This page was added on 03 December 2012 to included the Disclaimer below. No other amendments were made to this Product
DISCLAIMER
Users are warned that this historic issue of this publication series may contain language or views which, reflecting the authors' attitudes or that of the period in which the item was written, may be considered to be inappropriate or offensive today.

CHAPTER X.

VITAL STATISTICS.

Note.—1. Owing to considerations of space, the tables in this chapter contain only summaries of the principal vital statistics for Australia. They relate, in the main, to the year 1957, except for the totals of marriages, births, deaths and infant deaths, for which it has been possible to include figures for 1958. Comparisons have been restricted, in general, to the individual years 1954 to 1958 and the five-year periods 1931–35 to 1951–55, while age data have been shown in groups. Comparisons over longer periods, together with more detailed figures such as single age distributions and cross-classifications of various characteristics, will be found in the annual bulletin, *Demography*.

2. Figures for Australia throughout are exclusive of full-blood aboriginals.

§ 1. Provisions for Registration and Compilation of Statistics.

In Australia, vital statistics are compiled from information obtained from the registers of births, deaths and marriages. Each State and Territory has an independent system of registration. Provisions for the civil registration of births, deaths and marriages have been in force in Tasmania from 1839, in Western Australia from 1841, in South Australia from 1842, in Victoria from 1853 and in New South Wales and Queensland (then part of New South Wales) from 1856. Registration in the Territories is administered by the Commonwealth Government, registration in respect of the Northern Territory having been taken over from South Australia in 1911 and in respect of the Australian Capital Territory from New South Wales in 1930. The authority responsible for the registration of births, deaths and marriages occurring within his particular State or Territory is the Registrar-General or the Principal Registrar.

In the Australian Capital Territory and the Northern Territory, information concerning a birth is required to be supplied within 21 days, in South Australia in 42 days, and in all other States 60 days is allowed. In all States, however, provision has been made for the late registration of births. For the registration of a death, the period allowed is 8 days in Tasmania, 10 days in South Australia, 14 days in Western Australia, the Northern Territory and the Australian Capital Territory, 21 days in Victoria and 30 days in New South Wales and Queensland. Provision is made in all States and Territories for the celebration of marriages by ministers of religion registered for that purpose with the Registrar-General or the Principal Registrar of Births, Deaths and Marriages of the State or Territory and also by certain civil officers. In all cases the celebrant, whether minister of religion or civil officer, is required to register particulars of the parties married with the Registrar of the district in which the marriage has taken place. In Victoria, Western Australia, the Northern Territory and the Australian Capital Territory, registration of a marriage is required immediately following the ceremony, in Tasmania and South Australia within 7 days and in New South Wales and Queensland within 30 days.

For all States except Queensland and Tasmania, the registration of stillbirths is compulsory. Western Australia was the first State to introduce compulsory registration in 1908, followed by the Australian Capital Territory in 1930, New South Wales in 1935, South Australia in 1937, Northern Territory in 1949 and Victoria in 1953. No statutory provision has been made in Queensland or Tasmania for the registration of stillbirths, but provision is made in these States for voluntary registration and it appears likely that nearly all such births are notified to the Registrar-General. In this chapter, stillbirths have been excluded from all tables of births and deaths and are shown only in those specially relating to stillbirths.

While there is every indication that the registration work of the several States and the Territories is very efficiently carried out, it is clear that in those States with a large area and scattered population, failure to register births and deaths may occur in a few cases.

The data required for the compilation of vital statistics are copied from the registers of births, deaths and marriages in the Registrar-General's Office and forwarded, through the Deputy Commonwealth Statistician in each State, and direct from the Principal Registrars in the two Territories, to the Commonwealth Statistician. The compilation and publication of vital statistics for Australia is a function of the Commonwealth Statistician. The Statisticians in the various States compile and publish statistics relating to their respective States.

§ 2. Marriages.

NOTE.—See NOTE at the beginning of this chapter.

1. Number of Marriages.—The number of marriages registered in Australia during the year ended 31st December, 1958 was 74,001, giving a rate of 7.51 per 1,000 of the mean population for the year. A summary of the number of marriages registered in each State and Territory from 1931 to 1958 is given in the following table. Annual averages for each five-year period from 1861 to 1950 were published in Official Year Book No. 39, page 575. A graph showing the number of marriages in each year from 1860 to 1958 appears on page 333 of this issue.

				M_	ARRIAG	ES.				
Period		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
				Annu	JAL AVE	RAGES.				
1931–35		18,742	12,773	6,950	3,967	3,328	1,638	29	53	47,480
1936-40		25,295	17,784	8,982	5,726	4,399	2,187	83	85	64,541
1941-45		28,506	19,450	10,563	6,517	4,668	2,097	71	109	71,981
1946-50		30,162	20,453	10,666	6,581	5,205	2,529	114	181	75,891
1951–55	••	28,483	20,007	10,171	6,290	5,232	2,539	146	234	73,102
				Ann	UAL TO	TALS.				
1954		27,503	19,404	10,027	6,190	5,204	2,512	143	246	71,229
1955		27,645	20,056	10,098	6,226	5,145	2,600	151	251	72,172
1956		27,313	20,137	9,934	6,277	5,080	2,601	160	278	71,780
1957		28,767	20,239	10,271	6,581	4,897	2,507	178	256	73,696
1958		28,554	20,649	10,255	6,505	5,038	2,475	201	324	74,001
				1						

2. Crude Marriage Rates.—The crude marriage rates for each State and Territory from 1931 to 1958 are given hereunder:—

			CRU	JDE MA	RRIAG	E RATE	S.(a)			
Period	1.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
				AVERAGI	ANNU	L RATES		·		
1931–35		7.20	7.02	7.35	6.83	7.58	7.19	5.92	5.74	7.16
1936-40		9.29	9.52	8.80	9.65	9.49	9.25	13.28	7.22	9.35
1941-45		9.97	9.86	10.04	10.61	9.74	8.61	7.18	7.57	9.94
1946-50		9.90	9.72	9.41	9.87	10.01	9.56	9.39	9.36	9.77
1951–55	• •	8.41	8.34	7.92	8.11	8.44	8.35	9.21	(b) 8.22	8.29
				An	NUAL R	ATES.			<u>'</u>	
1954		8.02	7.91	7.64	7.77	8.13	8.07	8.82	(b)8.10	7.92
1955		7.92	7.94	7.54	7.59	7.81	8.22	8.86	(6)7.74	7.84
1956		7.68	7.73	7.27	7.40	7.50	8.07	8.94	(b)8.01	7.61
1957		7.94	7.57	7.38	7.53	7.08	7.59	9.50	(b)6.80	7.64
1958		7.73	7.54	7.25	7.25	7.14	7.33	10.45	7.88	7.51
		<u> </u>			,	<u> </u>		1	<u> </u>	

⁽a) Number of marriages per 1,000 of mean population. (b) Revised rates based on population estimates adjusted in accordance with the June, 1957 Population Count of Canberra are as follows:—1951-55, 8.20; 1954, 8.09; 1955, 7.67; 1956, 7.86; 1957, 6.74.

^{3.} Marriage Rates based on Marriageable Population.—As the marriage rates in some international tabulations are based on the unmarried population aged 15 years and over, the corresponding rates have been calculated for Australia for the eight census periods to 1953-55. The period in each case comprises the census year with the year immediately preceding and the year immediately following, and the figures are as follows,

PERSONS MARRYING PER 1,000 OF UNMARRIED POPULATION: AUSTRALIA.

	Period.				Rate.(a) Period.						
1880-82 1890-92 1900-02 1910-12				48.63 44.04 42.14 50.12	1920–22 1932–34 1946–48 1953–55				55.97 42.88 71.24 65.32		

⁽a) Average annual number of persons who married per 1,000 unmarried persons, including widowed and divorced, aged 15 years and over.

4. Crude Marriage Rates of Various Countries.—The following table gives the crude marriage rates for Australia in comparison with the rates for various other countries.

CRUDE MARRIAGE RATES(a): VARIOUS COUNTRIES.

Country.	1921- 25.	1926- 30.	1931- 35.	1957.	Country.	1921- 25.	1926– 30.	1931- 35.	1957.
United States of America Union of South Africa(b) Africa(b) Yugoslavia Japan Spain Netherlands Switzerland Canada Austria	10.6 8.0 10.6 8.8 7.3 8.2 7.7 7.3 9.6	9.9 9.3 9.5 8.0 7.3 7.7 7.5 7.3 7.5	9.2 9.4 7.8 7.6 6.5 7.2 7.7 6.4 6.8	8.9 8.8 8.6 8.5 8.5 8.5 8.1 8.0 8.0	New Zealand(c) United Kingdom Belgium Australia(d) Italy Denmark Finland Sweden France Norway Ireland, Republic of	8.0 7.7 10.6 8.0 9.0 7.9 7.1 6.3 9.5 6.3 4.9	7.6 7.5 9.1 7.5 7.3 7.8 7.2 6.7 8.2 6.1 4.6	7.3 7.9 7.8 7.2 6.8 8.7 7.2 7.3 7.4 6.5 4.6	8.0 7.8 7.6 7.6 7.5 7.3 7.2 7.0 7.0 6.9 5.0

⁽a) Number of marriages per 1,000 of mean or mid-year population.
only. (c) Includes Maoris. (d) Excludes full-blood aboriginals.

325

5. Age and Conjugal Condition at Marriage.—(i) General. Particulars of age at marriage in age groups and previous conjugal condition of bridegrooms and brides in 1957 are given hereunder. There were 6,563 males under 21 years of age married during 1957, while the corresponding number of females was 26,749. At the other extreme there were 105 bachelors and 60 spinsters in the age group 65 years and over.

AGE AND CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES: AUSTRALIA, 1957.

Age at		Brideg	rooms.		Brides.						
Marriage (Years).	Bach- elors.	Wid- owers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.			
Under 20	3,073			3,073	18,084	4	5	18,093			
20-24	30,630	13	50	30,693	32,849	99	240	33,188			
25-29	20,056	64	435	20,555	8,582	217	963	9,762			
30-34	7,288	148	893	8,329	3,003	309	1,128	4,440			
35-39	2,578	178	852	3,608	1,300	379	989	2,668			
40-44	1,170	319	734	2,223	684	456	692	1.832			
45-49	696	315	591	1,602	407	486	472	1,365			
50-54	386	406	357	1,149	270	404	210	884			
55-59	203	450	218	871	145	337	81	563			
60-64	83	416	84	583	87	307	54	448			
65 and over	105	835	70	1,010	60	361	32	453			
Total	66,268	3,144	4,284	73,696	65,471	3,359	4,866	73,696			

⁽b) White population

(ii) Proportional Distribution. In the following table the proportional distribution of bridegrooms and brides according to previous conjugal condition is shown in five-year periods from 1931 to 1955 and for each of the years 1955 to 1957:—

CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES: PROPORTIONAL DISTRIBUTION, AUSTRALIA.

(Per Cent.)

	İ		Brideg	rooms.			Bri	3.53 2.10 100.00 3.38 2.68 100.00 3.93 3.96 100.00 4.74 6.55 100.00 4.81 7.15 100.00 4.72 7.00 100.00	
Period.		Bach- elors.	Wid- owers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
1931-35		92.63	5.39	1.98	100.00	94.37	3.53	2.10	100.00
1936-40	- : : 1	92.59	4.82	2.59	100.00	93.94			100.00
1941-45		91.44	4.77	3.79	100.00	92.11	3.93	3.96	100.00
1946-50		88.82	4.74	6.44	100.00	88.71	4.74	6.55	100.00
1951-55		88.77	4.63	6.60	100.00	88.04	4.81	7.15	100.00
1955		89.24	4.46	6.30	100.00	88.28	4.72	7.00	100.00
1956		89.59	4.33	6.08	100.00	88.45	4.68	6.87	100.00
1957		89.92	4.27	5.81	100.00	88.84	4.56	6.60	100.00

(iii) Relative Ages of Bridegrooms and Brides. The relative ages of bridegrooms and brides in 1957 are shown below in age groups of five years.

RELATIVE AGES OF BRIDEGROOMS AND BRIDES: AUSTRALIA, 1957.

Age of	Total			A	ge of Bri	de (Years)			
Bridegroom (Years).	Bride- grooms.	Under 15.	15–19.	20–24.	25–29.	30–34.	35-39.	40-44.	45 and over.
Under 20	3,073	17	2,486	550	18	1	1		
20–24	30,693	15	11,417	17,594	1,436	190	26	10	5
25-29	20,555	2	3,449	11,474	4,364	937	238	62	29
30–34	8,329	1	568	2,795	2,595	1,573	569	168	60
35–39	3,608	1	93	557	896	940	695	299	127
40–44	2,223		29	157	294	468	514	455	306
45–49	1,602		9	42	112	201	354	373	511
50–54	1,149		6	11	33	84	163	247	605
55-59	871			7	10	29	75	125	625
60–64	583				3	9	21	57	493
65 and over	1,010			1	1	8	12	36	952
Total Brides	73,696	36	18,057	33,188	9,762	4,440	2,668	1,832	3,713

(iv) Average Ages of Bridegrooms and Brides. The average age at marriage of brides has remained fairly constant during recent years at a figure of about 25½ years. The average ages, in years, of brides for each of the five years to 1957 were:—1953, 25.73; 1954, 25.59; 1955, 25.42; 1956, 25.34; and 1957, 25.18. For the following five-year periods the average ages in years were:—1931-35, 25.50; 1936-40, 25.72; 1941-45, 25.68; 1946-50, 25.61; and 1951-55, 25.61. The average ages, in years, of bridegrooms were 28.96 in 1953, 28.82 in 1954, 28.68 in 1955, 28.66 in 1956, and 28.54 in 1957. It follows, therefore, that brides are, generally speaking, a little more than three years younger than bridegrooms. The difference in age was 3.23 in 1953 and 1954, 3.26 in 1955, 3.32 in 1956, and 3.36 in 1957.

6. Previous Conjugal Condition.—The following table shows the relative conjugal condition of bridegrooms and brides in 1957.

CONJUGAL CONDITION OF BRIDEGROOMS AND BRIDES: AUSTRALIA, 1957.

Co	niugal Co	ndition	· Total	Conjug	gal Condition of Brides.				
	of Bridegrooms.		Bridegrooms.	Spinsters.	Widows.	Divorced.			
Bachelors	••	•••	 66,268	62,009	1,389	2,870			
Widowers			 3,144	1,188	1,325	631			
Divorced			 4,284	2,274	645	1,365			
Tota	l Brides		 73,696	65,471	3,359	4,866			

- 7. Birthplaces of Persons Marrying.—A table showing the relative birthplaces of bridegrooms and brides married in each year will be found in the annual bulletin, *Demography*.
- 8. Occupation of Bridegrooms.—The distribution of the 73,696 bridegrooms for 1957 amongst classes of occupations was as follows:—craftsmen, 20,065; commercial and clerical, 13,016; operatives, 11,581; rural, fishing and hunting, 7,971; labourers, 7,944; professional and semi-professional, 4,171; domestic and protective service, 4,130; administrative, 2,761; not gainfully occupied and not stated, 2,057.
- 9. Celebration of Marriages.—In all the States, marriages may be celebrated either by ministers of religion who are registered for that purpose with the Registrar-General, or by certain civil officers—in most cases district registrars—but most of the marriages are celebrated by ministers of religion. The registered ministers in 1957 belonged to more than forty different denominations, some of which, however, have only very few adherents. A number of these have been combined under the heading "Other Christian". The figures for 1957 are shown in the following table:—

MARRIAGES IN EACH DENOMINATION, 1957.

		-							Aus	tralia.
Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	No.	Proportion of Total.
Church of Eng-										%
land	9,417	4,885	2,836	1,297	1,456	907,	34	77	20,909	28.37
Roman Catholic	7,283	5,331	2,649	1,171	1,143	482	50	93	18,202	24.70
Methodist	2,735	2,447	1,674	1,566	588	393	9	12	9,424	
Presbyterian	3,113	3,308	1,845	346	355	135	17	27	9,146	12.41
Greek Orthodox	692	962	95	338	50	4		5	2,146	2.91
Baptist	367	280	161	161	77	78			1,124	
Lutheran	137	237	281	391	27	6	1	6	1,086	
Congregational	245	252	73	227	99	42	2		940	_
Church of Christ	89	355	53	142	87	19	1	2	748	
Salvation Army	102	102	130	46	23	17	4	1	425	0.58
Seventh-Day Ad-		1	1			1				
ventist	86	29	42	22	18	14.			211	
Unitarian		30			1	'			31	i .
Other Christian	168	175	145	37	142	25	22	1	715	
Hebrew	142	183	1	1	7	6			340	0.46
Other Non-			.							
christian				2		(2	• • •
Total	24,576	18,576	9,985	5,747	4,073	2,128	140	224	65,449	88.81
Civil Officers	4,191	1,663	286	834	824	379	38	32	8,247	11.19
Grand Total	28,767	20,239	10,271	6,581	4,897	2,507	178	256	73,696	100.00

PROPORTION OF TOTAL.

(Per cent.)

Denominational Civil	91.78 97.22 8.22 2.78			

§ 3. Divorce.

The number of dissolutions of marriage, nullities of marriage and judicial separations in 1957 was 6,374. Further information may be found in Chapter XVI.—Public Justice, and detailed tables relating to divorce statistics for 1957 and summary tables for earlier years in *Demography*, Bulletin No. 75.

§ 4. Fertility and Reproduction.

NOTE.—See NOTE at the beginning of this chapter.

- 1. Introductory.—Of the two elements of increase in the population, namely, natural increase and net migration, the former has been by far the more important over the past few decades. The level of natural increase depends on the excess of births over deaths and the relation between fertility and mortality determines the rate of reproduction or replacement of the population.
- 2. Number of Live Births and Confinements.—(i) Year 1957. There are various methods of measuring the fertility of the population by relating the number of births to the numbers in the population. In each the basic data are, of course, the numbers of live births.

The number of live births registered in Australia during 1957 is shown in the following table. The table shows also the number of confinements resulting in one or more live births. The figures exclude cases where the births were of still-born children only.

LIVE BIRTHS AND CONFINEMENTS, 1957.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	N.T.	A.C.T.	Aus- tralia.
			Lı	VE BIRTI	is.				
Single births	77,615	59,052	33,078	19,083	16,533	8,268	628	1,113	215,370
Twins	1,801	1,382	668	453	388	167	18	21	4,898
Triplets	40	30	17		3				90
Quadruplets						\			
Males	40,879	30,968	17,329	10,025	8,738	4,365	337	596	113,237
Females	38,577	29,496	16,434	9,511	8,186	4,070	309	538	107,121
Total	79,456	60,464	33,763	19,536	16,924	8,435	646	1,134	220,358

STILLBIRTHS ASSOCIATED WITH MULTIPLE BIRTHS INCLUDED ABOVE.

Twins		53)	8	10	5	10	5	 [1]	92
Triplets		2		1]	 ا ا	3

CONFINEMENTS RESULTING IN ABOVE BIRTHS.

Nuptial	 75,153	57,718	31,491	18,670	15,943	8,011	551	1,102	208,639
Ex-nuptial			1,932						9,257
Total	 78,556	59,757	33,423	19,312	16,733	8,354	637	1,124	217,896

NOTE.—Owing to the registration procedure adopted in some States, it is possible that in some cases where one child only of a multiple pregnancy is live-born the confinement has been treated as a single birth. However, the numbers of multiple births are not significantly affected. See also para. 13.

(ii) Live Births, Years 1931 to 1958. The average annual number of live births in each State and Territory for each five-year period from 1931 to 1955 and the total number of live births for each year from 1954 to 1958 are given in the following table. Corresponding figures for each five-year period from 1861 to 1950 were published in Official Year Book No. 39, page 583.

LIVE BIRTHS.

Period		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
		·		Annu	AL AVE	RAGES.	<u></u>	··		
1931-35	•••	44,964	28,380	17,480	8,646	8,061	4,547	79	145	112,302
1936-40		47,679	30,282	19,534	9,388	8,877	4,866	125	221	120,972
1941-45		56,583	38,002	23,431	12,546	10,409	5,418	113	384	146,886
1946-50		68,856	47,372	28,003	16,270	13,130	7,064	289	734	181,718
1951-55		73,737	53,770		18,045	15,724	7,774	468	922	201,423
				Ann	UAL TO	TALS.				
1954		73,125	54,660	31,176	18,227	15,928	7,770	513	857	202,25€
1955		74,407	56,336	32,352	18,494	16,623	8,089	515	861	207,677
1956		75,714	58,393	32,409	18,964	16,916	8,104	556	1.077	212,133
1957		79,456	60,464		19,536	16,924	8,435	646	1,134	220,358
1958		80,045	61,269		20,047		8,568	697		222,504

A graph showing the number of births in each year from 1860 to 1958 will be found on page 333.

