## CHAPTER XXV. VITAL STATISTICS.

## § 1. Births.

1. Births, 1929.-The number of male and female births and the total births registered in Australia during the year 1929 are shown in the tables hereunder. The numerical relation which these births bear to the population, and various other associated features, are given in later tables.

BIRTHS, 1929.



(a) 13 Stillborn twins not included.
(d) 5 Stillborn twins not included.
(b) 4 Stillborn twins not included.
(e) 28 Stillborn twins not included.
(c) 6 Stillborn twins not Included.
2. Birth Rates.-The next table gives the crude birth rates for the years 1927 to 1929.

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

Generally speaking the crude birth rate of Australia has shown a constant decline for many years, and the rate for 1929 is the lowest yet recorded.

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

## BIRTH RATES, AND FACTORS AFFECTING THEM.-AVERAGE OF YEARS 1920, 1921, 1922.

| Particulars. | N.S.W. | Vic. | Q'land. | S.A. | W.A. | Tas. | $\begin{aligned} & \text { Aus- } \\ & \text { tralia. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Crude birth rate per 1,000 persons. | 25.99 | 23.54 | 26.72 | 24.23 | 24.14 | 26.99 | 25.15 |
| Birth rate per 100 women 15-44 incl. | 11.04 | 9.79 | 11.83 | 10.25 | 11.05 | 11.91 | 10.74 |
| Birth rate per 100 married women 15-44 incl.(a) | 19.39 | 19.29 | 21.26 | 18.71 | 19.62 | 21.83 | 19.85 |
| Birth rate per 100 married women $15-44$ incl. (corrected for age variation) | 19.14 | 19.44 | 20.77 | 18.99 | 20.44 | 21.24 | 19.65 |
| Ex-nuptial births-per cent. on all births | 4.82 | 4.84 | 5.00 | 3.28 | 4.02 | 5.11 | 4.69 |
| Ex-nuptial births per 100 unmarried women $15-44$ incl. | 1.16 | 0.92 | 1.26 |  |  |  | . 05 |
| Women 15-44 incl.-per cent. all persons | 23. 54 | 24.02 | 22.57 | 23.65 | 21.83 | 22.67 | 23.41 |
| Average age of all women 15-44 incl. | 28.67 | 28.61 | 28.09 | 28.73 | 28.45 | 28.10 | 28.54 |
| Married women 15-44 incl.-per cent. on all persons | 12.75 | 11.61 | 11.93 | 12.53 | 11.81 | 11.73 | 12.20 |
| Average age of married women 15-44 incl. . | 32.24 | 32,74 | 32.16 | 32.67 | 33.02 | 32,16 | 32.48 |

(a) Nuptial births only.

The following figures give a comparison for Australia, at Census periods from 1880, of the total births per 1,000 women (married and unmarried) and of the nuptial births per 1,000 married women of ages 15 to 44 inclusive :-

| Particulars. |  | $1880-82$. | $1890-92$. | $1900-02$. | $1910-12$. | $1920-22$. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

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

CRUDE BIRTH RATES( $a$ ).-VARIOUS COUNTRIES.


[^0](ii) Nuptial Birth Rates at Child-bearing Ages. The wide discrepancies between the crude birth rates of the various countries are, to some extent, due to differences in sex and age constitution and in conjugal condition. If the birth rates be calculated per 1,000 women of child-bearing ages, the comparison gives more reliable results. A table of results so calculated appeared in the previous Year Book, p. 941, and showed that Australia, with a rate of 198 nuptial births per 1,000 married women aged 15 to 49 years, was midway between the maximum and minimum of the countries for which these rates were obtained.
4. Masculinity of Births.-(i) General. The masculinity of births, i.e., the excess of males over females per 100 births registered for each State, during recent years varied from 0.32 in Tasmania in 1924 to 4.15 in the same State in 1929. On account of the smallness of the numbers, the returns from the Northern Territory and the Federal Capital Territory have not been taken into consideration.

Although the general tendency of the change in the sex composition of the ex-nuptial births has been the same as in the total births, the results in the smaller States do not show the same consistency in the former as in the latter on account of the relatively small numbers involved.

MASCULINITY(a) OF BIRTHS REGISTERED, 1929.

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

Note.-The minus sign (-) denotes an excess of females over males per 100 total ex-nuptial births.
(ii) Masculinity of Nuptial and Ex-nuptial Births-Various Countries. A table showing the masculinity of nuptial and ax-nuptial births for various countries appeared on p. 942 of the previous issue of this Year Book. It is, however, not proposed to repeat the table in this issue.
5. Ex-nuptial Births.-(i) General. The number of ex-nuptial births reached its maximum, 7,438 , in 1913 , but it has since fallen considerably. On the average of the five years 1910-14, the number of ex-nuptial births in Australia was 7,171, while for the period 1925-29 it was only 6,259 , a decline of 12.7 per cent., whereas the annual average total births for the same period increased by 3 per cent.; hence a comparison between the results for these two periods shows that the proportion of ex-nuptial births has fallen from 5.55 to 4.70 per cent. of all births.

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

(ii) Rate of Ex-nuptiality. The rate of ex-nuptiality, i.e., the percentage of ex-nuptial on total births has increased slightly in recent years to 4.70 per cent. of total births.

A better comparison is obtained by calculating the number of ex-nuptial births per thousand of the single and widowed female population between the ages of 15 and 45. The number of ex-nuptial births per 1,000 unmarried women of ages 15 to 45 has been found to be as follows :-Years $1880-82,14.49$; years $1890-92,15.93$; years $1900-02,13.30$; years $1910-12,12.53$; and years $1920-22,10.50$. The comparative results given in the previous issue were taken from the Annuaire International de Statistique, Vols. II. and V., and showed that ex-nuptial births varied from 38 per 1,000 unmarried women aged 15 to 49 years in Hungary to 4 in Ireland and Bulgaria. The rate for Australia was 12 per thousand.
(iii) Comparison of Rates. The following table shows the relative proportions of ex-nuptial and nuptial births to the total population during the last five years :-

CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES( $a$ ).-AUSTRALIA, 1925 TO 1929.

(a) Number of births per 1.000 of mean population.
6. Legitimations.-In the several States Acts have been passed to legitimize children born before the marriage of their parents, provided that no legal impediment to the marriage existed at the time of birth. On registration in accordance with the provisions of the Legitimation Acts, any child who comes within the scope of its intentions, born before or after the passing thereof, is deemed to be legitimized from birth by the post-natal union of its parents, and entitled to the status of offspring born in wedlock. (During 1929, 891 children were legitimated in Australia.)
7. Multiple Births.-Among the total number of 129,480 births registered in Australia in 1929 , there were 126,859 single births, 2,594 twins, and 27 triplets. The number of cases of twins was 1,311 , there being 26 stillbirths, and there were 9 cases of triplets, including one stillbirth. The total number of mothers was, therefore, 128,179; the proportion of mothers of twins being one in every 98 , of mothers of triplets one in every 14,242 of total mothers, and of all multiple births one in every 97 mothers. Multiple births occurred in 1.03 per cent of confinements.
8. Ages of Parents.-(i) Single Births. The relative ages of the parents of children registered in 1929 have been tabulated separately for male and femalo births, twins and triplets being distinguished from single births, and are shown for single ages in the Bulletin of "Australian Demography," No. 47, published by this Bureau. In the present work the exigencies of space allow only the insertion of corresponding tables showing the relative ages of parents in groups of five years.
ages of parents in cases of single births.-AUSTRALIA, 1929.

