#### PART III.

#### VITAL STATISTICS.

The system of compulsory registration of births, deaths, Registration of Births, and marriages in Victoria has been in force since 1853, Deaths, and and the registers contain all necessary information bearing Marriages. on the family history of the people. The statutory duties under the Registration Acts are performed by the Government Statist, who has supervision over the local registrars of births and deaths, the registrars of marriages, and (so far as regards their registration duties) the clergymen who celebrate marriages. Copies of entries certified by the Government Statist or by an Assistant Government Statist are prima facie evidence in the Courts of Australia of the facts to which they relate. At the Government Statist's Office there is kept for reference a complete collection of all registrations effected since 1st July, 1853, as well as originals or certified copies of all existing church records relating to earlier periods, as far back as 1837. Since the present system was instituted approximately 5,132,650 original entries have been made in the indexes, of which 1,428,250 relate to marriages, 2,498,200 to births, and 1,206,200 to deaths.

Since 1st August, 1932, all registrations of births and deaths occurring within the area of Greater Melbourne have been effected at the office of the Government Statist.

Persons desirous of obtaining information as to any birth, death or marriage registered in Victoria may apply to the Government Statist to have a search made against the records in the registers. They should furnish particulars, as complete as possible, including the date and place of the event, the names of the parties (if a marriage), age (if a death) and, in the case of a birth or death, the parentage. A fee of 2s. 6d. is charged for every search of a period of not more than five years and an additional fee of 2s. 6d. for each additional search period of five years or part thereof. A search fee is not charged in any case where an application for a certificate is lodged within three months of the date of registration of the event. There is no extra charge for an extract of an entry but, for a certificate, a further sum of 5s. is payable. For a search in the early church records, prior to 1st July, 1853, the fee is only 1s., a further sum of 1s. being payable if a certificate be required.

The value of the information contained in the records is shown by the number of applications for searches or certificates. In 1937 these numbered  $65,2\bar{1}\bar{4}$ .

Law relating to Marriages.

Marriages, Births, and births, and deaths in Victoria were consolidated in 1928.

Marriages may be celebrated by any minister of religion ordinarily officiating as such in one of the religious denominations, and whose name is registered in the office of the Government Statist, also by the Government Statist, an Assistant Government Statist, or a duly appointed registrar of marriages. The Governor in Council may prohibit from celebrating marriages any minister who is proved guilty of any indictable offence, misconduct or impropriety in the celebration of any marriage, or who makes a business of celebrating marriages for the purpose of profit or gain. At least three clear days before the performance of any marriage, written notice of such marriage must be given to the proposed celebrant by the parties about to be married, but such notice may, in respect of a marriage by a minister of religion, be dispensed with in the case of emergency by written permission of any Justice of the Peace. Marriage of minors is permissible only with the written consent of parents or guardian or, in certain circumstances, by permission of a Guardian of Minors, who is usually a police magistrate. Marriage with a deceased wife's sister is valid. Marriages of Jews and Quakers are exempted from the law relating to marriages, and are deemed legal and valid if celebrated according to their respective usages. Certificates of such marriages must, however, be lodged with the Government Statist for record purposes. No marriage is invalid by reason of its having been celebrated by an unqualified person if either of the parties believed at the time that such person was qualified, or by reason of any formal defect or irregularity where the identity of the parties to the marriage is not in question.

A person whose husband or wife has been continually absent from such person for the space of seven years or over, and has not been known by such person to be living within that time, may marry without being liable to prosecution for bigamy (see sec. 61 of the Crimes Act); but such a marriage would be void, and the issue thereof illegitimate, if it should be subsequently discovered that the former wife (or husband) was alive at the date of the marriage.

Births of live children must, under a penalty not exceeding £10 for default without reasonable cause, be registered within 60 days. After 60 days and within twelve months, registration may be effected, after declaration, on the payment of a fee of 5s.; after twelve months and under seven years, only by authority of the Government Statist (fee 20s.); and after seven years by order of a Judge of a County Court or the Supreme Court (fee 30s.). The occupier of every house or place in which an illegitimate child is born, or in which an illegitimate child under the age of five years dies, is required to give notice of such birth or death to the district registrar within three to seven days, according to the locality of the event. If the mother is the occupier, the period of notification is extended to three weeks.

Deaths must, under a penalty not exceeding £10, be notified to the local registrar by the occupier of the house or tenement in which the death occurred, and must be registered within 21 days by a person present at the death or in attendance during the last illness of the deceased. The medical practitioner in attendance during the last illness is also required, under a penalty not exceeding £5, to report the death to the registrar, unless the death has been reported to the Coroner.

Legitimation of an illegitimate child born in Victoria may be effected by the father at any time after the marriage of the father to the mother, provided there was, at the time of the birth of the child, no legal impediment to the marriage. Should the father be deceased, however, the mother may, on proof of his admission of paternity, effect the legitimation within two years of his death.

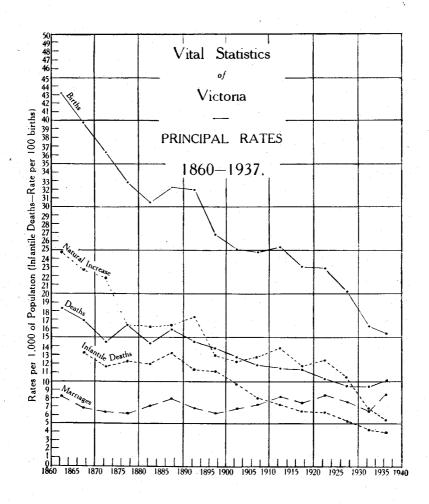
The Adoption of Children Act 1928 and the Adoption of Children Act 1936 provide for the legal adoption of children and for the registration of each adoption by the Government Statist.

Stillbirths are not registered, but registrars issue burial certificates in accordance with the *Cemeteries Act* 1928, and are instructed to keep a memorandum of each case notified.

Summary of Vital Statistics, 1937. The principal numbers and rates relating to Vital Statistics are given in the following table:—

#### VICTORIA—SUMMARY OF VITAL STATISTICS, 1937.

		Number of—					Rate per 1,000 of Population.			
Division.	Mean Population	Mar- riages.	Births.	Deaths.	Deaths under One Year.	Mar- riage.	Birth.	Death.	Deaths under One Year per 1,000 Births.	
Greater Melbourne	1,020,250		14,490	10,819	538	••	14.20	10.60	37.13	
Remainder of the State	835,783		15,241	7,794	553	••	18.24	9.33	36.28	
Victoria	1,856,033	16,226	29,731	18,613	1,091	8.74	16.02	10.03	36.70	



#### MARRIAGES.

Marriages—Numbers and Rates.

Marriages in Victoria in 1937 numbered 16,226, corresponding to a rate of 8.74 per 1,000 of the population. Rates for previous years were 8.61 in 1936, 8.38 in 1935, 7.57 in 1934, and 6.96 in 1933. The highest rate since 1857—9.85—was recorded in 1920. This was mainly due to the marriages of a large number of soldiers after their return to civilian life. The lowest rate recorded in the history of the State was 5.66 in 1931. There has been a steady increase since that year, the rate in 1937 being 54 per cent. higher than that in 1931.

The following table shows the number of marriages, the quarters in which they were registered, and the proportion per 1,000 of the population, since 1854:—

VICTORIA-MARRIAGES IN EACH QUARTER, 1855 TO 1937.

·	Average		Quarter of I	Registration.		Rate per
Period.	Annual Number of Marriages.	March.	June.	September.	December.	1,000 of Mean Population.
1855-59	4,362	*	*	*	*	10 · 24
1860-64	4,418	1.068	1,166	1.079	1,105	8 · 16
1865-69	4,533	1,123	1,144	1,113	1,153	6.94
1870-74	4,823	1,168	1,299	1,131	1,225	6.40
1875-79	5,023	1,239	1,307	1,207	1,270	$6 \cdot 21$
1880-84	6,296	1,528	1,611	1,483	1,674	7.07
1885-89	8,208	1,899	2,196	1,915	2,198	8.04
1890-94	7,945	1,995	2,100	1,838	2,012	6.88
1895 – 99	7,627	1,816	2,074	1,778	1,959	$6 \cdot 44$
1900-04	8,201	2,000	2,252	1,930	2,019	6.78
1905-09	9,209	2,185	2,548	2,182	2,294	7.36
1910-14	11,244	2,664	3,000	2,644	2,936	8 29
<b>1</b> 915–19	10,908	2,437	2,754	2,815	2,902	7.62
1920-24	13,598	3,252	3,578	3,152	3,616	8.64
1925-29	13.301	3,136	3,603	3,047	3,515	7 72
1930–34	12,019	2,929	3,123	2,727	3,240	6.64
1933	12,668	2,872	3,331	2,950	3,515	6.96
1934	13,862	3,677	3,457	3,005	3,723	7.57
1935	15,409	3,452	4.265	3,301	4.391	8 38
1936	15,915	3.448	4,776	3,240	4.451	3.61
1937	16,226	4,223	3,934	3,326	4,743	8.74
					,	

<sup>\*</sup> Not available.

The ordinary marriage rate—per 1,000 of the total population—like birth and death rates similarly estimated, is somewhat unreliable in comparatively newly settled countries like Australia, especially in earlier periods, but it affords a ready and approximate comparison between years not widely separated.

Marriage Rates The following statement shows the marriage rate per Australian 1,000 of the population in each of the Australian States New Zealand. and in New Zealand, for the last five years:—

# MARRIAGE RATES—AUSTRALIAN STATES AND NEW ZEALAND.

Year.	Vic- toria.	New South Wales.	Queens land.	South Aus- tralia.	Western Aus- tralia.	Tas- mania.	Aus- tralia.	New Zealand
1933	6.96	7.07	6.84	6 84	7.69	7.13	7.03	7.18
1934	7 · 57	7.70	7 . 99	7 · 39	8.34	7.32	7.71	7.64
1935	8.38	8 45	8 - 57	8 28	8.85	8.16	8 · 45	8 • 23
1936	8.61	8.57	8.49	8.82	9.43	8.98	8.66	9.25
1937	8.74	8.61	8 44	9.06	9.18	8.73	8.70	9.55

Ages of bridegrooms and brides.

The ages of bridegrooms and brides who where married in 1937 are shown in combination for various groups in the table which follows:—

# VICTORIA—AGES OF BRIDEGROOMS AND BRIDES IN COMBINATION, 1937.

									Age	of B	rides.									
Age; of Bride- grooms.	13.	14.	15.	16,	17.	18.	19.	20.	21 to 24.	25 to 29.	30 to <b>34</b> .	35 to <b>39</b>	40 to 44	45 to 49	50 to 54.	55 to 59.	ţ	65 to 69.	70 and over.	Total Bridegrooms.
16		1	2 3 2 8 4 1 1 	1 1 10 4 111 555 19 3 	$\frac{29}{37}$ $163$	120 15	31 57	11	12 28 96 2,299 2,585 786 182 47 13 4 2	 1 2 7 565 2,097 1,165 359 119 44 17 6 1	148 62 23 7 4 3	154 213 130 95 44 11 9 4 2	1 8 31 56 99 60 48 25 17 5 1	 1 1 9 19 27 62 42 27 22 12 3	   1 1 9 23 18 18 17 9 8	1 3 6 5 12 21 8 7	   5 3 8 12 17 9	17	2 11	16 16 75 147 304 4,239 5,734 2,915 1,253 590 372 205 119 108 80
Total Brides	<u> </u>	1	21	104	316	518	714	894	6,056	4,385	1,644	707	<u> </u>	_		 67		<u> </u> -	18	16,22

Of every 1,000 men married during the year, 728 were older and 172 younger than their brides, and 100 were of the same age.

In 1937 the oldest bridegroom was aged 84 years, and the oldest bride 78 years. The youngest bridegroom was aged 16 years and the youngest bride 14 years.

Proportion of marriages at various ages. The proportions of both sexes marrying in 1937 is shown, in varying age groups, in the following table:—

# VICTORIA—PROPORTIONS OF BRIDEGROOMS AND BRIDES IN AGE GROUPS, 1937.

Age Group.		Proportion p total		Age Group.	Proportion per 1,000 of total—			
		Bridegrooms.	Brides.		Bridegrooms.	Brides.		
Under 16			1 · 36	35 to 39	77 22	43.57		
16		·12	6.41	40 to 44	36 36	21.76		
17		.99	19.47	45 to 49	22 93	14 11		
18		4.50	31.92	50 to 54	12 63	6.47		
19		9.06	44 00	55 to 59	7 · 33	$4 \cdot 13$		
20		18.74	$55 \cdot 10$	60 and over	15.96	6.90		
21 to 24		261 25	373 23	]	!			
25 to 29		353 38	$270 \cdot 25$	Total	1,000 00	1,000:00		
30 to 34		179 53	$101 \cdot 32$	1		•		

Marriages of Minors. The number of minors marrying at each age and the proportion of each sex to the total marriages are given in the following table for each of the five years 1933 to 1937.

#### VICTORIA—MARRIAGES OF MINORS.

					Age	in Yea	rs.			T	Cotal.
	Year.		14.	15.	16.	17.	18.	19.	26.	Number.	Percentage of Total Marriages
		1		,						(	
					В	ridegroo	oms.				
.933 .934 .935 .936 .937				::	$\begin{bmatrix} 3 \\ 2 \\ 3 \\ \vdots \\ 2 \end{bmatrix}$	$egin{array}{c c} 15 & & & \\ 11 & & & \\ 11 & & & \\ 14 & & & \\ 16 & & & \\ \end{array}$	87 62 74 54 73	177 177 167 165 147	$     \begin{array}{r}       290 \\       305 \\       261 \\       269 \\       304     \end{array} $	572 557 516 502 542	4·52 4·02 3·35 3·15 3·34
						Brides	١.				
1933 1934 1935 1936 1937			3 5 2 1	$12 \\ 16 \\ 20 \\ 17 \\ 21$	92 72 87 99 104	274 260 261 261 261 316	542   505   560   590   518	659 664 691 706 714	689 803 875 818 894	2,268 2,323 2,499 2,493 2,568	17.90 16.76 16.22 15.66 15.83

The proportion of minors marrying steadily decreased from 1931 to 1936. A slight increase, as compared with 1936, was recorded in 1937.

Age at The mean ages at marriage, according to conjugal condition, are shown in the following table for each of the last five years:—

VICTORIA-MEAN AGE AT MARRIAGE, 1933 TO 1937.

		Bride	grooms.		Brides.				
Year,	Bachelors.	Divorced.	Widowers.	All Bride- grooms.	Spinsters.	Divorced.	Widows.	All Brides.	
1933 1934 1935 1936	28·09 28·26 28·32 28·41 28·39	40·23 40·89 40·84 40·30 39·43	48.80 49.61 49.99 49.80 50.01	29 · 45 29 · 68 29 · 72 29 · 76 29 · 81	25·26 25·40 25·46 25·58 25·47	36·09 35·21 36·10 35·81 36·64	43.52 45.32 44.88 44.97 45.47	26·10 26·25 26·35 26·37 26·42	

In 1937 the mean age at marriage of bridegrooms of brides under 45 was 28 94 years, while for brides under 45 the age was 25 53 years.

In 1937 the most popular age at marriage for bridegrooms was 24 years and for brides 21 years.

Marriage records for 1937 show that 87.7 per cent. of the bridegrooms and 93.2 per cent. of the brides married in Victoria were Australian born, while 9.3 per cent. of the grooms and 5.0 per cent. of the brides were born in Great Britain and Ireland. Of all persons married 90.5 per cent. were born in Australia, 7 per cent in New Zealand, 7.1 per cent in Great Britain and Ireland, and 4 per cent. in other British Possessions. Only a small proportion (1.3 per cent.) were natives of foreign countries. The numbers born in Australia and other countries are shown in the subjoined table for the years 1917 and 1937:—

BIRTHPLACES OF PERSONS MARRIED, 1917 AND 1937.

Where Born.	Brideg	rooms.	Brides.		
	1917.	1937.	1917.	1937.	
Australia	8,226	14,226	8,846	15,123	
New Zealand	71	134	59	104	
England and Wales	729	1,089	401	603	
Scotland	130	316	68	156	
Ireland	119	103	66	45	
Other British Possessions	37	97	- 11	45	
Germany	26	13	11	8	
Russia	26	17	-8	12	
Italy	27	78	8	37	
United States	18	8	. 7	14	
Other Foreign Countries and	1.	-	•		
unspecified	97	145	21	79	
Total	9,506	16,226	9,506	16,226	

Conjugal condition of persons marrying.

In the following tables are given the number of persons in each conjugal condition marrying during each of the five years 1933 to 1937, and the proportions in each condition for periods since 1900.

#### VICTORIA—CONJUGAL CONDITION OF PERSONS MARRYING, 1933 TO 1937.

Dented		Brideg	rooms.			Total			
Period.	Bach- elors.	Wid- owers.	Di- vorced.	De- serted.	Spin- sters.	Widows.	Di- vorced.	De- serted.	Mar- riages.
1933	11,735	684	243	6 5	11,990	434	224	20	12,668
1934	12,830	753	274		13,114	448	288	12	13,862
1935	14,273	797	332	7	14,560	513	$   \begin{array}{r}     319 \\     322 \\     405   \end{array} $	17	15,409
1936	14,769	810	331	5	15,107	471		15	15,915
1937	14,952	843	428	3	15,270	538		13	16,226

#### VICTORIA—PERCENTAGE OF PERSONS MARRYING IN EACH CONJUGAL CONDITION, 1900 TO 1937.

	19	37.		Percentage of Total—				
Marriages Between —	Num- ber.	Per- cen- tage.	Conjugal Condition.	1900-09.	1910-19.	1920-29.	1937.	
Bachelors and Spinsters	14,418	88.86			Brideg	rooms.		
Bachelors and Widows	262	1.61	Bachelors	91.4	92.7	92.1	92.2	
Bachelors and Divorced		_ 01	Widowers	8.1	6.5	6.3	5.2	
Women	275	1.70	Divorced	•5	*8	1.6	2.6	
Widowers and Spinsters	530	3 • 27						
Widowers and Widows	237	1.46	Total	100.0	100.0	100.0	100 • 0	
Widowers and Divorced	İ	1				''		
Women	76	•47	l		Brid			
Divorced Men and Spinsters	335	2.06	Spinsters	93.4	94.2	93.6	94.2	
Divorced Men and Widows	39	•24	Widows	6.0	4.8	4.9	3.3	
Divorced Men and Divorced			Divorced	•6	1.0	1.5	2.5	
Women	54	•33						
Total Marriages	16,226	100.00	Total	100.0	100.0	100.0	100 • 0	

NOTE.—In this table deserted men are included with bachelors and deserted women with spinsters,

The proportions of widowers and widows remarrying per 100 marriages, declined from 7.7 and 5.8 respectively in 1905-09 to 5.2 and 3.2 in 1933-37. During the same period the proportion of remarriages of divorced men increased from 5 to 2.2, and of divorced women from '7 to 2.1. The increased proportion of divorced persons remarrying reflects the higher number of decrees for dissolution of marriage granted in recent years. The numbers of such decrees granted and of remarriages of divorced men and of divorced women in each decade since 1900 are shown in the following table:—

VICTORIA—DIVORCED PERSONS REMARRYING SINCE 1900.

