

## 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 *primâ 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.

As evidence of the extent by which the information in the records is availed of, the number of transactions which took place in 1925 was 35,192, yielding £4,477 revenue. Included in the above number were 3,704 free ordinary searches and 344 free certificates.

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—  
Numbers and  
Rates.

Marriages in Victoria in 1925 numbered 13,370. This was the third highest number for one year in the history of the State, being 1,528 less than the greatest number previously recorded—that for 1920.

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 it affords a ready and approximate comparison between years not widely separated.

The numbers and rates relating to Victoria are given in the following table for different periods since 1879 :—

#### MARRIAGES IN VICTORIA—NUMBERS AND RATES, 1880 TO 1925.

Period.	Average Annual Number of Marriages.	Rate per 1,000 of Mean Population.	Period.	Average Annual Number of Marriages.	Rate per 1,000 of Mean Population.
1880-84..	6,296	7·07	1905-09..	9,209	7·36
1885-89..	8,208	8·04	1910-14..	11,244	8·29
1890-94..	7,945	6·88	1915-19..	10,908	7·62
1895-99..	7,627	6·44	1920-24..	13,598	8·64
1900-04..	8,201	6·78	1925 ..	13,370	8·00

The highest number of marriages in the history of the State, and also the highest rate per 1,000 of the population, were recorded in 1920. This was mainly due to the marriages of a large number of returned soldiers who had settled down to ordinary civilian life.

#### Marriage rates in Australasia.

The subjoined statement shows the marriage rate per 1,000 of the population in the various Australian States, the Commonwealth of Australia, and New Zealand, in quinquennial periods for the years 1910 to 1924, and for the year 1925 :—

#### MARRIAGES PER 1,000 OF MEAN POPULATION IN AUSTRALASIA, 1910 TO 1925.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1910-14	8·29	9·17	8·54	9·38	8·22	7·94	8·72	8·51
1915-19	7·62	7·96	7·59	7·94	6·62	6·90	7·75	7·30
1920-24	8·64	8·55	7·80	8·53	7·60	7·93	8·38	8·44
1925 ..	8·00	8·14	7·60	7·82	7·46	7·05	7·91	7·85

The marriage rate in England and Wales in 1925 was 7·6.

The marriages in Australia for 1925 numbered 46,899, as against 45,869 in 1924, 44,541 in 1923, 44,731 in 1922, 46,869 in 1921, and 51,552 in 1920. Of the total for 1925, 13,370 took place in Victoria, 18,522 in New South Wales, 6,471 in Queensland, 4,255 in South Australia, 2,746 in Western Australia, 1,504 in Tasmania, 20 in the Northern Territory, and 11 in the Federal Capital Territory.

**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-incident 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 marriageable males in Australasia.**

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
Anstralia .. .. .	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 1925 are shown in combination for various groups in the table which follows:—

AGES OF BRIDEGROOMS AND BRIDES IN COMBINATION  
IN VICTORIA, 1925.

Ages of Bridegrooms.	Ages of Brides.														Total Bridegrooms.				
	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.
16	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	3
17	...	...	1	6	6	2	3	...	2	...	...	...	...	...	...	...	...	...	20
18	...	4	11	14	25	13	8	...	9	...	...	...	...	...	...	...	...	...	85
19	...	...	9	24	42	47	20	35	5	...	...	...	...	...	...	...	...	...	182
20	1	3	8	29	38	57	36	96	12	...	...	...	...	...	...	...	...	...	232
21 to 25	3	8	37	106	262	331	351	1,995	456	66	10	1	...	...	...	...	...	...	3,626
25 to 30	...	4	13	54	100	150	206	1,865	1,680	341	67	9	5	2	...	...	...	...	4,496
30 to 35	...	1	9	4	18	26	55	554	872	515	148	27	9	1	...	...	...	...	2,239
35 to 40	...	...	...	1	4	3	7	6	134	315	303	101	51	10	4	...	...	...	1,039
40 to 45	...	...	...	...	2	1	6	51	101	136	127	90	23	10	1	1	...	...	549
45 to 50	...	1	...	1	...	...	1	7	32	58	80	77	47	12	4	...	...	...	320
50 to 55	...	...	...	...	...	1	...	4	11	39	39	52	35	24	16	5	...	...	226
55 to 60	...	...	...	...	...	...	...	2	3	17	18	24	30	23	14	5	2	...	138
60 to 65	...	...	...	...	...	...	...	...	5	3	9	12	15	9	4	4	1	...	86
65 to 70	...	...	...	...	...	...	...	...	...	1	6	5	8	5	4	4	...	...	41
70 to 75	...	...	...	...	...	...	...	...	...	1	3	3	...	5	4	6	2	3	27
75 and over	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	2	1	4	11
Total Brides	4	22	89	242	496	636	693	4,754	3,493	1,482	709	351	192	104	54	28	13	8	13,370

Although age inequalities among contracting parties were relatively few, they were striking in degree. Thus four men between 45 and 55 married women under 21, while seventeen women between 40 and 55

were married to men who were under 30 years. The great majority of the parties were, however, of suitable ages. Of every 1,000 men married during the year, 702 were older and 194 younger than their brides, and 104 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 1925:—

PROPORTIONS OF MALES AND FEMALES MARRYING AT DIFFERENT AGES, 1881-90, 1911-20, AND 1925.

Age Group.	Proportion per 1,000 of total—					
	Bridegrooms.			Brides.		
	1881-90.	1911-20.	1925.	1881-90.	1911-20.	1925.
Under 15 ... ..	...	...	..	.15	.07	.30
15 to 16 ... ..	...	...	...	1.17	.75	1.65
16 to 17 ... ..	.03	.16	.22	6.53	3.79	6.66
17 to 18 ... ..	.29	.62	1.50	20.32	12.65	18.10
18 to 19 ... ..	1.46	3.81	6.36	42.94	29.53	37.10
19 to 20 ... ..	5.62	9.53	13.61	65.03	44.34	47.57
20 to 21 ... ..	15.19	16.82	21.09	73.84	54.41	51.83
21 to 25 ... ..	321.02	255.25	271.20	432.34	360.34	355.57
25 to 30 ... ..	365.48	356.68	336.28	223.83	286.34	261.26
30 to 35 ... ..	134.57	166.37	167.47	62.07	105.01	110.84
35 to 40 ... ..	58.29	84.52	77.71	29.53	50.44	53.03
40 to 45 ... ..	32.54	42.03	41.06	17.10	24.21	26.25
45 to 50 ... ..	24.77	28.21	23.94	12.23	15.13	14.36
50 to 55 ... ..	18.40	16.55	16.90	6.74	6.60	7.78
55 to 60 ... ..	11.49	9.65	10.32	3.40	3.29	4.04
60 and over ... ..	10.85	9.86	12.34	2.78	3.10	3.66
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 1925, 519 were under 25 years, and 261 were aged 25-30, as against 506 and 286 at corresponding ages in the years 1911 to 1920, and 642 and 224 in the years 1881 to 1890.

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 1925 the mean age at marriage of bachelors, 28.32, with that of divorced men, and of widowers—39.59 and 47.27 respectively. The average age of spinsters marrying was 25.67, as against 34.57 for divorced women and 41.23 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
1910-14 ... ..	25·76	29·25
1915-19 ... ..	25·97	29·40
1920-24 ... ..	25·92	29·20
1925 ... ..	25·75	29·00

The mean age of women under 45 who married in 1925 differed very slightly from the average of the previous five years. In Victoria in 1925 the mean marrying age of all brides was 26·59, and of all bridegrooms, 29·75.

Marriage records show that, of the persons married in Victoria during 1925, 87·7 per cent. were born in Australia, 10·0 per cent. in the United Kingdom, and 1·0 per cent. in other British Possessions, and that only small proportions, about 1·9 per cent. of the bridegrooms and ·7 per cent. of the brides, were natives of foreign countries. The numbers born in Australia and other countries are shown in the subjoined table for the years 1913 and 1925 :—

**Birth places of persons marrying.**

BIRTHPLACES OF PERSONS MARRIED, 1913 AND 1925.

Where Born.	Bridegrooms.		Brides.	
	1913.	1925.	1913.	1925.
Australia ... ..	9,628	11,389	10,274	12,069
New Zealand ... ..	155	110	82	80
England and Wales ... ..	972	1,154	644	808
Scotland ... ..	213	316	141	217
Ireland ... ..	126	109	83	70
Other British Possessions ... ..	40	44	24	38
Germany ... ..	46	21	19	5
Russia ... ..	17	14	3	8
Italy ... ..	15	51	12	27
United States ... ..	30	49	14	6
Other Foreign Countries ... ..	82	113	28	42
Total ... ..	11,324	13,370	11,324	13,370

**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 1925, however, the greatest proportion of marriages took place in the Spring, except in the years 1920 and 1925. The numbers celebrated in the different seasons in 1925 were—3,594 in the Autumn, 3,511 in the Spring, 3,201 in the Winter, and 3,064 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, 1871-1925.**

Conjugal Condition.	Percentage of total Marriages.					
	1871-80.	1881-90.	1891-1900.	1901-10.	1911-20.	1925.
Bachelors and Spinsters..	80·59	85·84	87·22	88·46	90·31	90·43
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	4·73
Widowers and Widows ..	4·56	3·27	2·48	2·18	1·73	1·74

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 1925, 65 were widowers and 48 were widows, as against 64 and 51 respectively in 1924, 65 and 47 in 1923, 71 and 55 in 1922, and 64 and 54 in 1921.

**The number of divorced persons re-married during 1925** was 475, which was 78 more than the number for the preceding year. Of the 132,928 persons married during the last five years, divorced persons numbered 1,987, or 1 in every 67 persons, as compared with 1 in every 98 in the preceding five-year period. The following are the numbers of divorced persons who have re-married since 1920 :—

**DIVORCED PERSONS RE-MARRYING, 1921 TO 1925.**

Year.	Males.	Females.	Total.
1921 .. .. .	188	165	353
1922 .. .. .	182	179	361
1923 .. .. .	209	192	401
1924 .. .. .	196	201	397
1925 .. .. .	238	237	475

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.