| Ages of Fathers and Sexes of Children. | Total Children. | Ages of Mothers. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under $15 .$ | $\begin{aligned} & 15 \text { to } \\ & 19 . \end{aligned}$ | $\begin{aligned} & 20 \text { to } \\ & 24 . \end{aligned}$ | $\begin{gathered} 25 \text { to } \\ 29 . \end{gathered}$ | $\begin{gathered} 30 \text { to } \\ 34 . \end{gathered}$ | $\begin{gathered} 35 \text { to } \\ 39 . \end{gathered}$ | $\begin{gathered} 40 \text { to } \\ 44 . \end{gathered}$ | 45 and upwards. | $\begin{aligned} & \text { Un- } \\ & \text { speci- } \\ & \text { fied. } \end{aligned}$ |
| $\text { Under }\left\{\begin{array}{l} \text { Males. } \\ \text { Females } \\ \text { Total .. } \end{array}\right.$ | 457 389 846 | 1 4 | 348 291 639 |  <br> 100 <br> 92 <br> 192 | 5 5 10 | 1 |  |  | $\cdots$ | $\cdots$ |
| $20 \text { to } 24\left\{\begin{array}{l} \text { Males. } \\ \text { Females } \\ \text { Total. } \end{array}\right.$ | 8,079 7,579 15 | 4 1 5 | 1,949 1,889 3 | 5,146 <br> 4,783 <br> 98 | 888 | $\begin{array}{r}85 \\ 97 \\ \hline\end{array}$ | 10 | 3 3 6 | $\cdots$ | $\because$ |
|  |  | 5 | 3,838 | 9,929 | 1,67 | 182 | 21 | 6 |  |  |
| 25 to $29\left\{\begin{array}{l}\text { Males. } \\ \text { Females }\end{array}\right.$ | 16,631 $\mathbf{1 5 , 5 4 0}$ |  | 835 <br> 794 | $\underset{8,443}{8,885}$ | 7,383 | 1,331 1,229 | 181 | 16 19 | 1 |  |
|  |  | $\ldots$ | 1,629 | 13,328 | 14,274 | 2,560 | 344 | 35 | 1 |  |
| 30 to 34\{ $\begin{aligned} & \text { Males. } \\ & \text { Females } \\ & \text { Tatal }\end{aligned}$ | 14,545 13,713 | 1 | 188 188 | 2,195 2,109 | 5,935 5,616 | 5,242 4,854 10,090 | $\begin{array}{r}906 \\ \hline 868 \\ \hline\end{array}$ | 72 | 2 |  |
| So Total.. | 28,258 | 1 | 376 | 4,304 | 11,551 | 10,096 | 1,774 | 148 |  |  |
| Males. | 11,411 |  | 51 | 637 | 2,385 | 4,361 | 3,550 | 416 | 10 | 1 |
| 35 to 39 Females | 10,755 | $\ldots$ | 43 | 668 | 2,357 | 3,925 | 3,354 | 399 | 9 |  |
| Total .. | 22,166 | $\ldots$ | 94 | 1,305 | 4,742 | 8,286 | 6,904 | 815 | 19 | i |
| 40 to $44\left\{\begin{array}{l}\text { Males. } \\ \text { Females }\end{array}\right.$ | 6,713 6,364 |  | $\stackrel{20}{25}$ | 187 195 | 767 | 1,700 1,676 | $\stackrel{2,679}{2,507}$ | 1,323 1,266 | 37 32 | $\because$ |
| 40 to 44 \{ $\begin{aligned} & \text { Females } \\ & \text { Total . }\end{aligned}$ | 13,07r | $\because$ | 45 | 1982 | 1,430 | 1,376 | 5,186 | 1,268 | 32 69 |  |
| $45 \text { to } 49\left\{\begin{array}{l} \text { Males. } . \\ \text { Females } \end{array}\right.$ | 2,925 2,806 | $\because$ | 10 5 | 74 67 | 221 238 | 535 | 1,044 1,034 | 903 841 | 138 134 |  |
| - | 5,731 |  | 15 | 141 | 459 | 1,022 | 2,078 | 1,744 | 272 |  |
| $50 \text { to } 54\left\{\begin{array}{l} \text { Males. } \\ \text { Females } \end{array}\right.$ | $\begin{array}{r}993 \\ 963 \\ \hline 98\end{array}$ | $\because$ | 1 2 8 | 18 17 | ${ }_{65}^{65}$ | 157 153 | 303 <br> 304 | 388 | ${ }_{68}^{67}$ |  |
| Total .. | 1,956 | $\ldots$ | 3 | 35 | 125 | 310 | 607 | 743 | 133 |  |
| 55 to $50\{$ Males. | 325 365 | $\cdots$ | ${ }_{3}^{1}$ | 5 | 36 | 52 | 95 | 110 | 26 |  |
| . 55 to $59\left\{\begin{array}{l}\text { Females } \\ \text { Total . }\end{array}\right.$ | 365 | $\cdots$ | 3 4 | ${ }^{8} 8$ | ${ }^{27}$ | 48 | 128 | 121 | 30 |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 00 ${ }^{\text {Males. }}$ | 112 | $\cdots$ |  | 4 | 7 | 15 | 49 | 28 | 8 |  |
| 60 to $04\left\{\begin{array}{l}\text { Females } \\ \text { Total.. }\end{array}\right.$ | 109 221 | $\cdots$ | 1 | 4 | 11 | 23 38 | 36 85 | 37 65 | $\begin{array}{r}9 \\ \hline\end{array}$ |  |
| 65 and Males. . |  |  |  |  | 2 | 18 | 14 | 18 |  |  |
| up- Females | 52 |  | $\because$ | 3 | 6 | 7 | 18 | 14 | 4 | $\cdots$ |
| wards Total.. | 110 | $\cdots$ | $\cdots$ | 4 | 8 | 25 | 32 | 32 | 9 | $\cdots$ |
| Un- Males | 4 | -• |  | .. | 2 | . |  | 2 | .. |  |
| specher $\left\{\begin{array}{l}\text { Tomale. } \\ \text { Total }\end{array}\right.$ | 7 |  | 1 |  |  | $\cdots$ |  | 2 |  |  |
| Nuptial Males. | 62,253 | 8 | 3,404 | 15,252 | 17,690 | 13,497 | 8,831 | 3,273 | 297 | 1 |
| chil- $\{$ Females | 58,638 | 2 | 3,241 | 14,386 | 16,662 | 12,499 | 8,424 | 3,137 | 287 |  |
| dren Total.. | 120,891 | 10 | 6,645 | 29,638 | 34,352 | 25,996 | 17,255 | 6,410 | 584 | 1 |
| Ex- Males. | 3,073 | 19 | 943 | 1,012 | 459 | 321 | 216 | 90 | 12 |  |
| nuptial $\{$ Females | 2,895 | 25 | 935 | 988 | 416 | 246 | 211 | 88 | 4 | 2 |
| children Total .. | 5,988 | 44 | 1,878 | 1,980 | 875 | 567 | 427 | 178 | 16 | 3 |
| Total Males. . | 65,320 | 27 | 4,347 | 16,264 | 18,149 | 13,818 | 9,047 | 3,363 | 309 |  |
| children $\left\{\begin{array}{l}\text { Females }\end{array}\right.$ | 61,533 | 27 | 4,176 | 15,354 | 17,078 | 12,745 | 8,635 | 3,225 | 291 | 2 |
| TTat.. | 126,859 | 54 | 8,523 | 31,618 | 35,227 | 26,563 | 17,682 | 6,588 | 600 | 4 |

(ii) Twins. The ages of parents of twins in 1929 are given hereunder:-

AGES OF PARENTS OF TWINS.-AUSTRALIA, 1929.