	Period.		Decrees Granted.	Remarriages.				
	r criou.		Decrees Granted.	Divorced Men.	Divorced Women			
1900-09			1,208	418	554			
1910-19			2,258	867	1,096			
1920-29			4,392	2,125	2,116			

In 1937 decrees granted numbered 796, and remarriages of men and women 428 and 405 respectively.

Marriages in religious denominations. In 1937 the number of marriages celebrated by ministers of religion was 15,168, representing 93.5 per cent. of the total marriages. Civil registrars performed 1,058 marriages, or 6.5 per cent. of the total.

The numbers and proportions of marriages solemnized according to the rites of the principal religious denominations and of those performed by registrars of marriages, for the years 1917, 1927, and 1937, are shown in the following table:—

VICTORIA—MARRIAGES IN VARIOUS DENOMINATIONS.

	19	17.	. 19	927.	19	37.
Denomination.	Number.	Per- centage of Total Marriages.	Number.	Per- centage of Total Marriages.	Number.	Per- centage of Total Marriages
Church of England	2,479	26.08	3.916	28.78	4,611	28.42
Roman Catholic Church	1,858	19.55	2,579	18.95	2,987	18.41
Presbyterian Church	1,728	18 18	2,508	18 43	3,178	19 58
Methodist Church	1,419	14.93	2,001	14.70	2,517	15 51
Baptist Church	444	4 67	582	4.28	793	4 89
Church of Christ	237	2 49	323	2 · 37	382	2 · 35
Congregational Church	831	8 74	558	4.10	225	1.39
Salvation Army	37	.39	76	56	107	.66
Lutheran Church	48	50	65	48	79	49
Hebrew	35	· 37	59	43	85	52
Other Sects	. 70	.73	96	.71	204	1 26
Registrars of Marriages	320	3 37	845	6 21	1,058	6 52
Total	9,506	100 00	13,608	100.00	16,226	100.00

Civil The following statement shows the numbers and proportions of marriages performed by civil registrars, for each of the last ten years:—

VICTORIA—CIVIL MARRIAGES, 1928 TO 1937.

Year.		Number.	Percentage of Total Marriages.	Year.		Number.	Percentage of Total Marriages.	
1928		1,013	7.68	1933		1,340	10.58	
1929		1,040	8.04	1934		1,156	8.34	
1930		1,224	10.51	1935		1,373	8.91	
1931		1,143	11.23	1936		1,398	8.78	
1932		1,515	12.90	1937		1,058	6.52	

Registered clergymen.

The ministers qualified by registration to celebrate marriages numbered 1,903 on 31st December, 1937. The numbers of ministers in each denomination (excepting Jews and Quakers) and civil registrars of marriages were as follows:—

VICTORIA—REGISTERED MINISTERS IN EACH DENOMINATION, 1937.

Denomination.	Number of Registered Ministers.	Denomination.	Number of Registered Ministers.
Church of England Roman Catholic Presbyterian Methodist Baptist Church of Christ Congregational Salvation Army Lutheran Lutheran Luther Day Adventist Latter Day Saints (Reorganized)	427 492 316 313 97 82 56 41 37 11	Reformed Presbyterian Church of Ireland Ballarat Town Mission Catholic and Apostolic Free Christian New Church Greek Orthodox Church Syrian Orthodox International Bible Students' Association Pentecostal Particular Baptists Australian Church	2 2 1 1 1 1 1 1
Apostolic Church, Australia	4 3 3	Australian Church  Total Clergymen Civil Registrars of	1,903
Welsh Calvinistic Methodists Unitarian	2 2	Marriages Grand Total	1,918

#### BIRTHS.

The number of births registered in Victoria during the year 1937 was 29,731. This was 848 more than the number registered for the preceding year. The rate per 1,000 of population (16 02) was the highest experienced in Victoria since 1931. The lowest rate recorded was 15 16 in 1935. Stillbirths, which are excluded from both births and deaths, numbered 789, and correspond to a ratio of 26 5 per 1,000 infants born alive in 1937. There were 1,047 male to every 1,000 female births in 1937, as compared with 1,050 in 1936, 1,037 in 1935, 1,036 in 1934, and 1,042 in 1933.

In young communities, birth rates calculated per 1,000 of the population are to some extent unreliable and misleading. In the earlier periods when, owing to immigration, the population consists for the most part of men and women at the reproductive period of life, such rates are naturally high. As time proceeds, however, notwithstanding that immigration of reproductive adults may be maintained, the proportion of such adults to the total population must diminish, and with it, consequently, the birth rate. It is clear, however, that other powerful factors are tending to reduce the birth rate.

The following table shows the number of births—male and female—the quarters in which they were registered, and the proportion per 1,000 of the population since 1854:—

VICTORIA—BIRTHS IN EACH QUARTER, 1855 TO 1937.

	Average	Se	x.	Q	uarter of	Registratio	on.	Rate
Period.	Annual Number of Births.	Males.	Females.	March.	June.	Sep- tember.	December.	1,000 of Mean Popula- tion.
1855-59	17,154	8,742	8,412	*	*	*	*	39 49
1860-64	24,060	12,379	11,681	5,614	5,991	6,534	5,921	43 29
1865-69	25,963	13,219	12,744	6,027	6,543	7,105	6,288	39 .77
1870-74	27,359	13,944	13,415	6,478	6,769	7,467	6,645	36 35
1875-79	26,584	13,639	12,945	6.333	6,686	7,211	6,354	32 .85
188084	27,286	13,965	13,321	6,374	7,025	7,300	6,587	30 64
1885-89	32,941	16,883	16,058	7,824	8,289	8,814	8,014	32 .27
1890-94	36,945	18,901	18,044	8,669	9,604	9,735	8,937	31 99
1895-99	31,675	16,213	15,462	7,746	8,078	8,323	7,528	26 .76
1900-04	30,316	15,544	14,772	7,384	7,682	7,880	7,370	25 08
1905-09	30,994	15,879	15,115	7,489	7,832	8,076	7,597	24:76
1910–14	34,500	17,717	16,783	8,329	8,619	8,850	8,702	25 42
l915–19	33,101	17,014	16,087	8,228	8,336	8,514	8,023	23 13
1920-24	36,022	18,549	17,473	8,729	8,970	9,367	8,956	22 .89
1925-29	34,892	18,013	16,879	8,732	8,728	8,856	8,576	20 24
930-34	29,429	15,075	14,354	7,383	7,409	7,361	7,276	16.27
933	28,392	14,491	13,901	6,945	7,081	7,255	7,111	15 .59
.934	27,828	14,158	13,670	6,953	6,830	7,109	6,936	15.20
935	27,884	14.194	13,690	7,014	6,652	6,953	7,265	15.16
936	28,883	14,796	14,087	7,151	6,936	7,448	7,348	15.63
937 [	29,731	15,209	14,522	7,116	7,335	7,617	7,663	16.02

<sup>\*</sup> Not available.

The following statement shows the birth rate per 1,000 Birth Ratesof the population in each of the Australian States and in Australian States and New Zealand. New Zealand for the last five years:

#### BIRTH RATES—AUSTRALIAN STATES AND NEW ZEALAND.

Year.	Vic- toria.	New South Wales.	Queens- land.	South Aus- tralia.	Western Aus- tralia.	Tas- mania.	Aus- tralia.	New Zealand.
1933	15·59	16 · 99	18·14	15·32	17.95	19·93	16·78	16·59
1934	15·20	16 · 52	18·17	14·50	17.66	19·51	16·39	16·47
1935	15·16	16 · 89	18·31	14·14	18.23	19·41	16·55	16·13
1936	15·63	17 · 31	19·17	15·17	18.84	19·84	17·13	16·64
1937	16·02	17 · 63	19·36	15·25	18.95	20·69	17·43	17·29

The birth rate in England and Wales was 14.8 in 1936.

Birthplaces of parents of nuptial children.

1.3.

The birth records of children born in wedlock show that, in Victoria in 1937, 83 out of every 100 children were born to Australian parents, and 96 out of every 100 to one or both parents born in Australia. Of the total fathers, the percentages born in the States or countries mentioned hereafter were as follows: - 78·4 in Victoria; 87·4 in Australia; 0·7 in New Zealand; 6.9 in England and Wales; 1.9 in Scotland; 0.7 in Ireland; 0.5 in other British Possessions; and 1.9 in foreign countries. The corresponding percentages for mothers were: - Victoria, 81.5; Australia, 91.4; New Zealand, 0.6; England and Wales, 4.7; Scotland, 1.3; Ireland, 0.4; other British Possessions, 0.3; and foreign countries,

The average ages of fathers and of mothers of nuptial Ages of children whose births were recorded in 1937 were 32.54 and parents of 28.86 years respectively, which were 3.60 and 3.33 years nuptial children. respectively above the average ages of bridegrooms marrying brides under 45 years of age, and of such brides, for the year 1937. The proportions of both parents in various age groups are shown in the following table for the year mentioned:-

#### VICTORIA—PERCENTAGE OF PARENTS OF NUPTIAL CHILDREN IN AGE GROUPS, 1937.

Fathe	г.	Mother.					
Age Group.	Percentage of Total Parents.	Age Group.	Percentage of Total Parents.				
Under 20	0.50	Under 20					
00.4 - 04	11 94	20 to 24					
05 4 - 00	28.00	25 to 29					
30 to 34	28.14	30 to 34					
05 / 00	17.38	35 to 39					
10.1 = 1.1	8 · 39	40 to 44					
45 to 49	3.71	45 and over	0.43				
50 and over	1.94						
Total	100 00	Total .	100 00				

It will be seen that, on the experience of 1937, 56.45 per cent. of the mothers were between ages 20 and 30, and 34.67 per cent. between ages 30 and 40. The proportions of fathers at these ages were 39.94 and 45.52 per cent. respectively. Of every 1,000 nuptial births, about 44 were to mothers under 20 years and about 4 to mothers aged 45 years and upwards.

The following table shows the number of births (allotted Municipalities to the place of usual residence of the mother) and the births per 1,000 of the mean population in Greater Melbourne, provincial cities, principal towns, and the remainder of the State for the five-year periods 1923 to 1927, 1928 to 1932, and for the last three years:—

BIRTHS IN GREATER MELBOURNE, PROVINCIAL CITIES, PRINCIPAL TOWNS, AND REMAINDER OF STATE.

	A	nnual N	umber	of Birth	ıs.	Births	per 1,00	0 of Me	an Popt	ılation
Municipality.	1923- 1927.	1928- 1932.	1935.	1936.	1937.	1923- 1927.	1928- 1932.	1935.	1936.	1937.
reater Melbourne—										
Melbourne	1,812	1.348	1,117	1,131	1,176			12.39	12.53	13.03
Box Hill		259	197	242	219		18.31	12.77		13.9
Braybrook (Part)		187	149	156	114		22.28	16.78	17.43	12.6
Brighton	482	394	341	365	414			11.13	11.70	13.0
Brunswick	7 707	974	775	808	847			14.28	14.83	15.4
Camberwell			751	752	864				14.14	15.7
Caulfield	1,065	941	756	820	917			11.41	12.15	13.4
Chelsea	1	127	122	122	134		18.66	17:38	17.40	19.1
Coburg	703	742	621	624	652	25.15			15.95	16.5
Collingwood	900	532	476	514	479	20.35	16.63	15.76	17.06	15.9
Essendon	040	766	550	572	610			11.92	12.31	13.0
Fitzroy	1 000	517	451	447	489	19.92	15.96	14.75	14 64	16.0
Footscray	1 000	875	682	694	723	24.20		14 67	14.84	15.3
Hawthorn		424	383	444	460	16.63		11.17	12.78	13.1
Heidelberg (Part).		413	338	336	346		16.93	14.00	13.73	14.1
Kew	970	339	277	305	301	17.96	13.97	11.32	$12 \cdot 37$	12.0
Malvern	000	499	450	488	515	15.07	11.46	10.18	10.91	$11 \cdot 4$
Moorabbin		398	352	348	371		23.14	18.90	18.44	19.3
Mordialloc		148	141	127	145		15.37	14.26	12.80	14.7
Northcote			554	578	610	24.51	17.27	13.07		14.2
Oakleigh	1 .	264	239	214	216		22.72	19.75	17.54	17.5
Port Melbourne	0.70	230	200	197	220	21.14	17.24	15.49	15.20	16.9
Prahran	077	696	610	628	659	17.02	13.26	11.54	11.76	12.2
Preston	250	703	579	541	598	31.33	23.87	18.06	16 75	18.3
Richmond	000	693	566	608	609		16.71	14.28	15.32	15.3
Sandringham	O Pie	272	225	229	293			12.30	12.38	15.6
South Melbourne.			550	577	589		15.06	12.77	13.37	13.6
St. Kilda	050		496	529	572			10.21	10:70	11.3
Williamstown	1 405		306	336	348		19.28	13.76	15.05	15.5
Remainder o										
Metropolis	1.364		١ ١	١ ١		25.88		1		

		An	mual N	imber o	f Birth	š	Births p	er 1,000	0 of Me	an Popu	ılation
Municipality,	Municipality.		1928- 1932.	1935.	1936.	1937.	1923– 1927.	1928- 1932.	1935.	1936.	1937.
Provincial Cities	and										
Ballarat		728	664	578	583	605				15.27	15.8
Bendigo		609	550	544	577	577			18.47	19:37	19.3
Geelong		862	844	650	695	703		19.26		17.50	
Ararat		1	+	87	131	81		†	17.72	26.46	16.3
Castlemaine		132	105	93	81	111					
Colac		†	+	104	109	114		†	20.80		
Echuca		1 + .	+	- 83	92	97		†	18 61	20.67	21.8
Hamilton		144	138	102	132	124			17.59		
Horsham		†	Ť	123	117	129		†	23.21	21.83	23.9
Maryborough		114	118	106	120	102					
Mildura		198	184	208	219	250		28:23			
Sale		†	†	86	77	97		1	19.95		
Shepparton		7	151	160		185		27.51	27.44		
Stawell		111		82		77		19.46			
Wangaratta		†	†	99		130		201	20.41		
Warrnambool		183				180					
Wonthaggi		159	141	84	93	69	25.06	22.44	14.00	14.09	10.4
<b>Summary</b> — Greater Melbo Provincial Cities		17,904	15,949	13,254	13,732	14,490	20-14	16.03	13 · 20		1
Towns		3,240	3.163	3,333	3,570	3,631					
Remainder of	State	14,531			11,581		23.31				
Victoria	••	35,675		27.884	28,883			17.85	15.16	15.63	16.0

• Included in Remainder of Metropolis. † Not calculated.

Note.—The boundaries of Greater Melbourne were re-defined in 1929.

Multiple births. The number of cases of multiple births and the proportion per 1,000 of the total cases of births in the last five years were as follows:—

#### VICTORIA—MULTIPLE BIRTHS.

Yea	Year. Cases of Twins.		Cases of Triplets.	Cases of Quadruplets.	Total Multiple Cases.	Multiple Cases per 1,000 of Total Cases.	
1933		313	2		315	11 22	
1934		328	3		331	12.04	
1935		297			297	10.76	
1936		298	4		302	10.57	
1937		335	3	1	339	11 53	

On the average of the five years 1933-37, the proportion of mothers of twins was one in 90, of mothers of triplets one in 11,764, of mothers of quadruplets one in 141,173, and of mothers of all multiple births one in 89 mothers.

A case of quadruplets (3 males and 1 female) was recorded in the metropolitan area in the third quarter of 1937. This was the first case of quadruplets in Victoria since 1917.

Adoption of Children Act 1928 makes provision for the legal adoption of children under 21 years of age who have never married. The Adoption of Children Act 1936 provides that, for the purpose of legal adoption, an infant includes any person over the age of 21 years who has been brought up, maintained and educated by any person, or two spouses jointly, as his, her or their child under any de facto adoption. This Act further provides that the Court may make an order authorizing two spouses jointly to adopt an infant, notwithstanding that one of the spouses is the natural parent of the infant. An adopted child has the right of succession whether under an intestacy or disposition to the real and personal property of an adopter, but not to that of its natural parent or parents; it has no rights of succession to the property of adopting parents' relatives but has rights in estate of natural parents' relatives. Marriage is prohibited between an adopter and an adopted child.

The first registration under the Act of 1928 was effected on 14th October, 1929, and, between that date and the end of the year 1937, the adoptions of 971 male and 1,511 female children have been registered. During 1937, adoptions registered comprised 183 male and 192 female children.

The first provision for the legitimation of children born Children out of wedlock was made by the Registration of Births, Deaths, and Marriages Act 1903. This Act was repealed in 1912, and an Act passed which provided for the legitimation of such children at any time after the marriage of the parents, on the application of the father, provided there was no lawful impediment to the marriage of the parents at the time of the birth. An amending Act passed in 1916 allowed legitimation to be effected on the application of the mother, if the father were absent on war service or had died not more than two years prior to the date of her application. Up to the end of 1937 advantage was taken of these Acts to legitimate 3,802 children, of whom 279 were registered in the years 1903 to 1909, 1,347 in 1910 to 1919, 1,374 in 1920 to 1929, 101 in 1930, 85 in 1931, 77 in 1932, 93 in 1933, 79 in 1934, 100 in 1935, 128 in 1936, and 139 in 1937.

Legitimation Acts are in force in all the Australian States and in New Zealand, but there are marked differences in the numbers of legitimations resulting therefrom. In proportion to every 100 children born out of wedlock in 1937, the numbers of legitimations in the several States and in New Zealand during that year were as follows:—Victoria, 11·3; New South Wales, 22·0; Queensland, 16·5; South Australia, 9·0; Western Australia, 19·0; Tasmania, 15·2; and New Zealand, 36·0.