3. Crude Birth Rates.—The oldest and most popular method of measuring fertility is to relate the number of births to the total population, thus obtaining the crude birth rate. The crude birth rate measures the rate per thousand persons (irrespective of age or sex) at which the population has added to its numbers by way of births during a given period. Other methods of measuring fertility are shown on pages 330-337.

Crude birth rates for each five-year period from 1931 to 1955 and for each year from 1954 to 1958 for each State and Territory are set out below:-

CRUDE E	BIRTH R	ATES.(a)
---------	---------	----------

	-	1	 	RODE	Jan III	RATES.			1	,
Perio	1.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust
		·		Averag	ANNUA	L RATES	i.			
1931–35		17.28	15.60	18.48	14.89	18.36	19.95	15.99	15.77	16.9
1936-40		17.51	16.20	19.48	15.82	19.16	20.58	19.96	18.68	17.5
1941-45		19.79	19.27	22.28	20.43	21.72	22.23	11.40	26.82	20.2
1946-50		22.60	22.51	24.69	24.41	25.24	26,71	23.77	37.92	23.3
1951–55	• •	21.78	22.41	24.13	23.25	25.35	25.57	29.64	b32.30	22.8
		,	<u></u>	An	NUAL RA	ATES.		<u>'</u>		<u>'</u>
1954		21.33	22.28	23.74	22.89	24.88	24.97	31.64	<i>b</i> 28.21	22.50
1955		21.31	22.30	24.16	22.55	25.23	25.59	30.22	b26.56	22.5
1956		21.29	22.42	23.72	22.35	24.98	25.15	31.07	b31.04	22.50
1957		21.93	22.61	24.25	22.35	24.47	25.55	34.49	<i>b</i> 30.13	22.8
1958		21.67	22.36	23.95	22.35	23.71	25.37	36.25	31.01	22.5

(a) Number of births per 1,000 of mean population. (b) Revised rates based on population estimates adjusted in accordance with the June, 1957 Population Count of Canberra are as follows:—1951-55, 32.22; 1954, 28.17; 1955, 26.30; 1956, 30.47; 1957, 29.84.

Note.—The birth rates in the table above are based on live births registered in the respective States and Territories. Prior to 1939, a large proportion of births in respect of which the mother's usual residence was the Australian Capital Territory took place in Queanbeyan, just over the New South Wales border. With improved hospital facilities in the Territory, the position was reversed until late in 1952, when maternity accommodation was provided at the Queanbeyan District Hospital. The following rates, based on births in respect of which the mother's usual residence was the Australian Capital Territory, are a truer measure of birth rates in the Australian Capital Territory.

Average	Annua	Rate			Annual	
1931-1935			19.53	1954	 	(a)28.67
1936-1940			19.29	1955	 	(a)26.53
1941–1945			23.06	1956	 	(a)30.64
1946–1950			27.13	1957	 	(a)29.58
1951-1955	• •	(a)28.39	1958	 	31.04

(a) Revised rates based on population estimates adjusted in accordance with the June, 1957 Population Count of Canberra are as follows:—1951-55, 28.32; 1954, 28.63; 1955, 26.27; 1956, 30.07; 1957, 29.29.

The variations similarly caused in the birth rates for the States and the Northern Territory by referring the birth registrations to the State or Territory in which the mother was usually resident are shown by the following corrected rates for 1958:—New South Wales, 21.65; Victoria, 22.36; Queensland, 24.02; South Australia, 22.29; Western Australia, 23.74; Tasmania, 25.46; and Northern Territory, 36.15.

A graph showing the birth rate for each year from 1860 to 1958 will be found on page 334.

In the earlier years of the present century the crude birth rate fluctuated somewhat, but from 1912, when 28.60 was recorded, there was an almost continuous decline to the very low figure of 16.39 in 1934. The decline in the depression years was occasioned to some extent by the postponement of marriages and, with subsequent improvement in economic conditions, the rate rose. From 1940 the rate increased quite appreciably, owing to a continued improvement in the economic welfare of the community and the war-time boom in marriages. The latter resulted in an abnormal number of first births, but investigation indicates that rates for births other than first were generally slightly higher than might have been expected from pre-war experience. The improvement in the birth rate has been substantially maintained since the end of the war despite some falling off in marriage rates. The post-war peak of 24.07 was recorded in 1947.

4. Crude Birth Rates, Various Countries.—The following table gives crude birth rates for Australia in comparison with rates for various other countries.

Country.	1921- 25.	1926– 30.	1931- 35.	1957.	Country.	1921- 25.	1926– 30.	1931- 35.	1957.
Canada	27.4 27.1 22.2 22.5 35.0 23.9 29.8 25.7 20.3	24.1 25.9 19.7 19.7 34.2 21.0 28.5 23.2 20.1	21.4 24.1 17.0 d16.9 31.8 16.9 27.1 21.2 19.4	25.1 25.0 23.5 22.9 21.7 21.2	Finland France Norway Italy Switzerland Japan Belgium Austria Denmark United Kingdom Sweden	 24.7 19.3 22.2 29.8 19.5 34.6 20.4 22.2 22.3 20.4 19.1	22.5 18.2 18.0 26.8 17.6 33.5 18.6 17.6 19.4 17.2 15.9	19.5 16.5 15.2 23.8 16.4 31.6 16.8 14.4 17.7 15.5	20.1 18.4 18.2 18.2 17.7 17.2 17.0 17.0 16.7 16.5 14.6

CRUDE BIRTH RATES(a): VARIOUS COUNTRIES.

5. Fertility Rates.—The principal demographic factors affecting the level of crude birth rates are the proportion of women of child-bearing age in the population and the proportion of such women who are married. These factors may vary considerably at different periods and for different countries, and a population with a higher proportion of married women of child-bearing age will have a much higher crude birth rate than one with a low proportion, although the fertilities of the two populations may be identical.

In order to compare fertilities, births are sometimes related to the number of women of child-bearing age or, alternatively, nuptial births are related to the number of married women of child-bearing age. Thus births are related to potential mothers, giving the fertility rate.

The following table sets out for certain periods, commencing with 1880-82, the number of births per thousand of mean population, the number of births per thousand women of child-bearing age and the number of nuptial births per thousand married women of child-bearing age. For purposes of this table the child-bearing age has been taken to be 15-44 years inclusive, but births to mothers who were stated to be under 15 or over 44 years have been included in the compilations.

⁽a) Number of births per 1,000 of mean or mid-year population. (b) White population only. (c) Excludes Maoris. (d) 1933-35. (e) Excludes full-blood aboriginals.

		Ave	age Annual R	ates.	Index Nos	. (Base: 1880-	-82 = 100).
			Fertility	Rates.		Fertility	Rates.
Period.	i	Crude Birth Rate.(a)	Births per 1,000 Women aged 15-44 Years.	Nuptial Births per 1,000 Married Women aged 15-44 Years.	Crude Birth Rate.(a)	Births per 1,000 Women aged 15-44 Years.	Nuptial Births per 1,000 Married Women aged 15-44 Years.
1880-82		35.3	170	321	100	100	100
1890-92		34.5	159	332	98	94	103
1900-02		27.2	117	235	77	69	73
1910-12		27.2	117	236	77	69	74
1920-22		25.0	107	197	71	63	61
1932-34		16.7	71	131	47	42	41
1946-48		23.6	104	160	67	61	50
1953-55		22.7	109	149	64	64	46

CRUDE BIRTH RATES AND FERTILITY RATES: AUSTRALIA.

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

The table above shows how increasing proportions both of women of child-bearing age and of married women of child-bearing age inflate the crude birth rate. Thus, while the nuptial birth rate for married women increased by only 22 per cent. over the period 1932-34 to 1946-48 the crude birth rate rose by 41 per cent., due principally to the greatly increased number of marriages during that period.

6. Age-specific Fertility Rates for Females.—So long as customary ages at marriage do not change drastically, the main demographic factor affecting the number of births is the age composition of the potential mothers in the population. Within the child-bearing group the fertility of women of different ages varies considerably and a clearer view of the fertility of the population can be obtained from an examination of what are known as its age-specific fertility rates, that is, the number of births to women of specified ages per thousand women of those particular ages.

Age-specific fertility rates are more commonly expressed in age groups than in single ages. In the following table, such rates, calculated in terms of female births for the purpose of obtaining the gross and net reproduction rates described in para. 7, are shown in five-year age groups for Australia for the period 1921 to 1957.

AGE-SPECIFIC	FERTILITY	RATES(a):	AUSTRALIA.

Age Group (Years).	1921.	1926.	1931.	1936.	1941.	1946.	1951.	1955.	1956.	1957.
15-19 20-24 25-29 30-34 35-39	12.83 65.45 82.24 68.50 49.48 21.66	14.02 60.23 76.82 61.90 43.55 17.63	13.08 53.08 62.47 51.25 33.23 13.61	12.18 50.33 62.02 46.33 28.89	11.90 59.42 70.78 49.72 28.69 9.52	12.63 73.52 89.51 65.03 37.43 11.87	18.59 85.84 90.24 59.16 32.29 9.97	20.30 99.48 97.12 60.14 31.12 9.92	20.84 101.46 98.11 59.65 31.32 9.48	21.26 104.24 102.53 62.35 31.61 9.73
45–49	2.10	1.90	1.45	1.11	0.80	1.03	0.80	0.71	0.76	0.64

(a) Number of female births per 1,000 women in each age group.

The table shows that in recent years the most fertile age group has been 20-24 years, whereas previously fertility had been highest for the 25-29 age group. The decline in fertility between 1921 and 1936 was general but was more pronounced in the higher age groups. During the period 1936 to 1957, a rise in fertility occurred in all age groups below 40. The most noticeable increase has been in the 20-24 age group, in which, as mentioned, fertility is now highest, as the result of a marked trend towards earlier marriage.

7. Gross and Net Reproduction Rates for Females.—A single measure of reproduction known as the gross reproduction rate is obtained by adding together the specific fertility rates for each age in the child-bearing group. This measure indicates the number of female children who would be born on the average to women living right through the child-bearing period, if the conditions on which the rate is based continue. The rate is unaffected by the age composition of the potential mothers, and consequently it shows more clearly than the crude birth rate the reproductive propensity of the population. It is, however, an

imperfect measure of reproduction because it does not take into account the females who fail to live from birth to the end of the reproductive period. A more accurate measure of this nature is obtained by multiplying the specific fertility rates by the number of females in the corresponding age group of the stationary or life table population and summing the products. Allowance is thus made for the effect of mortality and the result is known as the net reproduction rate. The net reproduction rate indicates the average number of female children who would be born to women during their lifetime if they were subject at each age to the fertility and mortality rates on which the calculation is based. A constant net reproduction rate of unity indicates that the population will ultimately become stationary. If it continues greater than unity, the population will ultimately increase; if less than unity, it will ultimately decrease. The following table should be read in the light of the comment which follows it and of the index of marriage fertility in paragraph 9, page 337.

GROSS AND NET REPRODUCTION RATES: AUSTRALIA.

	Үеаг.		Gross Repro- duction Rate.	d	Net Repro- uction Rate.		Year.		Gross Repro- duction Rate.	Net Repro- duction Rate.
1881(a)	• • •		2.65	(b)	1.88	1947			1.493	(g) 1.416
1891(a)			2.30	(b)	1.73	1951			1.485	(g) 1.409
1901(a)			1.74	(c)	1.39	1953			1.556	(g) 1.477
1911			1.705	(d)	1.421	1954		1	1.558	(h) 1.497
1921		}	1.511	(e)	1.313	1955			1.594	(h) 1.532
1931			1.141	(f)	1.039	1956			1.608	(h) 1.546
1941			1.154	(f)	1.053	1957			1.662	(h) 1.598

(a) Approximate only.
(b) 1881-1890 mortality experience used.
(c) 1891-1900 mortality experience used.
(d) 1901-1910 mortality experience used.
(e) 1920-1922 mortality experience used.
(f) 1932-1934 mortality experience used.
(g) 1946-1948 mortality experience used.
(h) 1953-1955 mortality experience used.

Note:—It is not strictly correct to assume, as in the calculations of the rates above, that a particular age-specific fertility rate can be applied to a hypothetical group of women reaching that age, without taking account of previous fertility and marriage experiences. Reproduction rates are therefore unreliable when birth and marriage rates have been changing. The indexes of marriage fertility shown on the next page are also of doubtful reliability in similar circumstances.

Since 1881, there has been a substantial downward trend in both rates, but the gross rate has fallen considerably more than the net, showing that the decline in fertility has been offset to some extent by a decline in mortality. The net reproduction rate was below unity over the period 1932 to 1939. If such low levels were to be experienced indefinitely, ultimate population decline would be certain. The progressive rise in both gross and net reproduction rates from 1939 to 1947 was due largely to higher marriage rates during the war and early post-war years than had been experienced in the immediate pre-war years. Such fluctuations in marriage rates affect both gross and net reproduction rates substantially. When fluctuations in marriage rates are transient, reproduction rates calculated as above are not valid as indicators of relative fertility nor of the extent to which population will replace itself. Owing to various influences, the number of marriages in each year since 1950 has remained at a relatively high level and the net reproduction rates have been steady at about 1.4 to 1.5. The fertility of marriages is shown in paragraph 9 helow

8. Gross and Net Reproduction Rates, Various Countries.—In the following table a comparison is given of the gross and net reproduction rates recorded for various countries in the period 1955 to 1957. These represent the latest available international comparison.

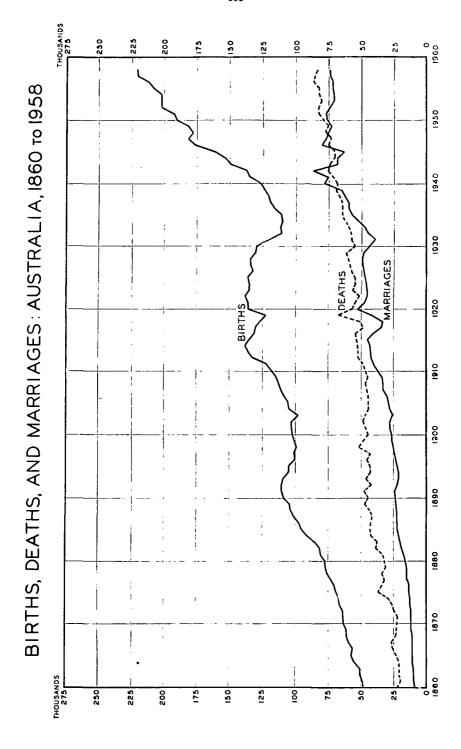
GROSS AND NET REPRODUCTION RATES: VARIOUS COUNTRIES.

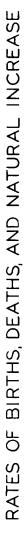
Country.	Period.	Reproc Ra	luction ite.	Country.		Period.	Reproduction Rate.	
		Gross.	Net.				Gross.	Net.
Canada	1956	1.88	(a)	France		1956	1.30	1.24
New Zealand (b) .	. 1956	1.85	1.78	Norway		1955	1.33	1.26
United States o	f			Switzerland		1955	1.19	1.13
America(c).	. 1955	1.67	1.61	Denmark		1956	1.26	1.14
Australia (d) .	. 1957	1.66	1.60	Scotland		1957	1.33	1.27
Ireland, Republic of	f 1955	1.59	1.45	England and W	ales	1956	1.15	1.11
Netherlands .	. 1956	1.48	1.41	Belgium		1955	1.16	1.06
Finland	. 1955	1.42	1.34	Sweden		1955	1.09	1.06
Portugal	. 1955	1.40	1.20	<u> </u>				

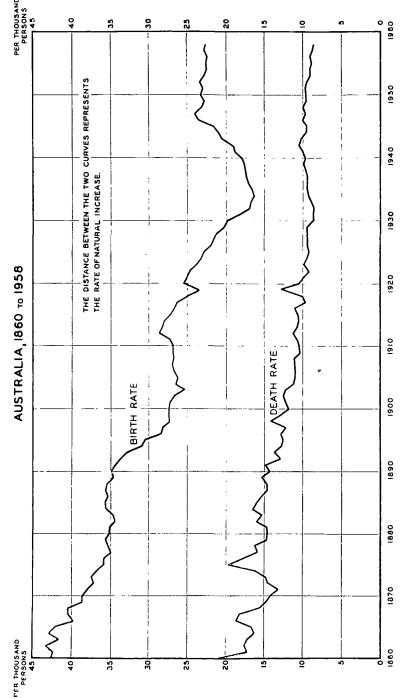
⁽a) Not available. full-blood aboriginals.

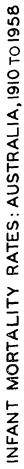
⁽b) Excludes Maoris.

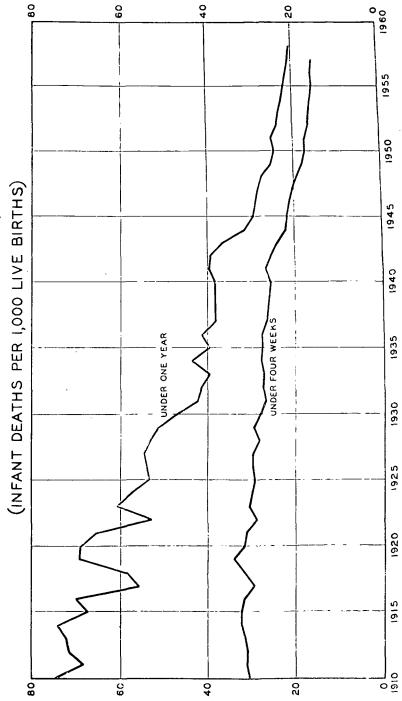
⁽c) White population only.

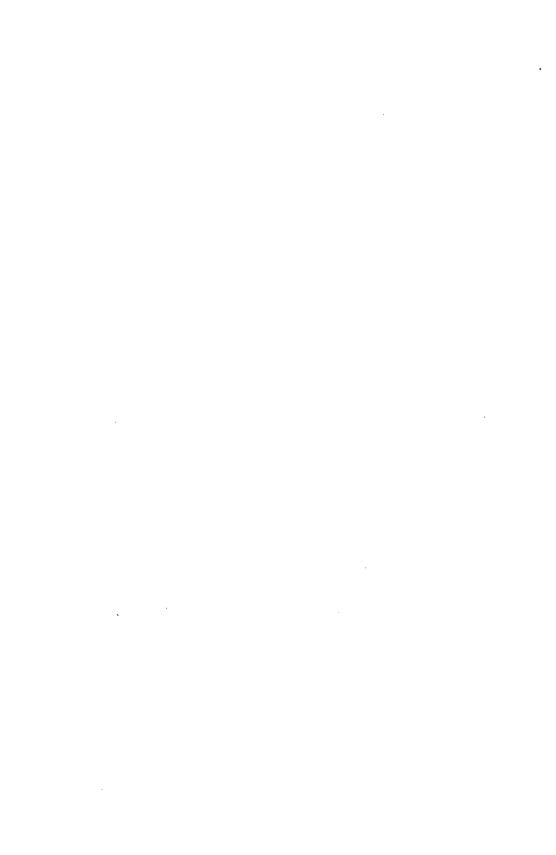












In comparing the reproduction rates of the countries shown above, allowance should be made for any differences in years, as the rates for any one country from year to year are affected by variations in the incidence of marriage.

9. Fertility of Marriages.—Estimates of the fertility of marriages which were published in issues of the Official Year Book prior to No. 36 were calculated by relating the births of one five-year period to the marriages in the preceding five years (see Official Year Book No. 35, p. 329). Since the publication of that issue, an improved method has been formulated for measuring current marriage fertility by relating nuptial confinements in each year to the marriages from which they could have resulted. Confinements of women of a certain number of years duration of marriage are related to the number of marriages taking place that number of years previously. The table below sets out this index of current fertility per marriage in respect of confinements in the individual years shown.

ידו וודטיוי	MARRIAGES:	ATICTOATIA

Year	Year. Nuptial Confinements per Marriage.		Year.	:	Nuptial Confine- ments per Marriage.	Year	Nuptial Confine- ments per Marriage.	
1943		2.21	1948		2.44	1953		2.66
1944		2.28	1949		2.45	1954		2.66
1945		2.36	1950	!	2.56	1955		2.71
1946		2.55	1951		2.55	1956		2.76
1947		2.55	1952		2.63	1957		2.87

NOTE.—See NOTE to table on page 332.