(a) One stillborn twin not included.
(b) Two stillborn twins not included.
(c) Three stillborn twins not incladed.
(d) Four stillborn twins not included.
(iii) Triplets. Particulars regarding the ages of parents in case of triplets are given in the next table:-
ages Of parents of Triplets.-AUSTralia, 1929.

9. Birthplaces of Parents.-The relative birthplaces of the parents of children whose births were registered during the year 1929 will be found in the Bulletin of "Australian Demography," published by this Bureau. A summary of the results of the tabulation is given hereunder.

BIRTHPLACES OF PARENTS.-AUSTRALIA, 1929.

| Birthplates. | Fathers. |  |  | Mothers of Nuptial Children. |  |  | Mothers of Ex-nuptial Children. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Single Births. | Twins. | Trip- lets. | Single Births. | Twins. | $\begin{aligned} & \text { Trip- } \\ & \text { lets. } \end{aligned}$ | Single Births. | Twins. | Triplets. |
| AUSTRALASIA- |  |  |  |  |  |  |  |  |  |
| New South Wales | 39,572 | 413 | 2 | 41,219 | 421 | 2 | 2,293 | 26 |  |
| Victoria.. | 29,547 | 324 | 2 | 29,185 | 316 | 3 | 1,276 | 17 | - |
| Queensland | 13,054 | 108 | $\cdots$ | 14,485 | 124 |  | 865 | 4 | $\cdots$ |
| South Australia | 9,485 | 89 | 2 | 9,345 | 86 | 1 | 266 | 3 |  |
| Western Australia. . | 3,994 | 36 | - | 5,099 | 47 | $\cdots$ | 267 |  | $\ldots$ |
| Tasmania | 5,495 | 45 | 1 | 5,437 | 44 | 1 | 337 | 4 | $\cdots$ |
| Northern Territory | 38 | 1 | . | 34 | 1 | . | 11 | . . |  |
| $\begin{array}{cc}\text { Federal } & \text { Capital } \\ \text { Territory } & \text {. }\end{array}$ | 16 |  | . | 16 |  |  | 1 |  |  |
| Now Zealand .. | 925 | 6 | $\cdots$ | 749 | 14 | $\cdots$ | 68 |  |  |

BIRTHPLACES OF PARENIS.-AUSTRALIA, 1929-continued.


## BIRTHS—1860 TO 1929.



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

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


DEATHS-1860 TO 1929.


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

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


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

STATE BIRTH-RATE GRAPHS. (See page 709.)
Explanation.-The base of each small square represents one year's interval, and the vertical height one birth per thousand of the population-the basic line for each State being twenty per thousand of the population.

STATE DEATH-RATE GRAPHS. (See page 710.)
Explanation.-The base of each small square represents one year's interval, and the vertical height one death per thousand of the population. The zero for each State is shown by a thickened line.














 30 $\square H-1+\square$




10. Occupations of Fathers.-A summary of the main groups of occupations of the fathers of all nuptial children whose births were registered in 1929 and the percentage of each class on the total are given in the following table : -

| Occupations. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { Fathers. } \end{aligned}$ | Orcupations. | $\begin{aligned} & \text { Number of } \\ & \text { Fathers. } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Class I.-Professional. |  | Class V.-Industrial. |  |
| Government, Defence, Law | 2,517 | Art and Mechanic Productions | 6,588 |
| Others | 3,719 | Textiles and Fibrous Materials | 1,644 |
| Total Class I. | 6,266 |  | 2,247 |
| Percentage on Total Fathers | $5 \cdot 13$ | stances | 674 |
|  |  | Metals and Minerals | 2,843 |
| Class II.-Domestic. |  | Fuel, Light, and Energy | 1,265 |
|  |  | Building and Construction | 7,156 |
| Board and Lodging .. .. | 1,087 | Others | 31,238 |
| Others | 1,026 |  |  |
| Total Class II. | 3 | Iotal Class V. | 53,697 |
|  |  | Percentage on Total Fathers | $43 \cdot 96$ |
| Percentage on Total Fathers | $1 \cdot 73$ |  |  |
| Property and Finance .. | 1,396 | Class VI.-Agricultural, |  |
| Art, Mechanic, and Textile Products | 1,020 | Pastoral, Mining, Etc. |  |
| Food and Drinks | 3,938 | Agricultural | 18.385 |
| Animal and Vegetable Sub- |  | Pastoral .- | 4,923 |
| stances . ${ }^{\text {a }}$. | 453 | Mining and Quarrying | $\bigcirc, 4 \geq 5$ |
| Fuel, Light, and Metals | 286 | Others .. . | 1,300 |
| Merchants and Dealers | 2,487 |  |  |
| Others | 7,798 | Total Class VI. | 27,033 |
| Total Class III. | 17,378 | Percentage on Total Fathers | $22 \cdot 13$ |
| Percentage on Total Fathers | $14 \cdot 23$ |  |  |
| Class IV.-Transport and Communication. |  | Class VII.-Indefinite. |  |
| Railway Trafic | 4,802 | Independent Means . $\quad$. | 292 |
| Road and Tramway Traffic | 7,443 | Occupation Unspecified | 88 |
| Sea and River Traffic Others | $\begin{aligned} & 1,289 \\ & 1,749 \end{aligned}$ | Total Class VII. | 380 |
| Total Class IV. | 15,283 | Percentage on Total Fathers | $0 \cdot 31$ |
| Percentage on Total Fathers | $12 \cdot 51$ | Total | 122,150 |

[^1](ii) Duration of Marriage and Issue of Mothers. The following table shows that the duration of marriage of mothers of nuptial children ranged from less than one year up to between 31 and 32 years, and that the average family increased fairly regularly with the duration of marriage. The average number of children of all marriages was 2.96 the corresponding fgures for 1928 being 2.99 ; for 1927, 3.03 ; for 1926, 3.06 ; and for $1925,3.10$.