The proportions of bridegrooms and brides under 21 years of age are given in the subjoined table for the years 1921 to 1925 :—

Year.	Percentage under 21 years of age.	
	Bridegrooms.	Brides.
1921 .. ..	2·83	14·09
1922 .. ..	3·29	13·63
1923 .. ..	3·51	15·14
1924 .. ..	3·58	16·03
1925 .. ..	4·28	16·32

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 1924 and 1925, are shown in the following table:—

**MARRIAGES IN VARIOUS DENOMINATIONS.**

Denomination.	1924.		1925.	
	Number.	Percentage of Total Marriages.	Number.	Percentage of Total Marriages.
Church of England .. ..	3,863	29·06	3,790	28·35
Roman Catholic Church .. ..	2,461	18·51	2,461	18·41
Presbyterian Church .. ..	2,474	18·61	2,540	19·00
Methodist Church .. ..	1,830	13·76	1,885	14·10
Congregational Church .. ..	885	6·66	899	6·72
Baptist Church .. ..	597	4·49	631	4·72
Lutheran Church .. ..	63	·47	55	·41
Church of Christ .. ..	279	2·10	319	2·39
Salvation Army .. ..	43	·32	57	·42
Hebrew .. ..	59	·44	39	·29
Other Sects .. ..	84	·63	166	1·24
Registrars of Marriages .. ..	658	4·95	528	3·95
Total .. ..	13,296	100·00	13,370	100·00

Marriages by Anglican clergymen represented 28·35 per cent. of the total in 1925, as compared with 29·06 per cent. in 1924, 28·61 per cent. in 1923, 29·02 per cent. in 1922, 29·10 per cent. in 1921,

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.

**Civil marriages.** In 1925, 3·95 per cent., 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* 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 averages only about one-seventh of the proportion in England and Wales, and approximately one-fourth of the proportion in New Zealand.

**Registered clergymen.** The ministers qualified by registration to celebrate marriages in Victoria numbered 1,658 on 31st December, 1925. 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 ..	424	Ballarat Town Mission ..	1
Roman Catholic ..	342	New Church ..	2
Presbyterian ..	310	Greek Orthodox Church ..	2
Methodist ..	281	Unitarian ..	1
Congregational ..	62	International Bible Students' Association ..	1
Baptist ..	93	Latter Day Saints (Mormons) ..	1
Church of Christ ..	65	Open Brethren ..	3
Lutheran ..	24		
Salvation Army ..	30	Total Clergymen ..	1,658
Latter Day Saints (Re-organized) ..	3	Lay Registrars of Marriages ..	22
Seventh Day Adventist ..	8		
Catholic Apostolic ..	2	Grand Total ..	1,680
Free Christian ..	2		
Australian Church ..	1		

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.

**Births—  
Numbers and  
Rates.** The number of births registered in Victoria during the year 1925 was 35,922, of which 18,593 were of males and 17,329 of females. This was 217 less than the number recorded for the preceding year. Still births, which are excluded from both births and deaths, numbered 1,109, and corresponded to a ratio of 3·1 per 100 infants born alive in 1925. There were 1,073 male to every 1,000 female births in 1925, as compared with 1,049 in 1924, 1,073 in 1923, 1,068 in 1922, and 1,057 in 1921.

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 number of births and the birth rates in Victoria for different periods since 1879 :—

BIRTHS IN VICTORIA—NUMBERS AND RATES,  
1880 TO 1925.

Period.	Average Annual Number of Births.	Rate per 1,000 of Mean Population.	Period.	Average Annual Number of Births.	Rate per 1,000 of Mean Population.
1880-84..	27,286	30·64	1905-09..	30,994	24·76
1885-89..	32,941	32·27	1910-14..	34,500	25·42
1890-94..	36,945	31·99	1915-19..	33,101	23·13
1895-99..	31,675	26·76	1920-24..	36,022	22·89
1900-04..	30,316	25·08	1925 ..	35,922	21·49

The following statement shows the average annual number of births and the birth rates per 1,000 of the population of each State, the Commonwealth of Australia, and New Zealand, for the years 1910 to 1925 :—

BIRTHS PER 1,000 OF MEAN POPULATION IN AUSTRALASIA,  
1910 TO 1925.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1910-14	25·42	28·79	28·81	27·98	28·63	29·90	27·73	26·15
1915-19	23·13	26·64	27·86	25·51	25·21	27·78	25·89	24·37
1920-24	22·89	25·27	25·59	23·37	23·52	26·54	24·40	22·99
1925 ..	21·49	24·01	23·82	21·06	22·23	24·24	22·89	21·17

The birth rate in England and Wales in 1925 was 18·3.

The births in Australia were fewer by 2,191 in 1925 than in 1914, although in the intervening period the population had increased by 19·9 per cent. The number in 1925 was 135,792, as compared with 134,926 in 1924, 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 1925, 35,922 occurred in Victoria, 54,615 in New South Wales, 20,283 in Queensland, 11,457 in South Australia, 8,185 in Western Australia, 5,218 in Tasmania, 65 in the Northern Territory, and 47 in the Federal Capital Territory.

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.

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

The birth records of children born in wedlock show that, in Victoria, in 1925, 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 :—79·2 in Victoria ; 87·4 in Australia ; ·7 in New Zealand ; 7·7 in England and Wales ; 1·6 in Scotland ; ·9 in Ireland ; ·3 in other British Possessions ; and 1·4 in foreign countries. The corresponding percentages for mothers were :—Victoria, 81·0 ; Australia, 89·3 ; New Zealand, ·5 ; England and Wales, 7·1 ; Scotland, 1·6 ; Ireland, ·6 ; other British Possessions, ·3 ; and foreign countries, ·6.

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

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

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	33,379	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	..	..	..	..
1881	862,346	25,675	29.77	98.4	1.2307	1.0016	36.69	6.92
1891	1,140,405	35,853	31.44	105.8	1.1446	0.9493	34.39	2.95
1901	1,201,341	29,279	24.37	106.4	1.1382	1.0426	28.77	4.40
1911	1,315,551	31,080	23.63	106.0	1.1425	1.0383	27.89	4.26
1921	1,531,280	33,879	22.12	116.1	1.0431	1.0261	23.68	1.56

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 36, or 1 in every 9,147 legitimate births. There were 251 Chinese half-caste births (fathers only Chinese), or 1 in every 1,312 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 1925 were 33·39 and 30·27 years respectively, which were 4·39 and 4·52 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, 1925.

Father.		Mother.	
Age Group.	Proportion per 100 Births.	Age Group.	Proportion per 100 Births.
Under 20 ... ..	49	Under 20 ... ..	3·64
20 to 25 ... ..	10·70	20 to 25 ... ..	20·93
25 to 30 ... ..	25·32	25 to 30 ... ..	29·75
30 to 35 ... ..	26·71	30 to 35 ... ..	24·80
35 to 40 ... ..	19·18	35 to 40 ... ..	15·34
40 to 45 ... ..	10·15	40 to 45 ... ..	5·12
45 to 50 ... ..	4·87	45 and over ... ..	·42
50 and over ... ..	2·58		
Total ... ..	100·00	Total ... ..	100·00

It will be seen that, on the experience of 1925, 50·7 per cent. of the mothers were between ages 20 and 30, and 40·1 per cent. between ages 30 and 40. The proportions of fathers at these ages were 36·0 and 45·9 per cent. respectively. Of every 1,000 legitimate births, about 36 were due to mothers under 20 years, and about 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.

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. This practice has been adhered to, and in 1924 and 1925 the decrease was approximately 1,250 and 1,350 respectively. These numbers give a fair indication of the extent by 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, 1924, and 1925 :—

#### BIRTH RATES IN METROPOLITAN, OTHER URBAN, AND RURAL DISTRICTS, 1923, 1924, AND 1925.

Division.	Births per 1,000 of Mean Population.		
	1923.	1924.	1925.
Metropolitan District ..	21·10	20·90	19·93
Country Towns (other urban) ..	22·08	21·25	20·41
Rest of State .. ..	24·03	23·81	24·13
Total State .. ..	22·31	22·01	21·49

The appended statement shows, for the years 1923, 1924, and 1925 the number of births, and the births per 1,000 of the population in the metropolitan municipalities; also, the mean population in each municipality for the year 1925:—

**BIRTH RATES IN METROPOLITAN MUNICIPALITIES, 1923, 1924, AND 1925.**

Municipality.	Mean Population for 1925.	Number of Births.			Births per 1,000 of Mean Population.		
		1923.	1924.	1925.	1923.	1924.	1925.
Melbourne City .. .. .	101,780	2,011	1,843	1,766	19 '73	18 '08	17 '35
Brighton City .. .. .	25,900	482	479	523	20 '51	19 '21	20 '19
Brunswick City .. .. .	49,230	1,130	1,206	1,113	24 '26	25 '22	22 '61
Camberwell City .. .. .	34,690	632	746	833	22 '97	23 '96	24 '01
Caulfield City .. .. .	57,620	1,050	1,073	1,057	21 '35	19 '54	18 '34
Coburg City .. .. .	29,770	553	680	735	24 '50	25 '56	24 '69
Collingwood City .. .. .	33,950	687	726	706	20 '05	21 '29	20 '80
Essendon City .. .. .	39,750	833	876	833	22 '23	22 '62	20 '96
Fitzroy City .. .. .	34,330	805	719	661	23 '12	20 '79	19 '25
Footscray City .. .. .	42,750	1,022	960	992	26 '73	23 '41	23 '20
Hawthorn City .. .. .	31,730	562	559	534	18 '55	17 '92	16 '83
Kew City .. .. .	21,050	378	387	363	20 '26	19 '44	17 '24
Malvern City .. .. .	42,500	625	691	664	15 '89	16 '08	15 '62
Northcote City .. .. .	36,930	823	930	908	24 '98	26 '72	24 '59
Oakleigh Town .. .. .	*	235	226	*	34 '36	31 '22	*
Port Melbourne City .. .. .	13,150	305	291	276	23 '21	22 '13	20 '99
Prahran City .. .. .	51,540	954	878	888	18 '73	17 '17	17 '23
Preston Town .. .. .	17,250	380	501	567	32 '59	35 '11	32 '87
Richmond City .. .. .	43,650	898	946	890	20 '64	21 '68	20 '39
Sandringham City .. .. .	17,250	221	268	275	15 '79	17 '29	15 '94
South Melbourne City .. .. .	47,130	951	951	777	20 '24	20 '20	16 '49
St. Kilda City .. .. .	41,150	648	677	641	16 '12	16 '59	15 '58
Williamstown City .. .. .	22,730	499	490	525	24 '62	22 '78	23 '10
Remainder of Metropolis .. .. .	51,720	927	1,067	1,384	23 '74	25 '80	26 '76
Hospitals and Shipping .. .. .	11,360	..	..	..	..	..	..
Whole Metropolis .. .. .	898,910	17,611	18,170	17,911	21 '10	20 '90	19 '93

\* Included in "Remainder of Metropolis."