The figure for a particular year gives the estimated number of children which a marriage would produce according to the fertility conditions of that year. There was an almost continuous decline for a number of years to 1942, but a pronounced increase has since occurred. In comparing this index with the net reproduction rate, it is evident that the rise in the latter since 1935 has been caused mainly by a rise in the marriage rate, due firstly to postponed depression marriages, and secondly to war-time and post-war marriages which have resulted in very high proportions of women married, particularly in the most fertile age groups. Only since 1944 has there been an increase in the fertility of marriages compared with pre-war levels.

The figures for 1949 and subsequent years present a somewhat inflated index, as many of the births which have been used to calculate the index relate to marriages of immigrants which took place overseas and are consequently not included in Australian marriage records. Partial investigation suggests that this factor probably overstated the index by very little in 1949, but that the overstatement at present is about 8 per cent.

10. Masculinity of Live Births.—The masculinity of live births, i.e., the number of males born for every 100 female births, has remained fairly stable for Australia at about 105. But when the number of births for which masculinity is being calculated is small (for example, State totals), considerable variation is shown. For 1958, the figures ranged from 99.14 in Northern Territory to 113.93 in the Australian Capital Territory. The averages for the ten years 1941-50 were as follows:—New South Wales, 105.49; Victoria, 105.47; Queensland, 105.49; South Australia, 105.78; Western Australia, 104.27; Tasmania, 104.45; Northern Territory, 100.20; Australian Capital Territory, 104.91; Australia, 105.38. The following table shows the figures for Australia for each ten-year period from 1901 to 1950 and for each of the years 1955 to 1958:—

MASCULINITY(a) OF LIVE BIRTHS REGISTERED: AUSTRALIA.

Particulars.	1901–10.	1911–20.	1921–30.	1931–40.	1941-50.	1955.	1956.	1957.	1958.
Total Births Ex-nuptial Births	105.22	105.27	105.55	105.12	105.38	105.16	106.87	105.71	104.98
	104.08	105.25	105.16	105.36	105.34	104.72	107.16	102.86	104.83

(a) Number of males born for every 100 female births.

11. Ex-nuptial Live Births.—(i) General. The highest proportion of ex-nuptial births in any one year since 1901 was recorded in 1905, when there were 6,545 ex-nuptial births, representing 6.24 per cent. of total births. Since then the proportion has declined steadily. The largest number of ex-nuptial births was recorded in 1957, when 9,362 were registered, but this number represented only 4.25 per cent. of total births. The lowest proportion was 3.78 per cent. in 1940.

The variations in the proportions of ex-nuptial births as between the individual States and Territories for 1957 are shown below.

EX-NUPTIAL LIVE BIRTHS: NUMBER AND PROPORTION, 1957.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
	3,438	2,065	1,954	651	799	346	87	22	9,362
Proportion of Total Births %	4.33	3.42	5.79	3.33	4.72	4.10	13.47	1.94	4.25

The number and proportion of ex-nuptial births at intervals from 1901 to 1957 are as follows:—

EX-NUPTIAL LIVE BIRTHS: NUMBER AND PROPORTION, AUSTRALIA.

Particulars.				Anı	nual Ave	rage.	i				
Parti	culars.		1901- 10.	1911- 20.	1921- 30.	1931– 40.	1941- 50.	1954.	1955.	1956.	1957.
Number Proportion	of	Total	6,498			5,133	i '	'	8,537	8,970	9,362
Births	• •	%	6.05	5.22	4.66	4.40	4.13	3.97	4.11	4.23	4.25

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.

- (ii) Rate of Ex-nuptiality. A further comparison is obtained by calculating the number of ex-nuptial births per thousand of the single, widowed and divorced female population aged from 15 to 44 years. On this basis, the number of ex-nuptial births per 1,000 unmarried women of ages 15 to 44 is as follows:—1880-82, 14.49; 1890-92, 15.93; 1900-02, 13.30; 1910-12, 12.53; 1920-22, 10.50; 1932-34, 6.91; 1946-48, 11.45; and 1953-55, 14.45. Ex-nuptial births to married women, which are not recorded separately, are included in these figures and it is not possible to determine to what extent they influence the trend shown.
- (iii) Comparison of Rates. The following table, showing the relative proportions of ex-nuptial and nuptial births to the total population, discloses a much greater proportional movement in the ex-nuptial birth rate than in the nuptial rate:—

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

Birth Rate.			Anı	nual Aver	1954.	1955.	1956.	1957.		
22 (11 7 (8)	•	1901–10.	1911-20.	1921–30.	1931-40.	1941–50.		1955.	1936.	1937.
Ex-nuptial Nuptial	•••	1.60	1.39 25.18	1.04	0.76 16.47	0.90 20.99	0.89	0.93	0.95	0.97
Total		26.51	26.57	22.44	17.23	21.89	22.50	22.57	22.50	22.86

- (a) Number of births per 1,000 of mean population.
- 12. Legitimations.—Acts have been passed in the several States to legitimize children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who comes within the scope of their purposes, born before or after the passing thereof, is deemed to be legitimate from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. During 1957, the number of children legitimized in Australia was 952.
- 13. Multiple Births.—Because the current Australian birth statistics are based only on those confinements which resulted in a live-born child, the number of confinements for multiple births for Australia is understated—firstly, because in cases where all children of a multiple birth are still-born the confinement is excluded, and secondly, because some cases of multiple births in which only one child was live-born are registered as single births.

During 1957, multiple births recorded on the above basis comprised 2,495 cases of twins and 31 cases of triplets, the resultant numbers of live-born and still-born children being respectively 4,898 and 92 for twins, 90 and 3 for triplets. This represents an average of

11.45 recorded cases of twins and 0.14 recorded cases of triplets per 1,000 confinements or, alternatively, mothers of twins represented 1 in every 87 mothers and mothers of triplets 1 in every 7,029. Total cases of multiple births represented 11.59 per 1,000 confinements or 1 in every 86 mothers.

The proportion of mothers of multiple births to total mothers does not vary greatly from year to year.

14. Ages of Parents.—The relative ages of the parents of children, whose births were registered in 1957, have been tabulated separately for male and female births, multiple births being distinguished from single births. For total births and for multiple births the relative ages of parents are shown in *Demography*, Bulletin No. 75. In the present work the exigencies of space allows only the insertion of a table showing, in respect of confinements resulting in one or more live births, the relative ages of parents in groups of five years.

CONFINEMENTS: RELATIVE AGES OF PARENTS, AUSTRALIA, 1957.

	ather (Year		Total.									
and Ty	pe of Birth			Under 15.	15–19.	20–24.	25–29.	30–34.	35–39.	40-44.	45 and over.	
Under 20 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65 and over			1,595 31,213 66,578 56,091 30,309 14,912 5,605 1,667 496 119		1,299 7,559 2,513 530 87 22 10 4 2 2	278 20,954 29,500 7,550 1,310 330 87 27 10 5	2,479 30,111 24,938 6,321 1,536 411 101	3 172 4,026 20,195 13,110 4,295 1,132 285 1011 23	394 2,679 8,630	196 830 2,540	1 3 21 67 165 86 21 7	
Mothers of Nuptial Children	Single Twins Triplets Total		206,222 2,386 31 208,639		11,954 73 1 12,028	59,562 487 7 60,056	65,178 780 4 65,962	42,691 647 11 43,349	20,476 336 8 20,820	5,977 61 6,038	372 2 374	
Mothers of Ex-nuptial Children	Single Twins Total		(a)9,148 109 (a)9,257	34	2,082 10 2,092	2,681 32 2,713	1,929 20 1,949	1,377 25 1,402	769 19 788	252 2 254	20 1 21	
Total Mothers	Single Twins Triplets	::	a215370 2,495 31	46 	14,036 83 1	62,243 519 7	67,107 800 4	44,068 672 11	21,245 355 8	6,229 63	392 3	
	Total		a217896	46	14,120	62,769	67,911	44,751	21,608	6,292	395	

(a) Includes four mothers whose ages were not stated.

- 15. Birthplaces of Parents.—A table showing birthplaces of parents of children whose births were registered during 1957 appears in *Demography*, Bulletin No. 75.
- 16. Occupation of Fathers.—A table showing occupations of the fathers of nuptial children whose births were registered in 1957 appears in *Demography*, Bulletin No. 75.
- 17. Age, Duration of Marriage and Issue of Mothers.—(i) General. The total number of nuptial confinements resulting in live births in 1957 was 208,639, comprising 206,222 single births, 2,386 cases of twins, and 31 cases of triplets. The tables relating to previous issue exclude the issue of former marriages and still-born children. On the other hand, they include children by the same father who were born to the mother prior to the marriage. Children born at the present confinement are included in the total issue shown.
- (ii) Duration of Marriage and Issue of Mothers. The following table shows that, in 1957, the duration of marriage of mothers of nuptial children ranged from less than one year to over 25 years, and that the average family increased fairly regularly with the duration of marriage. The average issue of married mothers who bore children in 1957 was 2.54, compared with 2.52 in 1956, 2.50 in 1955, 2.48 in 1954, and 2.45 in 1953.

NUPTIAL CONFINEMENTS: DURATION OF MARRIAGE AND ISSUE OF MOTHERS, AUSTRALIA, 1957.

Duration Marriage (Years).	e	Total Married Mothers.	Total Issue.	Average Issue.	Duration of Marriage (Years).	Total Married Mothers.	Total Issue.	Average Issue.
0- 1		26,932	27,508	1.02	15–16	2,871	13,957	4.86
1- 2		24,310	30,327	1.25	16 17	2,074	10,714	5.17
2- 3		23,352	40,457	1.73				
3- 4		20,287	41,629	2.05	17-18	1,687	9,144	5.42
4- 5		18,097	42,721	2.36	18–19	1,103	6,454	5.85
4- 3	• •	10,097	42,721	2.30	19–20	861	5,423	6.30
5 6		16,316	43,197	2.65		İ		
6- 7		14,224	41,672	2.93	20–21	618	3,938	6.37
7- 8		11,971	37,999	3.17	21-22	450	3,001	6.67
8 - 9		10,050	34,470	3.43	22–23	319	2,221	6.96
9-10		8,818	32,241	3.66	23-24	181	1,365	7.54
10-11		7,574	29,439	3.89	24–25	123	982	7.98
11-12		5,544	22,563	4.07				
12-13	••	4,075	17,490	4.29	25 and over	158	1,383	8.75
13-14		3,431	15,317	4.46				
14-15	• •	3,213	14,935	4.65	Total	208,639	530,547	2.54

(iii) Age and Average Issue of Mothers. The following table shows the average number of children born to mothers of different ages. In the younger ages there is, naturally, little difference in the average number of children to each mother from year to year, but for mothers in the higher age groups the number of issue has fallen until recently in comparison with past years. In 1957, average issue was greater in all age groups under 40 years than in the decade 1941-50. The average issue of mothers of all ages recorded for 1957 (namely, 2.54) is 21.8 per cent. below the average of 3.25 for the years 1911-20.

AGE AND AVERAGE ISSUE OF MOTHERS: AUSTRALIA.

		Age of Mother (Years).												
Period	l .	Under 20.	20–24.	25–29.	30–34.	35–39.	40–44.	45 and over.	All Ages					
1911-20	••	1.21	1.75	2.61	3.74	5.11	6.69	8.16	3.25					
1921-30		1.20	1.71	2.46	3.48	4.80	6.27	7.74	3.04					
1931-40		1.20	1.68	2.30	3.19	4.41	5.89	7.40	2.71					
1941-50		1.17	1.56	2.15	2.85	3.67	4.79	6.19	2.37					
1957		1.23	1.73	2.48	3.16	3.91	4.63	5.86	2.54					

(iv) Previous Issue of Mothers, Various Ages. A classification of mothers by age and previous issue is given for 1957 in the following table:—

NUPTIAL CONFINEMENTS: AGE OF MOTHER AND PREVIOUS ISSUE, AUSTRALIA, 1957.

_				Age of	Mother ((ears).			Total
	rious sue.	Under 20.	20–24.	25–29.	30–34.	35–39.	40-44.	45 and over.	Married Mothers.
0	•••	9,613	30,459	16,396	6,374	2,288	631	31	65,792
1		2,157	19,554	21,417	10,054	3,312	707	34	57,235
2		246	7,316	16,202	11,612	4,532	936	37	40,881
3		22	2,096	7,462	7,897	3,975	1,044	45	22,541
4		2	521	2,853	3,903	2,775	851	51	10,956
5			91	1,051	1,840	1,676	654	45	5,357
6		i I	17	417	877	923	410	29	2,673
7			2	127	446	542	278	22	1,417
8		1 1		31	195	397	173	28	824
9		1		4	87	210	131	11	443
10 and	over	'		2	64	190	223	41	520
Total N Motl	Married	12,040	60,056	65,962	43,349	20,820	6,038	374	208,639

(v) Multiple Births.—Previous Issue of Mothers. Figures regarding the previous issue of married mothers of twins in 1957 show that 610 mothers had no previous issue either living or deceased, 615 had one child previously, 495 had two previous issue, 299 three, 174 four, 89 five, 43 six, 23 seven, 17 eight, 9 nine, 6 ten, 3 eleven, 1 twelve, 1 thirteen and 1 fourteen.

Of the 31 cases of nuptial triplets registered during 1957, 4 mothers had no previous issue 7 had one, 7 had two, 5 had three, 2 had four, 2 had five, 3 had six and 1 had eight.

18. Nuptial First Births.—(i) Duration of Marriage. The following table shows the interval between marriage and first birth for periods since 1911. In cases of multiple births, the first live-born child only is enumerated.

NUPTIAL FIRST BIRTHS: DURATION OF MARRIAGE, AUSTRALIA.

Duration of			Annual	Average.		1055	1056	
Marriage.		1911–20	1921–30	1931-40.	1941–50.	1955.	1956.	1957.
	Nui	MBER OF	Nuptial	First E	BIRTHS.		·	·
Under 8 months		9,312	10,351	10,677	8,822	11,185	11,890	12,55
8 months		1.562	1,530	1,417	2,104	2.084	2,159	2,19
9 ,,		3,517	3,253	2,668	4,298	4,543	4,682	4,72
10 ,,		2,877	2,907	2,202	3,447	3,773	3,911	4,01
11 ,,		2,018	2,152	1,836	2,896	3,114	3,199	3,22
Total under 1 year		19,286	20,193	18,800	21,567	24,699	25,841	26,70
1 year and under 2 years		8,563	10,133	10,595	17,762	17,439	17,820	18,69
2 years ,, ,, 3 ,,		2,626	3,369	4,319	8,028	7,672	7,630	7,84
3 ,, ,, ,, 4 ,,		1,230	1,743	2,214	4,361	4,393	4,209	4,38
4 ,, ,, ,, 5 ,,		700	941	1,205	2,569	2,738	2,729	2,62
5 ,, ,, ,, 10 ,,	• •	980	1,446	1,766	3,936	4,477	4,561	4,61.
10 ,, ,, ,, 15 ,,	• •	168	240	289	501	682	711	74:
15 years and over	• •	42	55	55	94	138	145	173
Total		33,595	38,120	39,243	58,818	62,238	63,646	65,792
Pro	₽∩R	TION OF	TOTAL N	JUPTIAL	First Ri	RTHS	<u>. </u>	
Pro	POR	TION OF	TOTAL N		First Bi	RTHS.	·	
	POR				First Bi	RTHS.	18.68	19.08
Under 8 months 8 months		27.72 4.65	27.15 4.01	.) 27.21 3.61	15.00 3.58	17.97 3.35	3.39	3.33
Under 8 months 8 months 9 ,,	••	27.72 4.65 10.47	27.15 4.01 8.53	27.21 3.61 6.80	15.00 3.58 7.31	17.97 3.35 7.30	3.39 7.36	3.33 7.18
Under 8 months 8 months 9 ,,		27.72 4.65 10.47 8.56	27.15 4.01 8.53 7.63	27.21 3.61 6.80 5.61	15.00 3.58 7.31 5.86	17.97 3.35 7.30 6.06	3.39 7.36 6.14	3.33 7.18 6.09
Under 8 months 8 months 9 ,		27.72 4.65 10.47 8.56 6.01	27.15 4.01 8.53 7.63 5.65	27.21 3.61 6.80 5.61 4.68	15.00 3.58 7.31 5.86 4.92	17.97 3.35 7.30 6.06 5.00	3.39 7.36 6.14 5.03	3.33 7.18 6.09 4.93
Under 8 months 8 months 9 ,		27.72 4.65 10.47 8.56 6.01 57.41	27.15 4.01 8.53 7.63 5.65 52.97	27.21 3.61 6.80 5.61 4.68 47.91	15.00 3.58 7.31 5.86 4.92 36.67	17.97 3.35 7.30 6.06 5.00	3.39 7.36 6.14 5.03 40.60	3.33 7.18 6.09 4.93 40.59
Under 8 months 8 months 9 ,		27.72 4.65 10.47 8.56 6.01 57.41 25.49	27.15 4.01 8.53 7.63 5.65 52.97 26.58	27.21 3.61 6.80 5.61 4.68 47.91 27.00	15.00 3.58 7.31 5.86 4.92 36.67 30.20	17.97 3.35 7.30 6.06 5.00 39.68 28.02	3.39 7.36 6.14 5.03 40.60 28.00	3.33 7.18 6.09 4.93 40.59 28.42
Under 8 months 8 months 9 ,, 0 ,, 1 ,, Total under 1 year 1 year and under 2 years 2 years ,, ., 3 ,,		27.72 4.65 10.47 8.56 6.01 57.41 25.49 7.82	27.15 4.01 8.53 7.63 5.65 52.97 26.58 8.84	27.21 3.61 6.80 5.61 4.68 47.91 27.00 11.01	15.00 3.58 7.31 5.86 4.92 36.67 30.20 13.65	17.97 3.35 7.30 6.06 5.00 39.68 28.02 12.33	3.39 7.36 6.14 5.03 40.60 28.00 11.98	3.33 7.18 6.09 4.93 40.59 28.42 11.92
Under 8 months 8 months 9 ,,		27.72 4.65 10.47 8.56 6.01 57.41 25.49 7.82 3.66	27.15 4.01 8.53 7.63 5.65 52.97 26.58 8.84 4.57	27.21 3.61 6.80 5.61 4.68 47.91 27.00 11.01 5.64	15.00 3.58 7.31 5.86 4.92 36.67 30.20 13.65 7.41	17.97 3.35 7.30 6.06 5.00 39.68 28.02 12.33 7.06	3.39 7.36 6.14 5.03 40.60 28.00 11.98 6.61	3.3. 7.18 6.09 4.9 40.59 28.42 11.92 6.66
Under 8 months 8 months 9 ,,		27.72 4.65 10.47 8.56 6.01 57.41 25.49 7.82 3.66 2.08	27.15 4.01 8.53 7.63 5.65 52.97 26.58 8.84 4.57 2.47	27.21 3.61 6.80 5.61 4.68 47.91 27.00 11.01 5.64 3.07	15.00 3.58 7.31 5.86 4.92 36.67 30.20 13.65 7.41 4.37	17.97 3.35 7.30 6.06 5.00 39.68 28.02 12.33 7.06 4.40	3.39 7.36 6.14 5.03 40.60 28.00 11.98 6.61 4.29	3.33 7.18 6.09 4.99 40.59 28.42 11.92 6.66 3.99
Jnder 8 months 8 months 9 ,, 0 ,, 1 ,, Total under 1 year 1 year and under 2 years 2 years ,, , 3 ,, 3 ,, ,, , 4 ,, 4 ,, ,, ,, 5 ,, 5 ,, ,, ,, 10 ,,		27.72 4.65 10.47 8.56 6.01 57.41 25.49 7.82 3.66 2.08 2.92	27.15 4.01 8.53 7.63 5.65 52.97 26.58 8.84 4.57 2.47 3.79	27.21 3.61 6.80 5.61 4.68 47.91 27.00 11.01 5.64 3.07 4.50	15.00 3.58 7.31 5.86 4.92 36.67 30.20 13.65 7.41 4.37 6.69	17.97 3.35 7.30 6.06 5.00 39.68 28.02 12.33 7.06 4.40 7.19	3.39 7.36 6.14 5.03 40.60 28.00 11.98 6.61 4.29 7.17	3.33 7.18 6.09 4.9 40.59 28.42 11.92 6.66 3.99 7.01
Under 8 months 8 months 9 ,,		27.72 4.65 10.47 8.56 6.01 57.41 25.49 7.82 3.66 2.08	27.15 4.01 8.53 7.63 5.65 52.97 26.58 8.84 4.57 2.47	27.21 3.61 6.80 5.61 4.68 47.91 27.00 11.01 5.64 3.07	15.00 3.58 7.31 5.86 4.92 36.67 30.20 13.65 7.41 4.37	17.97 3.35 7.30 6.06 5.00 39.68 28.02 12.33 7.06 4.40	3.39 7.36 6.14 5.03 40.60 28.00 11.98 6.61 4.29	19.08 3.33 7.18 6.09 4.91 40.59 28.42 11.92 6.66 3.99 7.01 1.13 0.28

In 1957 the masculinity of nuptial first births was 107.34 and of total births 105.71.