Ex-nuptial Births in Victoria.

The following table shows the number of ex-nuptial births and their percentage to total births since 1909:—

### VICTORIA—EX-NUPTIAL BIRTHS, 1910 TO 1937.

Period.		A verage Annual Number of	A verage Ex	e Annual Num -nuptial Birth	ber of	Percentage of Total Births.
		Births.	Male.	Female.	Total.	
1910-14 1915-19 1920-24 1925-29 1930-34	••	 34,500 33,101 36,022 34,892 29,429	1,013 941 869 806 685	979 912 821 752 620	1,992 1,853 1,690 1,558 1,305	5·77 5·60 4·69 4·47 4·43
1933 1934 1935 1936 1937		 28,392 27,828 27,884 28,883 29,731	656 630 578 636 594	586 554 608 636 637	1,242 1,184 1,186 1,272 1,231	4.37 4·25 4·25 4·40 4·14

There has been an appreciable decrease in the proportion of exnuptial births to total births in Victoria since 1913, the percentage having fallen from 6.03 in that year to 4.14 in 1937.

The percentages in the various States and in New Zealand in 1937 were as follows:—Victoria, 4·14 per cent.; New South Wales, 4·43 per cent.; Queensland, 4·75 per cent.; South Australia, 3·47 per cent.; Western Australia, 4·03 per cent.; Tasmania, 4·63 per cent.; Australia, 4·33 per cent.; and New Zealand, 4·65 per cent.

A larger proportion of ex-nuptiality prevails among residents of Greater Melbourne and of the provincial cities and principal towns than in the rural districts of Victoria. During the year 1937, the proportion of ex-nuptial births to total births was 5.00 per cent in Greater Melbourne, 3.69 per cent in the provincial cities and principal towns, and 3.21 per cent. in the rural districts.

#### DEATHS.

The following table shows the number of deaths—male and female—the quarters in which they were registered, and the proportion per 1,000 of the population since 1854:—

### VICTORIA—DEATHS IN EACH QUARTER, 1855 TO 1937.

Period.	Average Annual		Sex.	<u> </u>	Quarter	of Registrati	on.	Rate per 1,00
	Number of Deaths.	Males.	Females.	March.	June.	September.	December.	of Mean Popula- tion.
1855-59 1860-64	7,653 10,210	4,768 6,001	2,885 4,209	*	*	*	*	17.78
1865-69	11,035	6,374	4,661	3,257	2,658	2,093	2,202	18.44
1870-74	10,978	6,365	4,613	3,385 3,232	2,938	2,243	2,469	$16 \cdot 93$
1875-79	13,289	7,567	5,722	4,016	2,744 3,567	2,461	2,541	14 · 56
1880-84	12,820	7,324	5,496	3,512	3,167	2,831	2,875	16.45
1885-89	16,200	9.307	6,893	4,591	3,107	3,013	3,128	14 · 40
890-94	16,886	9,716	7,170	4,643	4,108	3,689 3,977	4,008	15.87
8 <b>95</b> –9 <b>9</b>	16,350	9,227	7,123	4,324	3,957	3,808	4,158	14 · 62
1900-04	15,457	8,686	6,771	3,921	3,750	3,992	4,261	13 81
1905-09	14,932	8,296	6,636	3,805	3,539	3,917	3,794 3,671	12.84
1910-14	15,705	8,616	7,089	3,873	3,875	4,137	3,820	11.93
1915-19	16,283	8,860	7,423	3,781	4,172	4.467	3,863	11.57
920-24	16,375	8,781	7,594	3,846	4,166	4,503	3,860	11:38
925-29	16,674	8,969	7,705	3,770	4,213	4,602	4.089	10·40 9·67
930-34	17,180	9,175	8,005	3,814	4,214	4,822	4,330	9.50
933	17,456	9,308	8,148	3,831	4,188	5,222	4,215	9.59
934	18,648	9,913	8,735	4,160	4,640	5,160	4,688	10.18
935	18,456	9,856	8,600	3,974	4,457	5,631	4,394	10.03
936	18,778	9,996	8,782	4,070	4,800	5,454	4,454	10.16
937	18,613	9,890	8,723	3,833	4,990	5,311	4,479	10.03

\* Not available.

The death rate gradually declined from 18.44 in 1860-64 to 9.50 in 1930-34. The lowest death rate (8.93) in the history of the State was recorded in 1930. It remained low for the following three years, but in 1934 it rose to its maximum since 1923. There has been little fluctuation in the death rate during the last four years.

The number of deaths in 1937 was 18,613, which was 584 more than the average of the preceding five years.

In 1937 there were 1,134 male to every 1,000 female deaths, the average for the last five years being 1,139. The corresponding proportion of male to female births in the quinquennium was 1,043. The natural increase for the five-year period was 50,767 (males, 23,885—females, 26,882).

An indication of the improvement in the health of the various at Various Ages.

An indication of the improvement in the health of the community is obtained by comparing the death rates for groups of ages at different periods. Such rates are given in the subjoined table for the periods 1891–1900, 1902–11, 1912–21, and 1922–33:—

VICTORIA-DEATH RATES IN CERTAIN AGE GROUPS.

	Avera	ge Annual Deaths	per 1,000 at each	age.
Age Group.	1891–1900.	1902–1911.	1912-1921.	1922-1933
Males,				15.00
Under 5 · ·	$39 \cdot 29$	26.73	23.85	17.32
5 to 9	$3 \cdot 36$	2.16	2.42	1.74
10 to 14	$2 \cdot 20$	1.87	1.75	1.40
15 to 19 · ·	$3 \cdot 28$	$2 \cdot 72$	2 37	2 09
20 to 24 · ·	4.79	3.51	3.57	2.77
25 to 34 ···	6.60	4.75	4.71	3 24
35 to 44 ···	$9 \cdot 03$	7 · 81	7.14	5 31
45 to 54 · ·	$15 \cdot 32$	13.48	13 10	9.99
55 to 64 ··	32.90	25.38	25.05	23 · 12
65 to 74 · ·	62 99	59.04	53.18	52.07
75 and upwards	145.05	157 · 26	157 · 97	127 · 72
All Ages	15.47	13.30	12.57	10.76
Females.				10.51
Under 5	34.09	22 35	19.26	13.71
5 to 9	3.12	2.03	2.24	1.30
10 to 14	2.06	1.78	1 56	1.05
15 to 19	3.43	2 · 80	2.27	2.54
20 to 24	4.81	3 59	3 56	
25 to 34 · ·	6.89	5.01	4.58	3 29
35 to 44	8.68	7.16	6.01	4.55
45 to 54	12.12	9.96	9.44	7.68
55 to 64	23.64	18 80	17.46	16·06 38·68
65 to 74 · · ·	45.87	46.71	42.01	114 31
75 and upwards	124 · 33	131 .77	136 61	114 31
				_
All Ages	12.36	10.66	10.35	9.10

The figures show that, at all ages, lower death rates were experienced for both males and females during the period 1922-33 than in the periods enumerated.

Death Rate:— The following statement shows the death rate per Australian 1,000 of the population in each of the Australian States New Zealand. and in New Zealand for the last five years:—

### DEATH RATES—AUSTRALIAN STATES AND NEW ZEALAND.

Year.	Vic- toria.	New South Wales.	Queens- land.	South Aus- tralia.	Western Aus- tralia.	Tas- mania.	Aus- tralia.	New Zealand
				:				
1933	9 59	8.58	8 84	8.44	8.64	9.60	8.92	7.98
1934	10.18	8.95	8.57	$9 \cdot 26$	9:23	10.23	$9 \cdot 32$	8.48
1935	10.03	9 · 28	9.16	8.83	9.25	10 25	9.46	8.22
1936	10.16	9.14	8.78	9.30	9.40	10.34	9.43	8.75
937	10.03	9 36	9.10	8 91	8.95	9.51	9.44	9.08

In 1936 the death rate in England and Wales was 12.1.

Index of mortality. The differences in the age and sex constitutions of the populations of the six States have been taken into account in computing their respective indexes of mortality. The results for each are based upon a standard population distributed, according to sex, into eleven age groups. Mortality indexes for each State for the years 1933 to 1937, as compiled by the Commonwealth Statistician, are as follows:—

### INDEX OF MORTALITY FOR AUSTRALIA, 1933 TO 1937.

		Index of Mortality for—									
Year. Victoria.	New South Wales.	Queens- land	South Australia.	Western Australia.	Tasmania.	Australia.					
1933	8.74	8.52	9.10	7:66	8.74	8.86	8.62				
1934	9.30	8.96	8.84	8.39	9 45	9.43	9.04				
1935	9 08	9.18	9.39	7 · 97	9.47	9.54	9.10				
1936	$9 \cdot 23$	9.12	9.02	8 · 36	$9 \cdot 62$	9.60	$9 \cdot 12$				
1937	9.02	9.30	9 32	8 02	9 25	8.77	9 09				

Compiled on the basis of allotment of all deaths to the Death rates in place of usual residence, the following table shows the Municipalities. number of deaths, and the deaths per 1,000 of the mean population in Greater Melbourne, provincial cities and principal towns, and the remainder of the State, for the five-year periods 1923 to 1927 and 1928 to 1932, and for the last three years.

# DEATHS IN GREATER MELBOURNE, PROVINCIAL CITIES AND PRINCIPAL TOWNS, AND REMAINDER OF STATE.

!	Anı	nual Nu	nbe <b>r</b> of	Deaths	s <b>.</b>	Death	s per 1,	000 of 1 tion.	Iean Po	pula-
Municipality.	1923- 1927.	1928- 1932.	1935.	1936.	1937.	1923- 1927.	1928- 1932.	1935.	1936.	1937.
Greater Melbourne-					1.101	10.00	11.50	40.00	12.70	12.23
Melbourne	1,264	1,091	1,111	1,147	1,104	12.83	11.57 8.81	12.32	11.21	$\frac{12}{10.73}$
Box Hill		125	136	175	169		6.70	8·81 6·76	5.47	5.86
Braybrook (Part)		56	60	49 335	$\frac{53}{378}$	9.43	9.22	10.22	10.74	11.95
Brighton	242	272	313		538		9.57	9.87	10.55	9.83
Brunswick	520 316	532 430	536 505	575 478	539	9.15	8.87	9.78	8.98	9.84
Camberwell	463		664	665	708		8.72	10.02	9.86	10.35
Clin - land	400	63	92	84	82		9.24	13.10	11.98	11.71
O . L	232		333	294	320	8:29		8.60	7.52	8.10
0.111	422	363	409	369	354	12.45		13.54	12.25	11.78
Essendon	404		503	492	479		9.30	10.90	10.59	10.23
70.04	457	446	452	473	460			14.79	15.49	15.11
Footscray	397	402	416	444	442	9.78		8.95	9.49	$9 \cdot 38$
Hawthorn	331		427	402	415	10.51	10.67	12.45	11.57	11.85
Heidelberg (Part)	*	193	222	202	196	*	7.91	9.19	8.26	8.03
Kew	191		211	260	265	9.06	9.08	8.62	10.55	10.63
Malvern	368		489	485	505	8.71	9.28	11.06	10.85	$11 \cdot 23$
Moorabbin	1	130	180	153	157		7.55	9.67	8.11	8.20
Mordialloc		85	105	96	103		8.86	10.62	9.68	10.46
Northcote	349	369	400	410	437			9.47	9.62	10.21
Oakleigh	*	101	137	96	113		8.72	11.32	7.87	9.19
Port Melbourne	151	137	183	169	141				13.04	10.86
Prahran	608	628	687	655	666			13.00	12 26	12.42
Preston	168		267	263	271			8.33	8.14	8.30
Richmond	490		469	451	471			11.83	11.37	11.87
Sandringham	121		184	192	175			10.06	10.38	9.37
South Melbourne	539		492	539	501				12.49	11:61
St. Kilda	441		528	547	545				11.07	10.85
Williamstown	237	211	200	234	232	11.32	9.63	8.88	10.48	10.35
Remainder of						0.00				
Metropolis	520	) <sub>.</sub>	•••	•••	•••	9.86	'			•••
Provincial Cities and Principal Towns										
Ballarat	482	475	487	517	495	12.18	12.28	12.85	13 54	12.95
Bendigo	444		432	456	428		13.08	14.67	15.31	14.34
Geelong	401	455	458	486	452	10.16	10.40		12.24	11 35
Ararat	†	73	70	- 65	55	†	· †	14.26		11.11
Castlemaine	78	3 73	66	63	57					10.82
Colac	1		52	54	54		†	10.40		9.82
Echuca	†	†	39	50		1.1	†	8.74	11.24	10.56
Hamilton	68	59		71	66					
Horsham	†	†	58	67	60		10,00	10.94		
Maryborough	59			70			10.66			12.41
Mildura	6			74	86			12·70 11·60		
Sale	1 I.	† <sub>-</sub>	50	65			9.96			14.77
Shepparton	5 T	55		60 55						13.96
Stawell							10,0	11.75		
Wangaratta Warrnambool	1 180	) † 91	57 110				10.46			
Warrnam bool Wonthaggi	4									
wononaggi				-		-				
Summary-	1		1 .				1		1	
Greater Melbourne	9,23	1 9,688	10,711	10,734	[10,819]	10.3	9.74	10.67	10.60	10.60
Provincial Cities and	1		1	1						10.00
Principal Towns		9 1,845	2,230		2,299					
Remainder of State			5,515							
Victoria		3 16,844							10.16	10.03
* Inclu	ded in I	Remaind	er of M	etropol	is.	† No	t calcula	ited.		

<sup>\*</sup> Included in Remainder of Metropolis. † Not calculated. Note.—The boundaries of Greater Melbourne were re-defined in 1929.

Particulars of the residence of persons who died in the public institutions of Victoria give a definite indication of the assistance rendered by these institutions to people in the various divisions of the State. The numbers and proportions of such deaths in the various municipalities are given below for 1937:—

VICTORIA—PROPORTION OF DEATHS OF RESIDENTS OF CERTAIN AREAS OCCURRING IN PUBLIC INSTITUTIONS, 1937.

GREATER MELBOURNE— Melbourne Box Hill Braybrook (Part) Brighton Brunswick Camberwell Caulfield Chelsea Coburg Collingwood Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloe	455 24 18 75 177 97 133 19 100 128 94	104 13 4 15 40 26 35 2 24 32 23	Public Hospitals.  41 · 21   14 · 20   33 · 96   19 · 84   32 · 90   17 · 99   18 · 79   23 · 17   31 · 25   36 · 16   19 · 62	Other Public Institutions.  9 · 42 7 · 69 7 · 55 3 · 97 7 · 43 4 · 83 4 · 94 2 · 44 7 · 50 9 · 04	Total Public Insti- tutions. 50 · 63 21 · 89 41 · 51 23 · 81 40 · 33 22 · 82 23 · 73 25 · 61 38 · 75	in Public Institu- tions per 1,000 of Popu- lation.  6 19 2 35 2 43 2 85 3 97 2 25 2 46 3 00 3 14
Box Hill Braybrook (Part) Brighton Brunswick Camberwell Caulfield Chelsea Coburg Collingwood Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloc Northcote	24 18 75 177 97 133 19 100 128 94	13 4 15 40 26 35 2 24 32 23	14 · 20 33 · 96 19 · 84 32 · 90 17 · 99 18 · 79 23 · 17 31 · 25 36 · 16	7·69 7·55 3·97 7·43 4·83 4·94 2·44 7·50	21 89 41 51 23 81 40 33 22 82 23 73 25 61 38 75	2 · 35 2 · 43 2 · 85 3 · 97 2 · 25 2 · 46 3 · 00
Melbourne Box Hill Braybrook (Part) Brighton Brunswick Camberwell Caulfield Chelsea Coburg Collingwood Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloc Northcote	24 18 75 177 97 133 19 100 128 94	13 4 15 40 26 35 2 24 32 23	14 · 20 33 · 96 19 · 84 32 · 90 17 · 99 18 · 79 23 · 17 31 · 25 36 · 16	7·69 7·55 3·97 7·43 4·83 4·94 2·44 7·50	21 89 41 51 23 81 40 33 22 82 23 73 25 61 38 75	2 · 35 2 · 43 2 · 85 3 · 97 2 · 25 2 · 46 3 · 00
Box Hill Braybrook (Part) Brighton Brunswick Camberwell Caulfield Chelsea Coburg Collingwood Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloe Northcote	24 18 75 177 97 133 19 100 128 94	13 4 15 40 26 35 2 24 32 23	14 · 20 33 · 96 19 · 84 32 · 90 17 · 99 18 · 79 23 · 17 31 · 25 36 · 16	7·69 7·55 3·97 7·43 4·83 4·94 2·44 7·50	21 89 41 51 23 81 40 33 22 82 23 73 25 61 38 75	2 · 35 2 · 43 2 · 85 3 · 97 2 · 25 2 · 46 3 · 00
Braybrook (Part) Brighton Brunswick Camberwell Caulfield Chelsea Coburg Collingwood Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloe Northcote	18 75 177 97 133 19 100 128 94	4 15 40 26 35 2 24 32 23	33 · 96 19 · 84 32 · 90 17 · 99 18 · 79 23 · 17 31 · 25 36 · 16	7·55 3·97 7·43 4·83 4·94 2·44 7·50	41 51 23 81 40 33 22 82 23 73 25 61 38 75	2 · 35 2 · 43 2 · 85 3 · 97 2 · 25 2 · 46 3 · 00
Brighton Brunswick Camberwell Caulfield Chelsea Coburg Collingwood Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloc Northcote	75 177 97 133 19 100 128 94	15 40 26 35 2 24 32 23	19 · 84 32 · 90 17 · 99 18 · 79 23 · 17 31 · 25 36 · 16	3·97 7·43 4·83 4·94 2·44 7·50	23 · 81 40 · 33 22 · 82 23 · 73 25 · 61 38 · 75	2 85 3 97 2 25 2 46 3 00
Brunswick Camberwell Caulfield Chelsea Coburg Collingwood Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloc Northcote	177 97 133 19 100 128 94	40 26 35 2 24 32 23	32·90 17·99 18·79 23·17 31·25 36·16	7 · 43 4 · 83 4 · 94 2 · 44 7 · 50	40 · 33 22 · 82 23 · 73 25 · 61 38 · 75	3 · 97 2 · 25 2 · 46 3 · 00
Camberwell Caulfield Chelsea Coburg Collingwood Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloc Northcote	97 133 19 100 128 94	26 35 2 24 32 23	17 · 99 18 · 79 23 · 17 31 · 25 36 · 16	4 · 83 4 · 94 2 · 44 7 · 50	22 · 82 23 · 73 25 · 61 38 · 75	3 · 97 2 · 25 2 · 46 3 · 00
Caulfield Chelsea Coburg Collingwood Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloc Northcote	133 19 100 128 94	35 2 24 32 23	18·79 23·17 31·25 36·16	4 · 94 2 · 44 7 · 50	23 · 73 25 · 61 38 · 75	2·25 2·46 3·00
Chelsea	19 100 128 94	2 24 32 23	23·17 31·25 36·16	$\begin{array}{c} 2 \cdot 44 \\ 7 \cdot 50 \end{array}$	25 · 61 38 · 75	3.00
Coburg Collingwood Essendon Fitzroy Footseray Hawthorn Heidelberg (Part) Kow Malvern Moorabbin Mordialloc Northcote	100 128 94	24 32 23	31 · 25 36 · 16	7 50	38 · 75	
Collingwood Essendon Fitzroy Footseray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloe Northcote	128 94	32 23	36.16			
Essendon Fitzroy Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloc Northcote	94	23		9 04	4.00	0 11
Fitzroy			10.00		45.20	5 32
Footscray Hawthorn Heidelberg (Part) Kew Malvern Moorabbin Mordialloc Northcote	170 - 1		19.02	4.80	24 42	2 50
Hawthorn Heidelberg (Part)		52	36.96	11 30	48 26	7.29
Heidelberg (Part)	161	27	36 43	6.11	42 54	3 99
Kew Malvern Moorabbin Mordialloc Northcote	77	19	18.55	4 58	23 13	2.74
Malvern	48	6	24 · 49	3.06	27 55	2.21
Moorabbin Mordialloc Northcote	40	14	15 09	5.28	20.37	$\frac{2}{2} \cdot \frac{21}{17}$
Mordialloe Northcote	75	. 23	14 85	4 55	19:40	2.18
Northcote	46	8	29 30	5.09	34 · 39	2 . 82
	24	6	23 30	5.83	29 13	3 05
Oakleigh	122	24	27 92	5 49	33.41	
	36	4	31 85	3:54	35 39	3.41
Port Melbourne	43	13	30.49	9.22	39.71	3 25
	195	34	29.28	5 10	34.38	4.31
Preston	99	15	36.54	5 53	42.07	4 27
	156	38	33 12	8.07	41 19	3 49
Sandringham	44	8	25 14	4.57	$\frac{41}{29} \cdot 71$	4.89
	165	34	32 93	6.79		2.78
		25	24 77	4.59	39.72	4 61
Williamstown	L35	12	4 1 F	+ 99	$29 \cdot 36$	3 18

