

## CHAPTER XVIII. VITAL STATISTICS.

NOTE.—The rates published in this chapter in relation to the population since the year 1921 have been adjusted in accordance with the revised results of the Census of the 30th June, 1933.

### § 1. Births.

1. Births, 1934.—The number of male and female births and the total births registered in Australia during the year ended the 31st December, 1934, are shown in the tables hereunder. The numerical relation which these births bear to the population, and various other associated features, are given in later tables:—

#### BIRTHS, 1934.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
<b>MALE BIRTHS.</b>									
Single births	21,648	13,832	8,662	4,277	3,887	2,284	37	63	54,690
Twins ..	445	322	169	75	70	59	..	..	1,140
Triplets ..	11	4	..	2	1	..	..	..	18
<b>Total ..</b>	<b>22,104</b>	<b>14,158</b>	<b>8,831</b>	<b>4,354</b>	<b>3,958</b>	<b>2,343</b>	<b>37</b>	<b>63</b>	<b>55,848</b>
<b>FEMALE BIRTHS.</b>									
Single births	20,808	13,337	8,348	4,030	3,754	2,073	51	67	52,468
Twins ..	417	329	181	71	88	54	..	4	1,144
Triplets ..	6	4	..	4	1	..	..	..	15
<b>Total ..</b>	<b>21,231</b>	<b>13,670</b>	<b>8,529</b>	<b>4,105</b>	<b>3,843</b>	<b>2,127</b>	<b>51</b>	<b>71</b>	<b>53,627</b>
<b>TOTAL BIRTHS.</b>									
Single births	42,456	27,169	17,010	8,307	7,641	4,357	88	130	107,158
Twins ..	(a) 862	(b) 651	(c) 350	146	(d) 158	113	..	4	(e) 2,284
Triplets ..	(f) 17	(f) 8	..	6	(f) 2	..	..	..	(g) 33
<b>Total ..</b>	<b>43,335</b>	<b>27,828</b>	<b>17,360</b>	<b>8,459</b>	<b>7,801</b>	<b>4,470</b>	<b>88</b>	<b>134</b>	<b>109,475</b>
<b>TOTAL CONFINEMENTS.</b>									
Nuptial Mothers ..	40,845	26,323	16,325	8,131	7,433	4,177	74	131	103,439
Ex-nuptial Mothers ..	2,056	1,177	861	251	293	237	14	1	4,890
<b>Total Mothers</b>	<b>42,901</b>	<b>27,500</b>	<b>17,186</b>	<b>8,382</b>	<b>7,726</b>	<b>4,414</b>	<b>88</b>	<b>132</b>	<b>108,329</b>

(a) Sixteen stillborn twins not included. (b) Five stillborn twins not included. (c) Two stillborn twins not included. (d) Eight stillborn twins not included. (e) Thirty-one stillborn twins not included. (f) One stillborn triplet not included. (g) Three stillborn triplets not included.

2. Birth Rates.—The next table gives the crude birth rates from 1901 to 1934:—

## CRUDE BIRTH RATE.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.(c)	Australia.
1901 ..	27.78	25.77	28.52	25.41	30.39	28.58	6.72	(b)	27.16
1911 ..	28.58	25.01	27.63	28.86	28.22	28.60	9.36	16.84	27.20
1921 ..	25.91	23.16	26.68	24.09	23.37	26.97	20.18	10.86	24.95
1922 ..	25.59	23.10	25.73	23.77	23.82	27.01	18.93	11.28	24.68
1923 ..	24.56	22.32	25.13	22.69	22.39	26.14	19.52	5.65	23.75
1924 ..	23.93	22.01	24.21	22.01	22.86	24.89	15.34	10.48	23.21
1925 ..	23.79	21.49	24.24	21.22	21.95	24.21	16.98	9.77	22.86
1926 ..	22.63	20.84	23.06	20.73	21.79	23.33	18.50	12.07	21.98
1927 ..	22.40	20.30	22.78	20.33	21.63	22.68	15.28	10.31	21.62
1928 ..	22.27	19.69	22.36	19.98	21.36	21.77	18.61	14.64	21.27
1929 ..	21.04	18.98	20.60	18.63	21.51	22.03	11.86	17.91	20.25
1930 ..	20.59	18.55	20.80	17.42	21.44	21.66	14.26	18.30	19.86
1931 ..	18.67	16.86	19.28	15.77	19.77	21.18	14.52	18.29	18.16
1932 ..	17.40	15.19	18.56	14.74	18.31	19.78	16.07	16.92	16.86
1933 ..	16.99	15.60	18.14	15.32	17.95	19.93	15.23	14.47	16.78
1934 ..	16.52	15.20	18.17	14.50	17.66	19.51	17.84	14.47	16.39

(a) Number of births per 1,000 of the mean population for the year. (b) Part of New South Wales.

(c) The birth rates for the Federal Capital Territory in the above table are based on births which occurred in the Federal Capital Territory.

About 25 per cent. of births in respect of which the mother's usual residence is the Federal Capital Territory takes place in Queanbeyan just over the New South Wales border, while the number of births in respect of which the mother's usual residence is New South Wales which take place in the Federal Capital Territory is practically negligible. Consequently the following rates based on births in respect of which the mother's usual residence is the Federal Capital Territory are a fairer measure of birth rates in the Federal Capital Territory:—

1921 ..	14.96	1924 ..	17.26	1927 ..	21.10	1930 ..	22.07	1933 ..	19.11
1922 ..	20.46	1925 ..	20.87	1928 ..	23.38	1931 ..	21.40	1934 ..	17.93
1923 ..	11.79	1926 ..	22.41	1929 ..	23.28	1932 ..	20.09	..	..

The preceding table shows a progressive reduction from 1901 to 1934, broken only by a slight rise in 1911 in some of the States and in Australia as a whole. The rate for Australia for 1934 represents only 60 per cent. of that for 1901 and is the lowest yet recorded.

The principal factor in determining the crude birth rate is the proportion of *married* women of child-bearing age in the community, but as the fecundity of women varies with age, the birth rate per 1,000 married women will vary according to the age composition of the group, and, other things being equal, the rate generally should be highest where the average age of married women is lowest. For the purposes of the following table the child-bearing age has been taken as from 15-44 years inclusive, and all births of which the mothers were stated to be over 45 years have been counted in the group 40-44. The calculations have been made for the last two Census periods and cover in each case the Census year together with the year immediately preceding and the year immediately following.

## BIRTH RATES, AND FACTORS AFFECTING THEM.

Particulars.	1932-34. (Age Distribution at Census of 1933.)							1920- 1922.
	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aus- tralia.	
Crude birth rate per 1,000 persons	16.97	15.33	18.29	14.85	17.97	19.74	16.68	25.15
Birth rate per 100 women 15-44 inclusive .. .. .	7.25	6.46	7.93	6.31	8.05	8.71	7.14	10.74
Birth rate per 100 married women 15-44 incl. (a) .. .. .	12.98	12.34	14.46	12.01	14.67	16.08	13.14	19.65
Ex-nuptial births—per cent. on all births .. .. .	5.03	4.35	4.99	3.18	4.15	5.37	4.66	4.69
Ex-nuptial births per 100 unmarried women 15-44 incl. .. .. .	0.78	0.56	0.83	0.41	0.70	0.96	0.69	1.05
Women 15-44 incl.—per cent. all persons .. .. .	23.41	23.73	23.05	23.54	22.34	22.66	23.35	23.41
Average age of all women 15-44 incl. .. .. .	29.06	29.42	28.88	29.12	28.62	28.54	29.10	28.54
Married women 15-44 incl.—per cent. on all persons .. .. .	12.41	11.88	12.02	11.97	11.74	11.61	12.10	12.20
Average age of married women 15-44 incl. .. .. .	33.38	34.00	33.41	33.98	33.21	32.98	33.58	32.48

(a) Nuptial births only.

The following figures give a comparison for Australia, based on data obtained at Census periods, of the total births per 1,000 women (married and unmarried) and of the nuptial births per 1,000 married women of ages 15 to 44 inclusive:—

Particulars.	1880-82.	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Births per 1,000 women aged 15-44 .. .. .	169.7	158.8	117.3	117.2	107.4	71.4
Nuptial births per 1,000 married women 15-44 .. .. .	321.0	332.0	235.8	236.0	196.5	131.4

3. Birth Rates of Various Countries.—(i) *Crude Rates.* A comparison with other countries shows that the Australian States occupy a midway position. The rates for the pre-war period 1908-1913 have been added for purposes of comparison:—

## CRUDE BIRTH RATES.(a)—VARIOUS COUNTRIES.

Country.	1908 to 1913.	1934.	Country.	1908 to 1913.	1934.
Egypt .. .. .	43.6	44.1(e)	Queensland .. .. .	28.2	18.2
Soviet Union .. .. .	45.6	42.7(d)	Scotland .. .. .	26.2	18.0
Ceylon .. .. .	36.9	37.2	Germany .. .. .	29.5	18.0
Rumania .. .. .	43.1	32.0(e)	Denmark .. .. .	27.1	17.8
Japan .. .. .	32.9	31.6(e)	Western Australia .. .. .	28.9	17.7
Portugal .. .. .	34.6	28.4	U.S. of America(b) .. .. .	(c)	17.1
Poland .. .. .	37.4	26.6	New South Wales .. .. .	28.2	16.5
Spain .. .. .	32.1	26.2	New Zealand .. .. .	26.5	16.5
Argentina .. .. .	37.1	25.3	Belgium .. .. .	23.4	16.5(e)
Union of South Africa (whites) .. .. .	(c)	23.5	Australia .. .. .	27.4	16.4
Italy .. .. .	32.4	23.2	Switzerland .. .. .	24.7	16.2
Netherlands .. .. .	29.1	20.7	France .. .. .	19.5	16.1
Canada .. .. .	(c)	20.4	Great Britain and Ireland .. .. .	.. .. .	.. .. .
Northern Ireland .. .. .	23.1	19.8	.. .. .	24.6	15.3
Tasmania .. .. .	29.6	19.5	Victoria .. .. .	25.3	15.2
Irish Free State .. .. .	23.1	19.2	Norway .. .. .	26.0	14.8
Czechoslovakia .. .. .	31.1	18.8	England and Wales.. .. .	24.9	14.8
Finland .. .. .	29.5	18.4(e)	South Australia .. .. .	27.1	14.5
			Sweden .. .. .	24.4	13.8

(a) Number of births per 1,000 of the mean population.

(b) Figures for "existing birth-registration area."

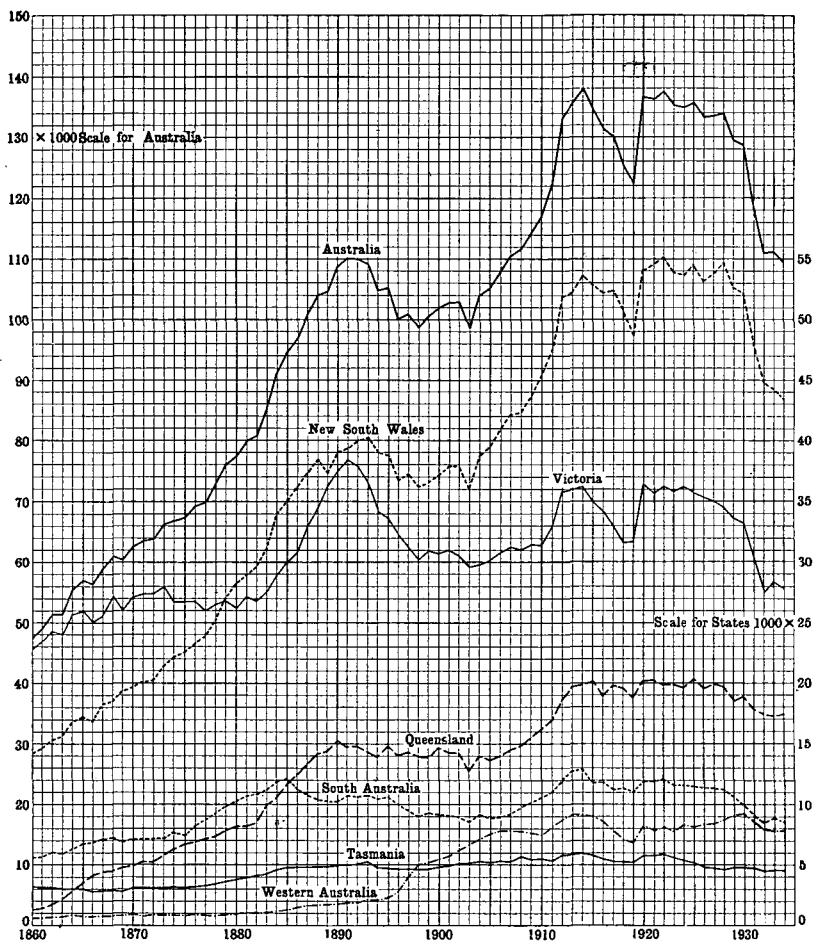
(c) Not available.

(d) For 1932.

(e) For 1933.

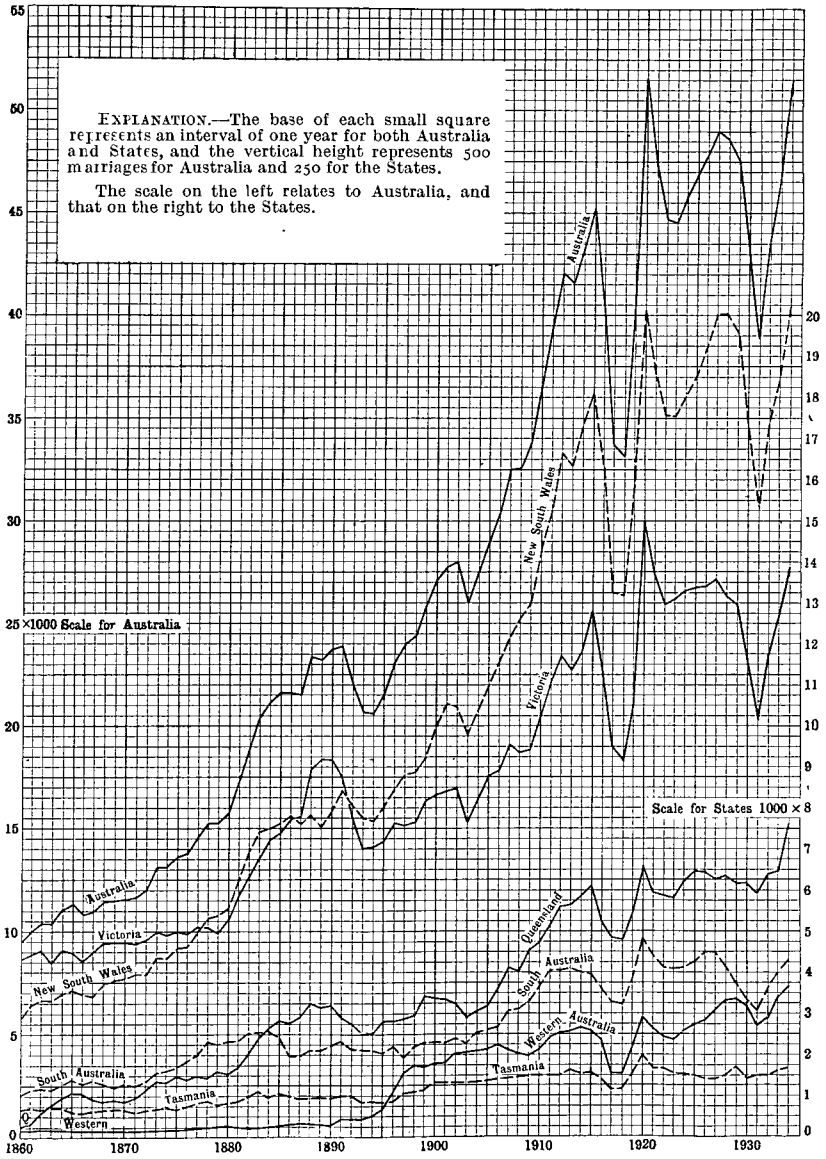
(ii) *Nuptial Birth Rates at Child-bearing Ages.* The wide discrepancies between the crude birth rates of the various countries are, to some extent, due to differences in sex and age constitution and in conjugal condition. If the birth rates are calculated per 1,000 women of child-bearing ages, the comparison gives more reliable results. A table

## BIRTHS, 1860 TO 1934.

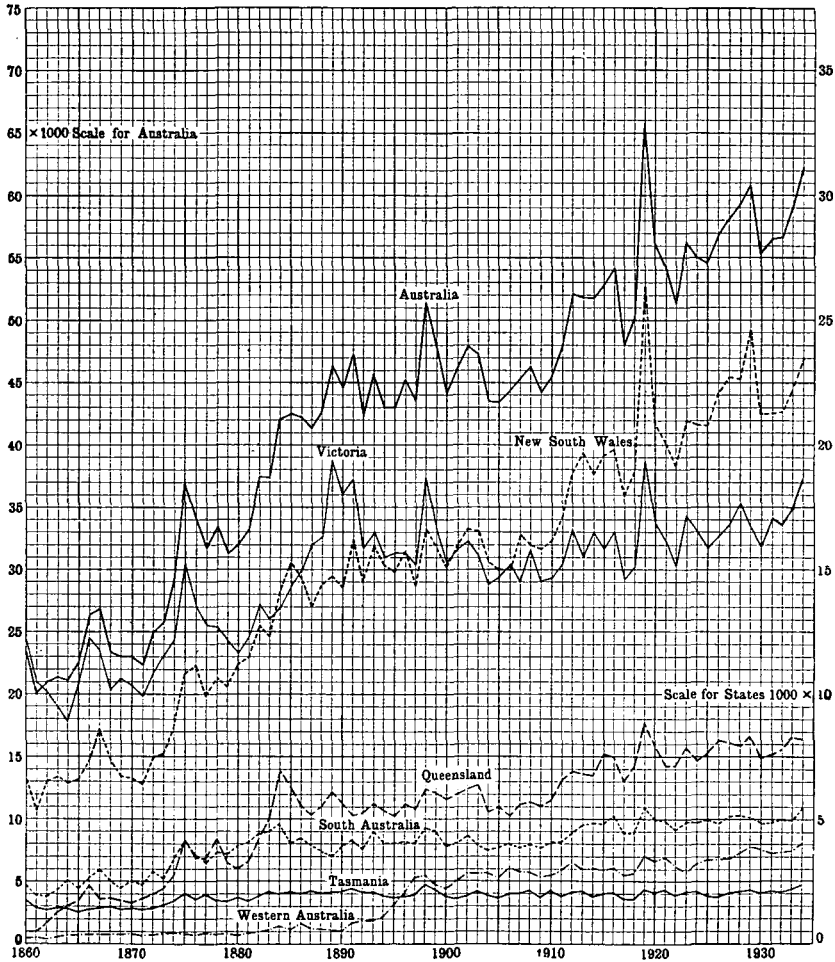


EXPLANATION.—The base of each small square represents an interval of one year for both Australia and States, and the vertical height represents 2,000 persons for Australia and 1,000 for the States. The scale on the left relates to Australia and that on the right to the States.

MARRIAGES, 1860 TO 1934.

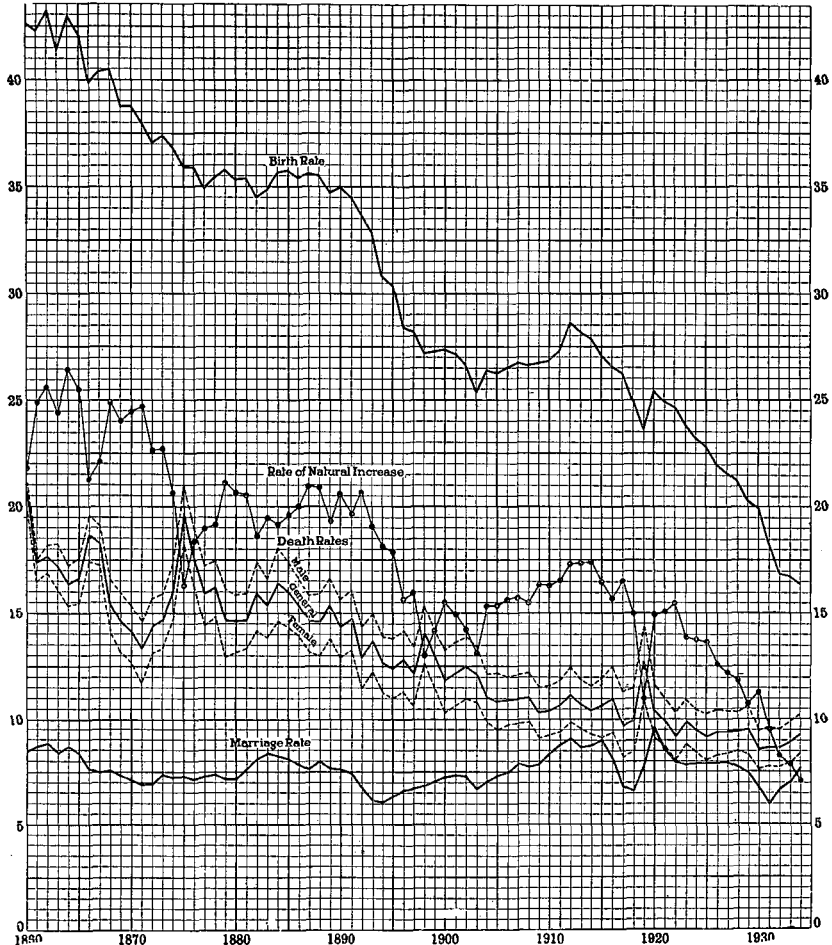


## DEATHS, 1860 TO 1934.



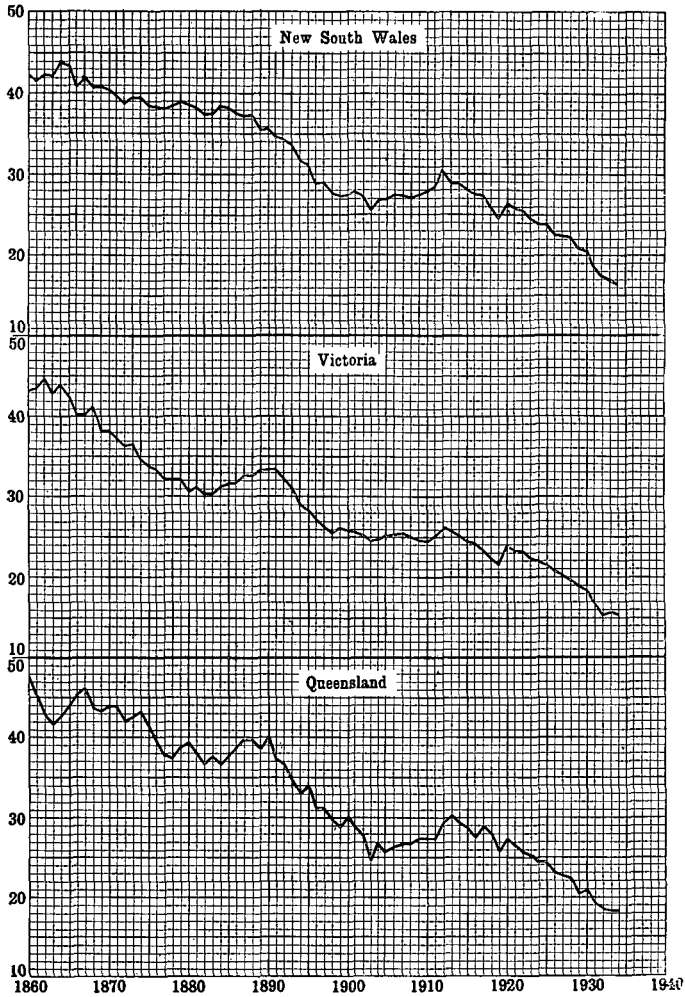
EXPLANATION.—The base of each small square represents an interval of one year for both Australia and States, and the vertical height represents 1,000 persons for Australia and 500 for the States.  
The scale on the left relates to Australia, and that on the right to the States.

RATES—BIRTH, NATURAL INCREASE, DEATH (MALE, GENERAL AND FEMALE) AND MARRIAGE—AUSTRALIA, 1860 TO 1934.



EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one-half per thousand of the population.

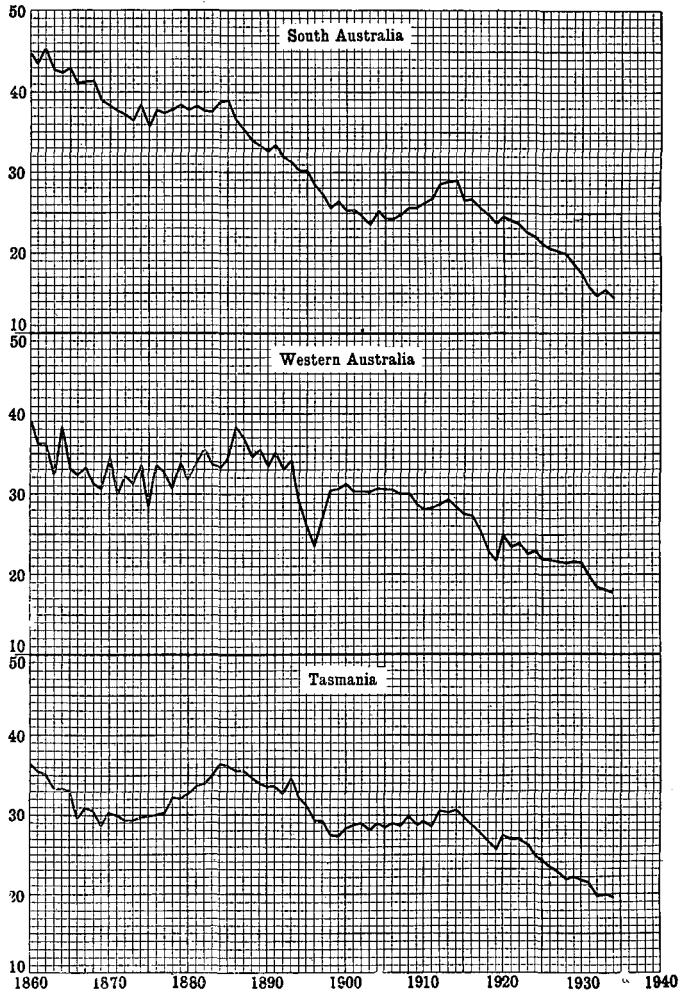
## BIRTH RATES—STATES, 1860-1934.