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, 1924, AND 1925.**

Town.	Population at end of 1925.	Number of Births.			Births per 1,000 of Population.		
		1923.	1924.	1925.	1923.	1924.	1925.
Ballarat and Suburbs .. .. .	40,990	785	790	708	19 '64	19 '46	17 '27
Bendigo and Suburbs .. .. .	33,700	653	634	614	19 '50	18 '85	18 '22
Geelong and Suburbs .. .. .	39,100	829	790	842	22 '35	20 '93	21 '53
Carrum .. .. .	6,500	133	125	127	22 '17	20 '16	19 '54
Castlemaine and Suburbs .. .. .	7,170	147	138	128	20 '50	19 '38	17 '85
Hamilton .. .. .	5,200	139	144	145	27 '20	28 '13	27 '88
Maryborough .. .. .	4,840	*	127	112	*	26 '29	23 '14
Mildura .. .. .	5,850	200	211	186	36 '04	37 '02	31 '79
Mordialloc .. .. .	7,220	120	152	160	17 '39	21 '17	22 '16
Stawell .. .. .	4,660	130	107	112	28 '26	23 '01	24 '08
Warmambool .. .. .	8,020	196	180	180	24 '65	22 '50	22 '44
Wonthaggi .. .. .	6,500	188	146	151	33 '57	24 '33	23 '23

\* 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.
1921 ... ..	408	3
1922 ... ..	394	8
1923 ... ..	412	4
1924 ... ..	378	3
1925 ... ..	393	3

On the average of the five years 1 mother in every 90 gave birth to twins, and 1 in every 8,466 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 1925 advantage was taken of these Acts, and of an Act (now repealed) passed in 1903, to legitimate 2,479 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, 121 in 1924 and 133 in 1925.

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 1925, the numbers of legitimations in the various States and New Zealand during that year were as follows :—Victoria, 8·7; New South Wales, 15·0; Queensland, 16·9; South Australia, 11·5; Western Australia, 25·1; Tasmania, 11·6; and New Zealand, 20·2.

**Illegitimate births in Victoria.**

The number of illegitimate births in Victoria during the year 1925 was 1,543, which represents a proportion of 4·30 to every 100 births registered, as against 4·59 in 1924, 4·37 in 1923, 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.

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.

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 1925, in the metropolitan area 1 birth in every 19, in other urban districts 1 in 23, and in the rural districts only 1 in 33 were registered as illegitimate. The corresponding rates for 1924 were 1 in 18, 1 in 21, and 1 in 32 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 year prior to the introduction of the above system, the proportions of illegitimate 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 1879 :—

**DEATHS IN EACH QUARTER, 1880 TO 1925.**

Period.	Annual Deaths.	Sex.		Quarter of Registration.				Death Rate per 1,000 of Mean Population.
		Males.	Females.	March.	June.	September.	December.	
1880-84..	12,820	7,324	5,496	3,512	3,167	3,013	3,128	14·40
1885-89..	16,200	9,307	6,893	4,591	3,912	3,689	4,008	15·87
1890-94..	16,886	9,716	7,170	4,643	4,108	3,977	4,158	14·62
1895-99..	16,350	9,227	7,123	4,324	3,957	3,808	4,261	13·81
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..	15,705	8,616	7,089	3,873	3,875	4,137	3,820	11·57
1915-19..	16,283	8,860	7,423	3,781	4,172	4,467	3,863	11·38
1920-24..	16,375	8,781	7,594	3,846	4,166	4,503	3,860	10·40
1925 ..	15,836	8,582	7,254	3,744	4,039	4,334	3,719	9·47

The number of deaths in 1925 was 15,836, which was 539 below the average of the preceding five years.

The deaths in Australia in 1925 numbered 54,567, as against 54,980 in 1924, 56,236 in 1923, 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 15,836 occurred in Victoria, 20,822 in New South Wales, 7,545 in Queensland, 4,979 in South Australia, 3,315 in Western Australia, 1,996 in Tasmania, 62 in the Northern Territory, and 12 in the Federal Capital Territory. The death rates per 1,000 of the population, for each of the Australian States, the Commonwealth of Australia, and New Zealand, are shown in the following statement for quinquennial periods 1910-24, and for 1925 :—

**DEATHS PER 1,000 OF MEAN POPULATION IN AUSTRALASIA, 1910 TO 1925.**

Period.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1910-14	11·57	10·41	10·30	10·30	10·02	10·55	10·70	9·35
1915-19	11·38	10·66	10·80	10·67	9·74	9·95	10·90	10·52
1920-24	10·40	9·50	9·56	9·66	9·48	9·82	9·79	8·98
1925 ..	9·47	9·16	8·86	9·15	9·00	9·35	9·20	8·29

The death rate in England and Wales in 1925 was 12·2.

The crude rate in Victoria is higher than in any other State, but this result is chiefly due to its containing a larger proportion of elderly persons, among whom the mortality rate is very high.

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 of each sex living in various age groups at the census of 1921 in each division of the Commonwealth, and those in a standard population, which has been adopted by statisticians as a standard for this purpose, are shown in the following table :—

PROPORTIONS LIVING IN FIVE AGE GROUPS IN A STANDARD POPULATION AND AUSTRALIA.

Age Group.	Proportion per 10,000 of Population living in—							
	Standard Population.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
			MALES.					
Under 5 years	601	517	578	611	557	535	602	562
5 to 25 ..	1,942	1,826	1,879	1,962	1,866	1,948	2,017	1,884
25 to 45 ..	1,318	1,431	1,559	1,585	1,509	1,527	1,336	1,512
45 to 65 ..	791	929	859	889	829	1,134	849	897
65 and over	258	226	227	231	253	184	236	228
Total ..	4,910	4,929	5,102	5,278	5,014	5,328	5,040	5,083
			FEMALES.					
Under 5 years	597	497	561	582	529	516	593	541
5 to 25 ..	1,959	1,833	1,869	1,921	1,857	1,912	1,990	1,872
25 to 45 ..	1,368	1,539	1,517	1,388	1,536	1,347	1,381	1,491
45 to 65 ..	856	948	747	661	806	756	760	798
65 and over	310	254	204	170	258	141	236	215
Total ..	5,090	5,071	4,898	4,722	4,986	4,672	4,960	4,917

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 25-45, and a relatively small number aged 65 and over. Among the Australian States, South



Australia and Western Australia have the highest and lowest proportions respectively of persons aged 65 years and upwards, Queensland and Western Australia a large excess of males over females, particularly at ages over 25, and Victoria an excess of females in each group, except those under 5 years—points which should be kept in view when comparing their crude death rates.

The differences shown in the preceding table in the age and sex 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 a standard population, distributed according to sex, into eleven age groups. In the preceding table, for the purpose of obtaining a readier comparison, the eleven groups have been reduced to five. Mortality indexes for each State, and detailed particulars for Victoria, for the undermentioned years, as compiled by the Commonwealth Statistician, are as follows:—

INDEX OF MORTALITY FOR AUSTRALIA, 1921-25.

Year.	Index of Mortality for—						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
1921	10·79	10·36	10·23	10·38	11·89	10·84	10·58
1922	9·85	9·79	10·15	9·39	10·91	9·81	9·89
1923	10·97	10·61	10·97	9·90	9·79	10·49	10·64
1924	10·31	10·31	9·90	9·50	10·82	10·43	10·20
1925	9·74	10·13	9·94	9·43	10·67	9·94	9·93

VICTORIA, 1921-25.

Year.	Crude Rates.			Standardized Rates.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
1921	11·43	9·63	10·52	11·57	10·04	10·79
1922	10·54	8·77	9·65	10·61	9·09	9·85
1923	11·46	9·98	10·71	11·56	10·38	10·97
1924	10·87	9·24	10·05	11·00	9·64	10·31
1925	10·32	8·64	9·47	10·45	9·04	9·74

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 1921 and 1922, two States had a higher

index of mortality than Victoria, in 1923, Queensland was the same, in 1924, Western Australia and Tasmania were higher, and New South Wales was the same, while, in 1925, with the exception of South Australia, Victoria's index of mortality was lower than the remainder.

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, *et seq.*, 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, 1924, and 1925:—

**DEATH RATES IN METROPOLITAN, OTHER URBAN,  
AND RURAL DISTRICTS, 1923, 1924, AND 1925.**

Division.	Deaths per 1,000 of Population.		
	1923.	1924.	1925.
Metropolitan District ..	11·28	10·49	9·71
Country Towns (other urban)..	12·46	11·27	10·69
Rest of State .. ..	9·48	9·09	8·79
Total State .. ..	10·71	10·05	9·47

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, 1924, and 1925:—

### DEATH RATES IN METROPOLITAN MUNICIPALITIES, 1923, 1924, AND 1925.

Municipality.	Mean Population for 1925.	Number of Deaths.			Deaths per 1,000 of Population.		
		1923.	1924.	1925.	1923.	1924.	1925.
Melbourne City .. ..	101,780	1,418	1,310	1,166	13·91	12·85	11·46
Brighton City .. ..	25,900	249	250	218	10·60	10·02	8·42
Brunswick City .. ..	49,230	534	503	495	11·46	10·50	10·05
Camberwell City .. ..	34,690	264	332	304	9·59	10·66	8·76
Caulfield City .. ..	57,620	402	477	457	8·17	8·82	7·93
Coburg City .. ..	29,770	227	229	218	10·06	8·61	7·32
Collingwood City .. ..	33,950	457	395	390	13·34	11·58	11·49
Essendon City .. ..	39,750	401	417	395	10·70	10·77	9·94
Fitzroy City .. ..	34,330	539	414	458	15·48	11·97	13·34
Footscray City .. ..	42,750	385	411	376	10·07	10·02	8·80
Hawthorn City .. ..	31,730	359	308	300	11·85	9·87	9·45
Malvern City .. ..	21,050	159	203	198	8·52	10·20	9·41
Northcote City .. ..	42,500	358	350	353	9·10	8·45	8·31
Oakleigh Town .. ..	36,930	309	333	366	9·38	9·57	9·91
Port Melbourne City .. ..	*	87	72	*	12·72	9·94	*
Prahran City .. ..	13,150	158	142	135	12·02	10·80	10·27
Preston Town .. ..	51,540	620	617	550	12·17	12·06	10·67
Richmond City .. ..	17,250	137	139	172	11·75	9·74	9·97
Sandringham City .. ..	43,650	561	471	464	12·90	10·80	10·63
South Melbourne City .. ..	17,250	111	122	131	7·93	7·87	7·59
St. Kilda City .. ..	47,130	585	542	483	12·45	11·51	10·25
Williamstown City .. ..	41,150	446	414	407	11·09	10·15	9·89
Remainder of Metropolis .. ..	22,730	240	236	208	11·84	10·97	9·15
Hospitals and Shipping .. ..	51,720	408	432	480	10·45	10·44	9·28
Hospitals and Shipping .. ..	11,360	..	..	..	..	..	..
Whole Metropolis .. ..	898,910	9,414	9,118	8,724	11·28	10·49	9·71

\* Included in "Remainder of Metropolis."

