431			

An inspection of the crude rates in the fourth column of the above table shows that legitimate births per 1,000 of population apparently declined by 6·87 in 1881, 5·20 in 1891, 12·27 in 1901, 13·01 in 1911, and 14·52 in 1921, as compared with the first-mentioned census date. After making allowance for the disturbing elements known to exist, the apparent decline of 6·87 in 1881 is altered to an increase of ·05 per 1,000, while the decline of 1891 is reduced from 5·20 to 2·25, that of 1901 from 12·27 to 7·87, that of 1911 from 13·01 to 8·75, and that of 1921 from 14·52 to 12·96 per 1,000 as compared with 1871. Between 1901 and 1921 there was a reduction of nearly 18 per cent. in the rate due to other than normal causes.

Chinese and half-caste Chinese births. During the last ten years the births to Chinese parents numbered 43, or 1 in every 7,626 legitimate births. There were 248 Chinese half-caste births (fathers only Chinese), or 1 in every 1,322 legitimate births registered in the same period.

Ages of parents of legitimate children. The average ages of fathers and mothers of legitimate children whose births were recorded in 1924 were 33·43 and 29·76 years respectively, which were 4·42 and 4·03 years above the average ages of bridegrooms marrying brides under 45 years of age, and of such brides for the same year. The proportions of both parents in various age groups are shown in the following table for the year mentioned :—

PERCENTAGE OF PARENTS IN AGE GROUPS, 1924.

Father.			Mother.		
Age Group.		Proportion per 100 Births.	Age Group.		Proportion per 100 Births.
Under 20	...	40	Under 20	...	3·25
20 to 25	...	10·43	20 to 25	...	20·96
25 to 30	...	25·43	25 to 30	...	30·13
30 to 35	...	27·22	30 to 35	...	25·26
35 to 40	...	19·09	35 to 40	...	14·95
40 to 45	...	10·11	40 to 45	...	5·05
45 to 50	...	4·67	45 and over	...	40
50 and over	...	2·65			
Total	...	100·00	Total	...	100·00

It will be seen that, on the experience of 1924, 51·1 per cent. of the mothers were between ages 20 and 30, and 40·2 per cent. between ages 30 and 40. The proportions of fathers at these ages were 35·9 and 46·3 per cent. respectively. Of every 1,000 legitimate births, about 32 were due to mothers under 20 years, and 4 to mothers aged 45 years and upwards. The *Year-Book* for 1916-17 contains on page 326 information relating to the ages of mothers of first-born children.

Birth rates in town and country. In editions of this work prior to 1923 birth rates for the various municipalities and divisions of the State were based on the births occurring therein in relation to their respective populations.

This method made no allowance for prospective mothers travelling from rural districts to towns where better lying-in facilities and attention were available, or to the metropolis, or for metropolitan residents, *enceinte*, travelling from one municipality to another. By reason of this the rates for the metropolis and urban districts were unduly inflated at the expense of the rural districts, and the recorded variations in the rates of the various municipalities were incorrect. Also, no provision was made for births which had occurred in the Women's and other public hospitals being credited to the districts in which the mothers resided. As about one-seventh of the metropolitan births occur in these institutions the rates for certain municipalities—particularly the poorer and more congested ones—were necessarily considerably understated.

In 1923; therefore, it was decided to allot all births registered in Victoria to the place of usual residence of the mother. Upon this being done for the year mentioned it was found that the total for the metropolis, i.e., the births registered therein, had decreased by approximately 1,200. In 1924 the decrease was approximately 1,250. These numbers give a fair indication of the extent to which the rates in districts outside the metropolitan area suffered under the discarded system of compilation.

The following table, computed on the above-mentioned basis, shows the number of births per 1,000 of the population in the metropolitan, other urban, and rural districts for the years 1923 and 1924 :—

**BIRTH RATES IN METROPOLITAN, OTHER URBAN, AND
RURAL DISTRICTS, 1923 AND 1924.**

Division.	Births per 1,000 of Population.	
	1923.	1924.
Metropolitan District ..	21·10	20·90
Country Towns (other urban) ..	22·08	21·25
Rest of State	24·03	23·81
Total State	22·31	22·01

Birth rates in metropolitan municipalities. The appended statement shows, for the years 1923 and 1924, the populations of, and the number of births, and the births per 1,000 of the population in the metropolitan municipalities :—

BIRTH RATES IN METROPOLITAN MUNICIPALITIES, 1923 AND 1924.

Municipality.	1923.			1924.		
	Mean Population for Year.	Number of Births.	Births per 1,000 of Population.	Mean Population for Year.	Number of Births.	Births per 1,000 of Population
Melbourne City	101,930	2,011	19·73	101,960	1,843	18·08
Brighton City	23,500	482	20·51	24,940	479	19·21
Brunswick City	46,580	1,130	24·26	47,810	1,206	25·22
Camberwell City	27,520	632	22·97	31,130	746	23·96
Caulfield City	49,180	1,050	21·35	54,090	1,073	19·84
Coburg City	22,570	553	24·50	26,000	680	25·56
Collingwood City	34,270	687	20·05	34,100	726	21·29
Essendon City	37,480	833	22·23	38,730	876	22·62
Fitzroy City	34,820	805	23·12	34,590	719	20·79
Footscray City	38,240	1,022	26·73	41,000	900	23·41
Hawthorn City	30,300	562	18·55	31,200	559	17·92
Kew City	18,660	378	20·26	19,910	387	19·44
Malvern City	39,320	625	15·89	41,430	691	16·68
Northcote City	32,950	823	24·98	34,810	930	26·72
Oakleigh Town	6,840	235	34·36	7,240	226	31·22
Port Melbourne City ..	13,140	305	23·21	13,150	291	22·13
Prahran City	50,930	954	18·73	51,140	878	17·17
Preston Town	11,660	380	32·59	14,270	501	35·11
Richmond City	43,500	898	20·64	43,630	946	21·68
Sandringham City	14,000	221	15·79	15,500	268	17·29
South Melbourne City ..	46,990	951	20·24	47,080	951	20·20
St. Kilda City	40,200	648	16·12	40,800	677	16·59
Williamstown City	20,270	499	24·62	21,510	490	22·78
Remainder of Metropolis ..	39,040	927	23·74	41,360	1,067	25·80
Hospitals and Shipping ..	10,930	..	..	11,300	..	..
Whole Metropolis	834,820	17,611	21·10	869,280	18,170	20·90

Birth rates
in country
towns.

Similar information relating to the twelve principal country towns is given in the table which follows :—

BIRTH RATES IN THE TWELVE PRINCIPAL COUNTRY TOWNS, 1923 AND 1924.

Town.	1923.			1924.		
	Popula- tion at end of year.	Number of Births.	Births per 1,000 of Popula- tion.	Popula- tion at end of year.	Number of Births.	Births per 1,000 of Popula- tion.
Ballarat and Suburbs ..	39,960	785	19·64	40,600	790	19·46
Bendigo and Suburbs ..	33,490	653	19·50	33,640	634	18·85
Geelong and Suburbs ..	37,100	829	22·35	37,740	790	20·93
Carrum	6,000	133	22·17	6,200	125	20·16
Castlemaine and Suburbs ..	7,170	147	20·50	7,120	138	19·38
Hamilton	5,110	139	27·20	5,120	144	28·13
Maryborough	*	*	*	4,830	127	26·29
Mildura	5,550	200	36·04	5,700	211	37·02
Mordialloc	6,900	120	17·39	7,180	152	21·17
Stawell	4,600	130	28·26	4,650	107	23·01
Warrnambool	7,950	196	24·65	8,000	180	22·50
Wonthaggi	5,600	188	33·57	6,000	146	24·33

* Not available.

Twin and triplet births. The numbers of cases of twin and triplet births in Victoria in the last five years were as follows :—

CASES OF TWINS AND TRIPLETS.

Year.	Cases of Twins.	Cases of Triplets.
1920	410	5
1921	408	3
1922	394	8
1923	412	4
1924	378	3

On the average of the five years 1 mother in every 89 gave birth to twins, and 1 in every 7,742 was delivered of triplets. The proportions for the decennium ended 1917 were 1 in every 94 and 1 in every 9,538 respectively.

Children legitimized.

In December, 1912, an Act was passed which provides that children born out of wedlock may be legitimized at any time after the marriage of the parents, on the application of the father, provided there was no lawful impediment to the marriage of the parents at the time of the birth. An amending Act passed in 1916 allowed legitimation to be effected on the application of the mother if the father were absent on war service or had died not more than two years previously. Up to the end of 1924 advantage was taken of these Acts, and of an Act (now repealed) passed in 1903, to legitimate 2,346 children, of whom 14 were registered in 1903, 19 in 1904, 34 in 1905, 43 in 1906, 58 in 1907, 60 in 1908, 51 in 1909, 71 in 1910, 126 in 1911, 106 in 1912, 157 in 1913, 149 in 1914, 141 in 1915, 140 in 1916, 136 in 1917, 162 in 1918, 159 in 1919, 165 in 1920, 168 in 1921, 133 in 1922, 133 in 1923, and 121 in 1924.

Legitimation Acts are in force in all the States and New Zealand, but there are marked differences in the numbers of legitimations resulting therefrom. In proportion to every 100 children born out of wedlock in 1924, the numbers of legitimations in the various States and New Zealand during that year were as follows :—Victoria, 7·3 ; New South Wales, 15·3 ; Queensland, 16·9 ; South Australia, 17·2 ; Western Australia, 16·8 ; Tasmania, 12·0 ; and New Zealand, 20·6.

Illegitimate births in Victoria.

The number of illegitimate births in Victoria during the year 1924 was 1,660, which represents a proportion of 4·59 to every 100 births registered, as against 4·37 in the previous year, 4·41 in 1922, 4·82 in 1921, 5·24 in 1920, 5·77 in 1919, 5·84 in 1918, 5·51 in 1917, 5·15 in 1916, 5·75 in 1915, and 5·77 in the period 1910-14.

Illegitimate births to unmarried women in Victoria. The percentage of illegitimate to total births in Victoria varied from 5·36 in 1891 to 5·94 in 1911, and 4·82 in 1921. The proportion of infants born out of wedlock to the unmarried and widowed women between 15 and 45 years of age in Victoria is shown in the subjoined table for the census years 1891, 1901, 1911, and 1921, when the conjugal condition of the population was known :—

ILLEGITIMATE BIRTHS PER 1,000 SINGLE WOMEN.

Year.	Single Women aged 15 to 45.	Illegitimate Births.	Illegitimate Births per 1,000 Single Women.
1891	142,443	2,064	14·5
1901	167,760	1,729	10·3
1911	187,488	1,964	10·5
1921	189,737	1,714	9·0

The number of infants born out of wedlock per 1,000 unmarried and widowed women in Victoria was 9·0 in 1921. This was considerably lower than the latest available figures for most European countries. The proportions ranged from 23 in Germany, 26 in Sweden, 24 in Denmark, 14 in Italy, and 16 in France, to 12 in Belgium, 13 in Scotland, 7 in England and Wales, 5 in Holland, and 4 in Ireland.

Illegitimacy in town and country. A larger proportion of illegitimacy prevails in Melbourne and suburbs than in the other urban and the rural districts of Victoria, the proportion in the country districts being the smallest of all. During the year 1924, in the metropolitan area 1 birth in every 18, in other urban districts 1 in 21, and in the rural districts only 1 in 32 were registered as illegitimate. The corresponding rates for 1923 were 1 in 18, 1 in 23, and 1 in 34 respectively. One striking result attending the introduction of the system of allotting all births to the mother's place of usual residence has been the altered ratios of illegitimacy in town and country—both the urban areas outside the metropolis and the country districts having higher ratios than on the basis previously adopted. For 1922 the proportions of illegitimacy to total births, based on the births which actually occurred in the various municipalities, were 1 in 15, 1 in 38, and 1 in 58 respectively.

DEATHS.

The following table shows the number of deaths—male and female—also the quarters in which they were registered and the proportion per 1,000 of the population since 1899 :—

DEATHS IN EACH QUARTER, 1900 TO 1924.

Period.	Annual Deaths.	Sex.		Quarter of Registration.				Death Rate per 1,000 of the Population.
		Males.	Females.	March.	June.	September.	December.	
1900-04..	15,457	8,686	6,771	3,921	3,750	3,992	3,794	12·84
1905-09..	14,932	8,296	6,636	3,805	3,539	3,917	3,671	11·93
1910 ..	14,736	8,132	6,604	3,820	3,693	3,661	3,562	11·34
1911 ..	15,217	8,356	6,861	3,519	3,774	4,132	3,792	11·52
1912 ..	16,595	9,077	7,518	4,000	4,199	4,498	3,898	12·22
1913 ..	15,475	8,496	6,979	4,075	3,678	4,137	3,585	11·09
1914 ..	16,503	9,017	7,486	3,953	4,030	4,257	4,263	11·56
1915 ..	15,823	8,860	6,963	3,524	3,788	4,380	4,131	11·05
1916 ..	16,489	8,901	7,588	4,111	4,140	4,509	3,729	11·66
1917 ..	14,555	7,952	6,603	3,430	3,585	3,831	3,709	10·31
1918 ..	15,177	8,079	7,098	3,537	3,563	4,144	3,933	10·66
1919 ..	19,370	10,508	8,862	4,303	5,784	5,469	3,814	13·15
1920 ..	16,832	9,060	7,772	3,998	4,351	4,433	4,050	11·13
1921 ..	16,165	8,662	7,503	4,017	4,031	4,412	3,705	10·51
1922 ..	15,156	8,187	6,969	3,610	3,867	4,084	3,595	9·65
1923 ..	17,219	9,135	8,084	3,766	4,593	4,760	4,100	10·71
1924 ..	16,503	8,863	7,640	3,840	3,987	4,828	3,848	10·05
Average 1920-24	16,375	8,781	7,594	3,846	4,166	4,503	3,860	10·40

The number of deaths in 1924 was 16,503, which was 445 below the average of the preceding five years. In one of those years—1919—the death rate was abnormally high owing to the existence of an epidemic of influenza.

The deaths in Australia in 1924 numbered 54,980, as against 56,236 in the preceding year, 51,312 in 1922, 54,076 in 1921, 56,289 in 1920, 65,930 in 1919, 50,249 in 1918, 48,029 in 1917, 54,197 in 1916, 52,782 in 1915, and 51,720 in 1914.