VICTORIA—PROPORTION OF DEATHS OF RESIDENTS OF CERTAIN AREAS OCCURRING IN Public Institutions, 1937—continued.

	Number of Residents in			tage of Dea its occurrin		Deaths of Residents occurring
Area.	Public Hospitals.	Other Public Insti- tutions.	Public Hospitals.	Other Public Insti- tutions.	Total Public Insti- tutions.	in Public Institu- tions per 1,000 of Popu- lation.
PROVINCIAL CITIES						
AND PRINCIPAL						
Towns—						
Ballarat	115	. 38	23 23	7.68	30.91	4 00
Bendigo	97	28	22.66	6.54	29 · 20	4.19
Geelong	132	21	29 20	4 65	33.85	3 84
Ararat	29	11	52.72	20.00	$72 \cdot 72$	8.08
Castlemaine	25	8	43 86	14.03	57.89	6.26
Colae	26	3	48 15	5.55	53 70	5.27
Echuca	20	2	42.55	4 25	46.80	4 94
Hamilton	22		33 · 33		33.33	3 74
Horsham	25	2	41 67	3.33	45.00	5.02
Maryborough	40	3	46 50	3.50	50.00	7.57
Mildura	55	3	63 95	3.49	67 44	8.37
Sale	17	3	37:77	6.67	44 · 44	4 · 61
Shepparton	35	6	40.22	6.89	47 11	6.96
Stawell	10	5	14.92	7.46	$22 \cdot 38$	3 12
Wangaratta	12	4.	20 69	6.89	27.58	3 · 30
Warrnambool	1 00	2	34 57	2 47	37:04	3.30
Wonthaggi	0.1	6	28:00	8.00	36 00	4 10
SUMMARY—				1		
Greater Melbourne	3,035	680	28 05	6.29	34 34	3 67
Provincial Cities and		1				- [
Principal Towns	709	145	30.84	6.31	37 · 15	4.56
Remainder of State	1,128	286	20:53	5.20	25.73	2.18
Victoria	4.872	1,111	26.17	5.97	32 · 14	3 · 22

PERCENTAGE OF DEATHS OF RESIDENTS OF GREATER MELBOURNE, REMAINDER OF STATE AND VICTORIA, OCCURRING IN PUBLIC HOSPITALS IN CERTAIN PERIODS SINCE 1910.

	1910-14.	1920-24.	1925-29.	1930-34.	1936.	1937.
Greater Melbourne Remainder of State Victoria	$egin{array}{c} 24 \cdot 3 \\ 17 \cdot 0 \\ 20 \cdot 4 \\ \end{array}$	$27 \cdot 0$ $21 \cdot 2$ $24 \cdot 3$	29·5 23·7 27·0	27·7 26·3 27·1	$28 \cdot 4 \\ 24 \cdot 2 \\ 26 \cdot 6$	28·1 23·6 26·2

The proportion of residents of Greater Melbourne who died in public hospitals increased slightly between 1910-14 and 1925-29 but, since the latter period, has shown a tendency to decrease. In the remainder of the State the proportion which, in 1910-14, was 30 per cent. below.

that of Greater Melbourne, increased constantly in each period until, in 1930–34, it was slightly below the proportion for the metropolis. In 1935 the proportions for Greater Melbourne and the remainder of the State were 27·5 and 27·3 respectively. Since 1935 the proportion for Greater Melbourne has been rising, whilst a sharp fall has been recorded in the proportion for the remainder of the State.

The percentage of deaths occurring in other public institutions of the State was 5.97 in 1937 and 5.94 in 1936. The rate in the metropolis is higher than that for the remainder of the State.

In 1937 the number of deaths in public institutions was 5,983, of which 3,715 were of residents of Greater Melbourne.

Metropolitan public institution in 1937 is given in the subjoined table:—

VICTORIA—DEATHS IN METROPOLITAN PUBLIC INSTITUTIONS, 1937.

Institution.	No. of Deaths.	Institution.	No. of Deaths
Hospitals—General—		SANATORIA-	-
Royal Melbourne	839	Heatherton	9.5
Alfred	597	Macleod Repatriation—Mont	35
Hamilton Russell Com-		Don't	
munity	34	Cross1-	1
Children's	290	Crosswall	35
St. Vincent's	479	Gressweii	27
St. Vincent's Intermediate	32	Total Sameteria	
Austin	426	Total Sanatoria	98
Women's	219	D-1	
Prince Henry's	136	BENEVOLENT INSTITUTIONS—	
Infantions Discuss	105	Melbourne (Cheltenham)	
Caulfield Repatriation	113	Asylum	198
Organ Victoria	70	Victorian Homes for Aged	
Jessie McPherson Com-	10	and Infirm	156
mannida.	0~	Convent of Little Sisters of	i
Williamatar	35	the Poor	53
010-11-0 1	43	Old Colonists' Homes	-1
D 1 D	7		
Dallan	26	Total Benevolent Institu-	
Police	7	tions	408
Total General Hospitals	3,458	FOUNDLING HOMES, REFUGES-	
		Drondmand	6
		Foot Molhoums	О
		The Harron Diamer	• • •
		Carlton	4
HOSPITALS—MENTAL—		Children's Walfan, D.	• •
Kew	84	Rominal	• •
Mont Park	76	Berwick	• •
Receiving House, Royal Park	80	Total Refuges, &c	10
Repatriation—Bundoora	5	Total Keluges, &c.	10
, and a second		Total Hamitals and	
Total Mental Hospitals	245	Total Hospitals and other Institutions	4.070
	220	Institutions	4,219

Of the 4,219 deaths in the above institutions, 2,491 were of males and 1,728 were of females.

Decrease in Metropolitan was an average of 10·15 deaths per 1,000 of the population, as compared with 15·76 in the decennium 1892–1901. The reduction in the rate represents a saving of approximately 56,000 lives in the last ten years. The improvement in the hygienic conditions of the metropolis is evidenced by a comparison of the death rates from tubercular and certain other diseases for the period 1928–37 with those for the decennium 1892–1901.

DEATH RATES-GREATER MELBOURNE.

	Average Annual Deaths per 1,000,000 of Population.							
Cause of Death.	1892–1901.	1928-37.	Decrease in 1928-37.					
Pulmonary Tuberculosis	1,654	519	1,135					
Other Tubercular Diseases	446	82	364					
Typhoid Fever	293	7	286					
Scarlet Fever	33	11	22					
Measles	215	10	205					
Diphtheria	196	61	135					
Total	2,837	690	2,147					

The figures show that the mortality from the six diseases mentioned declined by 76 per cent. in 1928-37—the decline representing a rate of 2,147 per million of the population.

The mortality from all causes showed a net decline of 5,610 per million of the population during the period mentioned.

The mortality of children under one year, in proportion to births, reveals a constant decline since 1890—the deaths per 1,000 children born having fallen from 133 in 1885–89 to 41 in 1933–37—a reduction of 69 per cent. In other words, where 100 infants died in the earlier years, only 31 died in the last five years.

The reduction has been contributed to by various health acts and educative measures, including the notification of infectious diseases, the regulation of the manufacture, sale, and distribution of foodstuffs and patent medicines, and the ensuring of a pure milk and water supply.

The passing of the Midwives Act in 1915 and the inauguration of the Infant Welfare movement in 1917, coincide with and, in a large degree, account for the reduction of the rate in later years. Particulars of the latter movement will be found in Part "Social Condition" of this volume.

The infantile death rates for Greater Melbourne, the remainder of the State, and the whole State, for various periods since 1879, are shown in the following table:—

VICTORIA—INFANTILE MORTALITY, 1880 TO 1937.

	Greater Mel	bourne.	Remainder	of State.	Victoria.		
Period.	Average Annual Number of Deaths under One Year,	Rate per 1,000 Births.	Average Annual Number of Deaths under One Year.	Rate per 1,000 Births.	Average Annual Number of Deaths under One Year.	Rate per 1,000 Births.	
1880-84	1,649	170 · 1	1,626	92.3	3,275	120.0	
1885–89	2,576	$178 \cdot 5$	1,812	$97 \cdot 9$	4,388	133 · 3	
1890-94	2,311	140 · 4	1,926	$94 \cdot 9$	4,237	114.7	
1895-99	1,650	131.5	1,913	100.0	3,563	112.5	
1900-04	1,417	$116 \cdot 5$	1,565	86.2	2,982	98.2	
1905-09	1,209	$96 \cdot 5$	1,307	71.5	2,516	81.2	
1910-14	1,345	$84 \cdot 2$	1,201	$64 \cdot 9$	2,546	73.8	
1915-19	1,302	$76 \cdot 2$	886	$55 \cdot 4$	2,188	66 · 1	
1920-24	1,328	71.6	1,024	58.6	2,352	65.3	
1925-29	1,034	$58 \cdot 4$	863	$50 \cdot 2$	1,897	$54 \cdot 4$	
1930-34	674	47.3	618	40.7	1,292	43 •9	
1933	550	40.9	598	40.0	1,148	40.4	
1934	634	$48 \cdot 2$	608	41 · 4	1,242	44.6	
1935	570	$43 \cdot 0$	578	39.5	1,148	$41 \cdot 2$	
1936	605	44 · 1	617	40.7	1,222	$42 \cdot 3$	
1937	538	$37 \cdot 1$	553	36.3	1,091	36.7	

The system was introduced in 1923 of allotting all births and deaths to the place of usual residence of the parties. In the cases of births and infantile deaths the mother's residence is considered to be that of the child. This accounts for the slight increase in the rate for the remainder of the State in the period 1920–24, and the corresponding decrease in the rate for the metropolis.

During the last decade the infantile death rate declined from 55·6 in 1928 to 36·7 in 1937, a decrease of 34 per cent. The most pronounced fall in the period occurred in 1929, the rate decreasing from 55·6 in the previous year to 47·2. Following 1929, the rate continued to decline each year until, in 1933, the low rate of 40·4 was recorded. In 1934 the rate increased sharply to 44·6 but dropped in the following year to 41·2. In 1936 there was a slight rise in the rate to 42·3 but, in 1937, a sudden fall occurred and a new low record was created.

Infantile deaths of infants under one year of age, and the deaths per 1,000 births in Greater Melbourne, provincial cities and principal towns, and the remainder of the State for the five-year periods 1923–27 and 1928–32, and for the last three years, were as follows:—

INFANTILE DEATHS IN GREATER MELBOURNE, PROVINCIAL CITIES AND PRINCIPAL TOWNS, AND REMAINDER OF STATE.

7111D INC.										
	An	nual Nu unde	ımber o r One Y		ns	Des	aths unc	ier One 90 Birtl		er
Municipality.			·····	1				- 1		
	1923-	1928-	1935.	1936.	1937.	1923-	1928-	1935.	1936.	1937.
	1927.	1932.	1955.	1990.	100	1927.	1932.	1300.	1050.	
Greater Melbourne										
Melbourne	163	86	55	61	49	89.97	63 95	49.24	53.93	41.67
Box Hill	*	10	9	9	4	*	37.04	45.68	37:19	$18 \cdot 26$
Braybrook (Part)	*	6	4	7	4		33.18	26 84	44.87	35.09
Brighton	20	15	14	12	12	41.49	39.11	41.06	32.88	28.99
Brunswick	77	60	25	28	36 28	65·99 42·15	61.63	32.26	$\frac{34}{30} \cdot 65$	42.50 32.40
Camberwell	34 52	30 39	27 29	23	24	48.65	41.87	35·95 38·36	26.83	26.17
Caulfield Chelsea	52	6	6	22 6	6	40 00	47.32	49.18	49 18	44.78
Coburg	44	33	19	28	20	62 29	44.47	30.59	44.87	30.67
Collingwood	62	38	39	31	20	89.80	71.78	81.93	60.31	41.75
Essendon	52	33	23	30	15	61.26	42.83	41.82	52.45	24.59
Fitzroy	57	41	29	27	16	83.50	79.33	64 30	60.40	32·72 34·58
Footscray	68	41	38	24	$\frac{25}{18}$	69·21 47·66	47.34 37.23	55·72 54·83	34.58 51.80	39.13
Hawthorn Heidelberg (Part)	25	16 20	21 11	23 13	8	71,00	49.37	32.24	38.69	23.12
Kew	17	15	5	11	11	45.38	43.66	18.05	36.06	36.54
Malvern	28	19	19	20	12	44.63	38.91	42.22	40.98	23.30
Moorabbin		14	10	16	11		34.17	28.41	45.98	29.65
Mordialloc	• • •	8	10	7	6		55.48	70.92	55.12	41·38 54·10
Northcote	54	38	20	22	$\frac{33}{12}$	60:16	51.73	36 16	38 06	55.55
Oakleigh	25	12	15 11	. 7	13	89.08	46·18 71·24	62·70 55·00	$32.71 \\ 35.53$	59.09
Port Melbourne Prahran	58	16 41	23	$\begin{array}{c} 7 \\ 26 \end{array}$	27	66.12	58.62	37.71	41.40	40.97
Decator	30		18	24	30		44.08	31.09	44.36	50.17
Richmond	65	46	30	30	22	73.81	65.23	53.00	49.34	36.13
Sandringham	15	10	6	9	6		35.95	26.67	39.30	
South Melbourne	77	47	28	42	38		70.87	50.91	72.79	64 · 52 33 · 22
St. Kilda	34		16	30	19		41.67	32.26	56.71	37 36
Williamstown	33	19	10	10	13	67.99	44.44	32.68	29.76	37 30
Remainder of	75					54.99			١	١
Metropolis	13	•••	• • •	• • •		32 50	•••	• • •		'
Provincial Cities and										
Principal Towns—					10				10.00	26.45
Ballarat	49		18	25	$\frac{16}{23}$		60.00	31·14 40·44	42.88	
Bendigo	48		22 33	25 27	26			50.77		1
Geelong	61	†	3	5	3		†	34.48	38.17	37.04
Castlemaine	' 8	1 5	5	5	1		47.80	53.76	61.73	9.01
Colac	†	†	5	4	5		†	48.08		
Echuca	1 1	†	3		7	†	1 - +	36.14	76.09	
Hamilton	10		3		5		34 63		37.88	
Horsham	† 6	† 5	6	4 6	4		45 84	32.52		
Maryborough Mildura	13				8				41.10	00.00
Sale	+ **	'l + "	1		3	1 7	1 1	11.63	25 97	30.93
Shepparton	h	' 8			10		54 16		65.36	
Stawell	7				3		28:26			
Wangaratta	1 †	, † <u>.</u>	8		11		1 70	80.81		
Warrnambool	1				4					
Wonthaggi	10	8	1	5		63.99	55.07	11.90	33 76	07 01
Summary-					1					
Greater Melbourne	1,165	812			538					
Provincial Cities and		168	147	156	139	69.40	53.24	44.10	43.70	38.28
Principal Towns	1				49.		10.70	38.15	39.81	35.66
Remainder of State Victoria	725 2,111				1,091		42.12			2 2 2 2 2

Included in Remainder of Metropolis.
 Not calculated.

Note.—The boundaries of Greater Melbourne were re-defined in 1929.

The deleterious effect of city surroundings on infant life is indicated by the higher rate of infantile mortality in urban than in country districts. During the years 1933-37, the deaths of children under one year of age to every 1,000 births were 43 in Melbourne, 42 in Ballarat, 40 in Bendigo, and 49 in Geelong, as against 39 in the remainder of the State.

Infantile Mortality at certain

children

1933-37.