DURATION OF MARRIAGE AND ISSUE OF MOTHERS.-AUSTRALIA, 1929.

| Duration of Marriage. | Total Mothers. | Total | Average Nimber of Children. | $\begin{aligned} & \text { Duration } \\ & \text { of } \\ & \text { Marriage. } \end{aligned}$ | Totai Mothers. | Total lssue. | Average Number of Children. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Years. |  |  |  | Years. |  |  |  |
| 0-1 | 20,233 | 20,687 | $1 \cdot 02$ | 18-19 | 1,334 | 9,804 | 7.35 |
| 1-2 | 13,437 | 17,226 | $1 \cdot 28$ | 19-20 | 1,054 | 8,341 | 7.91 |
| 2-3 | 12,503 | 22,296 | $1 \cdot 78$ | 20-21 | 775 | 6,133 | $7 \cdot 91$ |
| 3-4 | 10,366 | 22,000 | 2-12 | 21-22 | 633 | 5,358 | $8 \cdot 46$ |
| 5-5 | 9,016 | 22,403 | $2 \cdot 48$ | 22-23 | 425 | 3,851 | $9 \cdot 06$ |
| 6-6 | 7,794 | 21,699 | $2 \cdot 78$ | 23-24 | 292 | 2,716 | $9 \cdot 30$ |
| 7-7 | 6,737 | 21,278 | 3. 16 | 24-25 | 218 | 2,202 | $10 \cdot 10$ |
| 8-8 | 6,047 | 20,890 | $3 \cdot 45$ | 25-26 | 131 | 1,359 | $10 \cdot 37$ |
| $9-9$ | 5,699 | 21,642 | $3 \cdot 80$ | 23-27 | 71 | 691 | 9.73 |
| 9-10 | 5,256 | 21,742 | $4 \cdot 14$ | 27-28 | 31 | 318 | $10 \cdot 26$ |
| 10-11 | 3,872 | 17,468 | $4 \cdot 51$ | 28-29 | 20 | 235 | 11.75 |
| 11-12 | 2,929 | 13,991 | 4.78 | 29-30 | 11 | 124 | $11 \cdot 27$ |
| 12-13 | 2,563 | 12,975 | $5 \cdot 06$ | 30-31 | 8 | 91 | $11 \cdot 38$ |
| 13-14 | 2,608 | 13,782 | $5 \cdot 28$ | 31-32 | 1 | 5 | $5 \cdot 00$ |
| 14-15 | 2,421 | 13,942 | 5•76 | 32-33 |  |  |  |
| 15-16 | 2,163 | 13,261 | $6 \cdot 13$ |  |  |  |  |
| 16-17 | 1,857 | 12,199 | $6 \cdot 57$ | Total | 122,113 | 361,708 | $2 \cdot 96$ |
| 17-18 | 1,608 | 10,999 | $6 \cdot 84$ |  |  |  |  |

(iii) Ages of Mothers and Issue. The ages of mothers, issue, and average family are given in the following table, which shows that the average family increased fairly regularly to a maximum of 7.48 children in the age-group 45 years and over, and that the greatest number of mothers occurs in the group 25 to 29 years.

AGES AND ISSUE OF MOTHERS.-AUSTRALIA, 1929.

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

PREVIOUS ISSUE OF MOTHERS OF VARIOUS AGES.-AUSTRALIA, 192y.

| Previous lssue. | Mrothers' Ages. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 20 Years. | $\begin{aligned} & 20-24 \\ & \text { Years. } \end{aligned}$ | $\begin{aligned} & 25-29 \\ & \text { Years. } \end{aligned}$ | $\begin{aligned} & 30-34 \\ & \text { Years. } \end{aligned}$ | $\begin{aligned} & 35-39 \\ & \text { Years. } \end{aligned}$ | $\begin{aligned} & 40-44 \\ & \text { Years. } \end{aligned}$ | 45 Years and Over. | Total. |
| 0 | 5,420 | 15,454 | 10,853 | 4,276 | 1,700 | 408 | 41 | 38,152 |
| 1 | 1,137 | 9,191 | 10,011 | 5,833 | 2,358 | 441 | 18 | 28,989 |
| 2 | 115 | 3,674 | 6,447 | 5,140 | 2,691 | 645 | 30 | 18,742 |
| 3 | 5 | 1,166 | 4,020 | 4,114 | 2,643 | 718 | 47 | 12,713 |
| 4 | 1 | 286 | 2,110 | 2,893 | 2,279 | 728 | 52 | 8,349 |
| 5 | . | 39 | 877 | 1,940 | 1,716 | 705 | 54 | 5,331 |
| 6 | . | 8 | 280 | 1,133 | 1,419 | 684 | 49 | 3,573 |
| 7 | . | 4 | 82 | 564 | 1,149 | 641 | 55 | 2,495 |
| 8 | . | . | 20 | 257 | 740 | 494 | 53 | 1,564 |
| 9 | . | . | 7 | 103 | 418 | 356 | 59 | 943 |
| 10 | . | . | . . | 45 | 232 | 286 | 41 | 604 |
| 11 | . | . | . | 11 | 114 | 206 | 37 | 368 |
| 12 | . | . | . . | 6 | 37 | 88 | 26 | 157 |
| 13 | . | $\cdots$ | . | 1 | 16 | 46 | 12 | 75 |
| 14 | . | . | . | . . | . 8 | 25 | 7 | 40 |
| 15 | . . | $\cdots$ | - . | . . | 1 | 8 | 2 | 11 |
| 16 | . | - | . . | . . | .. | 2 | 2 | 4 |
| 17 | . | . | $\cdots$ | . | $\cdots$ | 2 |  | 2 |
| 18 | . | . | $\cdots$ |  |  |  | 1 | 1 |
| Total Mothers | 6,678 | 29,822 | 34,707 | 26,316 | 17,521 | 6,483 | 586 | 122,113 |

(v) Previous Issue of Mothers of Twins and Triplets. Figures regarding the previous issue of mothers of twins and triplets show that 281 mothers had twins at their first confinement; 283 at their second; 188 at their third; 154 at their fourth; 115 at their fifth; 92 at their sixth; 51 at their seventh; 34 at their eighth; 23 at their ninth; 16 at their tenth; 8 at their eleventh; 2 at their twelfth; 2 at their thirteenth; and 1 at her fifteenth.

Of the 9 cases of triplets registered during 1929, 2 were second confinements, 2 were third, 3 were fourth, and 1 each at the sixth and eighth.
12. Interval between Marriage and First Birth.-(i) Interval and Sex of Children. The following table shows the interval between marriage and first birth, distinguishing the sexes of the children. Twins and triplets are included, the eldest born only being enumerated :-
INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH.-AUSTRALIA, 1929.


[^2](ii) Ages of Molhers and Interval. The previous issuc of mothers of ex-nuptial ohildren is not recorded, but for the purposes of the following table all ex-nuptial births have been assumed to be first births. The table shows in a condensed form the ages of mothers in the cases of ex-nuptial first births, of nuptial first births occurring less than nine months after marriage, and of nuptial first births occurring nine months or more after marriage. A comparison of the combined total of the first two columns with the total of nuptial children born nine months or more after marriage shows that for all ages the ratio was about 2 to 3 . At all ages up to and including 21, however, there was a great preponderance of ex-nuptial births and of births following on ante-nuptial conception. It must, of course, be understood that a certain number of premature births is necessarily included among the births which occurred less than nine months after marriage, but information in connexion therewith is not available. The tabulation in single ages of mothers appears in Demography Bulletin No. 47.

AGES OF MOTHERS AND INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH, ETC.-AUSTRALIA, 1929.