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 1925 were 11·20 per 1,000 in the former as against 8·45 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 in Greater Melbourne and in the remainder of the State. On the average of the years 1923-25, the deaths of metropolitan residents were in the ratio of 10·47 per 1,000 of population, as against a ratio of 9·62 for residents of the rest of the State. The apparent difference in favour of the country is ·85, 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 1·34 among country than among metropolitan residents.

**Decrease in Metropolitan death rate.**

In Greater Melbourne, in the decade 1916-25, there were 11·63 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 32,350 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 1916-25 with those for the decennium 1892-1901. The following are the rates :—

Cause of Death.	Deaths per 1,000 of Population.		
	1892-1901.	1916-25.	Decrease in 1916-25.
Pulmonary Tuberculosis ...	1·654	0·749	0·905
Other Tubercular Diseases ...	0·446	0·163	0·283
Typhoid Fever ...	0·293	0·020	0·273
Scarlet Fever ...	0·033	0·021	0·012
Measles ...	0·215	0·037	0·178
Diphtheria ...	0·196	0·118	0·078
Total ...	2·837	1·108	1·729

The figures show that the mortality from the six diseases mentioned declined by 61 per cent in 1916-25—the decline representing a rate of 1·73 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 4·13 per 1,000 of the population during the period mentioned.

The appended statement shows, for the years 1923, 1924, and 1925, the number of deaths, and the deaths per 1,000 of the population in the twelve principal country towns; also, the population of each at the end of 1925:—

#### DEATH RATES IN THE TWELVE PRINCIPAL COUNTRY TOWNS, 1923, 1924, AND 1925.

Town.	Popula- tion at end of 1925.	Number of Deaths.			Deaths per 1,000 of Population.		
		1923.	1924.	1925.	1923.	1924.	1925.
Ballarat and Suburbs ..	40,990	552	451	470	13·81	11·11	11·47
Bendigo and Suburbs ..	33,700	474	470	410	14·15	13·97	12·17
Geelong and Suburbs ..	39,100	394	394	410	10·62	10·44	10·48
Carrum ..	6,500	71	52	41	11·83	8·39	6·31
Castlemaine and Suburbs	7,170	69	78	68	9·62	10·96	9·48
Hamilton ..	5,200	73	66	58	14·29	12·89	11·15
Maryborough ..	4,840	*	61	58	*	12·63	11·98
Mildura ..	5,850	70	69	67	12·61	12·11	11·45
Mordialloc ..	7,220	68	56	69	9·86	7·80	9·56
Stawell ..	4,660	61	52	46	13·26	11·18	9·87
Warrnambool..	8,020	96	70	76	12·08	8·75	9·48
Wonthaggi ..	6,500	58	61	41	10·36	10·17	6·31

\* 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 1925 were as follows :—

PROPORTION OF DEATHS OF RESIDENTS OF CERTAIN  
AREAS OCCURRING IN HOSPITALS, 1925.

Area.	Percentage of Deaths of Residents occurring in Hospitals, 1925.	Area.	Percentage of Deaths of Residents occurring in Hospitals, 1925.
Melbourne City .. ..	39·4	Williamstown City .. ..	21·6
Brighton City .. ..	18·3	Remainder of Metropolis	22·3
Brunswick City .. ..	31·1	Ballarat .. ..	20·2
Camberwell City .. ..	13·5	Bendigo .. ..	22·0
Caulfield City .. ..	14·7	Geelong .. ..	25·9
Coburg City .. ..	25·7	Carrum .. ..	14·6
Collingwood City .. ..	38·5	Castlemaine .. ..	36·8
Essendon City .. ..	24·6	Hamilton .. ..	22·4
Fitzroy City .. ..	41·9	Maryborough .. ..	46·6
Footscray City .. ..	28·2	Mildura .. ..	50·7
Hawthorn City .. ..	17·0	Mordialloc .. ..	31·9
Kew City .. ..	17·7	Stawell .. ..	30·4
Malvern City .. ..	15·9	Warrnambool .. ..	40·8
Northcote City .. ..	34·7	Wonthaggi .. ..	46·3
Port Melbourne City .. ..	43·0		
Prahran City .. ..	29·5	Summary—	
Preston Town .. ..	29·6	Greater Melbourne .. ..	28·5
Richmond City .. ..	35·3	Twelve Country Towns	26·6
Sandringham City .. ..	22·9	Remainder of State .. ..	21·4
South Melbourne City .. ..	31·3	Whole State .. ..	25·9
St. Kilda City .. ..	20·6		

Of the total deaths in the State 25·9 per cent. occurred in public hospitals in 1925, as against 24·4 per cent. in 1924 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 1925, the percentage treated in public hospitals varied from 43·0 for Port Melbourne, 41·9 for Fitzroy, 39·4 for Melbourne City, 38·5 for Collingwood, and 35·3 for Richmond, to 17·7 for Kew, 17·0 for Hawthorn, 15·9 for Malvern, 14·7 for Caulfield, and 13·5 for Camberwell. For the whole metropolitan area the percentage was 28·5 as compared with 22·7 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 26 per cent. that given to people residing elsewhere.

Residents of Greater Melbourne who died in public hospitals in Victoria during 1925 numbered 2,483.

**Deaths in public institutions in Greater Melbourne.**

In 1925 the deaths in public institutions were 31·2 per cent. of the total in the State. The number of deaths in each public institution in the metropolis in 1925 is given in the subjoined table:—

**DEATHS IN PUBLIC INSTITUTIONS IN GREATER MELBOURNE, 1925.**

Institution.	No. of Deaths.	Institution.	No. of Deaths.
<b>Hospitals—</b>		<b>Other Public Institutions—</b>	
Melbourne ... ..	850	Victorian Homes for Aged and Infirm ... ..	103
Alfred ... ..	496	Benevolent Asylum ... ..	149
St. Vincent's ... ..	158	Convent of the Little Sisters of the Poor ... ..	61
Homœopathic ... ..	92	Old Colonists' Homes ... ..	9
Austin ... ..	221	Foundling Hospital, Broadmeadows ... ..	11
Children's ... ..	481	Macleod Military Sanatorium ... ..	2
Women's ... ..	174	Children's Welfare Dépôt ... ..	3
Infectious Diseases ... ..	93	Kew Lunatic Asylum ... ..	98
Queen Victoria ... ..	54	Yarra Bend Lunatic Asylum... ..	4
Eye and Ear ... ..	10	Mont Park Asylum ... ..	48
Williamstown ... ..	15	Receiving House — Mental Hospital .. ..	47
Caulfield Repatriation ... ..	66	The Haven ... ..	12
Police ... ..	2	Foundling Hospital, East Melbourne .. ..	2
Heatherton Sanatorium ... ..	55	Carlton Refuge ... ..	...
Caulfield Convalescent ... ..	24	Macleod Military Mental Asylum ... ..	2
		Jancfield Sanatorium ... ..	12
		<b>Total Hospitals and other Institutions ... ..</b>	<b>3,354</b>
<b>Total Hospitals ... ..</b>	<b>2,791</b>		

**Infantile mortality.** 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 1925 numbered 2,046, and, as there were 35,922 births, it follows that of every 10,000 infants born approximately 570 died within twelve months. The rates for



Melbourne and suburbs, the extra metropolitan area, and the whole State, for different periods since 1879, are shown in the following table:—

INFANTILE MORTALITY IN VICTORIA, 1880 TO 1925.

Period.	Melbourne and Suburbs.		Rest of State.		Victoria.	
	Average Annual Number of Deaths under One Year.	Rate per 100 Births.	Average Annual Number of Deaths under One Year.	Rate per 100 Births.	Average Annual Number of Deaths under One Year.	Rate per 100 Births.
1880-84..	1,649	17·01	1,626	9·23	3,275	12·00
1885-89..	2,576	17·85	1,812	9·79	4,388	13·33
1890-94..	2,311	14·04	1,926	9·49	4,237	11·47
1895-99..	1,650	13·15	1,913	10·00	3,563	11·25
1900-04..	1,417	11·65	1,565	8·62	2,982	9·82
1905-09..	1,209	9·65	1,307	7·15	2,516	8·12
1910-14..	1,345	8·42	1,201	6·49	2,546	7·38
1915-19..	1,302	7·62	886	5·54	2,188	6·61
1920-24..	1,328	7·16	1,024	5·86	2,352	6·53
1925 ..	1,079	6·02	967	5·37	2,046	5·70

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. This accounts for the slight increase in the rate for the remainder of the State in the period 1920-24, and a corresponding decrease in the rate for the Metropolis.

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, 1924, and 1925 were as follows:—

INFANTILE DEATH RATES IN DIFFERENT DIVISIONS OF THE STATE, 1923, 1924, AND 1925.

Division.	Deaths under One Year per 100 Births.		
	1923.	1924.	1925.
Melbourne and Suburbs .. ..	7·34	6·77	6·02
Ballarat and Suburbs .. ..	8·54	6·58	7·49
Bendigo and Suburbs .. ..	10·57	10·25	6·19
Geelong and Suburbs .. ..	10·01	7·34	7·13
Rest of the State .. ..	5·29	5·15	5·15
Victoria .. ..	6·57	6·13	5·70

The prejudicial effect of city surroundings on infant life is evidenced by the mortality being heavier in urban than in country districts. During 1925 the deaths of children under 1 year of age to every 1,000 births were 60 in Melbourne, 75 in Ballarat, 62 in Bendigo, and 71 in Geelong, as against 51 in the rest of the State.

The following table shows for each metropolitan municipality the deaths of infants under 1 year, and the number of such deaths per 100 births in the years 1923, 1924, and 1925:—

Infantile  
death rates in  
metropolitan  
districts.