STATE BIRTH-RATE GRAPHS.

EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one birth per thousand of the population—the basic line for each State being ten per thousand of the population.

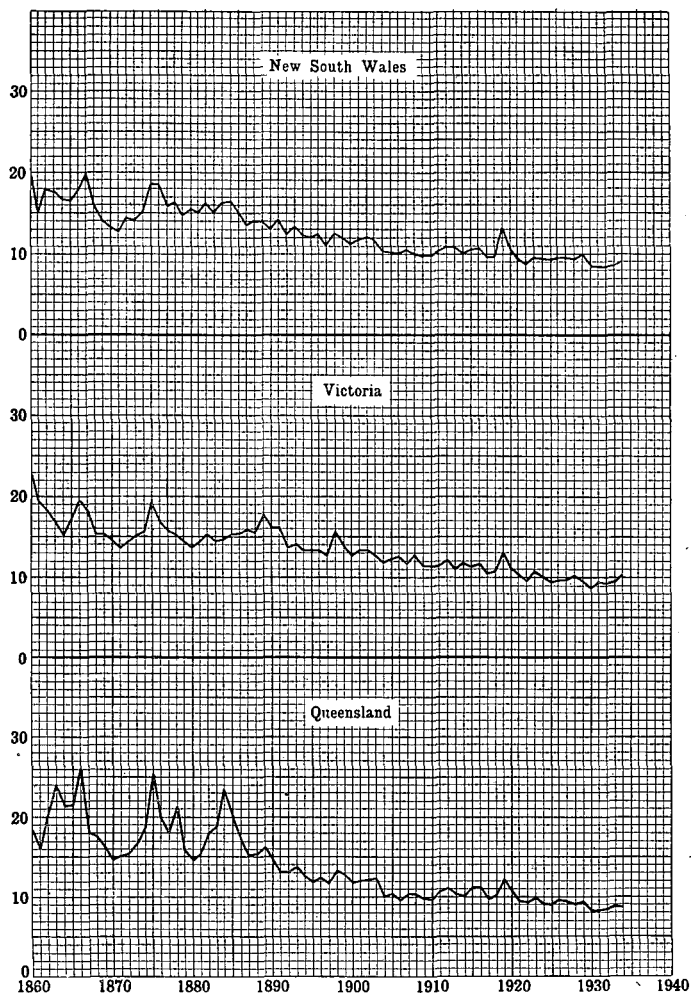


BIRTH RATES—STATES, 1860-1934—*continued.*

STATE BIRTH-RATE GRAPHS.

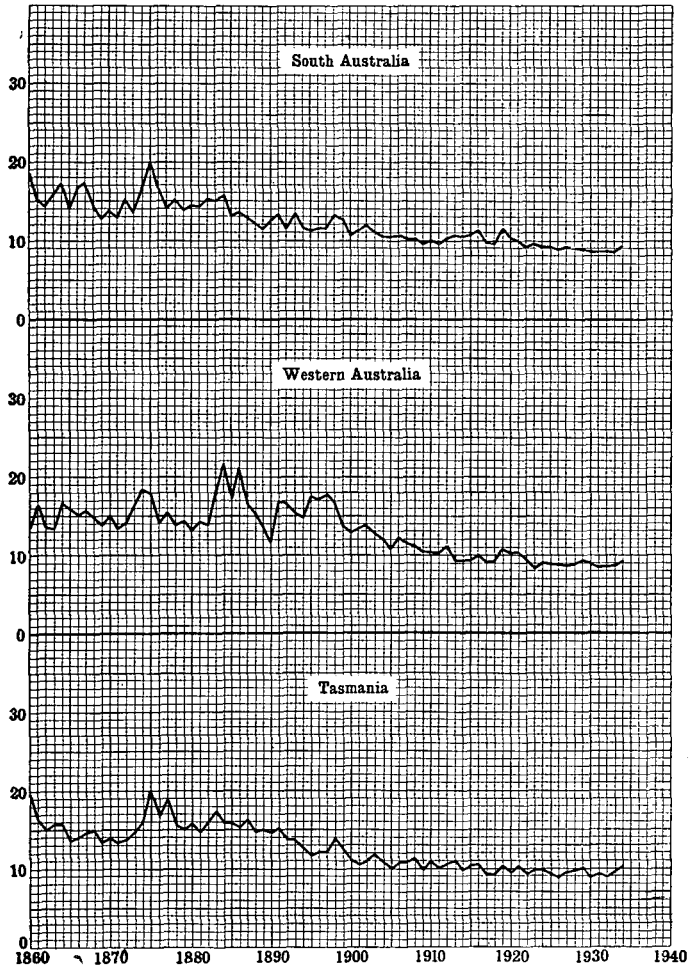
EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one birth per thousand of the population—the basic line for each State being ten per thousand of the population.

## DEATH RATES—STATES, 1860-1934.



STATE DEATH-RATE GRAPHS.

EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one death per thousand of the population. The zero for each State is shown by a thickened line.

DEATH RATES—STATES, 1860-1934—*continued.*

STATE DEATH-RATE GRAPHS.

EXPLANATION.—The base of each small square represents one year's interval, and the vertical height one death per thousand of the population. The zero for each State is shown by a thickened line.

of results so calculated appeared in Year Book No. 22, p. 941, and showed that Australia, with a rate of 198 nuptial births per 1,000 married women aged 15 to 49 years, was midway between the maximum and minimum of the countries for which these rates were obtained.

4. **Masculinity of Births.**—(i) *General.* The masculinity of births, i.e., the number of males per 100 females registered, varies considerably from State to State and from year to year. For 1934 the figures ranged from 102.99 in Western Australia to 110.16 in Tasmania. The averages for the last inter-censal period were as follow:—New South Wales 105.33, Victoria 106.19, Queensland 105.34, South Australia 105.08, Western Australia 105.66, Tasmania 105.59, Australia 105.57. Greater variations are recorded among ex-nuptial births than among nuptial births. The following table shows the figures for Australia at intervals since 1901:—

**MASCULINITY(a) OF BIRTHS REGISTERED, AUSTRALIA.**

Particulars.	1901.	1911.	1921.	1930.	1931.	1932.	1933.	1934.
Total Births ..	104.11	104.73	105.86	105.39	106.15	105.59	105.64	104.14
Ex-nuptial Births ..	105.50	103.10	106.09	105.15	102.60	106.47	102.83	105.72

(a) Number of male per 100 female births.

(ii) *Masculinity of Nuptial and Ex-nuptial Births—Various Countries.* A table showing the masculinity of nuptial and ex-nuptial births for various countries appeared on p. 942 of Official Year Book No. 22.

5. **Ex-nuptial Births.**—(i) *General.* The number of ex-nuptial births reached its maximum, 7,438, in 1913, but it has since fallen considerably. On the average of the five years 1910–1914 the number of ex-nuptial births in Australia was 7,171, while for the period 1930–1934 it was only 5,448, a decline of 24.0 per cent., whereas the annual average total births for the same period declined by 10.4 per cent., from 129,156 to 115,717; hence a comparison between the results for these two periods shows that the proportion of ex-nuptial births has fallen from 5.55 to 4.71 per cent. of all births.

The numbers of births and the rates at intervals from 1901 to 1934 are shown below:—

**EX-NUPTIAL BIRTHS AND BIRTH RATES, AUSTRALIA.**

Particulars.	1901.	1911.	1921.	1930.	1931.	1932.	1933.	1934.
Number of Ex-Nuptial Births ..	6,165	7,074	6,463	5,935	5,841	5,300	5,239	4,925
Percentage on Total Births ..	5.99	5.79	4.75	4.62	4.93	4.78	4.71	4.50

It is, of course, possible that the number of ex-nuptial births is somewhat understated owing to diffidence in proclaiming the fact of ex-nuptiality, and it is not unlikely that the majority of unregistered births are ex-nuptial.

The variations of the ex-nuptial birth rates as between the individual States and Territories for 1934 are as follow:—

**EX-NUPTIAL BIRTHS AND BIRTH RATES, 1934.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
Number..	2,070	1,188	864	253	296	239	14	1	4,925
Percentage on Total Births	4.78	4.27	4.98	2.99	3.79	5.35	15.91	0.75	4.50

(ii) *Rate of Ex-nuptiality.* A further comparison is obtained by calculating the number of ex-nuptial births per thousand of the single and widowed female population between the ages of 15 and 45. The number of ex-nuptial births per 1,000 unmarried women of ages 15 to 45 has been found to be as follows:—Years 1880–82, 14.49; years 1890–92, 15.93; years 1900–02, 13.30; years 1910–12, 12.53; and years 1920–22, 10.50. The estimated number for the years 1930–32 was 7.87. The comparative results for various countries given on p. 944 of Official Year Book No. 22 were taken from the *Annuaire International de Statistique*, Vols. II. and V., and showed that ex-nuptial births varied from 38 per 1,000 unmarried women aged 15 to 49 years in Hungary to 4 in Ireland and Bulgaria. The rate for Australia was 12 per thousand on the average of the years 1906–15.

(iii) *Comparison of Rates.* The following table showing the relative proportions of ex-nuptial and nuptial births to the total population discloses a much greater proportional reduction in the ex-nuptial birth rate than in the nuptial rate:—

**CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES.(a)—AUSTRALIA.**

Rates.	1901.	1911.	1921.	1930.	1931.	1932.	1933.	1934.
Ex-nuptial ..	1.62	1.57	1.18	0.92	0.90	0.80	0.79	0.74
Nuptial ..	25.52	25.64	23.77	18.94	17.26	16.06	15.99	15.65
Total ..	27.14	27.21	24.95	19.86	18.16	16.86	16.78	16.39

(a) Number of births per 1,000 of mean population.

6. *Legitimations.*—In the several States Acts have been passed to legitimize children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who comes within the scope of their intentions, born before or after the passing thereof, is deemed to be legitimate from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. (During 1933, 833 children were legitimized in Australia.)

7. *Multiple Births.*—Among the total number of 109,475 births registered in Australia in 1934, there were 107,158 single births, 2,284 twins, and 33 triplets. The number of cases of twins was 1,159, and of triplets 12, there being 34 stillborn twins and 3 stillborn triplets. The total number of mothers was, therefore, 108,329, the proportion of mothers of twins being one in every 93, of mothers of triplets one in every 9,027, and of mothers of all multiple births one in every 93 mothers. Multiple births occurred in 1.08 per cent. of confinements.

The proportion of multiple births to total births does not vary greatly from year to year and exhibits no constant tendency towards increase or decrease:—

**MULTIPLE BIRTHS.—AUSTRALIA.**

Particulars.	1911.	1921.	1930.	1931.	1932.	1933.	1934.
Mothers of Multiple Births	1,236	1,465	1,439	1,271	1,107	1,154	1,171
Percentage on Total Mothers	1.02	1.09	1.13	1.08	1.01	1.05	1.08
Number of Mothers to each Multiple Birth ..	98	92	88	92	99	95	93

8. Ages of Parents.—The relative ages of the parents of children registered in 1934 have been tabulated separately for male and female births, twins and triplets being distinguished from single births. For total births and for multiple births the relative single ages of parents are shown in the Bulletin of "Australian Demography," No. 52, published by this Bureau. In the present work the exigencies of space allow the insertion of a table showing the relative ages of parents of all births in groups of five years only:—

AGES OF PARENTS—ALL BIRTHS.—AUSTRALIA, 1934.

Ages of Fathers and Type of Birth.	Total Births.	Ages of Mothers.								
		Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.	Un-specified.
Under 20 { Single Twins	677 8	..	490 3	177 5	9	1	..	..	..	..
20 to 24 { Single Twins Triplets	13,460 108 2	3	3,306 16	8,727 80	1,312 9	101 3	10	1	..	..
25 to 29 { Single Twins Triplets	27,921 245 2	3	1,491 11	11,812 89	12,528 122	1,892 20	182 3	13	..	..
30 to 34 { Single Twins Triplets	26,063 285 2	1	371 4	4,198 36	11,049 104	8,903 117	1,413 23	124 1	4	..
35 to 39 { Single Twins Triplets	16,666 219 1	1	101 ..	1,081 6	3,476 32	6,462 100	4,922 74	614 6	9 1	..
40 to 44 { Single Twins Triplets	10,237 161 3	..	31 ..	342 5	1,072 17	2,657 44	3,946 63	2,126 32	63	..
45 to 49 { Single Twins Triplets	4,821 67 1	..	10 1	133 1	369 ..	892 8	1,668 33	1,550 22	199 2	..
50 to 54 { Single Twins Triplets	1,664 19 ..	..	5 ..	54 ..	118 2	290 2	486 7	604 7	107 1	..
55 to 59 { Single Twins Triplets	514 6 1	..	4 ..	24 ..	45 1	79 ..	168 2	148 3	46	..
60 to 64 { Single Twins Triplets	188 4	..	..	4 ..	15 ..	45 1	46 1	65	13 2	..
65 and upwards { Single Twins Triplets	92 1	..	..	5 ..	13 1	23 ..	25 ..	23	3	..
Un-specified { Single Twins	1	..	..	..	..	..	1	..	..	..
Mothers of Nuptial children { Single Twins Triplets Total	102,304 1,123 12 103,439	8 .. .. 8	5,809 35 .. 5,844	26,557 222 4 26,783	30,006 288 1 30,295	21,345 295 2 21,642	12,867 206 4 13,077	5,268 71 1 5,340	444 6 .. 450	.. .. .. ..
Mothers of ex-nuptial children { Single Twins Triplets Total	4,854 36 .. 4,890	21 .. .. 21	1,404 6 .. 1,410	1,688 15 .. 1,703	761 5 .. 766	492 5 .. 497	318 4 .. 322	145 1 .. 146	25 .. .. 25	.. .. .. ..
Total Mothers { Single Twins Triplets	107,158 1,159 12	29 .. ..	7,213 41 ..	28,245 237 4	30,767 293 1	21,837 300 2	13,185 210 4	5,413 72 1	469 6 ..	.. .. ..
Total	108,329	29	7,254	28,486	31,061	22,139	13,399	5,486	475	..

9. Birthplaces of Parents.—The birthplaces of the parents of children whose births were registered during the year 1934 will be found in the Bulletin of "Australian Demography," published by this Bureau. A summary of the results of the tabulation with the addition of the corresponding figures for 1911 follows:—

**BIRTHPLACES OF PARENTS.—AUSTRALIA.**

Birthplace.	Fathers.		Mothers of Nuptial Children.		Mothers of Ex-nuptial Children.	
	1911.	1934.	1911.	1934.	1911.	1934.
<b>AUSTRALASIA—</b>						
Australia .. ..	94,834	87,765	102,073	91,679	6,570	4,556
New Zealand .. ..	1,257	739	1,201	605	68	33
<b>EUROPE—</b>						
England and Wales .. ..	9,849	8,640	6,067	6,679	210	206
Scotland .. ..	2,289	2,384	1,486	1,909	46	46
Ireland .. ..	2,138	924	1,374	595	46	14
Other British Possessions .. ..	49	140	20	57	1	1
Western Europe .. ..	607	228	165	82	9	3
Central Europe .. ..	1,185	328	606	205	8	5
Southern Europe .. ..	360	1,289	203	947	6	5
Eastern Europe .. ..	168	137	81	70	..	1
<b>ASIA—</b>						
British Possessions .. ..	217	198	114	119	2	1
Foreign Countries .. ..	317	181	139	108	3	2
<b>AFRICA—</b>						
British Possessions .. ..	111	203	116	165	2	3
Foreign Countries .. ..	11	8	13	24	..	..
<b>AMERICA—</b>						
Canada .. ..	59	85	34	45	3	..
Other British Possessions .. ..	8	9	5	3	..	..
United States of America .. ..	182	105	87	67	3	3
Other Foreign Countries .. ..	70	22	19	28	1	1
<b>POLYNESIA—</b>						
British .. ..	30	29	21	26	1	1
Foreign .. ..	39	17	13	19	6	1
Indefinite .. ..	159	8	102	7	33	8
Total .. ..	113,939	103,439	113,939	103,439	7,018	4,890

10. Occupations of Fathers.—A summary of the main groups of occupations of the fathers of all nuptial children whose births were registered in 1921, 1931, and 1934, and the percentage of each class on the total are given in the following table:—

**OCCUPATIONS OF FATHERS OF NUPTIAL CHILDREN.—AUSTRALIA.**

Occupation Group.	Number of Fathers.			Percentage on Total.		
	1921.	1931.	1934.	1921.	1931.	1934.
				%	%	%
Professional .. ..	6,204	5,991	5,655	4.84	5.37	5.47
Domestic .. ..	2,319	2,146	1,682	1.81	1.93	1.63
Commercial .. ..	18,298	16,030	10,635	14.26	14.38	10.28
Transport and Communica- tion .. ..	15,351	12,302	9,980	11.96	11.04	9.65
Industrial .. ..	53,567	49,902	18,782	41.74	44.76	18.16
Agricultural, Pastoral, Min- ing, etc. .. ..	32,405	24,760	22,132	25.25	22.21	21.39
Indefinite .. ..	182	349	34,573 <sup>a</sup>	0.14	0.31	33.42 <sup>a</sup>
Total .. ..	128,326	111,480	103,439	100.00	100.00	100.00

(a) Includes 34,272 (33.13 per cent.) clerks, labourers, etc., where industry was not given, who were formerly included under "Commercial" or "Industrial".

11. *Mother's Age, Duration of Marriage, and Issue.*—(i) *General.* The total number of nuptial confinements excluding stillbirths in 1934 was 103,439, viz., 102,304 single births, 1,123 cases of twins, and 12 cases of triplets. Ex-nuptial children—previous issue by the same father—are included as previous issue, but children by former marriages and stillborn children are excluded. The tables cannot be given in detail but the following are their most salient features. More complete tabulations are shown in "Australian Demography," Bulletin No. 52 issued by this Bureau.

(ii) *Duration of Marriage and Issue of Mothers.* The following table shows that the duration of marriage of mothers of nuptial children ranged from less than one year up to between 32 and 33 years, and that the average family increased fairly regularly with the duration of marriage. The average issue of married mothers who bore children in 1934 was 2.83, compared with 2.89 in 1933, 2.95 in 1932 and 1931, and 2.92 in 1930.

DURATION OF MARRIAGE AND ISSUE OF MOTHERS.—AUSTRALIA, 1934.

Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.	Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.
Years.				Years.			
0-1 ..	18,098	18,256	1.01	17-18 ..	1,036	7,065	6.82
1-2 ..	11,609	14,556	1.25	18-19 ..	972	6,720	6.91
2-3 ..	9,687	16,784	1.73	19-20 ..	833	6,128	7.36
3-4 ..	8,080	16,775	2.08				
4-5 ..	7,871	18,784	2.39	20-21 ..	724	5,751	7.94
				21-22 ..	462	3,758	8.13
5-6 ..	6,995	18,646	2.67	22-23 ..	418	3,548	8.49
6-7 ..	6,234	18,568	2.98	23-24 ..	300	2,692	8.97
7-8 ..	5,235	17,322	3.31	24-25 ..	192	1,839	9.58
8-9 ..	4,481	16,243	3.62				
9-10 ..	3,785	15,005	3.96	25-26 ..	109	1,066	9.78
				26-27 ..	69	693	10.04
10-11 ..	3,277	14,047	4.29	27-28 ..	36	366	10.17
11-12 ..	2,809	12,789	4.55	28-29 ..	30	338	11.27
12-13 ..	2,698	13,138	4.87	29-30 ..	8	92	11.50
13-14 ..	2,489	13,086	5.26				
14-15 ..	2,087	11,657	5.59	30-31 ..	3	43	14.33
				31-32 ..	2	29	14.50
15-16 ..	1,597	9,684	6.06	32-33 ..	2	29	14.50
16-17 ..	1,211	7,644	6.31				
				Total ..	103,439	293,141	2.83

(iii) *Ages of Mothers and Issue.* The following table shows the average number of children borne by mothers of different ages. In the younger ages there is, naturally, little difference in the average number of children to each mother, but with the increase



of the age of the mother the number of issue has fallen in comparison with past years. During the period 1911 to 1934 the average issue of mothers of all ages has fallen by 15.27 per cent.—from 3.34 in 1911 to 2.83 in 1934 :—

#### AGES AND ISSUE OF MOTHERS.—AUSTRALIA.

Ages of Mothers.	Average Number of Children.				Ages of Mothers.	Average Number of Children.			
	1911.	1921.	1931.	1934.		1911.	1921.	1931.	1934.
Under 20 years ..	1.18	1.16	1.21	1.20	40-44 years ..	6.97	6.27	6.00	6.04
20-24 years ..	1.77	1.64	1.74	1.70	45 years and over ..	8.52	8.04	7.48	7.72
25-29 " ..	2.64	2.44	2.46	2.38					
30-34 " ..	3.82	3.57	3.44	3.34					
35-39 " ..	5.28	4.95	4.71	4.60	All ages ..	3.34	3.08	2.95	2.83

(iv) *Previous Issue of Mothers, Various Ages.* The previous issue, according to the age of the mother, is given in the following table :—

#### PREVIOUS ISSUE OF MOTHERS OF VARIOUS AGES.—AUSTRALIA, 1934.

Previous Issue.	Mothers' Ages.							
	Under 20 Years.	20-24 Years.	25-29 Years.	30-34 Years.	35-39 Years.	40-44 Years.	45 Years and Over.	Total.
0	4,777	14,257	10,170	3,852	1,254	308	17	34,635
1	960	7,990	8,635	4,955	1,774	410	13	24,737
2	109	3,147	5,563	4,304	2,099	574	22	15,818
3	5	1,069	3,197	3,164	1,990	654	37	10,116
4	1	248	1,648	2,191	1,638	584	40	6,350
5	..	54	730	1,448	1,340	611	42	4,225
6	..	16	239	928	1,101	515	49	2,848
7	..	2	82	478	808	486	50	1,906
8	..	..	29	199	496	381	36	1,141
9	..	..	2	81	276	314	46	719
10	..	..	..	31	174	208	25	438
11	..	..	..	7	74	132	30	243
12	..	..	..	3	30	90	16	139
13	..	..	..	1	12	38	16	67
14	..	..	..	..	7	21	6	34
15	..	..	..	..	4	6	2	12
16	..	..	..	..	..	5	3	8
17	..	..	..	..	..	3	..	3
Total Mothers	5,852	26,783	30,295	21,642	13,077	5,340	450	103,439

(v) *Previous Issue of Mothers of Twins and Triplets.* Figures regarding the previous issue of mothers of twins and triplets show that 289 mothers had twins at their first confinement; 246 at their second; 188 at their third; 138 at their fourth; 90 at their fifth; 62 at their sixth; 46 at their seventh; 32 at their eighth; 17 at their ninth; 9 at their tenth; 4 at their eleventh; and 2 at their thirteenth.

Of the 12 cases of triplets registered during 1934, 5 were second, 1 third, 2 fourth, 1 fifth, 2 sixth, and 1 seventh confinements.

12. *Interval between Marriage and First Birth.*—(i) *Interval.* The following table shows the interval between marriage and first birth for the years 1911, 1921, 1931 and 1934 respectively. Twins, triplets and quadruplets are included, the eldest born only being enumerated:—

INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH.—AUSTRALIA.

Interval.	Number of First Children.				Percentage on Total.			
	1911.	1921.	1931.	1934.	1911.	1921.	1931.	1934.
					%	%	%	%
Under 1 month ..	562	437	395	298	1.81	1.07	1.15	0.86
1 month ..	608	538	523	401	1.96	1.31	1.52	1.16
2 months ..	817	735	750	625	2.63	1.79	2.17	1.81
3 " ..	1,125	1,017	1,135	996	3.63	2.48	3.29	2.88
4 " ..	1,299	1,336	1,409	1,417	4.19	3.26	4.09	4.09
5 " ..	1,651	1,781	1,968	1,993	5.33	4.34	5.71	5.75
6 " ..	2,089	2,420	2,517	2,809	6.74	5.90	7.30	8.11
7 " ..	1,602	2,231	2,022	2,167	5.17	5.44	5.86	6.26
8 " ..	1,529	1,950	1,139	1,276	4.93	4.75	3.30	3.68
9 " ..	3,361	4,222	2,272	2,380	10.84	10.29	6.59	6.87
10 " ..	2,623	3,630	1,859	1,986	8.46	8.85	5.39	5.73
11 " ..	1,893	2,645	1,636	1,603	6.11	6.45	4.74	4.63
Total under 1 year	19,159	22,942	17,625	17,951	61.80	55.93	51.11	51.83
1-2 years ..	7,400	11,149	8,888	8,749	23.87	27.18	25.77	25.26
2-3 " ..	2,101	2,923	3,441	3,236	6.78	7.13	9.98	9.35
3-4 " ..	908	1,413	1,823	1,604	2.93	3.45	5.29	4.63
4-5 " ..	471	837	967	1,057	1.52	2.04	2.80	3.05
5-9 " ..	762	1,473	1,424	1,746	2.46	3.59	4.13	5.04
10-14 " ..	159	223	262	238	0.51	0.54	0.76	0.69
15-19 " ..	31	54	50	46	0.10	0.13	0.14	0.13
20 years and over	9	4	6	8	0.03	0.01	0.02	0.02
Total ..	31,000	41,018	34,486	34,635	100.00	100.00	100.00	100.00

The masculinity of first births was 104.37 as compared with 104.14 for total births.

(ii) *Ages of Mothers and Interval.* The previous issue of mothers of ex-nuptial children is not recorded, but for the purposes of the following table all ex-nuptial births have been assumed to be first births. The table shows in a condensed form the ages of mothers in cases of ex-nuptial births, of nuptial first births occurring less than nine months after marriage, and of all nuptial and ex-nuptial first births. A comparison of the combined total of the first two columns with the total of nuptial children born nine months or more after marriage shows that for all ages the ratio was 3 to 4. At all ages up to and including 21, however, there was a preponderance of ex-nuptial births and of births following on ante-nuptial conception. It must, of course, be understood that a certain number of premature births is necessarily included among the births which occurred less than nine months after marriage, but information in connexion therewith is not available, and the figures in the table must be accepted with this reservation. The tabulation in single ages of mothers appears in Demography Bulletin No. 52, published by this Bureau.