(ii) Age of Mother and Duration of Marriage. A summary showing grouped ages and grouped durations of marriage of mothers of nuptial first-born children is given in the following table:—

NUPTIAL FIRST BIRTHS: AGE OF MOTHER AND DURATION OF MARRIAGE, AUSTRALIA, 1957.

	Age of Mother (Years).								
Duration of Marriage.	Under 20.	20–24.	25–29.	30-34.	35–39.	40-44.	45 and over.	Total.	
Under 8 months	5,794	5,025	1,078	417	186	53	1	12,554	
8 months	424	1.164	413	133	45	11		2,190	
9 ,,	635	2,759	903	335	76	17	1	4,726	
10	532	2,315	804	257	82	20		4,010	
11 ,	415	1,931	603	205	59	15		3,228	
Total under 1 year	7,800	13,194	3.801	1,347	448	116	2	26,708	
1 year and under 2 years	1,595	10,874	4.182	1,390	. 508	145	3	18,697	
2 years ,, ,, 3 ,,	182	3,978	2,563	792	249	73	7	7,844	
3 ,, ,, ,, 4 ,,	35	1,573	2,035	507	180	50	2	4,382	
4 ,, ,, ,, 5 ,,	1	555	1,488	401	139	38	2	2,62	
5 ,, ,, ,, 10 ,,		284	2,274	1,521	425	102	9	4,61	
10 ,, ,, ,, 15 ,,	1	1	53	394	245	52	:	74:	
15 years and over		<u></u>	<u>:-</u>	22	94	55	6	17	
Total	9,613	30,459	16,396	6,374	2,288	631	31	65,79	

(iii) Nuptial First Births and Subsequent Births. The following table provides a comparison between the numbers of nuptial first births and subsequent births in periods since 1911 and shows also the proportion of first to total nuptial confinements.

NUPTIAL FIRST BIRTHS AND SUBSEQUENT BIRTHS: AUSTRALIA.

					Nupt	nts.	Proportion of First to	
	1	Period.			First Births.	Other Births.	Total.	Total Nuptia Confine- ments (Per Cent.).
			A	NNUAL	Averages.			
1911-20	•••	••	••		33,595	88,997	122,592	27.40
1921-30					38,120	88,086	126,206	30.20
1931–40					39,243	71,136	110,379	35.55
1941-50				1	58,818	96,994	155,812	37.75
				Annuai	Totals.			
1953	•••	•••		1	63,726	128,187	191,913	33.21
1954					62,029	129,989	192,018	32.30
1955					62,238	134,679	196,917	31.61
1956					63,646	137,217	200,863	31.69
1957					65,792	142,847	208,639	31.53

19. Stillbirths.—Registration of stillbirths is not compulsory in all Australian States. It has been compulsory in Western Australia since 14th January, 1908; in the Australian Capital Territory since 1st January, 1930; in New South Wales since 1st April, 1935; in South Australia since 1st May, 1937; in the Northern Territory since 1949; and in Victoria from 1st January, 1953. In Queensland and Tasmania, where registration is not enforced, some information is obtained by notification of stillbirths for various purposes. Because registration is not compulsory in all States, detailed statistics of stillbirths for Australia as a whole have not been compiled.

The number of stillbirths in each State and Territory, as recorded since 1936 by the means outlined above, is shown in the following table:—

STILLBIRTHS.

Period	1.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
				Ann	UAL AVE	RAGES.			-	
1936-40		1,409	854	(a)	(b) 274	234	144	(a)	5	(a)
1941–45		1,478	966	(c) 657	324	248	143	(a)	9	de 3,825
1946-50		1,405	949	626	368	274	161	(a)	12	(e) 3,795
1951-55		1,239	849	581	290	271	139	8	15	3,392
				An	NUAL TO	TALS.				
1953	!	1,257	817	585	287	268	141	8	16	1 3,379
1954		1,207	794	554	254	270	124	8	19	3,230
1955		1,243	788	521	271	239	109	7	13	3,19
1956		1,273	819	556	274	226	122	4	28	3,302
1957		1,282	870	584	297	273	104	4	9	3,423
(a) Not Queensland				years 19	938-40. orthern Te		r years	1942–45.	(d)	Exclude

The incidence of stillbirths in each State and Territory as measured by the rate per 1,000 of all births, both live and still, is as follows:—

PROPORTION OF STILLBIRTHS.(a)

PROPORTION OF STILLBIRTHS.(a)										
Period	l .	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
				Average	e Annu	AL RATES		·		·
1936-40	<u> </u>	28.71	27.43	(b)	c27.49	25.70	28.75	(b)	22.18	(b)
1941-45		25.46	24.79	d26.76	25.17	23.29	25.68	(b)	22.87	ef 25.2
1946-50		19.99	19.64	21.87	22.12	20.46	22.26	(b)	16.35	f 20.46
1951-55		16.52	15.55	18.41	15.80	16.97	17.54	17.20	15.58	16.50
				An	NUAL R	ATES.				
1953		16.51	15.02	18.65	15.56	16.62	17.90	17.09	19.90	16.43
1954		16.24	14.32	17.46	13.74	16.67	15.71	15.36	21.69	15.72
1955		16.43	13.79	15.85	14.44	14.17	13.30	13.41	14.87	15.13
1956		16.54	13.83	16.87	14.24	13.18	14.83	7.14	25.34	15.33
1957		15.88	14.18	17.00	14.98	15.87	12.18	6.15	7.87	15.30

⁽a) Number of stillbirths per 1,000 of all births (live and still). (b) Not available. (c) Three years 1938-40. (d) Four years 1942-45. (e) Excludes Queensland for 1941. (f) Excludes the Northern Territory.

§ 5. Mortality.

Note.—See Note at the beginning of this chapter. A detailed analysis for 1957 of causes of death and other characteristics such as issue will be found in *Demography*, Bulletin No. 75.

1. Number of Deaths.—(i) Year 1958. The following table shows the number of deaths, male and female, registered in each State and Territory during the year. Still-births, although registered as both births and deaths in some States, are excluded from the death statistics published herein.

DEATHS, 1958.

Sex.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Males					3,270			110	47,050
Females	 14,071	10,846	4,726	3,481	2,284	1,174	19	72	36,673
Persons	 32,350	23,625	11,455	7,743	5,554	2,708	106	182	83,723

(ii) Years 1931 to 1958. A summary of the number of deaths in each State and Territory from 1931 to 1958 is given in the following table. Annual averages for each five-year period from 1861 to 1950 were published in Official Year Book No. 39, page 597.

]	DEATH	<u>. </u>				
Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
	!	<u> </u>	Annt	JAL AVE	RAGES.				
1931-35 1936-40(a) 1941-45(a) 1946-50(a) 1951-55	 22,591 25,735 27,807 29,552 32,135	17,680 19,361 20,964 21,827 22,900	8,147 9,107 9,715 10,357 11,187	5,063 5,540 6,303 6,507 7,182	3,876 4,270 4,724 4,802 5,263	2,194 2,342 2,488 2,459 2,576	67 73 64 76 109	35 54 71 103 131	59,653 66,482 72,136 75,683 81,483
	 		Anı	VUAL TO	TALS.			l	
1954 1955 1956 1957 1958	 32,444 32,553 34,064 33,317 32,350	22,554 22,527 23,886 24,131 23,625	11,344 11,307 12,186 11,679 11,455	7,179 7,536 7,593 7,576 7,743	5,364 5,379 5,572 5,297 5,554	2,696 2,489 2,513 2,670 2,708	106 119 107 115 106	118 126 167 168 182	81,805 82,036 86,088 84,953 83,723

⁽a) Excludes deaths of defence personnel and of internees and prisoners of war from overseas for the period September, 1939 to June, 1947.

2. Crude Death Rates.—The commonest method of measuring the mortality rate is to relate the number of deaths for a given period to the mean population for that period, thus obtaining the crude death rate. This rate for a given period measures the number per thousand of population by which the population is depleted through deaths during that period. Crude death rates for each State and Territory from 1931 to 1958 are shown in the following table.

CRUDE DEATH RATES.(a) N.T. N.S.W. A.C.T. Period. Vic. Q'land. S. Aust. W. Aust. Tas. Aust. AVERAGE ANNUAL RATES. 9.00 1931-35 8.68 9.72 8.62 8.72 8.83 9.62 13.46 3.81 1936-40(b) 9.45 10.36 9.08 9.33 9.22 9.91 11.69 4.54 9.63 10.63 1941-45(b) 9.73 9.24 10.26 9.86 10.21 6.43 4.98 9.96 ٠. 9.70 9.13 9.74 1946-50(b) 10.37 9.76 9.23 9.30 6.27 5.31 . . 9.49 9.55 8.71 6.92 (c)4.601951-55 9.25 8.49 8.47 9.25 ANNUAL RATES. 6.54 1954 9.46 9.19 8.64 9.01 8.38 8.67 3.88 9.10 . . 6.98 (c)3.89 5.98 (c)4.81 1955 9.32 8.92 8.44 9.19 8.17 7.87 8.91 . . 1956 9.58 9.17 8.92 8.95 8.23 7.80 9.13 . . 1957 9.20 9.03 8.39 8.67 7.66 8.09 6.14 (c)4.468.81 1958-9.26 Males 9.87 9.29 9.37 9.03 8.78 8.03 5.00 9.45 . . 7.98 2.26 7.64 6.85 6.65 7.21 7.53 Females . . 7.87 3.76 8.63 5.51 Persons 8.76 8.62 8.10 7.87 8.02 4.43 8.50

A graph showing the number of deaths in each year from 1860 to 1958 will be found on page 333.

⁽a) Number of deaths per 1,000 of mean population. (b) Excludes deaths of defence personnel from September, 1939 to June, 1947. (c) Revised rates based on population estimates adjusted in accordance with the June, 1957 Population Count of Canberra are as follows:—1951-55, 4.58; 1955, 3.85; 1956, 4.72; 1957, 4.42.

A graph showing the crude death rate for each year from 1860 to 1958 will be found on page 334.

- 3. Standardized Death Rates.—(i) General. The death rates quoted above are crude rates, i.e., they simply show the number of deaths per thousand of mean population without taking into consideration differences in the sex and age composition of the population. Other conditions being equal, however, the crude death rate of a community will be low if it contains a large proportion of young people (not infants), and conversely it will be relatively high if the population includes a large proportion of elderly people. The foregoing table of crude death rates, therefore, does not indicate comparative incidence of mortality either as between States in the same year or in any one State over a period of years. In order to obtain a comparison of mortality rates on a uniform basis as far as sex and age constitution are concerned, "standardized" death rates may be computed. These are computed by selecting a particular distribution of age and sex as a standard, and then calculating what would have been the general death rate if the death rates for each sex and in each age group had been as recorded, but the age and sex distribution had been the same as in the standard population. For the standardized rates which follow, the standard population compiled by the International Institute of Statistics has been used. This standard is based upon the age distribution according to sex of nineteen European countries at their censuses nearest to the year 1900. Full details of the "Standard Population" were published in Official Year Book No. 22, page 962.
- (ii) Death Rates in Age Groups. An examination of the age distribution of deaths and the resultant age-specific death rates is made in paragraph 9, page 354.
- (iii) Comparison of Crude and Standardized Death Rates. The relative incidence of mortality as between individual States and as between the years 1921, 1933, 1947 and 1954 is illustrated in the following statement of crude and "standardized" death rates. These years have been chosen for comparison because the census data give essential information as to sexes and ages of the State populations. Crude death rates are shown to indicate the degree to which they disguise the true position.

	Partic	culars.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Crude D	eath R	ate(a)—				<u> </u>				
1921	. <i>.</i>			9.50	10.52	9.37	10.02	10.42	10.30	9.91
1933				8.58	9.59	8.84	8.44	8.64	9.60	8.92
1947				9.53	10.44	9.15	9.61	9.39	9.17	9.69
1954				9.46	9.19	8.64	9.01	8.38	8.67	9.10
Standaro	lized D	eath Rate	(b)				1	1 1		
1921			`	10.35	10.79	10.24	10.38	11.88	10.83	10.58
1933				8.52	8.74	9.10	7.66	8.74	8.86	8.62
1947				7.44	7.31	7.47	6.77	7.28	7.21	7.34
1954				7.24	6.63	6.80	6.52	6.71	7.02	6.90

CRUDE AND STANDARDIZED DEATH RATES.

The comparisons above relate to individual years in which a census of population was taken and should not be used as the basis for general conclusions as to changes in incidence of mortality for other than those years.

4. True Death Rates.—The main objections to standardized death rates are that the choice of a standard population is arbitrary and that the standardized rates have little value except for comparative purposes, and even then variation of the standard population may make appreciable differences. However a correct measurement of the mortality of the population can be obtained from life tables. A life table represents the number of survivors at each age from a group of newly-born children who are subject to given mortality conditions, and from such a table the complete expectation of life at birth can be calculated. The reciprocal of this figure is known as the true death rate, since, if the complete expectation of life of a person at birth is 50 years, say, then each person will on the average die 50 years after birth, so that in the standard population one person in 50 or 20 per thousand will die each year. The true death rate for a given period is unaffected by the particular age distribution of that period and is determined solely by the mortality experience of the period as manifested in the rate of survivorship from each year of age to the next. The table below sets out complete expectation of life at birth and true death rates for the periods covered by Australian life tables.

⁽a) Total deaths per 1,000 of mean population. in para. 3 (i) above.

⁽b) See explanation of standardized death rates

COMPLETE EXPECTATION OF LIFE AT BIRTH AND TRUE DEATH RATES: AUSTRALIA.

	Period.			spectation of th (Years).	True Death Rate.		
			Males.	Females.	Males.(a)	Females.(b)	
1881-1890	 	 	47.20	50.84	21.19	19.67	
1891-1900	 	 	51.06	54.76	19.58	18.26	
1901-1910	 	 	55.20	58.84	18.12	17.00	
1920-1922	 	 	59.15	63.31	16.91	15.80	
1932-1934	 	 	63.48	67.14	15.75	14.89	
1946-1948	 	 	66.07	70.63	15.14	14.16	
1953-1955	 	 	67.14	72.75	14.89	13.75	

⁽a) Number of deaths per 1,000 males in life table or stationary population. deaths per 1,000 females in life table or stationary population.

5. Crude Death Rates, Various Countries.—The following table gives crude death rates for Australia in comparison with rates for various other countries.

CRUDE DEATH RATES(a): VARIOUS COUNTRIES.

				(,					
Country.	1921- 25.	1926- 30.	1931- 35.	1957.	Country.	1921- 25.	1926- 30.	1931- 35.	1957.
Netherlands Canada	10.4 11.2 21.8 11.5	9.9 11.1 19.3 11.0	8.9 9.7 17.9 10.4 9.8	7.5 8.2 8.3 8.6 8.8	Sweden	12.1 20.2 12.5 17.4 20.2 12.4	12.1 17.9 12.1 16.0 20.0 12.3	11.6 16.4 11.8 14.1 17.9 12.2	9.9 10.0 10.0 10.0 10.5 11.5
Australia(c) Denmark New Zealand(d) Finland United States of America	9.5 11.3 8.6 15.1	9.3 11.1 8.6 14.8	9.0 10.9 8.2 13.3	8.8 9.3 9.4 9.4 9.6	Ireland, Republic of France Belgium Austria	14.6 17.2 13.4 15.8	14.4 16.8 13.7 14.4	14.0 15.7 12.9 13.5	11.9 12.0 12.4 12.8

⁽a) Number of deaths per 1,000 of mean or mid-year population.
(b) White population only.
(c) Excludes full-blood aboriginals.
(d) Excludes Maoris.
(e) 1933-35.

6. True Death Rates, Various Countries.—The following table gives true death rates for Australia in comparison with rates for various other countries:—

TRUE DEATH RATES: VARIOUS COUNTRIES.

!		True De	ath Rate.			True De	ath Rate.
Country.	Period.	Males.	Females.	Country.	Period.	Males.	Females,
Netherlands	1953-55	14.1	13.5	Scotland	1956	15.2	14.0
Norway	1951-55	14.1	13.4	Northern Ire-			1
Sweden	1951-55	14.2	13.6	land	1950-52	15.3	14.5
New Zealand(c)	1950-52	14.6	13.8	Germany, Fed-		1	
Denmark	1951-53	14.3	13.8	eral Republic	1952-53	15.4	14.5
England and		ł	1 1	Ireland, Re-		i	
Wales	1953-55	14.8	13.7	public of	1950-52	15.5	14.9
United States of	ļ	Į		France	1950-51	15.7	14.4
America-				Japan	1955	15.7	14.6
Whites	1956	14.9	13.6	Union of South		}	1
Others	1956	16.4	15.2	Africa(e)	1945-47	15.7	14.6
Australia (d)	1953-55	14.9	13.8	Finland	1951-55	15.9	14.3
Canada	1950-52	15.1	14.1	Belgium	1946-49	16.1	14.9
Switzerland	1948-53	15.1	14.1	Austria	1949-51	16.2	14.9

⁽a) Number of deaths per 1,000 males in life table or stationary population (see explanation on p. 345).
(b) Number of deaths per 1,000 females in life table or stationary population (see explanation on p. 345).
(c) Excludes Maoris.
(d) Excludes full-blood aboriginals.
(e) White population only.

⁽b) Number of

7. Australian Life Tables.—(i) Life Tables prior to 1954. It has been the practice at each census from 1911 onwards to prepare Life Tables representative of the mortality experience of Australia. The mortality of the Australian population for the thirty years from 1881 to 1910 inclusive was investigated in 1911 by the Commonwealth Statistician. Tables were compiled for each State and for Australia as a whole in respect of each sex for each of the decennial periods 1881-1890, 1891-1900 and 1901-1910. These compilations furnished a comprehensive view of Australian mortality in respect of sex, of time, and of geographical distribution, and practically superseded all Life Tables prepared in Australia prior to 1911. In addition, monetary tables based on the experience for the whole of Australia for the ten years 1901-1910 were prepared and published.

At the Census of 1921, Life Tables were prepared by the Commonwealth Statistician from the population recorded and the deaths in the three years 1920 to 1922. In 1933 and 1947, Life Tables based on the census population and the deaths in the years 1932 to 1934

and 1946 to 1948 respectively were compiled by the Commonwealth Actuary.

(ii) Life Tables of Census of 1954. On the occasion of the 1954 Census, the seventh in the scries of Life Tables were compiled by the Commonwealth Actuary. These were based on the population recorded at the Census, adjusted to allow for variation in the net movement into Australia over the years 1953 to 1955, and deaths during these years. Full particulars of the data used, the method of construction and the tabulations of these Life Tables will be found in the report of the Commonwealth Actuary which was published by the Commonwealth Statistician in 1958. This report will also appear in Volume VIII of the detailed tables of the 1954 Census.

The main features of the tables, including comparisons with earlier Australian tables and the latest experience in the United Kingdom and New Zealand are set out in the following summary tables.

COMPARATIVE TABLES. 1. RATES OF MORTALITY (q_r) AT REPRESENTATIVE AGES.