### INFANTILE DEATH RATES IN METROPOLITAN MUNICIPALITIES, 1923, 1924, AND 1925.

Municipality.	Number of Deaths under One year.			Deaths under One year per 100 Births.		
	1923.	1924.	1925.	1923.	1924.	1925.
Melbourne City .. ..	237	168	136	11·79	9·12	7·70
Brighton City .. ..	22	21	20	4·56	4·38	3·82
Brunswick City .. ..	85	79	72	7·52	6·55	6·47
Camberwell City .. ..	25	37	32	3·96	4·96	3·84
Caulfield City .. ..	56	63	35	5·33	5·87	3·31
Coburg City .. ..	42	38	49	7·59	5·59	6·67
Collingwood City .. ..	64	68	54	9·32	9·37	7·65
Essendon City .. ..	59	52	53	7·08	5·94	6·36
Fitzroy City .. ..	84	59	55	10·43	8·20	8·32
Footscray City .. ..	68	74	75	6·65	7·71	7·56
Hawthorn City .. ..	32	30	19	5·69	5·37	3·56
Kew City .. ..	13	18	19	3·44	4·65	5·23
Malvern City .. ..	31	27	28	4·96	3·91	4·22
Northcote City .. ..	49	54	54	5·95	5·81	5·95
Oakleigh Town .. ..	10	8	*	4·26	3·54	*
Port Melbourne City .. ..	25	26	24	8·20	8·93	8·70
Prahran City .. ..	68	66	49	7·13	7·52	5·52
Preston Town .. ..	24	31	37	6·32	6·19	6·53
Richmond City .. ..	73	66	65	8·13	6·98	7·30
Sandringham City .. ..	16	16	14	7·24	5·97	5·09
South Melbourne City .. ..	95	88	59	9·99	9·25	7·59
St. Kilda City .. ..	31	34	28	4·78	5·02	4·37
Williamstown City .. ..	32	38	32	6·41	7·76	6·10
Remainder of Metropolis .. ..	51	69	70	5·50	6·47	5·06
Whole Metropolis .. ..	1,292	1,230	1,079	7·34	6·77	6·02

\* Included in " Remainder of Metropolis."

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 1925 the total rate for males was 24.6 per cent. higher than that for females.

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 1925 :—

**INFANTILE MORTALITY AT DIFFERENT AGES,  
1900 TO 1925.**

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 ..	23.7	9.3	9.8	10.0	12.5	65.3	71.8	58.5	
1925 ..	23.1	7.8	7.9	7.1	11.1	57.0	62.9	50.5	

**INFANTILE MORTALITY AT DIFFERENT AGES,  
MALES AND FEMALES, 1925.**

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 ..	477	25.7	40.8	354	20.4	40.4
1 week to 1 month ..	168	9.0	14.3	111	6.4	12.7
1 to 3 months ..	161	8.7	13.8	122	7.0	13.9
3 to 6 months ..	142	7.6	12.1	114	6.6	13.0
6 to 12 months ..	222	11.9	19.0	175	10.1	20.0
<b>Total ..</b>	<b>1,170</b>	<b>62.9</b>	<b>100.0</b>	<b>876</b>	<b>50.5</b>	<b>100.0</b>

The experience of the years 1920-25 shows that, of every 20,000 newly-born boys and girls in equal numbers, 703 boys and 572 girls died within twelve months, and 9,297 of the former and 9,428 of the latter, or 18,725 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 960 more survivors in 1920-25 than in 1891-1900, and 1,257 more than in 1881-90.

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 1925 :—

INFANTILE DEATH RATES FROM CERTAIN CAUSES, 1891-93,  
1901-10, 1911-20, AND 1925.

Cause of Death.	Disease Classification Number.	Deaths under One Year per 1,000 Births in—			
		1891-93.	1901-10.	1911-20.	1925.
Whooping Cough.. ..	9	2·60	2·52	1·82	·81
Convulsions .. ..	80	6·83	3·10	1·63	·70
Bronchitis, Broncho-pneumonia, Pneumonia ..	99a, 100a, 101	11·37	8·13	6·86	4·90
Diarrhoeal Diseases, all forms	113	29·66	24·62	16·13	11·05
Congenital Malformations, &c. .. ..	159	3·45	4·86	4·38	4·62
Wasting Diseases (Marasmus, Atrophy, &c.) ..	160	22·24	12·74	13·09	6·65
Prematurity .. ..	161a	13·13	14·99	15·17	15·06
Violence .. ..	175 to 203	3·16	2·47	1·07	·67
Early Infancy, Injury at Birth .. ..	162, 161b	} 24·49	14·46	9·40	{ 7·02 5·48
All other causes .. ..	..		..	..	
Total, all causes .. ..	..	116·93	87·89	69·55	56·96

INFANTILE DEATH RATES, AT DIFFERENT AGES, FROM CERTAIN CAUSES, 1925.

Cause of Death.	Deaths under One Year per 1,000 Births.							
	Age Period.							
	Under 1 Week.	1 Week and under 1 Month.	1 Month and under 3 Months.	3 Months and under 6 Months.	6 Months and under 12 Months.	Total.	Males.	Females.
Bronchitis, Broncho-pneumonia, Pneumonia .. .. .	·20	·36	1·36	1·06	1·92	4·90	5·27	4·51
Diarrhœal Diseases, all forms .. .. .	..	·53	1·87	3·56	5·09	11·05	12·26	9·75
Congenital Malformations, &c. .. .. .	2·12	·95	·75	·33	·47	4·62	4·68	4·56
Wasting Diseases (Marasmus, Atrophy, &c.) .. .. .	2·64	1·42	1·56	·61	·42	6·65	7·59	5·66
Prematurity .. .. .	11·44	2·53	·95	·14	..	15·06	16·46	13·56
Early Infancy, Injury at Birth .. .. .	5·65	1·23	·11	·03	..	7·02	8·28	5·65
All other causes .. .. .	1·09	·75	1·28	1·39	3·15	*7·66	8·39	6·86
Total, all causes .. .. .	23·14	7·77	7·88	7·12	11·05	56·96	62·93	50·55

\* 2·53 were deaths from Epidemic and Infectious diseases, and, of these, 1·45 were of Infants aged 6 months to 12 months.

Of every 1,000 infants born 20·3 died from diarrhœal and wasting diseases during 1921-25 as against 29 in 1911-20, 37 in 1901-10, and 52 in 1891-93—a decrease of 61 per cent. since the last mentioned period. In 1921-25, acute bronchitis, broncho-pneumonia and pneumonia were responsible for 5·84 deaths per 1,000 births, as compared with 11·37 in 1891-93—a decline of 51 per cent. between the two periods. Of every 100 children who died in the last five years, 33 deaths were due to prematurity and congenital malformations, which may be regarded as of a non-preventable nature, while 20 died from diarrhœal diseases. The mortality from the latter diseases was highest during the months December to April. Of every 1,000 children born during the years referred to 13 died from diarrhœal 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 table which follows shows the number of deaths and the death rate of infants under one month for Melbourne and suburbs and the whole State for the years 1921 to 1925, also the principal causes of death.

## DEATHS OF INFANTS UNDER ONE MONTH, 1921 TO 1925.

Cause of Death.	Melbourne and Suburbs.					Victoria.				
	1921.	1922.	1923.	1924.	1925.	1921.	1922.	1923.	1924.	1925.
Convulsions .. .. .	16	31	6	10	7	37	54	27	27	20
Bronchitis, Broncho-pneu- monia, Pneumonia .. .	23	13	33	29	14	37	19	55	47	20
Diarrhoeal Diseases, all forms Congenital Malformations, &c. . . . .	11	11	11	3	9	26	22	26	14	19
Wasting Diseases (Marasmus, Atrophy, &c.) .. .	73	45	50	58	60	123	72	98	110	110
Prematurity .. . . .	78	81	87	80	65	182	188	166	137	146
Violence .. . . .	322	277	326	322	263	548	485	594	568	502
Injury at Birth .. . .	12	9	9	2	3	18	12	16	4	4
Early Infancy (162) } All other causes .. .	98	87	90	106	{ 80 56 } 19	{ 178 163 } 88	{ 187 163 } 50	{ 207 187 } 42	{ 124 123 } 45	{ 124 123 } 42
Total all Causes .. .	678	586	636	632	576	1,237	1,065	1,211	1,159	1,110
Deaths per 100 Births	3·67	3·10	3·61	3·48	3·22	3·48	2·93	3·38	3·21	3·09

On the average of the last ten years, 156 in every 1,000 illegitimate infants died within a year, as against 60 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 1925 the mortality rate of legitimate infants was 5·50 per 100 births. The children born out of wedlock during the same year numbered 1,543, and the deaths of illegitimate infants were 155, the death rate being thus 10·05 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 1925 :—

## DEATH RATES OF LEGITIMATE AND ILLEGITIMATE INFANTS FROM CERTAIN CAUSES.

Cause of Death.	Deaths under One Year per 1,000 Births.					
	Legitimate.			Illegitimate.		
	1904-08.	1914-18.	1925.	1904-08.	1914-18.	1925.
Diarrhoeal Diseases .. .	19·8	14·2	10·5	72·6	48·6	24·2
Prematurity, Congenital Malfor- mations, Marasmus, &c. . . .	30·3	27·2	25·4	52·1	64·9	48·4
Bronchitis, Broncho-pneumonia, Pneumonia .. . . .	6·9	6·1	4·7	18·6	12·5	9·8
Other causes .. . . .	18·3	15·3	14·4	58·7	36·6	18·9
Total, all causes .. . . .	75·3	62·8	55·0	202·0	162·6	101·3

The rates for 1925 show that of every 1,000 children born out of wedlock 24·2 died from diarrhœal diseases within a year, as compared with 10·5 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.

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.

#### INFANTILE DEATHS IN EACH MONTH FROM CERTAIN CAUSES, 1921-25.

Month.	Infantile Deaths in Greater Melbourne in 1921-25 from—					
	Diarrhœal Diseases.			Respiratory Diseases.		
	Males.	Females.	Total.	Males.	Females.	Total.
January .. ..	174	126	300	20	17	37
February .. ..	117	94	211	23	10	33
March .. ..	95	80	175	15	14	29
April .. ..	85	58	143	22	19	41
May .. ..	61	63	124	27	17	44
June .. ..	33	17	50	37	30	67
July .. ..	14	10	24	58	59	117
August .. ..	6	12	18	53	48	101
September .. ..	10	8	18	32	36	68
October .. ..	14	14	28	16	8	24
November .. ..	21	11	32	16	17	33
December .. ..	49	40	89	22	15	37
Total, 1921-25 ..	679	533	1,212	341	290	631

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 56 per cent. occur in the four months June to September.

The deaths of infants under 1 year of age in the Commonwealth numbered 7,250 in 1925, as compared with 7,701 in 1924, 8,186 in 1923, 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 State, the Commonwealth of Australia, and New Zealand for periods back to 1910 :—

#### INFANTILE MORTALITY IN AUSTRALASIA, 1910-25.

Period.	Deaths under One Year per 100 Births.							
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1910-14	7·38	7·27	6·55	6·78	7·49	7·68	7·17	5·72
1915-19	6·61	6·44	6·33	6·18	6·19	6·53	6·43	4·86
1920-24	6·53	6·10	5·46	5·84	6·11	6·24	6·10	4·49
1925 ..	5·70	5·50	4·52	4·61	5·66	5·52	5·34	4·00

The infantile deaths per 100 births in the Australasian capitals in 1925 were as follows :—Melbourne 6·02, Sydney 5·70, Brisbane 5·03, Adelaide 4·95, Perth 7·25, Hobart 7·61, and Wellington 4·39.

