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CHAPTER XXV.

VITAL STATISTICS.

§ 1. Births.

1. Births, 1919 to 1923.—The number of male and female births and the total births registered in Australia during the years 1919 to 1923 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.

MALE BIRTHS, 1919 TO 1923.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Ter.	Fed. Cap. Ter.	Aus- tralia.
1919	24,924	16,225	9,746	5,776	3,477	2,718	55	10	62,931
1920	27,691	18,647	10,537	6,178	4,256	2,908	31	8	70,256
1921	28,005	18,288	10,638	6,122	3,988	2,944	39	15	70,039
1922	28,218	18,738	10,263	6,150	4,163	2,995	38	17	70,582
1923 { Single births	27,182	18,150	9,955	5,863	3,930	2,831	40	6	67,957
Twins ..	531	408	208	113	84	54	..	..	1,398
Triplets ..	..	7	..	..	..	3	..	..	10
Total births	27,713	18,565	10,163	5,976	4,014	2,888	40	6	69,365

FEMALE BIRTHS, 1919 TO 1923.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Ter.	Fed. Cap. Ter.	Aus- tralia.
1919	23,608	15,394	8,953	5,284	3,460	2,592	51	17	59,359
1920	26,251	17,566	9,719	5,850	3,893	2,832	32	7	66,150
1921	26,631	17,303	9,691	5,852	3,819	2,811	40	12	66,159
1922	26,952	17,550	9,724	5,851	3,968	2,822	32	15	66,914
1923 { Single births	25,838	16,890	9,629	5,591	3,762	2,720	32	13	64,475
Twins ..	515	417	190	125	78	49	..	..	1,374
Triplets ..	3	5	..	..	..	..	..	..	8
Total births	26,356	17,312	9,819	5,716	3,840	2,769	32	13	65,857

TOTAL BIRTHS, 1919 TO 1923.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Ter.	Fed. Cap. Ter.	Aus- tralia.
1919	48,532	31,619	18,699	11,060	6,937	5,310	106	27	122,290
1920	53,942	36,213	20,256	12,028	8,149	5,740	63	15	136,406
1921	54,636	35,591	20,329	11,974	7,807	5,755	79	27	136,198
1922	55,170	36,288	19,987	12,001	8,131	5,817	70	32	137,496
1923 { Single births	53,020	35,040	19,584	11,454	7,692	5,551	72	19	132,432
Twins ..	(c)1,046	(a)825	398	238	(d)162	(b)103	..	..	2,772
Triplets ..	3	12	..	..	..	3	..	..	18
Total births	54,069	35,877	19,982	11,692	7,854	5,657	72	19	135,222

(a) One stillborn not included.
(c) Four stillborn not included.

(b) Three stillborn not included.
(d) Eight stillborn not included.

2. *Birth Rates.*—The next table gives the crude birth rates in each of the States and Territories and in Australia as a whole for the years 1919 to 1923.

CRUDE BIRTH RATE(a), 1919 TO 1923.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	North Ter.	Federal Capital Territory.	Australia.
1919	24.28	21.46	25.80	23.61	21.71	25.90	22.77	11.68	23.53
1920	26.10	23.95	27.10	24.71	24.73	27.28	14.95	6.90	25.45
1921	25.93	23.16	26.64	24.08	23.39	26.98	20.22	10.87	24.95
1922	25.67	23.10	25.58	23.71	23.92	27.08	19.16	11.37	24.69
1923	24.68	22.31	24.89	22.60	22.55	26.27	19.94	5.73	23.77

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

Notwithstanding some undulating movements at different times, the crude birth rate of Australia has shown a constant decline for many years, and if the figures for 1919 are discarded as the result of abnormal conditions arising from the war, the rate of 23.77 per 1,000 persons is the lowest yet recorded. If the war years are disregarded the fall of nearly one per thousand, from 24.69 per 1,000 in 1922 to 23.77 per thousand in 1923 is the most marked in any year since 1903, when the rate per 1,000 of the population fell to 25.29 from 26.71 in 1902. These remarks apply in a general way to all the States; the numbers in the Territories are too small to furnish satisfactory data for comparison.

The most effective 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.

To compare the relative increases to the populations of different countries accruing from births, it is of course necessary to take account of the ex-nuptial births, which vary very largely in relation to nuptial births between different countries and between different localities in the same country.

The following table gives for each of the States and for Australia some of the more important factors which affect the birth rates, and also the birth rates computed on various bases as follows:—Births per 1,000 of the population (crude); births per 1,000 women of child-bearing age; nuptial births per 1,000 married women of child-bearing age; births per 1,000 married women of child-bearing age corrected for inequalities in the age composition by taking the female population of Australia as a whole for a standard; and ex-nuptial births per 1,000 unmarried women aged 15-44 inclusive. The results are obtained from the births during the years 1920, 1921, and 1922 in relation to the age and conjugal condition of the population at the time of the Census of the 4th April, 1921.

The rates obtained from these computations place Tasmania first, and Queensland second, notwithstanding that the proportions of married women of child-bearing age in their populations were lower than the average for Australia. Some compensation to this disadvantage in its effect on the crude birth rate was provided by the relatively low average age of the married women in these States, and by the large proportion of ex-nuptial births. The relatively low proportion of married women of child-bearing age in Queensland was due to the large number of adult males engaged in localities unsuited to women, a circumstance which accounts for the high masculinity of the population.

In Tasmania the small proportion of married women in the total population arises from conditions directly opposite to those in Queensland. In Tasmania the numbers of the sexes were almost equal. Large numbers of the young adults emigrate to the mainland, leaving a population with abnormally large proportions of very young and very old. Although the proportion of married women of child-bearing age was lower in Tasmania than in Queensland, and the average age was the same in both States, Tasmania had the greater weight in the more productive age-groups—from 15 to 24 years.

Western Australia, though fifth in order of the crude birth rates, takes third place when the rates are computed in relation to women only. This change in position is due to the high masculinity. Notwithstanding that the average age of married women of reproductive ages was higher than in any other State, the uncorrected birthrate for nuptial births per 1,000 married women was higher than in New South Wales, Victoria, or South Australia. The adjustment for age improves the status of Western Australia very considerably, though not sufficiently to alter the sequence of its position.

The crude birth rate placed New South Wales third, but on the adjusted rate per 1,000 married women that State takes fifth place. The high position of New South Wales as determined by the crude birth rates was attained by the large proportion in the population of married women of child-bearing age rather than by their productiveness.

Victoria was the only State with an excess of females in its population, and the proportion to the total population of women aged 15-44 was the largest among the States, but as the proportion of these who were married was the lowest, the primary factor in the crude birth rate, viz., the proportion to the total population of married women of reproductive ages was the smallest.

The difference between the adjusted birth rates per 100 married women of child-bearing ages for New South Wales and Victoria was very small, and the proportions of ex-nuptial to all births in these States were almost identical.

Notwithstanding that 12.53 per cent. of the total population consisted of married women of child-bearing age—against an average of 12.20 for Australia—South Australia took fourth place in the order of crude birth rates. The advantage from this high proportion of potentially productive women was to some extent counteracted by their average age being somewhat above the average for Australia. The position was also affected by the very small proportion of ex-nuptial births. The number of nuptial births per 100 women of child-bearing age in South Australia, represented 18.71 as against 19.65 for Australia, although the difference is somewhat reduced by the adjusting process which makes the rate for South Australia 18.99 as against the Australian rate of 19.65.

BIRTHS RATES AND FACTORS AFFECTING THEM.—AVERAGE OF YEARS 1920, 1921, 1922.

Subject.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Australia.
Birth rate per 1,000 persons	25.99	23.54	26.72	24.23	24.14	26.99	25.15
Birth rate per 100 women 15-44 incl. ..	11.04	9.79	11.83	10.25	11.05	11.91	10.74
Birth rate per 100 married women 15-44 incl. (a)	19.39	19.29	21.26	18.71	19.62	21.83	19.65
Birth rate per 100 married women 15-44 incl. (corrected for age variation)	19.14	19.44	20.77	18.99	20.44	21.24	19.65
Ex-nuptial births—per cent. on all births ..	4.82	4.84	5.00	3.28	4.02	5.11	4.69
Ex-nuptial births per 100 unmarried women 15-44 incl.	1.16	0.92	1.26	0.72	0.92	1.26	1.05
Women 15-44 incl.—per cent. all persons ..	23.54	24.02	22.57	23.65	21.83	22.67	23.41
Average age of all women 15-44 incl. ..	28.67	28.61	28.09	28.73	28.45	28.10	28.54
Married women 15-44 incl.—per cent. to all persons	12.75	11.61	11.93	12.53	11.81	11.73	12.20
Average age of married women 15-44 incl. ..	32.34	32.74	32.16	32.67	33.02	32.16	32.48

(a) Nuptial births only.

The following figures gives a comparison for Australia, at Census periods from 1880 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.	1900-2.	1910-12.	1920-22.
Births per 1,000 women aged 15-44	169.7	158.8	117.3	117.2	107.4
Nuptial births per 1,000 married women 15-44 ..	321.0	332.0	235.8	236.0	196.5

3. **Birth Rates of Various Countries.**—(i) *Crude Rates.* A comparison with other countries shows that the Australian States occupy a rather low position, which is however, counterbalanced by a still lower position in regard to their death rates, as evidenced in the table hereinafter in the section dealing with "Deaths."

CRUDE BIRTH RATES (a).—VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Russia, European ..	1909	44.0	Finland	1922	24.3
Rumania	1920	40.2	Norway	1922	24.2
Ceylon	1922	39.4	Australia	1923	23.8
Chile	1921	39.2	Czecho-Slovakia ..	1922	23.4
Canada (Quebec) ..	1921	37.6	Northern Ireland ..	1922	23.0
Jamaica	1922	37.3	Austria	1922	22.8
Japan	1922	34.2	Scotland	1923	22.8
Bulgaria	1919	32.8	South Australia ..	1923	22.6
Spain	1922	30.5	Western Australia ..	1923	22.6
Italy	1921	30.4	United States (b) ..	1922	22.5
Hungary	1922	29.4	Denmark	1922	22.3
Union of South Africa			Victoria	1923	22.3
(whites)	1923	26.6	New Zealand	1923	21.9
Tasmania	1923	26.3	Belgium	1922	20.4
Germany	1921	26.1	Great Britain	1923	19.9
Netherlands	1922	25.9	England and Wales ..	1923	19.7
Prussia	1921	24.9	Switzerland	1922	19.6
Queensland	1923	24.9	France	1922	19.4
Canada (excluding Quebec) ..			Irish Free State ..	1923	19.4
.. ..	1922	24.8	Sweden	1923	18.8
New South Wales ..	1923	24.7			

(a) Number of births per 1,000 of the mean population. (b) Figures for "provisional birth-registration area," which includes about 65 per cent. of the population.

(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 be calculated per 1,000 women of child-bearing ages, the comparison gives more reliable results. The following table of the nuptial births per 1,000 married women of ages 15 to 45 in a number of countries has been taken from the *Annuaire International de Statistique*, and shows that nuptial births per 1,000 married women, aged 15 to 45 years, varied from 280 in Bulgaria to a minimum of 114 in France, Australia with a rate of 198 being midway between maximum and minimum.

NUPTIAL BIRTH RATES PER 1,000 MARRIED WOMEN AGED 15 TO 45 YEARS.—VARIOUS COUNTRIES.

Country.	Period.	Rate.	Country.	Period.	Rate.
Bulgaria	1910-11	280	Australia	1906-15	198
Ireland	1909-12	250	Hungary	1906-15	198
Netherlands	1905-14	233	Germany	1907-14	196
Finland	1906-15	230	Sweden	1908-13	196
Italy	1907-14	226	Denmark	1906-15	191
Norway	1907-14	224	New Zealand	1906-15	188
Austria	1908-13	219	Switzerland	1906-15	184
Spain	1906-15	218	England and Wales ..	1906-15	171
Prussia	1907-14	204	Belgium	1908-13	161
Scotland	1906-15	202	France	1910-11	114

4. **Masculinity of Births.**—(i) *General.* The masculinity of births, i.e., the excess of males over females per 100 births registered, during the last five years varied from 0.25 in Western Australia in 1919 to 4.66 in Queensland in 1921. On account of the smallness of the numbers, the returns from the Northern Territory and the Federal Capital Territory have not been taken into consideration. The following table, which gives the values for the States and Australia for 1919 to 1923, shows that for Australia the masculinity of births has fallen each year since 1920.

MASCULINITY(a) OF BIRTHS REGISTERED, 1919 TO 1923.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Capital Territory.	Australia.
1919 ..	2.71	2.63	4.24	4.45	0.25	2.37	3.77	-25.93	2.92
1920 ..	2.67	2.99	4.04	2.73	4.45	1.32	-1.59	6.67	3.01
1921 ..	2.51	2.77	4.66	2.25	2.16	2.31	-1.27	11.11	2.85
1922 ..	2.29	3.27	2.70	2.49	2.40	2.97	8.77	6.25	2.67
1923 ..	2.51	3.49	1.72	2.22	2.22	2.10	11.11	-36.84	2.59

(a) Excess of males over females per 100 total births.

NOTE.—The minus sign — denotes an excess of females over males per 100 total births.

(ii) *Masculinity of Ex-nuptial Births.* The masculinity of ex-nuptial births was as follows:—

MASCULINITY(a) OF EX-NUPTIAL BIRTHS, 1919 TO 1923.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Capital Territory.	Australia.
1919 ..	4.93	0.22	8.91	4.84	-2.74	7.98	0.00	-100.00	4.03
1920 ..	3.87	8.20	11.52	-2.22	5.36	-3.63	-6.67	..	5.60
1921 ..	3.94	2.72	-0.94	6.10	6.03	1.26	15.38	..	2.96
1922 ..	3.11	1.75	6.44	9.55	3.26	-2.64	-5.88	..	3.37
1923 ..	2.54	2.07	2.13	0.00	-5.96	-3.98	10.34	-100.00	1.72

(a) Excess of males over females per 100 total births.

NOTE.—The minus sign — denotes an excess of females over males per 100 total births.

Although the general tendency of the change in the sex composition of the ex-nuptial births has been the same as in the total births, the results in the smaller States do not show the same consistency in the former as in the latter. This is due, no doubt, to the relatively small numbers involved.

(iii) *Masculinity of Nuptial and Ex-nuptial Births, Various Countries.*—There is ordinarily a very small difference between the masculinity of nuptial and ex-nuptial births. Thus, according to the following table, for the period about 1906 to 1913, the masculinity in various countries ranged from 4.63 to 1.91, and from 5.90 to 0.06 for nuptial and ex-nuptial births respectively.

MASCULINITY OF BIRTHS.—VARIOUS COUNTRIES.

Country.	Period.	Masculinity of Births.(a)		Country.	Period.	Masculinity of Births.(a)	
		Nuptial Live Births.	Ex-nuptial Live Births.			Nuptial Live Births.	Ex-nuptial Live Births.
Spain ..	1906-13	4.63	5.90	Ireland ..	1906-12	2.61	1.63
Portugal ..	1906-10	3.93	0.06	New Zealand	1906-13	2.59	2.57
Finland ..	1906-13	3.03	2.09	Australia ..	1906-13	2.52	2.27
Sweden ..	1906-13	2.95	3.27	Netherlands	1906-13	2.49	1.53
Hungary ..	1906-13	2.86	2.02	Denmark ..	1906-13	2.43	2.22
Norway ..	1906-13	2.79	2.98	Switzerland	1906-13	2.38	1.21
Prussia ..	1906-13	2.79	2.12	Japan ..	1906-13	2.32	0.87
Russia, European ..	1906-09	2.77	2.00	France ..	1906-11	2.21	1.59
Austria ..	1906-13	2.76	2.73	Chile ..	1906-13	2.20	2.81
Germany ..	1906-13	2.71	2.29	Belgium ..	1906-13	2.08	1.31
Italy ..	1906-13	2.64	2.29	Scotland ..	1906-13	2.05	2.14
Serbia ..	1906-10	2.62	2.86	England and Wales ..	1906-13	1.91	2.07

(a) Excess of males over females per 100 total births.

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 1909-13 the number of ex-nuptial births in Australia was 7,090, while for the period 1919-23 it was only 6,332, a decline of 10.7 per cent., whereas the annual average total births for the same periods fell by 7.5 per cent. only.

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.

EX-NUPTIAL BIRTHS, 1919 TO 1923.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Capital Territory.	Australia.
1919 ..	2,495	1,826	1,078	433	292	326	26	1	6,477
1920 ..	2,582	1,902	1,033	450	317	303	15	..	6,602
1921 ..	2,640	1,725	1,062	377	315	318	26	..	6,463
1922 ..	2,667	1,602	932	356	337	265	17	..	6,176
1923 ..	2,676	1,595	1,079	360	285	251	29	1	6,276

(ii) *Rate of Ex-nuptiality, 1919 to 1923.* The rate of ex-nuptiality, i.e., the percentage of ex-nuptial on total births fell steadily from 5.30 in 1919 to 4.49 in 1922, but rose slightly to 4.64 in 1923. On the basis of the figures given in the preceding sub-section the ex-nuptial rate fell from 4.91 per cent. of all births during the years 1909-13 to 4.74 per cent. for the years 1919-23.

PERCENTAGE OF EX-NUPTIAL ON TOTAL BIRTHS, 1919 TO 1923.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Capital Territory.	Australia.
	%	%	%	%	%	%	%	%	%
1919 ..	5.14	5.77	5.76	3.92	4.21	6.14	24.53	3.70	5.30
1920 ..	4.79	5.25	5.10	3.74	3.89	5.28	23.81	..	4.84
1921 ..	4.83	4.85	5.22	3.15	4.03	5.53	32.91	..	4.75
1922 ..	4.83	4.41	4.66	2.97	4.14	4.56	24.29	..	4.49
1923 ..	4.95	4.45	5.40	3.08	3.63	4.44	40.28	5.26	4.64

A comparison of greater significance 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 calculation has been made for Australia for the last five Census periods for which the information is available, and covers in each case the Census year, together with the year immediately preceding and the year immediately following. 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; years 1920–22, 10.50. Corresponding figures for those countries for which the nuptial birth rates were shown in a preceding paragraph are given in the next table.

EX-NUPTIAL BIRTHS PER 1,000 UNMARRIED WOMEN AGED 15 TO 45 YEARS.—VARIOUS COUNTRIES.

Country.	Period.	Rate.	Country.	Period.	Rate.
Hungary	1906–15	38	Norway	1907–14	13
Austria	1908–13	30	Scotland	1906–15	13
Sweden	1908–13	26	Australia	1906–15	12
Denmark	1906–15	24	Belgium	1908–13	12
Germany	1907–14	23	New Zealand	1906–15	9
Prussia	1907–14	21	Switzerland	1906–15	8
Finland	1906–15	17	England and Wales ..	1906–15	7
France	1901–11	16	Netherlands	1905–14	5
Italy	1907–14	14	Ireland	1909–12	4
Spain	1906–15	14	Bulgaria	1910–11	4

(iii) *Comparison of Rates.* The following table has been prepared to show the relative movements of the ex-nuptial and the nuptial births in relation to the total population:—

CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES (a).—AUSTRALIA, 1919 TO 1923.

Rates.	1919.	1920.	1921.	1922.	1923.
Ex-nuptial	1.26	1.24	1.18	1.11	1.10
Nuptial	22.52	24.50	23.77	23.58	22.67
Total	23.78	25.74	24.95	24.69	23.77

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

6. *Multiple Births.*—Among the total number of 135,222 births registered in Australia in 1923 there were 132,432 single births, 2,772 twins, and 18 triplets. The number of cases of twins was 1,394, there being 16 stillbirths, and there were 6 cases of triplets. The total number of mothers was, therefore, 133,832, the proportion of mothers of twins being one in every 96, and of mothers of triplets one in every 22,305 of total mothers. The proportion of multiple births is fairly constant.

MULTIPLE BIRTHS.—AUSTRALIA, 1919 TO 1923.

Year.	Cases of Twins.	Cases of Triplets.	Cases of Quadruplets.	Percentage of Cases of Multiple Births on total Mothers.	Number of Mothers to each Multiple Birth.
1919	1,327	15	1	1.10	90
1920	1,521	16	..	1.13	88
1921	1,453	12	..	1.09	92
1922	1,432	12	..	1.06	94
1923	1,394	6	..	1.04	96

7. *Ages of Parents.*—(i) *Single Births.* The relative ages of the parents of children registered in 1923 have been tabulated separately for male and female births, twins and triplets being distinguished from single births, and are shown for single ages and for every State in "Australian Demography," No. 41, published by this Bureau. In the present work the exigencies of space allow only the insertion of corresponding tables showing the relative ages of parents in groups of five years. The largest number of fathers in the case of single births is found at ages 30 to 34, and of mothers at ages 25 to 29. When, however, the ages of both parents are considered together, the largest number of single births occurred where both father and mother were between 25 and 29.

AGES OF PARENTS IN CASES OF SINGLE BIRTHS.—AUSTRALIA, 1923.

Ages of Fathers and Sexes of Children.		Total Children.	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	Males..	319	..	235	74	8	2	..	..	..	..
	Females..	249	..	176	70	3	..	..	..	..	..
	Total..	568	..	411	144	11	2	..	..	..	..
20 to 24	Males..	6,796	..	1,370	4,414	906	89	14	2	..	1
	Females..	6,541	..	1,236	4,258	923	109	12	1	1	1
	Total..	13,337	..	2,606	8,672	1,829	198	26	3	2	2
25 to 29	Males..	16,040	..	605	6,263	7,579	1,404	163	19	5	2
	Females..	15,052	..	594	5,950	7,003	1,323	166	15	..	1
	Total..	31,092	..	1,199	12,213	14,582	2,727	329	34	5	3
30 to 34	Males..	17,052	..	151	2,612	6,789	6,286	1,109	102	3	..
	Females..	16,394	..	179	2,480	6,634	6,001	1,020	77	2	1
	Total..	33,446	..	330	5,092	13,423	12,287	2,129	179	5	1
35 to 39	Males..	12,592	..	59	772	2,710	4,774	3,848	420	9	..
	Females..	11,868	..	54	722	2,538	4,559	3,558	423	13	1
	Total..	24,460	..	113	1,494	5,248	9,333	7,406	843	22	1
40 to 44	Males..	6,982	1	21	226	776	1,891	2,748	1,288	31	..
	Females..	6,597	..	16	193	748	1,802	2,584	1,223	31	..
	Total..	13,579	1	37	419	1,524	3,693	5,332	2,511	62	..
45 to 49	Males..	3,188	..	4	68	278	595	1,172	946	125	..
	Females..	3,008	..	5	68	263	558	1,107	875	131	1
	Total..	6,196	..	9	136	541	1,153	2,279	1,821	256	1
50 to 54	Males..	1,238	..	3	25	87	207	423	403	89	1
	Females..	1,181	..	1	24	74	190	357	454	80	1
	Total..	2,419	..	4	49	161	397	780	857	169	2
55 to 59	Males..	395	..	2	5	22	67	134	131	34	..
	Females..	372	..	1	7	25	59	121	134	25	..
	Total..	767	..	3	12	47	126	255	265	59	..
60 to 64	Males..	156	..	..	3	13	27	41	59	13	..
	Females..	122	..	..	2	10	26	35	38	11	..
	Total..	278	..	..	5	23	53	76	97	24	..
65 and upwards	Males..	45	..	..	..	4	7	13	19	2	..
	Females..	49	..	..	2	2	14	17	10	2	..
	Total..	94	..	..	2	6	21	30	29	4	..
Not stated	Males..	10	..	..	3	2	3	1	1	..	..
	Females..	4	..	..	..	3	..	1	1	..	..
	Total..	14	..	..	3	5	3	1	2	..	..
Nuptial children	Males..	64,813	1	2,450	14,465	19,174	15,352	9,666	3,390	311	4
	Females..	61,437	..	2,264	13,776	18,226	14,641	8,977	3,251	296	6
	Total..	126,250	1	4,714	28,241	37,400	29,993	18,643	6,641	607	10
Ex-nuptial children	Males..	3,144	19	871	1,041	557	339	223	77	12	5
	Females..	3,038	14	804	1,020	553	351	207	75	10	4
	Total..	6,182	33	1,675	2,061	1,110	690	430	152	22	9
Total children	Males..	67,957	20	3,321	15,506	19,731	15,691	9,889	3,467	323	9
	Females..	64,475	14	3,068	14,786	18,779	14,992	9,184	3,326	306	10
	Total..	132,432	34	6,389	30,302	38,510	30,683	19,073	6,793	629	19

(ii) *Twins.* The ages of parents of twins in 1923 are given hereunder :—

AGES OF PARENTS OF TWINS.—AUSTRALIA, 1923.