				1710111 (9	X) AT REE	TESETTA	TITE AGE	· · · · · · · · · · · · · · · · · · ·
		ge v).		1901–10.	1920–22.	1932–34.	1946–48.	1953–55.
				M	ALES.	<u>'</u>		
0			••• (.09510	.07132	. 04543	.03199	.02521
10				.00179	.00156	.00119	.00072	.00056
20				.00370	.00284	.00219	.00169	.00186
30				.00519	.00390	.00271	.00186	.00170
40				.00816	.00617	.00460	.00337	.00297
50				.01395	.01158	.00966	.00919	.00819
60				.02584	.02407	.02216	.02278	.02221
70			i	.06162	.05290	.05082	.05256	.05315
80				.13795	.13340	.12659	.12011	.11958
				FE	MALES.			
0	•••	•••		.07953	.05568	.03642	.02519	.01989
10				.00159	.00127	.00087	.00050	.00035
20				.00329	.00252	.00183	.00091	.00064
30]	.00519	.00387	.00279	.00165	.00096
40				.00718	.00524	.00402	.00284	.00217
50				.00956	.00808	.00744	.00641	.00530
60				.01920	.01571	.01466	.01360	.01203
70			1	.04777	.04090	.03802	.03607	.03250
80				.11333	.11230	.10106	.10027	.09314

2. RATES OF MORTALITY FOR ONE PERIOD AS A PROPORTION OF THE RATES FOR THE PRECEDING PERIOD.

			Ma	les.			Fem	ales.	
	Age.	1920-22	1932-34	1946-48	1953–55	1920-22	1932–34	1946-48	1953-55
		1901-10.	1920-22.	1932-34.	1946-48.	1901-10.	1920-22.	1932-34.	1946-48.
0	<u> </u>	.75	.64	.70	.79	.70	.65	.69	.79
10		.87	.76	.61	. 78	.80	.69	.57	. 70
20		.77	.77	.77	1.10	.77	. 73	. 50	.70
30		.75	. 69	.69	.91	.75	.72	. 59	. 58'
40		.76	.75	.73	.88	.73	.77	.71	.76
50		.83	.83	.95	.89	.85	.92	.86	. 83
60		.93	.92	1.03	.97	.82	.93	.93	.88
70		.86	.96	1.03	1.01	.86	.93	.95	.90
80		.97	.95	.95	1.00	.99	.90	.99	.93

3. RATES OF MORTALITY FOR PERIODS SINCE 1901-10. AS A PROPORTION OF THE RATES FOR THE PERIOD 1901-10

			Ma	les.		Females.				
	Age.	1920-22	1932-34	1946-48	1953-55	1920-22	1932–34	1946-48	1953–55	
		1901–10.	1901-10.	1901-10.	1901-10.	1901–10.	1901-10.	1901-10.	1901-10	
0		.75	.48	.34	.27	.70	.46	.32	.25	
10	• • • • • • • • • • • • • • • • • • • •	.87	.66	.40	.31	.80	.55	.31	.22	
20		.77	.59	.46	.50	.77	.56	.28	. 19	
30		.75	.52	.36	.33	.75	.54	.32	.18	
40		.76	.56	.41	.36	.73	. 56	.40	.30	
50		.83	.69	. 66	.59	.85	.78	.67	.55	
60		.93	.86	. 88	.86	.82	.76	.71	. 63	
70		. 86	.82	.85	.86	.86	.80	.76	. 68	
80		.97	.92	.87	.87	.99	.89	.88	. 82	

4. NUMBER OF SURVIVORS (l_x) AT SELECTED AGES OUT OF 100,000 BIRTHS.

		ļ	Ma	les.		Females.					
	Age (x).	1920–22.	1932–34.	1946-48.	1953–55.	1920–22.	1932–34.	1946-48.	1953–55.		
0		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000		
10		89,389	93,193	95,619	96,488	91,314	94,424	96,549	97,228		
20		87,697	91,797	94,562	95,460	89,906	93,341	95,953	96,774		
30		84,743	89,566	92,967	93,801	87,086	91,174	94,740	96,055		
40		80,813	86,539	90,823	91,861	83,279	88,175	92,758	94,715		
50		74,330	81,061	85,946	87,553	78,313	83,680	89,011	91,573		
60		63,386	69,950	74,251	76,256	70,150	75,565	81,257	84,665		
70		44,332	50,086	52,230	54,054	54,771	59,629	65,398	69,613		
80		18,614	22,223	22,785	23,658	27,170	31,539	35,401	39,633		
90		2,141	2,935	3,144	3,507	4,238	5,808	6,556	8,087		
		1	1		1) '	1			

5. COMPLETE EXPECTATION OF LIFE (\mathring{e}_x) AT SELECTED AGES.

	Age		Ma	les.		Females.					
	(x)	1920–22.	1932-34.	1946-48.	1953-55.	1920-22.	1932–34.	1946-48.	1953–55.		
0		59.15	63.48	66.07	67.14	63.31	67.14	70.63	72.75		
10		56.01	58.02	59.04	59.53	59.20	61.02	63.11	64.78		
20		46.99	48.81	49.64	50.10	50.03	51.67	53.47	55.06		
30		38.44	39.90	40.40	40.90	41.48	42.77	44.08	45.43		
40		30.05	31.11	31.23	31.65	33.14	34.04	34.91	35.99		
50		22.20	22.83	22.67	22.92	24.90	25.58	26.14	27.03		
50		15.08	15.57	15.36	15.47	17.17	17.74	18.11	18.78		
70		9.26	9.60	9.55	9.59	10.41	10.98	11.14	11.62		
80		5.00	5.22	5.36	5.47	5.61	6.01	6.02	6.30		

MORTALITY 349

6. RATES OF MORTALITY (q_x) AT SELECTED AGES FROM 1953-55 EXPERIENCE COMPARED WITH RECENT RATES OF MORTALITY FOR THE UNITED KINGDOM AND NEW ZEALAND.

		i		Males.		Females.				
	Age . (x)		Australia 1953–55.	United Kingdom 1950-52.	New Zealand 1950-52.	Australia 1953–55.	United Kingdom 1950-52.	New Zealand 1950-52.		
0			.02521	.03266	.02499	.01989	.02510	.01995		
10			.00056	.00052	.00050	.00035	.00035	.00028		
20			.00186	.00129	.00161	.00064	.00083	.00068		
30			.00170	.00157	.00160	.00096	.00127	.00110		
40		'	.00297	.00290	.00268	.00217	.00227	.00209		
50			.00819	.00850	.00727	.00530	.00524	.00552		
60			.02221	.02369	.01951	.01203	.01271	.01316		
70			.05315	.05651	.04723	.03250	.03532	.03282		
80			.11958	.13629	.11260	.09314	.10466	.09334		

7. RATES OF MORTALITY FROM 1953-55 AUSTRALIAN EXPERIENCE, AS A PROPORTION OF THE RATES FOR THE UNITED KINGDOM AND NEW ZEALAND.

		Ma	iles.	Females.			
	Age (x).	Australia 1953-55 United Kingdom 1950-52.	Australia 1953-55 New Zealand 1950-52.	Australia 1953-55 United Kingdom 1950-52.	Australia 1953-55 New Zealand 1950-52.		
0	 	 .77	1.01	.79	1.00		
10		 1.08	1.12	1.00	1.25		
20	 	 1.44	1.16	.77	.94		
30	 	 1.08	1.06	.76	.87		
40	 	 1.02	1.11	.96	1.04		
50	 	 .96	1.13	1.01	.96		
60	 	 .94	1.14	.95	.91		
70	 	 .94	1.13	.92	.99		
80	 	 .88	1.06	.89	1.00		

The main features of the mortality rates are:-

(a) Male Mortality. With the exception of ages 16 to 26 inclusive, and 69 to 73 inclusive, the 1953-55 mortality rates are less than those for 1946-48. The most significant reduction has occurred at age 0, where the mortality rate is 79 per cent. of the corresponding rate for 1946-48, and only 27 per cent. of the experience for the period 1901-1910.

The most disturbing feature of the current experience has been the increase in mortality which has occurred in the 16-26 age group. This is the result of heavier mortality from accidents of all types, which has more than counterbalanced a decrease in the rates of mortality due to other causes.

At advanced ages, the experience suggests that only a slight improvement in male mortality has occurred since 1946-48.

(b) Female Mortality. The comparative tables above show that very substantial decreases in female mortality rates have occurred over the whole range of ages since the 1946-48 experience. This improvement has been considerably greater overall than that for males

Accident mortality among females, which has never been as significant as among males has increased very slightly but this increase has been more than offset by the reduction in the mortality from other causes. There is a notable disparity between the high male accident rate and the low female rate.

In the 1946-48 experience, female mortality from causes other than accident was, in the age range 20 to 39 years, heavier than the corresponding male mortality. For 1953-55, however, the position has been reversed. At high ages the female mortality rates have shown substantially greater improvement since 1946-48 than the male rates.

8. Infant Deaths and Death Rates.—(i) States. (a) Under One Year. For each State and Territory the number of deaths under one year of age and the rates of infant mortality during the period 1931 to 1958 were as follows:—

INFANT MORTALITY: UNDER ONE YEAR.

Period.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
		<u> </u>	<u>:</u>	Annı	JAL AVE	RAGES.		<u>'</u>	<u>'</u>	
1931-35	•••	1,885	1,214	690	304	329	202	6	5	4,635
1936-40		1,963	1,139	718	311	352	201	6	5	4,695
1941-45		2,034	1,311	804	413	347	213	7	7	5,136
1946-50		1,990	1,129	770	431	370	187	11	14	4,902
1951-55		1,852	1,113	730	407	384	184	17	14	4,701
				Ann	TO TO	TALS.		-		
1954	· · ·	1,850	1,055	695	388	359	186	9	4	4,546
1955		1,850	1,035	656	431	373	189	26	12	4,572
1956		1,777	1,128	737	377	384	170	24	11	4,608
1957		1,804	1,219	732	403	357	170	22	10	4,717
1958		1,704	1,178	657	449	360	167	22	23	4,560
			A	VERAGE	ANNUAL	RATES.(a)			
1931-35		41.92	42.76	39.46	35.12	40.81	44.47	80.60	34.48	41.27
1936-40		41.18	37.63	36.75	33.08	39.70	41.23	44.80	21.78	38.81
1941-45		35.95	34.50	34.30	32.95	33:30	39.31	61.73	18.72	34.97
1946-50		28.91	23.82	27.49	26.50	28.15	26.53	37.37	19.89	26.98
1951-55		25.11	20.70	23.58	22.55	24.41	23.67	36.28	15.40	23.34
				Ann	UAL RAT	res.(a)				
1954	••	25.30	19.30	22.29	21.29	22.54	23.94	17.54	4.67	22.48
1955		24.86	18.37	20.28	23.30	22.44	23.37	50.49	13.94	22.01
1956		23.47	19.32	22.74	19.88	22.70	20.98	43.17	10.21	21.72
1957		22.70	20.16	21.68	20.63	21.09	20.15	34.06	8.82	21.41
1958		21.29	19.23	19.40	22.40	21.52	19.49	31.56	18.04	20.49

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

(b) Under Four Weeks. The following table shows infant mortality rates under four weeks of age in each State and Territory during the period 1931 to 1957.

INFANT MORTALITY RATES (a): UNDER FOUR WEEKS.

Period		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
-				Averag	E ANNU	AL RATES	··			
1931-35	••	27.62	27.78	27.91	22.99	25.11	30.09	35.26	23.45	27.27
1936-40		27.63	25.94	26.15	21.62	22.62	29.56	28.80	16.33	26.19
1941-45		24.52	24.40	24.41	20.86	20.60	27.24	33.57	12.54	23.97
1946-50		20.53	17.55	19.95	18.38	19.53	19.34	21.45	15.80	19.34
1951-55		17.34	15.18	17.09	14.95	17.27	16.34	19.63	11.28	16.45
				AN	NUAL R	ATES.				
1953		17.17	15.70	17.80	13.99	16.45	15.51	23.91	13.96	16.48
1954		17.70	14.42	16.81	15.25	16.07	16.47	7.80	3.50	16.19
1955		17.31	13.49	14.84	14.11	16.00	16.81	33.01	11.61	15.50
1956		16.97	14.13	16.35	13.55	15.90	14.56	30.58	7.43	15.60
1957		16.39	15.02	15.22	13.77	15.13	13.63	18.58	7.06	15.36

⁽a) Number of deaths of children aged under four weeks per 1,000 live births registered.

(c) Four Weeks and under One Year. Infant mortality rates for children aged four weeks and under one year are shown in the following table for the period 1931 to 1957.

Period	1.	N.S.W.	Vic.	Q'land.	S. Aust.	W Aust.	Tas.	N.T.	A.C.T.	Aust.
				Averagi	E ANNUA	L RATES				
1931-35		14.30	14.98	11.55	12.13	15.70	14.38	45.34	11.03	14.00
1936-40		13.55	11.69	10.60	11.46	17.08	11.67	16.00	5.45	12.62
1941-45		11.77	10.33	10.14	12.34	12.77	12.30	22.40	6.21	11.27
1946-50		8.38	6.27	7.54	8.12	8.62	7.19	15.92	4.09	7.64
1951-55		7.77	5.52	6.49	7.60	7.14	7.33	16.65	4.12	6.89
				An	NUAL R	ATES.				
1953		7.48	5.45	7.18	6.66	7.38	7.37	15.22	7.61	6.82
1954		7.60	4.88	5.48	6.04	6.47	7.47	9.74	1.17	6.29
1955		7.55	4.88	5.44	9.19	6.44	6.56	17.48	2.33	6.51
1956		6.50	5.19	6.39	6.33	6.80	6.42	12.59	2.79	6.12
1957		6.31	5.14	6.46	6.86	5.96	6.52	15.48	1.76	6.05

- (a) Number of deaths of children aged four weeks and under one year per 1,000 live births registered.
- (ii) Australia. (a) Under One Year. 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 536,330 male infants born from 1953 to 1957, 13,170 (24.56 per 1,000) died during the first year of life, while of 508,329 female infants only 9,986 (19.65 per 1,000) died during the first year. Stillbirths, for which masculinity is also higher, are not included in any of the tables relating to deaths.

As shown by the following table, the disparity is greater during the first four weeks of life, termed the neonatal period, than during the remainder of the first year of life, or the post-neonatal period.

INFANT DEATHS AND MORTALITY RATES: AUSTRALIA.

			N	umber o	f Death	15.		Rates.(a)					
Period	Period.		Neonatal— Under Four Weeks.		Post- Neonatal— Four Weeks and under One Year.		Total under One Year.		Neonatal— under Four Weeks.		ost- atal— Weeks under Year.	Total under One Year.	
		Males.	Fe- males.	Males.	Fe- males,	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fo- males.
			An	NUAL A	VERAGI	s.			Aver	GE AN	NUAL F	LATES.	
1931-35 1936-40 1941-45 1946-50 1951-55		1,763 1,816 2,007 2,024 1,907	1,353 1,495 1,490	886 863 914 784 776	687 663 720 604 612	2,649 2,679 2,921 2,808 2,683	1,986 2,016 2,215 2,094 2,018	29.30 26.66 21.68	22.93 20.88 16.86	13.93 12.14 8.40	11.23 10.05 6.84	30.08	34.16 30.93 23.70
			A	NNUAL	TOTALS				A	ANNUAL	RATES		
1953 1954 1955 1956 1957	 	1,889 1,914 1,863 1,879 1,953	1,443 1,361 1,355 1,430 1,431	772 694 762 704 740	609 577 592 595 593		2,052 1,938 1,947 2,025 2,024	18.48 17.50 17.15	13.79 13.39 13.95	6.70 7.16 6.42	5.85 5.84 5.80	25.18	19.23 19.75

⁽a) Number of deaths per 1,000 male or female live births registered.

⁽b) Under Four Weeks. The following table shows particulars of infant deaths in the first four weeks of life, or the neonatal period, from 1931 to 1957. It will be seen that, for both males and females, the risk of death is very much greater during the first day of life than subsequently.

INFANT	DEATHS	AND	MORTALITY	RATES-UNDER	FOUR	WEEKS:	
			AUSTRA	LIA.			

			N	umber c	f Deatl	hs.		į		Rate	s.(a)		
		E	arly N	eonatal.		La		1	Early N	eonatal		Late Neonatal—	
Period	Period.		Under One Day.		One Day and under One Week.		Neonatal— One Week and under Four Weeks.		Under One Day.		Day inder Week.	One and	Week under Weeks.
		Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.	Males.	Fe- males.
			Ar	NNUAL A	VERAG	ES.			Aver	AGE AN	NUAL I	RATES.	
1931-35 1936-40		(b) (b)	(b)	c 1,442 c 1,496	$c_{1,120}$	320	233	(b)	(b) (b)	c24.13	c19.48 c18.99	5.17	3.94
1941-45 1946-50 1951-55	•••	906 986 918	674 731 713	758	541 539 508	280	220	12.03 10.56 8.88	8.28	8.12	6.09	3.00	2.49
•		:	A	NNUAL	TOTAL	s.				ANNUAL	RATES	3.	
1953 1954	:	870 943	751 696		520	246	245	9.11	7.05	7.00	5.27	2.37	
1955 1956	<i>:</i> .	889 933	686 754 789	714	496 478 478	232	173 198	8.51	7.35	6.52	4.66	2.12	1.93
1957		1,020	/89	685	4/8	248	164	9.01	7.37	6.05	4.46	2.19	1.33

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

(b) Not available.

(c) Includes

The foregoing tables indicate the decrease in infant mortality in Australia, the mortality rate of children aged under one year per 1,000 live births for 1957 being 52 per cent. of the average rate for 1931-35. The improvement was due largely to the decrease in deaths from preventable causes, the mortality rate for children aged one week but under one year of age declining by 58 per cent., while that for children aged under one week declined by only 40 per cent.

A graph showing infant mortality rates for each year from 1910 to 1958 will be found on page 335.

(iii) Statistical Divisions. The total numbers of births and of deaths of children under one year of age in each statistical division are shown in the annual bulletin, Demography. (iv) Various Countries. Compared with other countries Australia occupies a favourable position in respect of infant mortality. In 1957, only New Zealand, Sweden and the Netherlands recorded a lower rate than Australia.

INFANT MORTALITY RATES: VARIOUS COUNTRIES.

			Infa	ant Morta	lity Rate.(a)		Crude Birth
Country.		1921-25.	1926–30.	1931–35.	1936-40.	1956.	1957.	Rate(b), 1957.
Sweden	- - -	60	58	50	42	17	17	14.6
Netherlands		64	56	45	37	19	17	21.2
New Zealand(c)		43	37	32	32	19	20	25.1
Norway		52	49	45	(d) 40	21	(h)	18.2
Australia(e)		58	52	41	39	21	21	22.9
Denmark		82	82	71	60	25	23	16.7
Switzerland		65	54	48	45	26	23	17.7
United Kingdom		78	70	65	59	24	24	16.5
United States of America	٠.	74	68	59	51	26	26	25.0
Finland		96	88	72	72	26	28	20.1
Union of South Africa(f)		73	67	63	53	31	(h)	25.6
Canada		98	93	75	64	32	31	28.2
Ireland, Republic of		69	70	68	69	36	33	21.2
France		95	89	73	70	36	34	18.5
Belgium		100	95	82	77	44	35	17.0
Japan		159	137	120	(g) 112	41	40	17.2
Austria		136	117	99	81	43	44	17.0
Spain		143	124	113	121	46	48	21.7
Italy		127	119	105	103	49	50	18.2
Yugoslavia		(h)	151	153	(g) 141	98	101	23.5

⁽a) Number of deaths under one year per 1,000 live births registered. (b) Number of live births per 1,000 of mean or mid-year population. (c) Excludes Maoris. (d) 1935-39. (e) Excludes full-blood aboriginals. (f) White population only. (g) 1935-38. (h) Not available.

(v) Causes of Death: Children under one Year. Causes of death of children under one year of age should be considered in relation to age at death, because the emphasis on various causes changes rapidly as age at death varies. In 1957, congenital malformations (12.4 per cent.) and certain diseases of early infancy (84.8 per cent.) accounted for 97.2 per cent. of deaths in the first week of life. These causes accounted for 88.5 per cent. of the deaths in the second, third and fourth weeks of life (38.9 per cent. and 49.6 per cent. respectively). Of the remaining deaths in the first year of life, these causes only accounted for 31.1 per cent. (26.4 per cent. and 4.7 per cent. respectively), the emphasis having shifted to respiratory and digestive diseases (42.3 per cent.), accidents and violence (7.7 per cent.), infective and parasitic diseases (6.7 per cent.) and diseases of the nervous system (6.5 per cent.). A summary for 1957 of deaths of children under one year of age, classified according to principal causes of death and age at death, is given in the following table.

CAUSES OF DEATH: CHILDREN UNDER ONE YEAR OF AGE, AUSTRALIA, 1957.