Of the total deaths in the year under review 16,503 occurred in Victoria, 20,835 in New South Wales, 7,327 in Queensland, 4,870 in South Australia, 3,263 in Western Australia, 2,123 in Tasmania, 44 in the Northern Territory, and 15 in the Federal Capital Territory. The death rates per 1,000 of the population, for each of the Australian States and New Zealand, are shown in the following statement for

Death rates
in Australian
States and
New Zealand.

the periods 1902-06 and 1907-11, and for each of the last thirteen years :—

DEATH RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1902-06	12·55	10·84	10·92	10·67	12·17	11·04	11·44	9·81
1907-11	11·64	10·20	10·12	9·89	10·47	10·83	10·64	9·77
1912 ..	12·22	10·86	10·96	10·28	11·06	10·73	11·23	8·87
1913 ..	11·09	10·89	10·39	10·82	9·34	10·87	10·78	9·47
1914 ..	11·56	10·11	9·97	10·71	9·41	9·67	10·51	9·31
1915 ..	11·05	10·48	11·00	10·68	9·28	10·11	10·66	9·06
1916 ..	11·66	10·63	11·09	11·73	9·80	10·38	11·04	9·64
1917 ..	10·31	9·56	9·73	10·10	8·97	8·89	9·80	9·58
1918 ..	10·66	9·84	10·39	9·97	9·11	8·84	10·09	14·84
1919 ..	13·15	13·40	12·42	12·01	11·10	10·37	12·82	9·51
1920 ..	11·13	10·32	10·82	10·76	10·14	9·35	10·62	10·27
1921 ..	10·51	9·51	9·34	10·02	10·44	10·30	9·91	8·73
1922 ..	9·65	8·92	9·14	9·10	9·33	9·29	9·21	8·77
1923 ..	10·71	9·61	9·83	9·59	8·41	9·92	9·89	9·03
1924 ..	10·05	9·35	8·87	9·19	9·03	9·89	9·47	8·29

The rate in Victoria, taking the average of the last five years, was higher than in any other State, but this result was chiefly due to its containing a larger proportion of elderly persons, among whom the mortality rate is very high. The comparatively high rate in Australia in 1919 and the abnormal rate in New Zealand in the previous year were due to a heavy mortality from influenza.

Comparisons of the crude death rates of a country for different periods, or of different countries for the same period, are frequently misleading, as they do not allow for variations in the age distributions of the population. In European countries, the proportion of elderly people, among whom the death rate is heavy, is higher than in the Commonwealth or any of the Australian States, and it is greater in South Australia, and lower in Western Australia, than in any of the other States. The proportions living in various age groups at the census of 1921 in each division of the Commonwealth and New Zealand, and those in 1890 in Sweden—a

Age
distribution
and crude
death rates.

country which fairly represents European conditions—are shown in the following table :—

PROPORTIONS LIVING IN FIVE AGE GROUPS IN AUSTRALIAN STATES, NEW ZEALAND, AND SWEDEN.

Country.	Proportion per 10,000 of Population living in the Age Group—					Total.
	Under 1 Year.	1 to 20.	20 to 40.	40 to 60.	60 and over.	
Victoria	227	3,603	3,198	2,133	839	10,000
New South Wales ..	253	3,812	3,276	1,927	732	10,000
Queensland	268	3,926	3,270	1,846	690	10,000
South Australia ..	236	3,748	3,247	1,922	847	10,000
Western Australia ..	232	3,887	2,949	2,310	622	10,000
Tasmania	263	4,101	2,988	1,840	808	10,000
Australia	246	3,779	3,219	1,993	763	10,000
New Zealand	224	3,795	3,146	2,084	751	10,000
Sweden	255	3,980	2,696	1,923	1,146	10,000

The figures show that the characteristic features of Australian populations, as compared with those of European countries, are a large preponderance of persons in the age group 20-40, and a relatively small number aged 60 and over. Among the Australian States, South Australia and Western Australia have, as mentioned previously, the highest and lowest proportions respectively of persons aged 60 years and upwards—a point which should be kept in view when comparing their crude death rates.

The differences shown in the preceding table in the age constitutions of the populations of the six States have been taken into account in computing their respective indexes of mortality. The results for each are based upon an age distribution corresponding to that of Sweden in 1890, which has been adopted by statisticians as a standard for this purpose. Mortality indexes for each State for the undermentioned years, as compiled by the Commonwealth Statistician, are as follows :—

INDEX OF MORTALITY FOR THE AUSTRALIAN STATES.

Year.	Index of Mortality.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.
1920	13·72	13·32	14·36	13·49	15·63	12·28	13·65
1921	12·85	12·27	12·30	12·47	15·60	13·16	12·66
1922	11·20	10·91	11·38	10·62	11·80	10·88	11·10
1923	12·44	11·79	12·35	11·24	10·74	11·80	11·95
1924	11·70	11·50	11·15	10·84	11·78	11·78	11·47

In each of the last five years the crude death rate was higher in Victoria than in any other Australian State, but the figures in the above table show that, in each of the years under review, with the exception of 1923, two States had a higher index of mortality than Victoria.

A reliable estimate of the improvement in the health of the community is obtained by comparing the death rates for groups of ages at different periods. Such rates for Victoria are given in the subjoined table for the decennial periods 1891-1900, 1902-11, and 1912-21 :—

DEATH RATES IN CERTAIN AGE GROUPS IN VICTORIA.

Age Group.				Deaths per 1,000 at each Age.		
				1891-1900.	1902-11.	1912-21.
<i>Males.</i>						
Under 5	...	...	...	39·29	26·73	23·85
5 to 10	...	...	...	3·36	2·16	2·42
10 to 15	...	...	...	2·20	1·87	1·75
15 to 20	...	...	...	3·28	2·72	2·37
20 to 25	...	...	...	4·79	3·51	3·57
25 to 35	...	...	...	6·60	4·75	4·71
35 to 45	...	...	...	9·03	7·81	7·14
45 to 55	...	...	...	15·32	13·48	13·10
55 to 65	...	...	...	32·90	25·38	25·05
65 to 75	...	...	...	62·99	59·04	53·18
75 and upwards	...	...	...	145·05	157·26	157·97
All ages	...	...	...	15·47	13·30	12·57
<i>Females.</i>						
Under 5	...	...	...	34·09	22·35	19·26
5 to 10	...	...	...	3·12	2·03	2·24
10 to 15	...	...	...	2·06	1·78	1·56
15 to 20	...	...	...	3·43	2·80	2·27
20 to 25	...	...	...	4·81	3·59	3·56
25 to 35	...	...	...	6·89	5·01	4·58
35 to 45	...	...	...	8·68	7·16	6·01
45 to 55	...	...	...	12·12	9·96	9·44
55 to 65	...	...	...	23·64	18·80	17·46
65 to 75	...	...	...	45·87	46·71	42·01
75 and upwards	...	...	...	124·33	131·77	136·61
All ages	...	...	...	12·36	10·66	10·35

The figures show that at all ages, excepting between 5 and 10, and 20 and 25, and 75 and over for males, and between 5 and 10, and 75 and over for females, much lower death rates were experienced during the decennium 1912-21 than in the preceding one. Compared

with 1902-11, the mortality rate for the period 1912-21 for the two sexes combined was lower by 10 per cent. for the age group 0-10, by 9 per cent. at ages 10-15, by 16 per cent. at 15-20, by 5 per cent. at 25-35, by 12 per cent. at 35-45, and by 4 per cent. at 45-55 and 55-65. The rates, up to age 65 and probably to age 75, are comparable, and the marked decrease at successive periods shows that there had been a general improvement in hygienic conditions.

In years prior to 1923 it was the custom, when computing local death rates, to treat the deaths in two main divisions—those occurring in public institutions and those occurring elsewhere. The latter were credited to the district in which they were registered. Of the institutional deaths those occurring in hospitals were allotted to the usual residence; the remainder, together with any deaths of persons unknown or whose residence was not stated, were allotted to the various divisions of the State according to the population of each.

For purposes of greater accuracy, and following the lead of England and other countries, the allotment to usual residence has, for 1923, and 1924, been extended to cover all deaths, only those institutional deaths where the usual residence is unknown being allotted to the various divisions of the State as before mentioned.

The following table, computed on the above-mentioned basis, shows the number of deaths per 1,000 of the population in the metropolitan, other urban, and rural districts for the years 1923 and 1924 :—

**DEATH RATES IN METROPOLITAN, OTHER URBAN,
AND RURAL DISTRICTS, 1923 AND 1924.**

Division.	Deaths per 1,000 of Population.	
	1923.	1924.
Metropolitan District ..	11·28	10·49
Country Towns (other urban) ..	12·46	11·27
Rest of State ..	9·48	9·09
Total State ..	10·71	10·05

The deaths in Victoria of residents of metropolitan municipalities, and their proportions to the populations of these municipalities are shown in the following table for the years 1923 and 1924 :—

DEATH RATES IN METROPOLITAN MUNICIPALITIES, 1923 AND 1924.

Municipality.	1923.			1924.		
	Mean Population for Year.	Number of Deaths.	Deaths per 1,000 of Population.	Mean Population for Year.	Number of Deaths.	Deaths per 1,000 of Population.
Melbourne City	101,930	1,418	13·91	101,960	1,310	12·85
Brighton City	23,500	249	10·60	24,940	250	10·02
Brunswick City	46,580	534	11·46	47,810	502	10·50
Camberwell City	27,520	264	9·59	31,130	332	10·66
Caulfield City	49,180	402	8·17	54,090	477	8·82
Coburg City	22,570	227	10·06	26,600	229	8·61
Collingwood City	34,270	457	13·34	34,100	395	11·58
Essendon City	37,480	401	10·70	38,730	417	10·77
Fitzroy City	34,820	539	15·48	34,590	414	11·97
Footscray City	38,240	385	10·07	41,000	411	10·02
Hawthorn City	30,300	359	11·85	31,200	308	9·87
Kew City	18,660	159	8·52	19,910	203	10·20
Malvern City	39,320	358	9·10	41,430	350	8·45
Northcote City	32,950	309	9·38	34,810	333	9·57
Oakleigh Town	6,840	87	12·72	7,240	72	9·94
Port Melbourne City ..	13,140	158	12·02	13,150	142	10·80
Prahran City	50,930	620	12·17	51,140	617	12·06
Preston Town	11,660	137	11·75	14,270	139	9·74
Richmond City	43,500	561	12·90	43,630	471	10·80
Sandringham City	14,000	111	7·93	15,500	122	7·87
South Melbourne City ..	46,990	585	12·45	47,080	542	11·51
St. Kilda City	40,200	446	11·09	40,800	414	10·15
Williamstown City	20,270	240	11·84	21,510	236	10·97
Remainder of Metropolis ..	39,040	408	10·45	41,360	432	10·44
Hospitals and Shipping ..	10,930	..	..	11,300	..	..
Whole Metropolis	834,820	9,414	11·28	869,280	9,118	10·49
Remainder of State	772,953	7,805	10·10	772,572	7,385	9·56

The outstanding features of the above figures are the high death rates prevailing in some of the old centres of population, of which Melbourne City, Collingwood, Fitzroy, Port Melbourne, Prahran, Richmond, and South Melbourne, are examples, and the low rates in comparatively recently settled areas, such as Camberwell, Caulfield, Coburg, Kew, Malvern, Northcote, and Sandringham. The deaths for 1924 were 11·95 per 1,000 in the former as against 9·16 in the latter group. Slight differences in the age distribution of the populations of these two divisions may exist, but they can account for only a small portion of the great disparity in their mortality rates. It would appear that the standard of health, as indicated by death rates, is much better in the outlying and less densely populated suburbs than in the central and more congested areas of the metropolis.

**Metropolitan
and country
death rates
compared.**

The ages of the people, as disclosed at the census of 1921, enable a comparison to be made between the death rates prevailing at that time in Greater Melbourne and in the remainder of the State. On the average of the years 1920-22, the deaths of metropolitan residents were in the ratio of 11·50 per 1,000 of population, as against a ratio of 9·42 for residents of the rest of the State. The apparent difference in favour of the country is 2·08, but a computation shows that, when allowances are made for the unequal age and sex distribution of the people in these areas, the actual difference is greater—the deaths per 1,000 of population being fewer by 2·70 among country than among metropolitan residents.

**Decrease in
Metropolitan
death rate.**

In Greater Melbourne, in the decade 1915-24, there were 11·94 deaths per 1,000 of the population, as compared with 15·76 in the decennium 1892-1901. The reduction in the rate represents a saving of approximately 29,100 lives in the last ten years. Many factors have contributed to this result, but it is probable that the introduction of the sewerage system, the notification of contagious diseases, the improvement in the conditions of labour, the increasing supervision of the manufacture and sale of articles of consumption, the greater proportion of females in the community, and the advance of medical science, have been the main causes of the decline. That the sanitary conditions of the metropolis have greatly improved is evidenced by a comparison of the death rates from tubercular and certain other diseases for the period 1915-24 with those for the decennium 1892-1901. The following are the rates :—

Cause of Death.	Deaths per 1,000 of Population.		
	1892-1901.	1915-24.	Decrease in 1915-24.
Pulmonary Tuberculosis ...	1·654	0·765	0·889
Other Tubercular Diseases ...	0·446	0·169	0·277
Typhoid Fever ...	0·293	0·023	0·270
Scarlet Fever ...	0·033	0·022	0·011
Measles ...	0·215	0·035	0·180
Diphtheria ...	0·196	0·134	0·062
Total ...	2·837	1·148	1·689

The figures show that the mortality from the six diseases mentioned declined by 60 per cent in 1915-24—the decline representing a rate of 1·69 per 1,000 of the population. It is impossible to state which municipalities have contributed most to this result, as their mortality rates from the diseases referred to are not available for the earlier period. A comparison, however, of the general death rates in each, for the periods under review, shows that all divisions of the metropolis have, in varying degrees, shared in the improvement. The mortality from all causes showed a net decline of 3·82 per 1,000 of the population during the period mentioned.

The appended statement shows, for the years 1923 and 1924, the populations of, and the number of deaths, and the deaths per 1,000 of the population in the twelve principal country towns :—

DEATH RATES IN THE TWELVE PRINCIPAL COUNTRY TOWNS, 1923 AND 1924.

Town.	1923.			1924.		
	Population at end of year.	Number of Deaths.	Deaths per 1,000 of Population.	Population at end of year.	Number of Deaths.	Deaths per 1,000 of Population.
Ballarat and Suburbs ..	39,960	552	13·81	40,600	451	11·11
Bendigo and Suburbs ..	33,490	474	14·15	33,640	470	13·97
Geelong and Suburbs ..	37,100	394	10·62	37,740	394	10·44
Carrum ..	6,000	71	11·83	6,200	52	8·39
Castlemaine and Suburbs	7,170	69	9·62	7,120	78	10·96
Hamilton	5,110	73	14·29	5,120	66	12·89
Maryborough	*	*	*	4,830	61	12·63
Mildura	5,550	70	12·61	5,700	69	12·11
Mordialloc	6,900	68	9·86	7,180	56	7·80
Stawell	4,600	61	13·26	4,650	52	11·18
Warrnambool	7,950	96	12·08	8,000	70	8·75
Wonthaggi	5,600	58	10·36	6,000	61	10·17

* Not available.

An examination of the particulars of residence of persons who have died in the public hospitals of Victoria during recent years reveals definite and interesting information regarding the assistance rendered by these institutions to people in different divisions of the State. For the metropolitan municipalities, the twelve principal country towns, and the

Residents of different areas dying in hospitals.

remainder of the State, the percentages of the total deaths of residents thereof which occurred in public hospitals during the year 1924 were as follows :—

PROPORTION OF DEATHS OF RESIDENTS OF CERTAIN
AREAS OCCURRING IN HOSPITALS, 1924.