In 1925 the deaths of male children under 5 years of age numbered 1,503, and the deaths of female children under that age, 1,134—the former being in the proportion of 17·51 per cent., and the latter of 15·63 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 1925 :—

## 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
1925 ..	1,170	186	64	44	39	1,503	17·51
<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
1925 ..	876	150	47	35	26	1,134	15·63

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.

Ages at death.

The ages of males and females who died in 1925 and in the two preceding years are shown in the following table:—

## AGES AT DEATH IN VICTORIA, 1923 to 1925.

Ages.	1923.			1924.			1925.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 ..	1,311	1,047	2,358	1,199	1,017	2,216	1,170	876	2,046
1 to 2	213	159	372	201	175	376	186	150	336
2 „ 3	86	71	157	94	66	160	64	47	111
3 „ 4	43	33	76	49	44	93	44	35	79
4 „ 5	43	32	75	58	19	77	39	26	65
5 „ 10	158	103	261	136	99	235	127	97	224
10 „ 15	108	108	216	103	73	176	106	96	202
15 „ 20	168	151	319	161	148	309	162	124	286
20 „ 25	184	195	379	214	206	420	198	161	359
25 „ 30	215	249	464	204	230	434	194	215	409
30 „ 35	245	279	524	213	263	476	229	227	456
35 „ 40	289	295	584	231	260	541	299	248	547
40 „ 45	364	279	643	311	245	556	285	277	562
45 „ 50	389	343	737	363	309	677	363	301	664
50 „ 55	548	417	965	544	417	961	520	395	915
55 „ 60	712	500	1,212	673	487	1,160	656	449	1,105
60 „ 65	894	638	1,532	933	613	1,546	889	601	1,490
65 „ 70	843	677	1,520	842	637	1,479	857	657	1,514
70 „ 75	662	590	1,252	695	554	1,249	710	589	1,299
75 „ 80	623	682	1,305	609	606	1,215	580	596	1,176
80 „ 85	502	571	1,073	500	575	1,075	469	568	1,037
85 „ 90	357	434	791	301	375	676	296	343	639
90 „ 95	146	168	314	137	165	302	105	137	243
95 ..	12	21	33	13	14	27	14	14	28
96 ..	5	16	21	9	16	25	11	7	18
97 ..	5	9	14	5	7	12	3	9	12
98 ..	4	6	10	6	10	16	2	5	7
99 ..	1	2	3	2	4	6	1	2	3
100 ..	2	2	4	1	1	2	1	1	2
101 ..	..	..	..	1	1	2	1	1	2
102 ..	2	1	3	..	4	4	..	..	..
103 ..	..	..	..	..	..	..	..	..	..
104 ..	..	..	..	..	..	..	..	..	..
105 ..	..	1	1	..	..	..	..	..	..
109 ..	1	..	1	..	..	..	..	..	..
Total ..	9,135	8,084	17,219	8,863	7,640	16,503	8,582	7,254	15,836

Of the 49,558 persons who died in Victoria during the last three years 6,406 were aged 80 years and upwards, and 21—nine males and twelve females—had attained or passed the age of 100 years.

The highest age at death recorded in the period 1923-25 was 109 years, which was attained by one man. To every 100 female deaths there were 118 male deaths in 1925, as against 116 in 1924, 113 in 1923, 117 in 1922, and 115 in 1921.

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

Death rates from certain diseases.

DEATHS PER MILLION FROM CERTAIN CAUSES.

Cause of Death.	Deaths per Million of the Population.					
	1908-1912.	1921.	1922.	1923.	1924.	1925.
Typhoid Fever .. .. .	98	46	20	34	20	11
Measles .. .. .	33	4	1	48	4	26
Scarlet Fever .. .. .	16	12	8	11	13	10
Whooping Cough .. .. .	77	63	26	12	160	27
Diphtheria and Croup .. .. .	122	179	88	58	69	42
Influenza .. .. .	109	88	46	248	104	41
Acute Anterior Poliomyelitis (previously Infantile Paralysis) .. .. .	..	..	5	2	2	15
Cerebro-Spinal Meningitis .. .. .	..	11	8	8	20	17
Phthisis .. .. .	855	667	565	620	585	561
Other Tubercular Diseases .. .. .	182	137	120	123	127	97
Syphilis .. .. .	51	36	22	26	24	24
Cancer .. .. .	833	954	997	1,013	999	978
Diabetes .. .. .	107	136	110	98	133	107
Anæmia, Chlorosis, Leucæmia .. .. .	81	104	85	118	97	104
Simple Meningitis .. .. .	133	64	68	67	46	38
Locomotor Ataxia and other diseases of Spinal Cord .. .. .	71	52	38	49	55	29
Congestion and Hæmorrhage of the Brain .. .. .	449	472	433	471	467	451
Epilepsy .. .. .	35	34	27	39	25	34
Convulsions .. .. .	76	47	59	45	31	18
Heart Disease (including Endocarditis, Pericarditis, and Angina Pectoris) .. .. .	1,441	1,267	1,245	1,423	1,364	1,384
Acute and Chronic Bronchitis .. .. .	348	222	209	233	199	161
Pneumonia and Broncho-pneumonia .. .. .	834	676	746	978	741	543

DEATHS PER MILLION FROM CERTAIN CAUSES—*continued.*

Cause of Death.	Deaths per Million of the Population.					
	1908-1912.	1921.	1922.	1923.	1924.	1925.
Pleurisy .. .. .	45	35	29	32	30	29
Congestion of Lungs and Pulmonary Apoplexy .. .. .	63	59	59	45	59	52
Asthma and Pulmonary Emphysema	60	22	32	42	26	30
Diseases of the Stomach (Cancer excepted) .. .. .	99	79	81	81	71	91
Enteritis, Gastro-enteritis, and Diarrhoeal Diseases .. .. .	833	657	358	480	354	376
Appendicitis .. .. .	81	57	67	70	75	67
Hernia, Intestinal Obstruction ..	113	100	107	95	90	105
Hydatids .. .. .	22	14	13	10	10	11
Cirrhosis and other diseases of the Liver (Cancer excepted) .. .. .	158	99	81	90	87	86
Biliary Calculi .. .. .	27	25	20	14	25	23
Simple Peritonitis (non-puerperal)..	35	24	29	34	25	27
Acute and Chronic Nephritis, Uræmia, Bright's Disease .. .. .	576	516	514	501	482	493
Calculi of the Urinary System ..	7	8	4	6	9	5
Diseases of the Bladder and Prostate	94	57	55	68	69	86
Old Age .. .. .	1,030	873	873	867	770	762
Suicide .. .. .	102	95	81	78	72	107
Accidental Violence .. .. .	531	452	393	414	485	504
Homicide .. .. .	19	14	15	13	11	13

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 period 1920-25, 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, 1920-25.

Vital Statistics.

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Month.	Typhoid Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Phthisis.	Bronchitis.	Pneumonia and Broncho- pneumonia.	Diarrhœa and Enteritis.	Bright's Disease.	Total from all Causes.
January .. ..	129	89	58	20	77	44	60	203	67	82
February .. ..	196	89	61	22	70	39	48	176	76	79
March .. ..	139	69	110	39	74	50	55	146	67	77
April .. ..	113	34	122	45	76	70	72	121	78	83
May .. ..	125	50	143	53	90	86	89	77	82	83
June .. ..	50	53	135	197	84	124	122	38	84	89
July .. ..	40	92	98	185	88	138	130	26	103	96
August .. ..	37	121	81	153	95	144	117	23	101	93
September .. ..	15	112	64	114	90	97	93	23	86	84
October .. ..	26	124	55	70	93	79	85	28	84	82
November .. ..	34	89	25	63	83	78	70	43	85	76
December .. ..	96	78	48	39	80	51	59	96	87	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 1920-25 ..	44	109	161	154	966	342	1,185	752	804	16,254

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 periods since 1875 is given in the following table. A great reduction in the percentage of vaccinations to births is shown since the year 1919. 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.
1876-99 ..	72
1900-04 ..	64
1905-09 ..	67
1910-14 ..	65
1915-19 ..	56
1920-24 ..	8
1925 ..	5

In 1925 the vaccinations of children were equal to 5 per cent. of the births, as compared with 8 per cent. in the period 1920-24, 56 per cent. in the period 1915-19, and 72 per cent. in the period 1876-99.

**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 11 per 100,000 in 1925, or by 96 per cent. in the intervening years. The death rate from the disease also decreased by 96 per cent. during the same period. The deaths per 100 cases in 1925 were 10.5 as compared with 12.1 in 1920-24. The reported cases of, and deaths from typhoid fever and their pro-

portions 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 1925.

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
1920-24 .. ..	408	25·9	49	3·1	12·1
1925 .. ..	181	10·8	19	1·1	10·5

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

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-six years :—

Typhoid fever in the Metropolis.

TYPHOID FEVER IN THE METROPOLIS, 1890 TO 1925

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	13·0	19	2·7
1920-24 .. ..	105	13·0	16	2·0
1925 .. ..	38	4·2	5	0·6

The cases of, and deaths from typhoid fever in proportion to population declined by 99 and 98 per cent. respectively in Greater Melbourne between 1895-99 and 1925. 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 1924 and 1925, are given in the following table:—

### PREVALENCE OF TYPHOID FEVER.

Area.	Reported Cases of Typhoid Fever.					Annual Cases per 10,000 of Population.		
	1921.	1922.	1923.	1924.	1925.	1910-19.	1924.	1925.
Greater Melbourne ..	119	80	103	96	38	4·1	1·1	0·4
Ballarat and Suburbs	52	22	20	8	9	13·4	2·0	2·2
Bendigo and Suburbs	24	38	16	9	3	18·2	2·7	0·9
Geelong and Suburbs	35	7	3	1	..	9·0	0·3	..
Rest of the State ..	302	154	326	190	131	8·9	2·9	2·0

The cases in proportion to population were fewer by 90 per cent. in Greater Melbourne, 84 per cent. in Ballarat, 95 per cent. in Bendigo, and 78 per cent. in the rest of the State in 1925 than in the period 1910-19. In Geelong, no cases were reported during 1925.

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.

**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 1925 only 31 deaths occurred from this cause, and of that number only 8 took place in the last forty-one years of the period.