							Αį	e at	Deatl	1.						
Cause of Death.		Wee	ks.						N	I onth	ıs.					Un-
Cause of Death.	Un- der 1.	1.	2.	3.	1. (a)	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	der One Year.
Tuberculosis Septicaemia and pyaemia Bacillary dysentery Whooping cough Meningococcal infections Measles Other infective and parasitic diseases	 i	 		`i	 5 2 2 2	2 1 1 1	1 4 1	4 2 5 1	1 3 1 4 1		1 1 1 2	2 	i :2	1 2	.; 3 2	2 25 7 24 4
Neoplasms Allergic, endocrine system, etc., diseases	3		1	1		4	1	1	1	1	2	1	2	1		26 14
Diseases of the blood Mental, etc., disorders Meningitis Intractanial and intraspinal abscess Encephalitis Otitis media and mastoiditis Other diseases of the nervous system,	4 4 7 	3	 4 	2 i	15 	1 2 1 2	7 	2 4 1 	7 1 1	1 2	2 2 1 1	 5 	1 4 4 	2 i	1 3 1	22 67 1 4
etc Diseases of the circulatory system Pneumonia, age four weeks and over Bronchitis	:: :i	'i 	i i	 	1 51 3	3 1 46 2	7 1 54 6	1 3 37 3	1 2 30 3	3 1 30 2	1 15 2	3 1 18 1	1 1 21 3	3 1 7 3	1 14 4	24 13 323 34
Other diseases of the respiratory system Hernia and intestinal obstruction Gastro-enteritis and colitis, age four	4 21	·i	2	1	13 7	13 1	11 1	7 2	3 5	7 2	7	6	3 4	4 3		86 49
weeks and over Other diseases of the digestive system Diseases of the genito-urinary system Diseases of the skin and cellular	 6 	; ;	i 	i	6 2 1	8 1 1	8 2 3	14 1 1	6 3 1	6	5 'i	13 2 	9 1 	9	6 1 	90 25 11
tissue Diseases of the bones and organs of movement			2	1	3 2		1	1		3		1 2		1	2	13
Congenital malformations Certain diseases of early infancy(b)— Without mention of immaturity(b)	370 809	83	50 39	27 27	86 10	48 8	57 10	39	32	27	15 2	13	9	i3 1	13	882
Without mention of immaturity(b) With immaturity(b) Symptoms and ill-defined conditions Accidents, poisonings and violence	1,710 12 16		14	8 ···	10 2 15	8 4 1 16	10 1 11	 ii	7	14	; i 10	·· ·· 5	1 4	 .,	1 1 3	1,79 1,79 129
All Causes	2,973	217	118	76	234	171	188	149	123	104	71	81	79	67	66	4,71

⁽a) Age four weeks and under two months.

The individual categories representing the causes of death which come within Class XV.—Certain Diseases of Early Infancy are designed to show the effect of immaturity in such causes of infant death. In 1957, 68 per cent. of deaths in this class during the first week of life and 35 per cent. of those in the next three weeks of life were due, directly or indirectly, to immaturity. The relationship between immaturity and each of the individual categories of Class XV. is shown for the year 1957 in the following table.

⁽b) For further detail of this group of causes see next table.

DEATHS OF CHILDREN UNDER ONE YEAR OF AGE FROM CERTAIN DISEASES OF EARLY INFANCY: AUSTRALIA, 1957.

Cate-			out Me mmatu		With	Immat	urity.	Total.			
No.	Cause of Death.	Males.	Fe- males.	Per- sons.	Males.	Fe- males.	Per- sons.	Males.	Fe- males.	Per- sons.	
760	Intracranial and spinal injury								ı — —		
	at birth	185	108	293	90	71	161	275	179	454	
761	Other birth injury	64	39	103	96	71	167	160	110	270	
762	Post-natal asphyxia and	Ì	1 1				1	1	í	ĺ	
	atelectasis	121	107	228	161	107	268	282	214	496	
763	Pneumonia of the newborn	67	44	111	14	15	29	81	59	140	
764	Diarrhoea of the newborn	6	2	8		1	1	6	3	9	
765	Ophthalmia neonatorum		1					١			
766	Pemphigus neonatorum	٠	l '		1			١			
767	Umbilical sepsis	4	4	8	1			4	4	8	
768	Other sepsis of newborn	10	8.	18	1			10	8	18	
769	Neonatal disorders arising	1	-								
	from maternal toxaemia.	16	13	29	34	27	61	50	40	90	
770	Haemolytic disease of new-				-			•			
	born (erythroblastosis)	61	45	106	14	16	30	75	61	136	
771	Haemorrhagic disease of	1	l '- i								
	newborn	22	17 !	39	6	4	10	28	21	49	
772	Nutritional maladiustment	11	7	18	"	i	ì	11	8	19	
773	Ill-defined diseases peculiar		1			_	-				
	to early infancy	21	12 '	33	30	28	58	51	40	91	
774	Immaturity with mention of							}			
	any other subsidiary con-										
	dition		1		18	5	23	18	5	23	
775	Immaturity subsidiary to		''	• •	10				1		
.,,	some other cause		1		i		١			l	
776	Immaturity unqualified	::			569	413	982	569	413	982	
	Total, Class XV.	588	406	994	1.032	759	1,791	1,620	1,165	2,785	

(vi) Deaths of Ex-nuptial Children under one Year of Age. Distinction between nuptial and ex-nuptial children in death statistics for Australia as a whole has been made since 1925. Results show that death rates during infancy were higher for ex-nuptial children than for nuptial children, but in recent years there has been no significant difference.

Detailed information for Australia as to the age at which ex-nuptial children died from each cause of death will be found in the annual bulletin, *Demography*. Because of the small number of ex-nuptial deaths involved in each case, it is difficult to assess the real significance of the differences between the numbers of nuptial and ex-nuptial deaths from each individual cause.

9. Age Distribution.—(i) Number of Deaths. Age at death is recorded for statistical purposes in days for the first week of life, in weeks for the first four weeks, in months for the first two years and in completed years of life thereafter. These ages are usually combined in groups for publication, the most common being weeks for the first four weeks, months or groups of months for the first year, single years of age for the first five years and thereafter the five-year groups 5-9 years, 10-14 years, etc. A summary in this form for Australia is given in the following table for the year 1957.

AGE AT DEATH: AUSTRALIA, 1957.

Age at Death.	Males.	Fe- males.	Per- sons.	Age at Death.		Males.	Fe- males.	Per- sons.
Under 1 week 1 week and under 2 weeks 2 weeks and under 3 weeks 3 weeks and under 4 weeks	1,706 142 64 41	75 54	2,973 217 118 76	10-14 ,, 15-19 ,, 20-24 ,, 25-29 ,,		293 237 492 568 602	188 152 179 186 264	671 754 866
Total under 4 weeks	1,953	1,431	3,384	40-44 ,,	• •	771 828 1,176	393 535 804	1,980
4 weeks and under 3 months 3 months and under 6 ", 6 months and under 12 ",	242 238 260	222	405 460 468	45–49 " 50–54 " 55–59 " 60–64 "		1,818 2,609 3,662 4,709 6,365	1,098 1,316 1,924 2,803 4,141	3,925 5,586 7,512
Total under I year	2,693	2,024	4,717	70–74 ,, 75–79 ,, 80–84 ,,		6,640 5,879 4,080	5,046 5,539 5,046	
1 year	268 162 103 94	124 77	490 286 180 141	85-89 " 90-94 " 95-99 " 100 years and over Age not stated		2,511 874 180 21 24	3,453 1,401 290 30 12	5,964 2,275 470 51 36
Total under 5 years	3,320	2,494	5,814	Total, All Ages	••	47,659	37,294	84,953

There are different mortality rates at various stages of life and the actual number of deaths in any period depends upon the impact of these rates on the numbers living at the respective stages. Changes in the number of deaths from one period to another are caused by changes in the rate of mortality in the various age groups and by the changed proportions of persons living in the different groups.

In Australia, during the last fifty years, there has been a steady decline in the rate of mortality at all ages. This has been most pronounced at ages under one year. The increased length of life due to this factor coupled with the long-term decline in the birth rate and the effects of past and present migration, has been a significant cause in changing the age distribution of the population and consequently the age distribution of deaths, thus obscuring the effects of declining mortality rates.

The combined effect of these various influences can be seen from the following table which shows the proportion of deaths in various age groups in ten-year periods from 1901 to 1950 and for the year 1957.

PROPORTION OF DEATHS	IN EACH	AGE	GROUP	:	AUSTRALIA.
	(Per Cent	.)			

				Age a	t Death (Y	(ears).			
Period.	Under 1.	1-4.	5–19.	20–39.	40-59.	60–64.	65 and over.	Unspeci- fied.	Total.
1901–10	20.51	6.45	6.37	14.99	17.99	5.31	28.26	0.12	100.00
1911-20	16.66	6.09	5.49	14.44	20.32	6.19	30.68	Ŏ.13	100.00
1921-30	13.10	4.51	4.85	12.12	20.55	8.26	36.53	0.08	100.00
1931-40	7.40	2.56	3.83	9.36	20.54	8.36	47.92	0.03	100.00
1941-50	6.79	1.71	2.26	6.01	19.04	9.33	54.84	0.02	100.00
1957—									
Males	5.65	1.32	2.14	5.81	19.44	9.88	55.71	0.05	100.00
Females	5.43	1.26	1.39	3.69	13.79	7.52	66.89	0.03	100.00
Persons	5.55	1.29	1.82	4.88	16.96	8.84	60.62	0.04	100.00

A table showing these proportions for males and females separately for the period 1901 to 1950 was published in Official Year Book No. 39, page 614.

(ii) Age-specific Death Rates. In previous issues of the Official Year Book, average annual age-specific death rates were given for each State and Australia for the periods 1932-34, 1946-48 and 1953-55 (see Official Year Books, No. 37, page 778; No. 39, pages 615-6 and No. 44, pages 640-1). These rates were based on the age distribution of the population at the relevant censuses.

Intercensal estimates of the age distribution of the population are available only for Australia as a whole and not for the individual States. As a consequence age specific death rates for States are not available. The following table shows age-specific death rates for Australia for the years 1955, 1956 and 1957.

0- 4 5.8 5- 9 0.5	3 5.67	5.71	50.54		i	
10-14 0.4 15-19 1.0 20-24 1.2 25-29 1.1 30-34 1.1 35-39 1.9 40-44 3.0	8 0.47 5 0.91 0 1.29 8 1.21 6 1.45 3 1.96	0.49 0.46 1.01 1.23 1.25 1.56 1.97 2.99	50-54 55-59 60-64 65-69 70-74 75-79 80-84 85-89 90 and over	 8.11 12.81 20.19 32.39 51.69 78.96 131.79 198.78 308.97	8.01 12.93 20.63 32.13 53.02 83.16 139.94 215.14 337.91	7.85 12.68 20.16 31.58 51.24 78.21 129.84 202.55 324.21

AGE-SPECIFIC DEATH RATES(a): AUSTRALIA.

(a) Average number of deaths per 1,000 of population in each age group.

10. Causes of Death.—The classification of causes of death adopted for Australia by the Commonwealth Bureau of Census and Statistics at the inception of its mortality statistics in 1907 was that introduced by the International Institute of Statistics in 1893, reviewed by that Institute in 1899 and revised by an International Commission in 1900. This classification became known as the International List of Causes of Death and further international revisions in 1909 (Second), 1920 (Third), 1929 (Fourth), 1938 (Fifth) and 1948 (Sixth) were successively adapted for use in Australian statistics.

The Sixth Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death has been used in Australia since 1950. For the first time in connexion with the International List, international rules were laid down for a uniform method of selecting the main cause to be tabulated, if more than one cause is stated on the death certificate. Prior to 1950, the rules adopted in Australia for the selection of the cause of death to be tabulated were those laid down in the United States Manual of Joint Causes of Death, first published in 1914 and revised to conform with successive revisions of the International List.

The adoption of the new method marked a fundamental change in Australian cause of death statistics, with emphasis now placed on the underlying cause of death as indicated by the certifying practitioner. The introduction of this method required the adoption by all States of a form of medical certificate substantially identical with the International Form of Medical Certificate of Cause of Death as laid down in Article 9 of the World Health Organization Regulations No. 1. By 1950, all States had adopted satisfactory forms of certificate and it was possible to apply the new principles uniformly to all State cause of death records.

This change in principle affects the comparability of the statistics for 1950 and subsequent years with those for earlier years. For convenience in assessing the extent of the change and in accordance with a recommendation of the Sixth Decennial Revision Conference, causes of death for Australia for 1950 were also classified according to the detailed classification of the Fifth Revision, 1938, on the joint cause rules current for that revision. A complete detailed classification according to both the Fifth and Sixth Revisions was shown in *Demography*, Bulletin No. 68. Commencing with 1951, the classification is according to the Sixth Revision only.

In order to facilitate the briefer presentation of cause of death statistics, the present International Classification provides two special lists of causes for tabulation—the Intermediate List of 150 causes and the Abbreviated List of 50 causes. The latter has been used for the cause of death tabulations A to C which follow. Tables A and B show deaths of males and females, respectively, for 1957 and Table C shows the numbers of persons who died and the death rates and proportion per 10,000 deaths for the years 1956 and 1957.

A.—CAUSES OF DEATH: MALES, 1957. ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE INTERNATIONAL LIST).