The last four columns show the percentage of births following ante-nuptial conception on the total nuptial first births and ex-nuptial births. These columns disclose the remarkable fact that the percentage of births due to ante-nuptial conception diminishes rapidly from about 80 per cent. among mothers under 20 years of age to a minimum among mothers 25 to 34 years and then rises rapidly to mothers 45 years and over.

**AGES OF MOTHERS AND INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH, ETC.—AUSTRALIA.**

Age of Mother at Birth of Child.	1934.				Percentage Column III. on Column IV.			
	Ex-nuptial Births.	Nuptial Births less than nine months after Marriage.	Total of two preceding columns.	Nuptial First Births and Ex-nuptial Births.	1911.	1921.	1931.	1934.
	I	II.	III.	IV.				
Under 20 years	1,431	3,594	5,025	6,208	% 83.12	% 79.23	% 82.60	% 80.94
20 to 24 years	1,703	6,100	7,803	15,960	53.91	45.82	48.43	48.89
25 to 29 "	766	1,620	2,386	10,936	32.50	25.60	21.89	21.82
30 to 34 "	497	462	959	4,349	28.06	23.05	22.20	22.05
35 to 39 "	322	169	491	1,576	32.64	29.43	30.86	31.15
40 to 44 "	146	35	181	454	36.56	35.31	38.95	39.87
45 and over ..	19	2	21	36	60.47	54.84	48.89	58.33
Total ..	4,884	11,982	16,866	39,519	48.14	39.74	43.80	42.68

13. Interval between Birth and Registration of Birth.—Detailed information for the years 1911 to 1921 regarding the period which elapsed between birth and registration of birth was contained in Demography Bulletins issued by this Bureau for those years. The average interval for the year 1921 was 14.22 days for all children. Although no complete measurements have been made since 1921 it may be assumed that the interval has decreased to about 13 days.

### § 2. Marriages.

1. Marriages, 1934.—The number of marriages registered in Australia during the year ended the 31st December, 1934, was 51,465, giving a rate of 7.71 per 1,000 of the mean population for the year. The number of marriages in each State during 1934 together with the crude marriage rates for a series of years are given hereunder:—

#### MARRIAGES.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Aus-tralia.
Marriages in 1934..	20,210	13,862	7,635	4,310	3,682	1,678	30	58	51,465
Crude Rate—(a)									
1901 ..	7.73	6.99	6.66	6.45	9.68	7.76	1.05	..	7.32
1911 ..	9.19	8.40	8.41	9.80	8.44	7.77	3.02	2.81	8.79
1921 ..	8.78	8.90	7.82	8.82	7.95	7.82	3.83	0.80	8.59
1922 ..	8.16	8.27	7.57	8.21	7.17	7.77	3.52	..	8.03
1923 ..	7.96	8.16	7.31	7.95	6.77	7.36	1.90	1.19	7.82
1924 ..	8.05	8.10	7.66	7.82	7.15	7.07	4.57	1.02	7.89
1925 ..	8.07	8.00	7.73	7.88	7.36	6.98	5.22	2.29	7.89
1926 ..	8.19	7.90	7.50	8.13	7.47	6.71	3.55	2.74	7.90
1927 ..	8.34	7.88	7.21	7.96	7.93	6.72	5.84	3.88	7.93
1928 ..	8.16	7.53	7.14	7.26	8.12	6.97	5.16	3.54	7.71
1929 ..	7.80	7.31	6.87	6.50	8.00	7.86	4.48	5.03	7.43
1930 ..	6.86	6.52	6.81	5.78	7.47	6.56	6.23	3.79	6.69
1931 ..	6.02	5.66	6.43	5.33	6.34	6.68	5.04	4.09	5.96
1932 ..	6.73	6.49	6.86	6.29	6.68	6.64	4.47	4.82	6.63
1933 ..	7.07	6.96	6.84	6.84	7.69	7.13	5.76	5.85	7.03
1934 ..	7.70	7.57	7.99	7.39	8.34	7.32	6.08	6.26	7.71

(a) Number of marriages (not persons married) per 1,000 of mean annual population.

As in some international tabulations the marriage rates are calculated per 1,000 of the unmarried population of 15 years and over, the corresponding rates have been worked out for Australia for the last four census periods for which the particulars are available. The figures comprise in each case the census year with the year immediately preceding and the year immediately following, and are as follow:—Years 1880–82, 48.98; years 1890–92, 45.74; years 1900–02, 42.14; years 1910–12, 50.44; years 1920–22, 56.02; and years 1932–34, 42.88. These rates refer, of course, to persons married and not to marriages, as is the case in the preceding table.

2. Marriage Rates in Various Countries.—The following table shows the marriage rate for Australia in comparison with the rates for various other countries:—

CRUDE MARRIAGE RATES. (a)—VARIOUS COUNTRIES.

Country.	1908 to 1913.	1934.	Country.	1908 to 1913.	1934.
Germany .. ..	7.8	11.2	New South Wales ..	8.8	7.7
Soviet Union ..	8.6	10.6(f)	<b>Australia</b> .. ..	<b>8.4</b>	<b>7.7</b>
Denmark .. ..	7.3	9.5	Victoria .. ..	8.0	7.6
Union of South Africa(c)	(d)	8.8(e)	Scotland .. ..	6.7	7.5
Spain .. ..	7.0	8.6	South Australia ..	9.1	7.4
England and Wales ..	7.6	8.5	Netherlands .. ..	7.5	7.3
Poland .. ..	7.0	8.4	Tasmania .. ..	7.9	7.3
Rumania .. ..	9.5	8.3(e)	Italy .. ..	7.7	7.3
Western Australia ..	8.1	8.3	Japan .. ..	9.3	7.2(e)
Queensland .. ..	8.2	8.0	France .. ..	7.9	7.1
Czechoslovakia ..	7.7	7.9	Finland .. ..	6.1	6.9(e)
United States (b) ..	(d)	7.9(g)	Canada .. ..	(d)	6.8
Belgium .. ..	7.9	7.9(e)	Portugal .. ..	6.9	6.7
Switzerland .. ..	7.3	7.8	Norway .. ..	6.2	6.7
Sweden .. ..	6.0	7.8	Argentina .. ..	6.8	6.6
Great Britain and			Northern Ireland ..	5.2	6.4
Ireland .. ..	7.3	7.7(e)	Ceylon .. ..	5.2	5.5
New Zealand .. ..	8.5	7.7	Irish Free State ..	5.2	4.7

(a) Number of marriages per 1,000 of mean population. (b) Registration area. (c) White population only. (d) Not available. (e) For 1933. (f) For 1929. (g) For 1932.

3. Ages and Conjugal Condition at Marriage.—(i) *General.* The ages at marriage of bridegrooms and brides will be found in "Australian Demography," Bulletin No. 52, published by this Bureau. A summary in age-groups is given in the table hereunder, which also shows the previous conjugal condition of the contracting parties. There were 2,600 males who were less than twenty-one years of age married during 1934, while the corresponding number of females was 11,123. At the other extreme there were 64 men of sixty-five years and upwards who described themselves as bachelors, and 12 spinsters of corresponding age.

The information regarding the percentage distribution of bridegrooms and brides is shown in the last five lines of the table for the years 1911, 1921, 1931, 1933 and 1934.

## AGES AND CONJUGAL CONDITION OF PERSONS MARRIED.—AUSTRALIA, 1934.

Ages at Marriage.	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
Under 20..	1,206	..	..	1,206	7,604	2	1	7,607
20-24 years	15,603	20	16	15,639	22,600	44	63	22,707
25-29 "	18,207	138	101	18,446	12,090	144	248	12,482
30-34 "	7,785	265	205	8,255	3,749	218	287	4,254
35-39 "	2,713	344	215	3,272	1,424	285	224	1,933
40-44 "	1,175	411	200	1,786	623	271	135	1,029
45-49 "	540	389	137	1,066	277	261	79	617
50-54 "	274	358	68	700	140	195	37	372
55-59 "	124	261	38	423	71	120	9	200
60-64 "	62	217	13	292	30	97	8	135
65 years and over ..	64	302	14	380	12	114	3	129
Total ..	47,753	2,705	1,007	51,465	48,620	1,751	1,094	51,465
Percentage on Total	%	%	%	%	%	%	%	%
1911 ..	93.70	5.84	0.46	100.00	94.60	4.68	0.72	100.00
1921 ..	92.43	6.37	1.20	100.00	92.85	5.91	1.24	100.00
1931 ..	92.04	6.09	1.87	100.00	93.89	4.02	2.09	100.00
1933 ..	92.76	5.22	2.02	100.00	94.53	3.48	1.99	100.00
1934 ..	92.79	5.26	1.95	100.00	94.47	3.40	2.13	100.00

(ii) *Relative Ages, Bridegrooms and Brides.* The relative ages of bridegrooms and brides are shown for single years in "Australian Demography," Bulletin No. 52; a condensation into age-groups of five years is given below:—

## RELATIVE AGES OF PERSONS MARRIED.—AUSTRALIA, 1934.

Ages of Bridegrooms.	Total Bridegrooms.	Ages of Brides.							
		Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.
Under 20 years ..	1,206	3	848	336	15	4	..	..	..
20 to 24 ..	15,639	10	4,386	9,503	1,573	137	19	7	4
25 to 29 ..	18,446	4	1,762	9,266	6,308	926	137	35	8
30 to 34 ..	8,255	3	423	2,654	3,067	1,598	403	80	27
35 to 39 ..	3,272	1	95	639	949	824	567	132	65
40 to 44 ..	1,786	..	39	199	326	432	397	259	134
45 to 49 ..	1,066	..	18	62	151	192	209	232	202
50 to 54 ..	700	..	6	31	59	92	92	148	272
55 to 59 ..	423	..	2	4	24	23	61	78	231
60 to 64 ..	292	..	4	8	7	18	28	26	201
65 years and over ..	380	..	3	5	3	8	20	32	309
Total Brides ..	51,465	21	7,586	22,707	12,482	4,254	1,933	1,029	1,453

(iii) *Average Ages, Bridegrooms and Brides.* The age at marriage of brides has declined slightly during recent years to an average of about 25½ years. The figures for the five years are:—1930, 25.49; 1931, 25.30; 1932, 25.41; 1933, 25.42; and 1934, 25.65. For the five years 1907-11 the average age was 25.70 years compared

with 25.92 years for the five years 1912-16, 26.07 years for the five years 1917-21, and 25.76 years for the five years 1925-29. The average age of bridegrooms was in 1930, 29.20; in 1931, 28.99; in 1932, 29.06; in 1933, 29.07; and in 1934, 29.24 years. It follows, therefore, that brides are, generally speaking, three and one-half years younger than bridegrooms.

4. **Previous Conjugal Condition.**—The number of bachelors and spinsters, widowed and divorced persons, who were married during the year 1934, has already been given. The following table shows the conjugal condition of the contracting parties:—

**PREVIOUS CONJUGAL CONDITION OF PERSONS MARRIED.—AUSTRALIA, 1934.**

Conjugal Condition of Bridegrooms.	Total Bridegrooms.	Brides.		
		Spinsters.	Widows.	Divorced.
Bachelors .. .. .	47,753	46,091	899	763
Widowers .. .. .	2,705	1,786	733	186
Divorced .. .. .	1,007	743	119	145
<b>Total Brides .. .. .</b>	<b>51,465</b>	<b>48,620</b>	<b>1,751</b>	<b>1,094</b>

5. **Birthplaces of Persons Married.**—The following table shows the birthplaces of persons who were married in 1911, 1921 and 1934. In "Australian Demography," Bulletin No. 52, the relative birthplaces of bridegrooms and brides married in 1934 will be found tabulated in detail:—

**BIRTHPLACES OF PERSONS MARRIED.—AUSTRALIA.**

Birthplace.	Bridegrooms.			Brides.		
	1911.	1921.	1934.	1911.	1921.	1934.
<b>AUSTRALASIA—</b>						
Australia .. .. .	31,298	37,925	43,273	33,922	40,137	46,540
New Zealand .. .. .	450	405	492	303	280	368
<b>EUROPE—</b>						
England and Wales .. .. .	3,023	3,590	4,592	1,675	2,488	2,829
Scotland .. .. .	739	867	1,364	460	656	866
Ireland .. .. .	494	470	434	363	281	226
Other British Possessions .. .. .	16	30	49	9	14	22
Western Europe .. .. .	205	175	127	45	45	38
Central Europe .. .. .	311	149	201	92	61	77
Southern Europe .. .. .	62	139	411	21	56	170
Eastern Europe .. .. .	47	83	75	18	21	37
<b>ASIA—</b>						
British Possessions .. .. .	59	59	87	27	24	46
Foreign Countries .. .. .	83	57	46	16	12	39
<b>AFRICA—</b>						
British Possessions .. .. .	42	58	114	20	39	74
Foreign Countries .. .. .	1	3	10	2	5	6
<b>AMERICA—</b>						
Canada .. .. .	44	45	43	6	11	37
Other British Possessions .. .. .	6	8	7	..	5	1
United States of America .. .. .	58	90	72	16	25	34
Other Foreign Countries .. .. .	44	11	13	15	10	9
<b>POLYNESIA—</b>						
British .. .. .	13	9	20	7	11	16
Foreign .. .. .	25	18	8	7	13	13
Indefinite .. .. .	41	22	27	37	19	17
<b>Total .. .. .</b>	<b>37,061</b>	<b>44,213</b>	<b>51,465</b>	<b>37,061</b>	<b>44,213</b>	<b>51,465</b>

6. **Occupations and Ages of Bridegrooms.**—On the experience of 1931 the average ages at marriage of bridegrooms in the larger classes of occupations were as follow:—Professional, 30.01 years; Domestic, 30.47 years; Commercial, 29.20 years; Transport, 28.71 years; Industrial, 28.08 years; and Primary Producers, 30.15 years.

7. **Fertility of Marriages.**—The quotient obtained by division of the nuptial births registered, e.g., during the five years 1930 to 1934, by the number of marriages registered during the five years 1925 to 1929, i.e., the period antecedent by five years to the period of the births, has been called the "fertility of marriages." The quotient for this period is 2.58—in other words, the number of children to be expected from every marriage in Australia is about three. This method, while not absolutely accurate, generally furnishes results which agree fairly well with those found by more elaborate and careful investigation. For the following five-yearly periods the results were:—1925-29, 2.84; 1926-30, 2.88; 1927-31, 2.80; 1928-32, 2.53; 1929-33, 2.91; and 1930-34, 2.58.

8. **Celebration of Marriages.**—In all the States marriages may be celebrated either by ministers of religion whose names are registered for that purpose with the Registrar-General, or by certain civil officers—in most cases district registrars. Most of the marriages are celebrated by ministers of religion. The registered ministers in 1934 belonged to more than forty different denominations, some of which, however, can hardly be regarded as having any valid existence. A number of these have been omitted from the tabulation and are bracketed under the heading "Other Christian." The figures for 1934 are shown in the following table:—

MARRIAGES IN EACH DENOMINATION, 1934.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Australia.	
									No.	Per Cent.
										%
Church of Eng-land ..	8,190	3,997	2,298	974	1,393	635	..	25	17,512	34.03
Roman Catholic ..	4,280	2,540	1,773	447	594	274	4	24	9,936	19.31
Methodist ..	2,354	2,148	1,187	1,348	567	246	2	3	7,855	15.26
Presbyterian ..	2,382	2,330	1,165	192	321	141	..	2	6,533	12.69
Baptist ..	372	654	165	169	60	71	..	3	1,494	2.90
Congregational ..	420	248	128	229	104	52	..	..	1,181	2.29
Church of Christ ..	120	391	58	209	67	16	13	..	874	1.70
Lutheran ..	34	77	168	221	2	..	..	..	502	0.98
Salvation Army	101	104	68	33	24	13	..	..	343	0.67
Seventh-Day Adventist ..	52	15	21	7	16	4	..	..	115	0.22
Greek Catholic ..	29	11	10	5	16	..	..	..	71	0.14
Unitarian ..	4	43	..	12	..	..	..	..	59	0.11
Other Christian ..	143	84	282	43	15	19	4	..	590	1.15
Hebrew ..	62	64	3	3	8	..	..	..	140	0.27
Registrar's Office	1,667	1,156	309	418	495	207	7	1	4,260	8.28
<b>Total ..</b>	<b>20,210</b>	<b>13,862</b>	<b>7,635</b>	<b>4,310</b>	<b>3,682</b>	<b>1,678</b>	<b>30</b>	<b>58</b>	<b>51,465</b>	<b>100.00</b>
<b>Marriages cele- brated by Ministers of Religion</b>										
per cent.	91.75	91.66	95.95	90.30	86.56	87.66	76.67	98.28	91.72	..
<b>Marriages cele- brated by Civil Officers</b>										
per cent.	8.25	8.34	4.05	9.70	13.44	12.34	23.33	1.72	8.28	..

## § 3. Deaths.

1. Deaths, 1934.—The following table shows the number of deaths, male and female, registered in each State during the year :—

## DEATHS, 1934.

Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
Male ..	13,173	9,913	4,821	2,835	2,531	1,227	50	21	34,571
Female ..	10,301	8,735	3,371	2,568	1,545	1,118	10	10	27,658
Total ..	23,474	18,648	8,192	5,403	4,076	2,345	60	31	62,229

2. Crude Death Rates.—The crude death rates at intervals from 1901 to 1934 are shown in the following table :—

## CRUDE DEATH RATES.(a)

Year and Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
1901 ..	11.75	13.22	11.98	11.12	13.39	10.51	19.10	(b)	12.22
1911 ..	10.31	11.52	10.65	9.81	10.19	10.14	19.63	5.61	10.66
1921 ..	9.50	10.52	9.37	10.02	10.42	10.30	20.44	1.61	9.91
1922 ..	8.89	9.65	9.21	9.13	9.28	9.27	16.22	2.11	9.21
1923 ..	9.56	10.71	9.93	9.63	8.35	9.87	10.30	2.98	9.88
1924 ..	9.28	10.05	9.00	9.25	8.99	9.82	11.84	3.83	9.46
1925 ..	9.07	9.47	9.02	9.22	8.89	9.26	16.19	2.50	9.18
1926 ..	9.44	9.63	9.58	8.81	8.79	8.94	16.22	6.60	9.40
1927 ..	9.46	9.71	9.28	9.07	8.65	9.54	17.07	6.96	9.42
1928 ..	9.21	10.11	9.01	9.02	8.93	9.89	15.92	5.73	9.42
1929 ..	9.82	9.44	9.26	8.80	9.34	9.99	14.55	4.57	9.52
1930 ..	8.39	8.93	8.19	8.46	8.80	8.82	15.46	3.57	8.56
1931 ..	8.32	9.47	8.14	8.49	8.51	9.15	14.12	4.09	8.67
1932 ..	8.27	9.29	8.35	8.58	8.54	8.90	14.85	3.25	8.63
1933 ..	8.58	9.59	8.84	8.44	8.64	9.60	12.55	4.20	8.92
1934—									
Male ..	9.91	10.92	9.62	9.71	10.77	10.59	14.59	4.21	10.20
Female ..	7.96	9.46	7.41	8.82	7.47	9.87	6.60	2.34	8.41
Total ..	8.95	10.19	8.57	9.26	9.23	10.23	12.16	3.35	9.32

(a) Number of deaths per 1,000 of annual mean population. (b) Part of New South Wales prior to 1911.

3. Index of Mortality.—(i) *General.* The death rates quoted above are crude rates, i.e., they simply show the number of deaths per thousand of mean population without taking the age constitution into consideration. Other conditions being equal, however, the death rate of a country will be lower if it contains a large percentage of young people (not infants). In order to obtain a comparison of the mortality of various countries on a uniform basis so far as sex and age constitution are concerned, the standard population compiled by the International Institute of Statistics according to age distribution (eleven age-groups) of the population of nineteen European countries at their censuses nearest to the year 1900 is used in the computation of the "Index of Mortality" as distinguished from the crude death rate. Full details of the "Standard Population" will be found in Year Book No. 22, page 962.



(ii) *Comparison of Rates.* For the year 1934 on the basis of the crude rates there is a range of 1.66 per 1,000 persons between the lowest rate in Queensland (8.57) and the highest rate in Tasmania (10.23), whereas the standardized rates decrease the range to 1.06 per 1,000, i.e., between 8.39 in South Australia and 9.45 in Western Australia. In its application to the figures for 1934 the process of adjustment altered the relative positions of all States, particularly those of South Australia and Western Australia, from those determined by the crude rates. Thus South Australia which was third in the crude rates became sixth, and Western Australia, which was fourth, became first. The index of mortality for each State for 1921, 1931, 1933 and 1934 is shown in the following table:—

## INDEX OF MORTALITY.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
1921	10.35	10.79	10.24	10.38	11.88	10.83	13.71	1.89	10.58
1931	8.41	8.78	8.36	7.85	8.66	8.58	16.37	5.27	8.49
1933	8.52	8.74	9.10	7.66	8.74	8.86	7.71	6.09	8.62
1934	8.96	9.30	8.84	8.39	9.45	9.43	10.97	5.14	9.04

4. *Crude Death Rates of Various Countries.*—The following table gives the crude death rates of various countries for a pre-war period and the latest available year:—

## CRUDE DEATH RATES.(a)—VARIOUS COUNTRIES.

Country.	1908-13.	1934.	Country.	1908-13.	1934.
Netherlands ..	13.9	8.4	Argentina ..	17.5	11.8
New Zealand ..	9.3	8.5	England and Wales ..	14.1	11.8
Queensland ..	10.3	8.6	Great Britain and Ireland ..	14.5	12.5(e)
New South Wales ..	10.3	9.0	Scotland ..	15.5	12.9
Western Australia ..	10.3	9.2	Irish Free State ..	16.9	13.0
South Australia ..	10.1	9.3	Belgium ..	15.7	13.1(e)
<b>Australia ..</b>	<b>10.7</b>	<b>9.3</b>	Italy ..	20.4	13.1
Canada (including Quebec) ..	(c)	9.4	Czechoslovakia ..	21.0	13.2
Union of South Africa (Whites) ..	(c)	9.7	Finland ..	16.4	13.6(e)
Norway ..	13.6	9.8	Northern Ireland ..	16.9	14.3(e)
Tasmania ..	10.7	10.2	Poland ..	21.0	14.5
Victoria ..	11.7	10.2	France ..	18.6	15.1
Denmark ..	13.2	10.4	Spain ..	22.8	15.9
United States (b) ..	(c)	10.6(e)	Japan ..	20.5	17.8(e)
Germany ..	16.5	10.9	Rumania ..	24.7	18.7(e)
Sweden ..	14.0	11.2	Soviet Union ..	28.9	18.8(d)
Switzerland ..	15.2	11.3	Ceylon ..	31.4	22.9
			Egypt ..	25.8	27.8(e)

(a) Number of deaths per 1,000 of mean population.  
available. (d) For year 1928.

(b) Registration area.

(c) For year 1933.

(e) Not

5. *Infantile Deaths and Death Rates.*—(i) *Australia, 1901 to 1934.* The universal experience that during the first few years of life the higher death rate of male infants tends to counteract the excess of male births is confirmed by the fact that out of 296,887 male infants born from 1930 to 1934, 14,126 (47.57 per 1,000) died during their first year of life, while of 281,698 female infants only 10,683 (37.92 per 1,000) died during the first year.

## INFANTILE DEATHS AND DEATH-RATES.—AUSTRALIA.

Year.	Registered deaths under one year.			Rate of Infantile Mortality. (a)		
	Males.	Females.	Total.	Males.	Females.	Total.
1901 ..	5,888	4,778	10,666	112.13	94.73	103.61
1911 ..	4,745	3,624	8,369	75.91	60.72	68.49
1921 ..	5,111	3,841	8,952	72.97	58.06	65.73
1930 ..	3,419	2,646	6,065	51.90	42.33	47.24
1931 ..	2,889	2,105	4,994	47.34	36.62	42.14
1932 ..	2,621	1,960	4,581	46.00	36.32	41.30
1933 ..	2,500	1,897	4,397	43.74	35.06	39.52
1934 ..	2,697	2,075	4,772	48.29	38.69	43.59

(a) Number of deaths under 1 year per 1,000 live births registered.

(ii) States, 1901 to 1934. For the States and Territories the rates of infantile mortality during the period 1901-34 were as follow :—

## INFANTILE MORTALITY RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Cap. Terr.	Australia.
1901-05..	97.02	95.91	94.35	86.60	124.79	90.00	149.35	(c)	96.91
1906-10..	77.30	79.90	71.27	68.38	89.80	83.18	143.79	(c)	77.61
1911-15..	71.05	72.23	65.68	67.26	72.43	70.91	85.11	32.56	70.32
1916-20..	64.82	67.18	63.04	61.93	61.73	63.84	67.15	40.40	64.67
1921-25..	58.11	61.93	50.99	54.19	59.14	60.44	40.82	60.24	57.88
1926-30..	54.74	52.34	47.41	46.95	49.27	53.37	66.09	71.31	51.99
1930 ..	49.84	46.61	39.97	48.38	46.74	50.56	70.42	24.39 <sup>b</sup>	47.24
1931 ..	43.48	44.47	36.67	36.35	41.53	45.90	83.33	37.27 <sup>b</sup>	42.14
1932 ..	40.98	43.00	40.19	36.62	44.57	41.19	75.95	19.87 <sup>b</sup>	41.30
1933 ..	39.35	40.43	42.74	32.13	36.83	41.07	94.59	45.80 <sup>b</sup>	39.52
1934 ..	46.36	44.63	40.61	35.58	40.89	42.28	68.18	7.46 <sup>b</sup>	43.59

(a) Number of deaths under 1 year per 1,000 live births registered. (b) Based on deaths of infants born in the Federal Capital Territory. (c) Part of New South Wales prior to 1911.