An investigation into the experience in regard to infantile mortality over a period of years discloses that the decrease in the infantile death rate, since the earlier periods, has been shared proportionately by each sex, and also by each age period, except that of "under one week." The rate per 1,000 births of infants "under one week," which, in 1937, comprised 58 per cent. of the total infantile mortality, has varied from 21.5 in the quinquennium 1910-14 (the earliest years for which the information is available) to 23.7 in 1920-24 and 21.2 in 1937. Between 1910-14 and 1933-37, the mortality of infants "one week and under one month" decreased by 51 per cent. and that of infants "one month and under one year" by 66 per cent. Victoria lost, between the ages of one month and one year, 64 out of every 1,000 born in 1900-04, 33 in 1915-19, and fourteen

On the average of the years 1933-37, the total rate for males was higher than that for females by 25.9 per cent.

The tables which follow show the proportion of deaths of infants at various ages under one year for certain periods since 1899, and the male and the female death rates at each age period for the year 1937 :-

VICTORIA—INFANTILE MORTALITY  $\mathbf{AT}$ CERTAIN AGES, 1900 TO 1937.

			Deaths Ur	der One Y	Tear per 1	,000 Birtl	ns.	
Period.	Under 1 Week.	andunder	'and under	and under	6 Months and under 12 Months	Total under 1 Year.	Males.	Females
1900-04	34	1.4	16.9	21.0	25.9	98.2	105.7	90.4
1905-09	3:	$3 \cdot 0$	13.8	15.1	19.3	81 . 2	89 · 3	$72 \cdot 6$
1910-14	21.5	11.1	12.1	12.4	16.7	$73 \cdot 8$	81.8	65.3
1915–19	23.3	10.1	10.5	9.4	12.8	66.1	73.0	58.7
1920 24	23.7	9.3	9.8	10.0	12.5	$65 \cdot 3$	71.8	58.5
1925–29	$22 \cdot 7$	7.7	6.9	6.7	10.4	$54 \cdot 4$	60.7	47.6
1930–34	22.3	5.5	4.8	4.6	6.7	43.9	49.2	38.4
1933	22.3	5.3	4 · 2	3.5	5.1	40.4	45.7	35 0
1934	22.0	5.7	5.1	4.9	6.9	44.6	50.1	39.0
1935	21.9	5.7	$4 \cdot 2$	3.6	5.8	41.2	45.0	37 2
1936	21.1	5.5	$5 \cdot \overline{1}$	4.0	6.6	$\frac{11}{42} \cdot \frac{2}{3}$	46.4	38.0
1937	21.2	4.9	$3\cdot 3$	2.9	4.4	$\frac{12}{36} \cdot 7$	41.0	32 2

VICTORIA—INFANTILE MORTALITY AT CERTAIN AGES, MALES AND FEMALES, 1937.

		Males.			Females.	
${f Age}.$	Number.	Rate per 1,000 Births	Percentage at each Age,	Number.	Rate per 1,000 Births.	Percentage at each Age.
Under 1 week 1 week and under	363	23 87	58.17	268	18:45	57:39
1 month 1 month and under	96	6.31	15.39	50	3.44	10.71
3 months 3 months and under	53	3.48	8.49	44	3.03	9 42
6 months 6 months and under	43	2 83	6.89	42	2.90	8 99
12 months	69	4 54	11.06	63	4 34	13 49
Total under one year	624	41 03	100.00	467	32 · 16	100 00

An examination of the principal causes of infantile mortality over a period of years and at various ages reveals the direction in which an improvement has been achieved, and discloses those causes and factors to which future investigations need to be directed if the decline in the rate is to be maintained. The infant mortality rates from the principal causes for various periods since 1890 and for 1937 are shown in the next two tables.

VICTORIA—INFANTILE DEATH RATES FROM CERTAIN CAUSES.

Cause of Death.	Deaths under One Year per 1,000 Births in—										
-	1891-93.	1901–10.	1911-20.	1921-30.	1935.	1936.	1937.				
Epidemic, Endemic, and Infectious Diseases Bronchitis, Broncho-pneu-	12.41	7:31	4.87	3.57	2.37	2.84	1.89				
monia, Pneumonia	11·37 29·66	8·13 24·62	6.86	6·08 9·85	6·31 1·72	$\begin{array}{c} 6.72 \\ 2.46 \end{array}$	4'81 1'41				
Malformations, &c. (157)	3·45 22·24	4:86 12:74	4 38 18 09	4·43 6·77	4·73 2·04	$\frac{2.10}{4.71}$ 2.60	3 '40				
Prematurity	13.13	14.99	15 17	15.34	12.59	11.39	2 °05 11 °40				
Injury at birth Early Infancy (161) Other diseases	21.51	12.77	7.98	2·57 3·42	3·16 5·02	2·80 4·74	3 36 4 61				
Violence	3.16	2.47	1.07	4·42 ·80	2.30	$\frac{3.25}{80}$	2 96				
Total, all Causes	116.93	87.89	69.55	57.25	41.17	42.31	36 '70				

VICTORIA—INFANTILE DEATH RATES, AT VARIOUS AGES, FROM CERTAIN CAUSES, 1937.

		1	eaths t	inder ()	ne Year	per 1,0	000 Birt	hs.	
		Ag	e Perio	d.					
Cause of Death.				-			•		nnual 3-37.
	Under 1 Week.	1 Week and under 1 Month.	1 Month and under 3 Months.	3 Months and under 6-Months.	6 Months and under 12 Months.	Total.	Males.	Females.	Average Annual Rate, 1933-37.
					981				
Epidemic, Endemic, and Infectious Diseases	• 04	10	47	-50	78	1 89	1.58	2 · 20	2 · 65
Bronchitis, Broncho-pneu monia, Pneumonia	1-	67	.94	84	1.51	4.81	4 87	4.75	6:16
Diarrhoeal Diseases		07	.30	• 54	.50	1.41	1.78	1.03	2 01
Malformations, &c. (157)	1.78	64	.47	24	.27	3.40	3.68	3.10	4.47
Wasting Diseases (158)	1 21	.47	·13	17	.07	2 05	2.50	1 59	2 52
Prematurity	9 · 92	1.11	· 24	:10	03	11 40	12 · 36	10.40	11 84
Injury at Birth	2.99	37				3.36	4.14	2 55	3.23
Early Infancy (161)	3.77	- 60	·24			4.61	5.72	3.44	4 73
Other Diseases	.37	84	37	•40	98	2.96	3 55	2 34	2.52
Violence	.30	·04	·10	.07	.30	.81	85	   	-87
Total, all Causes	21 23	4 91	3 26	2 · 86	4 44	36 · 70	41 03	32·16	41 00
		<u> </u>		 			   .	<u> </u>	
Average Annual Rate, 1933-37	21 71	5 42	4 · 35	3.75	5 77	41 00	45·59	36 · 21	

The mortality of infants under one year from pre-natal causes (malformations, congenital debility, prematurity, injury at birth etc.) was 26.8 per 1,000 births in 1933–37 and represented 65 per cent. of the total infant deaths. Variations in classification in the earlier years prevent exact comparison but no appreciable decline is evident. The rate in 1937 was 24.8, of which 79 per cent. occurred in the first week of life.

The mortality from the chief preventable diseases—infectious, respiratory, and diarrhœal—has declined from 40·1 per 1,000 births in 1901–10 to 27·9 in 1911–20 and 10·8 in 1933–37. Deaths from diarrhœal diseases declined from 24·6 per 1,000 births in 1901–10 to 2·0 in 1933–37, the main respiratory diseases from 8·1 to 6·2 and the infectious from 7·3 to 2·6. It will thus be seen that, since the beginning of this century, mortality of infants from diarrhœal diseases has been reduced by 93 per cent.; the main respiratory diseases by 23 per cent.; and the infectious by 64 per cent. Of recent years respiratory diseases have displaced diarrhœal as the most fatal of the preventable infantile diseases. With few exceptions the mortality rate of males from infantile diseases is consistently higher than that of females.

The following table shows the number of deaths from the principal causes, and the death rate of infants under one month, for Greater Melbourne and the whole State, for the years 1933 to 1937.

#### VICTORIA—DEATHS OF INFANTS UNDER ONE MONTH, 1933 TO 1937.

GREATER	MELBOURNE	AND WHOLE	STATE

Cause of Death	Greater Melbourne.					Victoria,				
cause of Beath.	1933.	1934.	1935.	<b>19</b> 36.	1937.	1933.	1934.	1935.	1936.	<b>19</b> 37
Epidemic, Endemic, and Infectious Diseases Bronchitis, Broncho-pneu-	4	5	7	2	3	6.	10	11	4	4
monia, Pneumonia Diarrhœal Diseases	27	37 5	27 3	29 2	28 1	39 2	57 11	43 6	47	4
Malformations, &c. (157) Wasting Diseases (158)	51 21	36 14	40 9	40 12	31 16	110 59	76 48	81 40	104 41	7: 50
Prematurity njury at Birth	153 34	152 48	162 31	140 44	156 63	345 88	302 102	340 84	321 81	32 10
Early Infancy (161) Other Diseases	55 8 4	79 4 5	75 4 5	74 7 6	79 16 7	116 14 6	139 17 9	138 15 12	134 22 11	130 30 10
Total, all Causes	357	385	363	356	400	785	771	770	768	77
Deaths per 1,000 Births	26.5	29.3	27.4	25.9	27.6	27.6	27.7	27.6	26.6	26.

A survey of the mortality from pre-natal causes is not complete without taking into account the loss due to still-births. In Victoria stillbirths are not registered, but cases are notified to registrars in accordance with the provisions of the Cemeteries Act and the (Commonwealth) Maternity Allowance Act. Rates based on these notifications should be regarded as minimum rates, as they possibly understate the full extent of the loss.

The following table contains information relating to stillbirths and infantile mortality in Victoria for the years 1928 to 1937.

### VICTORIA—STILLBIRTHS (RECORDED) AND INFANT MORTALITY, 1928 TO 1937.

	.'		ge of Still- is to—	Deaths of Infants under One Year per 1,000 Births.							
Ye	Year.		Year			Exc					
		Living Births.	All Births.	Under One Month.	One Month and under Twelve Months.	Total under One Year.	*Inclusive of Stillbirths.				
1928		2.8	$2 \cdot 7$	29 · 5	26.1	55.6	80.9				
1929		$3 \cdot 1$	3.0	30 · 4	16.8	$47 \cdot 2$	76.0				
1930		3.0	$2 \cdot 9$	28.0	18.5	46.5	74.2				
1931		2.8	$2 \cdot 7$	28.6	15.9	44.5	70.4				
1932		$2 \cdot 9$	2.8	$27 \cdot 2$	15.8	43.0	69 · 9				
1933		$2 \cdot 9$	$2 \cdot 8$	$27 \cdot 6$	12.8	40.4	67 · 1				
1934	[	$3 \cdot 1$	3.0	$27 \cdot 7$	16.9	44.6	73.6				
1935		$3 \cdot 0$	$2 \cdot 9$	27 · 6	13.6	41.2	69 · 5				
1936		2.9	2.8	26 · 6	15.7	$42 \cdot 3$	69.0				
1937		$2 \cdot 7$	2.6	26.1	10.6	36.7	61.6				

<sup>•</sup> In the computation of the rates for the numbers inclusive of stillbirths, the latter are taken into account in both births and deaths.

It will be seen that, as with other mortality due to pre-natal influences, the rate of stillbirths shows little tendency to decrease.

Nuptial and Ex-nuptial Infantile death rates. On the average of the last ten years, 89 in every 1,000 ex-nuptial infants died within a year, as against 42 in every 1,000 nuptial children. The proportion of ex-nuptial children who died before the age of one year is, therefore, 2.1

times that of nuptial children. In the year 1937 the mortality rate of nuptial infants was 35·2 per 1,000 births. Births and deaths of ex-nuptial children numbered 1,231 and 87 respectively, the death rate being thus 70·7 per 1,000 births. With the view to ascertaining the chief reasons for the marked disproportion in the mortality rates of the two classes the following table has been constructed, showing the deaths from certain causes per 1,000 nuptial and ex-nuptial births, for the periods 1904–08, 1914–18, 1924–28 and the year 1937:—

# VICTORIA—DEATH RATES OF NUPTIAL AND EX-NUPTIAL INFANTS FROM CERTAIN CAUSES.

	Deaths under One Year per 1,000 Births.											
Cause of Death.		Nupti	al.	Ex-nuptial.								
	1904-08.	1914–18,	1924-28.	1937.	1904-08.	1914-18.	1924–28.	1937.				
Bronchitis, Broncho- Pneumonia, Pneu-												
monia	6:9	6.1	5.9	4.2	18.6	12.5	13.0	18.7				
Diarrheal Diseases Prematurity, Congenital Malformations, Maras-	19.8	14.2	8.9	1.3	72.6	48.6	23.1	4.1				
mus, &c.*	30.3	27.2	25.0	16.5	52.1	64.9	46.9	24 • 4				
Other Causes	18.3	15.3	14.7	13.2	58.7	36.6	29.3	23.5				
Total, all Causes	75.3	62.8	54.5	35.2	202.0	162.6	112.3	70.7				

<sup>\*</sup> Not including "Injury at Birth" and "Other Diseases peculiar to Early Infancy."

The rates for the last five years show that, of every 1,000 children born out of wedlock, 7·2 died from diarrheal diseases within a year, as compared with 1·8 deaths per 1,000 nuptial infants from the same cause. Owing to a larger proportion of the former children being deprived of breast food, a higher mortality from these diseases might be expected than amongst nuptial infants, but the striking differences in the death rates from this cause and from the chief respiratory diseases indicate considerable neglect in the rearing of ex-nuptial infants. The rates from bronchitis, broncho-pneumonia, and pneumonia were 18·6 and 5·6 per 1,000 births respectively.

In 1937 pre-natal causes (malformations, congenital debility, prematurity, injury at birth, etc.) accounted for 43, or 49 per cent. of the total deaths of ex-nuptial infants.

Intentile mortality Australian States and New Zealand, for the last five years.

The following statement shows the infantile death rate per 1,000 births in each of the Australian States and States a

INFANTILE DEATH RATE—AUSTRALIAN STATES AND NEW ZEALAND, 1933 TO 1937.

Year.	Vic- toria.	New South Wales.	Queens- land.	South Aus- tralia.	Western Aus- tralia.	Tas- mania.	Aus- tralia.	New Zealand.
1933	40.43	39.35	42.74	32 · 13	36.83	41.07	39.52	31 · 64
1934	44 · 63	46.36	40 61	35.58	40.89	42.28	$43 \cdot 59$	32 · 11
1935	41.17	39 · 44	37.26	34.95	40.15	51 · 84	$39 \cdot 78$	32.26
1936	42.31	43 · 47	36.20	31 · 09	42.22	49.55	41 · 16	30.96
1937	36.70	40.68	35.64	33.06	37.52	41.73	38.06	31.21

In the year 1937, the infantile mortality rates recorded for the Australian States showed that South Australia had the lowest rate and Tasmania the highest.

In 1936 the infantile death rate in England and Wales was 59 The infantile deaths per 1,000 births in the following capital cities in 1937 were:—Melbourne, 37·1; Sydney, 38·7; Brisbane, 40·1; Adelaide, 30·9; Perth, 42·4; Hobart, 39·5; and Wellington, 28·8.

Deaths of children under 5. In 1937 the deaths of male and of female children in Victoria under 5 years of age were 785 and 605 respectively.

Ages at death.

The ages of males and of females who died in each of the last three years are shown in the following table:—
VICTORIA—AGES AT DEATH, 1935 TO 1937.

		1935			1936.			1937.	
Ages.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Under l year	639 92	509 94	1,148 186	687 91	535 74	1,222 165	624 59	467 61	1,091 120
2 years 3 ,, 4 ,,	57 33 29	$\begin{array}{c} 51 \\ 28 \\ 24 \end{array}$	108 61 53	55 32 30	49 25 31	104 57 61	50 26 26	$\begin{array}{c c} 34 \\ 21 \\ 22 \end{array}$	84 47 48
5 to 9 10 , 14	133 124	98 67	231 191	107 116	83 71	190 187	120 98	88 65	208 163
15 ,, 19 20 ,, 24 25 ,, 29	145 201 180	95 137	240 338	154	119 179	273 365	130 206	94 148	224 354
30 ,, 34 35 to 39	184 271	211 194 237	391 378 508	217 194 244	218 225 230	435 419 474	$ \begin{array}{c c} 153 \\ 200 \\ 249 \end{array} $	184 183 211	337 383 460
40 ,, 44 45 ,, 49	332 434	306 339	638 773	$\frac{317}{450}$	$\frac{269}{380}$	586 830	315 441	301 354	616 795
50 ,, 54 55 ,, 59 60 ,, 64	581 688 866	423 493 671	1,004 1,181 1,537	533 680 884	393 521 653	$\begin{array}{c} 926 \\ 1,201 \\ 1,537 \end{array}$	581 728 879	408 503 677	989 1,231 1,556
65 ,, 69 70 ,, 74	1,204 1,393	967 1,200	2,171 2,593	$1,183 \\ 1,428$	991 1,139	$2,174 \\ 2,567$	$1,107 \\ 1,361$	$969 \\ 1,189$	2,076 2,550
75 ,, 79 80 ,, 84 85 ., 89	1,176 667 300	1,104 700 415	2,280 1,367 715	1,246 711 337	1,203 744 424	2,449 1,455 761	1,336 756 319	1,243 850 442	2,579 1,606 761
90 ,, 94 95	100	$178 \\ 25$	278 32	79 6	174 20	253 26	93 10	160 18	253 28
96 97	9 7 2	9 8	18 15	11 7	8	18 15	6	12 8	18 14
98 99 100	1	$\begin{array}{c c} 6 \\ 2 \\ 7 \end{array}$	8 3 7	2 4	$\begin{array}{c} 6 \\ 7 \\ 2 \end{array}$	8 11 2	4	$\begin{array}{c c} 5 \\ 1 \\ 2 \end{array}$	$\begin{array}{c} 9 \\ 1 \\ 3 \end{array}$
101 102	•	1 1	1 1			1	1	$\frac{1}{2}$	3
103 104 Unknown	1	••	 1	1 4	1	$egin{pmatrix} \cdot \cdot \cdot \\ 2 \\ 4 \end{bmatrix}$	5		
Total	9,856	8,600	18,456	9,996	8,782	18,778	9,890	8,723	18,613

Note.—Ages of very old people are frequently overstated; where particulars are available these are verified from official records.