**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 1925 there were 43 deaths attributed to this cause, representing a rate of 26 per million of the population, as compared with rates of 4 in 1924, 48 in 1923, 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

**Scarlet fever.** In 1925 the deaths from scarlet fever numbered 16, which corresponded to a rate of 10 per million of the population, as compared with rates of 13 in 1924, 11 in 1923, 8 in 1922, 12 in 1921, 24 in 1920 and 1919, and 34 in 1890-92. During 1925 there were 1,345 cases reported, as against 2,356 in 1924, 1,730 in 1923, 1,972 in 1922, and 2,816 in 1921. For the five years mentioned the deaths were equal to .9 per cent. of the cases. According to the experience of the last ten years the chance of dying from the disease is 68 per cent. greater for females than for males.

**Whooping cough.** Whooping cough was responsible for 45 deaths in 1925, which equalled a rate of 27 per million of the population at all ages, as compared with rates of 160 in 1924, 12 in 1923, 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 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 29 of the deaths were of infants under 1 year, and all 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 24 per cent. higher among females than males.

**Diphtheria.** The prevalence of diphtheria throughout the State during the last fifteen years was an unsatisfactory feature of the statistics of sickness relating to that period. For the year 1925 the number of cases was 2,631, as against a yearly average of 5,739 in 1920-24, 4,901 in 1915-19, 4,612 in 1910-14, 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 2·7 per cent. in 1925, as compared with 4·3 per cent. in 1915-19, 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 1925.

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
1920-24 .. ..	5,739	364·6	179	11·4	3·1
1925 .. ..	2,631	157·4	71	4·2	2·7
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
1920-24 .. ..	2,555	314·6	78	9·7	3·1
1925 .. ..	1,567	174·3	41	4·6	2·6

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 1924 and 1925, are given in the subjoined table :—

CASES OF DIPHTHERIA IN DIFFERENT AREAS.

Area.	Reported Cases of Diphtheria.					Annual Cases per 10,000 of Population.		
	1921.	1922.	1923.	1924.	1925.	1910-19.	1924.	1925.
Greater Melbourne ..	3,724	2,213	1,900	2,239	1,567	39·3	25·8	17·4
Ballarat and Suburbs	307	111	90	54	36	24·3	13·3	8·8
Bendigo and Suburbs	521	215	91	108	85	84·6	32·1	25·2
Geelong and Suburbs	405	200	98	127	133	43·4	33·7	34·0
Rest of the State ..	4,501	2,584	1,288	1,459	810	25·7	22·1	12·3

In 1925, the cases in each division of the State, except Geelong and suburbs, were fewer 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 from influenza in 1925 numbered 68, which corresponded to a rate of 41 per million of the population, as compared with rates of 104 in 1924, 248 in 1923, 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 1925, nearly 56 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.

**Acute Anterior Poliomyelitis (Infantile Paralysis).**

Opinions have been expressed by members of the medical profession that the name "infantile paralysis" as applied to "acute anterior poliomyelitis" is misleading, for adults are attacked and paralysis is not a constant symptom, consequently, in future issues, deaths occurring from this disease will be indicated by the medical nomenclature.

Mortality returns show that acute anterior poliomyelitis was responsible for 25 deaths in 1925, 4 in 1924, 4 in 1923, and 8 in 1922. Of the above 41 deaths, 22 were of males and 19 were of females; 2 were under 1 year of age, 13 were between 1 and 5 years, 9 were between 5 and 10 years, and 17 were over 10 years.

Cerebro-spinal meningitis was responsible for 28 deaths in 1925, 33 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 1,754, and the proportion of these that ended fatally was 52 per cent. The numbers of deaths from cerebro-spinal, tubercular, and simple meningitis during the last twelve years were as follows:—

DEATHS FROM DIFFERENT FORMS OF MENINGITIS, 1914-25.

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
1925 ..	16	12	38	39	39	25	93	76

The next table shows the incidence of mortality at various ages from different forms of meningitis for the period 1915-25:—

DEATHS AT DIFFERENT AGES FROM MENINGITIS, 1915-25.

Age Group.	Cerebro-spinal Meningitis.		Tubercular Meningitis.		Simple Meningitis.		Total—All Forms of Meningitis.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Under 5 ..	154	117	262	188	306	217	722	522
5 to 15 ..	73	54	89	92	65	52	227	198
15 ,, 25 ..	159	52	44	65	42	38	245	155
25 ,, 35 ..	76	27	33	22	31	21	140	70
35 ,, 45 ..	49	24	14	13	35	25	98	62
45 ,, 55 ..	50	28	4	10	43	16	97	54
55 ,, 65 ..	16	14	3	1	22	14	41	29
65 and over	7	8	2	..	20	10	29	18
Total 1915-25	584	324	451	391	564	393	1,599	1,108

On the average of the last eleven years the deaths of children under 5 years of age from cerebro-spinal, tubercular, and simple meningitis represented 30, 53, and 55 per cent. respectively of the total deaths from these diseases. Of the 28 persons who succumbed to cerebro-spinal meningitis in 1925, 21 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 1915-25 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.

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.				
	1921.	1922.	1923.	1924.	1925.	1921.	1922.	1923.	1924.	1925.
0-10 ...	3	6	4	2	4	2	5	3	3	5
10-15 ...	3	2	...	...	1	3	4	11	6	9
15-20 ...	16	20	20	20	11	27	34	42	43	48
20-25 ...	56	44	54	53	46	71	69	64	69	66
25-30 ...	64	59	67	62	60	79	57	77	67	71
30-35 ...	51	53	61	60	56	62	71	51	59	50
35-40 ...	68	47	63	66	75	54	45	53	39	41
40-45 ...	70	55	84	60	55	53	41	35	28	26
45-50 ...	69	42	51	47	43	34	27	31	21	22
50-55 ...	46	49	42	57	62	22	17	13	29	25
55-60 ...	42	43	38	49	49	20	16	25	24	10
60-65 ...	40	35	44	35	37	22	6	16	15	13
65-70 ...	18	20	19	18	21	8	7	8	4	9
70 and over	13	6	11	17	13	9	7	10	7	9
Total ...	559	481	558	546	533	466	406	439	414	404

For the year 1925, the average age of those who died from phthisis was 42·4 years for males and 34·2 years for females.

The deaths from phthisis in 1925 numbered 937—533 being of males and 404 of females—and equalled a rate of 561 per million of the population, as compared with rates of 585 in 1924, 620 in 1923, 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 1924, the deaths from this cause were 841, 796, 1,223 and 1,168 per million

Death rates from phthisis.

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 each 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	4·95
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 83 and 69 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 fifteen years:—

#### DEATH RATES FROM TUBERCULAR DISEASES IN MELBOURNE, BALLARAT, AND BENDIGO, 1891 TO 1925.

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.
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
1925 ..	6·3	5·6	11·3	1·1	·5	2·1	7·4	6·1	13·4



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 1924 and 1925 are given in the subjoined table:—

PHTHISIS IN DIFFERENT AREAS.

Area.	Reported Cases of Pulmonary Tuberculosis.					Annual Cases per 10,000 of Population.		
	1921.	1922.	1923.	1924.	1925.	1910-19.	1924.	1925.
Greater Melbourne ..	878	783	750	716	688	13·9	8·2	7·7
Ballarat and Suburbs	36	31	27	20	34	12·8	4·9	8·3
Bendigo and Suburbs	45	52	47	48	52	18·0	14·3	15·4
Geelong and Suburbs	19	10	19	24	24	7·9	6·4	6·1
Rest of the State ..	324	282	245	252	266	5·8	3·8	4·0
Whole State ..	1,302	1,158	1,088	1,060	1,064	10·4	6·5	6·4

In 1925 there were in Victoria 162 deaths from tubercular diseases (excluding phthisis), which corresponded to a rate of 97 per million, as compared with rates of 127 in 1924, 123 in 1923, 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 1924, the deaths from similar causes numbered 217, 362, 384, and 281 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:—

Tubercular diseases (phthisis excepted).

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.

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 three of those who died in 1925 had been born outside and resident less than one year in Australia, and 18 had resided in the continent for a shorter period than five years.

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.				
	1921.	1922.	1923.	1924.	1925.	1921.	1922.	1923.	1924.	1925.
0-15 .. ..	7	6	3	5	6	5	2	3	1	6
15-25 .. ..	7	7	3	9	9	3	3	7	5	2
25-35 .. ..	7	12	12	9	14	21	14	12	15	16
35-45 .. ..	33	31	38	44	42	65	75	73	67	87
45-55 .. ..	111	105	110	127	108	164	173	193	159	151
55-65 .. ..	243	278	252	263	258	223	224	236	228	238
65-75 .. ..	185	219	238	245	249	168	164	210	204	203
75-85 .. ..	84	103	83	106	95	103	97	109	103	119
85 and over ..	18	21	25	17	18	20	32	21	33	14
Total .. ..	695	782	764	825	799	772	784	864	815	836

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 1925 the average age of those who died from cancer was 62·4 years for males and 60·9 years for females, while the corresponding averages for phthisis were 42·4 years for males and 34·2 years for females.

Deaths from cancer in 1925 numbered 1,635, and represented a death rate of 978 per million of the whole population, as compared with rates of 999 in 1924, 1,013 in 1923, 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, and 584 in 1890-92. In England, Scotland, Northern Ireland, and the Irish Free State, in 1924, the deaths per million of population from this cause were 1,297, 1,331, 1,100, and 918 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	33·03	34·48
65 " 75 ...	53·96	51·18	61·66	63·05
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 1925 :—

SEAT OF CANCER.

Seat of Disease.	Males.	Females.	Total.
Cancer of the buccal cavity (mouth, &c.) ..	69	7	76
„ the stomach and liver ...	351	242	593
„ the peritoneum, the intestines, and the rectum ...	117	117	234
„ the female genital organs ...	...	153	153
„ the breast ...	...	150	150
„ the skin ...	29	19	48
„ other and unspecified organs ...	233	148	381
Total Deaths ...	799	836	1,635

Thirty-six 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.

During 1925 diabetes was responsible for 73 male and 106 female deaths, representing a rate of 107 per million of the population, as compared with rates of 133 in 1924, 98 in 1923, 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.

**Anæmia, chlorosis, leucæmia.** Anæmia, chlorosis, and leucæmia were responsible for 173 deaths in 1925, which corresponded to a rate of 104 per million of the population, as against rates of 97 in 1924, 118 in 1923, 85 in 1922, 104 in 1921, 90 in 1920, 93 in 1919, 90 in 1918, 97 in 1917, 94 in 1916, and 81 in 1908-12. Of the 49 persons who died from leucæmia in 1925, 32 were males.

**Diseases of the spine.** In 1925 locomotor ataxia and other diseases of the spine, excluding infantile paralysis, accounted for 34 male and 15 female deaths, representing a death rate of 29 per million of the population, as compared with rates of 55 in 1924, 49 in 1923, 38 in 1922, 52 in 1921, 45 in 1920, 73 in 1919, 88 in 1918, 58 in 1917, 70 in 1916, and 71 in 1908-12. Of the 17 persons who died from locomotor ataxia in 1925, 13 were males.