## INFANTILE MORTALITY RATES—UNDER ONE MONTH AND UNDER ONE YEAR.

State.	Under one month.			One month and under one year.		
	1911-15.	1921-25.	1934.	1911-15.	1921-25.	1934.
New South Wales ..	31.75	29.97	28.94	39.30	28.14	17.42
Victoria ..	33.07	32.19	27.78	39.16	29.74	16.85
Queensland ..	30.73	27.44	28.80	34.95	23.55	11.81
South Australia ..	29.07	27.83	22.46	38.19	26.36	13.12
Western Australia ..	30.87	27.56	26.15	41.56	31.58	14.74
Tasmania ..	32.68	31.73	27.07	38.23	28.71	15.21
Australia ..	31.69	29.91	27.80	38.63	27.97	15.79

These tables disclose the striking decrease in infantile mortality, the rate for 1934 being less than half that of 1901-05. The second table reveals the fact that relatively little improvement has taken place in the first month of life, but that the principal decrease has occurred among the older children and has been due to the decline in preventible diseases.

The deaths of infants under one year of age during 1934 numbered 4,772, the mortality rate being 43.59. Among the States South Australia had the lowest and New South Wales the highest rate.

(iii) *Districts.* The total number of births and of deaths of children under one year of age for 1934 are shown in Australian Demography Bulletin, No. 52, for each of the sixty-four districts for which the vital statistics have been tabulated.

(iv) *Various Countries and Cities.* Compared with other countries the States of Australia occupy a very favourable position, being surpassed only by New Zealand, and in some instances in 1934 by Netherlands. The Australian cities, Adelaide, Perth, Hobart, Brisbane and Sydney are among the cities having the twelve lowest rates in the list shown on the next page. The list is headed by Oslo (20), Wellington (31) and San Francisco (33), the next nine cities being Amsterdam, Auckland, Stockholm, Christchurch, Adelaide, Perth, Hobart, Brisbane and Sydney. The highest rate recorded in 1934 was 247 in Bombay. A study of the respective rates shows that a high birth rate is often, though not invariably, accompanied by a high infantile death rate:—

#### INFANTILE MORTALITY RATES.(a)—VARIOUS COUNTRIES.

Country.	Infantile Mortality Rate.(a)		Crude Birth Rate.(b) 1934.	Country.	Infantile Mortality Rate.(a)		Crude Birth Rate.(b) 1934.
	1906-15.	1934.			1906-15.	1934.	
New Zealand ..	61	32	16.5	Great Britain and Ireland ..	..	66(e)	14.9(e)
South Australia ..	68	36	14.5	Germany ..	168	66	18.0
Western Australia ..	81	41	17.7	Denmark ..	103	68(e)	17.8
Queensland ..	68	41	18.2	France ..	122	69	16.1
Tasmania ..	77	42	19.5	Northern Ireland ..	92	70	19.4(e)
Netherlands ..	115	43	20.7	Canada (including Quebec) ..	(c)	72	20.4
<b>Australia ..</b>	<b>74</b>	<b>44</b>	<b>16.4</b>	Scotland ..	113	78	18.0
Victoria ..	76	45	15.2	Belgium ..	139	85(e)	16.5(e)
New South Wales ..	74	46	16.5	Italy ..	144	100(e)	23.2
Switzerland ..	108	46	16.2	Spain ..	156	113	20.2
Norway ..	68	47(f)	14.8	Japan ..	151	121(e)	31.6(e)
Sweden ..	74	47	13.8	Czechoslovakia ..	(c)	126	18.8
England and Wales ..	113	58	14.8	Hungary ..	205	150	21.4
United States (Registration Area)	(c)	60	17.1	Egypt ..	(c)	162(e)	44.1(e)
Union of South Africa (Whites)	(c)	62	23.5	Ceylon ..	(c)	173	37.2
Irish Free State	92	63	19.2	Soviet Union ..	(c)	173(d)	42.7(f)
				Rumania ..	(c)	174(e)	32.0(e)

(a) Number of deaths under 1 year per 1,000 births registered of mean population. (c) Not available. (d) For year 1930.

(b) Number of births per 1,000 of year 1932. (e) For year 1933. (f) For

## INFANTILE MORTALITY RATES.(a)—VARIOUS CITIES.

City.	Rate of Infantile Mortality.(a)		City.	Rate of Infantile Mortality.(a)	
	1921.	1934.		1921.	1934.
Oslo .. ..	54	20	Antwerp .. ..	98	57
Wellington ..	61	31	Cologne .. ..	140	59
San Francisco ..	50	33	Berlin .. ..	135	60
Amsterdam ..	54	34	Edinburgh ..	96	63
Auckland ..	54	37	Washington ..	83	65
Stockholm ..	61	39	Munich .. ..	126	65
Christchurch ..	54	39	Breslau .. ..	170	66
Adelaide ..	74	40	London .. ..	80	67
Perth .. ..	81	41	Birmingham ..	82	67
Hobart .. ..	75	41	Leipzig .. ..	136	67
Brisbane ..	62	42	Manchester ..	94	69
Sydney .. ..	62	44	Leeds .. ..	98	71
Cape Town ..	82	45	Paris .. ..	95	76
Copenhagen ..	67	45	Aberdeen .. ..	108	77
Dresden .. ..	115	45	Johannesburg ..	101	77
Melbourne ..	74	48	Dublin .. ..	123	79
Chicago .. ..	84	49	Liverpool .. ..	105	80
Detroit .. ..	83	50	Madrid .. ..	..	81
Toronto .. ..	91	51	Belfast .. ..	115	81
New York City ..	72	52	Montreal .. ..	158	93
Los Angeles ..	68	53	Glasgow .. ..	106	98
Philadelphia ..	78	54	Cairo .. ..	..	201
Sheffield .. ..	99	55	Madras .. ..	281	232
Hamburg .. ..	95	55	Bombay .. ..	402	247

(a) Number of deaths under 1 year per 1,000 births registered.

## CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR.—AUSTRALIA, 1934.

Age at Death.	Measles.	Whooping Cough.	Diphtheria.	Erysipelas.	Meningococcal Meningitis.	Pulmonary Tuberculosis.	Tubercular Meningitis.	Tuberculosis, other forms.	Syphills.	Meningitis.	Convulsions.	Acute Bronchitis.
Under 1 week .. ..	..	..	..	..	..	..	..	..	2	..	17	2
1 week and under 2 weeks ..	..	..	3	1	..	..	1	..	..	..	2	4
2 weeks " 3 .. ..	..	3	1	..	..	..	..	..	2	2	1	1
3 " " 1 month .. ..	..	3	1	..	..	..	..	..	1	2	..	3
1 month " 2 months .. ..	..	36	1	1	1	..	..	..	1	4	2	4
2 months " 3 " .. ..	..	37	1	1	1	..	..	..	7	10	1	5
3 " " 4 " .. ..	1	30	3	1	1	..	..	..	2	7	1	4
4 " " 5 " .. ..	1	24	..	..	..	1	..	..	2	3	1	3
5 " " 6 " .. ..	..	12	..	..	..	1	..	2	1	5	..	..
6 " " 7 " .. ..	..	13	1	..	..	1	..	1	1	6	..	..
7 " " 8 " .. ..	1	18	2	1	..	1	..	1	1	1	1	1
8 " " 9 " .. ..	3	17	2	..	..	3	1	1	1	6	1	1
9 " " 10 " .. ..	..	22	3	..	..	5	1	..	2	1	1	1
10 " " 11 " .. ..	..	20	5	..	1	1	1	..	5	2	..	..
11 " " 1 year .. ..	6	25	4	1	1	1	2	1	1	1	..	..
Total under 1 year .. ..	12	260	27	5	7	4	14	5	21	54	30	28
Infantile Mortality (a)—												
1911 .. ..	0.34	1.57	0.25	0.16	..	0.08	0.31	0.22	0.85	1.83	2.55	2.34
1921 .. ..	0.15	1.97	0.59	0.24	0.03	0.07	0.18	0.08	0.56	1.10	1.45	1.50
1931 .. ..	0.10	1.58	0.25	0.11	0.08	0.03	0.22	0.04	0.20	0.32	0.39	0.32
1934 .. ..	0.11	2.38	0.25	0.04	0.06	0.04	0.13	0.05	0.19	0.49	0.27	0.26
Ex-nuptial deaths under 1 year included in above	..	26	6	..	..	..	1	..	2	2	..	1
Infantile Mortality (b)—												
1925 .. ..	0.16	2.06	0.32	0.16	0.48	..	0.32	..	1.27	0.32	2.38	0.48
1931 .. ..	0.51	1.71	0.34	..	0.17	..	0.34	..	0.51	..	0.51	0.86
1934 .. ..	..	5.28	1.22	..	..	..	0.20	..	0.41	0.41	..	0.20

(a) Rate per 1,000 total births.

(b) Rate per 1,000 ex-nuptial births.

CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR.—AUSTRALIA,  
1934—continued.

Age at Death.	Broncho-Pneumonia.	Pneumonia.	Other Diseases of Stomach.	Diarrhoea and Enteritis.	Hernia and Intestinal Obstruction.	Malformation.	Congenital Debility, Icterus and Sclerema.	Premature Birth.	Injury at Birth.	Other Diseases peculiar to Early Infancy.	Other Causes.	Total.
Under 1 week . . . . .	30	13	..	3	1	278	133	1,244	348	365	56	2,492
1 week and under 2 weeks	19	4	1	9	2	48	16	101	27	50	13	301
2 weeks	21	2	..	4	..	20	8	38	7	18	16	144
3 " " 1 month	13	3	..	4	1	17	7	20	3	7	14	106
1 month " 2 mths	65	14	1	21	6	47	22	16	21	9	47	302
2 months " 3 "	40	11	1	17	1	23	19	10	10	4	21	211
3 " " 4 "	34	13	1	20	4	30	10	3	1	..	23	191
4 " " 5 "	22	15	..	29	1	10	5	..	..	..	23	141
5 " " 6 "	28	13	..	37	3	12	4	1	..	..	23	143
6 " " 7 "	23	8	..	29	4	12	4	1	..	1	10	125
7 " " 8 "	23	10	..	23	7	9	3	..	1	..	21	124
8 " " 9 "	24	10	..	31	2	5	4	..	..	..	23	135
9 " " 10 "	16	11	..	14	2	8	..	..	..	..	21	104
10 " " 11 "	21	10	1	20	4	5	..	..	..	..	25	133
11 " " 1 year	31	6	..	20	2	7	5	..	..	..	16	120
Total under 1 year ..	411	143	9	288	42	528	236	1,439	392	455	362	4,772
Infantile Mortality (a)												
1911 .. .. .	2.86	1.90	0.47	16.99	0.72	2.99	..	22.41	4.07	5.58	68.49	
1921 .. .. .	3.08	2.08	0.71	15.01	0.57	3.74	7.64	15.29	5.53	4.16	65.73	
1931 .. .. .	2.82	1.62	0.13	3.26	0.41	4.23	2.60	14.04	2.81	3.29	42.14	
1934 .. .. .	3.75	1.31	0.08	2.63	0.38	4.82	2.16	13.14	3.58	4.16	43.59	
Ex-nuptial deaths under 1 year included in above .. .. .	39	7	..	26	1	30	24	98	14	17	35	329
Infantile Mortality (b)—												
1925 .. .. .	8.09	2.38	1.11	19.18	0.47	3.64	9.51	20.93	1.90	2.69	6.98	84.83
1931 .. .. .	5.31	3.43	0.34	8.39	0.17	4.28	7.19	21.92	3.08	3.77	5.82	68.65
1934 .. .. .	7.92	1.42	..	5.28	0.20	6.09	4.87	19.90	2.84	3.45	7.11	66.80

(a) Rate per 1,000 total births.

(b) Rate per 1,000 ex-nuptial births.

(v) *Causes of Deaths of Children under one Year.* The preceding table gives for twenty-three causes the ages of all children who died under one year of age during 1934. The infantile mortality rates for 1911, 1921, 1931 and 1934 have been added for all births, and for 1925, 1931 and 1934 for ex-nuptial births. Particulars for males and females may be found in Bulletin No. 52 of "Australian Demography."

Pre-natal influences, such as malformation, congenital debility and premature birth, together with injuries at birth, accounted for 3,050 or 64 per cent. of all deaths under one year; and of these 3,050 deaths, 2,492 or 82 per cent., occurred less than a week after birth. Among the survivors of the first week, broncho-pneumonia caused the greatest number of deaths. This disease was responsible for 411 deaths, representing 9 per cent. of all deaths under one year, or 3.75 per 1,000 births. Diarrhoea and enteritis caused 288 deaths and whooping cough 260 deaths.

(vi) *Deaths of Ex-nuptial Children under one Year.* The deaths of ex-nuptial children were tabulated by this Bureau for the first time in 1925. The causes of death of these children in 1934 and the rates in respect of 1925, 1931 and 1934 are shown as an addendum to the preceding table.



7. Deaths at Single Ages and in Age-Groups.—(i) *General.* The 62,229 deaths registered in Australia in the year 1934 will be found tabulated in groups of five years for each State and Territory in Bulletin No. 52 "Australian Demography, 1934." The deaths during the first two years of life have been tabulated in shorter periods. A summary for Australia is given in the following table :—

## DEATHS AT SINGLE AGES AND IN AGE-GROUPS.—AUSTRALIA, 1934.

Ages.	Males.	Fe- males.	Total.	Ages.	Males.	Fe- males.	Total.
Under 1 week ..	1,439	1,053	2,492	Total 5- 9 years ..	509	360	869
1 week and under 2 ..	172	129	301	" 10-14 " ..	413	305	720
2 weeks and under 3 ..	76	68	144	" 15-19 " ..	578	430	1,008
3 weeks and under 1 month ..	65	41	106				
Total under 1 month	1,752	1,291	3,043	" 20-24 " ..	768	629	1,397
				" 25-29 " ..	743	726	1,469
				" 30-34 " ..	772	729	1,501
				" 35-39 " ..	871	869	1,740
				" 40-44 " ..	1,220	1,063	2,283
				" 45-49 " ..	1,693	1,291	2,984
1 month and under 3 ..	316	197	513	" 50-54 " ..	2,012	1,442	3,454
3 months and under 6 ..	249	226	475	" 55-59 " ..	2,492	1,614	4,106
6 months and under 12	380	361	741	" 60-64 " ..	3,113	2,068	5,181
Total under 1 year..	2,697	2,075	4,772	" 65-69 " ..	3,725	2,770	6,495
				" 70-74 " ..	4,213	3,281	7,494
				" 75-79 " ..	3,741	3,110	6,851
				" 80-84 " ..	2,400	2,176	4,576
1 year and under 2 ..	444	350	794	" 85-89 " ..	1,113	1,290	2,403
2 years ..	211	185	396	" 90-94 " ..	380	476	856
3 " ..	187	153	340	" 95-99 " ..	99	116	215
4 " ..	134	128	262	" 100 and over	18	17	35
				Age Unspecified ..	23	5	28
Total under 5 years ..	3,673	2,891	6,564	Total All Ages ..	34,571	27,658	62,229

(ii) *Rates.* The death rate per 1,000 living at each age in each State for the three years 1920, 1921 and 1922, i.e., the Census year 1921, and the years immediately preceding and following, may be found in Official Year Book No. 22, page 975. It is expected that figures based on the 1933 Census results will be available for the next issue of the Year Book.

8. Deaths of Centenarians.—Particulars concerning the thirty-five persons—eighteen males and seventeen females—who died in 1934 aged 100 years and upwards, are given in the following table. While the Registrars-General of the various States verify the figures as far as possible, absolute reliance cannot be placed on their accuracy, owing to the well-known tendency of very old people to overstate their ages. In connexion with this question it may be noted that while parish registers in the United Kingdom often date very far back, compulsory registration of births dates practically from 1874 only, the Act of 1836 having left many loopholes for those unwilling to register the births of their children.

## DEATHS OF CENTENARIANS.—AUSTRALIA, 1934.

Age.	Locality where Death occurred.	State.	Cause of Death.	Occupation.	Birthplace.	Length of Residence in Australia.	Conjugal Condition
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## MALES.

100	Manning ..	N.S.W. ..	Senility ..	Grazier ..	N.S.W. ..	Native ..	Married
100	Patrick Plains	" ..	" ..	Farmer ..	" ..	" ..	"
100	Kyeamba ..	" ..	" ..	" ..	India ..	50 years ..	"
100	Werribee ..	Victoria ..	" ..	Labourer ..	Victoria ..	Native ..	"
100	Mansfield ..	" ..	" ..	Publican ..	N.S.W. ..	" ..	"
100	McIvor ..	" ..	Arterio-Sclerosis	Farmer ..	Denmark ..	70 years ..	"
100	Doncaster ..	" ..	Senility ..	Gentleman ..	England ..	88 years ..	Single
100	Brisbane ..	Queensland ..	" ..	Miner ..	" ..	66 years ..	"
101	Yanco ..	N.S.W. ..	" ..	Farmer ..	" ..	" ..	Married
101	Albury ..	" ..	Influenza with Hypostatic Pneumonia	Labourer ..	Victoria ..	Native ..	"
101	Preston ..	West. Aust. ..	Senility ..	Farmer ..	England ..	70 years ..	"
102	Wollongong	N.S.W. ..	" ..	Miner ..	" ..	84 years ..	"
103	Manly ..	" ..	Lobar Pneumonia	Blacksmith	N.S.W. ..	Native ..	"
103	Launceston	Tasmania	Influenzal Broncho-Pneumonia	Retired Merchant	England ..	80 years ..	"
104	Adelaide ..	Sth. Aust. ..	Senility ..	Gentleman ..	Scotland ..	54 years ..	Unknown
104	Canberra ..	Fed. Cap. Terr.	Hypostatic Pneumonia; Fall	Old-age Pensioner	Germany ..	102 years	Single
104	Beaconsfield	Tasmania	Cerebral Thrombosis	Not Stated	Tasmania	Native ..	Married
106	Granville ..	N.S.W. ..	Senility ..	Labourer ..	Italy ..	55 years ..	"

## FEMALES.

100	Ballarat E.	Victoria ..	Senility ..	..	England ..	77 years ..	Married
100	Fitzroy ..	" ..	" ..	..	" ..	93 years ..	"
100	Adelaide ..	Sth. Aust. ..	" ..	..	Scotland ..	83 years ..	Single
100	Yankalilla ..	" ..	" ..	..	Ireland ..	79 years ..	Married
100	Kadina ..	" ..	" ..	..	England ..	78 years ..	"
100	Kearsley ..	N.S.W. ..	Cerebral Thrombosis	..	" ..	94 years ..	"
101	Flinders ..	Victoria ..	Senility ..	..	" ..	87 years ..	"
101	Lilydale ..	" ..	" ..	..	" ..	80 years ..	"
102	Randwick	N.S.W. ..	Chronic Myocarditis	..	Ireland ..	80 years ..	"
102	Glen Innes	" ..	Acute Bronchitis	..	England ..	Unknown	"
102	Williamstown	Victoria ..	Senility ..	..	Scotland ..	74 years ..	"
102	Brunswick	" ..	" ..	..	Ireland ..	77 years ..	"
102	Adelaide ..	Sth. Aust. ..	Heat Exhaustion	..	" ..	83 years ..	"
103	Sandringham	Victoria ..	Senility ..	..	England ..	80 years ..	"
104	Avoca ..	" ..	" ..	..	Ireland ..	74 years ..	"
105	Cardwell ..	Queensland ..	Senile Gangrene	..	South Sea Islands	55 years ..	"
109	Rosedale ..	Victoria ..	Senility ..	..	England ..	76 years ..	"

NOTE.—The particulars shown in this table are those given in the death certificates, and no attempt has been made by the Commonwealth Bureau of Census and Statistics to verify them.



9. Length of Residence in Australia of Persons who Died.—The length of residence in Australia of all persons whose deaths were registered in the year 1934 is shown in the following table :—

LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED IN 1934.

Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.	Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.
Born in Australia ..	23,849	20,463	44,312	Resident 25 to 29 years	366	181	547
Resident under 1 year ..	39	16	55	"  30 to 34 " ..	406	172	578
"  1 year ..	11	10	21	"  35 to 39 " ..	314	157	471
"  2 years ..	18	6	24	"  40 to 44 " ..	706	391	1,097
"  3 " ..	27	8	35	"  45 to 49 " ..	1,075	686	1,761
"  4 " ..	28	25	53	"  50 to 54 " ..	1,597	985	2,582
"  5 " ..	43	44	87	"  55 to 59 " ..	710	451	1,161
"  6 " ..	76	47	123	"  60 to 64 " ..	629	468	1,097
"  7 " ..	90	46	136	"  65 yrs. and over	1,315	1,735	3,050
"  8 " ..	91	70	161	Length of residence not			
"  9 " ..	78	61	139	stated ..	1,497	463	1,960
"  10 to 14 years	402	341	743				
"  15 to 19 " ..	169	143	312				
"  20 to 24 " ..	1,035	689	1,724	Total ..	34,571	27,658	62,229

10. Birthplaces of Persons who Died.—The following table provides a summary of birthplaces of persons whose deaths were registered in 1911 and 1934. More detailed information in respect of 1934 will be found in "Australian Demography," Bulletin No. 52 :—

BIRTHPLACES OF PERSONS WHO DIED.—AUSTRALIA.

Birthplace.	1911.			1934.		
	Males.	Females.	Total.	Males.	Females.	Total.
<b>AUSTRALASIA—</b>						
Australia .. ..	14,476	12,279	26,755	23,849	20,463	44,312
New Zealand .. ..	126	79	205	256	204	460
<b>EUROPE—</b>						
England and Wales .. ..	5,639	3,541	9,180	5,192	3,707	8,899
Scotland .. ..	1,666	1,112	2,778	1,357	947	2,304
Ireland .. ..	2,837	2,528	5,365	1,453	1,523	2,976
Other British Possessions .. ..	40	26	66	41	20	61
Western Europe .. ..	365	62	427	388	84	472
Central Europe .. ..	678	292	970	467	259	726
Southern Europe .. ..	122	15	137	246	64	310
Eastern Europe .. ..	71	6	77	88	24	112
<b>ASIA—</b>						
British Possessions .. ..	102	28	130	117	37	154
Foreign Countries .. ..	470	8	478	265	19	284
<b>AFRICA—</b>						
British Possessions .. ..	29	18	47	36	30	66
Foreign Countries .. ..	2	1	3	5	4	9
<b>AMERICA—</b>						
Canada .. ..	73	15	88	54	16	70
Other British Possessions .. ..	5	6	11	13	5	18
United States of America .. ..	72	18	90	76	36	112
Other Foreign Countries .. ..	35	12	47	11	2	13
<b>POLYNESIA—</b>						
British .. ..	47	4	51	22	5	27
Foreign .. ..	44	10	54	46	6	52
Indefinite .. ..	692	218	910	589	203	792
<b>Total .. ..</b>	<b>27,591</b>	<b>20,278</b>	<b>47,869</b>	<b>34,571</b>	<b>27,658</b>	<b>62,229</b>

11. **Occupations of Males who Died.**—Information as to the main groups of the occupations of the 34,569 males who died in Australia in 1934 is contained in the following table. Corresponding data for 1921 and 1931 have been added for purposes of comparison.

**OCCUPATIONS OF MALES WHO DIED.—AUSTRALIA.**

Occupation Group.	Number of Male Deaths.			Percentage on Total.		
	1921.	1931.	1934.	1921.	1931.	1934.
Professional .. ..	1,307	1,534	1,958	4.26	4.82	5.66
Domestic .. ..	830	846	780	2.71	2.66	2.26
Commercial .. ..	2,739	3,727	2,914	8.94	11.72	8.43
Transport and Communica- tion .. ..	1,841	2,189	2,584	6.01	6.89	7.47
Industrial .. ..	8,613	10,330	5,393	28.10	32.49	15.60
Agricultural, Pastoral' and Mining, &c. .. ..	5,711	6,157	6,799	18.63	19.36	19.67
Indefinite .. ..	1,436	1,802	(a)9,206	4.68	5.67	(a)26.63
Dependent .. ..	8,175	5,211	4,935	26.67	16.39	14.28
<b>Total Male Deaths ..</b>	<b>30,652</b>	<b>31,796</b>	<b>34,569</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

(a) Includes clerks, labourers, &c., where industry was not given, who were formerly included under "Commercial" or "Industrial" as follows:—1934, 6,954 (20.12 per cent.).

12. **Causes of Death.**—(i) *General.* The classification adopted by the Commonwealth Bureau of Census and Statistics is that of the International Institute of Statistics, as amended by the Committees of Revision which met in Paris in 1909, 1920, and 1929.

(ii) *Mortality Statistics for 1907 and Subsequent Years.* The statistics relating to causes of death in Australia from the year 1907 onward have been tabulated in the Commonwealth Bureau of Census and Statistics in accordance with the above-mentioned classification, and the system is being employed also in the various State statistical offices.

(iii) *Classification of Causes of Death, 1930 to 1934, according to Abridged International Classification.* An abridged classification, which enumerates forty-three diseases and groups of diseases according to the revised classification, is in use in many European countries and American States, and a table has been prepared showing the causes of death according to the abridged classification, so that the results may be compared with those of countries which use the abridged index.

The compilations for the years 1930 to 1934 will be found in full in Bulletins Nos. 48 to 52 of "Australian Demography." In the following tables the abridged classification has been employed. Tables A, B and C show deaths of males, females and persons for the year 1934. Table D shows the number of persons who died in each of the years 1930 to 1934 and gives the rate per million of population for the last-named year.

Since death rates are subject to continual fluctuation, it is unsafe to base deductions on the figures relating to a single year. In order, therefore, to furnish a valid basis for comparison, Table E giving the number of deaths and the rates per 1,000,000 persons for three quinquennial periods has been prepared. While the absolute number of deaths has increased, the death rate has shown a very satisfactory decrease, which is reflected in the great majority of the causes specified in the table.