Area.	Percentage of Deaths of Residents occurring in Hospitals, 1924.	Area.	Percentage of Deaths of Residents occurring in Hospitals, 1924.
Melbourne City	37·7	St. Kilda City	20·0
Brighton City	14·0	Williamstown City ..	18·2
Brunswick City	31·1	Remainder of Metropolis	21·1
Camberwell City	16·0	Ballarat	16·6
Caulfield City	18·4	Bendigo	20·2
Coburg City	25·8	Geelong	20·6
Collingwood City	37·0	Carrum	36·5
Essendon City	21·6	Castlemaine	25·6
Fitzroy City	41·1	Hamilton	27·3
Footscray City	31·1	Maryborough	29·5
Hawthorn City	18·5	Mildura	53·6
Kew City	13·3	Mordialloc	23·2
Malvern City	13·4	Stawell	19·2
Northcote City	30·3	Warrnambool	27·1
Oakleigh Town	26·4	Wonthaggi	41·0
Port Melbourne City ..	30·3		
Prahran City	25·8	Summary—	
Preston Town	34·5	Greater Melbourne ..	27·4
Richmond City	35·2	Twelve Country Towns	22·9
Sandringham City	18·0	Remainder of State ..	20·1
South Melbourne City ..	31·5	Whole State	24·4

Of the total deaths in the State 24·4 per cent. occurred in public hospitals in 1924, as against 24·9 per cent. in the previous year and 20·9 per cent. in 1910-15. The disparities in the proportions for different areas are very significant. Of the total cases of fatal illness which occurred amongst residents of the metropolitan districts mentioned in 1924, the percentage treated in public hospitals varied from 41·1 for Fitzroy, 37·7 for Melbourne City, 37·0 for Collingwood, and 35·2 for Richmond, to 16·0 for Camberwell, 14·0 for Brighton, 13·4 for Malvern, and 13·3 for Kew. For the whole metropolitan area the percentage was 27·4 as compared with 20·8 for the rest of the State. Taking the proportions for fatal cases as an index of all cases dealt with, it would appear that, relatively to population, the assistance rendered by public hospitals to the residents of Greater Melbourne exceeds by about 32 per cent. that given to people residing elsewhere.

Residents of Greater Melbourne who died in public hospitals in Victoria during 1924 numbered 2,496.

Deaths in public institutions in Greater Melbourne.

In 1924 the deaths in public institutions were 30·3 per cent. of the total in the State. The number of deaths in each public institution in the metropolis in 1924 is given in the subjoined table :—

DEATHS IN PUBLIC INSTITUTIONS IN GREATER MELBOURNE, 1924.

Institution.	No. of Deaths.	Institution.	No. of Deaths.
Hospitals—		Other Public Institutions—	
Melbourne	930	Victorian Homes for Aged and Infirm	107
Alfred	440	Benevolent Asylum	182
St. Vincent's	157	Convent of the Little Sisters of the Poor	50
Homœopathic	76	Old Colonists' Homes	9
Austin	199	Foundling Hospital, Broadmeadows	15
Children's	462	Macleod Military Sanatorium	7
Women's	181	Children's Welfare Dépôt	5
Infectious Diseases	140	Kew Lunatic Asylum	124
Queen Victoria	49	Yarra Bend Lunatic Asylum... ..	46
Eye and Ear	10	Mont Park Asylum	28
Williamstown	20	Receiving House — Mental Hospital	35
Caulfield Repatriation Hospital	66	The Haven	16
Police ... ..	...	Foundling Hospital, East Melbourne	2
Heatherton Sanatorium	79	Carlton Refuge	4
		Macleod Military Mental Asylum	7
		Anzac Hostel, Brighton ... ..	...
Total Hospitals	2,809	Total Hospitals and other Institutions	3,446

The mortality of children under one year in proportion to births has been considerably less in recent than in earlier periods, but the necessity for reducing the risks to infant health and life, particularly amongst illegitimate children, is still apparent. The deaths of infants in 1924 numbered 2,216, and, as there were 36,139 births, it follows that of every 10,000 infants born approximately 613 died within twelve months. The rates for Melbourne and suburbs, the extra metropolitan area, and the whole

State, for different periods since 1880, are shown in the following table :—

INFANTILE DEATH RATES, 1881 to 1924.

Period.	Deaths under One Year per 100 Births in—		
	Melbourne and Suburbs.	Remainder of the State.	Whole State.
1881-1890	17·14	9·50	12·68
1891-1900	13·36	9·60	11·11
1901-05	11·26	8·45	9·58
1906-10	9·47	6·95	8·00
1911	7·82	6·12	6·87
1912	9·02	6·05	7·45
1913	7·63	6·51	7·05
1914	8·45	7·24	7·83
1915	7·99	5·77	6·88
1916	8·56	6·29	7·46
1917	6·55	4·72	5·67
1918	7·09	5·16	6·17
1919	7·87	5·65	6·80
1920	8·41	6·21	7·38
1921	7·40	7·11	7·27
1922	5·86	4·77	5·33
1923	7·34	5·84	6·57
1924	6·77	5·49	6·13

On the average of the last five years the infantile death rate for the metropolis was 7·12 per 100 births, which was 31 per cent. below that for the decennium ended 1910, and 47 per cent. below the rate for the decennium 1891-1900.

The deaths of infants under 1 year of age per 100 births in Greater Melbourne, Ballarat, Bendigo, Geelong, and the rest of the State in 1923 and 1924 were as follows :—

INFANTILE DEATH RATES IN DIFFERENT DIVISIONS OF THE STATE, 1923 AND 1924.

Division.	Deaths under One Year per 100 Births.	
	1923.	1924.
Melbourne and Suburbs	7·34	6·77
Ballarat and Suburbs	8·54	6·58
Bendigo and Suburbs	10·57	10·25
Geelong and Suburbs	10·01	7·34
Rest of the State	5·29	5·15
Victoria	6·57	6·13

The prejudicial effect of city surroundings on infant life is evidenced by the mortality being heavier in urban than in country districts. During 1924 the deaths of children under 1 year of age to every 1,000 births were 68 in Melbourne, 103 in Bendigo, 66 in Ballarat, and 73 in Geelong, as against 51 in the rest of the State.

In computing birth and death rates the system was introduced in 1923 of allotting all births and deaths to the place of usual residence of the parties. In the cases of births and infantile deaths the mother's residence is considered to be that of the child. The following table shows for each metropolitan municipality the number of births, the deaths of infants under 1 year, and the number of such deaths per 100 births in the years 1923 and 1924:—

INFANTILE DEATH RATES IN METROPOLITAN MUNICIPALITIES, 1923 AND 1924.

Municipality.	1923.			1924.		
	Births.	Deaths under One Year.		Births.	Deaths under One Year.	
		Number.	Rate per 100 Births.		Number.	Rate per 100 Births.
Melbourne City	2,011	237	11·79	1,843	168	9·12
Brighton City	482	22	4·56	479	21	4·38
Brunswick City	1,130	85	7·52	1,206	79	6·55
Camberwell City	632	25	3·96	746	37	4·96
Caulfield City	1,050	56	5·33	1,073	63	5·87
Coburg City	553	42	7·59	680	38	5·59
Collingwood City	687	64	9·32	726	68	9·37
Essendon City	833	59	7·08	876	52	5·94
Fitzroy City	805	84	10·43	719	59	8·20
Footscray City	1,022	68	6·65	960	74	7·71
Hawthorn City	562	32	5·69	559	30	5·37
Kew City	378	13	3·44	387	18	4·65
Malvern City	625	31	4·96	691	27	3·91
Northcote City	823	49	5·95	930	54	5·81
Oakleigh Town	235	10	4·26	226	8	3·54
Port Melbourne City	305	25	8·20	291	26	8·93
Prahran City	954	68	7·13	878	66	7·52
Preston Town	380	24	6·32	501	31	6·19
Richmond City	898	73	8·13	946	66	6·98
Sandringham City	221	16	7·24	268	16	5·97
South Melbourne City	951	95	9·99	951	88	9·25
St. Kilda City	648	31	4·78	677	34	5·02
Williamstown City	499	32	6·41	490	38	7·76
Remainder of Metropolis ..	927	51	5·50	1,067	69	6·47
Whole Metropolis ..	17,611	1,292	7·34	18,170	1,230	6·77

It is noticeable that the centres having the lowest infantile death rates are residential areas which are not so thickly populated as nearly all of the other metropolitan districts.

**Infantile
Mortality at
different
ages.**

An investigation into the experience in regard to infantile mortality over a period of years discloses a constant decrease in the infantile death rate, shared proportionately by each sex, since the earlier periods. Further analysis shows that the decrease was shared by all age periods except the period "under one week." Comparing the quinquennial periods 1910-14 and 1920-24 the mortality rate of infants whose age was over one week shows a decrease of 20·5 per cent., while that of infants under one week has increased by 10·2 per cent.

In 1924 the total rate for males was 12 per cent. higher than that for females; for the age period "under one week" the rates were approximately equal, but over that age the male death rate was greater at each age period—the excess amounting in all to 21 per cent.

The tables which follow show the percentage of deaths of infants at various ages under one year for certain periods since 1899, and male and female death rates at each age period for the year 1924 :—

**INFANTILE MORTALITY AT DIFFERENT AGES,
1900 TO 1924.**

Period.	Deaths Under One Year per 1,000 Births.						Males.	Females.
	Under 1 Week.	1 Week to 1 Month.	1 to 3 Months.	3 to 6 Months.	6 to 12 Months.	Total under 1 Year.		
1900-04 ..	34·4		16·9	21·0	25·9	98·2	105·7	90·4
1905-09 ..	33·0		13·8	15·1	19·3	81·2	89·3	72·6
1910-14 ..	21·5	11·1	12·1	12·4	16·7	73·8	81·8	65·3
1915-19 ..	23·3	10·1	10·5	9·4	12·8	66·1	73·0	58·7
1920 ..	24·4	10·6	11·7	11·9	15·2	73·8	82·6	64·5
1921 ..	24·4	10·4	11·8	12·1	14·0	72·7	80·9	64·0
1922 ..	21·6	7·7	7·2	7·3	9·5	53·3	60·3	45·9
1923 ..	24·5	9·3	9·1	9·4	13·4	65·7	70·6	60·5
1924 ..	23·5	8·5	9·4	9·5	10·4	61·3	64·8	57·7
1920-24 ..	23·7	9·3	9·8	10·0	12·5	65·3	71·8	58·5

**INFANTILE MORTALITY AT DIFFERENT AGES,
MALES AND FEMALES, 1924.**

Age.	Males.			Females.		
	Number.	Rate per 1,000 Births.	Percentage at each Age.	Number.	Rate per 1,000 Births.	Percentage at each Age.
Under 1 week ..	434	23·5	36·2	417	23·6	41·0
1 week to 1 month ..	171	9·2	14·3	137	7·8	13·5
1 to 3 months ..	199	10·7	16·6	141	8·0	13·9
3 to 6 months ..	184	10·0	15·3	159	9·0	15·6
6 to 12 months ..	211	11·4	17·6	163	9·3	16·0
Total ..	1,199	64·8	100·0	1,017	57·7	100·0

Probable mortality of infants. The experience of the years 1920-24 shows that, of every 20,000 newly-born boys and girls in equal numbers, 718 boys and 585 girls died within twelve months, and 9,282 of the former and 9,415 of the latter, or 18,697 of mixed sexes, were living at the end of the year. The corresponding numbers surviving the first year in earlier periods were 17,765 in the ten years 1891-1900 and 17,468 in 1881-90. It is thus seen that, of every 20,000 births comprising equal numbers of each sex, there were 932 more survivors in 1920-24 than in 1891-1900, and 1,229 more than in 1881-90.

Infantile death rates from certain causes. An investigation of infantile mortalities would be incomplete if the diseases which have proved fatal in different periods of years were not ascertained, and their incidence in each period compared. Information of this nature reveals the causes of high death rates, and, when a fairly early period is selected for comparison with recent years, it shows in what direction improvements have taken place. The chief preventable and non-preventable causes of death, grouped under certain headings, are shown in the subjoined table for the periods 1891-93, 1901-10, and 1911-20, and for the year 1924 :—

INFANTILE DEATH RATES FROM CERTAIN CAUSES, 1891-93, 1901-10, 1911-20, AND 1924.

Cause of Death.	Deaths under 1 year per 1,000 Births in—					
	1891-93.	1901-10.	1911-20.	1924.		
				Total.	Males.	Females.
Diarrhœal Diseases, all forms	29·66	24·62	16·13	9·77	10·76	8·73
Wasting Diseases (Marasmus, Atrophy, &c.) ...	22·24	12·74	13·09	5·84	6·65	4·99
Prematurity ...	13·13	14·99	15·17	16·96	17·67	16·21
Bronchitis, Broncho-pneumonia, Pneumonia ...	11·37	8·13	6·86	6·70	6·86	6·52
Convulsions ...	6·83	3·10	1·63	1·00	·97	1·02
Congenital Defects and Malformations ...	3·45	4·86	4·38	4·29	4·43	4·14
Violence ...	3·16	2·47	1·07	·61	·65	·57
Whooping Cough ...	2·60	2·52	1·82	·26	3·90	4·65
Other causes ...	24·49	14·46	9·40	11·90	12·92	10·83
Total, all causes ...	116·93	87·89	69·55	61·33	64·81	57·66

Of every 1,000 infants born 16 died from diarrhœal and wasting diseases in 1924, as against 29 in 1911-20, 37 in 1901-10, and 52 in 1891-93—a decrease of 70 per cent. since the last mentioned period. In 1924, acute bronchitis, broncho-pneumonia and pneumonia were responsible for 6·70 deaths per 1,000 births, as

compared with 11·37 in 1891-93—a decline of 41 per cent. between the two periods. Certain causes, which may be regarded as of a non-preventable nature, such as prematurity, congenital defects, and malformations, were responsible for 31 per cent. of the total infantile mortality during the last ten years. Of the deaths from preventable causes during that period, approximately 1 in every 3 was due to diarrhoeal diseases, the mortality being highest during the months December to April. Of every 1,000 children born during the years referred to 13 died from diarrhoeal complaints within a year, a proportion which shows the necessity for further preventive measures in relation to these diseases.

An examination of the male and female mortalities from the above diseases discloses the fact that the male rate was consistently higher than the female rate, except in the cases of whooping cough and convulsions.

The tables which follow show the number of deaths and the death rate of infants under one month for Melbourne and suburbs and the whole State for the years 1920 to 1924, also the principal causes of death.

DEATHS OF INFANTS UNDER ONE MONTH, 1920 TO 1924.

Year.	Melbourne and Suburbs.		Victoria.	
	No. of Deaths.	Deaths per 100 Births.	No. of Deaths.	Deaths per 100 Births.
1920 ..	733	3·80	1,270	3·51
1921 ..	678	3·67	1,237	3·48
1922 ..	586	3·10	1,065	2·93
1923 ..	636	3·61	1,211	3·38
1924 ..	632	3·48	1,159	3·21

DEATHS OF INFANTS UNDER ONE MONTH FROM CERTAIN CAUSES, 1920 TO 1924.