B 2 Tuberculosis, other forms	Cause of Death.	Detailed List Numbers.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
B 2 Tuberculosis, other forms	B 1 Tuberculosis of respiratory				1						
\$\begin{align*} \begin{align*} \begi	system						, 28		1 4		429
1	B 2 Tuberculosis, other forms						٠٠,		i	, 1,	27
B 3 Cholera B 7 Scarlet (ever and streptococcal strotat sore throat	B 3 Syphilis and its sequelae		38	44	19	13	9	3			126
Maintain Maintain								٠٠.			٠
B Scarlet fever and streptococcal sort throat sort	B 5 Cholera			• • •	' ···	· · · .		• • •	1		
Some throat	B 6 Dysentery, all forms	045-048	. 3	, 1	, 1	, ,	• •	• • •	• •	• •	6
B 8 Diphtheria B 9 Whooping cough B 10 Meningococcal infections B 10 Pilague B 11 Plague B 12 All other incests and haematopoietic tissues B 11 All other widers and haematopoietic tissues B 11 All other widers and haematopoietic tissues B 12 Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues B 18 Benign and unspecified neoplasms. B 22 Vascular lesions affecting certain and haematopoietic tissues B 23 Non-meningococcal meningitis B 24 Rheumatic fever experimental to the fact of the member of the memb		050 051		1 .					,		
B 9 Whooping cough 036		030, 031	1 2	1 7		1		• • •		• •	3
Bit Plaque State	B 8 Diphtheria			1	• • •	i	1	• • •	• •	• •	4 2
Bill Degue Bill Degue Bill Degue Bill Degue Bill Acute poliomyelitis Smallpox	B 9 Whooping cough				1 -					• •	38
Bil 3 Smallpox 984 985 3 4 1 1 1 1 1 1 1 1 1	Bio Meningococcai infections		17	,	, ,	1 -		. 3		;	30
Smallpox Smallpox				· · ·		1		1	• • •		
Bils Typhus and other rickettsial diseases 100-108 110-117 1 1 1 1 1 1 1 1 1			, ,		' 1	1	١	٠ ١	1	;	3
Bis Typhus and other rickettsial diseases 100-108 110-117 1 1 1 1 1 1 1 1 1			1	1 4	, ••	,	,			j	`io
diseases 110-117 1 1 1 1 1 1 1 1 1	D15 Turbus and other ricketteial	1 003	i	1		1 -	1 -	· •			10
Bif Allotter diseases classified as infective and parasitic (a) 75 41 28 16 11 6 1 2 18 18 Malignant neoplasms of lymphatic and nematopolicit dissues 140-205 2,611 1,934 997 537 494 213 3 12 6,861 120 1	disasses	100-108	1	i	į.	1		!	!	1	
Bit All other diseases classified as infective and parasitic necessary in the part of the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the parasitic necessary in the part of the part of the parasitic necessary in the part of the parasitic necessary in the part of the part			1	1					1	1	· · · ·
infective and parasitic B18 Malignant neoplasms, including neoplasms of lymphatic and haematopoletic tissues B19 Benign and unspecified neoplasms B20 Diabetes mellitus 260 129 176 45 30 19 20 1 1 42 12 1 1 5 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	BI7 All other diseases classified as	110 111	1			1	í	1	1		•
Bils Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues 140-205 2,611 1,934 997 537 494 213 3 12 6,86		(a)	75	41	28	16	11	6	1	. 2	180
ing neoplasms of lymphatic and haematopoietic tissues B19 Benigm and unspecified neoplasms		(-)	1			1	1	1	1 .		
and hatematopoletic tissues B19 Benign and unspecified neoplasms	ing peoplesms of lymphatic	ľ	1	i	1	ł	İ	1	l	1	:
Benign and unspecified neoplasms 210-239 50 30 12 11 5 3 1 1 1 1 1 1 1 1 1	and haematonoietic tissues	140-205	2.611	1.934	997	537	494	213	3	12	6,801
plasms 210-239 50 30 12 11 5 3 1 1 1820 Diabetes mellitus 260 129 176 445 30 19 20 1 1 44 22 290-293 33 33 35 5 4 2 5 5 22 2820 290-293 33 33 35 5 4 2 5 5 2 20 290-293 33 33 35 5 4 2 5 5 2 20 290-293 33 33 35 5 4 2 5 5 2 2 20 290-293 33 33 35 5 5 4 2 5 5 2 2 2 2 2 2 2 2			-,	1,50				1	1	1	1 0,002
B20 Diabetes mellitus 260 129 176 45 30 19 20 1 1 4 2 1 1 2 2 3 3 3 3 3 3 3 5 5 4 2 5 5 2 2 2 2 2 2 2 3 3 3		210-239	50	30	12	11	5	3	1	,	112
B22 Anaemias B22 Anaemias B22 Anaemias B22 Anaemias B23 Non-meningococcal meningitis 30-334 2,128 1,323 703 451 253 163 5 11 50 821 Non-meningococcal meningitis 340 34 17 17 2 7 3 1	B20 Diabetes mellitus	260			45		19	20	l ī	' '1	421
B22 Vascular lesions affecting central nervous system		290-293			15				l		92
tral nervous system B23 Non-meningococcal meningitis B24 Rheumatic fever B25 Chronic rheumatic heart disease B26 Arteriosclerotic and degenerative heart disease B26 Arteriosclerotic and degenerative heart disease B27 Chronic rheumatic heart disease B28 Arteriosclerotic and degenerative heart disease B29 Hypertension with heart disease B29 Hypertension with heart disease B29 Hypertension without mention Of heart B29 Hypertension without mention Of heart B29 Hypertension without mention Of heart B29 Hypertension without mention Of heart B20 Hypertension without mention Of heart B21 Non-model B22 Hypertension without mention B22 Hypertension without mention B23 Influenza B24 Hypertension without mention B25 Chronic Hypertension without mention B26 Gastrius duodenitis B27 Hypertension hipport heart disease B28 Hypertension without mention B29 Hypertension without mention B29 Hypertension without mention B20 Hypertension without mention B21 Hypertension hipport hip]	1	1	,]]]	1		
B23 Non-meningococal meningitis 340 34 17 17 2 7 3 1 B24 Rheumatic fever		330-334	2,128	1,323	703	451	253	163	5	! 11	5,037
## Rheumatic fever ## 400-402	B23 Non-meningococcal meningitis				17	2	7	3	1		81
## B25 Chronic rheumatic heart disease ## B26 Arteriosclerotic and degenerative heart disease ## B26 Arteriosclerotic and degenerative heart disease ## B27 Other diseases of heart ## B27 Other diseases of heart ## B28 Hypertension with beart disease ## B29 Hypertension without mention of psychosis, ill-defined and unknown causes ## B29 Hypertension without mention of psychosis, ill-defined and unknown causes ## B29 Hypertension without mention of ## B29 Suicide and self-inflicted finjury. ## B250 Homitode and operations of \$ 100 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of Psychosis, ill-defined and unknown causes ## B29 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of E80 Hypertension without mention of	B24 Rheumatic fever		. 9	18	. 6	4	2			!	40
B26 Arteriosclerotic and degenerative heart disease the heart disease to heart disease of heart		410-416	116	96	. 64	38	' 13	7	٠	1 1	335
tive heart disease			l .	ł		1	i .	1	1	1	
## 828 Hypertension with heart disease ## 829 Hypertension with heart disease ## 829 Hypertension with heart disease ## 829 Hypertension with heart disease ## 829 Hypertension with heart disease ## 827 164 54 78 31 1 99		420-422	5,575	3,830	1,756	1,223	957	387	9	28	13,765
## B28 Hypertension with leart disease 440-443 394 257 164 54 78 31 1 95 ## B29 Hypertension without mention of heart 440-443 394 257 164 54 78 31 1 95 ## B30 Influenza 440-483 69 111 32 21 32 10 22 ## B31 Incumonia 490-493 776 360 241 212 117 73 3 2 1,71 ## B32 Bronchitis 500-502 292 249 90 45 52 33 1 1 70 ## B33 Ulcer of stomach and duodenum 540, 541 223 132 75 45 35 12 1 4 55 ## B34 Appendicitis 550-553 35 22 17 8 9 4 2 1 55 ## B35 Intestinal obstruction and hernia ## B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn		430-434			241	109	19	49	1 2	3	1,395
B29 Hypertension without mention of heart		440-443	394	257	164	54	78	31	۱	1	979
of heart 444-447 205 152 75 40 28 12 3 16 2 B30 Influenza 480-483 369 111 32 21 32 10 2 B32 Promochitis 500-502 292 249 90 45 52 33 1 1 70 B33 Ulcer of stomach and duodenum 500-502 292 249 90 45 52 33 1 1 70 B34 Appendicitis 550-553 33 32 17 8 9 4 2 1 5 B34 Appendicitis 550-553 35 35 22 17 8 9 4 2 1 5 B35 Intestinal obstruction and hernia 560, 561, 570 111 64 51 31 19 8 1 22 B36 Castritis, duodenitis, enteritis and colitis, except diarrhoea 581 92 91 37 33			ļ	ļ	1	ì	1	i	İ	1	1
B30 Influenza					75)	513
B32 Bronchitis S00-502 292 249 90 45 52 33 1 1 76 76 76 76 76 76		480-483			32		32		١	1	275
B33 Ulcer of stomach and duodenum	B31 Pneumonia	490-493			241		117				1,784
B33 Ulcer of stomach and duodenum	B32 Bronchitis	500-502	292	249	90	45	52	33	1	1	763
B34 Appendicitis B35 Intestinal obstruction and hernia B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn B37 Cirrhosis of liver B38 Nephritis and nephrosis B39 Hyperplasia of prostate B39 Hyperplasia of prostate B41 Congenital malformations B42 Birth injuries, post-natal asphyxia and atelectasis B43 Infections of the newborn B44 Other diseases peculiar to early infancy, and immaturity unqualified B45 Senility without mention of psychosis, ill-defined and unknown causes B45 Senility without mention of psychosis, ill-defined and unknown causes B46 All other diseases B47 Motor vehicle accidents BE48 All other accidents BE48 All other accidents BE49 Suicide and self-inflicted injury BE50 Homicide and operations of war S50-553 35	B33 Ulcer of stomach and duo-	1		:	1		i	(1	r	l .
B35 Intestinal obstruction and hernia		540, 541									527
B35 Intestinal obstruction and hernia	B34 Appendicitis	550-553	, 35	22	. 17	8	9	4	+ 2	1	98
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	B35 Intestinal obstruction and	(!	l	1	Ė.	į .	1	į		•
and colitis, except diarrhoea of the newborn 543, 571, 572 78 44 37 21 12 2 2 15 B37 Cirrhosis of liver 581 92 91 37 33 12 4 2 2 25 B38 Nephritis and nephrosis 590-594 243 146 155 53 44 24 2 2 66 B39 Hyperplasia of prostate 610 153 188 73 53 57 31 1 55 B41 Congenital malformations 750-759 214 179 94 64 48 23 2 3 66 B42 Birth injuries, post-natal asphyxia and atelectasis 760-762 252 222 98 63 52 23 7 7 B43 Infections of the newborn 763-768 47 24 16 6 6 1 1 16 B44 Other diseases peculiar to early infancy, and immaturity unqualified 769-776 341 165 132 58 68 37 1 1 80 B45 Sendity without mention of psychosis, ill-defined and unknown causes Residual 1,484 1,343 661 332 276 140 7 8 4,22 BE47 Motor vehicle accidents { E800-E835 657 527 274 178 123 52 8 4 1,88} BE48 All other accidents { E800-E802, E840-E965 ainjury } E800-E909, 49 13 8 7 4 1 2 \$ 12		560, 561, 570	111	64	51	31	19	8	1	→ 1	285
of the newborn	B36 Gastritis, duodenitis, enteritis		1		1	i	,		1	1	
B37 Cirrhosis of liver 581 92 91 37 33 12 4 2 2 22 88 88 Nephritis and nephrosis 590-594 243 146 155 53 44 24 2 2 66 889 Hyperplasia of prostate 610 153 188 73 53 57 31 1 55 841 Congenital malformations 750-759 214 179 94 64 48 23 2 3 66 842 Birth injuries, post-natal asphyxia and atelectasis 760-762 252 222 98 63 52 23 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	and colitis, except diarrhoea		1		1	1		,		1	ł
B38 Nephritis and nephrosis S90-994 243 146 155 53 44 24 2 2 2 68 158 159 15	of the newborn	543, 571, 572							2		196
B39 Hyperplasia of prostate Congenital malformations Congenitations Congenital malformations Congenitations Congenital malformations Congenital malformations Congenita	B37 Cirrhosis of liver		92							2	271
B41 Congenital malformations 750-759 214 179 94 64 48 23 2 3 66 66 67 1 10 10 10 10 10 10 10									յ 2		669
B42 Birth injuries, post-natal asphysical and atelectasis 760-762 252 222 98 63 52 23 7 7											556
Physia and atelectasis 760-762 252 222 98 63 52 23 7 7 7 7 7 7 7 7 7	B41 Congenital malformations	750-759	214	1/9	94	64	48	23	1 2	1 3	627
Physia and atelectasis 760-762 252 222 98 63 52 23 7 7 7 7 7 7 7 7 7	B42 Birth injuries, post-natal as-	200 200	1 000	222		1			1 -	1	
B44 Other diseases peculiar to early infancy, and immaturity unqualified 769-776 341 165 132 58 68 37 1 1 80 845 850			232	222					7		717
infancy, and immaturity unqualified B45 Senility without mention of psychosis, ill-defined and unknown causes B46 All other diseases B46 All other diseases B46 All other accidents B48 All other accidents B49 Suicide and self-inflicted injury B50 Homicide and operations of E964, E965, war B40 Senility without mention of psychosis, ill-defined and unknown causes B41 165 132 58 68 37 1 1 80 B41 165 132 58 68 37 1 1 80 B41 165 132 58 68 37 1 1 80 B41 165 132 58 68 37 1 1 80 B41 165 132 58 68 37 1 1 80 B41 165 132 58 68 37 1 1 80 B41 165 132 58 68 37 1 1 80 B41 165 132 58 68 37 1 1 80 B42 12 10 4 55 B42 12 10 4 55 B43 12 12 10 4 55 B42 12 12 10 4 55 B43 12 12 10 4 55 B42 12 13 18 12 18 12 18 B42 12 10 4 55 B42 12 10 4 55 B43 12 12 10 4 55 B44 178 123 52 8 4 1.8 B43 18 18 18 18 18 18 18 18 18 18 18 18 18		/03-/08	47	24	10	. 0	. 6	I			101
qualified B45 Senility without mention of psychosis, ill-defined and unknown causes B46 All other diseases Residual 1,484 1,343 661 332 276 140 7 8 4,22 BE47 Motor vehicle accidents BE48 All other accidents E810-E835 657 527 274 178 123 52 8 4 1,83 664 1,34 665 1	B44 Other diseases peculiar to early	1				ţ	'		j	•	1
Residual 1.08 121 49 12 10 4 55 153 108 121 108 121 108 121 108 121 108 121 108 121 108 121 108 121 108 121 108 121 108 121 108 121 108 121 108 121 108 121 108 121 128 128 138		700 770	1 241	165				27	1 .		002
psychosis, ill-defined and unknown causes . 780-795 231 108 121 49 12 10 4 . 55 B46 All other diseases . Residual 1,484 1,343 661 332 276 140 7 8 4,2 BE47 Motor vehicle accidents . E810-E835 657 527 274 178 123 52 8 4 1,8 BE48 All other accidents . E800-E802		/69-//6	341	100	132	38	1 68	. 31		,	803
Residual 1,484 1,343 661 49 12 10 4 55	843 Senuity without mention of	1		1					,		•
Residual 1,484 1,343 661 332 276 140 7 8 4,2 1,2		700 705	221	100	121	1 40		10			
BE47 Motor vehicle accidents									. 4	,	535
BE48 All other accidents { E800_E802, E840_E962 } 785 537 323 166 144 74 12 7 2,0 BE49 Suicide and self-inflicted { E963, E970_E979 } BE50 Homicide and operations of { E964, E965, E980_E999 }						1 334	270				
BE49 Suicide and self-inflicted E963, E970-E979, BE50 Homicide and operations of E964, E965, E980-E999	DE4/ Motor venicle accidents	E010-E033	: 03/	321	214	1/8	123	52	. 8	4	1,843
BE49 Suicide and self-inflicted E963 E960. E970-E979 BE50 Homicide and operations of E964, E965, E980-E999 49 13 8 7 4 1 2		E000 E000	' `			İ					i
BE49 Suicide and self-inflicted	BE48 All other accidents		785	537	323	166	144	74	12	, 7	2,048
injury	· · · · · · · · · · · · · · · · · · ·		ነኝ .		1						t í
BE50 Homicide and operations of E964, E965, E980–E999 49 13 8 7 4 1 2		F970_F970	336 ح	155	153	87	73	33	4	3	844
war \ E980-E999 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	RESO Homicide and operations of	E964 E965	<u>ال</u> ا		1				1		
		F980-E999	! > 49	13	. 8	. 7	4	1	2		84
All Causes 18.734 13.084 6.013 4.101 3.126 1.514 25 102 47.6		2700 2777				,			í	-,	i——
	_ All Causes		18,734	: 13,084	6,913	4,101	3,126	1,514	85	102	47,659

⁽a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

B.—CAUSES OF DEATH: FEMALES, 1957. ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE INTERNATIONAL LIST).

	IN.	IERNAII	UNAL L	131).						
Cause of Death.	Detailed List Numbers.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
B 1 Tuberculosis of respiratory										
system	001-008	46	36	14	8	7	2		1	114
B 2 Tuberculosis, other forms	010-019	6	3	3	2	1				15
B 3 Syphilis and its sequelae	020-029	9	9	5	3	1	1			28
B 4 Typhoid fever B 5 Cholera	040 043		• • •	• • •		• • •		• •		••
B 5 Cholera B 6 Dysentery, all forms	045-048			3		::	1		::	6
B 7 Scarlet fever and streptococcal	045-040	'	• • •	,			• •	• • •		Ū
sore throat	050, 051								i	
B 8 Diphtheria	055	1	1	1	1		1	• •		5
B 9 Whooping cough	056	2	6	3	2	3	2	• •		5 23
B10 Meningococcal infections B11 Plague	057 058	9		1	_		_		::	23
B12 Acute poliomyelitis	080	2			,	1	::		::	3
B13 Smallpox	084				1 '				1	
BI4 Measles	085	2	3					• •		5
B15 Typhus and other rickettsial	400 400				ļ		[1	
diseases B16 Malaria	100-108	1	• • •	•••	• • •	• • •		• •	\ ··	1
B17 All other diseases classified as	110-117		• •		•••			• • •		••
infective and parasitic	(a)	57	36	12	12	10	2	1	1	131
B18 Malignant neoplasms, in-	\ \ \			-						
cluding neoplasms of lym-							1			
phatic and haematopoietic	140 205	2 224	1 011	720	500	225	177		14	£ 070
tissues	140-205	2,234	1,811	728	592	325	173	1	. 14	5,878
B19 Benign and unspecified neo- plasms	210-239	56	43	19	12	6	2		١	138
B20 Diabetes mellitus	260	266	271	71	46	47	29		::	730
B21 Anaemias	290-293	77	68	31	16	7	8		1	208
B22 Vascular lesions affecting	!		4 0 4 0							
central nervous system	330-334	2,652	1,862	772	584	341	214	3	12	6,440
B23 Non-meningococcal meningitis	340 400-402	13	14	11	8	2	1	• •		54 18
B24 Rheumatic fever B25 Chronic rheumatic heart	400-402	,		1	1			• •		10
disease	410-416	127	147	51	49	28	10		1	413
B26 Arteriosclerotic and degenera-										
tive heart disease	420-422	3,711	2,652	939	903	565	265	1	12	9,048
B27 Other diseases of heart	430-434	488	310	151	87	30	40	2	2	1,110
B28 Hypertension with heart dis-	440-443	454	311	164	80	75	24			1,108
B29 Hypertension without mention	110 113	1	0		"					1,100
of heart	444-447	208	165	91	38	33	25	1		561
B30 Influenza	480-483	47	66	19	17	11	8	2	l	170
B31 Pneumonia B32 Bronchitis	490-493 500-502	591	343 61	189 35	189 17	92 10	53 10	3	1 3	1,461 213
B32 Bronchius	300-302	<i>''</i>	01	33	1 17	10	10	••	3	213
denum	540, 541	85	52	24	10	9	3			183
B34 Appendicitis	550-553	24	8	9	3	7	6	• • •		57
B35 Intestinal obstruction and		400					_			
hernia	560, 561, 570	108	45	41	23	12	5	••	3	237
B36 Gastritis, duodenitis, enteritis		!								
and colitis, except diarrhoea of the newborn	543, 571, 572	79	55	28	27	16	3	3`	1	212
B37 Cirrhosis of liver	581	49	53	20	21	15	5		1	164
B38 Nephritis and nephrosis	590-594	235	134	124	31	27	19			570
B40 Complications of pregnancy, childbirth and the puer-	∫ 640–652,	} 64	27	21	12	11	2		1	138
childbirth and the puer- perium	ጊ 670–689	7								
B41 Congenital malformations	750-759	182	174	75	53	38	26	1		549
B42 Birth injuries, post-natal as-	150-155		1	1	ì	,		-		347
phyxia and atelectasis	760-762	161	179	67	39	40	16	1	1	504
B43 Infections of the newborn	763–768	25	19	16	8	3	2		1	74
B44 Other diseases peculiar to early		1		1		1		1	1	
infancy, and immaturity unqualified	769-776	252	131	102	45	42	14	2	1	589
B45 Senility without mention of	103-110	1 232	131	102	73	1 72	1-7	1	1 1	309
psychosis, ill-defined and		Į.	l	1	1			1	1	
unknown causes	780-795	306	98	110	70	17	12		2	615
B46 All other diseases	Residual	1,224	1,303	530	270	219	114	3	4	3,667
BE47 Motor vehicle accidents	E810-E835	172	140	53	53	32	17	٠٠. ا	3	470
BE48 All other accidents {	E800-E802, E840-E962	> 323	314	170	106	51	34	6		1,004
BE49 Suicide and self-inflicted	E963,	Κ	0.5			22	_	1	1	225
injury)	E970-E979	} 135	85	46	31	22	7			326
BE50 Homicide and operations of	E964, E965,	} 17	6	13	5	8] '	١	١	49
war \	E980-E999	<u> </u>	<u>-</u>		<u> </u>	<u> </u>			-l	
All Causes	١	14,583	11,047	4,766	3,475	2,171	1,156	30	66	37,294

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

C.—CAUSES OF DEATH: PERSONS, AUSTRALIA.

ABBREVIATED LIST OF 50 CAUSES (BASED ON THE SIXTH REVISION OF THE INTERNATIONAL LIST).

Cause of Death.	Detailed List Numbers.	Numb Dea			0,000 1ean	Proportion per 10,000 Deaths.	
		1956.	1957.	1956.	1957.	1956.	1957.
B 1 Tuberculosis of respiratory system B 2 Tuberculosis, other forms B 3 Syphilis and its sequelae B 4 Typhoid fever	001-008 010-019 020-029 040	663 61 174	154	70 7 18	56 4 16	77 7 20	64 5 18
B 4 Typhoid fever B 5 Cholera	043		1	• •	• •		• •
B 6 Dysentery, all forms B 7 Scarlet fever and streptococcal	045-048	15	12	2	1	2	1
sore throat B 8 Diphtheria	050, 051 055	9 12	3	i		1	
B 9 Whooping cough	056	10	7	1	l i	1	i
B10 Meningococcal infections	057	66	61	7	6	8	7
B11 Plague B12 Acute poliomyelitis	058 080	57	8	6		,	
B13 Smallpox	084					'	
B14 Measles	085	44	15	5	2	5	2
B15 Typhus and other rickettsial diseases	100-108		1				
B16 Malaria B17 All other diseases classified as in-	110-117	2	1	:-	••	::	::
fective and parasitic B18 Malignant neoplasms, including neoplasms of lymphatic and	(a)	329	311	35	32	38	37
haematopoietic tissues	140-205	12,281	12,679	1,303	1,315	1,427	1,493
B19 Benign and unspecified neoplasms	210-239	264	250.	28	26	31	29
B20 Diabetes mellitus B21 Anaemias	260 290–293	1,212 336	1,151	129 36	119 31	141 39	136 35
B22 Vascular lesions affecting central	330-334		11,477		1,191	ļ	
nervous system B23 Non-meningococcal meningitis	340	11,562		1,226 14	1,191	1,343 15	1,351 16
B24 Rheumatic fever	400-402	53	58	6	6	6	7
B25 Chronic rheumatic heart disease	410-416	782	748	83	78	91	88
B26 Arteriosclerotic and degenerative heart disease	420-422	23,913	22,813	2 537	2,366	2,778	2,685
B27 Other diseases of heart	430-434	2,634	2,505	2,537 279	260	306	2,003
B28 Hypertension with heart disease	440-443	2,190	2,087	232	217	254	246
B29 Hypertension without mention of heart	444-447	1,201	1,074	127	112	139	126
B30 Influenza	480-483	182	445	19	46	21	52
B31 Pneumonia	490-493	3,108	3,245	330	337	361	382
B32 Bronchitis	500-502 540, 541	1,055 687	976 710	112 73	101 74	123 80	115 84
B34 Appendicitis	550-553	155	, 155	16	16	18	18
B35 Intestinal obstruction and hernia	560, 561, 570	516	522	55	54	60	61
B36 Gastritis, duodenitis, enteritis and colitis, except diarrhoea of the newborn	543, 571, 572	414	408	44	42	48	48
B37 Cirrhosis of liver	581	470	435	50	45	55	51
B38 Nephritis and nephrosis	590-594	1,291	1,239	137	129	150	146
B39 Hyperplasia of prostate B40 Complications of pregnancy,	610 ∫ 640–652, \	543	556	58	58	63	66
child birth and the puerperium	ነ 670–689 <i>የ</i>	119	138	13	14	14	. 16
B41 Congenital malformations	750-759	1,172	1,176	124	122	136	138
B42 Birth injuries, post-natal asphyxia	760–762	1,084	1,221	115	127	126	144
and atelectasis B43 Infections of the newborn	763-768	1,004	175	18	18	120	21
B44 Other diseases peculiar to early			!				!
infancy, and immaturity un-	769-776	1,490	1 202	158	144		164
qualified B45 Senility without mention of psychosis, ill-defined and un-	709-170	1,450	1,392	136	144	173	104
known causes	780-795	1,285	1,150	136	119	149	135
B46 All other diseases	Residual	8,021	7,918	851 235	821	932 258	932 270
BE47 Motor vehicle accidents	E810-E835 E800-E802	2,219	2,293		238		1
E All other accidents	E840-E962 5	2,948	3,052	313	317	342	359
BE49 Suicide and self-inflicted injury	E970-E979	1,021	1,170	108	121	119	138
	E964, E965 E980-E999	135	133	14	14	16	16
All Causes		86,088	84,953	9,132	8,812	10,000	10,000

(a) 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

- 11. Deaths from Principal Causes.—(i) General. In the preceding tables, particulars have been given for each of the causes of death comprising the Abbreviated Classification according to the Sixth Revision of the International List. Certain important causes are treated in detail hereunder. The Abbreviated Classification numbers used in tables A to C (pp. 357-9) are indicated in parentheses for each cause or group of causes.
- (ii) All Forms of Tuberculosis (B1, B2). (a) General. The total number of deaths classified to all forms of tuberculosis in 1957 was 585, consisting of 456 males and 129 females. In comparing any of the figures for 1950 and subsequent years with those for 1949 and earlier years, consideration should be given to the effect of the change in basis from the Fifth to the Sixth Revision of the International List. This was discussed in Official Year Book No. 39, page 626.
- (b) Age at Death. The following table shows the age groups of males and females who were classified as dying from tuberculosis in 1957, together with figures for 1921, 1931, 1941 and 1951.

Age Grou	מו			Males.					Females.		
(Years).		1921.	1931.	1941.	1951.	1957.	1921.	1931.	1941.	1951.	1957.
0-14 15-29 30-44 45-64 65 and over Not stated		143 477 718 692 138	90 294 585 674 193	63 162 428 793 279	23 46 135 570 306	2 10 46 199 199	128 540 514 278 56	81 487 422 252 89	54 275 319 251 110	35 68 142 126 86 1	3 11 38 29 48
Total		2,171	1,836	1,725	1,080	456	1,516	1,331	1,009	458	129

TUBERCULOSIS (ALL FORMS): DEATHS IN AGE GROUPS, AUSTRALIA.