## A—CAUSES OF DEATH.—MALES, 1934.

Abridged Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Australia.
1. Typhoid Fever .. ..	1, 2	15	7	12	3	12	2	..	..	51
2. Typhus Fever .. ..	3	..	..	..	..	..	..	..	..	..
3. Small-pox .. ..	6	..	..	..	..	..	..	..	..	..
4. Measles .. ..	7	19	10	5	3	..	..	..	..	..
5. Scarlet Fever .. ..	8	9	11	..	3	..	..	..	..	37
6. Whooping Cough .. ..	9	139	45	23	9	1	2	..	..	23
7. Diphtheria .. ..	10	95	43	19	3	..	3	..	1	214
8a. Influenza—Pneumonic .. ..	11 (a)	105	114	50	19	19	9	..	2	196
8b. Influenza—Other .. ..	11 (b)	56	37	30	9	21	8	..	..	344
10. Tuberculosis of the Respiratory System .. ..	23	567	419	207	146	151	53	..	2	1,545
11a. Tubercular Meningitis .. ..	24	23	22	4	11	8	4	..	..	72
11b. Other Tuberculous Diseases .. ..	25-32	24	54	7	7	5	3	..	..	100
12. Syphilis .. ..	34	46	39	19	11	11	10	..	..	136
13. Malaria .. ..	38	1	2	9	..	7	..	3	..	22
14. Other Infectious or Parasitic Diseases .. ..	*	120	76	50	20	24	10	1	..	301
15. Cancer and other Malignant Tumours .. ..	45-53	1,369	1,073	482	320	281	132	3	1	3,661
16. Tumours, Non-Malignant or of Unspecified Nature .. ..	54, 55	70	36	27	16	10	5	..	..	164
17. Chronic Rheumatism, Gout .. ..	57, 58	18	27	5	7	7	4	..	..	68
18. Diabetes Mellitus .. ..	59	147	116	40	38	21	15	..	..	377
19. Acute and Chronic Alcoholism .. ..	75	13	3	7	4	3	2	..	..	32
20. Other General Diseases .. ..	*	190	149	77	41	27	10	..	..	494
21. Locomotor Ataxy, General Paralysis of Insane .. ..	80, 83	53	32	12	11	7	3	..	..	118
22. Cerebral Haemorrhage, Embolism, etc. .. ..	82	544	444	184	142	96	60	3	..	1,473
23. Other Diseases of Nervous System and Sense Organs .. ..	*	291	181	103	51	58	21	3	1	709
24. Diseases of the Heart .. ..	90-95	3,147	1,997	960	514	442	297	1	5	7,363
25. Other Diseases of the Circulatory System .. ..	96-103	618	519	209	107	101	73	..	..	1,627
26a. Acute Bronchitis .. ..	106(a)(c)	47	25	13	13	5	1	..	..	104
26b. Chronic Bronchitis .. ..	106(b)(d)	107	109	37	40	28	13	..	..	334
27. Pneumonia (all forms) .. ..	107-109	863	777	294	219	196	101	3	3	2,456
28. Other Diseases of the Respiratory System .. ..	104, 105, 110-114	183	241	106	51	60	12	3	..	656
29a. Diarrhoea and Enteritis (under two years of age) .. ..	119	74	64	14	13	24	16	..	..	205
29b. Diarrhoea and Enteritis (two years and over) .. ..	120	47	84	32	16	18	10	1	..	208
30. Appendicitis .. ..	121	154	80	62	30	18	11	..	..	355
31a. Cirrhosis of the Liver .. ..	124	57	59	32	14	12	1	..	1	176
31b. Other Diseases of the Liver and Biliary Calculi .. ..	125-127	59	53	26	11	13	3	..	..	165
32a. Hernia, Intestinal Obstruction .. ..	122	133	87	42	22	22	9	..	1	316
32b. Other Diseases of the Digestive System .. ..	*	227	173	80	55	50	21	1	..	607
33. Nephritis .. ..	130-132	839	598	300	141	113	52	3	..	2,046
34. Other Diseases of the Genito-Urinary System .. ..	133-139	251	231	138	80	47	24	..	..	771
37. Diseases of the Skin, Bones, etc. .. ..	151-156	94	49	35	18	20	8	..	..	224
38. Congenital Debility, Malformations, Premature Birth, etc. .. ..	157-161	756	436	300	125	125	70	2	..	1,814
39. Senility .. ..	162	371	497	216	174	116	26	8	..	1,408
40. Suicide .. ..	163-171	263	130	109	59	65	13	3	1	643
41. Homicide .. ..	172-175	26	16	10	3	7	10	..	..	72
42. Accidental or Violent Death (except Suicide and Homicide) .. ..	176-198	875	703	417	191	234	71	8	2	2,501
43. Non-specified and Ill-Defined Causes .. ..	199-200	68	45	17	68	10	4	4	1	217
Total—Males .. ..	..	13,173	9,913	4,821	2,835	2,531	1,227	50	21	34,571

\* No. 14:—4, 5, 12, 13, 15-22, 33, 35-37, 39-44; No. 20:—56, 60-74, 76, 77; No. 23:—78, 79, 81, 84-89; No. 32b:—115-118, 123, 128, 129.

## B—CAUSES OF DEATH.—FEMALES, 1934.

Abridged Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Australia.
1. Typhoid Fever .. ..	1, 2	4	4	3	1	4	1	..	..	17
2. Typhus Fever .. ..	3	..	..	..	..	..	..	..	..	..
4. Measles .. ..	7	15	15	5	5	..	..	..	..	40
5. Scarlet Fever .. ..	8	10	8	1	1	..	2	..	..	22
6. Whooping Cough .. ..	9	147	39	30	4	1	8	..	..	229
7. Diphtheria .. ..	10	98	67	22	5	17	13	..	..	222
8a. Influenza—Pneumonic .. ..	11 (a)	81	117	35	18	27	23	1	..	302
8b. Influenza—Other .. ..	11 (b)	45	46	17	5	12	6	..	..	131
10. Tuberculosis of the Respiratory System .. ..	23	388	334	108	105	67	40	..	1	1,043
11a. Tubercular Meningitis .. ..	24	17	19	3	5	2	5	..	..	51
11b. Other Tuberculous Diseases .. ..	25-32	26	41	7	6	9	7	..	..	96
12. Syphilis .. ..	34	15	9	6	3	1	3	..	..	37
13. Malaria .. ..	38	..	..	6	..	..	..	..	..	6
14. Other Infectious or Parasitic Diseases .. ..	*	75	47	35	21	10	9	3	..	200
15. Cancer and other Malignant Tumours .. ..	45-53	1,293	1,104	394	331	168	127	..	2	3,419
16. Tumours, Non-Malignant or of Unspecified Nature .. ..	54, 55	87	46	27	20	7	5	..	..	192
17. Chronic Rheumatism, Gout .. ..	57, 58	41	46	12	15	8	2	..	..	124
18. Diabetes Mellitus .. ..	59	265	203	80	72	29	20	..	..	669
19. Acute and Chronic Alcoholism .. ..	75	6	1	..	..	3	..	..	..	10
20. Other General Diseases .. ..	*	232	180	80	53	38	24	..	..	607
21. Locomotor Ataxy, General Paralysis of Insane .. ..	80, 83	11	5	4	2	2	1	..	..	25
22. Cerebral Hæmorrhage, Embolism, etc. .. ..	82	573	540	189	180	93	73	1	2	1,651
23. Other Diseases of Nervous System and Sense Organs .. ..	*	214	174	93	64	32	31	1	1	610
24. Diseases of the Heart .. ..	90-95	2,257	1,687	626	442	256	274	1	1	5,544
25. Other Diseases of the Circulatory System .. ..	96-103	539	562	159	126	53	56	..	..	1,495
26a. Acute Bronchitis .. ..	106(a)(c)	63	27	13	12	4	3	1	..	123
26b. Chronic Bronchitis .. ..	106(b)(d)	80	103	30	21	9	14	..	1	258
27. Pneumonia (all forms) .. ..	107-109	669	650	178	183	129	93	..	..	1,902
28. Other Diseases of the Respiratory System .. ..	104, 105, 110-114	133	126	53	57	37	18	..	..	424
29a. Diarrhœa and Enteritis (under two years of age) .. ..	119	64	42	18	17	30	9	..	..	180
29b. Diarrhœa and Enteritis (two years and over) .. ..	120	53	89	24	30	13	10	..	..	219
30. Appendicitis .. ..	121	82	44	33	14	10	8	..	..	191
31a. Cirrhosis of the Liver .. ..	124	33	28	7	9	5	1	..	..	83
31b. Other Diseases of the Liver and Biliary Calculi .. ..	125-127	102	99	50	35	20	13	..	..	319
32a. Hernia, Intestinal Obstruction .. ..	122	98	71	39	32	21	5	..	..	266
32b. Other Diseases of the Digestive System .. ..	*	102	88	42	34	22	11	..	..	299
33. Nephritis .. ..	130-132	692	522	244	119	62	38	..	2	1,679
34. Other Diseases of the Genito-Urinary System .. ..	133-139	103	91	51	16	25	11	..	..	297
35a. Post-abortive Sepsis .. ..	140(a)	24	8	15	8	7	1	..	..	63
35b. Criminal Abortion .. ..	140(b)	49	37	4	1	5	..	..	..	96
35c. Puerperal Septicæmia .. ..	145	39	32	8	8	7	4	..	..	98
36. Other Diseases of Pregnancy and Labour .. ..	141-144, 146-150	151	93	53	44	19	13	1	..	374
37. Diseases of the Skin, Bones, etc. .. ..	151-156	55	38	18	10	8	6	..	..	135
38. Congenital Debility, Malformations, Premature Birth, etc. .. ..	157-161	551	358	234	83	82	51	..	..	1,359
39. Senility .. ..	162	342	590	180	196	120	42	..	..	1,470
40. Suicide .. ..	163-171	86	42	20	19	11	5	..	..	183
41. Homicide .. ..	172-175	10	9	6	6	5	..	..	..	36
42. Accidental or Violent Death (except Suicide and Homicide) .. ..	176-198	267	233	94	95	50	30	..	..	769
43. Non-specified and Ill-Defined Causes .. ..	199-200	14	21	15	35	5	2	1	..	93
Total—Females .. ..	..	10,301	8,735	3,371	2,568	1,545	1,118	10	10	27,658

\* No. 14:—4, 5, 12, 13, 15-22, 33, 35-37, 39-44; No. 20:—56, 60-74, 76, 77; No. 23:—78, 79, 81, 84-89; No. 32b:—115-118, 123, 128, 129.

## C—CAUSES OF DEATH.—PERSONS, 1934.

Abridged Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Aus-tralia.
1. Typhoid Fever .. ..	1, 2	19	11	15	4	16	3	..	..	68
2. Typhus Fever .. ..	3	..	..	..	..	..	..	..	..	..
3. Small-pox .. ..	6	..	..	..	..	..	..	..	..	..
4. Measles .. ..	7	34	25	10	8	..	..	..	..	77
5. Scarlet Fever .. ..	8	19	19	1	1	1	4	..	..	45
6. Whooping Cough .. ..	9	286	84	53	7	1	11	..	1	443
7. Diphtheria .. ..	10	193	110	41	14	36	22	..	2	418
8a. Influenza—Pneumonic .. ..	11 (a)	186	231	85	37	58	48	1	..	646
8b. Influenza—Other .. ..	11 (b)	101	83	47	14	38	14	..	..	297
10. Tuberculosis of the Respiratory System .. ..	23	955	753	315	251	218	93	..	3	2,588
11a. Tubercular Meningitis .. ..	24	40	41	7	16	10	9	..	..	123
11b. Other Tuberculous Diseases .. ..	25-32	50	95	14	13	14	10	..	..	196
12. Syphilis .. ..	34	61	48	25	14	12	13	..	..	173
13. Malaria .. ..	38	1	2	15	..	7	..	3	..	28
14. Other Infectious or Parasitic Diseases .. ..	*	195	123	85	41	34	19	4	..	501
15. Cancer and other Malignant Tumours .. ..	45-53	2,662	2,177	876	651	449	259	3	3	7,080
16. Tumours, Non-Malignant or of Unspecified Nature .. ..	54, 55	157	82	54	36	17	10	..	..	356
17. Chronic Rheumatism, Gout .. ..	57, 58	59	73	17	22	15	6	..	..	192
18. Diabetes Mellitus .. ..	59	412	319	120	110	50	35	..	..	1,046
19. Acute and Chronic Alcoholism .. ..	75	19	4	7	4	6	2	..	..	42
20. Other General Diseases .. ..	*	422	329	157	94	65	34	..	..	1,101
21. Locomotor Ataxy, General Paralysis of Insane .. ..	80, 83	64	37	16	13	9	4	..	..	143
22. Cerebral Hæmorrhage, Embolism, etc. .. ..	82	1,117	984	373	322	189	133	4	2	3,124
23. Other Diseases of Nervous System and Sense Organs .. ..	*	505	355	196	115	90	52	4	2	1,319
24. Diseases of the Heart .. ..	90-95	5,404	3,684	1,586	956	698	571	2	6	12,907
25. Other Diseases of the Circulatory System .. ..	96-103	1,157	1,081	368	233	154	129	..	..	3,122
26a. Acute Bronchitis .. ..	106(a)(c)	110	52	26	25	9	4	1	..	227
26b. Chronic Bronchitis .. ..	106(b)(d)	187	212	67	61	37	27	..	1	592
27. Pneumonia (all forms) .. ..	107-109	1,532	1,427	472	402	325	194	3	3	4,358
28. Other Diseases of the Respiratory System .. ..	104, 105, 110-114	316	367	159	108	97	30	3	..	1,080
29a. Diarrhœa and Enteritis (under two years of age) .. ..	119	138	106	32	30	54	25	..	..	385
29b. Diarrhœa and Enteritis (two years and over) .. ..	120	100	173	56	46	31	20	1	..	427
30. Appendicitis .. ..	121	236	124	95	44	28	19	..	..	546
31a. Cirrhosis of the Liver .. ..	124	90	87	39	23	17	2	..	1	259
31b. Other Diseases of the Liver and Biliary Calculi .. ..	125-127	161	152	76	46	33	16	..	..	484
32a. Hernia, Intestinal Obstruction .. ..	122	231	158	81	54	43	14	..	1	582
32b. Other Diseases of the Digestive System .. ..	*	329	261	122	89	72	32	1	..	906
33. Nephritis .. ..	130-132	1,531	1,120	544	260	175	90	3	2	3,725
34. Other Diseases of the Genito-Urinary System .. ..	133-139	354	322	189	96	72	35	..	..	1,068
35a. Post-Abortive Sepsis .. ..	140(a)	24	8	15	8	7	1	..	..	63
35b. Criminal Abortion .. ..	140(b)	49	37	4	1	5	..	..	..	96
35c. Puerperal Septicæmia .. ..	145	39	32	8	8	7	4	..	..	98
36. Other Diseases of Pregnancy and Labour .. ..	141-144, 146-150	151	93	53	44	19	13	1	..	374
37. Diseases of the Skin, Bones, etc. .. ..	151-156	149	87	53	28	28	14	..	..	359
38. Congenital Debility, Malformations, Premature Birth, etc. .. ..	157-161	1,307	794	534	208	207	121	2	..	3,173
39. Senility .. ..	162	713	1,087	396	370	236	68	8	..	2,878
40. Suicide .. ..	163-171	349	172	129	78	76	18	3	1	826
41. Homicide .. ..	172-175	36	25	16	9	12	10	..	..	108
42. Accidental or Violent Death (except Suicide and Homicide) .. ..	176-198	1,142	936	511	286	284	101	8	2	3,270
43. Non-specified and Ill-Defined Causes .. ..	199-200	82	66	32	103	15	6	5	1	310
Total—Persons .. ..	..	23,474	18,648	8,192	5,403	4,076	2,345	60	31	62,229

\* No. 14 :—4, 5, 12, 13, 15-22, 33, 35-37, 39-44 ; No. 20 :—56, 60-74, 76, 77 ; No. 23 :—78, 79, 81, 84-89 ; No. 32b :—115-118, 123, 128, 129.

## D—CAUSES OF DEATH.—AUSTRALIA, 1930 TO 1934.

Abridged Classification.	General Classification Numbers.	1930.	1931.	1932.	1933.	1934.	1934—Rate per 1,000,000 Population.
1. Typhoid Fever .. .. .	1, 2	113	103	81	64	68	10
2. Typhus Fever .. .. .	3	2	1	5	3	..	..
3. Small-pox .. .. .	6	2	..	1	..	..	..
4. Measles .. .. .	7	146	45	35	105	77	12
5. Scarlet Fever .. .. .	8	79	74	106	80	45	7
6. Whooping Cough .. .. .	9	330	304	153	124	443	66
7. Diphtheria .. .. .	10	387	423	425	405	418	63
8a. Influenza—Pneumonic .. .. .	11(a)	137	586	195	561	646	97
8b. Influenza—Other .. .. .	11(b)	141	260	154	318	297	44
10. Tuberculosis of the Respiratory System .. .. .	23	2,850	2,823	2,661	2,596	2,588	387
11a. Tubercular Meningitis .. .. .	24	153	152	138	100	123	18
11b. Other Tubercular Diseases .. .. .	25-32	255	192	205	228	196	29
12. Syphilis .. .. .	34	166	146	164	158	173	26
13. Malaria .. .. .	38	22	24	16	12	28	4
14. Other Infectious or Parasitic Diseases .. .. .	*	562	535	609	517	501	75
15. Cancer and other Malignant Tumours .. .. .	45-53	6,120	6,589	6,875	6,971	7,080	1,060
16. Tumours, Non-Malignant or of Unspecified Nature .. .. .	54, 55	349	345	360	347	356	53
17. Chronic Rheumatism, Gout .. .. .	57, 58	139	171	152	158	192	29
18. Diabetes Mellitus .. .. .	59	722	902	999	1,060	1,046	157
19. Acute and Chronic Alcoholism .. .. .	75	74	52	52	48	42	6
20. Other General Diseases .. .. .	*	1,093	1,102	1,072	1,041	1,101	165
21. Locomotor Ataxy, General Paralysis of Insane .. .. .	80-83	142	169	144	179	143	21
22. Cerebral Hæmorrhage, Embolism, etc. .. .. .	82	2,810	2,884	3,021	3,206	3,124	468
23. Other Diseases of Nervous System and Sense Organs .. .. .	*	1,149	1,105	1,176	1,199	1,319	198
24. Diseases of the Heart .. .. .	90-95	8,626	10,382	11,074	12,002	12,907	1,932
25. Other Diseases of the Circulatory System .. .. .	96-103	2,646	2,537	2,626	2,778	3,122	467
26a. Acute Bronchitis .. .. .	106(a)(c)	215	226	211	231	227	34
26b. Chronic Bronchitis .. .. .	106(b)(d)	625	640	551	577	592	89
27. Pneumonia (all forms) .. .. .	107-109	3,328	3,795	3,441	3,934	4,358	652
28. Other Diseases of the Respiratory System .. .. .	104, 105, 110-114	956	1,008	960	1,003	1,080	162
29a. Diarrhœa and Enteritis (under two years of age) .. .. .	119	1,078	530	472	339	385	58
29b. Diarrhœa and Enteritis (two years and over) .. .. .	120	464	413	404	364	427	64
30. Appendicitis .. .. .	121	508	518	491	517	546	82
31a. Cirrhosis of the Liver .. .. .	124	276	252	267	254	259	39
31b. Other Diseases of the Liver and Biliary Calculi .. .. .	125-127	462	422	477	486	484	72
32a. Hernia, Intestinal Obstruction .. .. .	122	560	523	550	539	582	87
32b. Other Diseases of the Digestive System .. .. .	*	791	832	871	882	906	136
33. Nephritis .. .. .	130-132	3,182	3,306	3,440	3,562	3,725	558
34. Other Diseases of the Genito-Urinary System .. .. .	133-139	1,011	1,027	1,079	1,041	1,068	160
35a. Post-Abortive Sepsis .. .. .	140(a)	†	76	71	68	63	9
35b. Criminal Abortion .. .. .	140(b)	†	71	88	72	90	14
35c. Puerperal Septicæmia .. .. .	145	242	103	84	92	98	15
36. Other Diseases of Pregnancy and Labour .. .. .	141-144, 146-150	438	400	375	339	374	56
37. Diseases of the Skin, Bones, etc. .. .. .	151-156	364	324	339	349	359	54
38. Congenital Debility, Malformations, Premature Birth, etc. .. .. .	157-161	3,742	3,259	3,174	3,142	3,173	475
39. Senility .. .. .	162	3,071	2,750	2,750	2,887	2,878	431
40. Suicide .. .. .	163-171	943	827	754	790	826	124
41. Homicide .. .. .	172-175	103	128	91	97	108	16
42. Accidental or Violent Death (except Suicide and Homicide) .. .. .	176-198	3,356	2,937	3,042	2,979	3,270	490
43. Non-specified and Ill-Defined Causes .. .. .	199, 200	401	287	276	310	310	46
<b>Total .. .. .</b>	<b>..</b>	<b>55,331</b>	<b>56,560</b>	<b>56,757</b>	<b>59,117</b>	<b>62,229</b>	<b>9,317</b>

\* No. 14 :—4, 5, 12, 13, 15-22, 33, 35-37, 39-44; No. 20 :—56, 60-74, 76, 77; No. 23 :—78, 79, 81, 84-89; No. 32b :—115-118, 123, 128, 129. † Not available, included in 35c and 36.

## E—CAUSES OF DEATH.—AUSTRALIA, NUMBERS AND RATES.

Abridged Classification.	General Classification Numbers.	Number of Deaths.			Rate per 1,000,000 of Population.		
		1911-15.	1921-25.	1930-34.	1911-15.	1921-25.	1930-34.
1. Typhoid Fever .. .. .	1, 2	2,848	1,209	429	119	42	13
2. Typhus Fever .. .. .	3	..	4	11	..	..	..
3. Small-pox .. .. .	6	6	4	3	..	..	..
4. Measles .. .. .	7	1,505	582	408	63	20	12
5. Scarlet Fever .. .. .	8	237	235	384	10	8	12
6. Whooping Cough .. .. .	9	1,657	1,612	1,354	69	57	41
7. Diphtheria .. .. .	10	3,677	2,565	2,058	154	90	63
8a. Influenza—Pneumonic .. .. .	11(a)	1,894	1,808	2,125	79	64	65
8b. Influenza—Other .. .. .	11(b)		1,344	1,170		47	36
9. Plague .. .. .	14		1	72		3	..
10. Tuberculosis of the Respiratory System .. .. .	23	15,737	15,321	13,518	659	538	411
11a. Tubercular Meningitis .. .. .	24	1,156	876	666	48	31	20
11b. Other Tuberculous Diseases .. .. .	25-32	1,460	1,404	1,076	61	49	33
12. Syphilis .. .. .	34	837	632	807	35	22	24
13. Malaria .. .. .	38	112	150	102	5	5	3
14. Other Infectious or Parasitic Diseases .. .. .	5*	2,820	3,063	2,724	118	108	83
15. Cancer and other Malignant Tumours .. .. .	45-53	17,838	25,794	33,635	746	906	1,023
16. Tumours, Non-Malignant or of Unspecified Nature .. .. .	54, 55	546	633	1,757	23	22	53
17. Chronic Rheumatism, Gout .. .. .	57, 58	552	862	812	23	30	25
18. Diabetes Mellitus .. .. .	59	2,322	3,355	4,729	97	118	144
19. Acute and Chronic Alcoholism .. .. .	75	920	763	268	38	27	8
20. Other General Diseases .. .. .	*	4,039	5,355	5,409	169	188	164
21. Locomotor Ataxy, General Paralysis of Insane .. .. .	80-83	1,074	1,118	777	45	39	23
22. Cerebral Hæmorrhage, Embolism, etc. .. .. .	82	10,957	13,637	15,045	458	479	458
23. Other Diseases of Nervous System and Sense Organs .. .. .	*	12,550	10,323	5,948	525	363	181
24. Diseases of the Heart .. .. .	90-95	24,358	31,588	54,991	1,019	1,109	1,673
25. Other Diseases of the Circulatory System .. .. .	96-103	7,869	7,191	13,709	329	253	417
26a. Acute Bronchitis .. .. .	106(a)(c)	2,250	1,580	1,113	94	56	34
26b. Chronic Bronchitis .. .. .	106(b)(d)	4,962	4,053	2,985	208	142	91
27. Pneumonia (all forms) .. .. .	107-109	15,201	18,400	18,856	636	646	574
28. Other Diseases of the Respiratory System .. .. .	104, 105, 110-114	4,583	5,781	5,007	192	203	152
29a. Diarrhœa and Enteritis (under two years of age) .. .. .	119	15,207	9,866	2,804	636	346	85
29b. Diarrhœa and Enteritis (two years and over) .. .. .	120	4,027	3,144	2,072	169	110	63
30. Appendicitis .. .. .	121	1,761	2,035	2,580	74	71	78
31a. Cirrhosis of the Liver .. .. .	124	1,932	1,531	1,308	81	54	40
31b. Other Diseases of the Liver and Biliary Calculi .. .. .	125-127	1,445	1,796	2,331	60	63	71
32a. Hernia, Intestinal Obstruction .. .. .	122	2,336	2,648	2,754	98	93	84
32b. Other Diseases of the Digestive System .. .. .	*	3,968	4,053	4,282	166	142	130
33. Nephritis .. .. .	130-132	10,751	12,803	17,215	450	450	523
34. Other Diseases of the Genito-Urinary System .. .. .	133-139	3,065	4,146	5,226	128	146	159
35a. Post-Abortive Sepsis .. .. .	140(a)	†	†	†278	†	†	†8
35b. Criminal Abortion .. .. .	140(b)	†	†	†327	†	†	†10
35c. Puerperal Septicæmia .. .. .	145	1,072	1,138	619	45	40	19
36. Other Diseases of Pregnancy and Labour .. .. .	141-144, 146-150	2,060	2,321	1,926	86	82	59
37. Diseases of the Skin, Bones, etc. .. .. .	151-156	994	1,556	1,735	42	55	53
38. Congenital Debility, Malformations, Premature Birth, etc. .. .. .	157-161	21,410	21,511	16,490	896	755	502
39. Senility .. .. .	162	20,004	20,429	14,336	875	717	436
40. Suicide .. .. .	163-171	3,123	3,106	4,140	131	109	126
41. Homicide .. .. .	172-175	449	439	527	19	15	16
42. Accidental or Violent Death (except Suicide and Homicide) .. .. .	176-198	14,842	13,875	15,584	621	487	474
43. Non-specified and Ill-Defined Causes .. .. .	199, 200	3,026	3,460	1,584	127	122	48
<b>Total</b> .. .. .	..	256,337	271,171	289,994	10,726	9,522	8,820

\* No. 14:—4, 5, 12, 13, 15-22, 33, 35-37, 39-44; No. 20:—56, 60-74, 76, 77; No. 23:—78, 79, 81, 84-89; No. 32b:—113-118, 123, 128, 129. † 1931 to 1934 only. ‡ Not available, included in 35c and 36.