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

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

## § 2. Marriages.

1. Marriages, 1929. -The number of marriages registered in Australia during 1929 was 47,500 , giving a rate of 7.45 per 1,000 of the mean population for the year. The number of marriages in each State, together with the corresponding crude marriage rate, are given hereunder:-

MARRIAGES, 1929.

(a) Number of marriages (nut persolis married) per 1,000 of mean annual population.

As in some international tabulations the marriage rates are calculated per 1,000 of the unmarried population of 15 years and over, the corresponding rates have been worked out for Australia for the last four Census periods for which the particulars are available. The figures comprise in each case the Census year with the year immediately preceding and the year immediately following, and are as follows:-Years 1880-82, 48.98 ; years $1890-92,45.74$; years $1900-02,42.14$; years $1910-12,50.44$; and years $1920-22,56.02$. These rates refer, of course, to persons married and not to marriages, as is the case in the preceding table.
2. Marriage Rates in Various Countries.-The following table shows the marriage rate for Australia in comparison with various other countries :-

CRUDE MARRIAGE RATES (a).-VARIOUS COUNTRIES.

| Country. | Tear. | $\begin{aligned} & \text { Crude } \\ & \text { Marriage } \\ & \text { Rate. } \end{aligned}$ | Country. | Year. | Crude Marriage Rate. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Soviet Republics | 1926 | 10.6 | Great Britain |  |  |
| United States (b) | 1926 | 10.2 | Northern Ireland | 1928 | 7.6 |
| Rumania | 1927 | 9.8 | Denmark | 1927 | 7.6 |
| Poland | 1923 | 9.8 | Spain | 1928 | 7.6 |
| Union of South Africa (c) | 1928 | 9.4 | Australia | 1929 | 7.5 |
| Czecho-Sloviakia . | 1928 | 9.3 | Switzerland | 1928 | 7.5 |
| Germany | 1928 | 9.2 | Victoria | 1929 | 7.3 |
| Belgium | 1928 | 8.9 | Italy | 1928 | 7.0 |
| France | 1928 | 8.3 | Scotland | 1929 | 6.8 |
| Western Australia | 1929 | 8.2 | Queensland | 1929 | 6.7 |
| Tasmania | 1929 | 8.0 | Sweden . | 1928 | 6.7 |
| Japan | 1927 | 8.0 | South Australia | 1929 | 6.4 |
| New South Wales | 1929 | 7.9 | Ceylon | 1928 | 8.1 |
| England and Wales | 1929 | 7.9 | Norway | 1928 | 6.0 |
| Canada | 1929 | 7.9 | Northern Ireland | 1928 | 5.8 |
| New Zealand | 1929 | 7.5 | Irish Free State | 1929 | 4.5 |
| Netherlands .. .. | 1928 | 7.7 |  |  |  |

(a) Number of marriages per 1.000 of mean population.
(b) Registration area.
(c) White population only.
3. Ages and Conjugal Condition at Marriage.-(i) General. The ages at marriage of bridegrooms and brides will be found in "Australian Demography," Bulletin No. 47. A summary in age groups is given in the table hereunder, which also shows the previous conjugal condition of the contracting parties. There were 2,674 males who were less than twenty-one years of age married during 1929, while the corresponding number of females was -11,274. At the other extreme there were 60 men of sixty-five years and upwards, who described themselves as bachelors, and 10 spinsters of corresponding age.

AGES AND CONJUGAL CONDITION OF PERSONS MARRIED.-AUSTRALIA, 1929.

(ii) Relative Ages, Bridegrooms and Brides. The relative ages of bridegrooms and brides are shown for single years in "Australian Demography," Bulletin No. 47; a condensation into age-groups of five years is given below :-

RELATIVE ages of persons married.-AUSTRALIA, 1929.

(iii) Average Ages, Bridegrooms and Brides. The age at marriage of brides has declined slightly during recent years to an average of about 25 years. The figures for the five years are:-1925, 25.95 years; $1926,25.84 ; 1927,25.72 ; 1928,25.67$; and 1929, 25.62. For the five years $1907-11$ the average age was 25.70 years, compared with 25.92 years for the five years 1912-16, 26.07 years for the five years 1917-21, and 25.76 years for the five years 1925-29. The average age of bridegrooms in 1925 was 29.44 years; in 1926, 29.32 years; in 1927, 29.19 ; in 1928, 29.18 ; and in 1929, 29.18. It follows, therefore, that brides are generally speaking three and one-half years younger than bridegrooms.
4. Previous Conjugal Condition.-The number of bachelors and spinsters, widowed and divorced persons, who were married during the year 1929 has already been given. The following table shows the conjugal condition of the contracting parties :-

PREVIOUS CONJUGAL CONDITION OF PERSONS MARRIED.-AUSTRALIA, 1929.

| Conjugal Condition. |  | Total Bridegrooms. | Brides. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Spinsters. | Widows. | Divorced. |
| f Bachelors | $\cdots$ | 43,792 | 41,915 | 1,148 | 729 |
| Bridegrooms $\{$ Widowers | . | 2,834 | 1,856 | 775 | 203 |
| ( Dirorced | . | 874 | 669 | 106 | 99 |
| Total Brides . | . | 47,500 | 44,440 | 2,029 | 1,031 |

5. Birthplaces of Persons Married. -The following table shows the birthplaces of persons who were married in 1929. In "Australian Demography," Bulletin No. 47, the relative birthplaces of bridegrooms and brides will be found tabulated in full detail.

BIRTHPLACES OF PERSONS MARRIED.-AUSTRALIA, 1929.

6. Occupations and Ages of Bridegrooms.-A tabulation bas been made of the occupations and ages of all males married in Australia during 1929, an abridgment of which is given in the following table. The average ages of the persons falling under the twenty-eight subdivisions were determined, and it appears that, apart from the "Indefinite class," which consists chiefly of persons who have retired from business and who are living on income from investments, and who may be expected to have reached a comparatively high age before attaining a position of financial independence, the average age ranges from 27.14 years for those engaged in the manufacture of animal and vegetable substances, to 32.33 years in the class engaged in pastoral pursuits. On the exparience of 1929 the average ages at marriage of bridegrooms in the larger classes of occupations were as follows :-Professional, 30.13 years; Domestic, 30.34 years; Commercial, 29.59 years; Transport, 28.60 years; Industrial, 28.43 years; and Primary Producer, 30.75 years.