- (c) Death Rates. The reduction in mortality from tuberculosis is shown by the decline in the crude death rate from tubercular diseases, which fell from 68 per 100,000 of mean population in 1921 (males, 78; females, 56) to 18 in 1951 (males, 25; females, 11) and still further to 6 in 1957 (males 9; females, 3). The crude death rate does not reveal the even more striking fall in the number of deaths in the younger age groups, which can be seen from the table above.
- (d) Death Rates, Various Countries. A comparison of the death rates from tuberculosis for Australia with those for various other countries, made on the latest figures available, shows that Australia, with a rate of 6 deaths per 100,000 of mean population, occupies a favourable position as regards this disease. Whereas the rate for Denmark is only 5, rates range as high as 63 for Portugal. For various other countries rates are as follows:—Netherlands, 6; Canada, 8; New Zealand, 11; Union of South Africa and United States of America, 9; United Kingdom, 12; Switzerland, 22; Italy, 23; France, 29; Finland, 38; and Japan, 49.
- (iii) Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues (B18). (a) General. It was shown in Official Year Book No. 39, page 628, that deaths classified under this heading according to the Sixth Revision of the International List are not directly comparable in total with those on the Fifth Revision basis and comparability ratios were given to enable comparison to be made on an adjusted basis. This change must be kept in mind in considering the comparisons shown in the following pages.
- (b) Type and Seat of Disease. Tables showing the type and seat of disease in conjunction with age and conjugal condition of the persons dying from malignant neoplasms in 1957 will be found in Demography, Bulletin No. 75. A summary regarding type and seat of disease for 1957 is given below. It may be pointed out that the significance of the number of deaths shown for the various types of neoplasms enumerated hereunder is doubtful, owing to the fact that, in the absence of a post-mortem, it is impracticable for the certifying doctor in the majority of cases to make an accurate diagnosis as to type in the detail required for the following classification.

DEATHS FROM MALIGNANT NEOPLASMS AND NEOPLASMS OF LYMPHATIC AND HAEMATOPOIETIC TISSUES: TYPE AND SEAT OF DISEASE, AUSTRALIA, 1957.

Type of Disease.	Males.	Fe- males.	Per- sons.	Seat of Disease.	Males.	Fe- males.	Per- sons.
Malignant Neoplasms-				Malignant Neoplasms			
Cancer and carcinoma				Buccal cavity and			
(other than skin)	5,596	5,018	10,614		190	63	253
Skin cancer	33	28	61	Digestive organs and	i		
Sarcoma and myeloid sar-		0.2	207	peritoneum-		0.1	215
coma	114	93	207		134		215 1.776
Myeloma	122	72	194	0 11 '	1,081		1,776
Glioma Endothelioma		12			656		
Melanoma and melanotic	1	• • •	• • •	0.00	904		1,463
	129	96	,	Other	1,350	221	
Hypernephroma	30	12	42	2000	1,330		
Touctomo	15	1	16	Uterus		631	631
Malignant disease and	15	•		Other female genital			
malignant tumor, n.o.s.	201	145	346	organs		420	420
				Male genital organs	808		808
Total, Malignant				Urinary organs	360	160	520
Neoplasms	6.240	5 465	11.705	Skin		,	
opiusmb	0,270	3,403	11,,,05	Other and unspecified			
				organs	735	555	1,290
Neoplasms of Lymphatic and	i		1				
Haematopoietic Tissues—				Total, Malignant			
Lymphosarcoma and	1			Neoplasms	6.240	5.465	11,705
reticulosarcoma	135	108	243	1,000,000	.,	_,	
Hodgkin's disease	92	45	137				
Other forms of lym-	1 ~~	1	1 .57	Neoplasms of Lymphatic]		
phoma (reticulosis)	16	12	28	and Haematopoietic Tis-			
Multiple myeloma (plas-	'*	۱		sues	561	413	974
mocytoma)	42	28	70		"	1	
Leukaemia and aleu-				,	1 1		
kaemia	272	219	491		1		
Mycosis fungoides	4	1	5				
Total, Neoplasms of	-	<u> </u>					i
Lymphatic, etc.,		}					
Tissues	561	413	974				
Grand Total	6,801	5,878	12,679	Grand Total	6,801	5,878	12,679

⁽c) Age at Death. The ages of males and females who died from malignant neoplasms in 1957 are given below, together with figures for 1921, 1931, 1941 and 1951. The increase in the number of deaths from malignant neoplasms in the years since 1921 is principally due to the increase in the number of people in the higher age groups, at which ages the risks of cancer are much greater. While the total population increased by about 77 per cent. between 1921 and 1957, the number of people over 55 years of age increased by about 158 per cent. The increase in the number of deaths in the lower age groups from 1951 is partly due to the inclusion of neoplasms of lymphatic and haematopoietic tissues, also it is probable that a proportion of the increased number of deaths from cancer recorded in recent years has been due to improved diagnosis and certification on the part of the medical profession.

MALIGNANT NEOPLASMS(a): NUMBER OF DEATHS IN AGE GROUPS, AUSTRALIA.

Age Group	,			Males.				1	Females.		
(Years).		1921.	1931.	1941.	1951. (a)	1957. (a)	1921.	1931.	1941.	1951. ,	1957. (a)
Under 15 15-29 30-44 45-54 55-64		26 29 163 387 800	25 43 196 410 868	21 49 176 465 983	91 103 275 584 1,334	136 122 355 759 1,551	23 37 266 470 657	23 38 326 548 744	25 45 344 685 926	71 76 387 692 1,180	86 87 459 722 1,278
65 and over Not stated Total	::!	1,032 3 2,440	1,942 3,484	2,561 4,255	3,128 5,515	3,878 6,801	2,328	3,105	2,198 4,223	2,698 5,104	3,245 1 5,878

⁽a) Includes neoplasms of lymphatic and haematopoietic tissues.

- (d) Death Rates. The death rates from malignant neoplasms have continued to rise over recent years. The rates are crude death rates representing the number of deaths from malignant neoplasms per 100,000 of mean population and do not take account of changes in the age constitution of the population, and to a substantial extent reflect the increasing age of the population rather than the true change in mortality from malignant neoplasms (see previous paragraph). In 1921, the rate for Australia was 87 (males, 88; females, 87); in 1931 it was 101 (males, 105; females, 97); in 1941 it was 119 (males, 119; females, 120) and in 1951 it had risen to 126 (males, 129; females, 122). Figures for 1957 show that a further rise has taken place, the rate being 132 (males, 139; females, 124).
- (e) Death Rates, Various Countries. Death rates from malignant neoplasms per 100,000 of mean population for Australia and for various other countries are as follows:—Portugal, 84; Japan, 91; Italy, 128; Canada, 130; Union of South Africa, 131; Australia, 132; Finland, 146; United States of America, 147; New Zealand, 154; Netherlands, 158; Fance, 183; Switzerland, 190, and United Kingdom, 208. The rates are for the latest available year in each case.
- (iv) Diseases of the Heart (B25 to B28). The number of deaths classified to diseases of the heart in 1957 was 28.153 (16,474 males and 11,679 females). This class is the largest amongst causes of death, the rate having increased from 112 per 100,000 of mean population in 1911-15 to 292 in 1957. The increase in the number of deaths recorded from heart diseases has been particularly pronounced during the past twenty years. The rapid increase in mortality is partly a reflection of the ageing of the population, but the figures have been influenced mainly by improved diagnosis and certification by medical practitioners.

The death rates for heart diseases for various years from 1921 were as follows:—1921, 93 (males, 102; females, 83); 1931, 159 (males, 178; females, 142); 1941, 269 (males, 306; females, 231); 1951, 314 (males, 367; females, 259); and 1957, 292 (males, 337; females, 246). Deaths from heart diseases in 1957 represented 33 per cent. of the total deaths.

(v) Puerperal Causes (B 40). It was shown in Official Year Book No. 39, page 634, that the changes introduced with the Sixth Revision of the International List did not significantly affect the comparability of the total number of deaths from puerperal causes. The death rate from these causes (including criminal abortion) has fallen rapidly during recent years and in 1957 the rate was 0.6 per 1,000 live births, compared with a rate of 6 per 1,000 in 1936. The 138 deaths in 1957 correspond to a death rate of 2.9 per 100,000 females. The death rate may be expressed in other terms by stating that 1 of every 1,579 women giving birth to a live child in 1957 died from puerperal causes; the corresponding ratios for married women were 1 in every 1,669, and for single women 1 in every 712.

The death rate per 1,000 live births from puerperal causes in various countries for the latest available years is as follows:—New Zealand and Denmark, 0.4; United States of America, 0.5; France, United Kingdom and the Netherlands, 0.6; Canada, 0.8; Finland and Switzerland, 1.0; South Africa, 1.2; Italy, 1.3; and Japan, 1.8.

The total number of children left by the 125 married mothers who died from puerperal causes in 1957 was 323, an average of 2.5 children per mother.

One of the mothers who died had been married less than one year, 11 between one and two years, and 6 between two and three years. The duration of marriage ranged up to 28 years. Tabulations distinguishing the ages at marriage and at death will be found in *Demography*, Bulletin No. 75, which also includes a table showing in combination the duration of marriage and previous issue.

(vi) Congenital Malformations and Diseases of Early Infancy (B 41 to B 44). This combined group embraces two complete classes of the International List of Causes of Death which relate more specifically to infant deaths and they have already been presented in detail in the section devoted to causes of infant death (see pp. 353 and 354).

(vii) Accidents, Poisonings and Violence (BE 47 to BE 50). (a) General. Deaths in this class are classified according to external cause and not according to nature of injury. The classification provides sub-groups for accidents, including adverse reactions to prophylactic inoculations, therapeutic misadventures and late effects of accidental injury; suicide; homicide and injuries purposely inflicted by other persons; and injury resulting from operations of war, including late effects.

The following table, showing the death rates in the main sub-groups per 100,000 of mean population, indicates that the death rate from violence is generally about three times as great for males as for females. It can be seen also that in 1957 the proportion of deaths caused by violence was 7.83 per cent., compared with 6.76 per cent. in 1931-35.

The low level of the rates and proportions for the years 1941-45 is due largely to the exclusion of deaths of defence personnel from accidents, suicide and homicide, though the rates have been based on total mean population (including defence personnel). A further contributing factor is the decrease during this period in the number of automobile accidents. From July, 1947, deaths of defence personnel from accidents, etc., have again been included.

ACCIDENTS, POISONINGS AND VIOLENCE: DEATH RATES.(a)

	Death Rate(a) from—													Viole	
Period. Accidents.(b)		.(b)	Suicide.			Homicide.(c)			Total Violence.			Proportion per 10,000 Deaths.			
	М.	F.	P.	М.	F.	P.	М.	F.	P.	M.	· F.	P.	M.	F.	P.
1931-35 1936-40 1941-45 1946-50 1951-55	71 86 67 76 82	22 28 26 27 31	47 58 46 51 57	19 17 11 14 15	5 4 5 5	12 11 8 10 10	2 2 1 1 2	1 1 1 1	2 1 1 1 1	92 105 79 91 99	28 34 31 33 37	61 70 55 62 68	929 979 730 844 964	348 383	676 724 558 640 740
1953 1954 1955 1956 1957	79 79 79 76 76	30 30 31 33 31	56 55 56 55 55	16 16 15 16 17	6 5 5 6 7	11 11 10 11 12	2 2 2 2 2	1 1 1 1	1 1 1 1	97 97 96 94 98	37 36 37 40 39	68 67 67 67 68	969 965 969 930 1,007	448 472 486	746 737 752 735 783

⁽a) Number of deaths per 100,000 of mean population. (c) Includes late effects of injuries due to operations of war.

- (b) Accidents (BE 47, BE 48). In 1957, the total number of deaths from accidental causes was 5,345 (3,871 males and 1,474 females). Half of the accidental deaths were the result of transport accidents. Of these, the numbers attributable to the major causes, and the percentages of the total accidental deaths in each case, were as follows:—Motor vehicle traffic accidents, 2,202 (41.20 per cent.); motor vehicle non-traffic accidents, 91 (1.70 per cent.); other road vehicle accidents, 114 (2.13 per cent.); railway accidents, 140 (2.62 per cent.); water transport accidents, 84 (1.57 per cent.); aircraft accidents, 40 (0.75 per cent.); a total of 2,671 (49.97 per cent.). Other important causes were accidental falls, 991 (18.54 per cent.); accidental drowning, 494 (9.24 per cent.); and accidents caused by fire and explosion of combustible material, 202 (3.78 per cent.).
- (c) Suicide (BE 49). (i) Modes Adopted. Deaths from suicide in 1957 numbered 1,170 (males, 844; females, 326). Firearms and explosives were used in 316 cases (27.01 per cent. of total deaths by suicide). Other important modes adopted, together with the numbers and relevant percentages, were as follows:—Poisoning other than by gases, 279 (23.85 per cent.); poisoning by gases, 175 (14.96 per cent.); hanging or strangulation, 225 (19.23 per cent.); submersion (drowning), 65 (5.55 per cent.); other modes, 110 (9.40 per cent.).
- Of the 844 males who committed suicide, 298 (35.31 per cent.) used firearms or explosives. For females the most common mode was poisoning (other than by gases). This was used in 125 cases (38.34 per cent.).
- (ii) Age at Death. From the following table, which shows the age of persons who committed suicide in 1957, it will be seen that both young and very old people took their lives during this year.

⁽b) Includes "open verdict".

Age Groups (Years).		Males.	Females.	Persons.	Age Group (Yea	ırs).	Males.	Females.	Persons.
10-14			1	3	60-64		74	33	107
15-19		18	5	23	65-69		54	27	81
20-24	!	36	11	47	70–74		37	22	59
25-29		57	20	77	75-79		25	7	32
30-34		70	24	94	80-84		15	2	17
35-39		91	29	120	85-89		3	1	4
40-44		82	28	110	90-94		2	1 :	2
45-49		98	47	145	Not stated		2	١	2
50-54		94	30	124			L		
55-59		84	39	123	Total Deaths		844	326	1,170

AGE OF PERSONS WHO COMMITTED SUICIDE: AUSTRALIA, 1957.

(d) Homicide and Operations of War (BE 50). In 1957, there were 127 deaths from homicide and injury purposely inflicted by other persons (not in war), of which non-accidental poisonings caused 4 deaths, assault by firearms and explosives 50, assault by cutting and piercing instruments 15, assault by other means 54 and injury by intervention of police 4. Deaths from injury resulting from the operations of war numbered 6, but all were deaths from late effects of such injuries.

12. Age at Death and Average Issue of Deceased Married Males and Females.-Demography, Bulletin No. 75, contains a number of tables showing, in combination with the issue, the age at marriage, age at death and occupation of married (including widowed or divorced) persons who died in Australia in 1957. Deaths of married males in 1957 numbered 35,554, and of married females, 29,167. The tables which follow deal, however, with only 35,153 males and 29,001 females, the information regarding issue in the remaining 567 cases being incomplete. The total number of children in the families of the 35,153 males was 109,498 and of the 29,001 females, 96,650. The average number of children is shown for various age groups in the following table.

AGE AT DEATH AND AVERAGE ISSUE OF DECEASED MARRIED(a) MALES AND FEMALES: AUSTRALIA.

		Average Issue.										
Age at Death (Years).				Males.		Females.						
		1921.	1931.	1941.	1951.	1957.	1921.	1931.	1941.	1951.	1957.	
Under 20			0.75		0.43	0.25	0.77	0.66	0.79	0.83	0.66	
20-24		0.84	0.81	0.73	0.96	0.95	1.22	1.13	0.95	0.86	1.32	
25-29		1.29	1.33	1.12	1.29	1.38	1.86	1.81	1.45	1.61	1.69	
30-34		2.06	1.79	1.76	1.79	2.06	2.45	2.34	1.91	1.98	1.85	
35-39		2.58	2.13	2.11	2.12	2.21	3.29	2.89	2.30	2.49	2.44	
40-44		3.23	2.77	2.49	2.30	2.29	3.66	3.29	2.77	2.39	2.34	
45-49		3.48	3.10	2.68	2.51	2.45	3.76	3.55	2.93	2.59	2.34	
50-54		3.76	3.46	2.96	2.56	2.52	4.23	3.60	3.29	2.76	2.53	
55–59		4.41	3.69	3.28	2.71	2.55	4.69	4.01	3.55	3.03	2.65	
60-64		4.98	4.02	3.55	3.07	2.71	5.39	4.21	3.79	3.29	2.80	
65-69		5.50	4.41	3.73	3.25	2.98	5.86	4.82	4.01	3.63	3.15	
70–74		6.06	5.06	4.17	3.58	3.26	6.30	5.41	4.29	3.64	3.37	
75–79		6.66	5.65	4.56	3.83	3.48	6.56	6.02	4.85	3.96	3.55	
80-84		6.89	6.17	4.93	4.30	3.84	6.76	6.26	5.39	4.19	3.80	
85–89	• •	7.18	6.59	5.70	4.63	4.08	6.93	6.57	5.85	4.68	4.06	
90-94		7.21	6.94	6.57	5.06	4.46	6.53	6.73	6.11	5.08	4.42	
95-99		6.97	6.69	7.04	5.78	5.27	6.05	7.10	6.34	5.76	4.78	
100 and over		9.20	7.00	8.69	5.71	4.92	5.11	8.20	6.73	7.72	4.41	
Age not state	ď	5.36	5.00		8.00	0.33	5.80	5.00		5.50	2.33	
All Ages		4.97	4.44	3.91	3.39	3.11	5.05	4.72	4.22	3.68	3.33	

(a) Includes widowed or divorced.

The figures in the preceding table include the issue both living and dead. The proportion of living to deceased issue, taking males and females together, is almost seven to one. The totals for 1957 are shown in the following table:—

ISSUE OF DECEASED MARRIED(a) MALES AND FEMALES; AUSTRALIA, 1957.

	Issue	of Marrie	i Males.		Issue of Married Females.						
Issue.		Males.	Females.	Total.	Issue.		Males.	Females.	Total.		
Living Dead		49,424 7,121	48,081 4,872	97,505 11,993	Living Dead		40,742 8,779	41,268 5,861	82,010 14,640		
Total		56,545	52,953	109,498	Total		49,521	47,129	96,650		

(a) Includes widowed or divorced.

13. Age at Marriage of Deceased Males and Females, and Issue.—While the table giving the average issue of married males and females naturally shows an increase in the averages with advancing age at death, the following table, which gives the average issue of males and females according to the age at marriage of the deceased parent, shows a corresponding decrease in the averages as the age at marriage advances.

AGE AT MARRIAGE AND AVERAGE ISSUE OF DECEASED MALES AND FEMALES: AUSTRALIA.

Age at Marriage (Years).			Males.		Females.					
	1921.	1931.	1941.	1951.	1957.	1921.	1931.	1941.	1951.	1957.
Under 15	\					7.60	6.36	7.80	4.88	5.56
15-19	6.32	6.15	5.40	4.63	4.45	6.97	6.79	6.10	5.41	4.93
20-24	6.05	5.56	4.89	4.23	3.87	5.50	5.23	4.80	4.28	3.87
25-29	5.17	4.70	4.21	3.65	3.29	4.09	3.79	3.51	3.14	2.95
30-34	4.45	3.96	3.41	3.00	2.79	2.66	2.42	2.35	2.23	2.06
35-39	3.90	3.14	2.80	2.45	2.22	1.61	1.40	1.26	1.16	1.14
40-44	2.67	2.36	2.01	1.69	1.65	0.62	0.39	0.35	0.36	0.33
45–49	2.20	1.96	1.52.	1.33	1.04	0.03	0.12	0.01	0.07	0.13
50-54	1.70	1.60	1.05	0.80	0.63					
55-59	1.30	0.95	0.79	0.49	0.50					
60-64	0.33	0.63	0.29	0.24	0.26					
65 and over	0.25	0.18	0.01	0.29	0.21					
Age not stated	4.93	3.64	2.95	2.81	2.49	5.41	3.96	2.45	3.17	2.65
All Ages	4.97	4.44	3.91	3.39	3.11	5.05	4.72	4.22	3.68	3.33

§ 6. Vital Statistics of External Territories.

Because of the outbreak of hostilities in the Pacific during the 1939-45 War, civil administration in the external territories was suspended on 11th February, 1942, and registration of births, deaths and marriages was not resumed until 1946. The following table for the year 1957 shows the number of marriages, births and deaths registered in the external territories under the control of Australia, namely:—Norfolk Island; Papua; the Trust Territory of New Guinea; and the Trust Territory of Nauru. More detailed information will be found in a series of tables in *Demography*, Bulletin No. 75.

VITAL STATISTICS: EXTERNAL TERRITORIES, 1957.

(EXCLUDING INDIGENOUS POPULATION.)

Territory.	Marri-		Births.		Deaths.			
ramory.	ages.	Males.	Females.	Persons.	Males.	Females.	Persons.	
Norfolk Island	4	9	6	15	7	10	17	
Papua Trust Territory of New Guinea	92 77	95 253	62 246	157 499	21 55	18	23 73	
Trust Territory of Nauru	2	14	10	24	3		3	

Note.—Information for Cocos (Keeling) Islands is not available.