13. **Deaths from Specific Causes.**—(i) *Typhoid Fever*. The number of deaths from typhoid fever declined from 113 in 1930 to 68 in 1934, the rate for the latter year being ten per 1,000,000 living, and much lower than the average of 13 for the last five years. Of the 68 who died, 51 were males and 17 females. During the quinquennium 1911 to 1915 the death rate from typhoid fever was 119 per 1,000,000.

(ii) *Typhus*. Deaths from typhus have been rare in Australia. There were no deaths in 1934. In 1933 three deaths were recorded—one in New South Wales and two in Western Australia. In 1932 one death was recorded in New South Wales, one in South Australia and three in Western Australia. Only one death, which occurred in Western Australia, was recorded during 1931. During 1930, two deaths were recorded from this cause, both of which occurred in Western Australia.

(iii) *Small-pox*. The number of deaths from small-pox in Australia is very small. During the five years under review only three deaths were recorded from this cause, one of which occurred in 1932 in Queensland and the other two in 1930 in Western Australia.

(iv) *Measles*. Of the deaths from measles in the last five years the greatest number occurred during 1930, when 146 were registered, while the minimum of 35 was in 1932. There were 77 deaths in 1934 of which 37 were males and 40 females. The death rate for the last five years, viz., 12 per 1,000,000, was less than that for the years 1921 to 1925, and much less than the 63 per 1,000,000 recorded in 1911 to 1915.

(v) *Scarlet Fever*. The number of deaths had decreased each year since 1929 until 1932 when it rose to 106 compared with 74 in 1931; but it fell again to 45 in 1934. The increase in 1932 was confined to females, there being 33 male and 73 female deaths in that year compared with 35 male and 39 female deaths in 1931. Of the 45 deaths registered in 1934, 19 occurred in New South Wales and 19 in Victoria. The rate per 1,000,000 in 1930-34, viz., 12, was the highest for the three periods reviewed on the previous page. The rate for 1934 was 7.

(vi) *Whooping Cough*. During 1934 deaths from whooping cough numbered 443 (214 males and 229 females) representing a death rate of 66 per 1,000,000 persons, which is heavier than any recorded in the last five years. The death rate for this disease is almost invariably heavier for females than for males. For both sexes combined it has declined from 69 in 1911-15 to 41 per 1,000,000 in 1930-34.

(vii) *Diphtheria*. The number of deaths due to diphtheria was 418 in 1934. Of these deaths (representing a death rate of 63 per 1,000,000 persons) 196 were males and 222 females. The death rate is now less than half of that experienced during the five years ended 1915.

(viii) *Influenza*. The deaths from influenza during 1934 were more than in any year since 1929. Of the 943 deaths during 1934 from this disease, 646 were ascribed to pneumonic influenza and 297 to ordinary influenza.

(ix) *Plague*. Since 1911 deaths from this disease numbered 1 in 1912; 57 in 1921; 14 in 1922; and 1 in 1923.

(x) *Tuberculosis of the Respiratory System*. Of the various forms of tuberculosis prevalent in Australia, phthisis, or tuberculosis of the lungs, has attracted the most attention. The intimate relation, however, between tuberculosis of the lungs and of other parts of the respiratory system renders it desirable that all forms of tuberculosis of the respiratory system should be brought under one head for investigations concerning the age incidence and duration of this disease.

The decline in the toll levied by this disease on the community is plainly disclosed by the table on page 604, which shows how both the number of deaths and the death rate have declined since the period 1911 to 1915.

During 1934 there were 2,588 deaths (1,545 males and 1,043 females) from tuberculosis of the respiratory system, which compares favourably with the average of 2,786 for the preceding five years. The deaths in 1934 represented a rate of 387 per 1,000,000 persons.

(xi) *Tuberculosis of the Meninges*. The number of deaths ascribed to this cause in 1934 was 123, which is below the average for the preceding five years.



(xib) *Other Forms of Tuberculosis.* The deaths in 1934 include the following:—Tuberculosis of the intestines and peritoneum, 46; spinal column, 42; other bones and joints, 9; skin, 3; lymphatic system, 4; genito-urinary system, 19; other organs, 7; acute disseminated tuberculosis, 56; chronic disseminated tuberculosis, 1; and disseminated tuberculosis not specified as acute or chronic, 9.

(xic) *All Forms of Tuberculosis—(a) General.* The total number of deaths in 1934 was 2,907, viz., 1,717 males and 1,190 females.

(b) *Ages at Death.* The following table shows the ages of the 2,907 persons. Corresponding figures are also given for the year 1911:—

**TUBERCULAR DISEASES.—DEATHS IN AGE-GROUPS, AUSTRALIA.**

Ages.	1911.			1934.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years .. ..	124	114	238	57	39	96
5 years and under 10 ..	30	31	61	15	16	31
10 " " 15 ..	44	42	86	15	13	28
15 " " 20 ..	70	148	218	42	64	106
20 " " 25 ..	168	260	428	110	175	285
25 " " 30 ..	219	255	474	132	177	309
30 " " 35 ..	220	206	426	136	159	295
35 " " 40 ..	187	176	363	147	126	273
40 " " 45 ..	246	140	386	178	95	273
45 " " 50 ..	223	100	323	204	85	289
50 " " 55 ..	164	49	213	186	62	248
55 " " 60 ..	140	49	189	188	51	239
60 " " 65 ..	89	43	132	123	50	173
65 " " 70 ..	64	37	101	89	37	126
70 " " 75 ..	42	19	61	65	19	84
75 " " 80 ..	15	6	21	17	16	33
80 " " over ..	7	6	13	13	6	19
Age unspecified .. ..	3	..	3	..	..	..
Total .. ..	2,055	1,681	3,736	1,717	1,190	2,907

(c) *Occupations at Death, Males.* A tabulation of occupations of the males who died from tubercular diseases and the percentage which each class bears on the total male deaths from these diseases in 1921, 1931 and 1934 is given hereunder:—

**OCCUPATIONS OF MALES WHO DIED FROM TUBERCULAR DISEASES.—AUSTRALIA.**

Occupation Group.	Number of Male Deaths.			Percentage on Total.		
	1921.	1931.	1934.	1921.	1931.	1934.
Professional .. ..	167	107	99	% 7.69	% 5.83	% 5.76
Domestic .. ..	95	64	58	4.38	3.48	3.38
Commercial .. ..	292	270	132	13.45	14.71	7.69
Transport and Communication	165	170	153	7.60	9.26	8.91
Industrial .. ..	784	694	309	36.11	37.80	18.00
Agricultural, Pastoral, Mining, etc. .. ..	404	303	289	18.61	16.50	16.83
Indefinite .. ..	80	157	545(a)	3.68	8.55	31.74(a)
Dependent .. ..	184	71	132	8.48	3.87	7.69
Total Male Deaths ..	2,171	1,836	1,717	100.00	100.00	100.00

(a) Includes 431 (25.10 per cent.) clerks, labourers, etc., not specified as belonging to any industry, who were formerly included under "Commercial" or "Industrial".

(d) *Length of Residence in Australia.* The length of residence in Australia of persons who died from tubercular diseases in 1934 is given in the next table :—

**LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED FROM TUBERCULAR DISEASES, 1934.**

Length of Residence in Australia.	Male.	Fem.	Total.	Length of Residence in Australia.	Male.	Fem.	Total.
Born in Australia ..	1,284	1,009	2,293	Resident 10 years & under 15	47	31	78
Resident under 1 year ..	3	..	3	"    15    "    "    20	11	11	22
"    1 year ..	1	..	1	"    20    "    & over ..	260	93	353
"    2 years ..	1	..	1	Length of residence not stated	54	7	61
"    3    "    ..	..	..	..				
"    4    "    ..	5	..	5				
"    5    "    and under 10	51	39	90	Total Deaths ..	1,717	1,190	2,907

(e) *Death Rates.* The preceding table and the table on page 598 show that among persons who have lived less than five years in Australia, 188 deaths occurred, and of these, 10, or 5.3 per cent., were due to tubercular diseases.

In order to show the prevalence of tuberculosis in the several States and the change in the incidence in recent years the death rates from tubercular diseases in respect of the years 1911 and 1934 are given in the following table, together with the proportion which deaths from tuberculosis bear to 10,000 deaths from all causes :—

**TUBERCULOSIS (ALL FORMS).—DEATH RATES (a) AND PROPORTION OF TOTAL DEATHS.**

State or Territory.	Death Rate per 100,000 of Mean Population.					
	1911.			1934.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	85	67	76	46	33	40
Victoria ..	101	97	99	55	43	49
Queensland ..	74	58	67	44	26	35
South Australia ..	81	91	86	56	40	48
Western Australia ..	84	71	78	70	38	55
Tasmania ..	90	82	86	51	46	49
Northern Territory ..	293	..	241	..	..	..
Federal Capital Territory ..	..	131	56	40	23	32
Australia ..	88	78	83	51	36	44

State or Territory.	Proportion per 10,000 Deaths from all Causes.					
	1911.			1934.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	737	737	737	466	418	445
Victoria ..	801	936	862	499	451	477
Queensland ..	613	648	626	452	350	410
South Australia ..	775	995	877	578	452	518
Western Australia ..	718	870	770	648	505	594
Tasmania ..	839	854	846	489	465	478
Northern Territory ..	1,356	..	1,231	..	..	..
Federal Capital Territory ..	..	2,000	1,000	952	1,000	968
Australia ..	745	829	780	497	430	467

(a) Number of deaths from tuberculosis per 100,000 of mean population.

(f) *Death Rates, Various Countries.* The following comparative table for various countries shows that Australia occupies a very favourable position as regards the death rate from this disease :—

**TUBERCULOSIS.—DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.**

Country.	Year.	Respiratory System.	All Forms.	Country.	Year.	Respiratory System.	All Forms.
Queensland ..	1934	33	35	England and Wales	1933	69	82
New South Wales ..	1934	36	40	Egypt .. ..	1927	66	85
Union of South Africa (Whites) ..	1933	32	41	Great Britain and Northern Ire-land .. ..	1932	68	85
New Zealand ..	1933	32	42	Italy .. ..	1934	69	92
<b>Australia ..</b>	<b>1934</b>	<b>39</b>	<b>44</b>	Sweden .. ..	1934	(a)	102
South Australia ..	1934	43	48	Switzerland ..	1933	79	106
Victoria .. ..	1934	41	49	Northern Ireland ..	1934	84	112
Tasmania .. ..	1934	41	49	Irish Free State ..	1934	89	113
Western Australia	1934	49	55	Spain .. ..	1932	92	117
Netherlands ..	1934	39	55	Norway .. ..	1932	111	136
United States (Registration Area) ..	1934	51	57	Czechoslovakia ..	1933	127	144
Ceylon .. ..	1933	(a)	58	France .. ..	1931	131	152
Canada (including Quebec) ..	1933	53	65	Greece .. ..	1932	130	161
Scotland .. ..	1934	57	65	Hungary .. ..	1933	143	170
Denmark .. ..	1932	(a)	69	Poland (b) .. ..	1933	148	172
Germany .. ..	1932	62	75	Japan .. ..	1933	139	188
Belgium .. ..	1933	61	80	Finland .. ..	1932	191	223

(a) Not available.

(b) In towns with over 100,000 inhabitants.

(xii) *Syphilis.* In 1934, 173 persons (136 males and 37 females) died from syphilis. The rate per 1,000,000 persons was 26 in 1934 compared with average rates of 24, 22, and 35 for the year groups 1930-34, 1921-25 and 1911-15 respectively.

(xiii) *Malaria.* Deaths from malarial diseases are mainly confined to the tropical districts of Northern Queensland and Western Australia, and to the Northern Territory; 15 out of the 28 deaths registered in 1934 occurred in Queensland, 7 in Western Australia, 3 in Northern Territory, 2 in Victoria and 1 in New South Wales. The death rate was 3 per 1,000,000 for the quinquennium 1930-34, as compared with a rate of 5 for 1911 to 1915, and 1921 to 1925.

(xiv) *Other Infectious and Parasitic Diseases.* The deaths registered under this heading numbered 501 in 1934, including 35 from dysentery, erysipelas 37, lethargic encephalitis 37, acute poliomyelitis 31, meningococcal meningitis 21, tetanus 89, leprosy 10, purulent infection and septicæmia 103, hydatid cysts 72, and other infectious or parasitic diseases 66.

(xv) *Cancer and other Malignant Tumours.* (a) *General.* The number of deaths from cancer increased continuously to 6,256 in 1929, declined slightly to 6,120 in 1930, and rose again to 6,589 in 1931, 6,875 in 1932, 6,971 in 1933, and 7,080 in 1934. Of the deaths registered, 3,661 were of males, viz., 1,369 in New South Wales, 1,073 in Victoria, 482 in Queensland, 320 in South Australia, 281 in Western Australia, 132 in Tasmania, 3 in the Northern Territory and 1 in Federal Capital Territory; while 3,419 were of females, viz., 1,293 in New South Wales, 1,104 in Victoria, 394 in Queensland, 331 in South Australia, 168 in Western Australia, 127 in Tasmania and 2 in the Federal Capital Territory.

(b) *Type and Seat of Disease.* Tables showing the type and seat of disease, in conjunction with age, and with conjugal condition, of the persons dying from cancer in 1934 will be found in Bulletin No. 52 of "Australian Demography." A summary regarding type and seat of disease for the year 1934 is given on the next page.

## DEATHS FROM CANCER.—TYPE AND SEAT OF DISEASE, AUSTRALIA, 1934.

Type of Disease.	Males.	Fem.	Persons	Seat of Disease.	Males.	Fem.	Persons.
Cancer .. ..	288	319	607	Buccal Cavity and Pharynx ..	353	46	399
Carcinoma—				Digestive Tract and Peritoneum ..	2,190	1,553	3,743
Carcinoma Simplex	2,726	2,549	5,275	Respiratory Organs	196	75	271
Epithelioma ..	150	75	225	Uterus .. ..	..	506	506
Scirrhus .. ..	2	24	26	Other Female Genital Organs ..	..	190	190
Rodent Ulcer ..	36	23	59	Breast .. ..	6	662	668
Adeno-Carcinoma	31	45	76	Male Genito-Urinary Organs ..	517	..	517
Colloid Carcinoma	3	7	10	Skin .. ..	141	83	224
Sarcoma—				Other or Unspecified Organs ..	258	304	562
Sarcoma .. ..	156	114	270				
Myeloma .. ..	1	2	3				
Endothelioma ..	4	6	10				
Melanoma—							
Melanotic Sarcoma	22	17	39				
Melano-Carcinoma	5	5	10				
Embryonic Tumours—							
Hypernephroma	13	12	25				
Teratoma .. ..	5	..	5				
Chorio-Epithelioma	..	1	1				
Malignant Disease ..	219	220	439				
<b>Total Deaths</b>	<b>3,661</b>	<b>3,419</b>	<b>7,080</b>	<b>Total Deaths</b>	<b>3,661</b>	<b>3,419</b>	<b>7,080</b>

(c) *Ages at Death.* The ages of the persons who died from cancer in 1911 and 1934 are given in the following table, which shows that while the ages below 35 are not immune from the disease, the great majority of deaths occurred at ages from 35 upwards, the maximum being found in the age-group 65 to 69 in 1911 and 70 to 74 in 1934. The table also reveals the very great increase in numbers dying from cancer. The increase in the death rate is shown in a succeeding table :—

## DEATHS FROM CANCER.—AGES, AUSTRALIA.

Ages.	1911.			1934.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 15 years .. ..	21	8	29	22	18	40
15 years and under 20 ..	10	6	16	7	8	15
20 " " 25 ..	10	7	17	16	15	31
25 " " 30 ..	12	17	29	15	21	36
30 " " 35 ..	25	35	60	25	45	70
35 " " 40 ..	29	59	88	43	105	148
40 " " 45 ..	81	100	181	78	199	277
45 " " 50 ..	132	173	305	177	273	450
50 " " 55 ..	208	203	411	253	324	577
55 " " 60 ..	203	179	382	366	408	774
60 " " 65 ..	243	177	420	530	435	965
65 " " 70 ..	306	194	500	647	471	1,118
70 " " 75 ..	203	160	363	693	445	1,138
75 " " 80 ..	150	136	286	480	359	839
80 " " 85 ..	83	67	150	217	182	399
85 years and over ..	44	39	83	92	110	202
Unspecified .. ..	1	..	1	..	1	1
<b>.Total Deaths</b> .. ..	<b>1,761</b>	<b>1,560</b>	<b>3,321</b>	<b>3,661</b>	<b>3,419</b>	<b>7,080</b>

(d) *Occupations.* A tabulation in summarized form of occupations of the males who died from cancer in 1921, 1931 and 1934, together with the percentage of each class on the total male deaths from this disease, is given hereunder :—

OCCUPATION OF MALES WHO DIED FROM CANCER.—AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage on Total.		
	1921.	1931.	1934.	1921.	1931.	1934.
Professional .. ..	133	188	243	%	%	%
Domestic .. ..	76	97	90	5.45	5.40	6.64
Commercial .. ..	275	446	329	3.11	2.78	2.46
Transport and Communica- tion .. ..	212	295	291	11.27	12.80	8.98
Industrial .. ..	940	1,346	686	8.69	8.47	7.95
Agricultural, Pastoral, Mining, etc. .. ..	639	843	864	38.52	38.63	18.74
Indefinite .. ..	129	130	1,121 <sup>a</sup>	26.19	24.20	23.60
Dependent .. ..	36	139	37	5.29	3.73	30.62 <sup>a</sup>
				1.48	3.99	1.01
<b>Total Male Deaths ..</b>	<b>2,440</b>	<b>3,484</b>	<b>3,661</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

(a) Includes 848 (23.16 per cent.) clerks, labourers, etc., not specified as belonging to any industry, who were formerly included under "Commercial" or "Industrial".

(e) *Death Rates.* The following table shows the death rates per 100,000 of mean population from cancer in each State for the years 1911 and 1934 :—

The substantial increase in the death rate since 1911 is reflected in both sexes and in all States.

DEATHS FROM CANCER.—RATES.(a)

State or Territory.	1911.			1934.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales .. ..	77	71	74	103	100	102
Victoria .. ..	80	85	82	118	120	119
Queensland .. ..	71	56	64	96	87	92
South Australia .. ..	70	76	73	110	114	112
Western Australia .. ..	65	57	62	120	81	102
Tasmania .. ..	77	60	69	114	112	113
Northern Territory .. ..	37	..	30	87	..	61
Federal Capital Territory ..	99	..	56	20	47	32
<b>Australia .. ..</b>	<b>75</b>	<b>72</b>	<b>74</b>	<b>108</b>	<b>104</b>	<b>106</b>

(a) Number of deaths from cancer per 100,000 of mean population.

(f) *Proportion of Total Deaths.* While the death rate from all causes has diminished substantially in recent years, the rate from cancer has risen almost continuously, the result being that out of 10,000 deaths from all causes, 1,138 were due to cancer in 1934, as against 693 per 10,000 total deaths in 1911.

## DEATHS FROM CANCER.—PROPORTIONS ON 10,000 DEATHS.

State or Territory.	1911.			1934.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales ..	662	783	713	1,039	1,255	1,134
Victoria .. ..	637	819	719	1,082	1,264	1,167
Queensland .. ..	586	628	602	1,000	1,169	1,069
South Australia ..	675	828	745	1,129	1,289	1,205
Western Australia ..	557	700	605	1,110	1,087	1,102
Tasmania .. ..	723	629	680	1,076	1,136	1,104
Northern Territory ..	170	..	154	600	..	500
Federal Capital Territory ..	2,000	..	1,000	476	2,000	968
Australia .. ..	638	769	693	1,059	1,236	1,138

(g) *Comparison with Tuberculosis.* In recent years the death rate from tuberculosis has shown a tendency to decrease, while that from cancer has displayed an almost continuous increase. The table hereunder shows that for each of the periods under review the decline in the death rate from tuberculosis has been accompanied by an almost equal increase in the rate for cancer. Thus the death rate for tuberculosis declined by 43 while the rate for cancer increased by 39 per 100,000 persons. This equal but opposite tendency may be demonstrated by stating that the death rate from tuberculosis and cancer combined remains almost constant from period to period, the figures being:—1901–05, 152 per 100,000; 1906–10, 145; 1911–1915, 152; 1916–20, 154; 1921–25, 153; and 1930–34, 149.

## TUBERCULOSIS AND CANCER.—DEATH RATES(a)—AUSTRALIA.

Period.	Death Rate (a) from Tuberculosis.			Death Rate (a) from Cancer.		
	Males.	Females.	Total.	Males.	Females.	Total.
1901–05 ..	100	77	89	64	61	63
1906–10 ..	81	69	75	71	70	70
1911–15 ..	84	69	77	75	74	75
1916–20 ..	84	59	71	86	80	83
1921–25 ..	71	52	62	93	88	91
1930–34 ..	54	39	46	106	99	102

(a) Number of deaths per 100,000 of mean population.

(h) *Death Rates, Various Countries.* The following table shows the Australian death rate from cancer in comparison with that for other countries:—

## CANCER.—DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Egypt .. ..	1927	20	Belgium .. ..	1933	106
Greece .. ..	1932	41	<b>Australia .. ..</b>	<b>1934</b>	<b>106</b>
Spain .. ..	1933	68	Irish Free State ..	1934	108
Japan .. ..	1933	70	New Zealand .. ..	1933	111
Italy .. ..	1934	80	Czechoslovakia ..	1933	120
Finland .. ..	1932	80	Sweden .. ..	1932	125
Ceylon .. ..	1933	83	Netherlands .. ..	1934	125
Union of South Africa			Northern Ireland ..	1934	129
(Whites) .. ..	1933	95	Norway .. ..	1932	129
France .. ..	1931	96	Germany .. ..	1932	134
Poland (a) .. ..	1933	99	Denmark .. ..	1932	146
Canada (including			Switzerland .. ..	1933	149
Quebec) .. ..	1933	100	Great Britain and		
United States (Regis-			Northern Ireland ..	1932	151
tration Area) ..	1934	101	England and Wales ..	1933	153
Hungary .. ..	1933	103	Scotland .. ..	1934	153

(a) In towns with over 100,000 inhabitants.

(xvi) *Tumours, Non-malignant or of Unspecified Nature.* The number of deaths in 1934 was 356, including 115 deaths from non-malignant tumours, viz.—female genital organs 66, brain 34, other organs 15; and 241 deaths from tumours of undetermined nature, viz.—female genital organs 6, brain 168, other organs 67. The rate per million was the same for 1934 as for the five-yearly period 1930–34, viz., 53. Comparison with earlier periods is vitiated by the omission from this cause prior to 1928 of tumours of the brain.

(xvii) *Chronic Rheumatism, Gout.* Deaths from this cause in 1934 numbered 192, viz.—68 males and 124 females. The rate per million for 1930–34 was lower than for 1921–25, but higher than for 1911–15.

(xviii) *Diabetes Mellitus.* Table E, page 604, shows that both the number of deaths and the rate per million persons have been steadily increasing. The rate per million for 1930–34 was 144 as compared with 97 for 1911–15. In 1934 the number of deaths from this cause was 1,046, viz.—377 males, and 669 females—representing a rate of 157 per million persons.

(xix) *Acute and Chronic Alcoholism.* Deaths from this cause have been decreasing rapidly. The number of deaths in 1934 was 42, with a rate per million persons of only 6. The rate for the period 1911–15, was 38.

(xx) *Other General Diseases.* Under this head are included rheumatic fever, diseases of the thyroid gland, anæmia, leucæmia, and a number of less important diseases. For the number of deaths under each sub-head see Table F, page 622.

(xxi) *Locomotor Ataxy, General Paralysis of the Insane.* The number of deaths in 1934 was 143, viz.—locomotor ataxy 41 males, 6 females; general paralysis of the insane, 77 males, 19 females. The rate per million persons was 23 for the period 1930–34 as compared with 45 for the period 1911–15.

(xxii) *Cerebral Hæmorrhage, Embolism and Softening of the Brain.* The deaths under this heading have increased in number during the period under review. The figures for 1934 are made up as follow :—Cerebral hæmorrhage and apoplexy, 1,002 males, 1,133 females; cerebral embolism, 39 males, 39 females; cerebral thrombosis 318 males, 344 females; softening of the brain, 19 males, 31 females; hemiplegia and paralysis without specified cause, 95 males, 104 females.

Cerebral hæmorrhage, etc., associated with arterio-sclerosis is not now included in this group but forms part of group (xxv.).

The total of the group, viz., 3,124 ranks seventh in magnitude of the causes shown on p. 603 and corresponds to a death rate of 468 per million.

(xxiii) *Other Diseases of Nervous System.* Deaths in this group have declined from a rate per million of 525 in 1911–15 to 181 in 1930–34. The number of deaths in 1934 was 1,319 representing a rate of 198 per million persons.