Cause of Death.	Melbourne and Suburbs.					Victoria.				
	1920.	1921.	1922.	1923.	1924.	1920.	1921.	1922.	1923.	1924.
Diarrhoeal Diseases (all forms)	7	11	11	11	3	18	26	22	26	14
Wasting Diseases (Marasmus, Atrophy, etc.)	120	78	81	87	80	228	182	188	166	137
Prematurity	361	322	277	326	322	583	548	485	594	568
Bronchitis, Broncho - pneumonia and Pneumonia ..	18	23	13	33	29	33	37	19	55	47
Convulsions	11	16	31	6	10	24	37	54	27	27
Congenital Defects and Malformations	65	73	45	50	58	128	123	72	98	110
Violence	16	12	9	9	2	21	18	12	16	4
Syphilis	8	2	2	1	2	8	4	2	3	6
Other Causes	127	141	117	113	126	227	262	211	226	246

On the average of the last ten years, 159 in every 1,000 illegitimate infants died within a year, as against 61 in every 1,000 legitimate children. It is thus seen that the proportion of illegitimate children dying before the age of 1 year is 2·6 times that of legitimate children. In the year 1924 the mortality rate of legitimate infants was 5·76 per 100 births. The children born out of wedlock during the same year numbered 1,660, and the deaths of illegitimate infants were 229, the death rate being thus 13·80 per 100 births. With the view of ascertaining the chief reasons for the marked disproportion in the mortality rates of the two classes the following table has been constructed, showing the deaths from certain causes, per 1,000 legitimate and illegitimate births, for the periods 1904-08 and 1914-18 and the year 1924 :—

DEATH RATES OF LEGITIMATE AND ILLEGITIMATE INFANTS FROM CERTAIN CAUSES.

Cause of Death.	Deaths under 1 year per 1,000 Births.					
	Legitimate.			Illegitimate.		
	1904-08.	1914-18.	1924.	1904-08.	1914-18.	1924.
Diarrhoeal Diseases	19·8	14·2	9·0	72·6	48·6	24·7
Prematurity, Congenital Defects, Marasmus, &c.	30·3	27·2	25·5	52·1	64·9	59·6
Bronchitis, Broncho-pneumonia, Pneumonia	6·9	6·1	6·3	18·6	12·5	15·1
Other causes	18·3	15·3	16·8	58·7	36·6	38·6
Total, all causes	75·3	62·8	57·6	202·0	162·6	138·0

The rates for 1924 show that of every 1,000 children born out of wedlock 24·7 died from diarrhoeal diseases within a year, as compared with 9·0 deaths per 1,000 legitimate infants from the same cause. Owing to a larger proportion of the former children being deprived of breast food a higher mortality from these diseases might be expected among them than among legitimate infants, but the striking differences in the death rates from this cause and from the chief respiratory diseases indicate considerable neglect in the rearing of illegitimate infants.

Infantile
deaths in
each month
from certain
causes.

The influence of temperature on infantile mortality from the chief digestive and respiratory diseases is specially noticeable, whilst on deaths from other causes, particularly those of a developmental character, very little influence is apparent. The infantile deaths in Melbourne and suburbs from the two former classes of complaint in each month during the last five years are shown in the appended table :—

INFANTILE DEATHS IN EACH MONTH FROM CERTAIN CAUSES, 1920-24.

Month.	Infantile Deaths in Greater Melbourne in 1920-24 from—					
	Diarrhœal Diseases.			Respiratory Diseases.		
	Males.	Females.	Total.	Males.	Females.	Total.
January	187	144	331	22	20	42
February	122	93	215	24	13	37
March	98	80	178	18	18	36
April	86	63	149	19	16	35
May	64	61	125	30	14	44
June	32	14	46	38	32	70
July	10	12	22	56	50	106
August	8	13	21	56	52	108
September	10	7	17	35	34	69
October	18	12	30	26	17	43
November	34	18	52	27	21	48
December	81	66	147	24	26	50
Total, 1920-24 ..	750	583	1,333	375	313	688

The experience of the last five years shows that of the total infantile deaths in the metropolis from diarrhœal diseases 86 per cent. occur during the six months December to May, and of the deaths from respiratory diseases 51 per cent. occur in the four months June to September.

Infantile
mortality in
Australasia.

The deaths of infants under 1 year of age in the Commonwealth numbered 7,701 in 1924, as compared with 8,186 in the previous year, 7,251 in 1922, 8,952 in 1921, 9,431 in 1920, 8,464 in 1919, 7,364 in 1918, 7,302 in 1917, and 9,282 in 1916. The next table gives the proportion of such deaths to the total births in each

Australian State and New Zealand for each of the last thirteen years, and for earlier periods back to 1891 :—

INFANTILE MORTALITY IN AUSTRALASIA.

Period.	Deaths under 1 year per 100 Births.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1891-1900 ..	11·11	11·22	10·34	10·54	14·48	9·58	8·38
1902-06 ..	9·38	9·27	8·93	8·21	12·21	9·02	7·29
1907-11 ..	7·51	7·66	6·98	6·56	8·29	7·97	6·85
1912 ..	7·45	7·13	7·16	6·16	8·21	6·66	5·12
1913 ..	7·05	7·83	6·33	7·01	7·00	7·01	5·92
1914 ..	7·83	6·97	6·39	7·60	6·82	7·16	5·14
1915 ..	6·88	6·81	6·40	6·73	6·66	7·22	5·01
1916 ..	7·46	6·78	7·04	7·36	6·63	7·50	5·07
1917 ..	5·67	5·75	5·42	5·37	5·71	5·23	4·82
1918 ..	6·17	5·90	5·69	5·12	5·73	6·08	4·84
1919 ..	6·80	7·23	7·24	6·40	6·13	6·46	4·53
1920 ..	7·38	6·94	6·32	6·73	6·60	6·55	5·06
1921 ..	7·27	6·26	5·42	6·55	7·83	7·80	4·78
1922 ..	5·33	5·36	5·04	4·75	5·56	5·57	4·19
1923 ..	6·57	6·07	5·39	6·03	5·60	5·74	4·38
1924 ..	6·13	5·89	5·11	5·13	4·99	5·50	4·02

The infantile deaths per 100 births in the Australasian capitals in 1924 were as follows :—Melbourne 6·77, Sydney 5·72, Brisbane 6·05, Adelaide 5·66, Perth 6·15, Hobart 6·57, and Wellington 4·28.

In 1924 the deaths of male children under 5 years of age numbered 1,601, and the deaths of female children under that age, 1,321—the former being in the proportion of 18·06 per cent., and the latter of 17·29 per cent., to the total number

Deaths of
children
under 5.

of deaths of the respective sexes at all ages. The subjoined table gives the annual number of such deaths in the State at each year of age, and the proportion of the deaths under five years of age to the deaths at all ages in decennial periods from 1871 to 1920, and in the years 1921 to 1924 :—

MORTALITY OF CHILDREN UNDER FIVE YEARS.

Period.	Year of Age at Death.					Total under 5 Years.	
	0.	1.	2.	3.	4.	Number.	Proportion Per 100 Deaths at all Ages.
<i>Males.</i>							
1871-80 ..	1,783	508	206	148	119	2,764	39·41
1881-90 ..	2,158	464	161	114	92	2,989	34·28
1891-1900..	2,050	432	143	93	76	2,794	30·05
1901-10 ..	1,504	249	83	59	41	1,936	22·93
1911-20 ..	1,363	233	92	64	48	1,800	20·38
1921 ..	1,479	213	86	50	45	1,873	21·62
1922 ..	1,130	170	65	47	34	1,446	17·66
1923 ..	1,311	213	86	43	43	1,696	18·57
1924 ..	1,199	201	94	49	58	1,601	18·06
<i>Females.</i>							
1871-80 ..	1,482	482	198	139	106	2,407	46·06
1881-90 ..	1,805	423	151	105	84	2,568	39·61
1891-1900..	1,702	385	129	82	68	2,366	33·61
1901-10 ..	1,192	217	81	51	40	1,581	23·58
1911-20 ..	1,029	190	74	59	49	1,401	19·00
1921 ..	1,107	183	73	36	57	1,456	19·41
1922 ..	805	123	61	34	27	1,050	15·07
1923 ..	1,047	159	71	33	32	1,342	16·60
1924 ..	1,017	175	66	44	19	1,321	17·29

The number of persons of advanced ages was greater in the later than in the earlier years mentioned in the above table, and, as the mortality is very heavy at the older ages, this accounts to some extent for the gradual decrease in the proportion of deaths under the age of 5 years. After making allowance for this there is still a marked reduction in the mortality under 5 years of age in recent years as compared with that in periods prior to 1901.

The ages of males and females who died in 1924 and in the two preceding years are shown in the following table:—

AGES AT DEATH IN VICTORIA, 1922 to 1924.

Ages.	1922.			1923.			1924.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 ..	1,130	805	1,935	1,311	1,047	2,358	1,199	1,017	2,216
1 to 2	170	123	293	213	159	372	201	175	376
2 „ 3	65	61	126	86	71	157	94	66	160
3 „ 4	47	34	81	43	33	76	49	44	93
4 „ 5	34	27	61	43	32	75	58	19	77
5 „ 10	146	93	239	158	103	261	136	99	235
10 „ 15	113	69	182	108	108	216	103	73	176
15 „ 20	130	117	247	168	151	319	161	148	309
20 „ 25	176	180	356	184	195	379	214	206	420
25 „ 30	224	211	435	215	249	464	204	230	434
30 „ 35	216	257	473	245	279	524	213	263	476
35 „ 40	252	262	514	289	295	584	281	260	541
40 „ 45	301	273	574	364	279	643	311	245	556
45 „ 50	374	291	665	389	343	737	368	309	677
50 „ 55	492	359	851	548	417	965	544	417	961
55 „ 60	644	469	1,113	712	500	1,212	673	487	1,160
60 „ 65	805	523	1,328	894	638	1,532	933	613	1,546
65 „ 70	744	545	1,289	843	677	1,520	842	637	1,479
70 „ 75	590	524	1,114	662	590	1,252	695	554	1,249
75 „ 80	575	573	1,148	623	682	1,305	609	606	1,215
80 „ 85	459	566	1,025	502	571	1,073	500	575	1,075
85 „ 90	345	404	749	357	434	791	301	375	676
90 „ 95	122	151	273	146	168	314	137	165	302
95 ..	10	19	29	12	21	33	13	14	27
96 ..	9	10	19	5	16	21	9	16	25
97 ..	5	8	13	5	9	14	5	7	12
98 ..	..	9	9	4	6	10	6	10	16
99 ..	1	2	3	1	2	3	2	4	6
100 ..	3	1	4	2	2	4	1	1	2
101 ..	1	..	1	..	..	..	1	1	2
102 ..	4	2	6	2	1	3	..	4	4
103 ..	..	..	..	..	..	..	..	..	..
104 ..	..	1	1	..	..	..	..	..	..
105 ..	..	..	..	..	1	1	..	..	..
109 ..	..	..	..	1	..	1	..	..	..
Total ..	8,187	6,969	15,156	9,135	8,084	17,219	8,863	7,640	16,503

Of the 48,878 persons who died in Victoria during the last three years 6,547 were aged 80 years and upwards, and 29—fifteen males and fourteen females—had attained or passed the age of 100 years.

The highest age at death recorded in the period 1922-24 was 109 years, which was attained by one man. To every 100 female deaths there were 116 male deaths in 1924, as against 113 in the previous year, 117 in 1922, 115 in 1921, and 117 in 1920.

The death rates from the chief diseases are shown in the appended table for the period 1908-12 and for the last five years :—

DEATHS PER MILLION FROM CERTAIN CAUSES.

Cause of Death.	Deaths per Million of the Population.					
	1908-1912.	1920.	1921.	1922.	1923.	1924.
Typhoid Fever	98	37	46	20	34	20
Scarlet Fever	16	24	12	8	11	13
Measles	33	146	4	1	48	4
Diphtheria and Croup	77	125	63	26	12	160
Whooping Cough	122	183	179	88	58	69
Influenza	109	52	88	46	248	104
Hydatids	22	13	14	13	10	10
Cancer	833	908	954	997	1,013	999
Phthisis	855	658	667	565	620	585
Other Tubercular Diseases	182	145	137	120	123	127
Syphilis	51	46	36	22	26	24
Diabetes	107	126	136	110	98	133
Anæmia, Chlorosis, Leucæmia	81	90	104	85	118	97
Simple Meningitis	133	54	64	68	67	46
Cerebro-Spinal Meningitis .. .. .	..	10	11	8	8	20
Infantile Paralysis .. .. .	..	3	3	2	1	1
Locomotor Ataxia and other diseases of Spinal Cord	71	45	52	38	49	55
Congestion and Hæmorrhage of the Brain	449	472	472	433	471	467
Epilepsy	35	31	34	27	39	25
Convulsions	76	45	47	59	45	31
Heart Disease (including Endocarditis, Pericarditis, and Angina Pectoris)	1,441	1,287	1,267	1,245	1,423	1,364
Acute and Chronic Bronchitis	348	273	222	209	233	199
Pneumonia and Broncho-pneumonia	834	801	676	746	978	741

DEATHS PER MILLION FROM CERTAIN CAUSES—*continued*.

Cause of Death.	Deaths per Million of the Population.					
	1908-1912.	1920.	1921.	1922.	1923.	1924.
Pleurisy	45	23	35	29	32	30
Congestion of Lungs and Pulmonary Apoplexy	63	84	59	59	45	59
Asthma and Pulmonary Emphysema	60	41	22	32	42	26
Enteritis, Gastro-enteritis, and Diarrhoeal Diseases	833	639	657	358	480	354
Hernia, Intestinal Obstruction	113	118	100	107	95	90
Diseases of the Stomach (Cancer excepted)	99	106	79	81	81	71
Cirrhosis and other diseases of the Liver (Cancer excepted)	158	96	99	81	90	87
Biliary Calculi	27	31	25	20	14	25
Appendicitis	81	63	57	67	70	75
Simple Peritonitis (non-puerperal)	35	28	24	29	34	25
Acute and Chronic Nephritis, Uræmia, Bright's Disease	576	540	516	514	501	482
Diseases of the Bladder and Prostate	94	82	57	55	68	69
Calculi of the Urinary System	7	6	8	4	6	9
Old Age	1,030	1,019	873	873	867	770
Suicide	102	95	95	81	78	72
Accidental Violence	531	451	452	393	414	485
Homicide	19	12	14	15	13	11

The above and other causes of death are fully dealt with in subsequent paragraphs.

The following table shows for each month of the year the proportion of deaths per 1,000 due to nine well-known diseases and to all causes. The figures are based on the experience of the quinquennial period 1920-24, and, in order to make the results comparable, adjustments have been made to correct the inequality of the number of days in each month. The average annual mortality from each disease is shown at the foot of the table :—

The Seasonal Prevalence of Diseases.

SEASONAL PREVALENCE OF DISEASES IN VICTORIA, 1920-24.