OCCUPATIONS AND AGES OF BRIDEGROOMS.-AUSTRALIA, 1929.


| Ages at Marriage. |  | Manufacturing. |  |  |  |  |  |  | Primary Producers. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | $\text { - } 17 \mathrm{Y} 1 \mathrm{O}$ |  | $\begin{aligned} & \text { 萢 } \\ & \text { B } \\ & \text { H } \\ & \text { ت } \end{aligned}$ |  | $\begin{aligned} & \dot{\text { in }} \\ & \text { W } \\ & \text { 吉 } \end{aligned}$ |  |
| Under 20. | 108 | 37 | 39 | 14 | 53 | 14 | 78 | 402 | 72 | 27 | 33 | 12 |  |
| 20 to 24 | 1,222 | 296 | 378 | 153 | 406 | 218 | 1,095 | 4,054 | 1,479 | 366 | 276 | 114 | 9 |
| 25 , 29 | 1,088 | 239 | 260 | 168 | 398 | 286 | 823 | 3,41를 | 1,864 | 505 | 215 | 106 | 10 |
| 30 ", 34 | , 399 | 92 | 94 | 50 | 127 | 88 | 350 | 1,277 | 943 | 289 | 78 | 41 | 16 |
| 35 ," 39 | 167 | 54 | 52 | 23 | 70 | 44 | 185 | 1, 694 | 474 | 189 | 42 | 29 | 10 |
| 40 ", 44 | 76 | 21 | 93 | 5 | 52 | 15 | 120 | 352 | 282 | 117 | 31 | 14 | 10 |
| 45,149 | 58 | 21 | 15 |  | 12 | 12 | 69 | $\because 36$ | 153 | 69 | 19 | 9 | 5 |
| 50 and over | 70 | 36 | $\underline{1}$ | 7 | 37 | 6 | 119 | 332 | 238 | 105 | 38 | - | 76 |
| Notstated |  |  |  |  |  |  | 1 |  |  |  | .. |  |  |
| Total | 3,188 | 796 | 832 | 360 | 1,155 | 663 | 2,840 | 10,759 | 5,505 | 1,667 | 732 | 331 | 136 |
| Average age- |  |  |  |  |  |  |  |  |  |  |  |  |  |
| year 1929 | 27.92 | 28.89 | 27.66 | 27.14 | 28.44 | 8.10 | 29.08 | 28.50 | 30.60 | 32.33 | 29.18 | 8. 74 | 48.07 |

7. Fertility of Marriages.-The quotient obtained by division of the nuptial births registered, e.g., during the five years 1925 to 1929, by the number of marriages registered during the five years 1920 to 1924, i.e., the period antecedent by five years to the period of the births, has been called the "fertility of marriages." The quotient for this period is 2.84 -in other words, the number of children to be expected from every marriage in Australia is about three. This method, while not absolutely accurate, generally furnishes results which agree fairly well with those found by more elaborate and carcful investigation. For the following five-yearly periods the results were :-1921-25, 3.25 ; 1922-26, 3.14; 1923-27, 2.79; 1924-28, 2.81; and 1925-29, 2.84.
8. Registration of Marriages.-In all the States marriages may be celebrated either by ministers of religion whose names are registered for that purpose with the RegistrarGeneral, or by certain civil officers-in most cases district registrars. Most of the marriages are celebrated by ministers of religion. The proportions so celebrated in 1929 were :-New South Wales, 93.17 per cent.; Victoria, 91.96 per cent.; Queensland, 96.04 per cent.; South Australia, 92.63 per cent. ; Western Australia, 82.15 per cent.; and Tasmania, 93.34 per cent., the percentage for Australia being 92.40. The registered ministers in 1929 belong to more than forty different denominations, some of which, however, can hardly be regarded as having any valid existence. A number of these have been omitted from the tabulation and are bracketed under the heading "Other Christian." The figures for 1929 are shown in the following table :-

MARRIAGES IN EACH DENOMINATION.-AUSTRALIA, 1929.

| Denomination. | N.S.w. | Vic. | Qld. | S.A. | W.A. | Tas. | Nor.Ter. | Fed. <br> Cap. <br> Ter | Australia. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | No. | Per. Cent. |
| Church of England | 8,060 | 3,694 | 1,872 | 911 | 1,250 | 692 | 4 | 18 | 16,501 | 34.74 |
| Roman Catholic. . | 4,058 | 2,309 | 1,379 | 459 | 547 | 241 | 4 | 15 | 9,012 | 15.98 |
| Methodist | 2,258 | 1,833 | 979 | 1,086 | 461 | 314 | 6 | 4 | 6,941 | 14.61 |
| Presbyterian | 2,584 | 2,375 | 1,005 | 185 | 256 | 130 |  | 6 | 6,541 | 13.77 |
| Congregational | 458 | 473 | 107 | 167 | 106 | 75 | $\cdots$ | $\cdots$ | 1,386 | 2.92 |
| Baptist | 342 | 619 | 157 | 218 | 43 | 70 | $\cdots$ | $\cdots$ | 1,449 | 3.05 |
| Church of Christ | 104 | 328 | 52 | 105 | 37 | 44 | $\cdots$ | $\cdots$ | 670 | 1.41 |
| Lutheran | 44 | 74 | 149 | 178 | 6 | 1 | $\cdots$ | $\cdots$ | 452 | 0.95 |
| Greek Catholic | 34 | 11 | 4 | 12 | 12 | . . |  | $\cdots$ | 73 | 0.15 |
| Unitarian | 4 | 3 | 3 | 3 |  |  |  | $\cdots$ | 13 | 0.03 |
| Salvation Army.. | 94 | 57 | 22 | SS | 21 | 10 |  | $\cdots$ | 99 | $0.6 \underline{2}$ |
| Seventh-Day Adventist | 34 | 18 | 14 | $10^{\circ}$ | 10 | 3 |  |  | 89 | 0.19 |
| Other Christian | 78 | 50 | 180 | 22 | 5 | 17 | 1 |  | 353 | 0.74 |
| Hebrew | 49 | 51 | 2 | 1 | 12 | 1 |  |  | 116 | 0.24 |
| Registrav's Office | 1,334 | 1,040 | 244 | 274 | 601 | 114 | 5 | $\cdots$ | 3,612 | 7.60 |
| Total | 19,535 | 12,935 | 6,169 | 3,719 | 3,367 | 1,712 | 20 | 43 | 47,500 | 100.00 |

## § 3. Deaths.

1. Deaths, 1929.-The following table shows the number of deaths, male and female, registered in each State during the year 1929 :-

DEATHS, 1929.

|  | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | North. Terr. | Fed. Cap. Terr. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males | 14,018 | 9,131 | 5,054 | 2,799 | 2,472 | 1,164 | 57 | 23 | 34,713 |
| Females .. | 10,564 | 7,586 | 3,255 | 2,240 | 1,458 | 1,012 | 8 | 16 | 26,139 |
| Total . . | 24,582 | 16,717 | 8,309 | 5,039 | 3,930 | 2,176 | 65 | 39 | 60,857 |

2. Crude Death Rates, 1929.-The crude death rates for 1929 are as follow :-

CRUDE DEATH RATES (a), 1929.

| Sex. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | North. <br> Terr. | Fed. <br> Cap. <br> Terr. | Aus- <br> tralia. |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Males | $\ldots$ | 11.17 | 10.40 | 10.32 | 9.35 | 11.08 | 10.97 | 20.09 | 4.87 | 10.65 |
| Females | $\ldots$ | 8.74 | 8.51 | 7.48 | 8.00 | 7.75 | 9.40 | 5.97 | 4.37 | 8.39 |
| Total |  | 9.98 | 9.45 | 8.98 | 8.70 | 9.55 | 10.18 | 15.56 | 4.65 | 9.65 |