(xxiv) *Diseases of the Heart.* The number of deaths in 1934 was 12,907, viz., 7,363 males and 5,544 females. Of these deaths, 34 were attributed to pericarditis, 134 to acute infective endocarditis, 16 to other acute endocarditis, 370 to aortic valve disease, 755 to mitral valve disease, 75 to aortic and mitral valve disease, 194 to endocarditis not returned as acute or chronic, 701 to other and unspecified valve disease, 128 to acute myocarditis, 140 to fatty heart, 5,327 to other myocardial degeneration, 1,888 to myocarditis not returned as acute or chronic, 1,268 to diseases of coronary arteries, 93 to angina pectoris with record of coronary disease, 468 to angina pectoris other, 335 to disordered action of the heart, 85 to cardiac dilatation (cause unspecified), and 896 to heart disease undefined. The sex and territorial distribution of the deaths will be

found in the tables on pages 600 to 602. This class is the largest among causes of death, the death rate having grown from 1,019 per million in 1911-15 to 1,673 in 1930-34. The death rates and proportions per 10,000 deaths in 1934 were as follow:—

**DEATH RATES<sup>(a)</sup> FROM DISEASES OF THE HEART AND PROPORTION OF 10,000 TOTAL DEATHS, 1934.**

State or Territory.	Death Rates (a) from Diseases of the Heart.			Proportion of 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales .. ..	237	174	206	2,389	2,191	2,302
Victoria .. ..	220	183	201	2,015	1,931	1,976
Queensland .. ..	192	138	166	1,991	1,857	1,936
South Australia .. ..	176	152	164	1,813	1,721	1,769
Western Australia .. ..	188	124	158	1,746	1,657	1,712
Tasmania .. ..	256	242	249	2,421	2,451	2,435
Northern Territory .. ..	29	67	41	200	1,000	333
Federal Capital Territory .. ..	100	23	65	2,381	1,000	1,935
Australia .. ..	217	169	193	2,130	2,004	2,074

(a) Number of deaths from diseases of the heart per 100,000 of mean population.

(xxv) *Other Diseases of the Circulatory System.* The principal cause of death under this head was arterio-sclerosis. In 1934 the number of deaths from arterio-sclerosis with record of cerebral vascular lesion (i.e., in association with cerebral hæmorrhage, etc.) was 1,506 and without such record, 1,152. For further particulars see Table F, p. 622.

(xxvia) *Acute Bronchitis.* Deaths from bronchitis are classified under the following headings:—(a) Acute, (b) chronic, (c) unspecified, under five years of age, and (d) unspecified, five years and over. For the purpose of the abridged classification, (a) and (c) are treated as "acute," and (b) and (d) as "chronic" bronchitis. Acute bronchitis caused 227 deaths in 1934, viz., 104 males and 123 females.

(xxvib) *Chronic Bronchitis.* (See xxva). The deaths from this cause in 1934 numbered 592, viz., 334 males and 258 females, which was below the average for the previous four years, and much lower than the average for earlier periods.

(xxvii) *Pneumonia (all forms).* The deaths from pneumonia (all forms) during 1934 were 4,358—2,456 males and 1,902 females—and were equivalent to a rate of 652 per million persons. The average rate for 1930-34 was 574, and for 1911-15 636 per million persons. The total of 4,358 deaths is made up of 1,931 from broncho-pneumonia, 14 from capillary bronchitis, 1,380 from lobar pneumonia and 1,033 from pneumonia other and unspecified.

(xxviii) *Other Diseases of the Respiratory System.* Deaths under this heading in 1930 numbered 956; in 1931, 1,008; in 1932, 960; in 1933, 1,003; and in 1934, 1,080. For causes of death included under this head see Table F, p. 622.



The experience of deaths from diseases of the respiratory system in 1934 was unfavourable, the number being 8 per cent. above the average of the previous five years. The death rate of 937 per million in 1934, though higher than that of 851 for the period 1930-34 is lower than the death rates of 1,048 and 1,130 for the respective periods 1921-25 and 1911-15.

(xxixa) *Diarrhœa and Enteritis (Children under two years of age)*. The number of deaths due to these causes was 385 in 1934 and is the second lowest number recorded for many years. During 1934 5,566 children died before reaching their second birthday, and of these 385, or 6.9 per cent., died from diarrhœa and enteritis. The ages of children dying from these diseases during the first year of life will be found on page 594.

The number of deaths (under 2 years of age), the death rates, and proportions of 10,000 deaths due to diarrhœa and enteritis for 1911-15, 1921-25, 1930-34, and 1934 are given below. Reference to the last four lines of the table will reveal the very satisfactory decrease in the number of deaths due to these diseases. In view of changed birth-rates, however, the death-rates per 100,000 of mean population are not true measures of changes in the force of mortality. A better measure would be the estimated number of children in every 1,000 born who died from these diseases before reaching their second birthday. The numbers are estimated to be as follow:—

Period—	1911-15	Males, 24.6	Females, 20.9	Total, 22.8
„	1921-25	„ 16.5	„ 13.3	„ 14.9
„	1930-34	„ 4.8	„ 3.9	„ 4.4

**DEATHS, DEATH RATES(a), ETC., DIARRHŒA AND ENTERITIS (UNDER 2 YEARS OF AGE).—AUSTRALIA, 1934.**

State.	Number of Deaths from Diarrhœa and Enteritis. (Under 2 years of age.)			Death Rates (a) from Diarrhœa and Enteritis. (Under 2 years of age.)			Proportion of 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	74	64	138	6	5	5	56	62	59
Victoria ..	64	42	106	7	5	6	65	48	57
Queensland ..	14	18	32	3	4	3	29	53	39.
South Australia..	13	17	30	4	6	5	46	66	56
Western Australia	24	30	54	10	15	12	95	194	132
Tasmania ..	16	9	25	14	8	11	130	81	107
Australia, 1934 ..	205	180	385	6	6	6	59	65	62
Annual Average—									
1911-15 ..	1,687	1,354	3,041	68	59	64	569	627	593
1921-25 ..	1,114	859	1,973	38	31	35	362	366	364
1930-34 ..	315	246	561	9	8	9	97	96	97

(a) Number of deaths from these diseases per 100,000 of mean population.

(xxixb) *Diarrhœa and Enteritis (2 years and over)*. The number of deaths from the same causes in older ages, viz., 427 was rather higher than the average of 414 for the period 1930 to 1934.

(xxx) *Appendicitis and Typhlitis*. Deaths under this heading numbered 546 in 1934, including 355 males and 191 females. The death rate has remained fairly constant during the periods under review, being 74 per million in 1911-15, 72 in 1921-25, 78 in 1930-34 and 82 in 1934.

(xxxia) *Cirrhosis of the Liver.* The deaths from this cause during 1934 numbered 259, and included 29 deaths from alcoholic cirrhosis.

(xxxib) *Other Diseases of the Liver, and Biliary Calculi.* Under this heading are included deaths from acute yellow atrophy of the liver 20, from other diseases of the liver 50, from biliary calculi 191, and from other diseases of the gall bladder and ducts 223—giving a total of 484 for the group.

(xxxiaa) *Hernia, Intestinal Obstruction.* The deaths under this heading have not varied greatly from year to year, the number registered in 1934 being 582, viz., hernia, 205, and intestinal obstruction, 377.

(xxxiib) *Other Diseases of the Digestive System.* For causes included, see Table F, p. 622. The total number of deaths in 1934 was 906.

(xxxiii) *Acute and Chronic Nephritis.* Of the 3,725 deaths registered in 1934, 138 were ascribed to acute nephritis, and 3,292 to chronic nephritis. Nephritis is amongst the most prolific causes of death, and accounted in 1934 for a death rate of 558 per million persons. The death rate for the period 1930-34, viz., 523 per million, shows a considerable increase on the rates of 450 per million for the periods 1911-15 and 1921-25.

(xxxiv) *Other Diseases of the Genito-Urinary System.* This group of diseases accounted for 1,068 deaths in 1934, the most frequent cause being diseases of the prostate with 483 deaths. For further particulars see Table F, p. 622.

(xxxv) *Puerperal Septicæmia* (including Post-Abortive Sepsis, 35A, but excluding Criminal Abortion, 35B). The 161 deaths from puerperal septicæmia during 1934 showed a decrease from the average of the previous five years. The rate was 1.46 per 1,000 live births. The corresponding rates during the preceding five years were:—1929 1.71, 1930, 1.88; 1931, 1.51; 1932, 1.40; and 1933, 1.44. It is probable that some of the deaths now included under "Criminal Abortion" and excluded from figures affecting the rate for 1934 may have been classified with puerperal septicæmia in previous years. The rate in 1934 per 1,000 live births of 257 deaths from puerperal septicæmia, including criminal abortion, was 2.34. The 257 deaths mentioned above were made up as follow:—Post-abortive sepsis 63, criminal abortion 96, puerperal septicæmia 98. The following table shows the death rate per 1,000 live births from puerperal causes in various countries:—

#### CHILDBIRTH.—DEATHS PER 1,000 LIVE BIRTHS, VARIOUS COUNTRIES.

Country.	Year.	Rates per 1,000 Live Births from—		
		Puerperal Sepsis.	Other Puerperal Causes.	All Puerperal Causes.
Norway .. .. .	1932	1.00	1.62	2.62
Japan .. .. .	1933	0.68	1.97	2.65
France .. .. .	1931	0.94	1.75	2.69
Italy .. .. .	1934	1.06	1.67	2.73
Netherlands .. .. .	1934	1.02	2.16	3.18
Hungary .. .. .	1933	1.78	1.39	3.18
Sweden .. .. .	1932	1.70	1.74	3.44
Spain .. .. .	1932	2.10	1.42	3.52
Egypt .. .. .	1927	1.52	2.28	3.80
Denmark .. .. .	1930	1.18	2.65	3.83
Tasmania .. .. .	1934	1.12	2.91	4.03
England and Wales .. .. .	1933	1.75	2.57	4.32

CHILDBIRTH.—DEATHS PER 1,000 LIVE BIRTHS, VARIOUS COUNTRIES—  
*continued.*

Country.	Year.	Rates per 1,000 Live Births from—		
		Puerperal Sepsis.	Other Puerperal Causes.	All Puerperal Causes.
Irish Free State .. ..	1934	1.59	2.84	4.43
New Zealand .. ..	1933	1.64	2.80	4.44
Great Britain and Northern Ireland .. ..	1932	1.75	2.77	4.52
Switzerland .. ..	1933	1.33	3.24	4.58
Queensland .. ..	1934	1.33	3.28	4.61
Union of South Africa (Whites)	1933	2.54	2.27	4.81
Czechoslovakia .. ..	1933	2.66	2.18	4.85
Western Australia .. ..	1934	1.80	3.07	4.87
Canada (including Quebec) ..	1933	1.55	3.42	4.97
Belgium .. ..	1933	1.80	3.39	5.19
Germany .. ..	1932	2.54	2.74	5.28
Greece .. ..	1932	2.95	2.65	5.60
<b>Australia .. ..</b>	<b>1934</b>	<b>1.46</b>	<b>4.30</b>	<b>5.76</b>
United States (Registration Area) .. ..	1934	2.32	3.63	5.96
New South Wales .. ..	1934	1.45	4.62	6.07
Victoria .. ..	1934	1.44	4.67	6.11
Scotland .. ..	1934	2.68	3.52	6.20
Northern Ireland .. ..	1934	2.17	4.09	6.26
South Australia .. ..	1934	1.89	5.32	7.21
Ceylon .. ..	1927	6.48	11.02	17.50

(xxxvi) *Other Diseases of Pregnancy and Labour.* The deaths under this heading numbered 438 in 1930; 400 in 1931; 375 in 1932; 339 in 1933; and 374 in 1934. Included in the 374 deaths in 1934 were the following:—Abortion not returned as septic, 30; ectopic gestation, 36; other accidents of pregnancy, 3; puerperal hæmorrhage, 80; puerperal albuminuria and convulsions, 96; other toxæmias of pregnancy, 34; phlegmasia alba dolens, embolism or sudden death, 30; other accidents of childbirth, 53; other or unspecified conditions of the puerperal state, 12.

(xxxvii) *All Puerperal Causes.* The 631 deaths in 1934 under the two preceding headings correspond to a death rate of 19.2 per 100,000 females. The death rate may be expressed in other terms by stating that 1 of every 172 women confined in 1934 died from puerperal causes. The corresponding ratios for married women were 1 of every 183, and for single women 1 of every 73. More detailed information will be found in a series of tables in Bulletin No. 52 "Australian Demography."

A tabulation of these causes according to age at death for married and single women separately will be found in the abovementioned Bulletin.

The total number of children left by the married mothers was 1,393, an average of 2.5 children per mother.

Thirty-three of the mothers who died had been married less than one year, 87 between one and two years, and 37 between two and three years. The duration of marriage ranged up to 30 years, apart from 1 case in which the date of marriage was not stated. A tabulation, distinguishing the ages at marriage, will be found in Bulletin, No. 52 "Australian Demography," which also includes a table showing in combination the duration of marriage and previous issue.

(xxxviii) *Diseases of the Skin, Bones, etc.* The number of deaths in 1934 was 359 made up as follows:—Carbuncle 53, cellulitis 83, other diseases of the skin and annæxa 45, osteomyelitis 116, other diseases of the bones (tuberculosis and rheumatism excepted) 26, diseases of the joints and other organs of locomotion 36.

(xxxviii) *Congenital Malformation, Debility and Premature Birth.* The deaths under this heading in 1934 numbered 3,173, of which 3,050 were of children under one year of age. Of all deaths of children under one year of age 64 per cent. was due to these causes. The number of deaths for 1934 is given in the following table:—

## DEATHS FROM CONGENITAL DEBILITY, ETC., AND MALFORMATION, 1934.

State or Territory.	Congenital Malformation.			Premature Birth and Injury at Birth.			Congenital Debility and other diseases peculiar to early infancy.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	164	118	282	443	348	791	149	85	234
Victoria ..	88	67	155	228	188	416	120	103	223
Queensland ..	58	53	111	184	143	327	58	38	96
South Australia..	33	21	54	59	39	98	33	23	56
Western Australia	21	14	35	79	50	129	25	18	43
Tasmania ..	6	8	14	42	28	70	22	15	37
Northern Territory	..	..	..	..	..	..	2	..	2
Federal Capital Territory ..	..	..	..	..	..	..	..	..	..
Australia ..	370	281	651	1,035	796	1,831	409	282	691
Number of deaths under one year	303	225	528	1,035	796	1,831	409	282	691
Number of deaths under one year per 1,000 births	5.43	4.19	9.62	18.53	14.85	33.38	7.32	5.26	12.58

(xxxix) *Senility.* In 1934 2,878 deaths were attributed to this cause—1,408 males and 1,470 females.

Of the deaths described as due to senility, 9 males and 11 females were stated to be aged 100 years or over.

The death rate from senility in 1934 was 431 per million. For the three quinquennia tabulated on page 604 the rate has declined from 875 per million in 1911-15 to 717 in 1921-25 and to 436 in 1930-34, but this decrease is, no doubt, partly due to more particular diagnosis.

(xl) *Suicide.*—(a) *General.* The numbers of deaths from suicide showed an increase each year from 1922 until 1930 then fell to 1932 and rose again to 1934. The number of suicides in 1930, was 943—791 males and 152 females; in 1931, 827—689 males and 138 females; in 1932, 754—598 males and 156 females; in 1933, 790—633 males and 157 females; and in 1934, 826—643 males and 183 females.

(b) *Modes Adopted.* The modes adopted by persons who committed suicide in the years 1926-30, and 1933 and 1934 were as follow:—

## SUICIDES, MODES ADOPTED.—AUSTRALIA.

Mode of Death.	Males.			Females.			Persons.		
	Average of 5 years, 1926-30.	1933.	1934.	Average of 5 years, 1926-30.	1933.	1934.	Average of 5 years, 1926-30.	1933.	1934.
Poisoning .. ..	156	129	144	62	72	68	218	201	212
Poisonous gas .. ..	25	40	41	9	18	29	34	58	70
Hanging or Strangulation .. ..	93	87	73	22	16	18	115	103	91
Drowning .. ..	41	46	56	18	23	30	59	69	86
Firearms .. ..	197	196	202	7	9	12	204	205	214
Cutting or piercing instruments .. ..	104	83	87	12	9	14	116	92	101
Jumping from a high place .. ..	9	21	19	4	7	5	13	28	24
Crushing .. ..	15	20	13	4	2	6	19	22	19
Other Modes .. ..	10	11	8	3	1	1	13	12	9
Total .. ..	650	633	643	141	157	183	791	790	826

(c) *Death Rates.* The death rates from suicide and the proportion per 10,000 of total deaths are given in the following table for 1934, corresponding rates for the periods 1911-15, 1921-25, 1926-30, 1931, 1932, and 1933, being shown at the foot of the table :—

**SUICIDE.—DEATHS, DEATH RATES(a), AND PROPORTION OF TOTAL DEATHS, 1934.**

State or Territory.	Number of Deaths.			Death Rates (a) from Suicide.			Proportion of 10,000 Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	263	86	349	20	7	13	200	83	149
Victoria ..	130	42	172	14	5	9	131	48	92
Queensland ..	109	20	129	22	4	14	226	59	157
South Australia ..	59	19	78	20	7	13	208	74	144
Western Australia	65	11	76	28	5	17	257	71	186
Tasmania ..	13	5	18	11	4	8	106	45	77
Northern Territory	3	..	3	87	..	61	600	..	500
Federal Capital Territory ..	1	..	1	20	..	11	476	..	323
Australia, 1934 ..	643	183	826	19	6	12	186	66	133
„ 1933 ..	633	157	790	19	5	12	190	61	134
„ 1932 ..	598	156	754	18	5	12	188	63	133
„ 1931 ..	689	138	827	21	4	13	217	..	146
Average—1926-30	650	141	791	20	5	13	198	56	136
„ 1921-25	509	112	621	18	4	11	166	48	114
„ 1911-15	509	115	624	21	5	13	172	53	122

(a) Number of deaths from suicide per 100,000 of mean population.

(d) *Ages.* From the following table, which shows the ages of the persons who committed suicide in 1934, it will be seen that both extreme youth and extreme old age are represented :—

**AGES OF PERSONS WHO COMMITTED SUICIDE.—AUSTRALIA, 1934.**

Ages.	M.	F.	Total.	Ages.	M.	F.	Total.
10 years and under 15	2	..	2	60 years and under 65	55	9	64
15 „ „ 20	15	10	25	65 „ „ 70	41	6	47
20 „ „ 25	46	19	65	70 „ „ 75	31	5	36
25 „ „ 30	54	15	69	75 „ „ 80	16	..	16
30 „ „ 35	49	14	63	80 „ „ 85	9	1	10
35 „ „ 40	59	30	89	85 „ „ 90	3	..	3
40 „ „ 45	52	23	75	90 „ „ 95	..	..	..
45 „ „ 50	71	22	93	95 „ „ 100	..	..	..
50 „ „ 55	76	16	92	Not stated	1	..	1
55 „ „ 60	63	13	76	Total Deaths ..	643	183	826

(e) *Occupations of Males.* The next table gives the occupations of the males who committed suicide in 1921, 1931 and 1934:—

**OCCUPATIONS OF MALES WHO COMMITTED SUICIDE.—AUSTRALIA.**

Occupation Group.	Number of Male Deaths.			Percentage on Total.		
	1921.	1931.	1934.	1921.	1931.	1934.
Professional .. ..	32	29	43	% 6.27	% 4.21	% 6.69
Domestic .. ..	20	22	10	3.92	3.19	1.56
Commercial .. ..	81	106	90	15.88	15.38	14.00
Transport and Commu- nication .. ..	42	52	46	8.24	7.55	7.15
Industrial .. ..	180	256	96	35.29	37.16	14.93
Agricultural, Pastoral, Min- ing, etc. .. ..	131	182	147	25.69	26.41	22.86
Indefinite .. ..	21	39	207 <sup>a</sup>	4.12	5.66	32.19 <sup>a</sup>
Dependent .. ..	3	3	4	0.59	0.44	0.62
<b>Total Male Deaths ..</b>	<b>510</b>	<b>689</b>	<b>643</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

(a) Includes 178 (27.68 per cent.) clerks, labourers, etc., not specified as belonging to any industry, who were formerly included under "Commercial" or "Industrial".

(f) *Death Rates, Various Countries.* The following comparative table for various countries shows that Australia occupies a fairly favourable position as regards the death rate from suicide:—

**SUICIDE.—DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.**

Country.	Year.	Rate.	Country.	Year.	Rate.
Egypt .. ..	1927	3.2	Queensland .. ..	1934	13.5
Irish Free State .. ..	1934	3.5	Great Britain and Nor- thern Ireland .. ..	1932	13.6
Spain .. ..	1932	3.9	New Zealand .. ..	1933	13.6
Northern Ireland .. ..	1934	5.2	England and Wales .. ..	1933	14.0
Greece .. ..	1932	5.4	United States .. ..	1934	14.9
Norway .. ..	1932	6.5	Denmark .. ..	1932	17.1
Tasmania .. ..	1934	7.9	Western Australia .. ..	1934	17.2
Netherlands .. ..	1934	8.4	Sweden .. ..	1932	17.7
Italy .. ..	1934	8.6	Belgium .. ..	1933	18.2
Canada .. ..	1933	9.0	France .. ..	1931	19.0
Victoria .. ..	1934	9.4	Japan .. ..	1933	22.0
Scotland .. ..	1934	11.0	Poland (b) .. ..	1933	24.0
<b>Australia .. ..</b>	<b>1934</b>	<b>12.4</b>	Switzerland .. ..	1933	27.2
Union of South Africa (a) .. ..	1933	12.7	Germany .. ..	1932	29.1
New South Wales .. ..	1934	13.3	Czechoslovakia .. ..	1933	30.3
South Australia .. ..	1934	13.4	Hungary .. ..	1933	32.0

(a) White population only.

(b) In towns with over 100,000 inhabitants.

(xli) *Homicide.* Deaths from homicide in 1934 numbered 108, equivalent to about the average for the previous five years. See paragraph (xliia).

(xlii) *Accidental or Violent Deaths (except Suicide and Homicide).* Deaths from accidents in 1934 numbered 3,270, compared with an average of 3,173 for the previous five years. Of the deaths in 1934, 1,142 occurred in New South Wales; 936 in Victoria; 511 in Queensland; 286 in South Australia; 284 in Western Australia; 101 in Tasmania; 8 in Northern Territory; and 2 in the Federal Capital Territory. See paragraph (xliia).

(xliia) *Accidental or Violent Deaths (including Homicide and Suicide)*. The following table shows the various kinds of violent deaths, including homicides and suicides, recorded in Australia for the year 1934.

## DEATHS FROM EXTERNAL VIOLENCE.—AUSTRALIA, 1934.

Cause of Death.	Males.	Females.	Persons.
Suicide (see paragraph (xl) .. .. .)	643	183	826
Infanticide (murder of children under 1 year) ..	8	8	16
Homicide by firearms .. .. .	18	10	28
Homicide by cutting or piercing instruments ..	12	10	22
Homicide by other means .. .. .	34	8	42
<b>Homicide, Total .. .. .</b>	<b>72</b>	<b>36</b>	<b>108</b>
Poisoning by venomous animals—			
(a) Snakebite .. .. .	6	1	7
(b) Other .. .. .	3	1	4
Poisoning by food .. .. .	9	7	16
Accidental absorption of irrespirable or poisonous gas .. .. .	13	8	21
Other acute accidental poisonings (gas excepted) ..	20	11	31
Conflagration .. .. .	8	3	11
Accidental burns (conflagration excepted) ..	101	101	202
Accidental mechanical suffocation .. .. .	21	7	28
Accidental drowning .. .. .	277	64	341
Accidental injury by firearms .. .. .	81	2	83
Accidental injury by cutting or piercing instruments	11	1	12
Accidental injury by falling, crushing, etc.—			
In mines and quarries .. .. .	89	..	89
By machinery .. .. .	49	1	50
Connected with methods of transport—			
Railways .. .. .	130	9	139
Tramways .. .. .	34	9	43
Automobiles .. .. .	732	189	921
Other land vehicles .. .. .	164	21	185
Transport by water .. .. .	12	2	14
Transport by air .. .. .	20	..	20
Fall not otherwise specified .. .. .	242	199	441
Other crushings .. .. .	91	3	94
Cataclysm .. .. .	21	6	27
Injuries by animals (not poisoning) .. .. .	29	1	30
Starvation, thirst, fatigue .. .. .	2	1	3
Excessive cold .. .. .	5	1	6
Excessive heat .. .. .	29	34	63
Lightning .. .. .	6	1	7
Other accidental electric shocks .. .. .	25	6	31
Other and unstated forms of accidental violence—			
Inattention at birth .. .. .	5	2	7
Other .. .. .	113	31	144
Violent deaths of unstated nature (open verdict)—			
Drowning .. .. .	86	26	112
Firearms .. .. .	14	2	16
Cutting or piercing instruments .. .. .	1	..	1
Fall .. .. .	5	2	7
Crushing .. .. .	9	3	12
Other .. .. .	26	14	40
War wounds .. .. .	12	..	12
Capital punishment .. .. .	..	..	..
<b>External Violence, excluding Suicide and Homicide</b>	<b>2,501</b>	<b>769</b>	<b>3,270</b>
<b>Total Deaths from External Violence ..</b>	<b>3,216</b>	<b>988</b>	<b>4,204</b>

The following table of death rates per million of mean population reveals for External Violence (excluding Suicide and Homicide), i.e., "Accidents", a decrease to 1921-25, but an increase in the rates for 1926-30 to which the growth of automobile accidents has contributed very largely. The rates for 1934 were higher than those recorded in the three preceding years.

## DEATH RATES (a) ETC., EXTERNAL VIOLENCE.—AUSTRALIA.

Period.	Death Rates (a) from Homicide.			Death Rates (a) from External Violence excluding Suicide and Homicide.			Death Rates (a) from all External Violence.			All External Violence Proportion of 10,000 Deaths.
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	
1911-15 ..	21	16	19	948	268	621	1,170	330	770	718
1921-25 ..	17	13	15	753	211	488	950	260	610	643
1926-30 ..	19	15	17	843	240	549	1,070	300	690	746
1931 ..	25	14	20	690	204	452	923	261	599	688
1932 ..	19	9	14	700	220	464	898	277	593	685
1933 ..	18	11	15	678	214	449	883	273	583	654
1934 ..	21	11	16	738	234	490	949	301	630	676

(a) Number of deaths per 1,000,000 of mean population.