Month.	Typhoid Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Phthisis.	Bronchitis.	Pneumonia and Broncho- pneumonia.	Diarrhoea and Enteritis.	Bright's Disease.	Total from all Causes.
January	135	76	59	18	79	44	60	212	69	84
February	198	79	63	20	68	36	47	176	78	79
March	131	61	110	34	74	51	54	137	65	75
April	111	29	125	38	75	72	72	116	77	82
May	127	47	143	51	87	82	88	77	80	82
June	49	54	132	199	84	125	124	37	82	90
July	44	94	98	192	88	132	130	24	107	96
August	37	128	82	155	96	150	120	22	103	94
September	16	120	62	119	92	93	92	21	87	84
October	20	133	54	72	94	84	86	27	81	82
November	33	95	23	66	82	79	70	46	85	76
December	99	84	49	36	81	52	57	105	86	76
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Average Annual Number of Deaths 1920-24 ..	49	122	179	171	972	356	1,241	777	802	16,375

An inspection of the above table shows that the mortality from all causes was greatest in the winter months, the highest point being reached in July. It was lowest in the warmer months of the year, except January.

Typhoid fever, diarrhoea, and enteritis are essentially hot weather diseases, while pneumonia and broncho-pneumonia, bronchitis, and influenza are much more prevalent in the colder months than in the warmer ones. The greatest number of deaths from diphtheria occur in the autumn, while whooping cough reaches its zenith in the months of early spring. Phthisis and Bright's disease do not exhibit variations in mortality according to season to as great an extent as the other diseases mentioned, but reach their maximum mortality during the cold weather.

Vaccinations. The proportion of successful vaccinations to every 100 births for the period 1876-99, and for each year since, is given in the following table. A great reduction in the percentage of vaccinations to births is shown for the years 1920 to 1924. This is due to a large number of persons having taken advantage of the "Conscience Clause" of the Health Act of 1919, which came into operation on 24th March, 1920.

SUCCESSFUL VACCINATIONS PER 100 BIRTHS.

Period.	Vaccinations per 100 births.	Period.	Vaccinations per 100 births.
1876-99 ...	72	1912 ...	60
1900 ...	67	1913 ...	69
1901 ...	62	1914 ...	65
1902 ...	53	1915 ...	69
1903 ...	71	1916 ...	61
1904 ...	69	1917 ...	60
1905 ...	67	1918 ...	48
1906 ...	67	1919 ...	44
1907 ...	67	1920 ...	12
1908 ...	67	1921 ...	11
1909 ...	68	1922 ...	8
1910 ...	69	1923 ...	6
1911 ...	62	1924 ...	5

In 1924 the vaccinations of children were equal to 5 per cent. of the births, as compared with 6 per cent. in the preceding year, 8

per cent. in 1922, 11 per cent. in 1921, 12 per cent. in 1920, 44 per cent. in 1919, 64 per cent. in the period 1900-18 and 72 per cent. in the period 1876-99.

**Small-pox—
Deaths from.**

Persons suffering from small-pox have arrived at Victorian ports on many occasions, but, as they were at once quarantined, the disease never spread among the people of the State. During the years 1853 to 1924 only 31 deaths occurred from this cause, and of that number only 8 took place in the last forty years of the period.

**Typhoid
fever.**

The reported cases of typhoid fever for the whole State declined from 288 per 100,000 of population in 1895-99 to 53 per 100,000 in 1914-18, and 19 per 100,000 in 1924, or by 93 per cent. in the intervening years. The death rate from the disease also decreased by 93 per cent. during the same period. The deaths per 100 cases in 1924 were 10·9 as compared with 10·7 in 1914-18. The reported cases of, and deaths from typhoid fever and their proportions to the population, also the percentage of cases that ended fatally, are given in the next table for periods back to 1890 :—

TYPHOID FEVER IN VICTORIA, 1890 TO 1924.

Period.	Annual Cases Reported.		Annual Deaths.		Deaths per 100 reported Cases.
	Number.	Per 100,000 of Population.	Number.	Per 100,000 of Population.	
1890-94	2,932	253·9	381	33·0	13·0
1895-99	3,397	288·4	355	30·1	10·4
1900-04	2,152	178·1	213	17·6	9·9
1905-09	1,569	125·4	135	10·8	8·6
1910-14	1,374	101·0	107	7·8	7·8
1915-19	563	39·3	60	4·2	10·6
1920	433	28·8	55	3·7	12·7
1921	532	34·6	71	4·6	13·3
1922	301	19·1	32	2·0	10·6
1923	468	29·1	55	3·4	11·8
1924	304	18·5	33	2·0	10·9

The death rate from typhoid fever for Victoria is considerably lower than that for the Commonwealth.

**Typhoid
fever in the
Metropolis.**

The cases of, and deaths from typhoid fever in proportion to population, in Greater Melbourne, are given in the subjoined table for different periods during the last thirty-five years:—

TYPHOID FEVER IN THE METROPOLIS, 1890 TO 1924.

Period.	Annual Cases Reported.		Annual Deaths.	
	Number.	Per 100,000 of Population.	Number.	Per 100,000 of Population.
1890-94	1,645	349.3	205	43.5
1895-99	1,510	327.6	156	33.8
1900-04	701	140.0	74	14.8
1905-09	466	86.7	49	9.1
1910-14	385	61.4	36	5.8
1915-19	128	18.0	19	2.7
1920	128	17.0	13	1.7
1921	119	15.1	29	3.7
1922	80	9.9	11	1.4
1923	103	12.3	13	1.6
1924	96	11.0	16	1.8

The cases of, and deaths from typhoid fever in proportion to population declined by 97 and 95 per cent. respectively in Greater Melbourne between 1890-99 and 1924. The introduction and extension of the sewerage system coincide closely with, and in a large measure account for this great improvement.

**Prevalence
of typhoid
fever in
different
areas.**

The number of cases of typhoid fever during each of the last five years in five divisions of the State, and their proportions to the respective populations for the period 1910-19 and the years 1923 and 1924, are given in the following table:—

PREVALENCE OF TYPHOID FEVER.

Area.	Reported Cases of Typhoid Fever.					Annual Cases per 10,000 of Population.		
	1920.	1921.	1922.	1923.	1924.	1910-19.	1923.	1924.
Greater Melbourne ..	128	119	80	103	96	4.1	1.2	1.1
Ballarat and Suburbs	12	52	22	20	8	13.4	5.0	2.0
Bendigo and Suburbs	9	24	38	16	9	18.2	4.8	2.7
Geelong and Suburbs	10	35	7	3	1	9.0	0.8	0.3
Rest of the State ..	274	302	154	326	190	8.9	4.9	2.9

The cases in proportion to population were fewer by 73 per cent. in Greater Melbourne, 85 per cent. in Ballarat, 85 per cent. in Bendigo, 97 per cent. in Geelong, and 67 per cent. in the rest of the State in 1924 than in the period 1910-19.

**Death rates
from typhoid
fever at
different ages.**

The mortality from typhoid fever is higher at early adult and middle ages than at other periods of life, and higher among males than females. This is shown in the next table, which gives the death rates in age groups for each sex in the years 1900-02, 1910-12, and 1920-22, being the years adjoining the censuses of 1901, 1911, and 1921 :—

**DEATH RATES FROM TYPHOID FEVER, 1900-02, 1910-12,
AND 1920-22.**

Age Group.			Deaths per 10,000 of each Sex.					
			Males.			Females.		
			1900-02.	1910-12.	1920-22.	1900-02.	1910-12.	1920-22.
0-15	..	..	0·97	0·38	0·12	1·46	0·44	0·28
15-20	..	..	2·65	1·76	0·40	2·23	1·22	0·46
20-25	..	..	4·39	1·82	0·97	1·84	1·32	0·54
25-35	..	..	3·28	1·71	0·41	2·04	0·82	0·38
35-45	..	..	2·25	1·26	0·45	1·21	0·68	0·36
45-55	..	..	1·95	0·82	0·54	0·93	0·39	0·20
55-65	..	..	0·66	0·20	0·42	0·34	0·50	0·16
65 and over	..	..	..	0·10	0·10	0·23	0·19	0·09
All ages	..	..	1·95	1·00	0·37	1·49	0·69	0·32

The experience of the three census periods mentioned shows that the rate for males exceeds that for females by 33 per cent., and that the heaviest mortality occurs between the ages 15 and 35. It is notable that at each census period there were proportionately fewer deaths of boys than of girls under the age of 15.

Scarlet fever. In 1924 the deaths from scarlet fever numbered 22, which corresponded to a rate of 13 per million of the population, as compared with rates of 11 in 1923, 8 in 1922, 12 in 1921, 24 in 1920 and 1919, and 34 in 1890-92. During 1924 there were 2,356 cases reported, as against 1,730 in the previous year, 1,972

in 1922, 2,816 in 1921, and 2,259 in 1920. For the five years mentioned the deaths were equal to nearly 1 per cent. of the cases. According to the experience of the last ten years the chance of dying from the disease is 64 per cent. greater for females than for males

Measles. Although the mortality from measles has varied very considerably from period to period, there has been no very severe epidemic outbreak since 1898, when 671 deaths resulted from the disease. In 1924 there were 7 deaths attributed to this cause, representing a rate of 4 per million of the population, as compared with rates of 48 in the previous year, '6 in 1922, 4 in 1921, 146 in 1920, 17 in 1919, 5 in 1918, 11 in 1917, 13 in 1916, and 22 in 1915.

On the average of the five years 1919 to 1923, 53 per cent. of those who died from the disease were under 2 years of age and 75 per cent. were under 5 years. The incidence of mortality at various ages for each sex for the period 1919-23 was as follows:—

Sex.	Annual Deaths from Measles per 10,000 of each Sex aged—									
	0 to 1.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 and over.	All Ages.
Males	4·17	7·64	2·83	1·69	0·87	0·75	0·06	0·06	0·02	0·46
Females	2·34	7·87	2·35	1·50	0·52	0·57	0·23	0·03	0·06	0·40

Whooping cough. Whooping cough was responsible for 263 deaths in 1924, which equalled a rate of 160 per million of the population at all ages, as compared with rates of 12 in the previous year, 26 in 1922, 63 in 1921, 125 in 1920, 24 in 1919, 47 in 1918, 51 in 1917, 84 in 1916, 68 in 1915, 69 in 1914, and 71 in 1913. The rate for 1924 is the highest recorded since 1906. The infantile death rate is more affected than the general rate by this ailment, as it is practically confined to children. In the year under review 154 of the deaths were of infants under 1 year, and all, except 13, of the deaths were of children less than 5 years of age. On the average of the last ten years the mortality rate from the disease was 22 per cent. higher among girls than boys.

Diphtheria. The prevalence of diphtheria throughout the State during the last fourteen years was an unsatisfactory feature of the statistics of sickness relating to that period. For the year 1924 the number of cases was 3,987, as against 3,467 in 1923, 5,323 in 1922, 9,458 in 1921, and a yearly average of 5,161 in 1911-20, 1,410 in 1905-09, 1,680 in 1900-04, and 1,584 in 1895-99. On the other hand, a very great reduction took place from period to period in the proportion of cases which ended fatally. The case mortality rate was 2·9 per cent. in 1924, as compared with 4·6 per cent. in 1912-16, 6·3 per cent. in 1905-09, 9·5 per cent. in 1900-04, and 13·9 per cent. in 1895-99.

The appended table shows for the whole State and the metropolis the reported cases of and deaths from diphtheria, and their proportions to the population, also the ratios of deaths to cases for different periods since 1894 :—

DIPHTHERIA IN VICTORIA AND GREATER MELBOURNE, 1895 TO 1924.

Period.	Annual Cases Reported.		Annual Deaths.		Deaths per 100 Cases Reported.
	Number.	Per 100,000 of Population.	Number.	Per 100,000 of Population.	
VICTORIA.					
1895-99	1,584	134·6	221	18·8	13·9
1900-04	1,680	139·0	159	13·2	9·5
1905-09	1,410	112·6	89	7·1	6·3
1910-14	4,612	339·1	212	15·6	4·6
1915-19	4,901	342·5	209	14·6	4·3
1920	6,458	429·2	276	18·3	4·3
1921	9,458	615·2	275	17·9	2·9
1922	5,323	338·8	138	8·8	2·6
1923	3,467	215·6	94	5·8	2·7
1924	3,987	242·8	114	6·9	2·9
GREATER MELBOURNE.					
1895-99	748	162·1	113	24·6	15·1
1900-04	686	136·9	58	11·6	8·5
1905-09	758	140·8	46	8·5	6·1
1910-14	2,343	374·3	114	18·3	4·9
1915-19	2,864	402·6	127	17·9	4·4
1920	2,698	357·5	117	15·5	4·3
1921	3,724	473·2	104	13·2	2·8
1922	2,213	274·6	53	6·6	2·4
1923	1,900	227·6	50	6·0	2·6
1924	2,239	257·6	68	7·8	3·0

The cases of diphtheria which occurred in five divisions of the State in each of the last five years and their proportions to the respective populations, for the period 1916-19 and the years 1923 and 1924, are given in the subjoined table:—

CASES OF DIPHTHERIA IN DIFFERENT AREAS.

Area.	Reported Cases of Diphtheria.					Annual Cases per 10,000 of Population.		
	1920.	1921.	1922.	1923.	1924.	1910-19.	1923.	1924.
Greater Melbourne ..	2,698	3,724	2,213	1,900	2,239	39·3	22·8	25·8
Ballarat and Suburbs	330	307	111	90	54	24·3	22·5	13·3
Bendigo and Suburbs	428	521	215	91	108	84·6	27·2	32·1
Geelong and Suburbs	369	405	200	98	127	43·4	26·4	33·7
Rest of the State ..	2,633	4,501	2,584	1,288	1,459	25·7	19·4	22·1

In 1924, the cases in each division of the State, except Ballarat and suburbs, were more numerous than in the preceding year.

Of the 488 males and 506 females who died from diphtheria during the five years 1919-23, 850, or 86 per cent., were under 10 years of age. The incidence of mortality for each sex at different ages, for the period mentioned, was as follows:—

DEATH RATES FROM DIPHTHERIA AT DIFFERENT AGES, 1919-23.

Sex.	Annual Deaths from Diphtheria per 10,000 of each Sex aged—									
	0 to 1.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	15 to 20.	20 and over.	All Ages.
Males..	5·08	9·09	9·28	7·67	6·23	3·67	0·83	0·33	0·07	1·29
Females	3·86	6·65	6·09	6·56	7·10	4·91	0·96	0·62	0·13	1·30

The deaths attributed to hydatids in 1924 numbered 17, being equivalent to a rate of 10 per million of the population, as compared with rates of 10 in the preceding year, 13 in 1922, 14 in 1921, 13 in 1920, 18 in 1919, 21 in 1918, 14 in 1917, 21 in 1916, 18 in 1915, 22 in 1908-12, and 51 in 1890-92. According to the experience of the last ten years the death rate from this disease is 41 per cent. higher among males than females. Hospital returns for the period 1915-24 show that 660 cases of hydatids were treated therein and that 93, or, approximately, 1 in every 7, ended fatally.

**Anæmia,
chlorosis,
leucæmia.**

Anæmia, chlorosis, and leucæmia were responsible for 159 deaths in 1924, which corresponded to a rate of 97 per million of the population, as against rates of 118 in the previous year, 85 in 1922, 104 in 1921, 90 in 1920, 93 in 1919, 90 in 1918, 97 in 1917, 94 in 1916, 83 in 1915, 100 in 1914, 76 in 1913, and 81 in 1908-12. Of the 35 persons who died from leucæmia in 1924, 20 were males.