**Heart disease.** During 1925 there were 2,097 deaths ascribed to organic heart disease, 28 to pericarditis, 95 to endocarditis and myocarditis, and 93 to angina pectoris. The deaths of persons, over 45 years of age, from endocarditis and myocarditis, are now ascribed to organic heart disease. The total—2,313—from these causes represented a rate of 1,384 per million of the population, as compared with 1,364 in 1924, 1,423 in 1923, 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, and 1,441 in 1908-12. Of the 2,313 persons who died from these diseases in 1925, only 52, or 2·25 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.

Respiratory diseases. In 1925 the deaths from respiratory diseases numbered 1,482, which represented a rate of 887 per million of the population, as compared with rates of 1,143 in 1924, 1,441 in 1923, 1,195 in 1922, 1,141 in 1921, 1,329 in 1920, 1,430 in 1919, 1,160 in 1918, 1,094 in 1917, and 1,336 in 1916. Of the deaths from complaints of this nature in the year under review, 41 were referred to acute bronchitis, 99 to chronic bronchitis, 129 to bronchitis unspecified, 390 to broncho-pneumonia, 516 to pneumonia, 48 to pleurisy, and 48 to asthma. These six diseases accounted for 86 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.

**Diseases of the digestive system.** In 1925 there were 752 male and 624 female deaths from digestive ailments, representing a proportion of 823 per million of the population, as against rates of 778 in 1924, 914 in 1923, 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, and 2,382 in 1890-92. Diarrhœal diseases were responsible for 629 deaths, which were equivalent to a rate of 376 per million of population, the corresponding rates in previous periods being 354 in 1924, 480 in 1923, 358 in 1922, 657 in 1921, 639 in 1920, 501 in 1919, 504 in 1918, 408 in 1917, 731 in 1916, 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 629 deaths from diarrhœal diseases in the year under review, 489, or 78 per cent., were of children under 2 years of age, and 55, or about 9 per cent., were of persons over 65 years of age. There were 45 male and 30 female deaths from cirrhosis of the liver, 47 male and 80 female deaths from other affections of that organ (including hydatids), and 88 male and 88 female deaths from hernia and intestinal obstruction.

**Appendicitis.** The deaths from appendicitis numbered 112 in 1925, which represented a death rate of 67 per million of the population, as compared with rates of 75 in 1924, 70 in 1923, 67 in 1922, 57 in 1921, 63 in 1920, 61 in 1919, 66 in 1918, 62 in 1917, and 55 in 1916. Hospital records show that during the year ended 30th June, 1925, there were 2,887 cases treated, and that 56, or 1·9 per cent., ended fatally, as compared with fatality rates of 3·3 per cent. in 1924, 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



**Hydatids.** The deaths attributed to hydatids in 1925 numbered 18, being equivalent to a rate of 11 per million of the population, as compared with rates of 10 in 1924 and 1923, 13 in 1922, 14 in 1921, 13 in 1920, 18 in 1919, 21 in 1918, 14 in 1917, 21 in 1916, 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 48 per cent. higher among males than females. Hospital returns for the period 1916-25 show that 664 cases of hydatids were treated therein and that 97, or, approximately, 1 in every 7, ended fatally.

**Diseases of urinary system.** In 1925 there were 1,048 deaths attributed to diseases of the urinary system, which corresponded to a rate of 627 per million of the population, as against rates of 626 in 1924, 628 in 1923, 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 824 deaths, or 79 per cent., and complaints of the bladder and prostate for 144 deaths, or 14 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.

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 1925 in the following table :—

DEATH RATES OF MARRIED MOTHERS IN CHILDBED IN AGE GROUPS, 1906-1915 AND 1925.

Age Group.	Married Mothers.			
	Deaths.		Deaths per 1,000 Confinements.	
	1906-15.	1925.	1906-15.	1925.
Under 20 years .. ..	23	2	2·71	1·61
20 to 25 „ .. ..	184	17	2·85	2·39
25 „ 30 „ .. ..	326	39	3·60	3·86
30 „ 35 „ .. ..	334	46	4·59	5·46
35 „ 40 „ .. ..	346	31	6·86	5·95
40 years and over .. ..	156	14	6·90	7·44

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.

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 ten 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 Septicæmia.)	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
1925 ..	117	39	156	43·43

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 40·3 in 1921-25, as compared with 43·5 in 1911-15, 47·2 in 1906-10, and 60·9 in 1901-05.

**Puerperal  
septicæmia**

In 1925 there were 39 deaths of married and unmarried mothers from puerperal septicæmia, which corresponded to a death rate of 10·9 per 10,000 births, as against 15·5 in 1924, 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

**Senile decay.** During the year 1925, the deaths of 598 men and 676 women were ascribed to senile decay. The deaths at ages 65 and over from all causes during the year numbered 5,980—3,051 of men and 2,929 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 1925, 636 male and 207 female deaths were attributed to accidents and negligence, which represented a rate of 504 per million of the population. This proportion was 15.0 per cent. above the average rate—439—for the previous five years, and 37.9 per cent. below the rate—811—for 1890-92. The numbers of deaths from various accidents in 1925 are given in the appended table:—

DEATHS FROM ACCIDENTAL VIOLENCE, 1925.

Nature or Place of Accident.	Males.	Females.	Total.
Poisoning by Food .. .. .	4	2	6
Snake Bite .. .. .	5	..	5
Other Acute Poisonings .. .. .	10	5	15
Burns (including Conflagrations) .. .. .	34	41	75
Absorption of Poisonous Gases .. .. .	7	6	13
Accidental Mechanical Suffocation.. .. .	5	4	9
Suffocation in bed (infants) .. .. .	4	1	5
Drowning .. .. .	115	24	139
Firearms .. .. .	35	1	36
Falls .. .. .	48	4	52
In Mines and Quarries .. .. .	5	..	5
Machines .. .. .	9	..	9
Vehicular Accidents .. .. .	237	62	299
Injuries by Animals .. .. .	5	1	6
Effects of Heat .. .. .	2	3	5
Excessive Cold .. .. .	..	..	..
Electricity .. .. .	5	1	6
Lightning .. .. .	..	..	..
Fractures, Unspecified .. .. .	37	37	74
Other Violence .. .. .	69	15	84
<b>Total .. .. .</b>	<b>636</b>	<b>207</b>	<b>843</b>

On the average of the last three years the female mortality rate from accidents was 30 per cent. of the rate for males.

**Vehicular Accidents.**

In 1925, deaths from vehicular accidents numbered 299, as against 245 in 1924, 201 in 1923, 163 in 1922, 178 in 1921, and 153 in 1920. Motor vehicles were involved in 168 deaths in 1925, as against 135 in 1924, 103 in 1923, 65 in 1922, 38 in 1921, and 43 in 1920.

In the following table details are given of deaths due to collisions between various types of conveyances, pedestrians killed, and other fatal accidents in which vehicles were concerned, for the year 1925:—

**DEATHS FROM VEHICULAR ACCIDENTS, IN VICTORIA, 1925.**

	Collisions between—					Pedestrians killed.	Fall from vehicles and other accidents.	Total.	Males.	Females.
	Motor omnibus, car, trolley.	Motor cycle.	Horse drawn vehicle.	Bicycle.	Total.					
On Railways .. .. .	9	..	4	..	13	42*	9	64	47	17
Tramcar .. .. .	1	2	2	1	6	22	4	32	29	3
Motor omnibus .. .. .	2	4	..	..	6	2	2	10	10	..
" car .. .. .	2	8	2	5	17	65	22	104	78	26
" lorry, &c. .. .. .	..	2	2	..	4	18	6	28	20	8
" cycle .. .. .	..	1	3	..	4	5	11	20	17	3
Vehicle drawn by horses .. .. .	..	..	..	2	2	7	20	29	26	3
Bicycle .. .. .	..	..	..	..	..	4	3	7	6	1
Aeroplane .. .. .	..	..	..	..	..	..	1	1	1	..
Other or undefined .. .. .	..	..	..	..	..	1	3	4	3	1
Total .. .. .	14	17	13	8	52	166	81	299	237	62

\* Including 9 railway employees.

**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.

**Suicide.** In the year 1925, 144 males and 35 females took their own lives. The deaths represented a rate of 107 per million of the population, as compared with rates of 72 in 1924, 78 in 1923, 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 23·4 per cent. of that for the latter on the average of the last five years.

**Homicide.** The deaths ascribed to homicide in 1925 numbered 21, of which 10 were of males and 11 of females. These represented a rate of 13 per million of the population, as against rates of 11 in 1924, 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.

NATURAL INCREASE.

The average annual natural increase, *i.e.*, the excess of births over deaths, per 1,000 of the population, in the various Australasian States, the Commonwealth of Australia, and New Zealand, for different periods since 1909, as well as detailed particulars for Victoria since 1879, are shown in the following tables :—

NATURAL INCREASE PER 1,000 OF THE POPULATION.

AUSTRALASIA.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand.
1910-14	13·85	18·38	18·51	17·68	18·61	19·35	17·03	16·80
1915-19	11·75	15·98	17·06	14·84	15·47	17·83	14·99	16·80
1920-24	12·49	15·80	16·03	13·72	14·04	16·71	14·62	14·19
1925 ..	12·02	14·85	14·96	11·91	13·23	14·89	13·69	12·88

VICTORIA.

Period.	Excess of Births over Deaths.	Annual Rates per 1,000 of Population.			Period.	Excess of Births over Deaths.	Annual Rates per 1,000 of Population.		
		Births.	Deaths.	Natural Increase.			Births.	Deaths.	Natural Increase.
1880-84	14,466	30·64	14·40	16·24	1905-09	16,062	24·76	11·93	12·83
1885-89	16,741	32·27	15·87	16·40	1910-14	18,795	25·42	11·57	13·85
1890-94	20,059	31·99	14·62	17·37	1915-19	16,818	23·13	11·38	11·75
1895-99	15,625	26·76	13·81	12·95	1920-24	19,647	22·89	10·40	12·49
1900-04	14,859	25·08	12·78	12·30	1925 ..	20,086	21·49	9·47	12·02

The relatively small natural increase in 1915-19 was very largely due to a heavy mortality rate from influenza in 1919. The mean increase in the Australian States for the period 1921-25 was 14·37 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 for 1921-25—14·37—would enable a population to double itself in 48 years, while, at the Victorian rate of 12·33 per 1,000 of population, a period of 56 years would be required. In England and Wales in 1925 the excess of births over deaths was 6·1 per 1,000 of population.