Ages of Fathers and Sexes of Children.			Total Children.	Ages of Mothers.						
				Under 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.
Under 20 ..	{ Males ..	..	3	1	2	..	..	..	..	..
	{ Females ..	..	1	1	..	..	..	..	..	..
	{ Total ..	..	4	2	2	..	..	..	..	..
20 to 24 ..	{ Males ..	..	108	13	69	26	..	..	..	..
	{ Females ..	..	70	9	41	18	2	..	..	..
	{ Total ..	..	178	22	110	44	2	..	..	..
25 to 29 ..	{ Males ..	..	244	10	81	125	21	6	1	..
	{ Females ..	..	280	8	114	113	40	4	1	..
	{ Total ..	..	524	18	195	238	61	10	2	..
30 to 34 ..	{ Males ..	..	345	2	37	134	151	21	..	..
	{ Females ..	..	359	4	47	123	165	18	2	..
	{ Total ..	..	704	6	84	257	316	39	2	..
35 to 39 ..	{ Males ..	..	335	2	4	67	150	101	11	..
	{ Females ..	..	313	2	6	48	140	98	19	..
	{ Total ..	..	648	4	10	115	290	199	30	..
40 to 44 ..	{ Males ..	..	176	..	4	13	56	77	26	..
	{ Females ..	..	161	..	..	17	43	83	18	..
	{ Total ..	..	337	..	4	30	99	160	44	..
45 to 49 ..	{ Males ..	..	93	..	2	6	19	45	20	1
	{ Females ..	..	99	..	..	4	14	47	31	3
	{ Total ..	..	192	..	2	10	33	92	51	4
50 to 54 ..	{ Males ..	..	37	..	..	..	5	16	16	..
	{ Females ..	..	35	..	..	..	5	12	14	4
	{ Total ..	..	72	..	..	..	10	28	30	4
55 to 59 ..	{ Males ..	..	7	..	..	1	..	2	4	..
	{ Females ..	..	10	..	..	1	..	5	4	..
	{ Total ..	..	17	..	..	2	..	7	8	..
60 and over	{ Males ..	..	2	..	..	..	..	..	..	2
	{ Females ..	..	..	..	..	..	..	..	..	..
	{ Total ..	..	2	..	..	..	..	..	..	2
Nuptial children	{ Males ..	..	1,350	28	199	372	402	268	78	3
	{ Females ..	..	1,328	24	208	324	409	267	89	7
	{ Total ..	..	2,678	52	407	696	811	535	167	10
Ex-nuptial children	{ Males ..	..	48	9	16	6	12	3	2	..
	{ Females ..	..	46	9	14	6	6	9	2	..
	{ Total ..	..	94	18	30	12	18	12	4	..
Total children	{ Males ..	..	1,398	37	215	378	414	271	80	3
	{ Females ..	..	1,374	33	222	330	415	276	91	7
	{ Total ..	..	2,772	70	437	708	829	547	171	10

(iii) *Triplets*. Particulars regarding the ages of parents in cases of triplets are given in the next table:—

AGES OF PARENTS OF TRIPLETS.—AUSTRALIA, 1923.

Ages of Fathers and Sexes of Children.				Total Children.	Ages of Mothers.		
					25 to 29.	30 to 34.	35 to 39.
25 to 29 ..	Males ..	..	..	1	1	..	..
	Females ..	..	..	2	2	..	..
	Total ..	..	..	3	3	..	..
30 to 34 ..	Males ..	..	..	6	3	3	..
	Females ..	..	..	..	3	3	..
	Total ..	..	..	6	3	3	..
35 to 39 ..	Males ..	..	..	3	..	3	..
	Females ..	..	..	6	3	..	3
	Total ..	..	..	9	3	3	3
Total children	Males ..	..	..	10	4	6	..
	Females ..	..	..	8	5	..	3
	Total ..	..	..	18	9	6	3

(iv) *Influence on Masculinity*. Valid deductions cannot, of course, be drawn from one year's figures as to variations in the masculinity of the births at different ages of the parents, but so far as the figures go the following conclusions are indicated:—In cases where the father is older than the mother the masculinity has a tendency to be above the average, while in cases where both parents belong to the same age group, or where the father is younger than the mother, the masculinity is rather below the average. It is also below the average in cases where the father, or both father and mother are under 25; and it is above the average where the mother alone is under 25.

8. *Birthplaces of Parents*.—The relative birthplaces of the parents of children whose births were registered during the year 1923 will be found tabulated in the Bulletin of "Australian Demography," published by this Bureau. A summary of the results of the tabulation is given hereunder.

BIRTHPLACES OF PARENTS.—AUSTRALIA, 1923.

Birthplaces.	Fathers.			Mothers of Nuptial Children.			Mothers of Ex-nuptial Children.	
	Single Births.	Twins.	Triplets.	Single Births.	Twins.	Triplets.	Single Births.	Twins.
AUSTRALASIA—								
New South Wales ..	41,109	396	1	42,789	432	1	2,349	16
Victoria ..	33,206	396	4	32,486	364	4	1,494	17
Queensland ..	13,543	132	..	15,262	147	..	934	6
South Australia ..	11,248	116	..	10,907	121	..	349	3
Western Australia ..	2,357	26	..	3,172	32	..	201	..
Tasmania ..	5,810	56	1	5,856	63	1	336	2
Northern Territory ..	25	9	..	29	1	..	29	..
Federal Capital Territory ..	2	..	..	4	..	..	..	..
Papua ..	3	..	..	3	..	..	1	..
Territory of New Guinea ..	2	..	..	..	..	..	1	..
New Zealand ..	1,000	..	..	759	7	..	36	1

BIRTHPLACES OF PARENTS.—AUSTRALIA, 1923—*continued.*

Birthplaces.	Fathers.			Mothers of Nuptial Children.			Mothers of Ex-nuptial Children.	
	Single Births.	Twins.	Trip-lets.	Single Births.	Twins.	Trip-lets.	Single Births.	Twins.
EUROPE—								
England	10,792	120	..	9,936	112	..	285	1
Wales	317	8	..	261	4	..	13	..
Scotland	2,629	45	..	2,385	35	..	68	1
Ireland	1,320	17	..	889	10	..	26	..
Other British Possessions								
in Europe	108	3	..	64	1	..	2	..
Belgium	14	..	..	25	1	..	..	..
Denmark	134	..	..	28	1	..	2	..
France	42	..	..	66	..	..	2	..
Germany	358	2	..	137	3	..	3	..
Greece	217	2	..	122	2	..	1	..
Italy	381	4	..	253	3	..	2	..
Netherlands	40	2	..	17	..	..	1	..
Norway	75	1	..	16	..	..	2	..
Poland	34	..	..	13	..	..	..	..
Russia	164	..	..	88	1	..	5	..
Spain	34	..	..	19	..	..	1	..
Sweden	125	..	..	14	..	..	..	..
Switzerland	33	..	..	18	1	..	1	..
Other European Countries	151	2	..	61	..	..	..	..
ASIA—								
British India and Ceylon	128	..	..	84	1	..	3	..
Other British Possessions								
in Asia	19	1	..	8	..	..	..	..
China	101	1	..	21	..	..	1	..
Japan	24	..	..	12	..	..	..	..
Syria	79	..	..	51	..	..	..	..
Other Countries in Asia	13	1	..	6	..	..	..	..
AFRICA—								
Union of S. Africa ..	108	2	..	124	2	..	7	..
Other African Countries	30	..	..	28	..	..	..	..
AMERICA—								
Canada	106	..	..	31	2	..	1	..
Other British Possessions								
in America	4	..	..	5	..	..	1	..
United States of America	184	3	..	88	1	..	5	..
Other American Countries	44	1	..	29	..	..	2	..
POLYNESIA—								
Fiji	29	..	..	16	..	..	2	..
Other British Possessions								
in Polynesia	2	..	..	2	..	..	..	..
New Caledonia	18	..	..	22	..	..	1	..
New Hebrides	8	..	..	2	..	..	..	..
Other Polynesian Islands	17	..	..	2	..	..	1	..
At Sea	53	1	..	28	..	..	2	..
Unspecified	10	..	..	12	..	..	12	..
Total	126,250	1,347	6	126,250	1,347	6	6,182	47

9. Occupations of Fathers.—(i) Year 1923. A summary of the occupations of the fathers of all nuptial children whose births were registered in 1923 is given in the following table:—

OCCUPATIONS OF FATHERS OF NUPTIAL CHILDREN.—AUSTRALIA, 1923.

Occupations.	Number of Fathers.	Occupations.	Number of Fathers.
CLASS I.—PROFESSIONAL.		CLASS III.—COMMERCIAL—cont.	
General Government	779	Carriages and Vehicles ..	40
Local Government	77	Harness, Saddlery & Leatherware ..	1
Defence	333	Ships and Boats	5
Law and Order	1,119	Building Materials	32
Religion	383	Furniture	38
Charities	1	Chemicals and By-products ..	7
Health	1,100	Paper and Stationery	56
Literature	136	Textile Fabrics	428
Science	57	Dress	185
Civil Engineering, Architecture, and Surveying	443	Fibrous Materials	8
Education	826	Animal Food	2,425
Fine Arts	111	Vegetable Food	789
Music	135	Groceries, Drinks, Narcotics, and Stimulants	1,205
Amusements	510	Living Animals	114
Total Professional	6,010	Leather, Raw Materials	39
		Wool and Tallow	62
CLASS II.—DOMESTIC.		Hay, Corn, etc.	146
Hotelkeepers and Assistants ..	973	Other Vegetable Matter n.e.i. ..	47
Others engaged in providing board and lodging	166	Wood and Coal	150
House Servants	2	Stone, Clay and Glass	30
Coachmen and Grooms	67	Gold, Silver and Precious Stones ..	1
Hairdressers	622	Ironmongery	140
Laundrymen	50	Merchants, Importers	543
Others engaged in domestic occupations	362	Shopkeepers and Assistants ..	1,334
Total Domestic	2,242	Dealers and Hawkers	301
		Agents and Brokers	537
CLASS III.—COMMERCIAL.		Clerks, Bookkeepers, etc. ..	4,469
Banking and Finance	674	Commercial Travellers, Salesmen ..	1,921
Insurance and Valuation	573	Others engaged in Commercial Pursuits	1,393
Landed and House Property ..	216	Speculators on Chance Events ..	53
Property Rights n.e.i.	2	Storage	1
Books, Publications, Advertising ..	206	Total Commercial	18,210
Musical Instruments	14		
Prints, Pictures and Art Materials ..	1	CLASS IV.—TRANSPORT AND COMMUNICATION.	
Ornaments and Small Wares	2	Railway Traffic	4,943
Sports and Games	2	Tramway Traffic	1,294
Watches, Clocks, Jewellery	3	Road Traffic	5,995
Arms and Ammunition	1	Sea and River Traffic	1,486
Machinery	16	Postal Service	699
		Telegraph and Telephone Service ..	798
		Messengers, etc.	15
		Aviation	14
		Total Transport & Communication ..	15,244

OCCUPATIONS OF FATHERS OF NUPTIAL CHILDREN.—AUSTRALIA, 1923
—continued.

Occupations.	Number of Fathers.	Occupations.	Number of Fathers.
CLASS V.—INDUSTRIAL.		CLASS V.—INDUSTRIAL—cont.	
Books and Publications ..	813	Roads, Railways, Earthworks ..	261
Musical Instruments	59	Disposal of the Dead	35
Prints, Pictures and Art Materials	63	Disposal of Refuse	118
Ornaments and Small Wares ..	167	Other Industrial Workers—	
Equipment for Sports and Games	9	Manufacturers, etc.	769
Medals, Type, and Dies	34	Engineers, Firemen	3,043
Watches, Clocks, and Scientific Instruments	117	Contractors	1,255
Surgical Instruments	17	Labourers, undefined	24,010
Arms and Ammunition	10	Others	318
Engines, Machines, Tools, and Implements	1,701	Total Industrial	53,737
Carriages and Vehicles	1,446		
Harness, Saddlery & Leatherware	421		
Ships, Boats, etc.	134		
Furniture	801		
Building Materials	1,104		
Chemicals and By-products	55	CLASS VI.—AGRICULTURAL, PASTORAL, MINING, ETC.	
Textile Fabrics	262	Agricultural	22,567
Dress	1,897	Pastoral	3,620
Fibrous Materials	33	Dairy Farming	1,130
Animal Food	327	Bees, Fisheries, and Wild Animals	383
Vegetable Food	1,467	Forestry	758
Groceries, Drinks, Narcotics, and Stimulants	337	Water Conservation and Supply	106
Animal Matter n.e.i.	305	Mines and Quarries	3,410
Workers in Wood n.e.i.	208	Total Primary Producers	31,974
Vegetable Produce for Fodder ..	9		
Paper	20		
Stone, Clay, Glass, etc.	574		
Jewellery and Precious Stones ..	209		
Metals, other than Gold & Silver	2,890		
Gas, Electric Lighting, etc. ..	1,110		
Building—			
Builders	712	CLASS VII.—INDEFINITE.	
Stonemasons	181	Independent Means, having no specific occupation	151
Bricklayers	634	Occupation not stated	35
Carpenters	3,159	Total Indefinite	186
Slaters	71		
Plasterers	448		
Painters	1,221		
Plumbers	816		
Signwriters	63		
Others	24	Total all Occupations	127,603

(ii) *Summary, 1919 to 1923.* The next table gives a summary in classes of the occupations of fathers of nuptial children in each of the last five years, with the percentage of each class on the total number of fathers. In 1923, 42.11 per cent. of fathers were of the industrial class, and 25.06 per cent. were of the agricultural, pastoral, mining, etc., class. In the five years under review, the greatest variations in the percentages of the various classes were an increase in the industrial class from 40.72 to 42.11 per cent., and a decline in the agricultural class from 25.83 to 25.06, and in the professional class from 5.29 to 4.71 per cent.

OCCUPATIONS OF FATHERS OF NUPTIAL CHILDREN.—AUSTRALIA, 1919 TO 1923.

Class.		1919.	1920.	1921.	1922.	1923.
I. Professional	No.	6,063	6,638	6,204	6,369	6,010
	%	5.29	5.17	4.83	4.90	4.71
II. Domestic	No.	1,885	2,165	2,319	2,045	2,242
	%	1.65	1.69	1.81	1.57	1.76
III. Commercial	No.	16,501	18,208	18,298	18,731	18,210
	%	14.41	14.19	14.26	14.41	14.27
IV. Transport and Com- munication	No.	13,735	15,285	15,351	15,809	15,244
	%	11.99	11.91	11.96	12.17	11.95
V. Industrial	No.	46,636	54,086	53,567	54,104	53,737
	%	40.72	42.15	41.75	41.64	42.11
VI. Agricultural, pastoral, mining, etc.	No.	29,591	31,744	32,405	32,665	31,974
	%	25.83	24.74	25.25	25.14	25.06
VII. Indefinite	No.	102	147	169	204	186
	%	0.09	0.11	0.13	0.16	0.14
VIII. Dependents	No.	22	55	13	7	..
	%	0.02	0.04	0.01	0.01	..
Total	No.	114,535	128,328	128,326	129,934	127,603
	%	100.00	100.00	100.00	100.00	100.00

10. *Mother's Age, Duration of Marriage, and Issue.*—(i) *General.* A tabulation has been made showing, in age-groups, the duration of marriage and issue of mothers. The total number of nuptial confinements in 1923 was 127,603, but in 43 cases the necessary information was lacking, and the following series of tables refers, therefore, to 127,560 nuptial confinements, viz., 126,207 single births, 1,347 cases of twins, and 6 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 extenso*, but the following are their most salient features. The complete tabulations are shown in "Australian Demography," No. 41.

(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 33 and 34 years, and that the average family increased fairly regularly with the duration of marriage. The average number of children of all marriages was 3.08, the corresponding figures for 1922 being 3.10; for 1921, 3.08; for 1920, 3.11; and for 1919, 3.33.

DURATION OF MARRIAGE AND ISSUE OF MOTHERS.—AUSTRALIA, 1923.

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 ..	19,460	19,845	1.02	18-19 ..	1,452	10,765	7.41
1-2 ..	10,883	12,315	1.13	19-20 ..	1,119	8,700	7.77
2-3 ..	11,898	20,480	1.72	20-21 ..	839	6,759	8.06
3-4 ..	12,966	26,461	2.04	21-22 ..	680	5,825	8.57
4-5 ..	10,167	24,577	2.42	22-23 ..	543	4,875	8.98
5-6 ..	7,314	20,160	2.76	23-24 ..	463	4,286	9.26
6-7 ..	6,363	19,566	3.07	24-25 ..	263	2,487	9.45
7-8 ..	6,100	20,634	3.35	25-26 ..	174	1,787	10.27
8-9 ..	6,222	22,995	3.69	26-27 ..	100	1,068	10.68
9-10 ..	5,405	22,223	4.11	27-28 ..	61	652	10.69
10-11 ..	4,745	21,168	4.45	28-29 ..	31	319	10.29
11-12 ..	4,441	21,323	4.80	29-30 ..	16	171	10.68
12-13 ..	3,739	19,281	5.16	30-31 ..	8	95	11.87
13-14 ..	3,328	18,342	5.51	31-32 ..	1	14	14.00
14-15 ..	2,643	15,694	5.94	32-33 ..	1	14	14.00
15-16 ..	2,298	14,380	6.26	33-34 ..	1	14	14.00
16-17 ..	2,090	13,890	6.64				
17-18 ..	1,746	12,208	6.99				
				Total ..	127,560	393,373	3.08

(iii) *Ages of Mothers and Issue.* The ages of mothers, issue, and average family are given in the attached table, which shows that the average family increased fairly regularly to a maximum of 7.78 children in the age-group 45 years and over, and that the greatest number of mothers occurs in the group 25 to 29 years.

AGES AND ISSUE OF MOTHERS.—AUSTRALIA, 1923.

Ages of Mothers.	Total Mothers.	Total Issue.	Average Number of Children.	Ages of Mothers.	Total Mothers.	Total Issue.	Average Number of Children.
Under 20 years	4,738	5,640	1.19	40-44 years ..	6,721	42,554	6.33
20-24 years ..	28,437	48,721	1.71	45 yrs. and over	612	4,761	7.78
25-29 „ ..	37,736	92,862	2.46				
30-34 „ ..	30,403	106,946	3.52				
35-39 „ ..	18,913	91,889	4.86	All ages ..	127,560	393,373	3.08

(iv) *Previous Issue of Mothers, Various Ages.* The previous issue, according to the age of the mother, is given in the following table. Two mothers aged 40-44 each had 20 children prior to their present confinement.

PREVIOUS ISSUE OF MOTHERS OF VARIOUS AGES.—AUSTRALIA, 1923.

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	3,922	14,517	11,433	5,002	1,793	393	30	37,090
1	759	9,245	11,187	6,366	2,267	456	17	30,297
2	54	3,492	7,302	5,696	2,586	576	36	19,742
3	3	950	4,197	4,609	2,685	646	40	13,130
4	..	183	2,283	3,654	2,507	777	49	9,453
5	..	36	906	2,422	2,117	750	46	6,277
6	..	8	304	1,450	1,697	710	61	4,230
7	..	5	94	741	1,373	702	61	2,976
8	..	1	23	309	944	587	73	1,937
9	..	..	7	103	490	456	57	1,113
10	..	..	..	33	257	308	50	648
11	..	..	..	10	128	188	32	358
12	..	..	..	5	47	88	32	172
13	..	..	..	3	11	44	15	73
14	..	..	..	..	7	25	8	40
15	..	..	..	..	..	6	4	10
16	..	..	..	..	4	4	1	9
17	..	..	..	..	..	2	..	2
18	..	..	..	..	..	1	..	1
20	..	..	..	..	..	2	..	2
Total Mothers	4,738	28,437	37,736	30,403	18,913	6,721	612	127,560

(v) *Previous Issue of Mothers of Twins and Triplets.* Figures regarding the previous issue of mothers of twins and triplets show that 332 mothers had twins at their first confinement; 254 at their second; 225 at their third; 158 at their fourth; 120 at their

fifth; 77 at their sixth; 55 at their seventh; 52 at their eighth; 34 at their ninth; 22 at their tenth; 8 at their eleventh; 8 at their twelfth; and 2 at their thirteenth.

First, second, fourth, fifth, seventh, and eighth confinements each produced one of the 6 cases of triplets which occurred during 1923.

11. *Interval between Marriage and First Birth.*—(i) *Interval and Sex of Children.* The following table shows the interval between marriage and first birth, distinguishing the sexes of the children. Twins and triplets are included, the eldest born only being enumerated :—

INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH.—AUSTRALIA, 1923.

Interval.	Number of First Children.			Interval.	Number of First Children.		
	Males.	Females.	Total.		Males.	Females.	Total.
Under 1 month	212	172	384	2 years ..	1,936	1,855	3,791
1 month ..	239	196	435	3 " ..	949	928	1,877
2 months ..	345	316	661	4 " ..	476	424	900
3 " ..	475	456	931	5 " ..	234	224	458
4 " ..	614	563	1,177	6 " ..	154	160	314
5 " ..	802	740	1,542	7 " ..	149	119	268
6 " ..	1,125	978	2,103	8 " ..	76	88	164
7 " ..	1,084	1,040	2,124	9 " ..	56	46	102
8 " ..	803	787	1,590	10 " ..	54	34	88
9 " ..	1,705	1,593	3,298	11 " ..	33	28	61
10 " ..	1,483	1,507	2,990	12 " ..	24	20	44
11 " ..	1,014	1,050	2,064	13 " ..	12	18	30
12 " ..	982	942	1,924	14 " ..	14	19	33
13 " ..	613	640	1,253	15 " ..	15	7	22
14 " ..	584	526	1,110	16 " ..	11	9	20
15 " ..	508	453	961	17 " ..	9	4	13
16 " ..	443	456	899	18 " ..	3	4	7
17 " ..	400	354	754	19 " ..	3	2	5
18 " ..	358	315	673	20 " ..	1	4	5
19 " ..	242	241	483	21 " ..	..	2	2
20 " ..	236	227	463	22 " ..	..	1	1
21 " ..	229	206	435	23 " ..	..	1	1
22 " ..	195	182	377				
23 " ..	134	119	253	Total ..	19,034	18,056	37,090

The masculinity of first births was 2.64 as compared with 2.59 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 the ages of mothers in the cases of ex-nuptial first births, of nuptial first births occurring less than nine months after marriage, and of nuptial first births occurring nine months or more after marriage. 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 about 2 to 3. At all ages up to and including 21, however, there was a great 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.

**AGES OF MOTHERS AND INTERVAL BETWEEN MARRIAGE AND FIRST
BIRTH, ETC.—AUSTRALIA, 1923.**

Age of Mother at Birth of Child.	Ex-nuptial Births.	Nuptial Births less than nine months after Marriage.	Total of two preceding columns.	Nuptial Births nine months after Marriage and later.	Total Nuptial First Births.	Nuptial First Births and Ex-nuptial Births.
12 years ..	1	..	1	..	..	1
13 " ..	6	..	6	..	..	6
14 " ..	26	..	26	..	..	26
15 " ..	53	29	82	1	30	83
16 " ..	166	146	312	24	170	336
17 " ..	354	452	806	107	559	913
18 " ..	518	964	1,482	327	1,291	1,809
19 " ..	593	1,233	1,826	639	1,872	2,465
20 " ..	468	1,264	1,732	1,052	2,316	2,784
21 " ..	451	1,364	1,815	1,516	2,880	3,331
22 " ..	445	1,140	1,585	2,029	3,169	3,614
23 " ..	411	942	1,353	2,354	3,296	3,707
24 " ..	301	675	976	2,181	2,856	3,157
25 " ..	239	564	803	2,259	2,823	3,062
26 " ..	253	452	705	2,075	2,527	2,780
27 " ..	204	379	583	1,974	2,353	2,557
28 " ..	217	292	509	1,719	2,011	2,228
29 " ..	203	216	419	1,503	1,719	1,922
30 " ..	180	202	382	1,296	1,498	1,678
31 " ..	111	115	226	1,001	1,116	1,227
32 " ..	154	117	271	840	957	1,111
33 " ..	123	85	208	693	778	901
34 " ..	131	62	193	591	653	784
35 " ..	107	64	171	476	540	647
36 " ..	98	46	144	405	451	549
37 " ..	79	37	116	290	327	406
38 " ..	84	37	121	227	264	348
39 " ..	68	21	89	190	211	279
40 " ..	53	9	62	135	144	197
41 " ..	29	15	44	94	109	138
42 " ..	26	7	33	59	66	92
43 " ..	34	7	41	35	42	76
44 " ..	12	5	17	27	32	44
45 " ..	11	3	14	13	16	27
46 " ..	5	1	6	6	7	12
47 " ..	1	1	2	3	4	5
48 " ..	3	..	3	1	1	4
49 " ..	..	1	1	..	1	1
50 " ..	2	..	2	..	..	2
52 " ..	..	..	..	1	1	1
Unspecified ..	9	..	9	..	..	9
Total ..	6,229	10,947	17,176	26,143	37,090	43,319

12. Interval between Birth and Registration of Birth.—Information was obtained for the years 1911 to 1921 regarding the period which elapsed between birth and registration. A detailed table giving the results for 1921 is contained in Demography Bulletin No. 39, issued by this Bureau. The law relating to maternity allowances has tended to accelerate the registration of births; and during the year under review it was found that approximately 35 per cent. were registered in the first week.

Since the granting of the maternity allowance the weighted average interval between the dates of birth and registration has been found to be about 13 days both for nuptial and ex-nuptial children.

§ 2. Marriages.