Of the 55,847 persons who died in Victoria during the last three years 7,704 (or approximately 14 per cent.) were aged 80 years and upwards, and 21—four males and seventeen females—were stated as having attained or passed the age of 100 years. In 1887 deaths of persons aged 80 years and over represented about 3 per cent. of the total deaths in that year.

The changes that have occurred in the age distribution of the population over the last 50 years are reflected in the above figures.

Causes of The following tables show the causes of death in Victoria according to the international abridged classification for the period 1922-26 and for the last three years:—

VICTORIA—CAUSES OF DEATH, 1922–26, 1935, 1936, AND 1937.

International Abridged Classification.	N	umber	-		Deaths per Million of the Population.				
	1935.	1936.	1937.	1922- 1926.	1935.	1936.	1937.		
1. Typhoid Fever (1, 2)	16	10	9	21	9	5	5		
4. Measles	20	1	1	17	11	1	1		
5. Scarlet Fever	5	14	. 5		3	8	_3		
6. Whooping Cough	50	50	38		27	27	20		
7. Diphtheria	94	99 41	52 56		. 51 86	$\frac{53}{22}$	28		
8a. Influenza—Respiratory	158 63	42	$\frac{36}{24}$	$\frac{61}{52}$	34	23	$\frac{30}{13}$		
8b. Influenza—Other	761	762	713		414	412	384		
11a. Tubercular Meningitis	42	38	36		23	21	20		
11b. Other Tuberculous Diseases	$7\overline{5}$	70	. 58		41	38	$\bar{31}$		
12. Syphilis	47	39	42		25	21	22		
13. Malaria			1	1			1		
14. Other Infectious or Parasitic Diseases	116	138	187		63	75	100		
15. Cancer and other Malignant Tumours	2,260	2,288	2,351	1,000	1,229	1,238	1,267		
13. Tumours, Non-Malignant or of Un-	101	106	101	51	55	58	54		
specified Nature	79	66	56		43	36	30		
18. Diabetes Mellitus	309	311	304		168	168	164		
19. Acute and Chronic Alcoholism	7	10	11	11	4	5	6		
20. Other General Diseases (Classes 3, 4, 5)	332	366	334		180	198	179		
21. Locomotor Ataxia, General Paralysis of		1							
Insane (80, 83)	38	41	30	31	21	22	16		
22. Cerebral Haemorrhage, Embolism, &c.	0.40	000			F10	F04			
(82)	943	980	985	†	513	531	531		
23. Other Diseases of Nervous System and	294	307	267	236	159	166	144		
Sense Organs	3,945	3,812	3,904		2,145	2.063	2,104		
25a. Arterio-sclerosis	958	1,104	1,197		521	597	645		
25b. Other Diseases of Circulatory System	157	172	164		85	93	88		
26a Acute Bronchitis (106a and c)	45	47	37	48	24	25	20		
26b. Chronic Bronchitis (106b and d)	202		170		110	102	91		
27. Pneumonia (all forms) (107-109)	1,354		1,150		736	672	620		
28. Other Diseases of the Respiratory System	330	329	278	214	180	178	150		
29a. Diarrhoea and Enteritis (under two	62	97	= 0	904	0.4	50	0.1		
years of age)	02	97	58	294	34	53	31		
over)	111	102	93	86	60	55	50		
30. Appendicitis	139		126		76	78	68		
31a. Cirrhosis of the Liver	84		75		46	47	41		
31b. Other Diseases of the Liver and Biliary				1					
Calculi (125–127)	130		125		71	. 82			
32a. Hernia, Intestinal obstruction	169		180				97		
32b. Other Diseases of the Digestive System	287		316				170		
33. Nephritis (130-132) 34. Other Diseases of the Genito-Urinary	1,055	1,059	1,125	505	574	573	606		
System	332	349	335	151	180	189	181		
35a. Post-Abortive Sepsis	8		5		4	4	3		
35b. Criminal Abortion (140b)	35	49	41		19	26			
35c. Puerperal Septicaemia (without abortion)	19			1 1	10	22	8		
36. Other Diseases of Pregnancy and Labour	69		69		38				
37. Diseases of the Skin, Bones, &c	76	94	96	61	. 41	- 51	51		
38. Congenital Debility, Malformations,	015	809	772	731	140	100	410		
Premature Birth, &c 39. Senility	1,010		1,362		443 549	438 680	416 734		
40. Suicide	166		1,302				86		
41. Homicide	24		18						
42. Accidental or Violent Death (176-198)	974	990	1,050	465	530				
43. Non-specified or Ill-defined Causes	90	93	38	94	49	50	18		
* Total all Courses	19 450	10.770	19 615	9,898	10.094	10.100	10.000		
* Total all Causes									
* One death from No. 2 Typhus Fe	ver in l'	926 : nc	death	s trom N	to. 3 Sn	rali Pox	and		

<sup>\*</sup> One death from No. 2 Typhus Fever in 1926; no deaths from No. 3 Small Pox and No. 9 Plague.
† Comparable figures not available.

Detailed classification rumbers in brackets.

# CAUSES OF DEATH, VICTORIA, GREATER MELBOURNE, AND REMAINDER OF STATE, 1937.

	N	umber o	of Death	ıs.	Death 1,000, Popul	000 of
International Abridged Classification.	Vieta	oria.	olis.	ate.	olis.	ate.
	Males.	Fe- males	Metropolis	Remainder of State.	Metropolis	Remainder of State.
1. Typhoid Fever (1, 2)	4	5	3	6	3	7
4. Measles	1 1	4		$\frac{1}{1}$	4	$\frac{1}{1}$
5. Scarlet Fever	18	20	15	23	15	28
6. Whooping Cough 7. Diphtheria	32	20	28	$\frac{20}{24}$	27	29
8a. Influenza—Respiratory	22	34	21	35	20	42
8a. Influenza—Respiratory 8b. Influenza—Other	16	8	13	11	13	13
10. Tuberculosis of the Respiratory System	410	303	452	261	443	312
11a. Tubercular Meningitis	17	19	21	15	$\frac{21}{36}$	18
1b. Other Tuberculous Diseases	25 31	33 11	37 35	$\frac{21}{7}$	34	$\frac{25}{8}$
12. Syphilis	31	1 1	35	'	1	•
A Other test Manager To the Total	105	82	109		107	93
14. Other injectious or Parasitic Diseases 15. Cancer and other Malignant Tumours	1,147	1,204	1,448	903	1,419	1,081
16. Tumours, Non-Malignant or of Unspecified	,	_,	/			,
Nature	42	59	60	41	59	49
17. Chronic Rheumatism, Gout (57-58)	16	40	31	25	30	30
8. Diabetes Melntus	109	195	182	122	178	146
19. Acute and Chronic Alcoholism	$\begin{array}{c c} & 7 \\ 141 \end{array}$	193	$\frac{8}{180}$	$\frac{3}{154}$	177	$^{3}_{184}$
20. Other General Diseases (Classes 3, 4, 5) 21. Locomotor Ataxia, General Paralysis of Insane	141	190	100	194		104
(80, 83)	24	6	23	7	22	8
22. Cerebral Haemorrhage, Embolism, &c. (82)	409	576	589	396	577	474
23. Other Diseases of Nervous System and Sense						
Organs	135	132	136	131	134	157
24. Diseases of the Heart (90-95)	2,188	1,716	2,298	1,606	2,252	1,922
25a. Arterio-sclerosis	526	671	804	393	788 108	470
25b. Other Diseases of Circulatory System	90	74 21	$110 \\ 16$	$\frac{54}{21}$	16	$\frac{65}{25}$
26a. Acute Bronchitis (106a and c)	16 84	86	98	$\frac{21}{72}$	96	86
26b. Chronic Bronchitis (106b and d) 27. Pneumonia (all forms) (107-109)	625	525	683	467	669	559
28. Other Diseases of the Respiratory System	179	99	149	129	146	154
29a. Diarrhoea and Enteritis (under two years of age)		27	38	20	. 37	24
29b. Diarrhoez and Enteritis (two years and over)	42	51	52	41	51	49
30. Appendicitis	82	44	74	52	73	62
Bla. Cirrhosis of the Liver	48	27	46	29	45	35
31b. Other Diseases of the Liver and Biliary Calculi	42	83	74	51	73	61
(125-127)	94	86	111	69	109	83
22b. Other Diseases of the Digestive System	208	108	202	114	197	137
33. Nephritis (130–132)	579	546	680	445	667	532
4. Other Diseases of the Genito-Urinary System	236	99	197	138	193	165
B5a. Post-Abortive Sepsis		5	1 1	4	1	5
35b. Criminal Abortion (140b)		41	30	11	29	13
85c. Puerperal Septicaemia (without abortion)		14 69	. 7 29	7 40	29	8 48
36. Other Diseases of Pregnancy and Labour	65	31	57	39	55	47
37. Diseases of the Skin, Bones, &c 38. Congenital Debility, Malformations, Premature	"	91	01	55	"	
Birth, &c	445	327	389	383	382	458
9. Senility	629	733	601	761	589	911
0. Suicide	131	28	88	71	86	85
11. Homicide	12	6	10	. 8	10	9 570
2. Accidental or Violent Death (176-198)	805	245	572	478	561	572
3. Non-specified or Ill-defined Causes	21	12	7	26	7	31
#Tomat :== G.wara	0.000	0 760	10 010	7 704	10.604	9,325
*TOTAL ALL CAUSES	9,890	8,723	10,819	1,194	10,004	9,525

No deaths from No. 2 Typhus Fever, No. 3 Small Pox, and No. 9 Plague. Detailed classification numbers in brackets.

Typhoid being equivalent to a rate of 5 per million of population, as compared with rates of 5 in 1936, 9 in 1935, 6 in 1934, 9 in 1933, 31 in 1920-24, 108 in 1905-09, and 301 in 1895-99. Cases of typhoid fever reported in 1937 numbered 50, or 27 per million of population, as aginst 259 in 1920-24, and 2,884 in 1895-99.

The figures show that the mortality from typhoid has been reduced

to very small proportions.

Small-pox— Persons suffering from small-pox have arrived at Deaths from. Victorian ports on many occasions, but, as they were at once quarantined, the disease never spread among the people of the State. During the years 1853 to 1937, only 31 deaths occurred from this cause. The last death from small-pox in Victoria occurred in 1921.

Although the mortality from measles has varied very considerably from period to period, there has been no very severe epidemic outbreak since 1898, when 671 deaths resulted from the disease. In 1937 there was 1 death attributed to this cause, representing an approximate rate of 1 per million of the population, as compared with rates of 1 in 1936, 11 in 1935, 14 in 1934, and 7 in 1933. The disease chiefly affects children. On the average of the five years 1933 to 1937, 35 per cent. of those who died from the disease were under 2 years, and 60 per cent. were under 5 years of age.

In 1937 the deaths from scarlet fever numbered 5, which corresponded to a rate of 3 per million of the population, as compared with rates of 8 in 1936, 3 in 1935, 10 in 1934, 7 in 1933, and 34 in 1890–92. During 1937 there were 2,567 cases reported, as against 2,122 in 1936, 1,458 in 1935, 1,834 in 1934, and 2,493 in 1933. For the five years mentioned the deaths were less than one per cent. of the cases. Sixty-five per cent. of these deaths were of children under 10 years of age.

Whooping cough was responsible for 38 deaths in 1937, which equalled a rate of 20 per million of the population at all ages, as compared with rates of 27 in 1936, 27 in 1935, 46 in 1934, and 21 in 1933. The infantile death rate is more affected than the general rate by this ailment, as it is practically confined to children. In the year under review, 24 of the deaths were of infants under 1 year, and all except five of the deaths were of children less than 5 years of age.

The continued prevalence of diphtheria throughout the State since 1910, is one of the few instances in which morbidity statistics have not revealed material improvement. On the other hand a very great reduction has taken place since 1890, in the proportion of cases which ended fatally. On the average of the five years 1933 to 1937, 52 per cent. of those who died were under 5 years, and 85 per cent. were under 10 years of age.

The appended table shows for Victoria and Greater Melbourne the reported cases of and deaths from diphtheria, their proportions to the population, and the ratios of deaths to cases for different periods since 1894:—

DIPHTHERIA IN VICTORIA AND GREATER MELBOURNE, 1895 TO 1937.

	Annuai	Cases Reported.	Annual	Deaths.	Deaths pe
Period.	Numbe	Per 100,000 of Population.	Number.	Per 100,000 of Population.	100 Cases Reported.
		VICTORIA.			
1895-99	1,58		221	18.8	13.9
1900-04	1,68		159	13.2	9.5
1905-09	1,41	0 112.6	89	7.1	6.3
1910-14	4,61	2 339 1	212	15.6	4.6
1915-19	4,90	342.5	209	14.6	4.3
1920–24	5,73	9 364.6	179	11.4	3.1
1925-29	3,17	6 183.8	93	5.4	2.9
1930–34	5,64	5 312.1	124	6.8	$2 \cdot 2$
1933	6,56	4 360.5	126	6.9	1.9
1934	5,49		110	6.0	$2 \cdot 0$
1935	4,30		94	5.1	$2 \cdot 2$
1936	5,21		99	5.4	1.9
1937	3,04	0 163.8	52	2.8	1.7
	· G	REATER MELBOI	URNE.		
1895-99	74	8   162 1	113	24.6	15.1
1900-04	68	6 136.9	58	11.6	8.5
1905-09	75	8 140.8	46	8.5	6.1
1910-14	2,34	3 374.3	114	18.3	4.9
1915-19	2,86	4 402.6	127	17.9	4.4
1920-24	2,55	5 314.6	78	9.7	3.1
1925–29	1,84	3 191.1	52	5.4	2.8
1930–34	3,15	1 315.9	68	6.8	$2 \cdot 1$
1933	3,59	4 362.3	69	7.0	1.9
1934	2,53	9 254.4	49	4.9	1.9
1935	2,46	$0 \mid 245 \cdot 0 \mid$	57	5.7	$2 \cdot 3$
1936	3,29	9 325.8	57	5.6	1.7
1937	1,68	3 165.0	28	2.7	î•7

The cases of diphtheria which occurred in the metropolitan area, the three principal provincial cities and the remainder of the State in each of the last five years, and their proportions to the respective populations, for the period 1910–19 and the years 1935, 1936, and 1937, are given in the subjoined table:—

### VICTORIA—CASES OF DIPHTHERIA.

Агеа	Rep	orted C	ases of	Diphth	Annual Cases per 10,000 of Population				
	1933.	1934.	1935.	1936.	1937.	1910-19.	1935.	1936.	1937.
Greater Melbourne	3,594	2,539	2,460	3,299	1,683	39.3	24.5	32.6	1 <b>6</b> ·5
Ballarat	237	241	154	159	49	24 · 3	40.6	41.6	12.8
Bendigo	263	109	85	63	43	84.6	28.9	21.1	14.4
Geelong	318	181	283	206	182	43.4	71.0	51.9	45 7
Remainder of State	2,152	2,420	1,327	1,491	1,083	25.7	18.2	20.5	14 9

The deaths from influenza in 1937 numbered 80. This corresponded to a rate of 43 per million of the population as compared with rates of 45 in 1936, 120 in 1935, 171 in 1934, 107 in 1933, 2,407 in 1919, 71 in 1913–17, 109 in 1908–12, and 381 in 1890–92.

The rate of mortality was low in 1937, being 56 per cent. below

the average of the previous quinquennium.

Of the deaths recorded in 1937, 70 per cent. were associated with

specified respiratory complications.

With the exception of the 1919 epidemic, when 72 per cent. of the deaths were of persons between 20 and 50 years of age, influenza has always proved more fatal to elderly people than to those at middle or young ages. In 1937, 60 per cent. were of persons over 50 years of age.

Tuberculosis The number of deaths ascribed to tuberculosis during 1937 was 807, the rate per million of population being 435. This is the lowest rate on record for Victoria.

The deaths from tuberculosis of the respiratory system in 1937 numbered 713—410 being of males and 303 of the respiratory females—and equalled a rate of 384 per million of the population, as compared with rates of 412 in 1936, 414 in 1935, 411 in 1934, 405 in 1933, 660 in 1918—22, 855 in 1908—12, and 1,365 in 1890—92. In 1937 tuberculosis of the respiratory system was responsible for 88 per cent. of the total deaths from tuberculosis. The deaths from this cause in Scotland and in Northern Ireland in 1937 were 560 and 758 per million of their respective populations. For England and Wales and for Eire in 1936 the rates were 583 and 919

respectively. The rates of mortality for Victoria at the last six census periods per 10,000 of each sex, in age groups, are shown in the following table:—

VICTORIA—DEATH RATES FROM TUBERCULOSIS OF THE RESPIRATORY SYSTEM IN AGE GROUPS.

Age Group.	Annual	Mortality fr	om Tubercule 10,000 of	osis of the Re each Sex.	spiratory Sys	stem per
	1880-82.	1890-92.	1900-02.	1910-12.	1920-22.	1932-34
Males. Under 15	1 · 74	-90	38	·46	.42	24
15 to 19	6.88	5.41	5.06	3.71	2.67	1.07
20 to 24	21 · 19	18.29	14.35	8.45	7.88	3.59
25 to 34	30 33	23 · 70	20.31	13 · 11	9.70	5 · 44
35 to 44	25 · 11	28 · 28	22.07	15.63	12.43	7.46
45 to 54	28 · 65	31 · 17	25.05	18.07	13.94	9.05
55 to 64	31 41	36.48	35 · 75	18 88	13 03	10 · 56
35 and upwards	18 08	25 · 40	31 · 07	13.55	8 · 65	7 · 80
All Ages	15.33	15.73	13.51	8.98	7.11	4.74
Females. Under 15	1.76	1 · 43	.93	-97	-38	·23
15 to 19	12.50	9.51	8 · 18	7.62	4 84	2 92
20 to 24	21.00	18.49	12.79	12.68	10.20	6.60
5 to 34	26.56	21 · 77	18.15	14.03	10.00	7.08
35 to 44	24 06	22 · 53	17:74	11.51	9 · 15	5.26
5 to 54	20.72	16 · 13	14.41	8.18	5.91	3.82
5 to 64	14.26	12 · 35	12.52	7 · 47	4.95	3.78
5 and upwards	13 · 12	8.25	8.18	5 · 29	3.94	2.88
All Ages	12.75	11.51	9.72	7 · 61	5 · 55	3.70

A comparison of the mortality from tuberculosis of the respiratory system at the census periods 1920–22 and 1932–34 shows that lower death rates obtained in each age group in 1932–34 than in 1920–22 and that the improvement was greater among males than among females,

Deaths from tuberculosis of the respiratory system in the resipratory system in each of the last five years, and the ages and sexes of various ages.