(a) Number of deaths per 1,000 of anaual mean population.
3. Index of Mortality.-(i) General. The death rates quoted above are crude rates, i.e., they simply show the number of deaths per thousand of mean population without taking the age constitution into consideration. Other conditions being equal, however, the death rate of a country will be lower if it contains a large percentage of young people (not infants). In order to obtain a comparison of the mortality of various countries on a uniform basis so far as sex and age constitution is concerned, the standard population compiled by the International Institute of Statistics, according to age distribution (eleven age-groups) of the population of nineteen European countries at their censuses nearest to the year 1900 is used in the computation of the "Index of Mortality" as distinguished from the crude death rate. Full details of the "Standard Population" will be found in Year Book No. 22, page 962.
(ii) Comparison of Rates. For the year 1929 on the basis of the crude rates there is a range of 1.48 per 1,000 persons between the lowest rate in South Australia (8.70) and the highest rate in Tasmania (10.18), whereas the standardized rates increase the range to 2.72 per 1,000 , i.e., between 8.97 in South Australia and 11.69 in Western Australia. In its application to the figures for 1929 the process of adjustment altered the relative positions of all States with the exception of South Australia and New South Wales from those determined by the crude rates. The principal change was that Western Australia in fourth place dropped to the lowest position, while Tasmania rose to the fourth place. The index of mortality for each state for 1929 is shown in the following table:-

INDEX OF MORTALITY, 1929.

| States. |  |  |  |  |  | Territories. |  | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N.S.W. | Victoria | Q'land. | S. Aust. | W. Aust. | Tas. | Northern. | Federal Capital. |  |
| 11.14 | 9.78 | 10.21 | 8.97 | 11.69 | 10.98 | 14.78 | 5.37 | 10.39 |

4. Crude Death Rates of Various Countries.-The following table gives particulars of the crude death rates of various countries for the latest available years:-

DEATH RATES (a).-VARIOUS COUNTRIES.

(a) Number of deaths per 1,000 of mean population. (b) Registration area.
5. Iniantile Deaths and Death Rate.-(i) Australia, 1925 to 1929. The universal experience that during the first few years of life the higher death rate of male infants tends to counteract the excess of male births is confirmed by the fact that out of 342,619 male infants born from 1925 to 1929, 20,216 (58.9 per 1,000 ) died during their first year of life, while of 323,591 female infants only 15,225 ( 47.0 per 1,000 ) died during the first year.

INFANTILE DEATHS AND DEATH RATES.—AUSTRALIA, 1925 TO 1929.

| Year. |  |  | Registered deaths under one year. |  |  | Rate of Infantile Mortality. (a) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Males. | Females. | Total. | Males. | Females. | Total. |
| 1925 | - | $\cdots$ | 4,089 | 3,162 | 7,251 | 58.80 | 47.73 | 53.40 |
| 1926 |  | $\cdots$ | 4,149 | 3,041 | 7,190 | 60.64 | 46.97 | 53.99 |
| 1927 |  | . | 4,102 | 3,181 | 7,283 | 59.55 | 49.08 | 54.47 |
| 1928 |  | . | 4,003 | 3,098 | 7,101 | 57.89 | 47.72 | 52.96 |
| 1929 |  | . | 3,873 | 2,743 | 6,616 | 53.13 | 43.64 | 51.10 |

(a) Number of deaths under 1 year per 1,000 live births registered.
(ii) States, $1 \dot{925}$ to 1929. For the States and Territories the rates of infantile mortality during the last five years were as follow :-

INFANTILE MORTALITY RATES (a), 1925 T0 1929.

| Year. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | North. Terr. | $\begin{aligned} & \text { Fed. } \\ & \text { Cap. } \\ & \text { Terr. } \end{aligned}$ | Australla. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1925 | 54.95 | 56.98 | 45.21 | 46.09 | 56.57 | 55.19 | 30.77 | 106.38 | 53.40 |
| 1926 | 57.61 | 55.68 | 50.65 | 44.33 | 49.27 | 47.61 | 68.49 | 53.33 | 53.99 |
| 1927 | 54.94 | 56.05 | 54.45 | 53.43 | 45.86 | 52.97 | 102.94 | $142.85 b$ | 54.47 |
| 1928 | 54.77 | 55.63 | 45.54 | 47.51 | 48.14 | 63.95 | 60.24 | $83.33 b$ | 52.96 |
| 1929 | 56.44 | 47.23 | 46.03 | 40.88 | 56.13 | 53.16 | 18.87 | $19.61 b^{\prime}$ | 51.10 |

(a) Number of deaths under 1 year per 1,000 live births registered.
(b) Based on deaths of infants born in the Federal Capital Territory.

The deaths of infants under one year of age during 1929 numbered 6,616 , the mortality rate being-51.10, which is the lowest recorded in Australia. Among the States in 1929, South Australia had the lowest and New South Wales the highest rate.
(iii) Districts. The total number of births and of deaths of children under one year of age for 1929 are shown in Australian Demography Bulletin, No. 47, Tables 24 and 76, for each of the sixty-four districts for which the vital statistics have been tabulated.
(iv) Various Countries and Cities. Compared with other countries, the States of Australia occupy a very favourable position, being surpassed by New Zealand, Norway, Netherlands, and Switzerland only. Among cities, however, the best of the Australian cities, Adelaide, has the sixth place only, whereas New Zealand has three cities amongst the first five on the list presented on the next page. A study of the respective rates shows that a high birth rate is often, though not invariably, accompanied by a high infantile death rate.

INFANTILE MORTALITY RATES (a).-VARIOUS COUNTRIES.

| Country | Year. | Rate of Infantile Mortality. (a) | Crude Birth Rate. (b) | Country. | Year. | Rate of Infantile Mortality. (a) | Crude Birth Rate (b) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New Zealand | 1929 | 34 | 19.0 | England and |  |  |  |
| South Australia | 1929 | 41 | 18.4 | Wales | 1929 | 74 | 16.3 |
| Queensland | 1929 | 46 | 20.0 | Northern Ireland | 1928 | 78 | 20.1 |
| Victoria.. | 1929 | 47 | 19.0 | Denmark | 1928 | 81 | 19.6 |
| Norway | 1927 | 51 | 18.0 | Belgiam | 1928 | 87 | 18.4 |
| Australia | 1929 | 51 | 20.3 | Scotland | 1929 | 87 | 19.0 |
| Netherlands | 1928 | 52 | 23.3 | Germany | 1928 | 59 | 18.6 |
| Tasmania | 1929 | 53 | 22.4 | France .. | 1923 | 91 | 18.2 |
| Switzerland | 1928 | 54 | 17.3 | Canada (includ- |  |  |  |
| Western Australia | 1929 | 56 | 22.0 | ing Quebec) | 1929 | 92 | 24.0 |
| New South Wales | 1929 | 57 | 21.4 | Italy . | 1927 | 120 | 27.0 |
| Sweden .. | 1928 | 62 | 16.1 | Spain | 1928 | 125 | 29.7 |
| Cnited States (Re- |  |  |  | Japan | 1928 | 138 | 34.4 |
| gistration Area) | 1928 | 68 | 19.7 | Egypt | 1928 | 151 | 42.2 |
| Great Britain and |  |  |  | Czecho-Slovakia | 1927 | 157 | 23.3 |
| Northern Ireland | 1928 | 68 | 17.2 | Ceylon | 1928 | 177 | 40.0 |
| Irish Free State | 1929 | 70 | 19.8 | Hungary | 1928 | 177 | 26.1 |
| Union of South Africa (Whites) | 1928 | 71 | 25.8 | Rumaria | 1927 | 209 | 34.4 |