1. **Marriages, 1919 to 1923.**—The number of marriages registered in Australia during 1923 was 44,541, giving a rate of 7.83 per 1,000 of the mean population for the year, the lowest rate since 1919. The number of marriages in each State for the years 1919 to 1923 is given hereunder :—

MARRIAGES, 1919 TO 1923.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Fed. Cap. Terr.	Australia.
1919 ..	15,809	11,706	5,429	3,855	2,194	1,513	25	9	40,540
1920 ..	20,154	14,898	6,667	4,881	2,932	1,999	17	4	51,552
1921 ..	18,506	13,676	5,963	4,383	2,656	1,668	15	2	46,869
1922 ..	17,580	12,996	5,878	4,144	2,446	1,674	13	..	44,731
1923 ..	17,523	13,126	5,814	4,099	2,376	1,592	7	4	44,541

2. **Marriage Rates, 1919 to 1923.**—The number of marriages registered per thousand of mean population is given in the following table for the same period :—

CRUDE MARRIAGE RATES(a), 1919 TO 1923.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Fed. Cap. Terr.	Australia.
1919 ..	7.91	7.95	7.49	8.23	6.87	7.38	5.37	3.89	7.80
1920 ..	9.75	9.85	8.92	10.03	8.90	9.50	4.04	1.84	9.62
1921 ..	8.78	8.90	7.81	8.82	7.96	7.82	3.84	0.81	8.59
1922 ..	8.18	8.27	7.52	8.19	7.20	7.79	3.56	..	8.03
1923 ..	8.00	8.16	7.24	7.29	6.82	7.39	1.94	1.21	7.83

(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 follows :—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. These rates refer, of course, to persons married and not to marriages, as is the case in the preceding table.

3. **Marriage Rates in Various Countries.**—The following table shows the marriage rate for Australia in comparison with various other countries. The countries having the highest rates are those European countries which were engaged in the war, and the rates, which are not all available for the same year, are lowest in the latest years. The high rates were possibly due to marriages deferred on account of the war.

CRUDE MARRIAGE RATES.—VARIOUS COUNTRIES.

Country.	Year.	Crude Marriage Rate.	Country.	Year.	Crude Marriage Rate.
Bulgaria	1919	16.2	Canada (excluding Quebec) ..		7.8
Austria	1921	12.7	South African Union ..	1922	7.8
Prussia	1921	12.1	Switzerland ..	1922	7.7
Germany	1921	11.9	England and Wales ..	1922	7.6
Belgium	1921	11.8	Great Britain ..	1923	7.6
Italy	1921	11.7	Spain	1923	7.6
Czecho-Slovakia ..	1922	10.7	Tasmania	1922	7.4
Hungary	1922	10.5	Queensland	1923	7.2
Rumania	1919	10.2	Scotland	1923	7.2
France	1922	9.8	Finland	1923	7.0
Japan	1922	9.0	Western Australia ..	1921	6.8
Netherlands	1922	8.7	Chile	1923	6.5
Victoria	1923	8.2	Norway	1921	6.4
New South Wales ..	1923	8.0	Sweden	1922	6.3
Denmark	1922	7.9	Northern Ireland ..	1923	6.3
South Australia ..	1923	7.9	Ceylon	1922	5.7
Quebec (Canada) ..	1921	7.9	Irish Free State ..	1922	4.8
Russia (European) ..	1909	7.9	Jamaica	1922	3.5
New Zealand	1923	7.9		1921	
Australia	1923	7.8			

4. *Age and Conjugal Condition at Marriage.*—(i) *General.* The ages at marriage of bridegrooms and brides will be found in "Australian Demography," Bulletin No. 41. A summary in age groups is given in the table hereunder, which also shows the previous conjugal condition of the contracting parties. There were 1,943 males who were less than twenty-one years of age married during 1923, while the corresponding number of females was 8,780. At the other extreme there were 27 men of sixty-five years and upwards, who described themselves as bachelors, and 12 spinsters of corresponding age.

AGES AND CONJUGAL CONDITION OF PERSONS MARRIED.—AUSTRALIA, 1923.

Age at Marriage.	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
Under 20 ..	933	..	..	933	6,058	7	1	6,066
20-24 years	13,386	19	9	13,414	18,333	80	42	18,455
25-29 "	14,195	191	76	14,462	10,534	283	160	10,977
30-34 "	7,162	382	156	7,700	3,952	462	200	4,614
35-39 "	3,006	499	167	3,672	1,589	451	130	2,170
40-44 "	1,239	447	118	1,804	586	369	73	1,028
45-49 "	573	356	73	1,002	269	295	38	602
50-54 "	285	314	40	639	112	194	13	319
55-59 "	145	237	25	407	38	106	4	148
60-64 "	59	195	7	261	17	69	3	89
65 years and over ..	27	213	5	245	12	58	..	70
Unspecified	2	..	..	2	3	..	..	3
Total	41,012	2,853	676	44,541	41,503	2,374	664	44,541

(ii) *Relative Ages, Bridegrooms and Brides.* The relative ages of bridegrooms and brides are shown for single years in "Australian Demography," Bulletin No. 41; a condensation into age-groups of five years is given below:—

RELATIVE AGES OF PERSONS MARRIED.—AUSTRALIA, 1923.

Ages.	Total Bride- grooms.	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.	Not stated.
<i>Ages of Bridegrooms.</i>										
Under 20 ..	933	1	673	243	15	1	..	..	..	..
20 to 24 ..	13,414	7	3,527	8,058	1,570	198	37	11	6	..
25 to 29 ..	14,462	3	1,288	6,953	5,016	975	184	32	11	..
30 to 34 ..	7,700	..	413	2,281	2,782	1,646	453	106	19	..
35 to 39 ..	3,672	..	107	626	1,078	985	630	179	67	..
40 to 44 ..	1,804	..	26	183	315	466	431	260	123	..
45 to 49 ..	1,002	..	12	64	123	195	212	184	212	..
50 to 54 ..	639	..	6	26	48	86	132	119	221	1
55 to 59 ..	407	..	2	11	15	39	50	69	221	..
60 to 64 ..	261	..	1	5	8	11	26	49	161	..
65 and upwards ..	245	..	..	5	7	12	15	19	187	..
Not stated ..	2	..	..	..	..	..	..	..	..	2
Total Brides	44,541	11	6,055	18,455	10,977	4,614	2,170	1,028	1,228	3

(iii) *Average Ages, Bridegrooms and Brides.* The age at marriage of brides has remained fairly stationary during recent years at an average of about 26 years. The figures for the five years are:—1919, 25.77 years; 1920, 26.11 years; 1921, 26.16 years; 1922, 26.14 years; and 1923, 25.61 years. 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 25.96 years for the five years 1919–1923. The average age of bridegrooms in 1919 was 29.10 years; in 1920, 29.55 years; in 1921, 29.74 years; in 1922, 29.65 years; and in 1923, 29.12 years. It follows, therefore, that brides are generally speaking rather less than three and one-half years younger than bridegrooms.

5. *Previous Conjugal Condition.*—The number of bachelors and spinsters, widowed and divorced persons, who were married during the year 1923 has already been given. The following table shows the conjugal condition of the contracting parties:—

PREVIOUS CONJUGAL CONDITION OF PERSONS MARRIED.—AUSTRALIA, 1923.

Conjugal Condition.		Total Bridegrooms.	Brides.		
			Spinsters.	Widows.	Divorced.
Bridegrooms	{ Bachelors ..	41,012	39,082	1,434	496
	{ Widowers ..	2,853	1,911	828	114
	{ Divorced ..	676	510	112	54
Total Brides ..		44,541	41,503	2,374	664

6. *Birthplaces of Persons Married.*—Information regarding the birthplaces of persons who were married in 1923 was not obtained in Western Australia; the totals in the following table, therefore, are exclusive of that State. As might be expected,

OCCUPATIONS AND AGES OF BRIDEGROOMS.—AUSTRALIA, 1923.

Ages at Marriage.	Pro- fessional.		Domestic.		Commercial..							Transport and Communication.			
	Government, Defence, and Law.	Others.	Board and Lodging.	Others.	Property and Finance.	Art, Mechanic, and Textile Products.	Food and Drinks.	Animal and Vege- table Substances.	Fuel, Light, and Metals.	Merchants and Dealers.	Others.	Railways.	Roads and Trams.	Seas and Rivers.	Others.
15 years ..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	..
16 " ..	..	1	..	2	..	..	2	..	..	..	3	2	5	1	..
17 " ..	..	..	..	..	..	..	..	..	1	..	..	..	17	2	..
18 " ..	2	3	4	5	..	1	12	..	..	4	20	5	58	5	1
19 " ..	3	5	5	8	1	1	41	1	..	12	40	16	58	5	3
20 " ..	8	28	6	11	4	7	41	..	3	14	69	28	75	13	6
21 " ..	40	70	17	21	13	18	114	9	..	34	206	61	205	53	33
22 " ..	64	97	31	23	26	129	10	6	..	51	220	95	201	56	24
23 " ..	68	112	26	22	38	27	137	12	..	62	295	117	237	45	53
24 " ..	67	118	32	24	44	34	118	7	9	87	375	116	182	38	44
25 " ..	80	149	29	25	46	27	122	7	6	83	368	94	151	50	53
26 " ..	87	122	29	20	63	36	112	9	3	71	341	79	161	32	66
27 " ..	85	127	18	16	53	27	95	9	12	69	309	78	139	43	64
28 " ..	83	93	24	25	42	27	87	13	6	77	317	75	99	43	39
29 " ..	84	97	28	19	30	19	83	11	8	63	236	62	95	38	29
30 " ..	53	80	21	10	35	20	62	12	8	56	249	52	98	36	27
31 " ..	52	73	18	11	36	10	46	6	3	47	173	50	57	25	24
32 " ..	37	68	26	8	32	11	36	4	2	42	143	46	81	32	18
33 " ..	34	52	17	4	18	13	40	9	2	40	134	31	52	22	12
34 " ..	23	56	16	16	16	16	30	5	2	40	104	39	39	22	14
35 to 39 ..	103	186	52	32	48	38	102	21	16	123	303	82	163	82	24
40 " 44 ..	43	72	27	12	30	8	62	9	8	61	135	43	63	62	18
45 " 49 ..	24	46	17	8	12	5	30	9	1	33	66	23	37	20	3
50 and over	53	82	37	11	29	24	45	4	5	68	85	40	51	32	14
Not stated	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Total ..	1,073	1,737	480	333	616	383	1,547	167	116	1,137	4,192	1,234	2,269	752	569
Average age— year 1923	30.36	30.44	31.88	28.98	30.49	30.12	28.25	31.00	30.29	31.26	28.66	28.74	27.62	30.72	28.13

Ages at Marriage.	Manufacturing.								Primary Producers.				
	Art and Mechanic Productions.	Textiles and Fibrous Materials.	Food and Drinks.	Animal and Vegetable Substances.	Metals and Minerals.	Fuel, Light, and Energy.	Building and Con- struction.	Others.	Agri- cultural.	Pastoral.	Mining and Quarrying.	Others.	Indefinite.
15 years ..	..	..	..	..	..	..	..	..	..	..	..	..	..
16 " ..	..	..	..	..	..	..	..	..	..	..	..	..	..
17 " ..	5	3	1	..	2	2	1	7	..	..	..	1	..
18 " ..	27	9	4	1	16	2	10	83	15	2	5	3	2
19 " ..	52	18	15	4	31	4	28	177	46	7	25	8	1
20 " ..	75	23	23	3	57	11	61	307	73	14	36	14	..
21 " ..	184	68	70	11	122	27	152	670	218	34	73	16	..
22 " ..	266	63	85	15	100	33	174	782	307	57	68	22	1
23 " ..	264	81	80	28	130	60	199	782	431	56	81	17	3
24 " ..	289	77	56	14	101	40	238	680	406	78	72	16	1
25 " ..	260	69	64	15	98	53	258	677	429	78	57	17	3
26 " ..	247	52	46	12	88	47	220	521	445	100	42	30	1
27 " ..	222	56	36	14	73	35	191	499	456	85	35	21	5
28 " ..	190	57	34	7	81	36	171	472	459	84	34	15	2
29 " ..	172	57	38	10	63	33	150	456	455	80	35	12	5
30 " ..	109	35	28	7	42	28	105	373	380	71	44	14	3
31 " ..	94	37	22	5	54	18	97	306	282	74	24	14	..
32 " ..	78	28	25	1	37	24	93	300	283	72	26	8	1
33 " ..	75	24	19	2	25	8	100	202	243	36	28	6	4
34 " ..	63	20	21	5	28	10	56	215	229	47	25	9	4
35 to 39 ..	193	49	47	17	92	37	236	777	621	141	60	25	4
40 " 44 ..	84	36	24	6	43	15	100	379	316	86	45	9	8
45 " 49 ..	56	18	10	5	26	9	55	208	179	56	30	7	9
50 and over	73	15	19	3	32	8	102	291	240	86	51	4	48
Not stated	..	..	..	..	..	..	1	..	..	..	..	..	..
Total ..	3,078	895	767	185	1,344	540	2,800	9,176	6,515	1,347	896	288	105
Average age— year 1923	27.93	27.96	27.63	28.01	27.77	28.03	29.18	28.70	30.44	32.08	29.60	28.24	44.51

8. **Fertility of Marriages.**—The quotient obtained by division of the nuptial births registered, *e.g.*, during the five years 1919 to 1923, by the number of marriages registered during the five years 1914 to 1918, *i.e.*, the period antecedent by five years to the period of the births, has been called the “fertility of marriages.” This works out at 3.25—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 year 1919 the result was 2.86; for 1920, 3.05; for 1922, 3.22; and for 1923, 3.25.

9. **Registration of Marriages.**—(i) *Marriages in each Denomination.* 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 proportions so celebrated in 1923 were:—New South Wales, 94.75 per cent.; Victoria, 96.13 per cent.; Queensland, 96.35 per cent.; South Australia, 96.19 per cent.; Western Australia, 82.70 per cent.; and Tasmania, 96.61 per cent., the percentage for Australia being 94.92. The registered ministers in 1923 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 Christians.” The figures for 1923 are shown in the following table:—

MARRIAGES IN EACH DENOMINATION.—AUSTRALIA, 1923.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N. Ter.	Fed. Cap. Ter.	Australia.
Church of England ..	7,667	3,763	1,752	1,097	874	626	2	2	15,783
Roman Catholic ..	3,403	2,401	1,350	502	378	204	..	2	8,240
Methodist ..	2,192	1,853	919	1,341	353	305	2	..	6,965
Presbyterian Church ..	2,346	2,530	866	174	178	174	..	..	6,268
Congregational ..	381	847	126	210	74	56	..	..	1,694
Baptist ..	239	640	159	186	38	80	..	..	1,342
Church of Christ ..	127	271	32	194	33	63	..	..	720
Lutheran ..	26	47	131	183	3	..	..	..	390
Greek Orthodox ..	18	18	5	..	5	..	1	..	47
Unitarian ..	8	2	..	7	..	..	..	..	17
Salvation Army ..	71	57	39	36	13	9	..	..	225
Seventh-Day Adventists ..	30	6	10	5	8	1	..	..	60
Other Christians ..	48	137	213	7	1	18	..	..	424
Hebrew ..	46	46	..	1	7	..	..	..	100
Registrar's Office ..	920	508	212	156	411	54	2	..	2,263
Unspecified ..	1	..	..	..	..	2	..	..	3
Total ..	17,523	13,126	5,814	4,099	2,376	1,592	7	4	44,541

(ii) *Number and Percentage in each Denomination, 1919 to 1923.*—The number of marriages according to denomination, and the percentages on total marriages, are shown in the next table:—

MARRIAGES IN EACH DENOMINATION.—AUSTRALIA, 1919 TO 1923.

Denomination.		1919.	1920.	1921.	1922.	1923.
Church of England ..	Total	14,264	18,859	16,499	15,877	15,783
	%	35.19	36.58	35.20	35.49	35.43
Roman Catholic ..	Total	7,390	9,141	8,458	8,304	8,240
	%	18.23	17.73	18.05	18.57	18.50
Methodist ..	Total	6,321	7,796	7,320	6,904	6,965
	%	15.59	15.12	15.62	15.43	15.64
Presbyterian ..	Total	5,570	7,097	6,808	6,345	6,268
	%	13.74	13.76	14.52	14.18	14.07
Congregational ..	Total	1,698	2,308	2,001	1,773	1,694
	%	4.19	4.48	4.27	3.96	3.80
Baptist ..	Total	1,342	1,744	1,461	1,356	1,342
	%	3.31	3.38	3.12	3.03	3.01
Church of Christ ..	Total	703	839	870	768	720
	%	1.73	1.63	1.86	1.72	1.62
Lutheran ..	Total	356	386	401	422	390
	%	0.88	0.75	0.86	0.94	0.88
Greek Orthodox ..	Total	24	30	23	34	47
	%	0.06	0.06	0.05	0.08	0.11
Unitarian ..	Total	15	21	21	18	17
	%	0.04	0.04	0.04	0.04	0.04
Salvation Army ..	Total	234	302	227	214	225
	%	0.58	0.59	0.48	0.48	0.51
Seventh-Day Adventists	Total	58	60	57	56	60
	%	0.14	0.12	0.12	0.13	0.13
Other Christians ..	Total	533	628	527	483	424
	%	1.31	1.22	1.12	1.08	0.95
Hebrew ..	Total	104	111	113	90	100
	%	0.26	0.22	0.24	0.20	0.22
Registrar's Office ..	Total	1,887	2,198	2,074	2,075	2,263
	%	4.65	4.26	4.43	4.64	5.08
Unspecified ..	Total	41	32	9	12	3
	%	0.10	0.06	0.02	0.03	0.01
		40,540	51,552	46,869	44,731	44,541

§ 3. Deaths.

1. Male and Female Deaths, 1919 to 1923.—The total numbers of deaths registered in each year from 1919 to 1923 inclusive are given in the two following tables. The annual average of male deaths during the period was 32,241, and of female deaths 24,528, the details being as follow :—

MALE DEATHS, 1919 TO 1923.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North Terr.	Fed Cap. Terr.	Aus- tralia.
1919 ..	15,256	10,508	5,337	2,927	2,340	1,175	82	7	37,632
1920 ..	12,088	9,059	4,824	2,814	2,161	1,055	48	4	32,053
1921 ..	11,490	8,662	4,397	2,655	2,209	1,166	70	3	30,652
1922 ..	11,014	8,187	4,372	2,537	1,994	1,084	52	5	29,245
1923 ..	11,969	9,135	4,699	2,727	1,907	1,140	35	10	31,622
Rate (a), 1923	10.72	11.46	11.08	10.48	10.24	10.57	13.58	4.81	10.91

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

FEMALE DEATHS, 1919 TO 1923.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Fed. Cap. Terr.	Aus- tralia.
1919 ..	11,088	8,862	3,519	2,548	1,250	1,017	3	11	28,298
1920 ..	8,846	7,773	3,123	2,269	1,227	981	15	2	24,236
1921 ..	8,536	7,503	2,745	2,327	1,271	1,031	10	1	23,424
1922 ..	8,152	6,968	2,780	2,071	1,173	913	8	1	22,066
1923 ..	9,079	8,084	3,194	2,234	1,023	997	3	..	24,614
Rate (a), 1923	8.46	9.98	8.43	8.69	6.31	9.28	2.90	..	8.82

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

2. **Male and Female Death Rates, 1923.**—The crude male and female death rates for 1923 only are given in the last line of the preceding tables. Victoria had the highest rate for both males and females, and Western Australia the lowest rate for each sex. The rates for the two Territories are based on very small numbers, and comparisons with the States would be misleading.

Owing to differences in age constitution in the six States, the crude rates are not, however, strictly comparable. A more satisfactory rate is furnished by the "Index of Mortality" (see sub-para. 13). The death rates for males and females in each State in five-year age groups for the three years 1920 to 1922, that is, for the Census year and for the year immediately preceding and following, are shown on page 992.

The high death rate in 1919 was due to the outbreak of influenza. The rates for the four years 1920–1923 averaged about 11.0 per 1,000 for males, and 8.7 per 1,000 for females.

MALE AND FEMALE DEATH RATES (a).—AUSTRALIA, 1919 TO 1923.

Year.	1919.	1920.	1921.	1922.	1923.
Male rate	14.40	11.75	11.05	10.33	10.91
Female rate	10.95	9.20	8.72	8.08	8.82
Crude total rate	12.69	10.50	9.91	9.21	9.89

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

3. **Total Deaths, 1919 to 1923.**—The total number of deaths during each of the five years 1919 to 1923 is given below :—

TOTAL DEATHS, 1919 TO 1923.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Fed. Cap. Terr.	Australia.
1919 ..	26,344	19,370	8,856	5,475	3,590	2,192	85	18	65,930
1920 ..	20,934	16,832	7,947	5,083	3,388	2,036	63	6	56,289
1921 ..	20,026	16,165	7,142	4,932	3,480	2,197	80	4	54,076
1922 ..	19,166	15,155	7,152	4,608	3,167	1,997	60	6	51,311
1923 ..	21,048	17,219	7,893	4,961	2,930	2,137	38	10	56,236

4. **Crude Death Rates, 1919 to 1923.**—The crude death rates for the five years 1919 to 1923 are given in the next table. The comparatively high rate in 1919 was due to the heavy mortality from influenza.

CRUDE DEATH RATES (a), 1919 TO 1923.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Fed. Cap. Terr.	Australia.
1919 ..	13.18	13.15	12.22	11.69	11.24	10.69	18.26	7.79	12.69
1920 ..	10.13	11.13	10.63	10.44	10.28	9.67	14.95	2.76	10.50
1921 ..	9.50	10.52	9.36	10.02	10.43	10.30	20.47	1.61	9.91
1922 ..	8.92	9.65	9.15	9.11	9.32	9.30	16.42	2.13	9.21
1923 ..	9.61	10.71	9.83	9.59	8.41	9.92	10.53	3.02	9.89

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

5. **Death Rates of Various Countries.**—A comparison with foreign countries based on crude death rates is, owing to the different age constitution of the population, apt to favour Australia, but even if an allowance were made for the comparative youth of its population, Australia would still occupy a good position. The following table gives particulars of the crude death rates of various countries for the latest available years :—

DEATH RATES (a).—VARIOUS COUNTRIES.

Country.	Year.	Crude Death Rate.	Country.	Year.	Crude Death Rate.
Western Australia ..	1923	8.4	Switzerland ..	1922	12.9
New Zealand ..	1923	9.0	Irish Free State ..	1923	13.3
New South Wales ..	1923	9.6	Belgium ..	1922	13.9
South Australia ..	1923	9.6	Finland ..	1921	14.0
Union of South Africa (Whites) ..	1923	9.7	Canada (Quebec) ..	1921	14.2
Queensland ..	1923	9.8	Germany ..	1921	14.8
Australia ..	1923	9.9	Prussia ..	1921	14.8
Tasmania ..	1923	9.9	Northern Ireland ..	1922	15.4
Canada (excluding Quebec) ..	1922	10.4	Austria ..	1921	17.1
Victoria ..	1923	10.7	Italy ..	1921	17.5
Netherlands ..	1922	11.4	France ..	1922	17.6
Sweden ..	1923	11.4	Czecho-Slovakia ..	1922	17.8
England and Wales ..	1923	11.6	Bulgaria ..	1919	19.9
Great Britain ..	1923	11.7	Spain ..	1922	20.5
United States (Registration Area) ..	1922	11.8	Hungary ..	1922	20.8
Norway ..	1922	11.9	Japan ..	1922	22.3
Denmark ..	1922	11.9	Jamaica ..	1922	22.9
Scotland ..	1923	12.9	Ceylon ..	1922	27.8
			Russia, European ..	1909	28.9
			Chile ..	1921	33.4
			Rumania ..	1919	36.1

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

6. **Infantile Deaths and Death Rate.**—(i) *Australia, 1919 to 1923.* In the following table, which shows both the total number of deaths of children under one year and the rate per thousand births since 1919, males and females are distinguished. 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 343,173 male infants born from 1919 to 1923, 24,195 (70.50 per 1,000) died during their first year of life, while of 324,439 female infants only 18,087 (55.75 per 1,000) died during the first year.

INFANTILE DEATHS AND DEATH RATES.—AUSTRALIA, 1919 TO 1923.

Year.	Registered deaths under one year.			Rate of Infantile Mortality.(a).		
	Males.	Females.	Total.	Males.	Females.	Australia.
1919	4,802	3,662	8,464	76.31	61.69	69.21
1920	5,386	4,045	9,431	76.66	61.15	69.14
1921	5,111	3,841	8,952	72.97	58.06	65.73
1922	4,279	2,972	7,251	60.62	44.42	52.74
1923	4,617	3,567	8,184	66.56	54.16	60.52

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

(ii) *States, 1919 to 1923.* For the States and Territories the rates of infantile mortality during the last five years were as follows :—

INFANTILE MORTALITY RATES (a), 1919 TO 1923.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Fed. Cap. Terr.	Australia.
1919 ..	71.83	67.90	71.88	64.01	61.12	64.97	66.04	111.11	69.21
1920 ..	69.41	73.70	63.24	67.34	66.02	65.51	190.48	66.67	69.14
1921 ..	62.56	72.55	54.16	65.48	78.26	78.02	63.29	74.07	65.73
1922 ..	53.60	53.35	50.38	47.50	55.59	55.70	57.14	31.25	52.74
1923 ..	60.68	65.70	53.95	60.30	56.02	57.45	13.89	..	60.52

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

The infantile mortality rate for Australia in 1922 was the lowest yet recorded, and was exceptionally low in all the States, South Australia occupying the premier position with a mortality of 47.50 per 1,000 births. Moreover, the death rate from almost every cause was low, though the greatest effect was from the comparatively low mortality from diarrhoea and enteritis and from pneumonia and whooping cough. Although the rate for 1923 was not so satisfactory as for 1922, it was much below the average for the years 1919–1921. In 1923 Queensland had the lowest and Victoria the highest rate among the States.