Deaths from tuberculosis of the respiratory system in the ages and sexes of the deceased, are given in the next table:—

VICTORIA—DEATHS FROM TUBERCULOSIS OF THE RESPIRATORY SYSTEM AT VARIOUS AGES.

				Males.				1	Females	١.	
Age Group				Year.			Year.				
		1933.	1934.	1935.	1936.	1937.	1933.	1934.	1935.	1936.	1937.
0-9		3	7	3	4	8	4	2	1	7	2
10-14		1	2		1	2	3	3	2	2	2
15–19	• • •	12	7	9	8	7	27	21	20	27	15
20-24	••	23	30	26	21	23	56	40	43	57	41
25-29		30	40	39	26	19	51	62	63	60	52
30-34		48	31	36	35	33	42	49	45	53	41
35-39		42	38	43	37	44	35	40	38	34	42
40-44		45	51	51	54	47	27	31	31	40	20
45-49		44	47	40	52	51	24	22	11	18	26
50-54		40	41	55	40	48	10	19	20	17	13
55-59		34	45	45	35	36	15	12	21	10	14
60-64		33	35	27	33	40	14	16	15	13	12
65-69	•	24	25	20	29	27	12	7.	11	16	-9
70 and over	••	22	20	36	19	25	16	10	10	14	14
Total		401	419	430	394	410	336	334	331	368	303

For the year 1937, the average age of those who died from tuberculosis of the respiratory system was 46.2 years for males and 37.7 years for females. Tubercular diseases (tuberculosis of the respiratory system excepted).

In 1937 there occurred in Victoria 94 deaths from tubercular diseases (excluding tuberculosis of the respiratory system), which corresponded to a rate of 51 per million of the population, as compared with rates of 59 in 1936, 64 in 1935, 74 in 1934, 66 in 1933, 134 in 1918-22, 182 in 1908–12 and 379 in 1890–92. The deaths from similar causes in Scotland and in Northern Ireland in 1937 numbered 176 and 207 per million of their respective populations. In 1936 the rates for England and Wales and in Eire, were 109 and 255 respectively.

In earlier periods, the death rate from tuberculosis was Tubercular death rates in considerably higher in the Metropolis and the mining centres Melbourne. of Ballarat and Bendigo-Bendigo in particular-than in Ballarat, Bendigo, and the rural portions of the State. During recent years the Geelong. rates for Greater Melbourne and Ballarat have declined considerably.

#### DEATH RATES FROM TUBERCULAR DISEASES IN MELBOURNE, BALLARAT, BENDIGO, AND GEELONG.

			1	Deaths	per 10	,000 o	f the 1	Populat	ion.					
Period.		Tuberculesis of the Respiratory System.					Other Tubercular Diseases.				All Tubercular Diseases.			
	Greater Melbourne.	Ballarat.	Bendigo.	Geelong.	Greater Melbourne.	Ballarat.	Bendigo.	Geelong.	Greater Melbourne.	Ballarat,	Bendigo.	Geelong.		
1891-1900	16·7 13·9 10·8 9·1 8·9 5·9 4·7 4·7 4·8	17·1 15·3 11·5 10·3 11·2 6·7 5·2 2·7 5·3 4·7 1·3 3·7	24·1 22·7 21·2 16·5 16·0 11·9 10·7 10·1 9·2 10·4 9·4	† † † † † 4 · 6 · 4 · 2 · 4 · 1 · 1 · 3 · 3 · 3 · 8 · 5	4·7 4·2 3·0 2·1 1·9 1·5 1·0 8 8 ·7 6	3·5 4·0 2·1 2·2 1·5 1·0 4 -8 1·3 -5	4·0 4·7 2·0 2·1 2·0 2·2 ·8 ·9 1·0 1·3	† † † † † † † 1 · 9 · 8 · 1 · 0 · 7 · 5 · 7 · 3	21 4 18 1 13 8 11 • 2 10 · 2 6 · 9 5 · 5 5 · 5 5 · 6	20.6 19.3 13.6 12.5 12.7 7.7 5.6 3.5 6.6 5.8 4.2	28·1 27·4 23·2 18·6 18·0 14·1 11·5 11·0 7·1 9·5 11·4 10·7	† † † † † † 5.5 5.1 2.5 3.8 4.5 6.8		

† Not calculated.

Deaths in 1937, from diseases included under this Other Infectious heading (cause No. 14, on page 99) were dysentery 5, and Parasitic erysipelas 17, acute poliomyelitis 77, lethargic encephalitis 7, cerebro-spinal meningitis 10, tetanus 10, septicaemia 31, hydatid cysts 20, and other diseases 10.

Hydatids. In 1937, there were 11 male and 9 female deaths from hydatids, of which 5 of males and 3 of females were attributed to hydatid tumour of the liver. The deaths from hydatids in 1937 were equivalent to a rate of 11 per million of the population, as compared with rates of 9 in 1936, 10 in 1935, 13 in 1934, 12 in 1933, 16 in 1918–22, 22 in 1908–12, and 51 in 1890–92.

The incidence of Poliomyelitis in Victoria has been recorded since the year 1916, when the disease was added to the list of compulsorily notifiable diseases. The highest incidence (until the 1937-38 epidemic) was 303 cases in 1918. Seven years later, in 1925, 140 cases were reported. The years 1928 to 1931 were all years of high incidence. The disease assumed epidemic proportions in 1931, 1934, and 1937.

Towards the end of June, 1937, an epidemic began in a southern suburb of Melbourne, eventually spread to all parts of the State and continued until June, 1938. The total number of cases from 1st July, 1937, to 30th June, 1938, was 2,096. The number of deaths registered during the period was 113 (males 70, females 43).

The incidence and mortality in connexion with the epidemic are shown in the following tables:—

VICTORIA—POLIOMYELITIS INCIDENCE, 1st July, 1937, TO 30th JUNE, 1938.

Age Group			195	37.			1938.						Total
(Years).	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	Cases.
0-4 5-9 10-14 15 and over	7 22 6 1	60 98 20 6	87 78 14 8	84 122 32 11	107 177 49 22	114 174 66 41	64 158 73 61	44 69 30 44	16 28 15 17	9 14 8 6	3 9 9 3	1 4 4 1	596 953 326 221
Total .	36	184	187	249	355	395	356	187	76	37	24	10	2,096

VICTORIA—POLIOMYELITIS—INCIDENCE AND MORTALITY 1st JULY, 1937, TO 30th JUNE, 1938.

	Gı	reater M	[elbourn	ne	Re	mainde	r of Sta	ite.	То	tal.
Age.	Cas	ses.	Dea	ths.	Cas	ses.	Dea	ths.		
	1.7.37 to 31.12.37.	1.1.38 to 30.6.38.	1.7.37 to 31.12.37.	1.1.38 to 30.6.38.	1.7.37 to 31.12.37.	1.1.38 to 30.6.38.	1.7.37 to 31.12.37.	1.1.38 to 30.6.38.	Cases.	Deaths
Under 1 year 1 year 1 year 2 years 3 " 4 " 5 " 6 " 7 " 8 " 9 " 10 " 11 " 11 " 11 " 11 " 11 " 11 " 11	19 48 79 101 110 1124 125 90 72 44 25 12 13 3 5 3 1 1 3 5 2 2 1	2 8 10 18 24 27 33 22 20 11 12 8 7 7 5 5 3 3 6  1 1 1  1 1  1	2 5 5 5 3 4 1 1 7 7 5 2 5 5 3	1 2 2 1 1 1 2 2 3 1 1 1	2 117 399 338 484 494 295 221 114 57 79 43 33 22 44 22 11 11 11 11 11 11 11 11 11 11 11 11	8 10 13 32 12 31 33 26 29 28 21 16 8 11 4 4 6 6 4 8 6 6 2 3 3 3 7 7 3 5 5 1 1 1 1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	31 77 1190 1790 1230 230 192 147 148 106 68 44 40 41 20 17 16 18 8 8 12 6 11 6 6 11 6 11 6 11 12 11 12 11 13 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	3 6 5 4 8 8 3 13 8 5 10 7 7  2 2 3 3 1 1  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3  3 
Total	1,011	291	58.	18	394	400	17	20	2,096	113

Poliomyelitis was responsible for 77 deaths in 1937, 4 in 1936, 7 in 1935, 9 in 1934, 7 in 1933, 4 in 1932, 16 in 1931, 12 in 1930, 17 in 1929, and 32 in 1928.

Deaths from cancer in 1937 numbered 2,351, and represented a death rate of 1,267 per million of the whole population, as compared with rates of 1,238 in 1936, 1,229 in 1935, 1,190 in 1934, 1,180 in 1933, 934 in 1918–22, 833 in 1908–12, and 584 in 1890–92. The deaths from this cause in Scotland and in Northern Ireland in 1937 were 1,569 and 1,251 per million of their respective populations. In 1936 the rates for England and Wales and in Eire were 1,625 and 1,206 respectively.

Cancer death rates, computed in relation to the general at Different able owing to the changed age distribution of the people. Satisfactory comparisons are obtained by relating the deaths with the number of persons in the community of the same sex, in age groups. This has been done for four census periods, when the numbers of the people in age groups were accurately known, and the results are given in the appended table:—

VICTORIA—DEATH RATES FROM CANCER IN AGE GROUPS.

. ~		Average Ar	nnual Deaths from	Cancer per 10,000	of each Sex.
Age Group.		1900-02.	1910-12.	1920-22.	1932-34
Males.					
Under 5		.30	.73	·46	·27
5 to 9		$\cdot 42$	·25	·13	·20
10 to 14		· 20	·16	·14	·24
15 to 19		$\cdot 22$	.15	.30	·37
20 to 24	1	. 33	·71	•64	73
25 to 34		$1 \cdot 26$	.96	76	* .93
35 to 44		$3 \cdot 69$	3.16	3 31	3.04
45 to 54		$14 \cdot 14$	16.03	13.94	10.13
55 to 64		36.00	$36 \cdot 36$	40 46	37.25
65 to 74		$59 \cdot 04$	74 15	$78 \cdot 21$	85.19
75 and over	••	$74 \cdot 04$	88.40	110 · 12	133 · 78
All Ages		7 · 52	8:50	9 · 52	11 63
Females.					
Under 5		26	.19	•39	.38
5 to 9		$\cdot 04$	·10	.17	.17
10 to 14			27	.05	.08
15 to 19		$\cdot 28$	•44	·15	.17
20 to 24		23	•41	.30	.39
25 to 34		1 · 61	$1 \cdot 39$	1.28	1.57
35 to 44		$6 \cdot 05$	$7 \cdot 26$	6.61	6.00
45 to 54		$18 \cdot 13$	17.87	19.14	17.31
55 to 64		$33 \cdot 05$	38.03	34 · 48	35.82
65 to 74		$51 \cdot 18$	61 · 66	$63 \cdot 05$	61 · 17
75 and over	••	$62\cdot 70$	86.19	92.86	106.19
All Ages		6.64	8.76	9 · 63	12.00

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

Cancer—
Deaths at arrives ages:

The number of deaths from cancer in various age groups arrives ages:
in each of the last five years is given below:—

### VICTORIA—DEATHS FROM CANCER AT VARIOUS AGES

				Males.			Females.					
Age Group.		1933.	1934.	1935.	1936.	1937.	1933.	1934.	1935.	1936.	1937.	
0-14	<u> </u>		4		9	6		4	5	3	4	
15-24		13	5	5	6	4	. 6	1	10	9	4	
25-34		17	14	21	20	17	17	21	26	14	18	
35-44		37	37	50	29	50	84	81	110	.90	95	
45-54		86	111	103	114	113	175	177	157	194	177	
55-64		242	261	237	252	227	287	273	268	304	260	
65-74		425	425	419	436	429	330	332	384	338	371	
75-84		196	191	208	221	276	180	180	196	189	236	
85 and over	• •	15	- 26	15	25	25	31	- 35	41	35	39	
Total		1,033	1,074	1,063	1,112	1,147	1,115	1,104	1,197	1,176	1,204	

Ninety-two per cent. of the deaths from cancer in 1937 were at ages 45 years and upwards.

The widely different social and economic effects produced by the prevalence of and deaths from the two important diseases, cancer and tuberculosis of the respiratory system, are evidenced by the ages of their victims. For the year 1937 the average age of those who died from the former was 66·1 years for males and 63·7 years for females, while the corresponding averages for the latter were 46·2 years for males and 37·7 years for females.

Seat of Cancer. The following table shows the seat of cancer in persons who died from this disease in 1937:—

SEAT OF CANCER, 1937.

Seat of Disease.		Males.	Females.	Total.
Buccal cavity and pharynx		102	15	117
Oesophagus		54	16	70
Stomach, duodenum, liver and biliary ducts		345	272	617
Pancreas		42	33	. 75
Intestines, peritoneum and rectum		214	252	466
Respiratory organs		67	28	95
Female genital organs			226	226
Female breast			244	244
Male genito-urinary organs		204		204
Skin		26	27	53
Other and unspecified organs		93	91	184
Total Deaths		1,147	1,204	2,351

Fifty-two per cent. of the persons who died from cancer were affected in the digestive tract or peritoneum. Of the females who died from the disease, 39 per cent. were affected in the genital organs or breast.

Diabetes. The rate of mortality from diabetes has increased, the average of the last five years being 56 per cent. higher than that for the period 1908–12.

During 1937 diabetes was responsible for 109 male and 195 female deaths, representing a rate of 164 per million of the population, as compared with rates of 168 in 1936, 168 in 1935, 174 in 1934, 163 in 1933, 130 in 1918–22, and 107 in 1908–12.

The deaths from diabetes per 10,000 of each sex in age groups for the periods 1900-02, 1910-12, 1920-22, and 1932-34, are shown in the following table:—

VICTORIA—DEATH RATES FROM DIABETES.

	Average An	nual Deaths from	Diabetes per 10,000	of each Sex.
Age Group.	1900-02.	1910–12.	1920-22.	1932-34
Males.				
Under 10	.09	10	13	. 19
	1	20		13
10 to 19 20 to 29	·24 ·17	64	31 48	·14 ·18
90.4-90	32	58	45	.18
10 4- 10	49	1 11	95	31
50 to 50	1.90	1.11	2.14	
50 to 59				1.92
60 to 69	2.67	5.63	5.19	5.82
70 to 79	4.36	7.34	7.37	13.13
80 and over	4.11	$7 \cdot 43$	8.42	$12 \cdot 33$
All Ages	.56	1.00	1.03	1 · 25
Females.				
Under 10	.05	·15	22	.04
10 to 19	26	•36	.39	·21
20 to 29	·36	30	53	·16
30 to 39	-51	.53	.54	.19
40 to 49	.42	·78	1.11	-90
50 to 59	1 42	$3 \cdot 18$	2.79	4.00
<b>6</b> 0 to 69	$3 \cdot 19$	8.47	8.02	9.57
70 to 79	5.01	11.54	$12 \cdot 51$	17.97
80 and over	3.54	6.83	6.02	11.97
All Ages	.60	1 · 26	1.45	2.08

In 1932-34 the rate for females was 66 per cent. higher than that for males.

Other General Cause No. 20 on page 99) were acute rheumatic fever 90, exopthalmic goitre 34, other diseases of the thyroid and parathyroid glands 14, pernicious anaemia 54, other anaemias 3, leucaemia 57, Hodgkin's disease 34, and other diseases 48.

In 1937, 409 male and 576 female deaths were ascribed Haemorrhage, to these causes, the total—985—corresponding to a rate of Embolism, &c. 531 per million of the population as compared with rates of 531 in 1936, 513 in 1935, 537 in 1934, and 545 in 1933. Of the 985 deaths in 1937, 604 were due to cerebral haemorrhage, 19 to apoplexy, 12 to cerebral embolism, 275 to cerebral thrombosis, 8 to softening of the brain, and 67 to hemiplegia and unspecified paralysis.

Other Diseases in 1937, were 29 deaths from simple meningitis, 54 from other diseases of the spinal cord, 26 from epilepsy, 26 from other diseases.

During 1937 there were 3,904 deaths ascribed to diseases of the heart, including 9 due to pericarditis, 543 to endocarditis, 2,111 to disease of the myocardium, 647 to diseases of coronary arteries, 149 to angina pectoris, 44 to angina pectoris with record of coronary disease, and 401 to other diseases of the heart. The total causes in 1937 represented a rate of 2,104 per million of the population, the rates for previous years being 2,063 in 1936, 2,145 in 1935, 2,012 in 1934, 1,880 in 1933, 1,347 in 1922–26, and 1,441 in 1908–12. On the average of the three years 1932 to 1934 the deaths from all forms of heart diseases per 10,000 of each sex, in age groups, were as follows:—

VICTORIA—DEATH RATES FROM HEART DISEASE AT VARIOUS AGES, 1932–34.

		Deaths per 10,000 Persons aged—											
Sex.		0-14.	15-19. 20-24	25-34.	35-44.	45-54.	55-64.	65-74.	75 and upwards.	All Ages			
Males Females	::	·51 ·40	1.03 1.03 1.21 1.04	1·76 1·76	5·21 4·27	16·97 10·73	54·44 35·43	145·47 97·32	316·23 278·94	20·71 16·97			

The figures indicate that the mortality rate from heart disease increases greatly as age advances. Of the deaths of persons aged 70 and upwards, approximately 1 in 4 is due to some form of this disease.

In 1937 the number of deaths from arteriosclerosis with Arteriosclerosis record of cerebral vascular lesion (cerebral haemorrhage etc.) was 635 and, without such record, 562. Of the total deaths, 717 or 60 per cent. were of persons aged 70 years and over.

In 1937 the deaths from respiratory diseases numbered 1,635, which represented a rate of 881 per million of the population, as compared with rates of 977 in 1936, 1,050 in 1935, 1,125 in 1934, and 998 in 1933. Of the deaths in the year under review, 37 were due to acute bronchitis, 170 to chronic bronchitis, 591 to broncho-pneumonia, 232 to lobar pneumonia, 327 to pneumonia unspecified, 57 to pleurisy, 52 to asthma, 68 to pulmonary congestion, embolism, etc., 57 to chronic interstitial pneumonia, and 44 to other diseases. Further details will be found under causes Nos. 26 to 28 on pages 99 and 100.