(xliii) *Unspecified or Ill-defined Diseases.* The number of deaths included under this heading was 401 in 1930, 287 in 1931, 276 in 1932, 310 in 1933, and 310 in 1934, of which 217 were males and 93 females. The detailed classification shows these ill-defined diseases under two headings—sudden death, including syncope; and unspecified or ill-defined causes, of which the following are specimens:—Heart failure, asthenia, anasarca, atrophy, exhaustion, dropsy, ascites, and general oedema, etc. In 1934 the number of deaths which came under the first of these categories was 34, and under the second, 276. It is inevitable that cases will occur regarding which the available information is insufficient to permit of a clear definition of the fatal disease in the certificate of death. In the majority of cases, however, there is little doubt that more *satisfactory certificates might have been given.*

(xliv) "*Other Diseases.*" The abridged classification of causes of death used in Tables A to E in the preceding pages differs from that used in the Official Year Books previous to No. 25 in that no residue of "other diseases" is shown at the foot. The items are ranged in classes or groups of classes and each class or group of classes is made



complete by the addition of an "other diseases" item for that class or group of classes. These "other diseases" items are expanded into their constituent causes in the following table:—

## F.—DEATHS FROM "OTHER DISEASES."—AUSTRALIA, 1934.

Causes.	G.C.N. (a)	M.	F.	Total.
<b>14. OTHER INFECTIOUS OR PARASITIC DISEASES.</b>				
Dysentery—				
Amoebic .. .. .	13a	2	..	2
Bacillary .. .. .	13b	5	4	9
Other .. .. .	13c	12	12	24
Erysipelas .. .. .	15	26	11	37
Acute Poliomyelitis .. .. .	16	17	14	31
Encephalitis Lethargica .. .. .	17	15	22	37
Cerebrospinal Fever .. .. .	18	10	11	21
Anthrax .. .. .	20	..	..	..
Tetanus .. .. .	22	63	26	89
Leprosy .. .. .	33	6	4	10
Other Venereal Diseases .. .. .	35	3	..	3
Purulent Infection and Septicæmia .. .. .	36	58	45	103
Other Diseases due to Protozoa .. .. .	39	7	2	9
Ankylostomiasis .. .. .	40	1	2	3
Hydatid Cysts—				
Liver .. .. .	41a	23	13	36
Other Organs .. .. .	41b	23	13	36
Other Diseases due to Helminths .. .. .	42	..	2	2
Mycoses .. .. .	43	11	2	13
Mumps .. .. .	44a	6	5	11
Other .. .. .	44b	13	12	25
<b>Total .. .. .</b>	<b>..</b>	<b>301</b>	<b>200</b>	<b>501</b>
<b>20. OTHER GENERAL DISEASES.</b>				
Rheumatic Fever .. .. .	56	106	118	224
Scurvy .. .. .	60	..	..	..
Beri-beri .. .. .	61	2	..	2
Pellagra .. .. .	62	..	1	1
Rickets .. .. .	63	1	..	1
Osteomalacia .. .. .	64	..	..	..
Diseases of the Pituitary Gland .. .. .	65	4	2	6
Diseases of the Thyroid and Parathyroid Glands—				
Exophthalmic Goitre .. .. .	66a	14	117	131
Other Diseases of Thyroid Gland .. .. .	66b	10	41	51
Diseases of Parathyroid Gland .. .. .	66c	2	..	2
Diseases of the Thymus Gland .. .. .	67	4	6	10
Diseases of the Adrenals (Addison's Disease) .. .. .	68	16	13	29
Other General Diseases .. .. .	69	10	11	21
Hæmorrhagic Conditions .. .. .	70	27	16	43
Anæmia, Chlorosis—				
Pernicious .. .. .	71a	115	143	258
Others .. .. .	71b	11	17	28
Leucæmia, Lymphadenoma—				
Leucæmia .. .. .	72a	97	73	170
Aleucæmia (Lymphadenoma) .. .. .	72b	46	26	72
Diseases of the Spleen .. .. .	73	13	17	30
Other Diseases of the Blood and Blood-forming Organs .. .. .	74	1	4	5
Chronic Poisoning by Organic Substances .. .. .	76	1	..	1
Chronic Poisoning by Mineral Substances—				
Chronic Lead Poisoning .. .. .	77a	13	2	15
Other .. .. .	77b	1	..	1
<b>Total .. .. .</b>	<b>..</b>	<b>494</b>	<b>607</b>	<b>1,101</b>

(a) G.C.N. = General Classification Number.

F.—DEATHS FROM "OTHER DISEASES."—AUSTRALIA, 1934—*continued.*

Causes.	G.C.N. (a)	M.	F.	Total
<b>23. OTHER DISEASES OF NERVOUS SYSTEM AND SENSE ORGANS.</b>				
Encephalitis (not epidemic)—				
Cerebral Abscess .. .. .	78a	31	17	48
Others .. .. .	78b	29	27	56
Simple Meningitis—				
Simple Meningitis .. .. .	79a	112	80	192
Non-Epidemic Cerebro-Spinal Meningitis .. .. .	79b	7	8	15
Other Diseases of the Spinal Cord .. .. .	81	114	93	207
Other Forms of Insanity .. .. .	84	40	57	97
Epilepsy .. .. .	85	113	76	189
Convulsions of Infants under Five years of Age .. .. .	86	21	20	41
Other Diseases of the Nervous System—				
Chorea .. .. .	87a	1	4	5
Neuralgia and Neuritis .. .. .	87b	6	9	15
Paralysis Agitans .. .. .	87c	84	73	157
Disseminated Sclerosis .. .. .	87d	35	54	89
Idiocy, Imbecility .. .. .	87e	13	11	24
Other Diseases .. .. .	87f	36	25	61
Diseases of the Eye and Annexa .. .. .	88	2	3	5
Diseases of the Ear and Mastoid Sinus .. .. .	89	65	53	118
Total .. .. .	..	709	610	1,319
<b>25. OTHER DISEASES OF THE CIRCULATORY SYSTEM.</b>				
Aneurysm (other than of Heart) .. .. .	96	149	47	196
Arterio-sclerosis (of coronary arteries excepted)—				
With record of Cerebro-Vascular Lesion .. .. .	97a	703	803	1,506
Without record of Cerebro-Vascular Lesion .. .. .	97b	647	505	1,152
Gangrene .. .. .	98	39	33	72
Other Diseases of the Arteries .. .. .	99	43	25	68
Diseases of the Veins (Varices, Hæmorrhoids, Phlebitis, etc.) .. .. .	100	7	28	35
Diseases of the Lymphatic System, Lymphangitis, etc. .. .. .	101	8	3	11
Abnormalities of Blood Pressure .. .. .	102	24	44	68
Other Diseases of the Circulatory System .. .. .	103	7	7	14
Total .. .. .	..	1,627	1,495	3,122
<b>28. OTHER DISEASES OF THE RESPIRATORY SYSTEM.</b>				
Diseases of the Nasal Fossæ and Annexa .. .. .	104	17	16	33
Diseases of the Larynx .. .. .	105	17	11	28
Pleurisy .. .. .	110	117	64	181
Congestion, Hæmorrhagic Infraction of Lung .. .. .	111	194	223	417
Asthma .. .. .	112	78	75	153
Pulmonary Emphysema .. .. .	113	8	2	10
Other Diseases of the Respiratory System, Tuberculosis excepted—				
Chronic Interstitial Pneumonia .. .. .	114a	192	9	201
Gangrene of the Lung .. .. .	114b	6	6	12
Other Diseases .. .. .	114c	27	18	45
Total .. .. .	..	656	424	1,080

(a) G.C.N. = General Classification Number;

F.—DEATHS FROM "OTHER DISEASES."—AUSTRALIA, 1934—*continued.*

Causes.	G.C.N. (a)	M.	F.	Total.
<b>32B. OTHER DISEASES OF THE DIGESTIVE SYSTEM.</b>				
Diseases of the Buccal Cavity, Pharynx, etc.—				
Buccal Cavity and Annexa .. .. .	115a	15	15	30
Pharynx and Tonsils .. .. .	115b	58	52	110
Diseases of the Oesophagus .. .. .	116	6	4	10
Ulcer of the Stomach or Duodenum—				
Stomach .. .. .	117a	217	68	285
Duodenum .. .. .	117b	135	18	153
Other Diseases of the Stomach (Cancer excepted) .. .. .	118	52	46	98
Other Diseases of the Intestines .. .. .	123	53	31	84
Diseases of the Pancreas .. .. .	128	30	26	56
Peritonitis (without specified cause) .. .. .	129	41	39	80
<b>Total .. .. .</b>	<b>..</b>	<b>607</b>	<b>299</b>	<b>906</b>
<b>34. OTHER DISEASES OF THE GENITO-URINARY SYSTEM.</b>				
Other Diseases of the Kidney and Annexa .. .. .	133	134	132	266
Calculi of the Urinary Passages .. .. .	134	51	23	74
Diseases of the Bladder .. .. .	135	53	24	77
Diseases of the Urethra, Urinary Abscess, etc. .. .. .	136	45	3	48
Diseases of the Prostate .. .. .	137	483	..	483
Diseases of the Male Genital Organs, not stated as Venereal .. .. .				
Venereal .. .. .	138	5	..	5
Diseases of the Female Genital Organs, not stated as Venereal—				
Ovary, Fallopian Tubes and Parametrium .. .. .	139a	..	72	72
Uterus .. .. .	139b	..	40	40
Breast .. .. .	139c	..	1	1
Others .. .. .	139d	..	2	2
<b>Total .. .. .</b>	<b>..</b>	<b>771</b>	<b>297</b>	<b>1,068</b>

(a) G.C.N. = General Classification Number.

14. Causes of Deaths in Classes.—The figures in the preceding sub-sections relate to specific causes of death, and are of greater value in medical statistics than a mere grouping under general headings. The classification under eighteen general headings adopted by the compilers of the International Nomenclature is, however, shown in the

following table, together with the death rates and proportions on total deaths pertaining to those classes. A further table furnishes the death rates for the quinquennia 1911-15, 1921-25 and 1926-30:—

## DEATHS, DEATH RATES(a), ETC., IN CLASSES.—AUSTRALIA, 1934.

Class.	Total Deaths.			Deaths Rates.(a)			Proportion of 10,000 Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Parasitic and Infectious Diseases	3,207	2,396	5,603	95	73	84	928	866	900
2. Cancer and Other Tumours	3,825	3,611	7,436	113	110	111	1,106	1,306	1,195
3. Rheumatism, Diseases of Nutrition, of Endocrine Glands, and Other General Diseases	614	1,102	1,716	18	34	26	178	398	276
4. Diseases of the Blood and Blood-forming Organs	310	296	606	9	9	9	90	107	97
5. Chronic Poisonings and Intoxications	47	12	59	1	..	..	13	4	9
6. Diseases of the Nervous System and of the Organs of Sense	2,300	2,286	4,586	68	70	69	665	827	737
7. Diseases of the Circulatory System	8,990	7,039	16,029	265	214	240	2,600	2,545	2,576
8. Diseases of the Respiratory System	3,550	2,707	6,257	105	82	94	1,027	979	1,005
9. Diseases of the Digestive System	2,032	1,557	3,589	60	47	54	588	563	577
10. Diseases of the Genito-Urinary System and Annexa	2,817	1,976	4,793	83	60	72	815	714	770
11. Pregnancy, Labour and Puerperal State	..	631	631	..	19	9	..	228	101
12. Diseases of the Skin and of the Cellular Tissue	106	75	181	3	2	3	31	27	29
13. Diseases of the Bones and Organs of Locomotion	118	60	178	4	2	3	34	22	29
14. Congenital Malformations	370	281	651	11	9	10	107	101	105
15. Early Infancy	1,444	1,078	2,522	43	33	38	418	390	405
16. Old Age	1,408	1,470	2,878	42	45	43	407	532	463
17. External Causes	3,216	988	4,204	94	30	63	930	357	676
18. Causes of Death not Determined	217	93	310	6	3	5	63	34	50
Total .. .. .	34,571	27,658	62,229	1,020	841	932	10,000	10,000	10,000

(a) Number of deaths per 100,000 of mean population.

## QUINQUENNIAL DEATH RATES IN CLASSES.—AUSTRALIA.

Class.	Number of Deaths per 100,000 of Mean Population.								
	1911 to 1915.			1921 to 1925.			1926 to 1930.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Parasitic and Infectious Diseases							107	86	97
2. Cancer and Other Tumours							100	98	100
3. Rheumatism, Diseases of Nutrition, of Endocrine Glands, and Other General Diseases							19	29	24
4. Diseases of the Blood and Blood-forming Organs							8	9	8
5. Chronic Poisonings and Intoxications							3	1	2
6. Diseases of the Nervous System and of the Organs of Sense	112	93	103	93	83	88	78	77	77
7. Diseases of the Circulatory System	147	116	132	150	118	134	186	150	168
8. Diseases of the Respiratory System	132	93	113	121	88	105	116	85	101
9. Diseases of the Digestive System	135	123	130	97	81	89	79	63	71
10. Non-venereal Diseases of the Genito-Urinary System	72	46	59	72	49	61	77	56	67
11. Puerperal Condition	..	27	13	..	25	12	..	24	12
12. Diseases of Skin and Cellular Tissue	6	5	6	6	4	5	4	3	3
13. Diseases of Organs of Locomotion	2	1	1	3	2	2	3	2	2
14. Congenital Malformations	12	9	10	12	10	11	12	9	10
15. Early Infancy	87	71	79	73	56	65	60	46	54
16. Old Age	94	80	88	76	68	72	55	53	54
17. External Causes	117	33	77	95	26	61	107	30	69
18. Causes of Death not Determined	16	9	13	15	9	12	12	6	9
Total .. .. .	1,193	942	1,073	1,061	841	953	1,026	827	928

15. Ages at Death of Married Males and Females, and Issue.—Bulletin No. 52 "Australian Demography" contains a number of tables showing the ages at marriage, ages at death, birthplace, and occupations, in combination with the issue of married persons who died in Australia in 1934. A summary of those tables is given hereunder. Deaths of married males in 1934 numbered 21,741, and of married females, 19,892. The tabulations which follow deal, however, with only 21,379 males and 19,640 females, the information in the remaining 614 cases being incomplete. The total number of children in the families of the 21,379 males was 92,373, and of the 19,640 females, 89,124. The average number of children is shown for various age-groups in the following table:—

AGES AT DEATH OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.—AUSTRALIA.

Age at Death.	Average Issue.					
	Males.			Females.		
	1911.	1921.	1934.	1911.	1921.	1934.
Under 20 years .. ..	0.33	..	..	0.94	0.77	0.70
20 to 24 " .. ..	0.77	0.84	0.75	1.27	1.22	1.10
25 " 29 " .. ..	1.25	1.29	1.36	1.82	1.86	1.63
30 " 34 " .. ..	2.05	2.06	1.87	2.74	2.45	2.36
35 " 39 " .. ..	2.80	2.58	2.23	3.64	3.29	2.93
40 " 44 " .. ..	3.47	3.23	2.64	4.09	3.66	3.22
45 " 49 " .. ..	4.09	3.48	3.10	4.54	3.76	3.37
50 " 54 " .. ..	4.75	3.76	3.42	5.35	4.23	3.54
55 " 59 " .. ..	5.44	4.41	3.73	5.86	4.69	3.77
60 " 64 " .. ..	5.95	4.98	3.89	5.99	5.39	4.01
65 " 69 " .. ..	6.23	5.50	4.20	6.50	5.86	4.44
70 " 74 " .. ..	6.41	6.06	4.66	6.38	6.30	5.07
75 " 79 " .. ..	6.75	6.66	5.30	6.72	6.56	5.54
80 " 84 " .. ..	6.68	6.89	5.79	6.22	6.76	6.05
85 " 89 " .. ..	6.67	7.18	6.42	5.97	6.93	6.41
90 " 94 " .. ..	6.03	7.21	7.32	5.69	6.53	6.37
95 " 99 " .. ..	7.30	6.97	7.22	5.05	6.05	6.77
100 years and upwards ..	9.33	9.20	5.71	5.17	5.11	6.40
Age not stated .. ..	4.33	5.36	3.00	4.60	5.80	..
All ages .. ..	5.42	4.97	4.32	5.35	5.05	4.54

The figures in the preceding table include the issue both living and dead, the proportion between them, taking the issue of deceased males and females together, being about 1,000 to 247. The totals are shown in the following table:—

ISSUE OF MARRIED MALES AND FEMALES.—AUSTRALIA, 1934.

Issue of Married Males.	Males.	Females.	Total.	Issue of Married Females.	Males.	Females.	Total.
Living ..	38,210	37,476	75,686	Living ..	34,995	34,828	69,823
Dead ..	9,529	7,158	16,687	Dead ..	10,855	8,446	19,301
Total ..	47,739	44,634	92,373	Total ..	45,850	43,274	89,124

16. Ages at Marriage of Deceased Males and Females, and Issue.—While the table giving the average issue of married males and females naturally shows an increase in the averages with advancing ages at death, the following table, which gives the average

issue of males and females according to the age at marriage of the deceased parents shows a corresponding decrease in the averages as the age at marriage advances:—

**AGES AT MARRIAGE OF DECEASED MALES AND FEMALES, AND AVERAGE ISSUE.—AUSTRALIA.**

Age at Marriage.	Average Issue.					
	Males.			Females.		
	1911.	1921.	1934.	1911.	1921.	1934.
Under 15 years .. ..	..	..	4.00	9.71	7.60	9.22
15 to 19 „ .. ..	6.97	6.32	5.89	7.10	6.97	6.48
20 „ 24 „ .. ..	6.34	6.05	5.33	5.77	5.50	5.07
25 „ 29 „ .. ..	5.70	5.17	4.64	4.27	4.09	3.72
30 „ 34 „ .. ..	4.92	4.45	3.77	3.04	2.66	2.45
35 „ 39 „ .. ..	4.05	3.90	3.09	1.68	1.61	1.31
40 „ 44 „ .. ..	3.43	2.67	2.46	0.72	0.62	0.45
45 „ 49 „ .. ..	2.59	2.20	1.82	0.26	0.03	0.07
50 „ 54 „ .. ..	2.45	1.70	1.54	..	..	..
55 „ 59 „ .. ..	1.66	1.30	1.36	..	..	..
60 „ 64 „ .. ..	2.00	0.33	1.26	..	..	..
65 years and upwards ..	1.00	0.25	1.06	..	..	..
Age unspecified .. ..	5.40	4.93	3.31	5.23	5.41	3.62
All Ages .. ..	5.42	4.97	4.32	5.35	5.05	4.54

17. *Birthplaces of Deceased Married Males and Females, and Issue.*—The following table shows the birthplaces of married males and females who died in 1911 and 1934, together with the average issue. No generalizations can, of course, be made in those cases in which the number of deaths was small, but where the figures are comparatively large, as in the case of natives of Australia and the British Isles, differences occur between the averages of these individual countries which appear inexplicable on any other ground than that of different age constitution of the locally born population. It will be noted that the differences occur both in the male and female averages.

**BIRTHPLACES OF DECEASED MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.—AUSTRALIA.**

Birthplace.	Married Males.				Married Females.			
	1911.		1934.		1911.		1934.	
	Deaths.	Average Issue.	Deaths.	Average Issue.	Deaths.	Average Issue.	Deaths.	Average Issue.
Australasia—								
Australia .. ..	4,074	4.71	13,716	4.28	4,566	4.57	13,409	4.39
New Zealand .. ..	64	3.89	138	3.42	56	3.84	165	3.44
Europe—								
England and Wales ..	4,079	5.87	4,177	4.40	3,152	5.86	3,302	4.72
Scotland .. ..	1,133	5.86	1,034	4.38	1,002	6.09	832	4.90
Ireland .. ..	1,766	6.12	958	4.86	2,118	5.83	1,285	5.19
Other British Possessions .. ..	23	6.52	29	4.45	24	5.75	18	4.72
Western .. ..	199	4.33	265	4.33	55	5.07	71	5.38
Central .. ..	484	5.81	371	5.18	270	6.56	241	6.20
Southern .. ..	58	5.09	164	3.17	12	4.92	59	3.75
Eastern .. ..	35	4.37	55	3.55	6	4.50	24	5.41
Asia—								
British Possessions ..	32	3.87	54	3.11	17	6.41	33	3.76
Foreign Countries ..	74	2.46	105	2.58	5	2.60	17	5.11
Africa—								
British Possessions ..	16	3.56	26	3.58	15	4.80	27	4.26
Foreign Countries ..	..	..	3	2.00	..	..	4	5.50
America—								
British Possessions ..	42	5.55	42	3.50	17	6.47	18	3.77
United States .. ..	40	3.78	52	2.87	17	4.94	31	3.97
Other Foreign Countries ..	17	4.53	7	1.00	10	4.50	1	6.00
Polynesia .. ..	5	4.00	21	3.80	9	3.33	7	3.14
Indefinite .. ..	72	4.28	112	4.44	72	4.85	96	5.06
Total .. ..	12,213	5.42	21,379	4.32	11,423	5.35	19,640	4.54

18. Occupations of Deceased Married Males, and Issue.—The following tabulation shows the average issue in combination with the occupation of deceased males :—

**OCCUPATIONS OF DECEASED MARRIED MALES AND AVERAGE ISSUE—  
AUSTRALIA.**

Occupation Group.	Deaths of Married Males.			Average Issue.		
	1921.	1931.	1934.	1921.	1931.	1934.
Professional .. ..	926	1,194	1,599	4.04	3.78	3.59
Domestic .. ..	552	621	544	3.55	3.64	3.30
Commercial .. ..	1,977	2,962	2,403	4.18	3.55	3.55
Transport and Communica- tion .. ..	1,254	1,742	2,078	4.63	4.15	4.09
Industrial .. ..	5,086	6,883	4,306	4.95	4.49	4.16
Agricultural, Pastoral, Min- ing, etc. .. ..	3,983	4,495	5,024	5.83	5.31	5.14
Indefinite .. ..	759	936	5,389 <sup>a</sup>	5.49	4.68	4.45 <sup>a</sup>
Dependent .. ..	15	39	36	4.00	3.85	3.00
<b>Total .. ..</b>	<b>14,552</b>	<b>18,872</b>	<b>21,379</b>	<b>4.97</b>	<b>4.44</b>	<b>4.32</b>

(a) Includes clerks, labourers, &c., not specified as belonging to any industry, who were formerly included under "Commercial" or "Industrial" as follows: 1934, 4,271 (average issue 4.29).

#### § 4. Australian Life Tables.

The Official Year Book, No. 20, pp. 952 and 959 to 973, contained a synopsis of the various Australian Life Tables, also comparisons with other countries of the expectation of life at various ages. Considerations of space, however, do not permit of their repetition herein. The compilation of Life Tables based on the age distribution of the population at the Census of the 30th June, 1933, is now in progress.

#### § 5. Registration of Births, Deaths and Marriages in the Territory for the Seat of Government.

Up to the end of 1929 the provisions of the Registration of Births, Deaths and Marriages Act of 1899 and the Marriage Act of 1899 of New South Wales applied to the Territory for the Seat of Government. Births, deaths and marriages occurring within the Territory were registered by the District Registrars, Queanbeyan and Nowra, and were incorporated in the New South Wales records.

Towards the end of 1929, however, the Registration of Births, Deaths and Marriages Ordinances were enacted, providing for the assumption by the Commonwealth Government of the function of registration within the Territory as from 1st January, 1930. The Commonwealth Statistician is the Principal Registrar, and all registrations are made at Canberra.

Marriages within the Territory are celebrated according to the conditions prescribed by the Marriage Ordinance, 1929. This Ordinance, which closely follows the provisions of the Marriage Act of New South Wales, which it supersedes as regards the Territory for the Seat of Government, came into operation on 1st January, 1930.

## § 6. Graphical Representation of Vital Statistics.

(See Graphs pp. 569 to 576.)

1. **General.**—The progressive fluctuations of the number of births, marriages, and deaths are important indexes of the economic conditions and social ideals of a community. Graphs have accordingly been prepared which show these fluctuations. It should be remembered, however, that, normally, the increase of births and marriages should be proportional to the growth of population. The graphs showing rates have been revised in respect of the years 1921 to 1933 in accordance with the results of the Census of the 30th June, 1933.

2. **Graphs of Annual Births, Marriages, and Deaths.**—The outstanding features of the graph representing births are :—An almost continuous rise in the numbers from 1860 to 1891; a decline till 1898, associated with the commercial crises of 1891–93; a sharp fall in 1903 which accompanied a severe drought; an uninterrupted increase from 1903 to 1914, the total for 1914 being the highest recorded; a rapid decline to 1919, the result of war conditions, followed by an equally rapid increase in 1920. The numbers were fairly constant from 1920 to 1928 after which they declined steeply as the result of the world depression.

The graph for marriages up to 1914 discloses approximately the same features as that for births—financial crises and droughts having a similar effect. The numbers for 1914 and 1915 showed a considerable increase over previous years. From 1916 to 1918 there was a rapid fall, the numbers being much below those of pre-war years. During 1919 and 1920 the recovery was very rapid, the total for the latter year being the highest ever recorded. Marriages declined again to 1923 then recovered to 1927, when the experience of the period 1915 to 1920 was repeated, the graph falling sharply with the progress of the depression and making a striking recovery in the past three years.

The characteristic feature of the graph of deaths is its irregular nature. On the whole, however, there is a fairly steady increase due to the growth of population.

3. **Graphs of Annual Birth, Marriage, and Death Rates, and Rate of Natural Increase.**—The graph of the birth rate indicates a well marked decline throughout the whole period. This reduction of rate has been subject to fluctuations, there being two periods of arrested decline, viz., from 1877 to 1890, and from 1903 to 1912.

The variations in the marriage rates though less abrupt than those in the birth and death rates, have ranged from a minimum of 6.08 per 1,000 which marked the culmination of a commercial depression in 1894 to a maximum of 9.62 per 1,000 in 1920. The depression of 1931, however, was responsible for the establishment of a new minimum of 5.96 per 1,000 in that year. The next three years witnessed a sharp advance to 7.71 per thousand.

On the whole, the graph for the death rate furnishes clear evidence of a satisfactory decline during the period. The graph brings into prominence six years in which the rates were very high when compared with adjacent years, viz., 1860, 1866, 1875, 1884, 1898, and 1919. The high rate of 1919 was due to influenza, while in the other years epidemics of measles were largely responsible.

The graph of natural increase shows roughly the same variations as that for the birth rate, but the influence of the death rate is indicated by the very low rates of natural increase for 1875, 1898, and 1910, which resulted from the exceptionally high death rates of those years. The rate shows a rapid decline since 1922.