(iii) *Districts.* The total number of births, of deaths of children under one year of age, and the average rate of infantile mortality for the five years 1919 to 1923 are shown in the following table for each of the fifty-nine districts for which the vital statistics have been tabulated. To afford a better indication of the geographical position of the districts, the name of a town situated in a fairly central part of each district has been added. The figures for the Federal Capital Territory and for Lord Howe Island are included for the sake of completeness, but are too small to be used in comparison with others. Remarkable

variations are shown in the mortality rate for the various districts. The lowest rate was experienced in the western district of South Australia (36.16 per 1,000 births), and the highest in the Trans-Darling Plains (Broken Hill) of New South Wales (115.49 per 1,000 births).

INFANTILE MORTALITY.—STATE DISTRICTS, 1919 TO 1923.

States and Territories.	Districts.	Towns.	Total Births, 1919-23.	Total Deaths of Children under one year, 1919-23.	Average Infantile Mortality per 1,000 Births, 1919-23.
New South Wales ..	Metropolitan ..	Sydney ..	109,948	7,362	66.96
" ..	North Coast ..	Grafton ..	22,295	1,036	46.47
" ..	Lower Hunter ..	Newcastle ..	28,927	2,003	70.78
" ..	Cumberland ..	Parramatta ..	14,954	773	51.69
" ..	South Coast ..	Nowra ..	10,032	571	56.92
" ..	Northern Tableland ..	Armidale ..	12,912	698	54.06
" ..	Central Tableland ..	Bathurst ..	16,350	1,188	72.66
" ..	Southern Tableland ..	Goulburn ..	13,663	880	64.41
" ..	North-Western Slope ..	Morice ..	5,394	319	59.14
" ..	Central-Western Slope ..	Dubbo ..	9,382	569	60.65
" ..	South-Western Slope ..	Temora ..	10,607	520	49.02
" ..	Riverina ..	Hay ..	6,163	366	59.39
" ..	Plains East of Darling ..	Cobar ..	1,534	113	73.66
" ..	Trans-Darling Plains ..	Broken Hill ..	4,182	483	115.49
" ..	Lord Howe Island ..	— ..	6	1	166.67
Victoria ..	Metropolitan ..	Melbourne ..	92,125	6,721	72.96
" ..	Central ..	Geelong ..	16,840	1,115	66.21
" ..	North-Central ..	Kyneton ..	6,210	358	57.65
" ..	Western ..	Hamilton ..	17,641	1,023	57.99
" ..	Wimmera ..	Horsham ..	7,236	448	61.91
" ..	Mallee ..	Ultima ..	6,466	434	67.12
" ..	Northern ..	Rochester ..	16,081	978	60.82
" ..	North-Eastern ..	Beechworth ..	4,675	234	50.05
" ..	Gippsland ..	Sale ..	8,314	379	45.59
Queensland ..	Metropolitan ..	Brisbane ..	30,214	2,041	67.55
" ..	Moreton ..	Ipswich ..	11,374	541	47.56
" ..	Wide Bay ..	Maryborough ..	11,817	581	49.17
" ..	Port Curtis ..	Rockhampton ..	7,530	475	63.08
" ..	Edgecumbe ..	Townsville ..	9,717	545	56.09
" ..	Rockingham ..	Cairns ..	5,679	264	46.49
" ..	York Peninsula ..	Cooktown ..	1,033	77	74.54
" ..	Carpentaria ..	Croydon ..	1,749	122	69.75
" ..	Central-Western ..	Winton ..	552	43	77.90
" ..	South-Western ..	Charleville ..	1,361	100	73.48
" ..	Central ..	Blackall ..	3,173	201	63.35
" ..	Maranoa ..	Roma ..	1,818	116	63.81
" ..	Downs ..	Toowoomba ..	13,236	705	53.26
South Australia ..	Metropolitan ..	Adelaide ..	29,357	1,996	67.99
" ..	Central ..	Gawler ..	11,926	575	48.21
" ..	Lower North ..	Redruth ..	9,295	629	67.67
" ..	Upper North ..	Port Augusta ..	2,835	164	57.85
" ..	South-Eastern ..	Mount Gambier ..	2,934	126	42.94
" ..	Western ..	Port Lincoln ..	2,408	87	36.13
Western Australia ..	Metropolitan ..	Perth ..	20,023	1,370	68.42
" ..	Northern Agricultural ..	Geraldton ..	5,362	315	58.75
" ..	South-Western ..	Katanning ..	9,301	464	49.89
" ..	Eastern Goldfields ..	Kalgoorlie ..	3,239	251	77.49
" ..	Northern Goldfields ..	Pilbara ..	556	43	77.34
" ..	North-Western ..	Roebourne ..	204	8	39.22
" ..	Northern ..	Broome ..	198	16	82.90
Tasmania ..	Hobart ..	Hobart ..	7,796	557	71.45
" ..	Launceston ..	Launceston ..	4,390	334	76.08
" ..	North-Eastern ..	Scottsdale ..	2,702	161	59.59
" ..	North-Western ..	Stanley ..	7,261	438	60.32
" ..	Midland ..	Zeehan ..	2,720	126	46.32
" ..	South-Eastern ..	Sorell ..	2,778	158	56.88
" ..	South-Western ..	Franklin ..	632	45	71.20
Northern Territory ..	..	Darwin ..	390	29	74.36
Federal Capital Territory ..	..	Canberra ..	120	7	58.33

(iv) *Various Countries and Cities.* Compared with other countries, the States of Australia occupy a very favourable position, being surpassed by New Zealand only. There are, however, several continental cities which show better results than any Australian city shows. It may be pointed out also in connexion with the rates hereunder, that a high birth rate is often, though not invariably, accompanied by a high infantile death rate. The figures in the subjoined tables relate to the latest years for which returns are available :—

INFANTILE MORTALITY RATES (a).—VARIOUS COUNTRIES.

Country.	Year.	Rate of Infantile Mor- tality. (a)	Crude Birth Rate. (b)	Country.	Year.	Rate of Infantile Mor- tality. (a)	Crude Birth Rate. (b)
New Zealand ..	1923	44	21.9	Canada (exclud- ing Quebec) ..	1922	87	24.8
Queensland ..	1923	54	24.9	Finland ..	1921	95	24.3
Western Australia ..	1923	56	22.6	Bulgaria ..	1919	109	40.2
Tasmania ..	1923	57	26.3	Belgium ..	1921	115	21.8
South Australia ..	1923	60	22.6	France ..	1922	124	19.3
Australia ..	1923	61	23.8	Canada (Quebec) ..	1921	128	37.6
New South Wales ..	1923	61	24.7	Germany ..	1921	134	24.9
Norway ..	1921	63	24.5	Prussia ..	1921	134	24.9
Sweden ..	1921	65	21.4	Spain ..	1922	142	30.5
Irish Free State ..	1923	66	19.4	Austria ..	1920	157	22.4
Victoria ..	1923	66	22.3	Italy ..	1917	158	19.5
Netherlands ..	1922	67	25.9	Japan ..	1922	166	34.2
Switzerland ..	1922	68	19.6	Jamaica ..	1922	177	37.3
England and Wales ..	1923	69	19.7	Ceylon ..	1922	188	39.4
Great Britain ..	1923	70	19.9	Hungary ..	1921	197	23.5
United States (Re- gistration Area) ..	1921	76	24.3	Rumania ..	1920	231	42.5
Denmark ..	1921	77	25.4	Russia, European ..	1909	248	44.0
Northern Ireland ..	1922	77	23.0	Chile ..	1914	286	37.0
Scotland ..	1923	79	22.8				
Union of South Africa (Whites) ..	1923	82	26.6				

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

INFANTILE MORTALITY RATES (a).—VARIOUS CITIES.

City.	Year.	Rate of Infantile Mortality. (a)	City.	Year.	Rate of Infantile Mortality. (a)
Amsterdam ..	1923	39	Liverpool ..	1923	98
Auckland ..	1923	44	Belfast ..	1923	101
Christiania ..	1923	46	Aberdeen ..	1923	104
Wellington ..	1923	47	Hamburg ..	1923	104
Stockholm ..	1923	50	Dresden ..	1923	105
Zürich ..	1916	55	Monte Video ..	1916	111
Rome ..	1915	56	Dublin ..	1923	111
Brisbane ..	1923	58	Genoa ..	1916	126
London ..	1923	60	Prague ..	1922	131
Perth ..	1923	61	Leipzig ..	1923	134
Sydney ..	1923	63	Munich ..	1923	143
Christchurch ..	1923	66	Berlin ..	1923	144
Hobart ..	1923	66	Chicago ..	1916	145
Adelaide ..	1923	67	Cologne ..	1923	147
Newcastle, N.S.W. ..	1923	68	Warsaw ..	1923	147
Copenhagen ..	1923	68	Vienna ..	1922	149
Birmingham ..	1923	71	Lodz ..	1922	156
Melbourne ..	1923	71	Marseilles ..	1916	157
Geneva ..	1916	73	Breslau ..	1923	171
New York ..	1922	74	Rio de Janeiro ..	1912	174
Edinburgh ..	1923	82	Madrid ..	1915	177
Antwerp ..	1923	83	Buda Pest ..	1920	184
Manchester ..	1923	85	Florence ..	1916	192
Washington ..	1919	85	Montreal ..	1911	242
Glasgow ..	1923	90	Petrograd ..	1912	249
Paris ..	1923	90	Madras ..	1923	253
Toronto ..	1917	92	Bombay ..	1922	402
Buenos Aires ..	1916	94			

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

Information relative to the causes of death of children under one year of age will be found in sub-section 18.

7. Deaths in Age-Groups, 1919 to 1923.—A distribution into age-groups has been made of the 283,842 deaths which occurred in Australia from 1919 to 1923, and the results have been tabulated for each State. It is, however, sufficient to show here the results for Australia as a whole, which are as follows :—

DEATHS IN AGE GROUPS.—AUSTRALIA, 1919 TO 1923.

Age-Group.	Males.	Females.	Total.	Percentage on Total Males.	Percentage on Total Females.	Percentage on Total.
Under 1 year ..	24,195	18,087	42,282	15.01	14.75	14.90
1 year and under 5 ..	8,453	7,038	15,491	5.24	5.74	5.46
5 years and under 20 ..	8,176	6,757	14,933	5.07	5.51	5.26
20 years and under 40 ..	21,709	19,543	41,252	13.47	15.94	14.53
40 years and under 60 ..	35,673	22,994	58,667	22.13	18.75	20.67
60 years and under 65 ..	13,284	7,978	21,262	8.24	6.50	7.49
65 years and over ..	49,366	40,177	89,543	30.62	32.76	31.55
Age unspecified ..	348	64	412	0.22	0.05	0.14
Total ..	161,204	122,638	283,842	100.00	100.00	100.00

8. Deaths at Single Ages and in Age-Groups, 1923.—(i) *General.* The 56,236 deaths registered in Australia in the year 1923 will be found tabulated under single years, and in groups of five years for each State and Territory, in Bulletin No. 41, "Australian Demography, 1923." 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, 1923.

Ages.	Males.	Females.	Total.	Ages.	Males.	Females.	Total.
Total under 1 month ..	2,349	1,798	4,147	Total 20-24 years ..	691	663	1,354
" 1 month and under 3 ..	887	611	1,498	" 25-29 " ..	774	829	1,603
" 3 months and under 6 ..	627	514	1,141	" 30-34 " ..	894	904	1,798
" 6 months and under 12 ..	754	644	1,398	" 35-39 " ..	1,100	1,046	2,146
Total under 1 year ..	4,617	3,567	8,184	" 40-44 " ..	1,303	910	2,213
1 year and under 2 ..	819	632	1,451	" 45-49 " ..	1,438	1,018	2,456
2 years ..	324	268	592	" 50-54 " ..	1,814	1,213	3,027
3 " ..	205	152	357	" 55-59 " ..	2,308	1,425	3,733
4 " ..	151	125	276	" 60-64 " ..	2,821	1,752	4,573
Total under 5 years ..	6,116	4,744	10,860	" 65-69 " ..	2,924	1,866	4,790
Total 5-9 years ..	528	425	953	" 70-74 " ..	2,429	1,717	4,146
" 10-14 " ..	414	364	778	" 75-79 " ..	2,216	2,008	4,224
" 15-19 " ..	574	469	1,043	" 80-84 " ..	1,759	1,620	3,379
				" 85-89 " ..	1,000	1,099	2,099
				" 90-94 " ..	843	399	1,242
				" 95-99 " ..	87	119	206
				" 100 and over ..	13	12	25
				Age Unspecified ..	76	12	88
				Total All Ages ..	31,622	24,614	56,236

(ii) *Rates.* The following tables give the death rate per 1,000 living at each age for the three years 1920, 1921, and 1922, viz., the Census year 1921, and the years immediately preceding and following. The Northern Territory is included with South Australia, and the Federal Capital Territory with New South Wales :—

CHAPTER XXV.—VITAL STATISTICS.

AVERAGE ANNUAL DEATH RATES.—AGE-GROUPS, 1920 TO 1922.

Age-Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
0 to 4 years	21.49	22.61	20.73	20.01	23.88	20.72	21.64
5 " 9 "	1.85	2.15	1.96	2.25	2.24	2.04	2.02
10 " 14 "	1.59	1.61	1.58	1.56	1.42	1.83	1.59
15 " 19 "	2.16	2.07	2.90	2.42	2.37	2.66	2.30
20 " 24 "	2.74	3.06	3.54	3.33	3.96	3.23	3.10
25 " 29 "	3.36	3.60	4.37	3.64	4.08	5.05	3.70
30 " 34 "	4.13	3.70	4.58	4.00	5.40	4.59	4.16
35 " 39 "	5.36	5.32	5.95	5.18	6.42	4.79	5.48
40 " 44 "	7.85	6.60	7.86	6.20	7.90	5.98	6.89
45 " 49 "	9.61	9.80	10.60	8.81	12.09	8.71	9.91
50 " 54 "	12.38	12.24	14.23	11.76	17.18	11.51	12.90
55 " 59 "	18.72	18.24	20.34	19.70	23.76	13.44	19.04
60 " 64 "	28.35	28.48	30.36	25.63	34.19	23.95	28.71
65 " 69 "	43.00	44.38	44.93	42.31	49.51	38.53	43.74
70 " 74 "	65.81	65.16	64.56	62.01	72.15	53.65	64.88
75 " 79 "	105.54	107.84	103.32	106.23	115.56	109.46	106.53
80 " 84 "	159.12	163.74	159.06	161.73	184.49	132.47	160.73
85 " 89 "	271.79	266.12	227.79	226.87	283.46	232.39	259.17
90 and over	368.58	387.01	314.96	387.09	566.67	350.00	376.08
FEMALES.							
0 to 4 years	16.92	17.91	16.05	16.25	18.80	16.74	17.09
5 " 9 "	1.66	1.95	1.89	2.27	1.28	2.09	1.82
10 " 14 "	1.21	1.20	1.43	1.34	1.23	1.63	1.27
15 " 19 "	1.63	2.00	1.99	2.72	1.34	2.58	1.90
20 " 24 "	2.43	2.92	2.81	2.85	3.07	3.74	2.75
25 " 29 "	3.47	3.55	3.61	3.85	3.99	3.87	3.59
30 " 34 "	3.85	4.13	4.11	4.21	4.60	4.41	4.06
35 " 39 "	4.64	4.98	5.80	5.18	4.90	5.98	5.00
40 " 44 "	5.15	5.74	6.03	4.98	6.39	5.48	5.51
45 " 49 "	6.71	6.91	6.76	6.40	8.12	7.31	6.87
50 " 54 "	9.35	9.11	9.11	9.10	10.62	8.61	9.27
55 " 59 "	13.17	12.87	13.60	10.85	12.81	14.23	12.92
60 " 64 "	19.08	19.06	19.71	18.27	17.78	20.13	19.05
65 " 69 "	31.59	31.69	30.81	32.89	30.49	34.72	31.76
70 " 74 "	50.24	51.83	50.61	45.65	54.20	49.42	50.43
75 " 79 "	88.19	88.52	88.10	83.98	96.43	80.32	87.81
80 " 84 "	140.29	143.71	126.40	132.25	137.07	126.00	138.32
85 " 89 "	225.11	231.45	210.65	193.54	219.51	208.79	221.44
90 and over	380.95	321.79	288.89	337.50	478.26	352.94	341.68
PERSONS.							
0 to 4 years	19.24	20.30	18.45	18.17	21.39	18.75	19.40
5 " 9 "	1.76	2.05	1.93	2.26	1.76	2.07	1.92
10 " 14 "	1.40	1.40	1.51	1.45	1.33	1.73	1.43
15 " 19 "	1.90	2.03	2.45	2.57	1.86	2.62	2.10
20 " 24 "	2.58	2.99	3.17	3.09	3.52	3.49	2.92
25 " 29 "	3.42	3.57	4.00	3.75	4.03	4.43	3.64
30 " 34 "	3.99	3.92	4.37	4.10	5.03	4.50	4.11
35 " 39 "	5.03	5.14	5.88	5.18	5.72	5.39	5.24
40 " 44 "	5.99	6.16	7.04	5.60	7.23	5.73	6.22
45 " 49 "	8.21	8.30	8.89	7.62	10.41	8.04	8.44
50 " 54 "	10.97	10.67	12.04	10.46	14.58	10.16	11.20
55 " 59 "	16.19	15.60	17.57	15.32	19.61	13.80	16.22
60 " 64 "	24.11	23.93	25.99	22.13	27.90	22.13	24.22
65 " 69 "	37.81	37.90	39.23	37.80	41.71	36.73	38.17
70 " 74 "	58.34	58.09	58.64	53.85	64.31	51.54	57.82
75 " 79 "	97.02	97.07	96.41	94.82	106.68	93.60	96.98
80 " 84 "	149.75	152.49	144.74	145.42	162.58	128.81	149.09
85 " 89 "	248.05	246.87	219.48	206.49	252.00	219.14	238.91
90 and over	374.81	349.09	304.15	355.73	528.30	351.64	357.36

The tables show a high death rate for children under five years of age, but it rapidly diminishes until, at ages 10 to 14, the rate is 1.43 per 1,000, which is the lowest at any age. The rate thereafter gradually rises with increasing age until, at the ages 90 and over, more than one-third die every year.

9. Deaths of Centenarians, 1923.—Particulars concerning the twenty-five persons who died in 1923 aged 100 years and upwards, are given in the following table. It must, of course, be understood that while the Registrars-General of the various States take the greatest care to have statements as to abnormally high ages verified as far as possible, absolute reliance cannot be placed on the accuracy of the ages shown, owing to the well-known tendency of very old people to overstate their ages. No attempt has been made by the Commonwealth Bureau of Census and Statistics to verify the truth of the statements made. The fact must not be disregarded in connexion with this question that while parish registers in the United Kingdom often date very far back, compulsory registration of births dates practically only from 1874, the Act passed in 1836 having left many loop-holes open for those unwilling to register the births of their children.

DEATHS OF CENTENARIANS.—AUSTRALIA, 1923.

Age.	Locality where Death occurred.	State.	Cause of Death.	Occupation.	Birthplace.	Length of Residence in Australia.	Conjugal Condition.
MALES.							
109	Ballarat ..	Victoria ..	Senility ..	Cloth finisher	England ..	Unspecified	Unspecified
103	Paterson ..	N.S.W. ..	Burns ..	Farmer ..	England ..	88 years ..	Married
103	Carcoar ..	" ..	Aortic Regurgitation	Labourer..	N.S.W. ..	Native ..	Unspecified
102	Liverpool ..	" ..	Senility ..	Unspecified	Ireland ..	68 years ..	Single
102	Tarnagulla ..	Victoria ..	Burns ..	Farmer ..	England ..	70 " ..	Married
102	Creswick ..	" ..	Senility ..	" ..	Ireland ..	61 " ..	"
102	Pt. Adelaide	S. Australia	Sarcoma of neck	Labourer..	England ..	74 " ..	"
101	Brisbane ..	Queensland	Senility ..	Miner ..	Ireland ..	60 " ..	Single
100	Brewarrina	N.S.W. ..	Asthma	Labourer..	China ..	Unspecified	"
100	Marrickville	" ..	Acute Bronchitis	Unspecified	Greece ..	68 " ..	Married
100	Tenterfield	" ..	Senility ..	Miner ..	Canary Is.	80 " ..	Unspecified
100	Cheltenham	Victoria ..	" ..	Bricklayer	England ..	38 " ..	Married
100	Kew ..	" ..	Ulceration of Bowel	Gentleman	" ..	73 " ..	"
FEMALES.							
105	Cheltenham	Victoria ..	Senility ..	" ..	England ..	66 years ..	Married
104	Merriwa ..	N.S.W. ..	" ..	" ..	" ..	66 " ..	"
103	Hobart ..	Tasmania	Accidental Fall	" ..	Ireland ..	Unspecified	"
102	Waverley ..	N.S.W. ..	Senility ..	" ..	Scotland ..	40 years ..	"
102	Ballarat ..	Victoria ..	Broncho-Pneumonia	" ..	England ..	79 " ..	"
101	Corowa ..	N.S.W. ..	Senility ..	" ..	Ireland ..	72 " ..	"
101	Dalby ..	Queensland	" ..	" ..	" ..	67 " ..	"
101	Hobart ..	Tasmania	" ..	" ..	England ..	63 " ..	"
101	Launceston	" ..	Hypostatic Pneumonia	" ..	Ireland ..	45 " ..	"
100	Ballarat ..	Victoria ..	Senility ..	" ..	" ..	76 " ..	"
100	Richmond ..	" ..	" ..	" ..	" ..	52 " ..	"
100	Adelaide ..	S. Australia	" ..	" ..	Germany..	84 " ..	"

10. Length of Residence in Australia of Persons who Died in 1923.—The length of residence in Australia of all persons whose deaths were registered in the year 1923 has been tabulated for all the States, and a summary of the results is shown below :—

LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED IN 1923.

Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.	Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.
Born in Australia ..	19,775	16,762	36,537	Resident 25 to 29 years ..	395	151	546
Resident under 1 year ..	122	52	174	" 30 to 34 ..	673	317	995
" 1 year ..	71	39	110	" 35 to 39 ..	950	612	1,562
" 2 years ..	66	56	122	" 40 to 44 ..	1,405	653	2,058
" 3 ..	53	56	109	" 45 to 49 ..	753	474	1,227
" 4 ..	32	34	66	" 50 to 54 ..	794	536	1,330
" 5 ..	19	12	31	" 55 to 59 ..	603	552	1,155
" 6 ..	19	11	30	" 60 to 64 ..	947	908	1,855
" 7 ..	29	19	48	" 65 yrs. and over ..	1,719	1,985	3,704
" 8 ..	42	32	74	Length of residence			
" 9 ..	83	71	154	not stated ..	1,806	589	2,395
" 10 to 14 years ..	711	436	1,147				
" 15 to 19 ..	231	123	354				
" 20 to 24 ..	319	134	453	Total ..	31,622	24,614	56,236

11. Birthplaces of Persons who Died in 1923.—The following table gives the birthplaces of persons whose deaths were registered in 1923. Full particulars will be found in "Australian Demography," Bulletin No. 41.

BIRTHPLACES OF PERSONS WHO DIED IN 1923.—AUSTRALIA.

Birthplace.	Males.	Females.	Persons.	Birthplace.	Males.	Females.	Persons.
AUSTRALASIA—				ASIA—			
New South Wales ..	7,483	6,365	13,848	British India and			
Victoria ..	6,413	5,375	11,788	Ceylon ..	105	25	130
Queensland ..	2,088	1,747	3,835	Other Brit. Posses-			
South Australia ..	2,018	1,744	3,762	sions in Asia ..	12	1	13
Western Australia ..	579	459	1,038	China ..	258	2	260
Tasmania ..	1,191	1,069	2,260	Japan ..	32	1	33
Northern Territory ..	3	3	6	Other Asiatic			
Papua and Terri-				Countries ..	39	9	48
tory of New							
Guinea ..	6	..	6	AFRICA—			
New Zealand ..	218	117	335	Union of Sth. Africa	20	9	29
				Other Brit. Posses-			
				sions in Africa	14	8	22
				Other African			
				Countries ..	2	..	2
EUROPE—				AMERICA—			
England ..	5,195	3,622	8,817	Canada ..	37	21	58
Wales ..	194	119	313	Other Brit. Posses-			
Scotland ..	1,395	991	2,386	sions in America	14	6	20
Ireland ..	2,179	2,176	4,355	United States of			
Other Brit. Posses-				America ..	93	32	125
sions in Europe	38	21	59	Other American			
Austria ..	26	2	28	Countries ..	15	12	27
Denmark ..	117	23	140				
France ..	44	11	55	POLYNESIA—			
Germany ..	510	286	796	British Posses-			
Greece ..	33	2	35	sions in Polynesia	8	3	11
Italy ..	96	25	121	Other Polynesian			
Netherlands ..	14	2	16	Islands ..	51	6	57
Norway ..	66	15	81				
Russia ..	41	13	54	At Sea ..	73	56	129
Sweden ..	121	8	129				
Switzerland ..	38	13	51	Unspecified ..	633	185	818
Other European							
Countries ..	110	30	140	Total Deaths ..	31,622	24,614	56,236

12. Occupations of Males who Died in 1923.—(i) *Australia, 1923.* Information as to the occupations of the 31,622 males who died in Australia in 1923 is contained in the following statement :—

OCCUPATIONS OF MALES WHO DIED IN 1923.—AUSTRALIA.

Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
CLASS I.—PROFESSIONAL.		CLASS III.—COMMERCIAL—cont.	
General Government	180	Hay, corn, etc.	24
Local Government	15	Other vegetable matter	12
Defence	115	Wood and coal	30
Law and order	238	Stone, clay, glass	2
Religion	117	Gold, silver and precious stones ..	1
Health	201	Ironmongery	26
Literature	57	Merchants	129
Science	9	Shopkeepers and assistants	232
Civil and mechanical engineering, architecture and surveying ..	91	Dealers and hawkers	126
Education	128	Agents and brokers	135
Fine arts	32	Clerks, bookkeepers, etc.	669
Music	52	Commercial travellers and salesmen	240
Amusements	104	Others engaged in commercial pursuits	211
Total Professional	1,339	Speculators on chance events	11
CLASS II.—DOMESTIC.		Total Commercial	2,914
Hotelkeepers and assistants ..	394	CLASS IV.—TRANSPORT AND COMMUNICATION.	
Others engaged in providing board and lodging	77	Railway traffic	554
House servants	6	Tramway traffic	70
Coachmen and grooms	46	Road traffic	633
Hairdressers	66	Sea and river traffic	533
Laundrymen	8	Postal service	89
Others engaged in domestic occupations	206	Telegraph and telephone service	40
Total Domestic	803	Messengers, etc.	12
CLASS III.—COMMERCIAL.		Aviation .. ..	..
Banking and finance	103	Total Transport and Communication	1,931
Insurance and valuation	97	CLASS V.—INDUSTRIAL.	
Land and household property ..	62	Books and publications	142
Property rights, n.e.l.	2	Musical instruments	13
Books, publications and advertising	48	Prints, pictures and art materials	16
Prints, pictures, and art materials	1	Ornaments and small wares	21
Ornaments and small wares	1	Sports and games	2
Watches, clocks, jewellery	1	Designs, medals, type and dies ..	5
Arms and ammunition	1	Watches and clocks	33
Carriages and vehicles	4	Arms and ammunition	8
Harness and saddlery	1	Engines, machines, tools, etc. ..	164
Ships and boats	7	Carriages and vehicles	153
Building materials	16	Harness, saddlery and leatherware	117
Furniture	8	Ships, boats and equipment	60
Paper and stationery	12	Furniture	101
Textile fabrics	100	Building materials	92
Dress	15	Chemicals and by-products	5
Fibrous materials	2	Textile fabrics	38
Animal food	295	Dress	427
Vegetable food	85	Fibrous materials	6
Groceries and stimulants	145	Animal food	28
Living animals	43	Vegetable food	235
Leather, raw materials	7	Groceries and stimulants	67
Wool and tallow	10	Animal matter	54

OCCUPATIONS OF MALES WHO DIED IN 1923.—AUSTRALIA—*continued.*

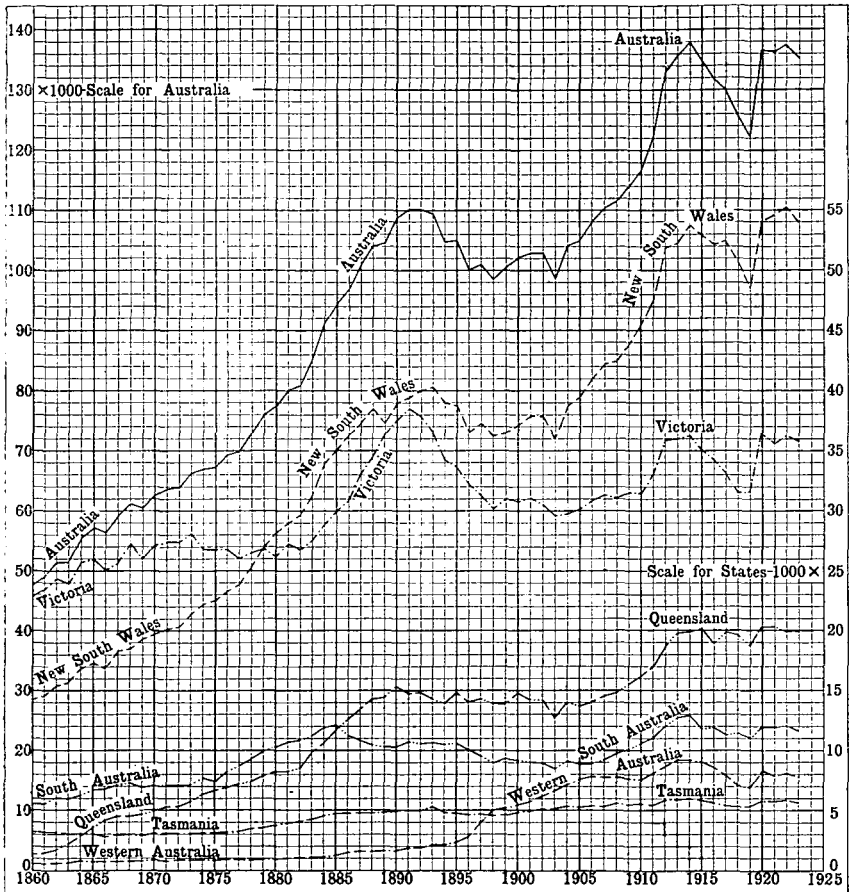
Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
CLASS V.—INDUSTRIAL—<i>cont.</i>		CLASS VI.—AGRICULTURAL, PASTORAL, MINING PURSUITS, ETC.	
Workers in wood not elsewhere classed	20	Agricultural	3,408
Vegetable produce for fodder	1	Pastoral	856
Paper	1	Dairy farming	64
Stone, clay, glass	92	Bees, fisheries and wild animals	105
Jewellery and precious stones	45	Forestry	93
Metals, other than gold and silver	433	Water conservation and supply	17
Gas, electric lighting, etc.	76	Mines and quarries	1,359
Building—		Total Primary Producers	5,902
Builders	133		
Stonemasons	76	CLASS VII.—INDEFINITE.	
Bricklayers	108	Independent means, having no specific occupation	594
Slaters	9	Occupation unspecified	1,272
Carpenters	562	Total Indefinite	1,866
Plasterers	50		
Painters and glaziers	254	CLASS VIII.—DEPENDENTS.	
Plumbers	103	Dependent relatives (including persons under 20 years of age with no specified occupation)	7,244
Signwriters	6	Supported by voluntary and State contributions	114
Others	3	Total Dependents	7,358
Roads, railways and earthworks	49	Total Male Deaths	31,622
Disposal of the dead	12		
Disposal of refuse	36		
Other industrial workers—			
Manufacturers	73		
Engineers, firemen	471		
Contractors	244		
Labourers, undefined	4,814		
Others	44		
Total Industrial	9,509		

(ii) *Australia, 1919 to 1923.* The male deaths in Australia grouped according to the main classes of occupations, and the percentage of each class on the total male deaths for the five years 1919 to 1923, are shown in the table hereunder:—

OCCUPATIONS OF MALES WHO DIED IN AUSTRALIA, 1919 TO 1923.

Occupation.	1919.	1920.	1921.	1922.	1923.
Class					
I. Professional .. { Total	1,944	1,391	1,307	1,317	1,339
.. { Per cent.	5.17	4.34	4.26	4.50	4.23
II. Domestic .. { Total	1,059	739	830	745	803
.. { Per cent.	2.81	2.30	2.71	2.55	2.54
III. Commercial .. { Total	3,694	2,814	2,739	2,871	2,914
.. { Per cent.	9.82	8.78	8.94	9.82	9.22
IV. Transport and communication .. { Total	2,706	1,910	1,841	1,842	1,931
.. { Per cent.	7.19	5.96	6.01	6.30	6.11
V. Industrial .. { Total	11,397	8,849	8,613	8,592	9,509
.. { Per cent.	30.29	27.61	28.10	29.38	30.07
VI. Agricultural, Pastoral Mining, etc. { Total	6,966	5,786	5,711	5,664	5,902
.. { Per cent.	18.51	18.05	18.63	19.37	18.66
VII. Indefinite .. { Total	1,529	1,595	1,436	1,378	1,866
.. { Per cent.	4.06	4.98	4.68	4.71	5.90
VIII. Dependents .. { Total	8,337	8,969	8,175	6,836	7,358
.. { Per cent.	22.15	27.98	26.67	23.37	23.27
Total	37,632	32,053	30,652	29,245	31,622

BIRTHS—1860 TO 1923.

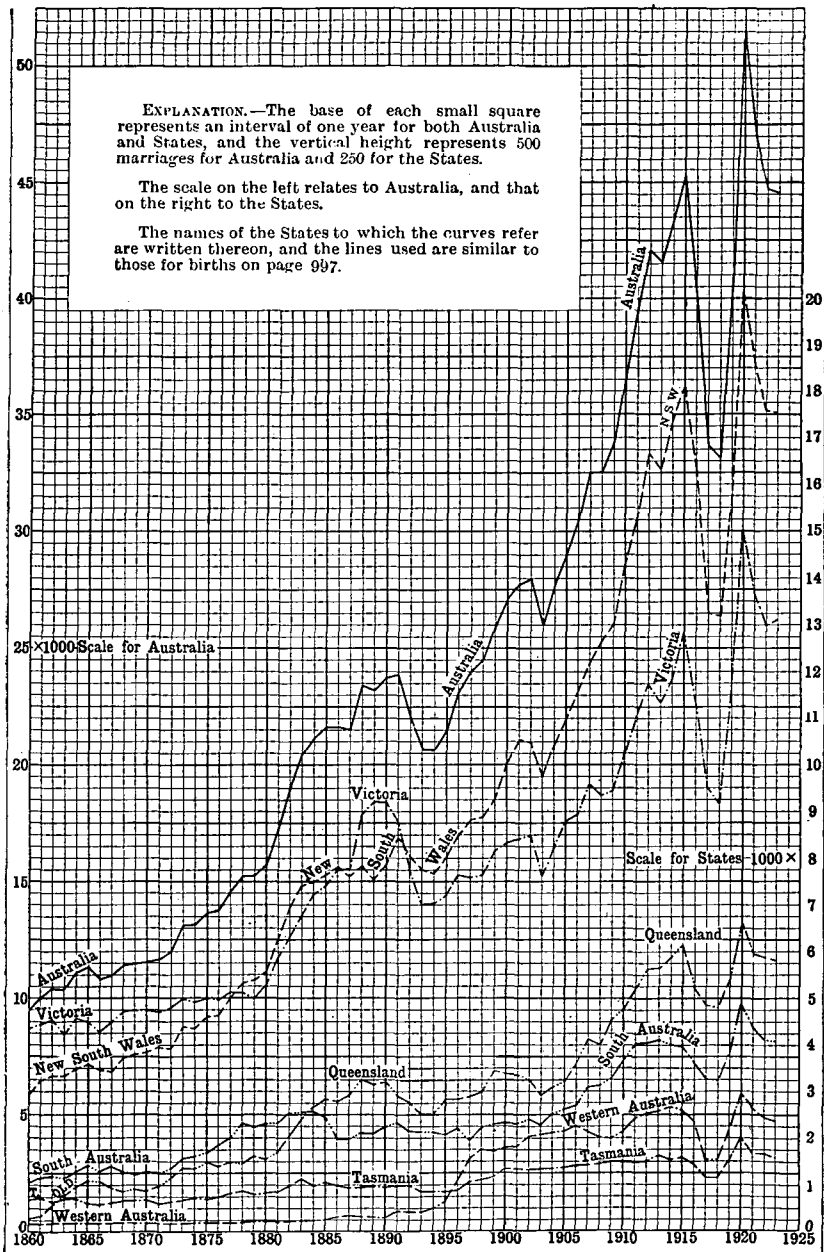


EXPLANATION.—The base of each small square represents an interval of one year for both Australia and States, and the vertical height represents 2,000 persons for Australia and 1,000 for the States.

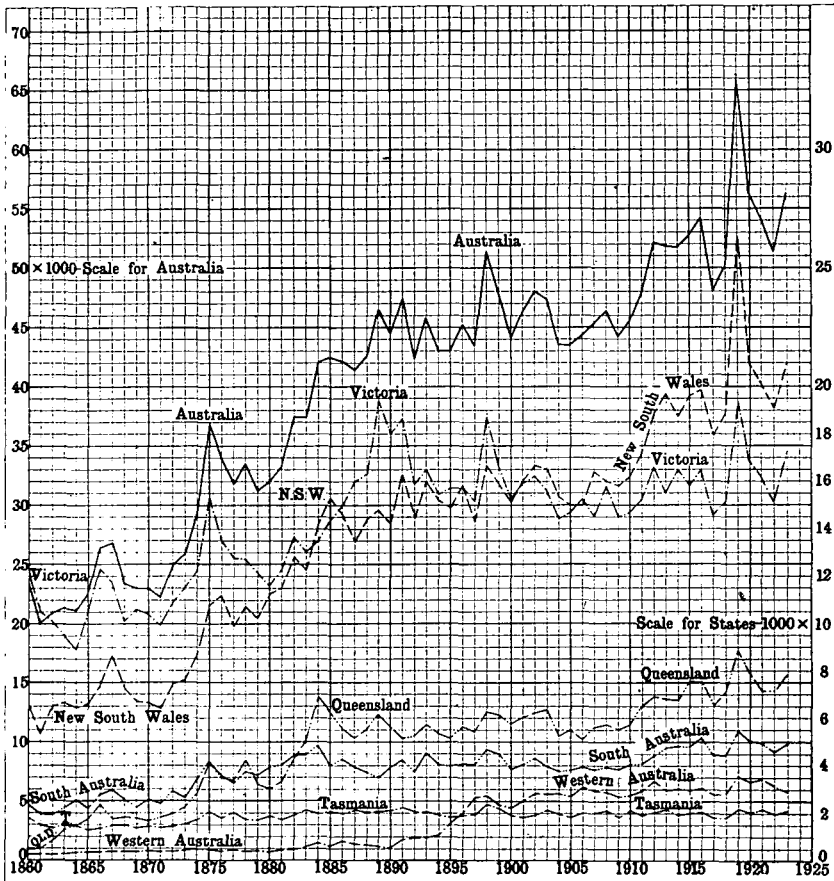
The scale on the left relates to Australia and that on the right to the States.

The names of the States to which the curves refer are written thereon, and the characters of the lines used are as follows:—Australia, —————; New South Wales, —————; Victoria, —————; Queensland, —————; South Australia, —————; Western Australia, —————; Tasmania, —————.

MARRIAGES, 1860 TO 1923.



DEATHS—1860 TO 1923.

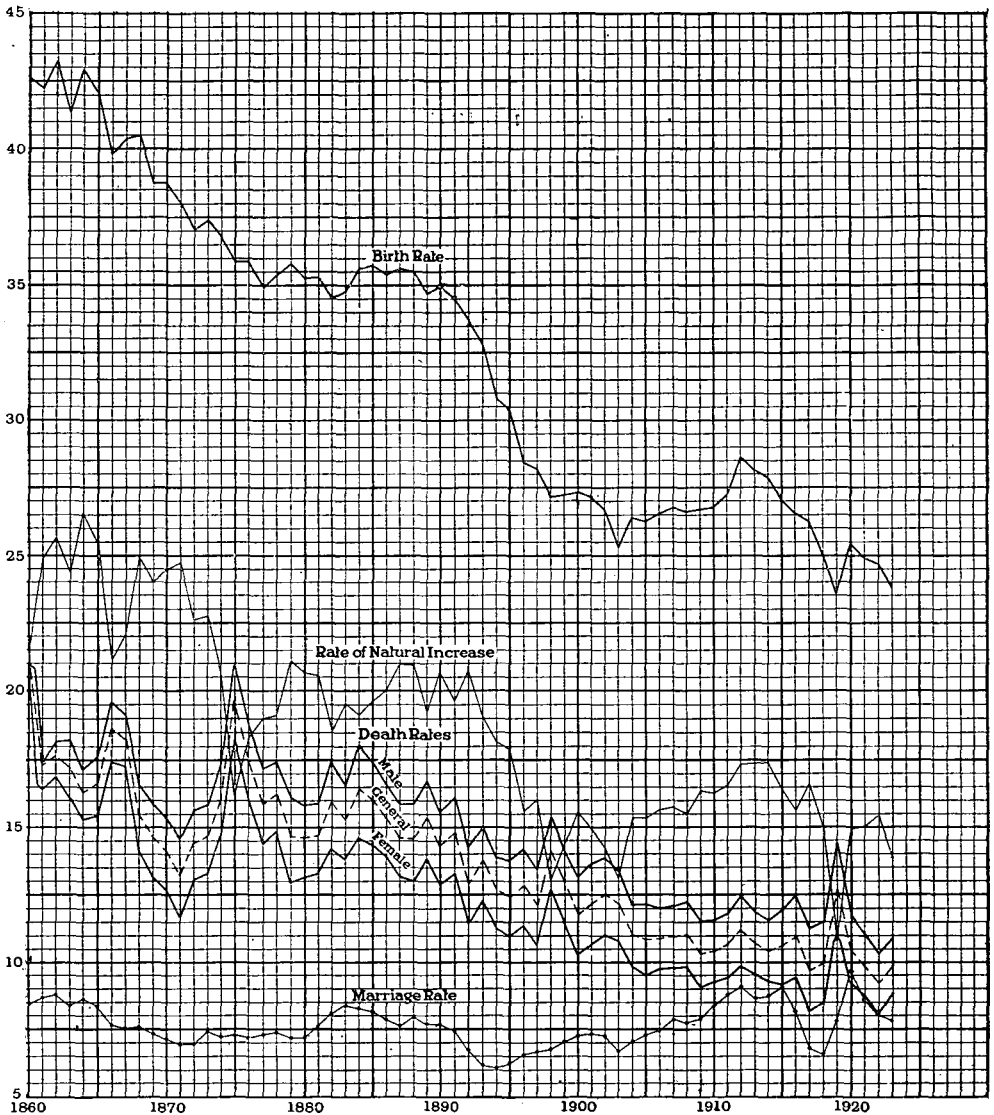


EXPLANATION.—The base of each small square represents an interval of one year for both Australia and States, and the vertical height represents 1,000 persons for Australia and 500 for the States.

The scale on the left relates to Australia, and that on the right to the States.

The names of the States to which the curves refer are written thereon, and the lines used are similar to those for births on page 997.

GENERAL BIRTH, NATURAL INCREASE, DEATH (MALE, GENERAL AND FEMALE) AND MARRIAGE RATES—AUSTRALIA, 1860 TO 1923.



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

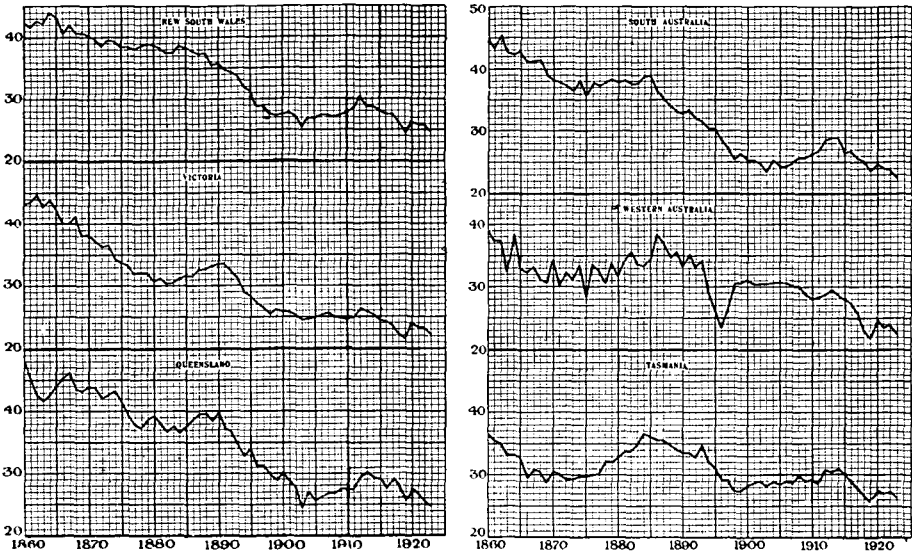
STATE BIRTH-RATE GRAPHS. (See next page.)

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 twenty per thousand of the population.

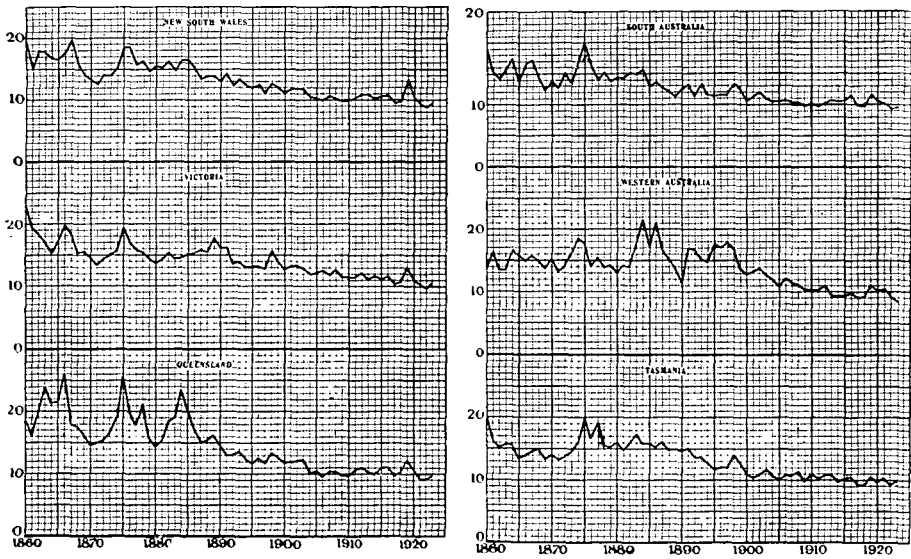
STATE DEATH-RATE GRAPHS. (See next page.)

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.

BIRTH RATES—STATES, 1860 TO 1923.



DEATH RATES—STATES, 1860-1923.



For explanation of above graphs see page 1000.

13. **Index of Mortality.**—(i) *For Year 1923.* The death rates—those for age-groups on page 992 excepted—so far quoted 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 age constitution is concerned, the International Statistical Institute in its 1895 session recommended the universal adoption of the population of Sweden in five age-groups, as ascertained at the Census of 1890, as the standard population by which the "Index of Mortality," as distinguished from the crude death rate, should be ascertained. The calculation for 1923 is shown below for each of the States and Territories and for Australia, the distribution of the mean population of 1923 into age-groups being in accordance with the Census of 1921:—

INDEX OF MORTALITY, 1923.