Diabetes.

During 1924 diabetes was responsible for 79 male and 140 female deaths, representing a rate of 133 per million of the population, as compared with rates of 98 in the preceding year, 110 in 1922, 136 in 1921, 126 in 1920, 134 in 1919, 146 in 1918, 120 in 1917, 128 in 1916, 114 in 1915, 119 in 1914, 91 in 1913, and 107 in 1908-12. The deaths from diabetes per 10,000 of each sex in nine age groups, for the periods 1900-02, 1910-12, and 1920-22, are shown in the subjoined table:—

**DEATHS FROM DIABETES PER 10,000 OF
EACH SEX.**

Age Group.			Deaths per 10,000 of each Sex.					
			Males.			Females.		
			1900-02.	1910-12.	1920-22.	1900-02.	1910-12.	1920-22.
0-10	...	...	·09	·10	·13	·05	·15	·22
10-20	...	...	·24	·20	·31	·26	·36	·39
20-30	...	...	·17	·64	·48	·36	·30	·53
30-40	...	...	·32	·58	·45	·51	·53	·54
40-50	...	...	·49	1·11	·95	·42	·78	1·11
50-60	...	...	1·38	1·80	2·14	1·42	3·18	2·79
60-70	...	...	2·67	5·63	5·19	3·19	8·47	8·02
70-80	...	...	4·36	7·34	7·37	5·01	11·54	12·51
80 and over	...	..	4·11	7·43	8·42	3·54	6·83	6·02
All Ages	...	...	·56	1·00	1·03	·60	1·26	1·45

In 1920-22 the female exceeded the male rate for each age group between 40 and 80, the excess for the twenty years of life 60 to 80 amounting to 61 per cent. For all ages combined the rate for females was 41 per cent. higher than that for males.

Influenza. The deaths from influenza in 1924 numbered 170, which corresponded to a rate of 104 per million of the population, as compared with rates of 248 in the previous year, 46 in 1922, 88 in 1921, 52 in 1920, 2,407 in 1919, 148 in 1918, 71 in 1913-17, 109 in 1908-12, and 381 in 1890-92.

In 1924, 51 per cent. of the deaths recorded were associated with specified pneumonic complications.

With the exception of the 1919 epidemic, when 72 per cent. of the deaths were of persons between 20 and 50 years of age, influenza has always proved more fatal to elderly people than to those at middle or young ages.

The next table gives the death rate per 10,000 of each sex in age groups for the last five census periods:—

DEATHS FROM INFLUENZA IN VICTORIA PER 10,000 OF EACH SEX.

Age Group.					1880-82.	1890-92.	1900-02.	1910-12.	1920-22.
<i>Males.</i>									
0-15	...	...	...	...	·34	2·50	1·10	·40	·23
15-20	...	...	...	...	·07	·64	·34	·24	·30
20-25	...	...	...	...	...	1·20	·59	·21	·38
25-35	...	...	...	...	·07	1·50	·79	·17	·27
35-45	...	...	...	...	...	3·04	1·31	·59	·56
45-55	...	...	...	...	·24	5·12	3·20	·73	·92
55-65	...	...	...	...	·24	12·65	5·25	2·38	1·44
65 and upwards	...	...	...	...	2·36	27·13	17·02	12·27	4·18
All ages	...	...	...	...	·25	3·94	2·30	1·10	·65
<i>Females.</i>									
0-15	...	...	...	...	·34	1·86	1·15	·42	·25
15-20	...	...	...	...	...	·92	·83	·34	·26
20-25	...	...	...	...	...	1·28	·69	·35	·35
25-35	...	...	...	...	·07	2·35	·89	·22	·45
35-45	...	...	...	...	·08	4·11	1·86	·30	·46
45-55	...	...	...	...	...	5·39	2·02	·68	·68
55-65	...	...	...	...	·62	11·46	5·53	1·61	·91
65 and upwards	...	...	...	...	3·18	35·22	16·02	12·80	3·86
All ages	...	...	...	...	·24	3·72	2·13	1·10	·60

Influenza epidemic, 1919.

Information in regard to the epidemic of 1919 is given in the *Year-Book* for 1918-19, pages 214-216; and in the 1919-20 issue, pages 180-182.

Respiratory diseases.

In 1924 the deaths from respiratory diseases numbered 1,877, which represented a rate of 1,143 per million of the population, as compared with rates of 1,441 in the previous year, 1,195 in 1922, 1,141 in 1921, 1,329 in 1920, 1,430 in 1919, 1,160 in 1918, 1,094 in 1917, 1,336 in 1916, and 1,368 in 1915. Of the deaths from complaints of this nature in the year under review, 67 were referred to acute bronchitis, 109 to chronic bronchitis, 150 to bronchitis unspecified, 485 to broncho-pneumonia, 731 to pneumonia, 50 to

pleurisy, and 35 to asthma. These six diseases accounted for 87 per cent. of the total respiratory mortality. The seasonal incidence of these maladies is evidenced by the deaths in June, July, August, and September, which represented 46 per cent. of the total for the whole year. Respiratory diseases are much more fatal at the extremes of life than at middle ages, and among males than females. This is shown in the appended table, which gives for each sex the death rates relating to groups of ages at five census periods :—

DEATHS FROM RESPIRATORY DISEASES PER 10,000 OF EACH SEX.

Age Group.				1880-82.	1890-92.	1900-02.	1910-12.	1920-22.
<i>Males.</i>								
0-15	...	...	...	29·02	28·52	16·53	12·94	10·25
15-20	...	...	...	3·30	2·92	2·70	1·66	1·76
20-25	...	...	...	5·34	4·88	4·85	2·35	2·73
25-35	...	...	...	8·31	6·85	5·94	3·86	3·71
35-45	...	...	...	15·80	13·55	9·49	10·50	8·01
45-55	...	...	...	26·59	25·18	18·04	18·25	15·69
55-65	...	...	...	51·65	56·51	38·37	32·68	30·42
65 and upwards	...	...	...	136·54	141·07	112·38	138·87	112·17
All ages	...	...	...	24·48	24·30	18·66	17·17	14·42
<i>Females.</i>								
0-15	...	...	...	24·18	24·13	13·85	10·50	8·54
15-20	...	...	...	2·02	3·52	2·34	1·56	2·32
20-25	...	...	...	4·23	3·05	3·34	2·48	1·72
25-35	...	...	...	5·72	5·65	3·75	3·55	3·25
35-45	...	...	...	12·53	11·55	7·68	5·85	4·90
45-55	...	...	...	13·63	17·01	11·80	8·28	6·71
55-65	...	...	...	29·15	32·10	27·42	16·64	13·50
65 and upwards	...	...	...	116·12	112·38	86·78	99·81	86·51
All ages	...	...	...	17·08	17·62	13·28	11·81	10·15

The mortality from respiratory diseases at all ages combined was less in the period 1920-22 than in any of the four previous census periods. At each census date the male exceeded the female rate, the average excess for the five census periods being 42 per cent.

Cerebro-spinal meningitis was responsible for 33 deaths in 1924, 13 in 1923, 12 in 1922, 17 in 1921, 15 in 1920, 14 in 1919, 37 in 1918, 75 in 1917, 326 in 1916, and 338 in 1915. The cases reported to the Public Health Department in those years numbered 1,726, and the proportion of these that ended fatally

**Cerebro-spinal,
tubercular,
and simple
meningitis.**

was 51 per cent. The numbers of deaths from cerebro-spinal, tubercular, and simple meningitis during the last eleven years were as follows :—

DEATHS FROM DIFFERENT FORMS OF MENINGITIS, 1914-24.

Year.	Cerebro-spinal Meningitis.		Tubercular Meningitis.		Simple Meningitis.		Total—All Forms of Meningitis.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1914 ..	12	5	42	30	90	63	144	98
1915 ..	239	99	35	35	74	46	348	180
1916 ..	191	135	29	40	56	39	276	214
1917 ..	48	27	56	41	37	35	141	103
1918 ..	28	9	55	40	39	35	122	84
1919 ..	7	7	38	24	33	29	78	60
1920 ..	12	3	49	34	46	35	107	72
1921 ..	8	9	42	44	62	37	112	90
1922 ..	9	3	30	28	67	40	106	71
1923 ..	7	6	32	34	64	43	103	83
1924 ..	19	14	47	32	47	29	113	75

Age incidence of different forms of meningitis.

The next table shows the incidence of mortality at various ages from different forms of meningitis for the period 1915-24 :—

DEATHS AT DIFFERENT AGES FROM MENINGITIS, 1915-24.

Age Group.	Cerebro-spinal Meningitis.		Tubercular Meningitis.		Simple Meningitis.		Total—All Forms of Meningitis.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Under 5 ..	144	106	238	176	235	202	667	434
5 to 15 ..	69	54	83	79	62	50	214	183
15 „ 25 ..	158	52	40	55	39	38	237	145
25 „ 35 ..	76	26	30	21	29	20	135	67
35 „ 45 ..	49	24	13	12	32	23	94	59
45 „ 55 ..	49	28	4	9	37	16	90	53
55 „ 65 ..	16	14	3	..	21	9	40	23
65 and over	7	8	2	..	20	10	29	18
Total 1915-24	568	312	413	352	525	363	1,506	1,032

On the average of the last ten years the deaths of children under 5 years of age from cerebro-spinal, tubercular, and simple meningitis represented 28, 54, and 55 per cent. respectively of the total deaths from these diseases. Of the 33 persons who succumbed to cerebro-spinal meningitis in 1924, 24 were under 5 and 25 were under 15 years of age. Up to the age of 15 years the incidence of the mortality from this disease in the period 1915-24 was 33 per cent. higher for males than for females, while for the age group 15 to 45 the rate for the former was about 2·8 times that for the latter.

**Diseases of
the spine.**

In 1924 locomotor ataxia and other diseases of the spine, excluding infantile paralysis, accounted for 65 male and 26 female deaths, representing a death rate of 55 per million of the population, as compared with rates of 49 in the previous year, 38 in 1922, 52 in 1921, 45 in 1920, 78 in 1919, 88 in 1918, 58 in 1917, 70 in 1916, 58 in 1915, 75 in 1914, 62 in 1913, and 71 in 1908-12. Of the 13 persons who died from locomotor ataxia in 1924, 11 were males.

**Infantile
paralysis.**

Mortality returns show that infantile paralysis was responsible for 2 deaths in 1924, as against 2 in the previous year, 3 in 1922, 4 in 1921, 4 in 1920, 3 in 1919, 21 in 1918, 6 in 1917, 4 in 1916, 2 in 1915, 9 in 1914, 3 in 1913, and 6 in 1912. Of the 69 persons who died during these thirteen years, 41 were boys. Seven of the victims were under 1 year of age, and 33 were under 5 years. The cases reported to the Public Health Department in 1924 numbered 12, as compared with 7 in the preceding year, 23 in 1922, 27 in 1921, 5 in 1920, 2 in 1919, 303 in 1918, and 32 in 1917.

**Heart
disease.**

During 1924 there were 1,779 deaths ascribed to organic heart disease, 29 to pericarditis, 338 to endocarditis and acute myocarditis, and 93 to angina pectoris. The total—2,239—from these causes represented a rate of 1,364 per million of the population, as compared with 1,423 in the previous year, 1,245 in 1922, 1,267 in 1921, 1,287 in 1920, 1,402 in 1919, 1,400 in 1918, 1,442 in 1917, 1,287 in 1916, 1,134 in 1915, 1,278 in 1914, 1,294 in 1913, and 1,441 in 1908-12. Of the 2,239 persons who died from these diseases in 1924, only 45, or 2.0 per cent., were under 15 years of age. On the average of the three years 1920 to 1922 the deaths from all forms of heart disease per 10,000 of each sex, in age groups, were as follows :—

**DEATH RATES FROM HEART DISEASE AT
VARIOUS AGES, 1920-22.**

Sex.	Deaths per 10,000 Persons aged—									
	0-15.	15-20.	20-25.	25-35.	35-45.	45-55.	55-65.	65-75.	75 and upwards.	All Ages.
Males ..	1.52	1.92	2.04	2.64	5.40	14.52	40.62	112.20	247.10	13.74
Females ..	1.15	1.85	1.53	3.25	5.26	10.73	29.53	85.65	208.17	11.70

The figures indicate that the mortality rate from heart disease is a function of age, and that it attains its maximum at the oldest age. Of the deaths of persons aged 75 and upwards, approximately 1 in 5 is due to some form of this disease.

**Diseases of
the digestive
system.**

In 1924 there were 709 male and 568 female deaths from digestive ailments, representing a proportion of 778 per million of the population, as against rates of 914 in the previous year, 796 in 1922, 1,095 in 1921, 1,147 in 1920, 978 in 1919, 1,030 in 1918, 884 in 1917, 1,206 in 1916, 1,098 in 1915, 1,504 in 1914, 1,220 in

1913, 1,345 in 1912, 1,233 in 1911, and 2,382 in 1890-92. Diarrhoeal diseases were responsible for 581 deaths, which were equivalent to a rate of 354 per million of population, the corresponding rates in previous periods being 480 in 1923, 358 in 1922, 657 in 1921, 639 in 1920, 501 in 1919, 504 in 1918, 408 in 1917, 731 in 1916, 590 in 1915, 941 in 1914, 709 in 1913, 833 in 1908-12, and 1,342 in 1890-92. The age incidence of these diseases shows that they are heaviest at the extremes of life. Of the 581 deaths from diarrhoeal diseases in the year under review, 443, or 76 per cent., were of children under 2 years of age, and 60, or about 10 per cent., were of persons over 65 years of age. There were 61 male and 25 female deaths from cirrhosis of the liver, 51 male and 64 female deaths from other affections of that organ (including hydatids), and 73 male and 74 female deaths from hernia and intestinal obstruction.

Appendicitis. The deaths from appendicitis numbered 123 in 1924, which represented a death rate of 75 per million of the population, as compared with rates of 70 in 1923, 67 in 1922, 57 in 1921, 63 in 1920, 61 in 1919, 66 in 1918, 62 in 1917, 55 in 1916, and 72 in 1915. Hospital records show that during 1924 there were 2,067 cases treated, and that 68, or 3·3 per cent., ended fatally, as compared with fatality rates of 2·1 per cent. in 1923, 2·6 per cent. in 1922, 2·2 per cent. in 1921, 2·7 per cent. in 1920, 3·3 per cent. in 1919, 3·0 per cent. in 1918, 2·5 per cent. in 1917, 4·1 per cent. in 1916, 5·3 per cent. in 1915, and 6 per cent. in the period 1908-12. According to the experience of the three years 1920 to 1922 the death rate from appendicitis is approximately 63 per cent. higher among males than females. The mortality rates at various ages for that period were as follows:—

DEATH RATES FROM APPENDICITIS, 1920-22.