The greatest mortality from the respiratory diseases occurs during the months of June, July, and August.

In 1937 there were 547 male and 426 female deaths from digestive ailments, representing a proportion of 524 per million of the population, as against rates of 572 in 1936, 534 in 1935, 580 in 1934, 541 in 1933, 807 in 1922–26, and 2,382 in 1890–92. Deaths from the principal diseases in 1937 were, 154 from ulcers of the stomach and duodenum, 151 from diarrhoeal diseases, 126 from appendicitis, 51 from hernia, 129 from intestinal obstruction, 75 from cirrhosis of the liver, 53 from biliary calculi, 53 from other diseases of the gall bladder and biliary passages, and 181 from other diseases. Further rates and details are given under causes Nos. 29 to 32 on pages 99 and 100.

The 151 deaths from diarrhoeal diseases in 1937 correspond to a rate of 81 per million of the population as compared with rates of 108 in 1936, 94 in 1935, 152 in 1934, 109 in 1933, 380 in 1922–26, 833 in 1908–12, and 1,342 in 1890–92. The age incidence of these diseases shows that they are heaviest at the extremes of life. In earlier years these diseases constituted one of the most fatal menaces to infant life. The decline in the mortality therefrom has however been progressive and since 1928 the rate has reached small proportions. Of the deaths at all ages in 1937, 42 were of infants under one year of age, 16 were between the ages of one and two years, 9 between two and five years, while 30 were of persons aged 65 years and over. Infantile diarrhoea has been further dealt with in the section "Infantile Mortality."

In 1937 there were 1,460 deaths attributed to diseases Diseases of the of the genito-urinary system, which corresponded to a rate genito-urinary of 787 per million of the population, as against rates of 762 in 1936, 754 in 1935, 786 in 1934, 755 in 1933, 670 in 1918–22, and 700 in 1909–12. In 1937, acute and chronic nephritis were responsible for 1,125 deaths, other diseases of the kidney, etc. for 93, diseases of the prostate for 145, and other genito-urinary diseases for 97.

Deaths in childbirth. The death rate of women in childbirth is usually ascertained by comparing the number of deaths of parturient women with the total number of live births. In the following table are given the proportions of deaths from puerperal septicaemia and all other puerperal causes for each of the last ten years and the averages of previous periods back to 1871. The rates given for years prior to 1926 are not strictly comparable with those for subsequent years.

VICTORIA—DEATHS OF MOTHERS (MARRIED AND SINGLE)
TO EVERY 10,000 CHILDREN BORN ALIVE, 1871 TO 1937.

	Dea	ths of	Mothers A	Annual	ly	3	Deaths Chil	of Mot dren Bo	hers to ever orn Alive f	ery 10,00 rom—	00
		Puerperal Septicæmia. Other Puerperal Causes.		Total.		Puerperal Septicæmia.			Other Puerperal Causes.	To	tal.
Period.	Without Abortion.	Septic Abortion.		Excluding Criminal Abortion.	Including Criminal Abortion.	Without Abortion.	Septic Abortion.	Criminal Abortion.		Excluding Criminal Abortion.	Including Criminal Abortion
1871-1880 1881-1890 1891-1900 1901-1910 1911-1920 1921-1925	6 6 5	16 34 36 52 53	$\begin{array}{c c} 127 \\ 121 \\ 117 \\ 114 \\ 94 \\ 102 \\ \end{array}$	18 18 10 14	73 85 83 66 47 45		17 · 12 20 · 48 20 · 20 16 · 93 15 · 42 11 · 96	3. ) 3. 2.	$\begin{array}{r} 47 \cdot 26 \\ 38 \cdot 71 \\ 35 \cdot 81 \\ 37 \cdot 12 \\ 27 \cdot 35 \\ 28 \cdot 37 \end{array}$	59 56 54 42	38 ·19 ·01 ·05 ·77 ·33
1928 1929 1930 1931 1932 1933 1934 1935		6 28 13 19 13 21 9 19 9 30 7 28 8 37 8 38 7 49 5 41	113 121 92 9 89 61 7 93 69 85	180 170 174 135 125 98 133 96 132 88	189 195 154 155 126 170 131 181	10·5/ 11·5( 6·8] 13·8	3·87 3·92 2·97 3·28 7·2·47 1·2·87 1·2·87 5·2·42	$5.65 \\ 6.34 \\ 6.26 \\ 10.92$	33·63 36·53 30·33 32·41 21·48 33·42 24·75 29 43	44 · 51 45 · 52 34 · 52 47 · 79 34 · 43 45 · 70	56 · 2 58 · 8 50 · 7 56 · 4 44 · 3 61 · 0 46 · 9 62 · 6

The death rate of women from puerperal causes, as shown in the above table, declined steadily during each period from 1871-80 to 1921-25, but the average rate for the following years showed a considerable increase.

The following tables give information in age groups for the year 1937 relating to the causes of death of women foauses.

The following tables give information in age groups to the year 1937 relating to the causes of death of women in childbirth, and the total number of children born to married mothers.

VICTORIA—DEATHS FROM PUERPERAL CAUSES, 1937.

			Ag	es at .	Death.		,		
Causes of Death.	Under 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 and over.	Total	Married Mothers.	Unmarried Mothers.
(40. (a) Abortion with septic conditions (b) Criminal abortion		1 8	2 10	2 11		·i	5 41*	5 29	12
141. Abortion without septic conditions 142. Ectopic gestation		1	2	1 2	1 1	1	3 7	3 6	1
143. Other accidents of pregnancy (excluding hæmorrhage) 144. Puerperal hæmorrhage	1	·. 1	$\frac{1}{3}$	5	 4	3	1 17	1 16	1
145. Puerperal septicemia (not consequent on abortion) 146. Puerperal albuminuria and	1	2	4	5		.2	14	13	1
eclampsia	3	6	3	2 4	$\frac{1}{2}$	1	16 10	14 10	2
thrombosis (b) Embolism or sudden death 149. Other accidents of childbirth—		i		2	1		4	4	
(a) Cæsarean section (b) Other surgical operations	٠.	••	••		2		2	2	
and instrumental delivery (c) Others 150. (a) Puerperal diseases of the	٠	••	3	1	3		7	7	
breast (b) Other unspecified conditions									
of the puerperal state			2		21	8	$\frac{2}{129}$	$\frac{2}{112}$	17
Total	$\frac{10}{5}$		33	$\frac{35}{32}$	21	8	1129	114	-
Unmarried Mothers Total Issue of Married Mothers	5 2	6	3 52	3 79	61	26	$\begin{array}{c} 17 \\ 245 \end{array}$		

\* Self-induced 6: open verdict 35.

Of the 245 children born to the 112 married women who died, 219 were living at the time of their mother's death, or an average of 2·0 children per mother, as compared with 2·1 in 1936, 2·3 in 1935, 2·5 in 1934, and 2·6 in 1933.

First confinements were responsible for 43, or 38.4 per cent. of the total deaths of married mothers, as compared with 36.3 per cent. in 1936, 25.6 per cent. in 1935, 32.9 per cent. in 1934, and 28.6 per cent. in 1933.

Ages at Death of Women in childbirth varies considerably at different ages, and is higher at older than at younger ages. The number of deaths of women in childbirth and the death rates in various age groups in Victoria, for the period 1926-30 and the years 1935, 1936, and 1937, are shown in the following table:—

VICTORIA—DEATH RATES OF WOMEN IN CHILDBIRTH, IN AGE GROUPS, 1926 TO 1937.

	2	Mothers.									
Age Group.		Des	ths.		Deaths per 10,000 children born alive.						
	1926-80.	<b>1</b> 935.	1936.	1937.	1926–30.	1935.	1936.	1 <b>9</b> 37.			
Under 20 years	41	7	12	10	47 1	45 9	76 4	63 2			
22 to 24 ,,	150	16	36	22	39 1	<b>23</b> ·1	50.2	28 9			
25 ,, 29 ,,	231	38	50	33	46 5	45.9	57.8	36 · 1			
30 ,, 34 ,,	226	30	46	35	56.8	48.3	73 5	53 ⋅ 6			
35 ,, 39 ,,	226	25	23	21	88 1	70.2	60-8	58.9			
40 years and over	111	15	. 14	8	117.8	105 · 9	95 8	60.5			
Total	985	131	181	129	57 4	47.0	62 7	43 4			

The experience of the years 1926–30 showed that, for the age period 35 years and upwards, the deaths of mothers in childbirth were 96 per 10,000 live births, as compared with 47 per 10,000 for those under that age.

During the year 1937, the deaths of 629 men and 733 women were ascribed to senile decay, as compared with 613 men and 644 women in 1936. Prior to 1927, deaths from ill-defined causes, i.e., heart failure, debility, &c., of those persons over 65 years of age, were shown as being due to senile decay. In that year, however, in accordance with the rule laid down in the International List of Causes of Death, only deaths of persons over 70 years of age from such causes were included therein. The deaths at ages 70 and over from all causes during 1937 numbered 7,825—3,893 of men and 3,932 of women, or 42.0 per cent. of the total deaths.

Accidental to accidents or negligence. These represented a rate of 565 per million of the population. This proportion was above the average rate—492—for the previous five years, and 30 per cent. below the rate—811—for 1890–92. In 1931 a distinction was made for the first time between deaths recorded as "open verdict" and those returned definitely as "accidental." The numbers of deaths from various accidents in the last five years are given in the appended table:—

VICTORIA—DEATHS FROM ACCIDENTAL VIOLENCE, 1933 TO 1937.

•		A	nnual De	eaths du	ring		
Nature or Place of Accident.	1933.	1934.	1935.	1936.		1937.	
					Total.	Males.	Female
Snake Bite			2	1	1	1	
Other Venomous Bites and Stings	••	••	1	2		••	••
Poisoning by Food	3	5	3	2			l
Absorption of Poisonous Gases	8	6	6	3	5	3	2
Other Acute Poisonings	5	6	8	5	4	4	
Conflagration (Bush fires, &c.)	2	4	5	5	. 3	2	1
Burns, Scalds, &c	63	68	53	49	44	22	22
Accidental Mechanical Suffocation	10	5	11	6	10	4	6
Drowning \( \) accidental \( \)	74	94	88	77	67	57	10
open verdict	56	48	55	51	58	44	14
Firearms \( \) accidental \( \)	24	26	29	17	20	17	3
`open verdict	6	7	2	8	10	10	
In Mines and Quarries	16	17	23	14	28	28	
Machines	9	12	12	14	10	9	1
Transport Accidents	352	385	440	508	568	456	112
Falls \( \) accidental \( \) \( \) \( \)	94	121	102	106	119	70	49
∫ open verdict	5	4	6	2	9	6	$\frac{3}{2}$
Other Crushings	20	29	26	20	$\frac{17}{2}$	$\frac{15}{2}$	2
Injuries by Animals	10	4 6	$\begin{array}{c} 6 \\ 4 \end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Z	. 4	• • •
Excessive Cold	$\frac{5}{1}$	15	3	2	4		1
Effects of Heat	$\frac{1}{2}$	19	.4	$\frac{2}{2}$	1	1	•
Lightning	4	4	13	2	11	10	1
Electricity Other   Caccidental	39	45	35	48	31	24	7
Violence \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	25	23	37	39	28	16	12
Total accidental	741	852	874	890	945	728	217
Total open verdict	92	82	100	100	105	76	29
Grand Total	833	934	974	990	1,050	804	246

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

Transport Accidents.

In 1937, deaths from transport accidents numbered 568, as against 508 in 1936, 440 in 1935, 385 in 1934, 350 in 1933, 350 in 1932, 373 in 1931, 406 in 1930, 394 in 1929, and 382 in 1928.

During the year 1937, deaths connected with transport represented 54 per cent. of the total deaths from accidents.

In the following table details are given of deaths due to collisions between various types of conveyances, pedestrians killed, and other fatal accidents in which transport was concerned, for the year 1937.

VICTORIA—DEATHS FROM TRANSPORT ACCIDENTS, 1937.

			-	Colli	sion 1	betwee	en									
- <del>-</del>	Railway vehicle.	Tramcar.	Motor car.	Motor lorry, &c.	Motor cycle.	Horse-drawn vehicle, &c.	Bicycle.	Fixed object.	Aeroplane.	Water transport.	Total.	Pedestrians killed.	*Other Accidents.	Total.	Males.	Females.
Railway vehicle	1		12		1						14	19	15	†48	39	9
Tramcar			4	1	5	1					11	12	3	26	18	- 8
Motor-car			19	4	37	1	39	18			118	155	54	327	257	70
" omnibus							2				2	3	1	6	5	1
,, lorry, &c.					11		12	2			25	20	18	63	51	12
" cycle					2	3	1	3	ļ		9	9	19	37	32	5
Horse - drawn vehicle													12	12	11	1
Bicycle		٠.	, .				4	2			6	2	7	15	12	3
Horse													16	16	14	2
Aeroplane													7	7	7	
Water transport						•••				3	3		. 7	10	10	
Other transport													1	1		1
Total	1		35	5	56	5	58	25		3	188	220	160	568	456	112 .

Includes all rail accidents to railway employees (collisions excepted) and accidents to persons boarding or leaving vehicles.

<sup>†</sup> Includes 5 railway employees.

Accidental deaths in which they were motor vehicles. involved, for the years 1928 to 1937, were as follows:—

## VICTORIA—DEATHS INVOLVING MOTOR VEHICLES, 1928 TO 1937.

			Number of Motor	Deaths Involving Motor Vehicles.						
	Year.		Vehicles (30th June.)	Number.	Per 10,000 Motor Vehicles	Per 1,000,000 of Population				
1928			150,343	297	19.8	170				
$1929 \dots$			168,578	294	17.4	166				
1930			179,887	307	17.1	172				
1931			168,231	296	17.6	135				
1932			167,952	262	15.6	145				
1933			179,602	255	14.2	140				
1934			188,256	294	15.6	161				
1935			200,759	338	16.8	184				
$1936 \dots$			219,925	395	18.0	214				
1937			233,573	456	19.5	246				

It will be observed that, while registrations of motor vehicles increased greatly during the years mentioned, the mortality per 10,000 vehicles fluctuated only slightly, the average rate for the period 1933–37 being 17·0 as compared with a rate of 17·4 in 1928–32. The mortality per million of population was 246 in 1937, 214 in 1936, 161 in 1934, and 82 in 1924. The mortality rate in 1937 was the highest on record.

On the average of the five years, 1933 to 1937, motor cars, &c., were involved in 17.6 deaths per 10,000 cars registered, and motor cycles in 26.6 deaths per 10,000 motor cycles registered.

Suicide. In the year 1937, 131 males and 28 females took their lives. The deaths represented a rate of 86 per million of the population, as compared with rates of 107 in 1936, 90 in 1935, 93 in 1934, 103 in 1933, 87 in 1918–22, 102 in 1908–12, and 109 in 1890–92. Of the 131 male deaths in 1937 from suicide 36, or 27 per cent., were connected with firearms. A much lower rate from suicide obtains among females than among males, the rate for the former, on the average of the last five years, being 27 per cent. of that for the latter.

Homicide. The deaths ascribed to homicide in 1937 numbered 18, of which 12 were of males and 6 of females. These represented a rate of 10 per million of the population, as against rates of 10 in 1936, 13 in 1935, 14 in 1934, 16 in 1933, 14 in 1918–22, and 19 in 1908–12. Since 1930 deaths from criminal abortion have been excluded from this category and included with deaths from puerperal causes.

### NATURAL INCREASE.

Natural increase per 1,000 of the mean population, in population in Australian States and in New Zealand. New Zealand, for different periods since 1909, as well as detailed particulars for Victoria since 1879, are shown in the following tables:—

# NATURAL INCREASE PER 1,000 OF THE MEAN POPULATION. AUSTRALIA AND NEW ZEALAND.

Period.	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	Australia.	New Zealand
1910-14 1915-19 1920-24 1925-29 1930-34	13·85 11·75 12·49 10·57 6·77	18·38 15·98 15·73 12·99 9·52	18·51 17·06 16·13 13·35 10·56	17 · 68 14 · 84 13 · 75 11 · 18 6 · 89	18·61 15·47 13·96 12·71 10·26	19·35 17·83 16·66 13·27 11·05	17·03 14·99 14·60 12·18 8·78	16·80 16·80 14·01 11·65 9·19
1933 1934 1935 1936	6·00 5·02 5·13 5·47 5·99	8·42 7·57 7·61 8·17 8·27	9·30 9·59 9·15 10·39 10·26	6·88 5·24 5·31 5·87 6·34	9·31 8·43 8·98 9·44 10·00	$10 \cdot 33$ $9 \cdot 28$ $9 \cdot 16$ $9 \cdot 50$ $11 \cdot 18$	7·86 7·07 7·09 7·70 7·99	8·61 7·99 7·91 7·89 8·21

### VICTORIA.

Period.	Average Annual Excess				Period.	Average Annual Excess	Annual Rates per 1,000 of Mean Population.			
	of Births over Deaths.	Births.	Deaths.	Natural Increase.		of Births over Deaths.	Births.	Deaths.	Natural Increase	
1880-84 1885-89 1890-94	14,466 16,741 20,059	0 - 00	$15.87 \\ 14.62$	$16.40 \\ 17.37$	1925–29 1930–34	18,218 $12,249$	20 · 24 16 · 27	9·67 9·50	10·57 6·77	
1895–99 1900–04 1905–09 1910–14 1915–19 1920–24	15,625 14,859 16,062 18,795 16,818 19,647	$\begin{array}{c} 26 \cdot 76 \\ 25 \cdot 08 \\ 24 \cdot 76 \\ 25 \cdot 42 \\ 23 \cdot 13 \\ 22 \cdot 89 \end{array}$	13 · 81 12 · 78 11 · 93 11 · 57 11 · 38 10 · 40	13·85 11·75	1933 1934 1935 1936 1937	10,936 9,180 9,428 10,105 11,118	15 · 59 15 · 20 15 · 16 15 · 63 16 · 02	10.18 $10.03$ $10.16$	$5 \cdot 47$	

The Victorian death rates are below those of England and Wales at nearly all periods of life. In England and Wales in 1936 the excess of births over deaths was 2 '7 per 1,000 of population.