Age-Group.	Mean Population, 1923, distributed according to Results of Census of 1921.	Number of Deaths, 1923.	No. of Deaths per 1,000 of Mean Population, 1923, in each Age-Group.	Age Distribution per 1,000 of Standard Population.	Index of Mortality.
NEW SOUTH WALES.					
Under 1 year	55,574	3,277	58.97	25.5	1.50
1 year and under 20	836,622	2,170	2.59	398.0	1.03
20 years " 40	717,691	2,580	3.59	269.6	0.97
40 " " 60	421,505	4,142	9.83	192.3	1.89
60 " and upwards	159,018	8,879	55.84	114.6	6.40
Total	2,190,410	21,048	9.61	1,000.0	11.79
VICTORIA.					
Under 1 year	36,627	2,356	64.32	25.5	1.64
1 year and under 20	580,292	1,479	2.55	398.0	1.01
20 years " 40	514,597	1,952	3.79	269.6	1.02
40 " " 60	342,948	3,561	10.38	192.3	2.00
60 " and upwards	133,309	7,871	59.04	114.6	6.77
Total	1,607,773	17,219	10.71	1,000.0	12.44
QUEENSLAND.					
Under 1 year	21,562	1,078	50.00	25.5	1.28
1 year and under 20	316,134	890	2.82	398.0	1.12
20 years " 40	262,664	1,153	4.39	269.6	1.18
40 " " 60	147,993	1,581	10.68	192.3	2.05
60 " and upwards	54,395	3,191	58.66	114.6	6.72
Total	802,748	7,893	9.83	1,000.0	12.35
SOUTH AUSTRALIA.					
Under 1 year	12,272	705	57.45	25.5	1.46
1 year and under 20	194,960	436	2.24	398.0	0.89
20 years " 40	168,156	578	3.44	269.6	0.93
40 " " 60	99,038	941	9.50	192.3	1.83
60 " and upwards	43,019	2,301	53.49	114.6	6.13
Total	517,445	4,961	9.59	1,000.0	11.24

INDEX OF MORTALITY, 1923—*continued.*

Age-Group.	Mean Population, 1923, distributed according to Results of Census of 1921.	Number of Deaths, 1923.	No. of Deaths per 1,000 of Mean Population, 1923, in each Age-Group.	Age Distribution per 1,000 of Standard Population.	Index of Mortality.
WESTERN AUSTRALIA.					
Under 1 year	8,160	442	54.17	25.5	1.38
1 year and under 20	136,370	275	2.02	396.0	.80
20 years " 40	102,723	385	3.75	269.6	1.01
40 " " 60	80,319	819	10.20	192.3	1.96
60 " and upwards	20,703	1,009	48.74	114.6	5.59
Total	348,275	2,930	8.41	1,000.0	10.74
TASMANIA.					
Under 1 year	5,681	325	57.21	25.5	1.46
1 year and under 20	88,545	206	2.33	398.0	.92
20 years " 40	64,408	262	4.07	269.6	1.10
40 " " 60	39,628	387	9.77	192.3	1.83
60 " and upwards	17,065	957	56.08	114.6	6.43
Total	215,327	2,137	9.92	1,000.0	11.80
NORTHERN TERRITORY.					
Under 1 year	76	1	13.16	25.5	.34
1 year and under 20	893	3	3.36	398.0	1.34
20 years " 40	1,179	2	1.70	269.6	.46
40 " " 60	1,048	14	13.36	192.3	2.57
60 " and upwards	414	18	43.48	114.6	4.98
Total	3,610	38	10.53	1,000.0	9.69
FEDERAL CAPITAL TERRITORY.					
Under 1 year	80	..	..	25.5	..
1 year and under 20	1,354	..	..	398.0	..
20 years " 40	1,150	2	1.74	269.6	.47
40 " " 60	558	7	12.54	192.3	2.41
60 " and upwards	173	1	5.78	114.6	.66
Total	3,315	10	3.02	1,000.0	3.54
AUSTRALIA.					
Under 1 year	140,032	8,184	58.44	25.5	1.49
1 year and under 20	2,155,170	5,459	2.53	398.0	1.01
20 years " 40	1,832,568	6,914	3.77	269.6	1.02
40 " " 60	1,133,037	11,452	10.11	192.3	1.94
60 " and upwards	428,096	24,227	56.59	114.6	6.49
Total	5,688,903	56,236	9.89	1,000.0	11.95

NOTE.—The small number of persons whose ages were not ascertained at the 1921 Census has been proportionately distributed among the various age-groups, and the same plan has been followed in regard to the 88 persons who died in 1923, and those whose ages were not stated in the certificate of death.

Under the adjusted index the only change in the positions of the States is that Tasmania takes fourth place from Queensland, though the range of difference throughout as compared with the crude rates is somewhat reduced. On the basis of the crude rates there is a range of 2.30 per 1,000 persons between the lowest rate in Western Australia (8.41) and the highest rate in Victoria (10.71), whereas the adjusted rates reduce the range to 1.70 per 1,000, i.e. between 10.74 in Western Australia and 12.44 in Victoria.

(ii) *Years 1919 to 1923.* For purposes of comparison with previous years the index of mortality is shown in the following table for each of the five years 1919 to 1923 :—

INDEX OF MORTALITY, 1919 TO 1923.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Capital Territory.	Australia.
1919 ..	16.48	15.51	15.97	14.59	15.50	13.29	17.42	8.76	15.75
1920 ..	13.32	13.72	14.36	13.49	15.63	12.28	18.27	3.20	13.65
1921 ..	12.27	12.85	12.30	12.47	15.60	13.16	22.38	2.15	12.66
1922 ..	10.91	11.20	11.38	10.62	11.80	10.88	13.93	2.91	11.10
1923 ..	11.79	12.44	12.35	11.24	10.74	11.80	9.69	3.54	11.95

14. *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 1909 and 1920. The detailed classification groups causes of death under 205 different headings in fifteen categories, as follows :—

- | | |
|---|--|
| <ul style="list-style-type: none"> i. Epidemic, Endemic, and Infectious Diseases. ii. General Diseases not included in (i). iii. Diseases of the Nervous System and Organs of Sense. iv. Diseases of the Circulatory System. v. Diseases of the Respiratory System. vi. Diseases of the Digestive System. vii. Diseases of the Genito-urinary System and Adnexa. | <ul style="list-style-type: none"> viii. Puerperal Condition. ix. Diseases of the Skin and Cellular Tissue. x. Diseases of the Organs of Locomotion. xi. Malformations. xii. Early Infancy. xiii. Old Age. xiv. External Causes. xv. Ill-defined Diseases. |
|---|--|

(ii) *Compilation of Vital Statistics for 1907 and Subsequent Years in Commonwealth Bureau.* The vital statistics of Australia from the year 1907 onward have been tabulated according to this classification in the Commonwealth Bureau, and the system is being employed in all the State offices in the preparation of their monthly and quarterly bulletins of vital statistics.

(iii) *Classification of Causes of Death, 1919 to 1923, according to Abridged International Classification.* An abridged classification which enumerates thirty-eight diseases and groups of diseases according to the revised classification, is in use in many European and American States, while the Australian statistics have been compiled on the detailed classification. 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 1919 to 1923 will be found in full in *Bulletins Nos. 37 to 41 of "Australian Demography"*; here it will suffice to give the abridged classification under thirty-eight headings for the year 1923.

CAUSES OF DEATH.—MALES, 1923.

Cause.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Aus- tralia.
1 Typhoid Fever ..	52	28	33	5	10	8	..	..	136
2 Typhus ..	..	..	..	1	..	..	..	..	1
3 Malaria ..	3	2	11	1	1	..	1	..	19
4 Small-pox ..	..	..	..	..	..	..	..	..	..
5 Measles ..	69	49	5	..	1	3	..	..	127
6 Scarlatina ..	5	14	2	4	..	1	..	..	26
7 Whooping Cough ..	37	7	5	5	4	..	..	..	58
8 Diphtheria and Croup ..	106	46	20	23	10	17	..	..	222
9 Influenza ..	78	49	71	13	8	5	..	..	224
9A Pneumonic Influenza ..	133	132	106	11	9	10	..	1	402
10 Asiatic Cholera ..	..	..	..	..	..	..	..	..	..
11 Cholera Nostras ..	..	2	..	..	..	1	..	..	3
12 Other Epidemic Diseases	49	45	33	15	6	4	..	..	152
13 Tuberculosis of the Respiratory System	651	574	237	189	150	60	5	..	1,866
14 Tuberculosis of the Men- inges ..	29	35	4	8	2	6	..	..	84
15 Other forms of Tuber- culosis ..	39	38	5	12	6	7	..	..	107
16 Cancer and other Malig- nant Tumours ..	962	764	398	254	161	88	2	..	2,629
17 Meningitis ..	118	91	34	15	18	11	..	..	287
18 Hæmorrhage, Embolism, and Softening of Brain	557	398	179	151	84	59	..	..	1,428
19 Organic Diseases of the Heart ..	959	828	374	242	170	132	..	1	2,706
20 Acute Bronchitis ..	85	41	25	18	7	9	..	..	185
21 Chronic Bronchitis ..	164	163	71	55	21	10	1	..	485
22 Pneumonia ..	649	472	199	128	86	66	1	1	1,602
23 Other Diseases of the Respiratory System (Tuberculosis exceptd.)	565	633	244	119	110	52	1	2	1,726
24 Diseases of the Stomach (Cancer excepted) ..	102	84	39	28	20	11	..	..	284
25 Diarrhœa and Enteritis (children under 2 years only) ..	581	323	183	120	74	18	..	..	1,299
26 Appendicitis & Typhlitis	115	59	36	11	13	11	..	..	245
27 Hernia, Intestinal Ob- struction ..	107	76	39	25	25	13	1	..	286
28 Cirrhosis of the Liver..	53	55	37	17	11	5	..	..	178
29 Nephritis and Bright's Disease ..	537	460	204	130	69	31	..	..	1,431
30 Non-cancerous Tumours and other Diseases of Female Genital Organs	..	..	..	..	..	..	..	..	..
31 Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis)	..	..	..	..	..	..	..	..	..
32 Other Puerperal Acci- dents of Pregnancy and Confinement ..	..	..	..	..	..	..	..	..	..
33 Congenital Debility and Malformations ..	912	676	307	189	119	100	..	..	2,303
34 Senile Debility ..	1,017	618	382	229	124	88	10	..	2,468
35 Violence ..	770	544	388	155	148	71	3	1	2,080
36 Suicide ..	180	106	88	50	51	14	3	..	492
37 Other Diseases ..	2,114	1,607	900	443	347	214	2	4	5,631
38 Unspecified or Ill-defined Diseases ..	171	116	40	61	42	15	5	..	450
Total—Males ..	11,969	9,135	4,699	2,727	1,907	1,140	35	10	31,622

CAUSES OF DEATH.—FEMALES, 1923.

Cause.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Aus-tralia.
1 Typhoid Fever ..	46	26	13	8	8	5	..	..	106
2 Typhus ..	..	..	..	..	..	..	..	..	..
3 Malaria ..	..	..	1	..	1	..	..	..	2
4 Small-pox ..	..	..	..	..	..	..	..	..	..
5 Measles ..	51	32	8	1	..	3	..	..	95
6 Scarletina ..	7	6	..	4	..	2	..	..	19
7 Whooping Cough ..	35	13	7	4	..	2	..	..	61
8 Diphtheria and Croup	64	41	19	24	10	15	..	..	173
9 Influenza ..	72	56	65	10	4	10	..	..	217
9A Pneumonic Influenza	125	122	82	17	10	11	..	..	367
10 Asiatic Cholera ..	..	..	..	..	..	..	..	..	..
11 Cholera Nostras ..	..	..	..	..	..	..	..	..	..
12 Other Epidemic Diseases	53	37	24	17	5	3	..	..	139
13 Tuberculosis of the Respiratory System	452	463	116	134	65	75	..	..	1,305
14 Tuberculosis of the Men- inges ..	23	33	3	6	4	6	..	..	75
15 Other forms of Tuber- culosis ..	31	47	3	17	2	7	..	..	107
16 Cancer and other Malignant Tumours ..	888	871	266	237	104	78	..	..	2,444
17 Meningitis ..	75	55	26	19	15	10	1	..	201
18 Hæmorrhage, Embolism, and Softening of Brain	534	562	167	170	58	70	..	..	1,561
19 Organic Diseases of the Heart ..	756	769	264	215	81	102	..	..	2,187
20 Acute Bronchitis ..	61	39	33	24	4	5	..	..	166
21 Chronic Bronchitis ..	141	152	39	51	10	14	..	..	407
22 Pneumonia ..	458	360	136	69	46	55	..	..	1,124
23 Other Diseases of the Respiratory System (Tuberculosis exceptd.)	439	435	124	83	53	41	..	..	1,175
24 Diseases of the Stomach (Cancer excepted) ..	54	46	27	12	13	8	..	..	160
25 Diarrhoea and Enteritis (children under 2 years only) ..	433	274	151	97	65	19	..	..	1,039
26 Appendicitis & Typhlitis	77	55	22	24	7	6	..	..	191
27 Hernia, Intestinal Ob- struction ..	78	71	33	20	11	9	..	..	222
28 Cirrhosis of the Liver..	30	39	15	3	5	3	..	..	95
29 Nephritis and Bright's Disease ..	356	383	178	60	31	21	..	..	1,029
30 Non-cancerous Tumours and other Diseases of Female Genital Organs	66	45	25	21	12	5	..	..	174
31 Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis)	103	54	34	22	12	8	..	..	233
32 Other Puerperal Acci- dents of Pregnancy and Confinement ..	203	93	93	35	20	14	..	..	458
33 Congenital Debility and Malformations ..	642	542	217	149	97	74	1	..	1,722
34 Senile Debility ..	801	756	253	219	73	115	..	..	2,217
35 Violence ..	221	154	101	61	31	26	..	..	594
36 Suicide ..	42	37	10	12	2	4	..	..	107
37 Other Diseases ..	1,581	1,327	623	366	148	155	1	..	4,201
38 Unspecified or Ill-defined Diseases ..	81	89	16	23	16	16	..	..	241
Total—Females ..	9,079	8,084	3,194	2,234	1,023	997	3	..	24,614

CAUSES OF DEATH.—PERSONS, 1923.

Cause.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	Fed. Cap. Ter.	Aus- tralia.
1 Typhoid Fever ..	98	54	46	13	18	13	..	..	242
2 Typhus ..	..	..	..	1	..	..	..	..	1
3 Malaria ..	3	2	12	1	2	..	1	..	21
4 Small-pox ..	..	..	..	..	..	..	..	..	..
5 Measles ..	120	81	13	1	1	6	..	..	222
6 Scarletina ..	12	20	2	8	..	3	..	..	45
7 Whooping Cough ..	72	20	12	9	4	2	..	..	119
8 Diphtheria and Croup ..	170	87	39	47	20	32	..	..	395
9 Influenza ..	150	105	136	23	12	15	..	..	441
9A Pneumonic Influenza ..	258	254	188	28	19	21	..	1	769
10 Asiatic Cholera ..	..	..	..	..	..	..	..	..	..
11 Cholera Nostras ..	..	2	..	..	..	1	..	..	3
12 Other Epidemic Diseases ..	102	82	57	32	11	7	..	..	291
13 Tuberculosis of the Respiratory System ..	1,103	1,037	353	323	215	135	5	..	3,171
14 Tuberculosis of the Men- inges ..	52	68	7	14	6	12	..	..	159
15 Other forms of Tuber- culosis ..	70	85	8	29	8	14	..	..	214
16 Cancer and other Malignant Tumours ..	1,850	1,635	664	491	265	166	2	..	5,073
17 Meningitis ..	193	146	60	34	33	21	1	..	488
18 Hæmorrhage, Embolism, and Softening of Brain ..	1,091	960	346	321	142	129	..	..	2,989
19 Organic Diseases of the Heart ..	1,715	1,597	638	457	251	234	..	1	4,893
20 Acute Bronchitis ..	146	80	58	42	11	14	..	..	351
21 Chronic Bronchitis ..	305	315	110	106	31	24	1	..	892
22 Pneumonia ..	1,107	832	335	197	132	121	1	1	2,726
23 Other Diseases of the Respiratory System (Tuberculosis exceptd.) ..	1,004	1,068	368	202	163	93	1	2	2,901
24 Diseases of the Stomach (Cancer excepted) ..	156	130	66	40	33	19	..	..	444
25 Diarrhœa and Enteritis (children under 2 years only) ..	1,014	597	334	217	139	37	..	..	2,338
26 Appendicitis & Typhlitis ..	192	114	58	35	20	17	..	..	436
27 Hernia, Intestinal Ob- struction ..	185	147	72	45	36	22	1	..	508
28 Cirrhosis of the Liver ..	83	94	52	20	16	8	..	..	273
29 Nephritis and Bright's Disease ..	893	843	382	190	100	52	..	..	2,460
30 Non-cancerous Tumours and other Diseases of Female Genital Organs ..	66	45	25	21	12	5	..	..	174
31 Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis) ..	103	54	34	22	12	8	..	..	233
32 Other Puerperal Acci- dents of Pregnancy and Confinement ..	203	93	93	35	20	14	..	..	458
33 Congenital Debility and Malformation ..	1,554	1,218	524	338	216	174	1	..	4,025
34 Senile Debility ..	1,818	1,374	635	448	197	203	10	..	4,685
35 Violence ..	991	698	489	216	179	97	3	1	2,674
36 Suicide ..	222	143	98	62	53	18	3	..	599
37 Other Diseases ..	3,695	2,934	1,523	809	495	369	3	4	9,832
38 Unspecified or Ill-defined Diseases ..	252	205	56	84	58	31	5	..	691
Total—Persons ..	21,048	17,219	7,893	4,961	2,930	2,137	38	10	56,236

The classification for the years 1919 to 1923 is shown for Australia in the following table, and for purposes of comparison the figures for the year 1923 have been repeated from the preceding table. Male and female deaths for 1919 are shown on pages 188 and 189 of the thirteenth issue, for 1920 on pages 129 and 130 of the fourteenth issue, for 1921 on pages 122 and 123 of the fifteenth issue, and for 1922 on pages 1001 and 1002 of the sixteenth issue of this book.

CAUSES OF DEATH.—AUSTRALIA, 1919 TO 1923.

PERSONS.

Cause.	1919.	1920.	1921.	1922.	1923.
1 Typhoid Fever	272	312	352	227	242
2 Typhus .. .. .	..	..	..	..	1
3 Malaria	34	19	43	21	21
4 Small-pox .. .. .	..	..	2	2	..
5 Measles	51	482	83	28	222
6 Scarletina	69	90	42	38	45
7 Whooping Cough	211	561	428	182	119
8 Diphtheria and Croup	581	829	917	543	395
9 Influenza	1,289	230	308	162	441
9A Pneumonic Influenza	10,263	218	346	193	769
10 Asiatic Cholera .. .. .	..	..	..	..	..
11 Cholera Nostras	1	1	2	1	3
12 Other Epidemic Diseases	157	124	232	244	291
13 Tuberculosis of the Respiratory System (a)	3,479	3,098	3,205	2,957	3,171
14 Tuberculosis of the Meninges	188	214	218	176	159
15 Other forms of Tuberculosis	281	295	264	264	214
16 Cancer and other Malignant Tumours	4,421	4,511	4,768	5,052	5,073
17 Meningitis	481	596	558	518	488
18 Hæmorrhage, Embolism, and Softening of the Brain	2,467	2,495	2,472	2,833	2,989
19 Organic Diseases of the Heart	5,864	5,370	5,166	5,158	4,893
20 Acute Bronchitis	420	398	386	283	351
21 Chronic Bronchitis	1,047	962	816	796	892
22 Pneumonia	2,656	2,099	2,066	2,151	2,726
23 Other Diseases of the Respiratory System (Tuberculosis excepted)	2,413	2,527	2,304	2,208	2,901
24 Diseases of the Stomach (Cancer excepted)	478	443	439	467	444
25 Diarrhoea and Enteritis (Children under two years only)	2,520	3,067	2,589	1,743	2,338
26 Appendicitis and Typhilitis	352	882	351	402	436
27 Hernia, Intestinal Obstruction	530	541	480	545	508
28 Cirrhosis of the Liver	315	340	323	323	273
29 Nephritis and Bright's Disease	2,221	2,286	2,139	2,333	2,460
30 Non-cancerous Tumours and other Diseases of the Female Genital Organs	132	154	166	169	174
31 Puerperal Septicæmia (Puerperal Fever, Peritonitis, Phlebitis)	166	250	208	196	233
32 Other Puerperal Accidents of Pregnancy and Confinement	404	433	435	425	458
33 Congenital Debility, etc.	3,885	4,046	3,758	3,521	4,025
34 Senile Debility	4,840	4,636	3,981	4,044	4,685
35 Violence	2,799	2,791	2,892	2,590	2,674
36 Suicide	546	636	621	533	599
37 Other Diseases	9,390	10,048	9,995	9,318	9,832
38 Unspecified or Ill-defined Diseases	707	805	721	665	691
Total	65,930	56,289	54,076	51,311	56,236

(a) Includes acute disseminated tuberculosis.

15. Deaths from Special Causes.—The above table furnishes comparisons for the last five years only, and comparisons will, therefore, generally be restricted to that period.

(i) *Typhoid Fever*. The number of deaths from typhoid fever in 1923 was 242, which was equivalent to 4 per hundred thousand living. This rate, though lower than the average for the five years, was higher than in 1922, when it varied from 8 per hundred thousand persons living in Western Australia to 2 in Victoria.

(ii) *Typhus*. One death from typhus, which occurred in South Australia, was registered for the year 1923.

(iii) *Malaria*. Deaths from malarial diseases are mainly confined to the tropical districts of Northern Queensland and Western Australia, and to the Northern Territory; 12 out of the 21 deaths registered in 1923 occurred in Queensland, 3 in New South Wales, 2 in Victoria, 2 in Western Australia, and 1 each in South Australia and the Northern Territory.

(iv) *Small-pox*. The number of deaths from small-pox in Australia is very small, four deaths only resulting in the five years under review.

(v) *Measles*. Of the deaths from measles the greatest number occurred during 1920, when 482 were registered, while the minimum was in 1922 with a total of 28 deaths. During 1923 there were 222 deaths from measles, of which 127 were males and 95 females; of these, 120 were registered in New South Wales, 81 in Victoria, 13 in Queensland, 6 in Tasmania, and 1 each in South and Western Australia.

(vi) *Scarlatina*. The mortality from this source is very light, the average of deaths from 1919 to 1923 being 57 per annum.

(vii) *Whooping Cough*. In 1920 the number of deaths was 561, the highest number registered in the period 1919 to 1923. In 1923 there were 119 deaths, equal to a death rate of 2 per 100,000 persons. Seventy-two deaths occurred in New South Wales, 20 in Victoria, 12 in Queensland, 9 in South Australia, 4 in Western Australia, and 2 in Tasmania.

(viii) *Diphtheria and Croup*. The number of deaths due to diphtheria and croup has varied from a minimum of 395 in 1923 to a maximum of 917 in 1921. Of the 395 registered in 1923, 382 were attributed to diphtheria, which gives a death rate of 7 per 100,000 of population. The corresponding rates for the separate States were—Victoria, Queensland, and Western Australia, 5; New South Wales, 8; South Australia, 9; and Tasmania, 14.

(ix) *Influenza*. The deaths from influenza during 1923 were more numerous than in any year since the extraordinary epidemic of 1919. In 1923, there were 1,210 deaths from this disease, representing a rate of 21 per 100,000. Of these deaths, 441 were ascribed to ordinary influenza, and 769 to pneumonic influenza.

(x) *Asiatic Cholera*. No deaths from Asiatic cholera have been recorded in Australia.

(xi) *Cholera Nostras*. For the five years under review only eight deaths have been due to this cause.

(xii) *Other Epidemic Diseases*. The deaths registered under this heading numbered 291 in 1923. The list in 1923 includes the following diseases:—Dysentery 114, erysipelas 75, lethargic encephalitis 57, acute poliomyelitis 30, leprosy 8, plague 1, and other epidemic diseases 6. There were no deaths from plague in the years 1919 and 1920. Outbreaks occurred in 1921 and 1922, causing 61 deaths in Queensland and 10 in New South Wales.

(xiii) *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.

Including a small number of deaths from acute disseminated tuberculosis, there were 3,171 deaths from tuberculosis of the respiratory system in 1923, which compares favourably with the average of 3,185 for the preceding four years. The 3,171 deaths in 1923 represented a rate of about 56 per 100,000 persons. Of these deaths, 1,866 were males and 1,305 females.

(xiv) *Tuberculosis of the Meninges*. The number of deaths ascribed to this cause has varied very slightly during the last five years. The greatest number, viz., 218, occurred in 1921, and the least number, viz., 159, in 1923.

(xv) *Other Forms of Tuberculosis.* The deaths in 1923 include the following:—Tuberculosis of the intestines and peritoneum, 77; tuberculosis of the spinal column, 43; tuberculosis of the joints, 29; tuberculosis of other organs, 30; and chronic disseminated tuberculosis, 40.

(xva) *All Forms of Tuberculosis.*—(a) *General.* A complete tabulation of all the different tubercular diseases from which deaths occurred in 1923 will be found in Bulletin No. 41 of "Australian Demography." The total number of deaths due to tubercular diseases was 3,544, viz., 2,057 males and 1,487 females.

(b) *Ages at Death.* The following table shows the ages of these 3,544 persons:—

TUBERCULAR DISEASES.—DEATHS IN AGE-GROUPS, AUSTRALIA, 1923.

Ages.	Male.	Female.	Total.	Ages.	Male.	Female.	Total.
Under 5 years ..	74	60	134	55 years and under 60	147	64	211
5 years and under 10	23	24	47	60 " " 65	137	38	175
10 " " 15	15	35	50	65 " " 70	79	28	107
15 " " 20	68	125	193	70 " " 75	38	19	57
20 " " 25	150	209	359	75 " " 80	11	9	20
25 " " 30	211	235	446	80 " " over ..	6	4	10
30 " " 35	212	194	406	Unspecified ..	7	..	7
35 " " 40	223	172	395				
40 " " 45	254	100	354				
45 " " 50	206	103	309				
50 " " 55	196	68	264	Total ..	2,057	1,487	3,544

(c) *Occupations at Death, Males.* A tabulation has been made of the occupations of males dying from tubercular diseases during 1923. A summary is given hereunder:—

OCCUPATIONS OF MALES WHO DIED FROM TUBERCULAR DISEASES.—AUSTRALIA, 1923.

Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
PROFESSIONAL CLASS—		INDUSTRIAL CLASS—	
Government, Defence, Law ..	63	Art and Mechanic Productions	98
Others	51	Textiles and Fibrous Materials	50
DOMESTIC CLASS—		Food and Drinks	29
Board and Lodging	38	Animal and Vegetable Sub-	
Others	26	stances	5
COMMERCIAL CLASS—		Metals and Minerals	53
Property and Finance	20	Fuel, Light and Energy	11
Art, Mechanic and Textile Pro-		Building and Construction ..	99
ducts	30	Others	409
Food and Drinks	42	AGRICULTURAL, PASTORAL,	
Animal and Vegetable Sub-		MINING, ETC., CLASS—	
stances	9	Agricultural	142
Fuel, Light and Metals	12	Pastoral	43
Merchants and Dealers	45	Mining and Quarrying	189
Others	151	Others	8
TRANSPORT AND COMMUNICATION		INDEPENDENT MEANS	16
CLASS—		DEPENDENTS	158
Railway Traffic	44	OCCUPATION NOT STATED	74
Road and Tramway Traffic ..	79	TOTAL MALE DEATHS	2,057
Sea and River Traffic	43		
Others	20		

(d) *Length of Residence in Australia.* The length of residence in Australia of persons who died from tubercular diseases in 1923 is given in the next table :—

**LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED FROM
TUBERCULAR DISEASES, 1923.**

Length of Residence in Australia.	Male.	Fem.	Total.	Length of Residence in Australia.	Male.	Fem.	Total.
Born in Australia ..	1,519	1,264	2,783	Resident 10 years & under 15	108	46	154
Resident under 1 year ..	10	7	17	" 15 " " 20	26	12	38
" 1 year ..	9	4	13	" 20 " " over ..	245	84	329
" 2 years ..	10	7	17	Length of residence not stated	91	24	115
" 3 " ..	5	8	13				
" 4 " ..	5	7	12				
" 5 " and under 10	29	24	53	Total Deaths ..	2,057	1,487	3,544

(e) *Death Rates.* The preceding table and the table on page 994 show that, among persons who had lived less than five years in Australia, 581 deaths occurred, and of these 72, or 12.4 per cent., were due to tubercular diseases.

In order to show the prevalence of tuberculosis in the several States, the death rates from tubercular diseases 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, 1923.**

State.	Death Rates (a) from Tuberculosis.			Proportion per 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales ..	64	47	56	601	557	582
Victoria ..	81	67	74	709	672	691
Queensland ..	58	32	46	524	382	466
South Australia ..	80	61	71	767	703	738
Western Australia ..	85	44	66	829	694	782
Tasmania ..	68	82	75	640	883	753
Northern Territory ..	194	..	139	1,429	..	1,316
Australia ..	71	53	62	651	604	630

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

(f) *Death Rates, Various Countries.* The following table, which gives for a number of countries the death rates from tuberculosis of the respiratory system per 100,000 persons living, shows that Australia occupies a very favourable position in comparison with other countries :—

**TUBERCULOSIS OF THE RESPIRATORY SYSTEM.—DEATHS PER 100,000
PERSONS LIVING, VARIOUS COUNTRIES.**

Country.	Year.	Death Rate.	Country.	Year.	Death Rate.
Rumania	1914	40	Irish Free State ..	1922	117
Union of South Africa (Whites)	1921	46	Denmark	1921	120
New Zealand	1923	49	Northern Ireland ..	1922	126
Australia	1923	56	Prussia	1922	135
Canada (exclusive of Quebec)	1921	61	Italy	1917	146
Ontario (Canada) ..	1922	66	Jamaica	1915	147
Ceylon	1922	68	Japan	1922	148
Scotland	1922	83	Germany	1920	152
Belgium	1921	86	Spain	1921	158
Netherlands	1922	86	Sweden	1918	176
England and Wales ..	1922	90	Switzerland	1920	180
Great Britain	1922	90	Norway	1918	194
United States (Regis- tration Area) (a) ..	1922	97	France	1917	215
Quebec (Canada) ..	1921	102	Austria	1921	227
			Finland	1918	258
			Chile	1914	255
			Hungary	1915	354

(a) All forms of tuberculosis.

(xvi) *Cancer and other Malignant Tumours.*—(a) *General.* The number of deaths from cancer has increased continuously to 5,073 in 1923. Of the deaths registered in 1923, 2,629 were of males, viz., 962 in New South Wales, 764 in Victoria, 398 in Queensland, 254 in South Australia, 161 in Western Australia, 88 in Tasmania, and 2 in the Northern Territory; while 2,444 were of females, viz., 888 in New South Wales, 871 in Victoria, 266 in Queensland, 237 in South Australia, 104 in Western Australia, and 78 in Tasmania. Bulletin No. 41 of "Australian Demography" contains a complete tabulation of the various types of cancer and of the seat of the disease.

(b) *Type and Seat of Disease.* Tables showing the type and seat of disease, in conjunction with age, and also with conjugal condition, of the persons dying from cancer in 1923 will be found in Bulletin No. 41 of "Australian Demography." A summary showing type and seat of disease for the year 1923 is given hereunder:—

DEATHS FROM CANCER.—TYPE AND SEAT OF DISEASE, AUSTRALIA, 1923.

Type of Disease.	Males.	Females	Persons	Seat of Disease.	Males.	Females	Persons
Carcinoma	1,432	1,429	2,861	Stomach and liver ..	1,134	697	1,831
Cancer	525	476	1,001	Other organs	709	357	1,066
Malignant disease ..	267	302	569	Peritoneum, intes- tines and rectum ..	356	391	747
Sarcoma	170	106	276	Female genital organs .. ..	..	468	468
Epithelioma	159	61	220	Breast .. ..	..	426	426
Rodent ulcer	46	16	62	Buccal cavity	298	44	342
Malignant tumour ..	22	26	48	Skin	132	61	193
Neoplasm	3	13	16				
Scirrhus	1	13	14				
Hypernephroma	4	2	6				
Total Deaths	2,629	2,444	5,073	Total Deaths	2,629	2,444	5,073

(c) *Ages at Death.* The ages of the 5,073 persons who died from cancer in 1923 are given in the following table, which shows that while the ages below 35 are not by any means immune from the disease, the great majority of deaths occurred at ages from 35 upwards, the maximum being found in the age-group 60 to 65 :—

DEATHS FROM CANCER.—AGES, AUSTRALIA, 1923.

Ages.	Male.	Female.	Total.	Ages.	Male.	Female.	Total.
Under 15 years ..	21	12	33	60 years and under 65	447	372	819
15 years and under 20	7	4	11	65 " " 70	505	312	817
20 " " 25	9	5	14	70 " " 75	335	254	589
25 " " 30	15	12	27	75 " " 80	232	209	441
30 " " 35	27	33	60	80 " " 85	129	107	236
35 " " 40	41	87	128	85 years and over	63	60	123
40 " " 45	80	155	235	Unspecified ..	7	2	9
45 " " 50	131	230	361				
50 " " 55	220	281	501				
55 " " 60	360	309	669	Total Deaths ..	2,629	2,444	5,073

(d) *Occupations.* A summarized tabulation of the occupation of males who died from cancer is given hereunder :—

DEATHS FROM CANCER.—OCCUPATIONS (MALES), AUSTRALIA, 1923.

Class of Occupation.	No. of Male Deaths.	Class of Occupation.	No. of Male Deaths.
Professional	147	Agricultural, Pastoral, Mining, etc.	625
Domestic	91	Independent Means ..	57
Commercial	310	Dependents	31
Transport and Communication	172	Occupation not specified	125
Industrial	1,071		
		Total Male Deaths ..	2,629

(e) *Death Rates.* The following table shows that with the exception of Victoria the death rate for males is higher than that for females in every State :—

DEATHS FROM CANCER.—RATES (a) AND PROPORTIONS, 1923.

State.	Death Rates (a) from Cancer.			Proportion of 10,000 Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	86	83	84	804	978	879
Victoria	96	107	102	836	1,078	959
Queensland	94	70	83	847	833	841
South Australia	98	92	95	931	1,061	990
Western Australia	86	64	76	844	1,017	905
Tasmania	81	73	77	772	782	777
Northern Territory	78	..	55	571	..	526
Australia	91	88	89	832	993	903

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

(f) *Comparison with Tuberculosis.* In recent years the death rate from tuberculosis has shown a tendency to decrease, while that for cancer has displayed an almost continuous increase. The table hereunder shows that for each of the years under review, the death rate for cancer has been greater than that for tuberculosis, the excess varying from 9 per 100,000 persons in 1919 to 30 in 1922. Taking the sexes separately, however, the rate for males for tuberculosis exceeded that for cancer in 1919. During the whole period the mortality of females from cancer was always greater than that from tuberculosis.

TUBERCULOSIS AND CANCER.—DEATH RATES (a), AUSTRALIA, 1919 TO 1923.

Year.	Death Rate (a) from Tuberculosis.			Death Rate (a) from Cancer.		
	Males.	Females.	Total.	Males.	Females.	Total.
1919	90	62	76	88	82	85
1920	79	55	67	86	82	84
1921	78	56	68	88	87	87
1922	71	51	61	93	88	91
1923	71	53	62	91	88	89

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

(g) *Deaths, 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.
Ceylon	1922	10	United States (Registration Area) ..	1922	87
Rumania	1914	13	New Zealand	1923	88
Serbia	1911	14	Ontario, Canada ..	1922	88
Jamaica	1915	17	Prussia	1921	89
Chile	1914	36	Australia	1923	89
Hungary	1915	48	Germany	1920	95
Quebec (Canada) ..	1921	56	Northern Ireland ..	1922	99
Union of South Africa (Whites)	1921	60	Sweden	1918	104
Spain	1921	60	Netherlands	1922	112
Italy	1917	68	Great Britain	1922	123
Japan	1922	69	England and Wales ..	1922	123
Canada (exclusive of Quebec)	1921	75	Norway	1918	124
France	1917	75	Scotland	1922	125
Belgium	1921	79	Switzerland	1920	126
Irish Free State ..	1922	80	Austria	1921	128
			Denmark	1921	154

The fifth issue of this Year Book contains on pages 230, *et seq.*, a paper dealing, *inter alia*, with the incidence of cancer in Australia.

(xvii) *Meningitis.* The deaths during 1923 from cerebro-spinal meningitis numbered 50, and from all other forms of meningitis 438. Of the former, 21 occurred in New South Wales, 11 in Victoria, 12 in Queensland, 3 in South Australia, 1 in Western Australia, and 2 in Tasmania.

(xviii) *Cerebral Hæmorrhage, Embolism and Softening of the Brain.* The deaths under this heading have been remarkably uniform in number during the period under review. The figures for 1923 are made up as follows:—Cerebral hæmorrhage and apoplexy, 1,201 males and 1,276 females; cerebral embolism, 179 males, 249 females; softening of the brain, 48 males and 36 females.

(xix) *Organic Diseases of the Heart.* The number of deaths in 1923 was 4,893, viz., 2,706 males and 2,187 females. Of these deaths, New South Wales contributed 959 males and 756 females; Victoria, 828 males and 769 females; Queensland, 374 males and 264 females; South Australia, 242 males and 215 females; Western Australia, 170 males and 81 females; Tasmania, 132 males and 102 females; and Federal Capital Territory, 1 male. The death rates and proportions per 10,000 deaths in 1923 were as follows:—

DEATH RATES (a) FROM ORGANIC HEART DISEASE AND PROPORTION OF 10,000 TOTAL DEATHS, AUSTRALIA, 1923.

State.	Death Rates (a) from Organic Heart Disease.			Proportion of 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	86	70	78	801	833	815
Victoria	104	95	99	907	951	928
Queensland	88	70	80	796	827	808
South Australia	93	84	88	890	963	921
Western Australia	91	50	72	892	792	857
Tasmania	122	95	109	1,158	1,023	1,095
Federal Capital Territory ..	48	..	30	1,000	..	1,000
Australia	93	78	86	856	889	870

(a) Number of deaths from Organic Heart Disease per 100,000 of mean population.

(xx) *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 is credited with 420 deaths in 1919, 398 in 1920, 386 in 1921, 283 in 1922, and 351 in 1923, viz., 185 males and 166 females.

(xxi) *Chronic Bronchitis.* The deaths from this cause in 1923 numbered 892, viz., 485 males and 407 females.

(xxii) *Pneumonia.* The deaths from pneumonia during 1923 were 2,901, showing an increase of 658, or 29.3 per cent., over the average for the previous four years.

(xxiii) *Other Diseases of the Respiratory System.* This heading was established in 1910, the figures previously being included in "Other Diseases" (No. xxxvii). Deaths in 1919 numbered 2,413; in 1920, 2,527; in 1921, 2,304; in 1922, 2,208; and in 1923, 2,901. The total for 1923 is made up as follows, viz.:—Diseases of the nasal fossae, 4; diseases of the larynx, 50; broncho-pneumonia, 1,604; capillary bronchitis, 27; pleurisy,

229; pulmonary congestion and apoplexy, 320; gangrene of the lungs, 21; asthma, 244; pulmonary emphysema, 24; chronic interstitial pneumonia, 344; other diseases of the respiratory system (tuberculosis excepted), 34.

(xxiv) *Diseases of the Stomach (Cancer excepted)*. In 1923 this heading includes ulcer of the stomach, 103 males, 45 females; ulcer of the duodenum, 52 males, 20 females; and other diseases of the stomach (cancer excepted), 129 males, 95 females; a total of 444.

(xxv) *Diarrhœa and Enteritis (Children under two years only)*. The number of deaths due to these causes is always a large one, varying from 1,743 in 1922 to a maximum of 3,067 in 1920. The total for 1923 was 2,338. During 1923, 9,635 children died before reaching their second birthday, and of these, 2,338, or 24.3 per cent., died from diarrhœa and enteritis. The age distribution of children dying from these diseases during the first year of life will be found on page 1025.

The number of deaths, the death rates, and proportions of 10,000 deaths due to infantile diarrhœa and enteritis are given below :—

**DEATHS, DEATH RATES (a), ETC., INFANTILE DIARRHŒA AND ENTERITIS.—
AUSTRALIA, 1923.**

State.	Number of Deaths from Infantile Diarrhœa and Enteritis.			Death Rates (a) from Infantile Diarrhœa and Enteritis.			Proportions of Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	581	433	1,014	52	40	46	485	477	482
Victoria ..	323	274	597	40	34	37	354	339	347
Queensland ..	183	151	334	43	40	42	389	473	423
South Australia ..	120	97	217	46	38	42	440	434	437
Western Australia	74	65	139	40	40	40	388	635	474
Tasmania ..	18	19	37	17	18	17	158	191	173
Australia ..	1,299	1,039	2,338	45	37	41	411	422	466

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

(xxvi) *Appendicitis and Typhlitis*. Deaths under this heading numbered 352 in 1919, 382 in 1920, 351 in 1921, 402 in 1922, and 436 in 1923; the total for the last year included 245 males and 191 females.

(xxvii) *Hernia, Intestinal Obstruction*. The deaths under this heading have not varied greatly from year to year, the number registered in 1923 being 508, viz., hernia 140, and intestinal obstruction, 368.

(xxviii) *Cirrhosis of the Liver*. The deaths from this cause during 1923 numbered 273, showing a decrease of 52, or 15.6 per cent., on the average for the previous four years.

(xxix) *Nephritis and Bright's Disease*. The number of deaths attributable to these diseases from year to year is very large. In 1919 there were 2,221; in 1920, 2,286; in 1921, 2,139; in 1922, 2,333; and in 1923, 2,460; viz., 1,431 males and 1,029 females

Of the deaths registered in 1923, 219 were ascribed to acute nephritis, and 2,241 to Bright's disease. New South Wales was responsible for 893 deaths; Victoria for 843; Queensland for 382; South Australia for 190; Western Australia for 100; and Tasmania for 52.

(xxx) *Non-Cancerous Tumours and other Diseases of the Female Genital Organs.* Deaths in 1919 numbered 132; in 1920, 154; in 1921, 166; in 1922, 169; and in 1923, 174. Included in the 174 deaths in 1923 were the following:—Cysts, etc., of the ovary, 27; salpingitis and pelvic abscess, 44; benign tumours of the uterus, 57; uterine hæmorrhage (non-puerperal), 7; other diseases of the female genital organs, 39.

(xxxi) *Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis).* The number of deaths varied from a maximum of 250 in 1920 to a minimum of 166 in 1919. In 1923 there were 233 deaths

(xxxii) *Other Puerperal Accidents of Pregnancy and Confinement.* The deaths under this heading in 1919 numbered 404; in 1920, 433; in 1921, 435; in 1922, 425; and in 1923, 458. Included in the 458 deaths in 1923 were the following:—Accidents of pregnancy, 87; puerperal hæmorrhage, 72; other accidents of childbirth, 78; puerperal albuminuria and convulsions, 149; puerperal phlegmasia alba dolens, embolus, sudden death, 64; death following childbirth, 8.

(xxxiii) *All Puerperal Causes.* The 691 deaths in 1923 under the two preceding headings correspond to a death rate of 25 per 100,000 females. It may be expressed in other terms by stating that 1 out of every 194 women confined in 1923 died from puerperal causes. The corresponding ratios for married women were 1 out of every 201 married women, and for single women 1 out of every 113. More detailed information will be found in a series of tables in Bulletin No. 41, "Australian Demography."

The ages of the mothers who died varied from 14 to 48 years as shown in the following table:—

DEATHS FROM PUERPERAL CAUSES.—AGES OF MOTHERS, AUSTRALIA, 1923.

Age at Death.	Married Women.	Single Women.	Total.	Age at Death.	Married Women.	Single Women.	Total.
14 years ..	..	2	2	32 years ..	30	1	31
15 " ..	..	1	1	33 " ..	38	..	38
16 " ..	..	4	4	34 " ..	31	..	31
17 " ..	2	2	4	35 " ..	36	..	36
18 " ..	4	5	9	36 " ..	31	1	32
19 " ..	4	4	8	37 " ..	18	..	18
20 " ..	13	3	16	38 " ..	33	..	33
21 " ..	20	3	23	39 " ..	34	..	34
22 " ..	16	1	17	40 " ..	26	..	26
23 " ..	23	4	27	41 " ..	12	..	12
24 " ..	24	5	29	42 " ..	9	..	9
25 " ..	20	5	25	43 " ..	8	..	8
26 " ..	37	4	41	44 " ..	2	..	2
27 " ..	27	1	28	45 " ..	4	..	4
28 " ..	35	2	37	46 " ..	1	..	1
29 " ..	35	3	38	48 " ..	1	..	1
30 " ..	26	2	28				
31 " ..	36	2	38	Total Deaths	636	55	691

The total number of children left by the married mothers was 1,666, an average of 2.6 children per mother.

Thirty-four of the mothers who died had been married less than one year, 105 between one and two years, and 64 between two and three years. The duration of marriage ranged up to 27 years, apart from 11 cases in which the date of marriage was not stated. A tabulation, distinguishing the ages at marriage, will be found in Bulletin No. 41, "Australian Demography," which also gives a table showing in combination the duration of marriage and previous issue.

(xxxiii) *Congenital Debility, Premature Birth, and Malformations.* The deaths under this heading in 1923 numbered 4,025, of which 3,962 were of children under one year of age. Over 48 per cent. of the deaths of children under one year of age are due to these causes. Returns for 1923 are given in the following table:—

DEATHS FROM CONGENITAL DEBILITY, ETC., AND MALFORMATIONS, 1923.

State.	Congenital Malformations.			Premature Birth, and Injury at Birth.			Congenital Debility, Icterus, Sclerema.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	132	86	218	583	400	983	197	156	353
Victoria ..	97	79	176	398	321	719	181	142	323
Queensland ..	48	36	84	177	134	311	82	47	129
South Australia	39	28	67	100	82	182	50	39	89
Western Australia	20	20	40	67	64	131	32	13	45
Tasmania ..	20	12	32	53	43	96	27	19	46
North'n Territory	..	..	..	..	..	..	..	1	1
Australia ..	356	261	617	1,378	1,044	2,422	569	417	986
Number of deaths under one year per 1,000 births	4.66	3.52	4.10	19.87	15.84	17.91	8.20	6.33	7.29

(xxxiv) *Senile Debility.* The deaths ascribed to "old age" form a large group, and are in excess of those due to infantile debility. In 1923, 4,685 deaths were attributed to this cause, as follows: 1,818 occurred in New South Wales, viz., 1,017 males and 801 females; 1,374 in Victoria, viz., 618 males and 756 females; 635 in Queensland, viz., 382 males and 253 females; 448 in South Australia, viz., 229 males and 219 females; 197 in Western Australia, viz., 124 males and 73 females; 203 in Tasmania, viz., 88 males and 115 females; and 10 males in the Northern Territory.

Of the males whose deaths were described as due to senility, ten were between 55 and 59 years of age, and seven were stated to be over 100. Of the females, two were between 55 and 60, and nine were 100 or over.

(xxxv) *Violence.* A very large number of deaths is due every year to external violence, and, as may be expected, male deaths largely predominate. The figures quoted are exclusive of suicides, which have been treated in a separate group. Deaths ascribed to violence numbered in 1919, 2,799, viz., 2,161 males and 638 females; in 1920, 2,791,

viz., 2,159 males and 632 females; in 1921, 2,892, viz., 2,301 males and 591 females; in 1922, 2,590, viz., 2,016 males and 574 females; and in 1923, 2,674, viz., 2,080 males and 594 females. Of the deaths in 1923, 770 males and 221 females died in New South Wales; 544 males and 154 females in Victoria; 388 males and 101 females in Queensland; 155 males and 61 females in South Australia; 148 males and 31 females in Western Australia; 71 males and 26 females in Tasmania; 3 males in the Northern Territory; and 1 male in the Federal Capital Territory.

The following table shows the various kinds of violent deaths which occurred in 1923, distinguishing males and females :—

DEATHS FROM EXTERNAL VIOLENCE.—AUSTRALIA, 1923.

Cause of Death.	Males.	Females.	Persons.
Poisoning by food	11	6	17
Venomous bites and stings	6	..	6
Other acute poisonings (gas excepted)	29	10	39
Conflagration	6	2	8
Burns (conflagration excepted)	122	173	295
Accidental mechanical suffocation	33	13	46
Absorption of irrespirable or poisonous gas	4	4	8
Accidental drowning	387	88	475
Traumatism by firearms	64	10	74
Traumatism by cutting or piercing instruments	4	2	6
Traumatism by fall	285	59	344
Traumatism in mines or quarries	66	..	66
Traumatism by machines	34	1	35
Traumatism by other crushing (vehicles, railways, etc.)	618	94	712
Injuries by animals (not poisoning)	29	9	38
Wounds of war	16	..	16
Starvation, thirst, fatigue	33	4	37
Excessive cold	2	1	3
Effects of heat	26	10	36
Lightning	8	1	9
Other accidental electric shocks	18	1	19
Homicide by firearms	10	6	16
Homicide by cutting or piercing instruments	3	2	5
Homicide by other means	30	26	56
Infanticide (murder of children under 1 year)	2	13	15
Fractures (cause not specified)	83	34	117
Other external violence (cause specified)	74	11	85
Other external violence (cause unspecified)	77	14	91
Total Deaths	2,080	594	2,674
Death Rate per 100,000 of mean population	72	21	47

In every kind of violent death, with the exception of burns and infanticide, there was, therefore, an excess of males.

(xxxvi) *Suicide.* (a) *General.* Deaths by suicide have remained fairly stationary during recent years, the number in 1919 being 546, viz., 440 males and 106 females; in 1920, 636, viz., 516 males and 120 females; in 1921, 621, viz., 510 males and 111 females; in 1922, 533, viz., 441 males and 92 females; and in 1923, 599, viz., 492 males and 107 females.

(b) *Modes Adopted.* The modes adopted by persons who committed suicide in the years 1919 to 1923 were as follows :—

SUICIDES, MODES ADOPTED.—AUSTRALIA, 1919 TO 1923.

Mode of Death.	Males.		Females.		Persons.	
	Total of 4 years. 1919-22.	1923.	Total of 4 years 1919-22.	1923.	Total of 4 years 1919-22.	1923.
Poisoning	365	115	200	43	565	158
Poisonous gas	15	6	4	8	19	14
Hanging or Strangulation	262	75	62	10	324	85
Drowning	152	51	74	24	226	75
Firearms	626	141	25	7	651	148
Cutting or piercing instruments	391	76	30	8	421	84
Jumping from a high place	20	10	16	3	36	13
Crushing	41	8	8	4	49	12
Other Modes	35	10	10	..	45	10
Total	1,907	492	429	107	2,336	599

(c) *Death Rates.* The death rates from suicide and the proportion per 10,000 of total deaths are given in the following table :—

SUICIDE—DEATHS, DEATH RATES (a), AND PROPORTION OF TOTAL DEATHS, 1923.

State.	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	180	42	222	16	4	10	154	46	105
Victoria	106	37	143	13	5	9	116	46	83
Queensland	88	10	98	21	3	12	187	31	124
South Australia	50	12	62	19	5	12	183	54	125
Western Australia	51	2	53	27	1	15	267	20	181
Tasmania	14	4	18	13	4	8	123	40	84
Northern Terr.	3	..	3	116	..	83	857	..	790
Australia	492	107	599	17	4	10	156	44	107

(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 1923, it will be seen that both extreme youth and extreme old age are represented :—

AGES OF PERSONS WHO COMMITTED SUICIDE.—AUSTRALIA, 1923.