Sex.	Deaths from Appendicitis per 10,000 of each Sex aged—									
	Under 10.	10 to 15.	15 to 20.	20 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 and over.	All Ages.
Males..	0·31	0·87	1·31	0·86	0·74	1·08	0·79	0·85	0·68	0·78
Females	0·30	0·66	0·51	0·59	0·53	0·56	0·40	0·32	0·69	0·48

Diseases of urinary system. In 1924 there were 1,027 deaths attributed to diseases of the urinary system, which corresponded to a rate of 626 per million of the population, as against rates of 628 in the previous year, 624 in 1922, 643 in 1921, 697 in 1920, 645 in 1919, 741 in 1918, 710 in 1917, 705 in 1916, 712 in 1915, 670 in 1914, 724 in 1913, and 700 in 1909-12. Acute and chronic nephritis were responsible for 791 deaths, or 77 per cent., and complaints of the bladder and prostate for 113 deaths, or 11 per cent. of the total referred to maladies of the urinary system. The deaths per 10,000 of each sex, in

age groups, for the periods 1900-02, 1910-12, and 1920-22 are shown in the following table :—

DEATH RATES FROM DISEASES OF URINARY SYSTEM.

Age Group.	Deaths per 10,000 of each Sex.					
	Males.			Females.		
	1900-02.	1910-12.	1920-22.	1900-02.	1910-12.	1920-22.
0-10 ...	·93	·67	·67	·59	·79	·67
10-20 ...	·45	·73	·53	·82	·71	·52
20-30 ...	1·83	1·72	1·23	1·59	1·61	1·72
30-40 ...	3·55	3·03	2·66	4·21	3·76	2·89
40-50 ...	8·12	9·03	6·23	7·26	7·07	5·27
50-60 ...	17·43	18·95	14·59	11·36	13·81	10·57
60-70 ...	39·62	46·63	38·30	21·49	24·44	22·04
70-80 ...	80·68	96·18	97·19	27·70	38·53	40·26
80 and over ...	128·48	153·04	167·09	27·15	43·70	54·38
All Ages ...	8·05	9·18	8·04	4·28	5·34	5·13

The figures for the latest period show that there is scarcely any difference between the rates for males and females under 50 years of age. For older ages, however, the excess of the male over the female rate is very pronounced, especially at ages 70 and upwards. For all ages the rate for males exceeds that for females by 57 per cent.

Deaths from
phthisis at
various ages.

The ages and sexes of those who died from pulmonary tuberculosis in each of the last five years are given in the next table :—

DEATHS FROM PULMONARY TUBERCULOSIS AT VARIOUS AGES.

Age Group.	Males.					Females.				
	Year.					Year.				
	1920.	1921.	1922.	1923.	1924.	1920.	1921.	1922.	1923.	1924.
0-10 ..	12	3	6	4	2	6	2	5	3	3
10-15 ..	3	3	2	...	...	6	3	4	11	6
15-20 ..	17	16	20	20	20	33	27	34	42	43
20-25 ...	47	56	44	54	53	67	71	69	64	69
25-30 ...	64	64	59	67	62	76	79	57	77	67
30-35 ...	65	51	53	61	60	55	62	71	51	59
35-40 ...	57	68	47	63	66	45	54	45	53	39
40-45 ...	60	70	55	84	60	42	53	41	35	28
45-50 ...	70	69	42	51	47	26	34	27	31	21
50-55 ..	58	46	49	42	57	21	22	17	13	29
55-60 ...	46	42	43	38	49	15	20	16	25	24
60-65 ...	39	40	35	44	35	13	22	6	16	15
65-70 ...	16	18	20	19	14	6	8	7	8	4
70 and over	16	13	6	11	17	9	9	7	10	7
Total ...	570	559	481	558	546	420	466	406	439	414

For the year 1924, the average age of those who died from phthisis was 42 years for males and 34·9 years for females.

The deaths from phthisis in 1924 numbered 960—546 being of males and 414 of females—and equalled a rate of 585 per million of the population, as compared with rates of 620 in the previous year, 565 in 1922, 667 in 1921, 658 in 1920, 739 in 1919, 701 in 1918, 677 in 1917, 743 in 1916, 661 in 1915, 724 in 1914, 755 in 1913, 855 in 1908-12, and 1,365 in 1890-92. In England, Scotland, Northern Ireland, and the Irish Free State in 1923, the deaths from this cause were 836, 820, 1,200 and 1,113 per million of their respective populations. The rates for Victoria are more fully shown in the following table, which gives the mortality per 10,000 of each sex, in age groups, at six census periods:—

DEATH RATES IN VICTORIA FROM PHTHISIS IN AGE GROUPS AT SIX CENSUS PERIODS.

Age Group.	Annual Mortality from Phthisis per 10,000 of Sex.					
	1870-72.	1880-82.	1890-92.	1900-02.	1910-12.	1920-22.
<i>Males.</i>						
0 to 15 ...	1·22	1·74	·90	·38	·46	·42
15 " 20 ...	5·71	6·88	5·41	5·06	3·71	2·67
20 " 25 ...	18·75	21·19	18·29	14·35	8·45	7·88
25 " 35 ...	22·21	30·33	23·70	20·31	13·11	9·70
35 " 45 ...	21·83	25·11	28·28	22·07	15·63	12·43
45 " 55 ...	22·24	28·65	31·17	25·05	18·07	13·94
55 " 65 ...	27·86	31·41	36·48	35·75	18·88	13·03
65 and upwards ...	19·56	18·08	25·40	31·07	13·55	8·65
All Ages ...	12·89	15·33	15·73	13·51	8·98	7·11
<i>Females.</i>						
0 to 15 ...	·98	1·76	1·43	·93	·97	·38
15 " 20 ...	12·37	12·50	9·51	8·18	7·62	4·84
20 " 25 ...	19·28	21·00	18·49	12·79	12·68	10·20
25 " 35 ...	22·02	26·56	21·77	18·15	14·03	10·00
35 " 45 ...	21·65	24·06	22·53	17·74	11·51	9·15
45 " 55 ...	19·60	20·72	16·13	14·41	8·18	5·91
55 " 65 ...	10·51	14·26	12·35	12·52	7·47	4·96
65 and upwards ...	12·61	13·12	8·25	8·18	5·29	3·94
All Ages ...	10·62	12·75	11·51	9·72	7·61	5·55

A comparison of the mortalities from pulmonary tuberculosis at the census periods 1910-12 and 1920-22 shows that lower death rates obtained in each age group in 1920-22 than in 1910-12, and that the improvement was greater among females than males. By combining the death rates from pulmonary tuberculosis, as shown above, with those from other forms of tubercular disease, given in a subsequent page, it appears that every section of the community

experienced relief from tubercular diseases in 1920-22 as compared with the previous census period.

The distribution of tuberculous mortality shows that certain urban centres—particularly Bendigo and suburbs—furnish considerably higher death rates than the rural portions of the State. The tubercular death rate among miners is considerably in excess of that among farmers and graziers, and, as the residents of Bendigo and suburbs are largely engaged in mining occupations, while most persons living in rural districts are associated with the farming and grazing industries, the distribution of callings accounts in a large measure for the disparity in the mortality rates from this cause in the divisions of the State referred to. On the average of the last five years the tubercular death rate of Bendigo exceeded the rates of Ballarat and Melbourne by 68 and 71 per cent. respectively. The rates in these localities from phthisis and other tubercular diseases are given in the appended table for the periods 1891-1900, 1901-05, and 1906-10, and each of the last fourteen years:—

DEATH RATES FROM TUBERCULAR DISEASES IN MELBOURNE, BALLARAT, AND BENDIGO, 1891 TO 1924.

Period.	Deaths per 10,000 of the Population.								
	Phthisis.			Other Tubercular Diseases.			All Tubercular Diseases.		
	Melbourne and Suburbs.	Ballarat and Suburbs.	Bendigo and Suburbs.	Melbourne and Suburbs.	Ballarat and Suburbs.	Bendigo and Suburbs.	Melbourne and Suburbs.	Ballarat and Suburbs.	Bendigo and Suburbs.
	Melbourne and Suburbs.	Ballarat and Suburbs.	Bendigo and Suburbs.	Melbourne and Suburbs.	Ballarat and Suburbs.	Bendigo and Suburbs.	Melbourne and Suburbs.	Ballarat and Suburbs.	Bendigo and Suburbs.
1891-1900 ..	16.7	17.1	24.1	4.7	3.5	4.0	21.4	20.6	28.1
1901-05 ..	13.9	15.3	22.7	4.2	4.0	4.7	18.1	19.3	27.4
1906-10 ..	10.8	11.5	21.2	3.0	2.1	2.0	13.8	13.6	23.2
1911 ..	9.9	9.4	19.5	2.6	3.3	2.5	12.5	12.7	22.0
1912 ..	10.0	10.0	17.7	2.0	1.7	2.1	12.0	11.7	19.8
1913 ..	8.8	10.9	20.0	2.2	2.8	2.3	11.0	13.7	22.3
1914 ..	8.9	11.2	11.8	2.0	.9	1.0	10.9	12.1	12.8
1915 ..	7.7	10.2	13.6	1.7	2.1	2.4	9.4	12.3	16.0
1916 ..	8.6	14.3	14.2	1.8	1.5	1.4	10.4	15.8	15.6
1917 ..	7.9	10.9	16.8	2.2	1.7	2.2	10.1	12.6	19.0
1918 ..	8.3	9.2	17.4	1.8	1.3	3.1	10.1	10.5	20.5
1919 ..	8.7	10.8	14.7	1.7	1.0	2.0	10.4	11.8	16.7
1920 ..	7.9	10.6	17.1	1.9	2.0	1.2	9.8	12.6	18.3
1921 ..	8.1	7.0	14.2	1.9	1.3	2.1	10.0	8.3	16.3
1922 ..	6.7	8.1	11.4	1.5	.3	2.7	8.2	8.4	14.1
1923 ..	6.9	7.3	9.9	1.4	2.3	2.1	8.3	9.6	12.0
1924 ..	6.5	5.4	12.8	1.4	.8	2.1	7.9	6.2	14.9

**Prevalence
of phthisis in
different
areas.**

Relatively to population cases of pulmonary tuberculosis are fewer in country districts than in urban areas. The cases reported during each of the last five years in five divisions of the State, and their proportions to the populations of these divisions for the period 1910-19 and the years 1923 and 1924 are given in the subjoined table :—

PHTHISIS IN DIFFERENT AREAS.

Area.	Reported Cases of Pulmonary Tuberculosis.					Annual Cases per 10,000 of Population.		
	1920.	1921.	1922.	1923.	1924.	1910-19.	1923.	1924.
Greater Melbourne ..	653	878	783	750	716	13·9	9·0	8·2
Ballarat and Suburbs	21	36	31	27	20	12·8	6·8	4·9
Bendigo and Suburbs	21	45	52	47	48	18·0	14·0	14·3
Geelong and Suburbs	16	19	10	19	24	7·9	5·1	6·4
Rest of the State ..	211	324	282	245	252	5·8	3·7	3·8
Whole State ..	922	1,302	1,158	1,088	1,060	10·4	6·8	6·5

**Tubercular
diseases
(phthisis
excepted).**

In 1924 there were in Victoria 209 deaths from tubercular diseases (excluding phthisis), which corresponded to a rate of 127 per million, as compared with rates of 123 in the previous year, 120 in 1922, 137 in 1921, 145 in 1920, 126 in 1919, 144 in 1918, 163 in 1917, 136 in 1916, 135 in 1915, 140 in 1914, 156 in 1913, 182 in 1908-12, and 379 in 1890-92. In England, Scotland, Northern Ireland, and the Irish Free State, in 1923, the deaths from similar causes numbered 226, 360, 394, and 298 per million of their respective populations. The death rates in Victoria for various age groups are shown in the following table for five census periods :—

DEATH RATES FROM TUBERCULAR DISEASES (PHTHISIS EXCEPTED) IN AGE GROUPS.

Age Group.	Deaths per 10,000 of each Sex.				
	1880-82.	1890-92.	1900-02.	1910-12.	1920-22.
<i>Males.</i>					
0-15 ...	7.98	10.36	5.64	2.75	2.00
15-20 ...	.81	1.17	1.12	1.12	.83
20-25 ...	1.23	.89	1.77	1.23	1.55
25-35 ...	.66	.84	1.91	1.71	1.61
35-45 ...	.88	.77	1.39	1.38	1.15
45-55 ...	.85	.67	1.64	.82	1.17
55-65 ...	1.07	.78	2.40	1.29	1.06
65 and over	2.36	.56	1.17	.59	1.07
All ages	3.55	4.02	2.99	1.70	1.48
<i>Females.</i>					
0-15 ...	7.28	8.43	5.33	2.12	1.57
15-20 ...	1.30	1.27	1.95	2.34	1.13
20-25 ...	.69	1.23	2.09	2.59	1.73
25-35 ...	.41	.88	1.98	1.81	1.18
35-45 ...	.70	.42	1.77	1.33	.78
45-55 ...	.67	.34	1.01	.93	1.01
55-65 ...	.62	.69	.71	1.11	.70
65 and over	1.19	.64	.71	.29	.86
All ages	3.39	3.58	2.91	1.76	1.21

As compared with the period 1910-12 the proportion of persons under 15 years of age who died from tubercular diseases (excluding phthisis) during 1920-22 represented a decline of 27 per cent. for males and of 26 per cent. for females.

**Tubercular
diseases—
Deaths of
recent arrivals.**

The experience of recent years shows that the tubercular death rate in Victoria is but slightly affected by the arrival from beyond Australia of persons suffering from tubercular diseases. Only six of those who died in 1924 had been born outside and resident less than one year in Australia, and 22 had resided in the continent for a shorter period than five years.

**Cancer—
Deaths at
various ages.**

The numbers dying from cancer in different age groups in each of the last five years are given below :—

DEATHS FROM CANCER AT VARIOUS AGES.

Age Group.	Males.					Females.				
	1920.	1921.	1922.	1923.	1924.	1920.	1921.	1922.	1923.	1924.
0-15	4	7	6	3	5	7	5	2	3	1
15-25	4	7	7	3	9	3	3	3	7	5
25-35	9	7	12	12	9	16	21	14	12	15
35-45	31	33	31	38	44	62	65	75	73	67
45-55	118	111	105	110	127	139	164	173	193	159
55-65	240	243	278	252	263	194	223	224	236	228
65-75	162	185	219	238	245	159	168	164	210	204
75-85	83	84	103	83	106	83	103	97	109	103
85 and over ..	27	18	21	25	17	25	20	32	21	33
Total	678	695	782	764	825	688	772	784	864	815

The widely different social and economic effects produced by the prevalence of and deaths from the two important diseases, cancer and phthisis, are evidenced by the ages of their victims. For the year 1924 the average age of those who died from cancer was 62·7 years for males and 61·7 years for females, while the corresponding averages for phthisis were 42 years for males and 34·9 years for females.

**Cancer—
Death rates.** Deaths from cancer in 1924 numbered 1,640, and represented a death rate of 999 per million of the whole population, as compared with rates of 1013, in the previous year, 997 in 1922, 954 in 1921, 908 in 1920, 870 in 1919, 942 in 1918, 925 in 1917, 921 in 1916, 812 in 1915, 830 in 1914, 838 in 1913, 833 in 1908-12, 8976.—10

and 584 in 1890-92. In England, Scotland, Northern Ireland, and the Irish Free State, in 1923, the deaths per million of population from this cause were 1,267, 1,300, 1,068, and 863 respectively.

**Cancer—
Death Rates
at different
ages.**

Cancer death rates, computed in relation to the general population in earlier and later periods, are not fairly comparable owing to the changed age distribution of the people. A more accurate mortality rate is obtained by comparing the deaths with the number of persons in the community of the same sex, in age groups. This has been done for four census periods, when the numbers of the people in age groups were accurately known, and the results are given in the appended table:—

DEATH RATES FROM CANCER IN AGE GROUPS.

Age Group.	Deaths from Cancer per 10,000 of each Sex.			
	1890-92.	1900-02.	1910-12.	1920-22.
<i>Males.</i>				
Under 5 ...	·18	·30	·73	·46
5 to 10 ...	·10	·42	·25	·13
10 " 15 ...	·11	·20	·16	·14
15 " 20 ...	·17	·22	·15	·30
20 " 25 ...	·32	·33	·71	·64
25 " 35 ...	·81	1·26	·96	·76
35 " 45 ...	4·29	3·69	3·16	3·31
45 " 55 ...	14·83	14·14	16·03	13·94
55 " 65 ...	31·92	36·00	36·36	40·46
65 " 75 ...	52·75	59·04	74·15	78·21
75 and over	53·55	74·04	88·40	110·12
All ages	6·16	7·52	8·50	9·52
<i>Females.</i>				
Under 5 ...	·09	·26	·19	·39
5 to 10 ...	·10	·04	·10	·17
10 " 15 ...	·06	..	·27	·05
15 " 20 ...	·12	·28	·44	·15
20 " 25 ...	·22	·23	·41	·30
25 " 35 ...	1·68	1·61	1·39	1·28
35 " 45 ...	7·43	6·05	7·26	6·61
45 " 55 ...	18·00	18·13	17·87	19·14
55 " 65 ...	31·79	33·05	38·03	34·48
65 " 75 ...	53·96	51·18	61·66	33·05
75 and over	49·55	62·70	86·19	92·86
All ages	5·57	6·64	8·76	9·63

Deaths from cancer occur at all age periods, but the rates in the foregoing table show that it is essentially a disease of later life, increasing rapidly in the groups past middle age, and reaching a maximum

mortality rate in the oldest age group. From the figures for the periods 1910-12 and 1920-22 it will be seen that there was in the later period a considerable increase in the death rate from cancer.

Seat of cancer.

The following table shows the seat of cancer in persons who died from this disease in 1924 :—

SEAT OF CANCER.

Seat of Disease.	Males.	Females.	Total.
Cancer of the buccal cavity (mouth, &c.) ..	86	11	97
„ the stomach and liver ...	342	218	560
„ the peritoneum, the intestines, and the rectum ...	134	108	242
„ the female genital organs ...	...	161	161
„ the breast ...	...	136	136
„ the skin ...	35	27	62
„ other and unspecified organs ...	228	154	382
Total Deaths ...	825	815	1,640

Thirty-four per cent. of the persons who died from cancer were affected in the stomach or liver. Of the females who died from the disease 36 per cent. were affected in the genital organs or the breast.

Senile decay. During the year 1924, the deaths of 601 men and 664 women were ascribed to senile decay. The deaths at ages 65 and over from all causes during the year numbered 6,090—3,121 of men and 2,969 of women.

Accidental violence.

Death rates from accidental violence have been lower in late years than in earlier periods, a result that is chiefly due to the lighter mortality rate from accidental drowning, the smaller proportion of the population engaged in country occupations, which are generally of a more hazardous nature than those in towns, and the increasing proportion of females in the community.

In 1924, 606 male and 191 female deaths were attributed to accidents and negligence, which represented a rate of 485 per million of the population. This proportion was 13·6 per cent. above the average rate—427—for the previous five years, and 47 per cent. below the rate—811—for 1890-92. The numbers of deaths from various accidents in 1924 are given in the appended table :—

DEATHS FROM ACCIDENTAL VIOLENCE, 1924.

Nature or Place of Accident.	Males.	Females.	Total.
Poisoning by Food	5	3	8
Snake Bite .. .. .	..	1	1
Other Acute Poisonings	15	11	26
Burns (including Conflagrations)	36	37	73
Absorption of Poisonous Gases	8	2	10
Accidental Mechanical Suffocation	11	6	17
Suffocation in bed (infants)	4	4	8
Drowning	87	35	122
Firearms	25	1	26
Falls	46	6	52
In Mines and Quarries	6	1	7
Machines	8	..	8
Vehicular Accidents—			
On Railways	54	5	59
Motor Car	74	38	112
Motor Cycle	14	2	16
Motor Lorry	7	..	7
Aeroplane .. .. .	..	..	..
Bicycle	3	..	3
Tram Car	13	3	16
Vehicle drawn by Horses	23	5	28
Vehicle, other or undefined	4	..	4
Injuries by Animals	12	1	13
Effects of Heat	4	5	9
Excessive Cold	2	..	2
Electricity	10	..	10
Lightning	1	1	2
Fractures, Unspecified	54	19	73
Other Violence	80	5	85
Total	606	191	797

On the average of the last three years the female mortality rate from accidents was 29 per cent. of the rate for males.

Fatal accidents
among males
at different
ages.

The mortality rate from accidents is only one-half as great among males aged 15 to 45 as among men over age 45. The deaths per 10,000 males at certain ages from drowning and other accidents, for the period 1920-22, were as follows:—

DEATH RATES FROM ACCIDENTS—MALES, 1920-22.

	Accidental Deaths per 10,000 Males Aged—							
	15-20.	20-25.	25-35.	35-45.	45-55.	55-65.	65 and over.	15 and upwards.
Drowning ..	1·92	1·13	1·06	1·11	1·46	1·91	2·43	1·44
Other Accidents ..	3·43	4·34	4·91	5·26	6·05	8·24	14·38	5·91
Total Accidents ..	5·35	5·47	5·97	6·37	7·51	10·15	16·81	7·35

For men aged 20 to 35 the death rate from accidental violence is about one-third of that for men over age 65 and slightly greater than one-half of the rate for those aged 55 to 65.

Occupations
of men
dying from
accidents.

During the year 1924, 485 males aged seventeen years and upwards died from the results of accidents. The numbers for the different occupations were as follows:—

Occupation.	Deaths from Accidents, 1924.	Occupation.	Deaths from Accidents, 1924.
Labourer (undefined) ..	92	Plasterer	3
Farming, pastoral.. ..	71	Plumber	3
Railway employee.. ..	31	Printer	3
Clerical	22	Traveller	3
Carter, carrier, driver ..	16	Artist	2
Carpenter	14	Builder	2
Gardener,	10	Bricklayer	2
Boot trade	9	Brickwork's employee ..	2
Seaman, shipping	9	Canvasser	2
Blacksmith	8	Chemist	2
Engineering	8	Cold storage employee ..	2
Miner, quarryman	8	Dealer	2
Salesman	6	Engine driver	2
Watchman, etc.	6	Fruiterer	2
Jockey	5	Grocer	2
Merchant.. ..	5	Horse trainer	2
Painter	5	Jeweller	2
Sawyer	5	Liftman	2
Liquor trade	4	Maltster	2
Contractor	4	Manager	2
Electrician	4	Military	2
Motor trade	4	Orchardist	2
Wharf labourer, stevedore ..	4	Teacher	2
Butcher	3	Tramway employee	2
Cook	3	Wood carter, cutter	2
Doctor	3	Woolclasser	2
Insurance inspector	3	Other (specified)	34
Iron worker	3	Unspecified	24
Millhand	3		
Mining manager	3	Total	485

Suicide.

In the year 1924, 96 males and 22 females took their own lives. The deaths represented a rate of 72 per million of the population, as compared with rates of 78 in the preceding year, 81 in 1922, 99 in 1921, 95 in 1920, 89 in 1919, 72 in 1918, 88 in 1917, 83 in 1916, 105 in 1915, 90 in 1914, 103 in 1913, 102 in 1908-12, and 109 in 1890-92. A much lower rate from suicide obtains among females than males, the rate for the former being slightly less than one-fourth of that for the latter on the average of the last five years.

Homicide.

The deaths ascribed to homicide in 1924 numbered 18, of which 6 were of males and 12 of females. These represented a rate of 11 per million of the population, as against rates of 13 in 1923, 15 in 1922, 14 in 1921, 12 in 1920, 18 in 1919, 13 in 1918 and 1917, 14 in 1916, 17 in 1915, 16 in 1914, 18 in 1913, and 19 in 1908-12.

Deaths of married women in childbed.

The death rate of women in childbed varies considerably at different ages, and is less at younger than at older age periods. The number of deaths of married mothers in childbed, and the death rates in various age groups are shown for the decade 1906-15 and the year 1924 in the following table:—

DEATH RATES OF MARRIED MOTHERS IN CHILDBED IN AGE GROUPS, 1906-1915 AND 1924.

Age Group.	Married Mothers.			
	Deaths.		Deaths per 1,000 Confinements.	
	1906-15.	1924.	1906-15.	1924.
Under 20 years	23	3	2·71	2·71
20 to 25 „	184	25	2·85	3·50
25 „ 30 „	326	41	3·60	3·99
30 „ 35 „	334	40	4·59	4·64
35 „ 40 „	346	38	6·86	7·45
40 years and over	156	13	6·90	7·00

The experience of the ten years 1906-15 showed that for the age period 35 years and upwards the deaths of mothers in childbed were 69 per 10,000, as against 37 per 10,000 for those under 35 years of age. For the same term of years the number of deaths per 1,000 married women of all ages in first confinements was 5·57, as against an average of 4·04 for other confinements.

Deaths in
childbed.

The death rate of women in childbed is usually ascertained by comparing the number of deaths of parturient women with the total number of births. The proportions for each of the last nine years, and the averages of previous periods back to 1871 are given below :—

DEATHS OF MOTHERS (MARRIED AND SINGLE) TO EVERY
10,000 CHILDREN BORN ALIVE.

Period.	Number of Mothers who Died Annually of—			Deaths of Mothers to every 10,000 Children Born Alive.
	Puerperal Diseases or Accidents. (Excluding Sep- ticæmia.)	Puerperal Septicæmia.	Total.	
1871-80 ..	127	46	173	64·38
1881-90 ..	121	64	185	59·19
1891-1900 ..	117	66	183	56·01
1901-05 ..	126	58	184	60·92
1906-10 ..	101	46	147	47·17
1911-15 ..	96	58	154	43·55
1916 ..	75	55	130	37·97
1917 ..	89	45	134	40·56
1918 ..	64	43	107	33·86
1919 ..	95	39	134	42·38
1920 ..	132	62	194	53·57
1921 ..	105	58	163	45·80
1922 ..	91	31	122	33·62
1923 ..	79	29	108	30·11
1924 ..	120	56	176	48·70

It will be seen that the death rate of women in childbed has been much less in recent than in earlier periods. The deaths of mothers per 10,000 children born alive were 42·4 in 1920-24, as compared with 43·5 in 1911-15, 47·2 in 1906-10, and 60·9 in 1901-05.

**Puerperal
septicæmia.**

In 1924 there were 56 deaths of married and unmarried mothers from puerperal septicæmia, which corresponded to a death rate of 15·5 per 10,000 births, as against 8·1 in 1923, 8·5 in 1922, 16·3 in 1921, 17·1 in 1920, 12·3 in 1919, 13·6 in 1918 and 1917, 16·1 in 1916, 11·4 in 1915, 16·8 in 1914, 18·1 in 1913, 16·0 in 1908-12, and 18·1 in 1901-07.

**Medical
Attendance at
Confinement.**

With a view to ascertaining the effect of the passing of the Commonwealth Maternity Allowance Act 1912 on the number of mothers who availed themselves of medical attention in confinement, the birth registration records for the years 1911, 1918, and 1924 have been examined, and the proportions so attended have been ascertained for the metropolitan area, the rest of the State, and the whole State.

**MEDICAL ATTENTION OBTAINED AT CONFINEMENTS,
PROPORTION OF TOTAL CONFINEMENTS, 1911, 1918,
AND 1924.**

Year.				Metropolitan Area.	Rest of the State.	Total State.
				per cent.	per cent.	per cent.
1911	..	..	..	73	65	68
1918	..	..	..	81	77	79
1924	..	..	..	87	90	89

NOTE.—Stillbirths and abortions have not been taken into consideration.

The above figures give evidence of the beneficial effects of the Act, especially in the country areas, where the proportion of births medically attended has risen from 65 per cent. in 1911 to 90 per cent. in 1924. It will be observed that, in 1924, the proportion for the Rest of the State exceeded that for the Metropolitan area.

In the three years mentioned there were 11, 12, and 9 births respectively registered where no one was shown as being in attendance at birth, but, in the majority of these cases, the children were foundlings.

NATURAL INCREASE.

Natural
increase per
1,000 of popu-
lation in
Australasia.

The natural increase, *i.e.*, the excess of births over deaths, per 1,000 of the population, in the various Australian States and New Zealand, for the periods 1902-06, 1907-11 and 1912-16, and for each of the last eight years, is shown in the following table :—

NATURAL INCREASE PER 1,000 OF THE POPULATION,
AUSTRALIAN STATES AND NEW ZEALAND.

Period.	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1902-06	12·30	15·76	15·41	13·28	18·04	18·12	14·68	16·94
1907-11	13·05	17·45	17·03	15·54	18·13	18·85	16·01	17·07
1912-16	13·72	18·04	18·51	17·21	18·65	19·62	16·82	16·70
1917	13·09	18·13	19·37	15·74	16·71	18·57	16·56	16·08
1918	11·53	16·42	17·72	15·43	13·88	17·54	15·01	8·60
1919	8·31	11·10	13·58	11·92	10·47	15·21	10·84	12·03
1920	12·82	15·97	16·47	14·27	14·45	17·60	14·95	15·10
1921	12·64	16·43	17·25	14·05	12·99	16·67	15·04	14·61
1922	13·45	16·76	16·39	14·60	14·62	17·78	15·47	15·04
1923	11·60	15·08	15·06	13·01	14·14	16·34	13·88	12·91
1924	11·96	14·76	15·00	12·89	14·01	15·18	13·77	13·28
Mean 1920-24	12·49	15·80	16·03	13·72	14·04	16·71	14·62	14·19

The smallness of the natural increase in 1919 was very largely due to a heavy mortality rate from influenza in that year. The mean increase in the Australian States for the period 1920-24 was 14·62 per 1,000 of population, which is probably greater than will prevail when the age constitution of the people becomes similar to that of old settled countries. At present the proportion of elderly people is smaller than in those countries, and, partly as a

consequence of this, the death rate is lower. The Victorian death rates are below those of England and Wales at nearly all periods of life. The Australian annual rate of increase due to excess of births over deaths—14·62—would enable a population to double itself in 48 years, while, at the Victorian rate of 12·49 per 1,000 of population, a period of 56 years would be required. In England and Wales in 1924 the excess of births over deaths was 6·6 per 1,000 of population.