Ages.	M.	F.	Total.	Ages.	M.	F.	Total.
10 years and under 15	3	..	3	60 years and under 65	41	8	49
15 " " 20	12	7	19	65 " " 70	35	6	41
20 " " 25	19	4	23	70 " " 75	18	..	18
25 " " 30	41	10	51	75 " " 80	8	..	8
30 " " 35	55	20	75	80 " " 85	6	..	6
35 " " 40	50	10	60	Not stated	7	..	7
40 " " 45	62	12	74				
45 " " 50	46	7	53				
50 " " 55	44	13	57				
55 " " 60	45	10	55	Total Deaths ..	492	107	599

(e) *Occupations of Males.* The following table gives the occupations of the 492 males who committed suicide in 1923 :—

OCCUPATIONS OF MALES WHO COMMITTED SUICIDE.—AUSTRALIA, 1923.

Occupation.	Deaths.	Occupation.	Deaths.
PROFESSIONAL CLASS—		INDUSTRIAL CLASS—	
Government, Defence, Law ..	10	Art and Mechanic Productions ..	22
Others	15	Textiles and Fibrous Materials ..	13
DOMESTIC CLASS—		Food and Drink	5
Board and Lodging	10	Animal and Vegetable Sub-	
Others	2	stances	2
COMMERCIAL CLASS—		Metals and Minerals	9
Property and Finance	7	Building and Construction ..	22
Art, Mechanic and Textile		Others	119
Products	4	AGRICULTURAL, PASTORAL,	
Food and Drinks	18	MINING, ETC., PURSUITS—	
Animal and Vegetable Sub-		Agricultural	75
stances	4	Pastoral	15
Merchants and Dealers ..	17	Mining and Quarrying ..	17
Others	32	Others	4
TRANSPORT AND COMMUNICATION		INDEPENDENT MEANS	2
CLASS—		DEPENDENTS	5
Railways	7	OCCUPATION NOT STATED ..	25
Roads and Trams	19		
Seas and Rivers	9		
Others	3	Total Male Deaths ..	492

(f) *Frequency.* It has been said that suicide has become more frequent during recent years, but an examination of the figures from the year 1871 onwards shows that the assertion needs qualification. The absolute figures have certainly increased, but proportionately to the population the figures for 1916–20, and 1921 to 1923 were less than those for 1886–90 and 1891–95. The figures for the five years 1911–15, showed, however, an increase, not only absolutely, but in proportion to the population. The rate of 131.17 suicides per million persons living was the highest of any quinquennium for which figures are obtainable. The five years 1916–1920 show lower figures and percentages than the average of the previous thirty years. No particulars are available for Western Australia prior to 1886, and from 1886 to 1895 the sexes are not distinguished. The figures for the first five periods are, therefore, exclusive of Western Australia :—

SUICIDES.—AUSTRALIA, 1871–75 TO 1923.

Period.	Number of Suicides.			Suicides per One Million of Persons Living. Average Annual Rate.			Suicides of Females to 100 Suicides of Males. Based on—	
	Males.	Females.	Persons.	Males.	Females.	Persons.	Absolute Figures.	Rates.
1871–75 ..	715	150	865	150.94	37.56	99.07	20.98	24.88
1876–80 ..	878	145	1,023	159.69	31.06	100.62	16.51	19.45
1881–85 ..	999	183	1,182	152.58	32.90	97.61	18.32	21.56
1886–90 ..	1,394	292	(a) 1,686	179.20	43.97	(c) 116.92	20.95	24.54
1891–95 ..	1,574	337	(b) 1,911	181.34	44.09	(d) 117.07	21.41	24.31
1896–1900	1,838	410	2,248	191.11	47.88	123.65	22.31	25.05
1901–05 ..	2,054	380	2,434	201.78	40.88	124.98	18.50	20.26
1906–10 ..	2,031	437	2,468	186.11	43.22	117.39	21.51	23.22
1911–15 ..	2,546	577	3,123	206.15	50.36	131.17	22.66	24.43
1916–20 ..	2,238	521	2,759	175.46	40.93	108.27	23.28	23.33
1921 ..	510	111	621	183.89	41.33	113.76	21.76	22.47
1922 ..	441	92	533	155.78	33.61	95.72	20.86	21.58
1923 ..	442	107	599	169.81	38.33	105.29	21.75	22.57

(a) 1705 inclusive of Western Australian figures. (b) 1984 inclusive of Western Australian figures. (c) 116.49 inclusive of Western Australian figures. (d) 119.11 inclusive of Western Australian figures.

(xxxvii) *Other Diseases.* The number of causes included under this heading is very large, amounting to no less than 85 of the items shown in the detailed classification, and deaths were recorded under every one of these with the exception of the following:—Glanders, rabies, soft chancre, gonococcus infection, other infectious diseases, pellagra, ankylostomiasis, and ringworm, diseases of the scalp, itch. The total number of deaths under "other diseases" in 1919, was 9,390, viz., 5,316 males and 4,074 females; in 1920, 10,048, viz., 5,740 males and 4,308 females; in 1921, 9,995, viz., 5,627 males and 4,368 females; in 1922, 9,318, viz., 5,276 males and 4,042 females; and in 1923, 9,832, viz., 5,631 males and 4,201 females. Some of the diseases included here account for very considerable numbers of deaths. Particulars of the deaths included in 1923 are shown in the following table:—

DEATHS FROM "OTHER DISEASES."—AUSTRALIA, 1923.

Causes.	M.	F.	Total.	Causes.	M.	F.	Total.
Anthrax	3	..	3	Embolism and Thrombosis (not cerebral) ..	44	70	114
Tetanus	53	29	82	Diseases of the Veins ..	10	20	30
Mycoses	3	2	5	Diseases of the Lymphatic System ..	11	10	21
Syphilis	97	51	148	Hæmorrhage (without specified cause) ..	8	11	19
Purulent Infection and Septicæmia ..	76	60	136	Other Diseases of the Circulatory System ..	62	70	132
Other Tumours (Tumours of the female genital organs excepted) ..	9	24	33	Diseases of the Mouth and its Associated Organs ..	9	9	18
Acute Rheumatic Fever ..	124	96	220	Diseases of the Pharynx ..	25	22	47
Chronic Rheumatism and Gout	73	136	209	Diseases of the Oesophagus ..	13	3	16
Scurvy	1	..	1	Diarrhoea and Enteritis of Children over two years of age and Adults ..	311	313	624
Beri-beri	25	..	25	Intestinal Parasites ..	5	5	10
Rickets	8	..	8	Other Diseases of the Intestines ..	51	43	94
Diabetes	288	404	692	Acute Yellow Atrophy of the Liver ..	7	12	19
Anæmia, Chlorosis ..	244	246	490	Hydatid Tumours of the Liver ..	21	19	40
Diseases of the Pituitary Gland	2	1	3	Biliary Calculi	41	93	134
Exophthalmic Goitre ..	8	75	83	Other Diseases of the Liver ..	112	109	221
Diseases of the Thyroid Gland	6	42	48	Diseases of the Pancreas ..	23	36	59
Diseases of the Parathyroid Gland	1	2	3	Peritonitis (without specified cause) ..	62	61	123
Diseases of the Thymus Gland	4	1	5	Other Diseases of the Digestive System ..	3	..	3
Addison's Disease ..	12	27	39	Chyluria	1	..	1
Diseases of the Spleen ..	8	4	12	Other Diseases of the Kidneys and their Adnexa ..	124	88	212
Leucæmia	46	31	77	Calculi of Urinary Passages ..	35	16	51
Hodgkin's Disease ..	40	16	56	Diseases of the Bladder ..	133	23	156
Acute and Chronic Alcoholism ..	126	27	153	Other Diseases of the Urethra, Urinary Abscesses, etc. ..	31	3	34
Chronic Lead Poisoning ..	18	4	22	Diseases of the Prostate ..	319	..	319
Other Chronic Poisonings ..	6	..	6	Non-venereal Diseases of the Male Genital Organs ..	3	..	3
Other General Diseases ..	35	30	65	Non-puerperal Diseases of the Breast (Cancer excepted) ..	..	2	2
Encephalitis	81	67	148	Gangrene	55	42	97
Locomotor Ataxia ..	79	11	90	Furuncle	17	6	23
Other Diseases of the Spinal Cord	134	107	241	Phlegmon, Acute Abscess ..	53	36	89
Paralysis without specified cause	183	140	323	Other Diseases of the Skin and Adnexa ..	15	27	42
General Paralysis of the Insane	150	19	169	Non-tuberculous Diseases of the Bones ..	61	33	94
Other Forms of Mental Alienation	46	62	108	Other Diseases of the Joints (Tuberculosis and Rheumatism excepted) ..	17	12	29
Epilepsy	129	103	232	Other Diseases of the Organs of Locomotion ..	1	1	2
Convulsions (non-puerperal) ..	4	5	9	Other Diseases peculiar to Infancy	210	182	392
Convulsions of Children under five years of age ..	134	108	242	Lack of Care (Infants) ..	9	3	12
Chorea	1	6	7				
Neuralgia and Neuritis ..	20	11	31				
Other Diseases of the Nervous System ..	136	145	281				
Diseases of the Eye ..	2	1	3				
Diseases of the Ear ..	37	21	58				
Pericarditis	47	27	74				
Endocarditis and Acute Myocarditis ..	366	296	662				
Angina Pectoris ..	195	74	269				
Diseases of the Arteries, Atheroma, Aneurism ..	669	310	979				
				Total Deaths ..	5,631	4,201	9,832

(xxxviii) *Unspecified or Ill-defined Diseases.* The number of cases included under this heading was 707 in 1919, 805 in 1920, 721 in 1921, 665 in 1922, and 691 in 1923, of which 450 were males and 241 females. The detailed classification places these ill-defined diseases under two headings—sudden death, including syncope; and unspecified or ill-defined causes, of which the following are specimens:—Asthenia, coma, dentition, exhaustion, heart failure, dropsy, ascites and general oedema, etc. In 1923, the number of deaths which came under the first of these categories was 56, and under the second, 635. 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.

16. *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 fifteen general headings adopted by the compilers of the International Nomenclature is, however, shown in the following table, together with the death rates and percentages on total deaths pertaining to those classes:—

DEATHS, DEATH RATES (a), ETC., IN CLASSES.—AUSTRALIA, 1923.

Class.	Total Deaths.			Death Rates. (a)			Proportion of 10,000 Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Epidemic, Endemic, and Infectious Diseases	3,659	2,808	6,467	126	101	114	1,157	1,141	1,150
2. General diseases not included above	3,713	3,610	7,323	128	129	129	1,174	1,466	1,302
3. Diseases of the Nervous System and of the Organs of Sense	2,851	2,568	5,419	98	92	95	901	1,043	964
4. Diseases of the Circulatory System	4,118	3,075	7,193	142	110	127	1,302	1,249	1,279
5. Diseases of the Respiratory System	3,998	2,872	6,870	138	103	121	1,265	1,167	1,222
6. Diseases of the Digestive Organs	2,975	2,432	5,407	103	87	95	941	988	961
7. Diseases of the Genito-Urinary System and Adnexa	2,077	1,335	3,412	72	48	60	657	542	607
8. Puerperal Condition .. .. .	..	691	691	..	25	12	..	281	123
9. Diseases of the Skin and of the Cellular Tissue	140	111	251	5	4	4	44	45	44
10. Diseases of the Bones and Organs of Locomotion	79	46	125	3	2	2	25	19	22
11. Malformations	356	261	617	12	9	11	113	106	109
12. Early Infancy	2,166	1,646	3,812	75	59	67	685	669	678
13. Old Age	2,468	2,217	4,685	85	79	82	731	901	834
14. External Causes	2,572	701	3,273	89	25	58	813	285	582
15. Ill-defined Diseases	450	241	691	15	9	12	142	98	123
Total	31,622	24,614	56,236	1,091	882	989	10,000	10,000	10,000

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

17. *Causes of Deaths of Children under one Year.*—"Bulletin No. 41, Australian Demography," contains tables showing for twenty-six causes the ages at death of children dying during the first year of life. In the Bulletin mentioned, the particulars are given for males and females separately for Australia, but the totals for Australia only are shown hereunder for both sexes combined:—

CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR.—AUSTRALIA, 1923.

Age at Death.	Measles.	Whooping Cough.	Diphtheria.	Croup.	Erysipelas.	Pulmonary Tuberculosis.	Tubercular Meningitis.	Tuberculosis, other forms.	Syphilis.	Simple Meningitis.	Cerebro-Spinal Meningitis.	Convulsions.	Acute Bronchitis.
Under 1 week ..	..	1	..	..	..	..	..	..	1	5	..	62	8
1 week and under 2 ..	..	1	..	..	..	..	..	..	5	3	1	17	9
2 weeks ..	1	..	..	..	1	..	..	..	3	2	..	10	10
3 ..	1	2	..	..	2	..	..	..	2	1	..	2	16
1 month ..	3	6	2	..	10	1	..	..	7	11	..	16	33
2 months ..	3	9	..	..	6	..	1	..	7	9	1	6	24
3 ..	3	7	3	..	3	..	2	12	12	7	1	5	13
4 ..	5	3	1	..	2	..	1	2	13	18	1	12	6
5 ..	5	3	1	1	..	..	1	2	3	13	2	7	6
6 ..	4	4	..	..	1	..	3	..	1	13	1	9	4
7 ..	2	6	6	..	..	..	2	..	2	15	..	6	5
8 ..	3	3	4	..	..	1	1	..	1	10	..	10	4
9 ..	6	6	5	..	..	..	1	..	1	12	1	7	6
10 ..	4	4	3	1	2	2	4	2	1	11	..	3	6
11 ..	7	4	6	..	1	2	3	..	2	6	..	8	5
Total under 1 year ..	39	63	31	2	28	6	19	9	50	136	8	180	155
Number of deaths from each cause per 1,000 births ..	.29	.46	.23	.01	.21	.04	.14	.07	.37	1.01	.06	1.33	1.15

Age at Death.	Broncho-Pneumonia.	Pneumonia.	Pleurisy.	Diseases of Stomach.	Diarrhœa and Enteritis.	Hernia.	Intestinal Obstruction.	Malformations.	Congenital Debility, Leterus and Sclerema.	Premature Birth.	Injury at Birth.	Other Diseases peculiar to Early Infancy.	Lack of Care.	Other Causes.	Total.
Under 1 week ..	9	13	1	9	22	1	2	273	393	1,685	216	328	9	49	3,087
1 week and under 2 ..	17	16	..	1	20	..	..	49	95	171	16	20	..	26	467
2 weeks ..	16	16	..	1	17	..	1	41	53	110	9	15	..	23	329
3 ..	24	20	..	3	21	..	..	23	44	77	5	3	..	18	264
1 month ..	74	28	1	10	119	1	1	40	100	77	3	11	..	29	583
2 months ..	3	45	22	1	7	141	..	26	94	18	1	4	3	27	453
3 ..	43	13	..	11	207	..	1	24	61	12	..	2	..	30	462
4 ..	29	21	1	7	215	1	5	16	46	7	..	2	..	18	420
5 ..	19	21	..	3	198	1	8	14	26	3	..	1	..	19	357
6 ..	27	22	..	8	194	..	4	8	20	4	..	2	..	35	364
7 ..	31	16	..	3	148	..	7	13	12	3	..	1	..	23	300
8 ..	24	17	..	3	151	..	2	10	12	2	..	..	..	23	281
9 ..	14	17	..	2	161	..	3	6	15	..	..	1	..	28	292
10 ..	25	17	..	2	130	..	4	8	10	1	1	1	..	29	271
11 ..	29	25	..	7	116	..	3	4	5	..	..	1	..	20	254
Total under 1 year ..	426	284	4	76	1,860	4	41	555	986	2,170	251	392	12	397	8,184
Number of deaths from each cause per 1,000 births ..	3.15	2.10	.03	.56	13.75	.03	.30	4.10	7.29	16.05	1.86	2.90	.09	2.94	60.52

Pre-natal influences, as evidenced in malformations, congenital debility, and premature birth, together with injuries at birth, accounted for 3,962, or 48 per cent., of all deaths under one year; and of these 3,962 deaths, 2,567, or nearly 65 per cent., occurred within a week of birth. Among the survivors of the first week, diarrhœa and enteritis had the most fatal effects. These diseases were responsible for 1,860 deaths, representing nearly 23 per cent. of all deaths under one year, or 13.75 per 1,000 births. Excluding deaths from pre-natal causes already referred to, over 57 per cent. of the deaths between three months and one year of age were due to diarrhœa and enteritis.

18. Ages at Death of Married Males and Females, and Issue.—“Bulletin No. 41, Australian Demography,” contains a number of tables, showing the age at marriage,

age at death, duration of life after marriage, birthplaces, and occupations, in combination with the issue of married persons who died in Australia in 1923. A short summary of the tables mentioned is given hereunder. Deaths of married males in 1923 numbered 16,624, and of married females, 15,566. The tabulations which follow deal, however, with only 16,234 males and 15,274 females, the information in the remaining 682 cases being incomplete. The total number of children in the families of the 16,234 males was 79,664; and of the 15,274 females, 78,129. 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, 1923.**

Age at Death.	Average Family of Males.	Average Family of Females.	Age at Death.	Average Family of Males.	Average Family of Females.
Under 20 years ..	1.00	0.61	70 to 74 years ..	5.76	6.32
20 to 24 years ..	0.88	1.12	75 „ 79 „ ..	6.41	6.49
25 „ 29 „ ..	1.43	1.75	80 „ 84 „ ..	6.78	6.51
30 „ 34 „ ..	1.88	2.54	85 „ 89 „ ..	7.06	6.52
35 „ 39 „ ..	2.58	3.30	90 „ 94 „ ..	7.35	6.77
40 „ 44 „ ..	3.02	3.51	95 „ 99 „ ..	7.21	6.54
45 „ 49 „ ..	3.61	3.79	100 years and up- wards ..	7.14	5.92
50 „ 54 „ ..	3.83	4.16	Age unspecified ..	3.90	4.25
55 „ 59 „ ..	4.20	4.58			
60 „ 64 „ ..	4.66	5.24			
65 „ 69 „ ..	5.41	5.98	All ages ..	4.91	5.12

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 289. The totals are shown in the following table :—

ISSUE OF MARRIED MALES AND FEMALES.—AUSTRALIA, 1923.

Issue of Married Males.	Males.	Females.	Total.	Issue of Married Females.	Males.	Females.	Total.
Living ..	31,741	31,609	63,350	Living ..	29,369	29,712	59,081
Dead ..	9,163	7,151	16,314	Dead ..	10,613	8,435	19,048
Total ..	40,904	38,760	79,664	Total ..	39,982	38,147	78,129

These figures show a masculinity in the births of 2.52, which is in harmony with the experience of the birth statistics.

19. Ages at Marriage of Deceased Males and Females, and Issue.—While the table giving the average families of married males and females naturally shows an increase in the averages with advancing ages at death, the following table, which gives the average families 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, 1923.

Age at Marriage.	Average Family of Males.	Average Family of Females.	Age at Marriage.	Average Family of Males.	Average Family of Females.
Under 20 years ..	6.74	7.15	50 to 54 years ..	1.81	..
20 to 24 „ ..	5.91	5.63	55 „ 59 „ ..	1.37	..
25 „ 29 „ ..	5.06	4.04	60 „ 64 „ ..	0.56	..
30 „ 34 „ ..	4.42	2.97	65 years and upwards ..	0.59	..
35 „ 39 „ ..	3.82	1.64	Age unspecified ..	5.07	5.08
40 „ 44 „ ..	2.80	0.43			
45 „ 49 „ ..	2.17	0.04	All ages ..	4.91	5.12

20. Duration of Life after Marriage of Males and Females.—The duration of life after marriage has been tabulated for males and females both in combination with the age at marriage, and with the total and average issue. The tables containing the result do not, however, lend themselves to condensation, and are, therefore, omitted here. They will be found in Bulletin No. 41 of "Australian Demography."

21. Birthplaces of Deceased Married Males and Females, and Issue.—The following table shows the birthplaces of married males and females who died in 1923, together with their 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, differences occur between the averages of the individual States which appear inexplicable on any other ground than that of different age-constitution of the locally-born population of the various States due to the different dates of the foundation of settlement. Thus, New South Wales and Tasmania, owing to their early settlement, contain a larger number of locally-born inhabitants of advanced ages than Victoria and Queensland, in which colonization was begun almost fifty years after the foundation of New South Wales. It will be noted that the differences occur both in the male and female averages. Although the figures apply to Australia as a whole, it must be borne in mind that the vast majority of deaths of natives of any one State are registered in that particular State.

BIRTHPLACES OF DECEASED MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.—AUSTRALIA, 1923.

Birthplace.	Married Males.		Married Females.		Birthplace.	Married Males.		Married Females.	
	Deaths.	Average Family.	Deaths.	Average Family.		Deaths.	Average Family.	Deaths.	Average Family.
New South Wales ..	3,083	5.03	3,339	5.16	British India and Ceylon ..	43	3.93	23	4.39
Victoria ..	2,933	4.17	2,761	4.19	Other British Possessions in Asia ..	3	1.00	1	5.00
Queensland ..	582	4.05	632	3.80	China ..	57	2.75	1	8.00
South Australia ..	1,024	4.78	1,002	4.69	Other Asiatic Countries ..	18	3.50	8	4.00
Western Australia ..	107	4.84	119	4.15	British Possessions in Africa ..	17	5.24	13	3.70
Tasmania ..	614	4.78	657	5.35	Other African Countries ..	..	..	1	1.00
Northern Territory ..	1	..	..	..	Canada ..	25	4.28	17	6.24
New Zealand ..	139	3.37	94	3.87	Other British Possessions in America ..	10	2.70	2	5.50
England ..	3,961	5.23	3,242	5.53	United States ..	63	4.17	27	4.33
Wales ..	149	5.13	104	5.87	Other American Countries ..	7	4.57	6	4.33
Scotland ..	1,017	5.26	869	5.62	Other Polynesian Islands ..	14	2.93	5	2.20
Ireland ..	1,430	5.70	1,837	5.92	At Sea ..	53	5.38	48	6.48
Other British Possessions in Europe ..	20	4.75	18	4.94	Unspecified ..	46	4.85	39	4.82
Denmark ..	87	5.61	21	5.62					
France ..	24	2.88	10	4.40					
Germany ..	395	5.82	276	6.61					
Italy ..	53	5.02	22	4.95					
Norway ..	36	4.83	15	6.40					
Russia ..	25	3.00	11	5.50					
Sweden ..	*62	4.29	8	5.38					
Other European Countries ..	127	4.23	46	4.94					
					Total ..	16,234	4.01	15,274	5.12

22. Occupations of Deceased Married Males, and Issue.—A final tabulation shows the average issue in combination with the occupation of deceased males.

OCCUPATIONS OF DECEASED MARRIED MALES, AND AVERAGE ISSUE.—
AUSTRALIA, 1923.

Occupation.	Deaths of Married Males.	Average Family.	Occupation.	Deaths of Married Males.	Average Family.
PROFESSIONAL CLASS—			INDUSTRIAL CLASS—		
Government, Defence, and Law	430	4.47	Art and Mechanic Products	697	4.60
Others	554	4.14	Textiles and Fibrous Materials	345	4.44
			Food and Drinks	249	5.04
DOMESTIC CLASS—			Animal and Vegetable Sub-		
Board and Lodging	298	3.71	stances	58	5.07
Others	215	4.03	Metals and Minerals	422	4.88
			Fuel, Light and Energy	53	3.42
COMMERCIAL CLASS—			Building and Construction	1,061	4.75
Property and Finance	215	4.04	Others	2,957	4.85
Art, Mechanic and Textile					
Products	167	3.86	AGRICULTURAL, PASTORAL,		
Food and Drinks	393	4.50	MINING, ETC., CLASS—		
Animal and Vegetable Sub-			Agricultural	2,602	6.26
stances	76	4.79	Pastoral	630	5.54
Fuel, Light and Metals	43	4.10	Mining and Quarrying	883	5.15
Merchants and Dealers	482	4.32	Others	116	5.69
Others	790	3.58			
			INDEPENDENT MEANS	432	5.33
TRANSPORT AND COMMUNICA-					
TION CLASS—			DEPENDENTS	8	5.75
Railways	454	4.82			
Roads and Trams	519	4.48	OCCUPATION NOT STATED	668	4.85
Seas and Rivers	306	4.15			
Others	106	4.29	Total	16,234	4.91

§ 4. Graphical Representation of Vital Statistics.

1. **General.**—The progressive fluctuations of the numbers 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.

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 crisis of 1891–3; 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 until 1920, the result of war conditions. The figures for the last four years show a tendency to return to normal.

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. The totals for 1921, 1922, and 1923 were not so favourable.

The characteristic feature of the graph of deaths is its irregular nature. On the whole, however, there is an increase which is 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 to a maximum of 9.62 per 1,000 in 1920.

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. Epidemics of measles were largely responsible for the high rates in the first five years, while influenza caused the increase during 1919.

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 1919, which resulted from the exceptionally high death rates of those years.