[^3] mean population

INFANTILE MORTALITY RATES (a).-VARIOUS CITIES.

| Cly. |  | Year. | $\begin{aligned} & \text { Rate of } \\ & \text { Infantile } \\ & \text { Mortallty. } \\ & \text { (a) } \end{aligned}$ | Clty. |  | Year. | $\begin{gathered} \text { Rate of } \\ \text { Infantifle } \\ \text { Mortality. } \\ (a) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oslo |  | 1929 | 34 | Hamburg | $\cdots$ | 1929 | 7 |
| Auckland |  | 1929 | 34 | Johannesburg |  | 1929 | 78 |
| Christchurch |  | 1929 | 40 | Birmingham |  | 192S | 79 |
| Wellington |  | 1929 | 41 | London |  | 1929 | 79 |
| Amsterdam . |  | 1929 | 43 | Edinburgh .. |  | 1929 | 80 |
| Adelaide |  | 1929 | 44 | Munich |  | 1929 | 83 |
| San Franciseo |  | 1928 | 46 | Dresden | . | 1929 | 85 |
| Stockholm |  | 1929 | 46 | Sheffeld |  | 1929 | 87 |
| Melbourne |  | 1929 | 51 | Berlin |  | 1929 | 89 |
| Brisbane .. |  | 1929 | 55 | Liverpool | $\cdots$ | 1929 | 95 |
| Copenhagen .. |  | 1929 | 55 | Dublin |  | 1929 | 95 |
| Hobart |  | 1929 | 56 | Aberdeen |  | 1929 | 95 |
| Sydney |  | 1929 | 57 | Manchester |  | 1929 | 96 |
| Cape Town . |  | 1928 | 60 | Leeds |  | 1929 | 96 |
| Chicago |  | 1929 | 61 | Paris |  | 1929 | 99 |
| Perth |  | 1929 | 64 | Cologne |  | 1929 | 100 |
| New York City |  | 1928 | 66 | Buda Pest |  | 1929 | 101 |
| Washington.. |  | 1928 | 66 | Glasgow |  | 1929 | 107 |
| Los Angeles . . |  | 1928 | 66 | Belfast |  | 1929 | 112 |
| Philadelphia |  | 1928 | 71 | Leipzig |  | 1929 | 115 |
| Toronto |  | 1928 | 72 | Breslau |  | 1929 | 119 |
| Antwerp |  | 1929 | 73 | Montreal |  | 1928 | 144 |
| $\underset{\text { Neweastle, N.S.W. }}{\text { Detroit }}$ |  | 1929 |  |  | $\cdot$ | 1929 | 294 299 |
| Detroit |  | 1928 | 77 | Bombay |  | 1929 | 299 |

(a) Number of deaths under 1 year per 1,000 births registered.
(v) Causes of Deaths of Children under one Year. The following table gives for twenty-six causes the ages of all children who died under one year of age. Particulars for males and females may be found in Bulletin No. 47 of "Australian Demography."

CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR.-AUSTRALIA, 1929.

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

Pre-natal influences, such as malformation, congenital debility, and premature birth, together with injuries at birth, accounted for 3,475 , or 52 per cent., of all deaths under one year ; and of these 3,475 deaths, 2,402 , or 69 per cent., occurred within a
weak of birth. Among the survivors of the first week, diarrhcea and enteritis had the most fatal effects. These diseases were responsible for 737 deaths, representing 11 per cent. of all deaths under one year, or 5.69 per 1,000 births.
(vi) Deaths of Ex-nuptial Children under one Year. The deaths of ex-nuptial children were tabulated by this Bureau for the first time in 1925. The causes of death of these children in 1929 are shown as an addendum to the preceding table.

Pre-natal influonces such as malformation, congenital debility, premature birth, and injuries at birth accounted for 269 , or 47 per cent., and diarrhcea and enteritis for 103 , or 11 per cent., of the total deaths.
6. Deaths in Age-Groups, 1925 to 1929.-A distribution into age-groups has been mado of the 290,037 deaths which occurred in Australia from 1925 to 1929, and the results have been tabulated for each State. It is, however, sufficient to show here the results for Australia as a whole, which are as follow :-

DEATHS IN AGE GROUPS.-AUSTRALIA, 1925 TO 1929.

| Age-Group. | Males. | Females. | Total. | Percentage on Total Males. | Percentage on Total Females. | $\begin{gathered} \text { Percentage } \\ \text { on } \\ \text { Total. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 1 year | 20,216 | 15,225 | 35,441 | 12.31 | 12.10 | 12.22 |
| 1 year and under 5 | 6,660 | 5,610 | 12,270 | 4.05 | 4.46 | 4.23 |
| 5 years and under 20 | 7,866 | 5,856 | 13,722 | 4.79 | 4.66 | 4.73 |
| 20 years and under 40. | 17,819 | 16,734 | 34,553 | 10.85 | 13.30 | 11.91 |
| 40 years and under 60.. | 35,796 | 24,054 | 59,850 | 21.79 | 19.12 | 20.64 |
| 60 years and under 65.. | 14,842 | 9,343 | 24,185 | 9.04 | 7.43 | 8.34 |
| 65 years and over | 60,884 | 48,953 | 109,837 | 37.07 | 38.91 | 37.87 |
| Age unspecified | 159 | 20 | 179 | 0.10 | 0.02 | 0.06 |
| Total | 164,242 | 125,795 | 290,037 | 100.00 | 100.00 | 100.00 |

7. Deaths at Single Ages and in Age-Groups, 1929.-(i) General. The 60,857 deaths registered in Australia in the year 1929 will be found tabulated in groups of five years for each State and Territory, in Bulletin No. 47 "Australian Demography, 1929." The deaths during the first two years of life have been tabulated in shorter periods. A summary for Australia is given in the following table :-

DEATHS AT SINGLE AGES AND IN AOE-GROUPS.-AUSTRALIA, 1929.

| Ages. | Males. | Fe- males. | Total. | Ages. |  | Males. | $\begin{gathered} \mathrm{Fe}- \\ \text { males. } \end{gathered}$ | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total under 1 month | 2,277 | 1,553 | 3,830 | Total 20-24 years | $\cdots$ | 826 | 657 | 1,483 |
| ,, 1 nonth and under 3 | 468 | 323 | 791 | " 25-29 |  | 872 | 776 | 1,648 |
| ", 3 months and under 6 \| | 437 | 331 | 768 | $\because 30-34$ |  | 921 | 838 | 1,759 |
| ", 6 months and under 12, | 691 | 536 | 1,227 | " 35-39 |  | 1,139 | 1,022 | 2,161 |
|  |  |  |  | 40-44 |  | 1,373 | 1,057 | 2,430 |
|  |  |  |  | ", 45-49 ", |  | 1,656 | 1,179 | 2,835 |
| Total under 1 year | 3,873 | 2,743 | 6,616 | $\because 50-51$ " | $\cdots$ | 1,919 | 1,293 | 3,212 |
|  |  |  |  | " 55-59 " | $\cdots$ | 2,393 | 1,544 | 3,937 |
|  |  |  |  | " 60-64 | . | 3,085 | 1,874 | 4,959 |
| 1 year and under:? | 661 | 536 | 1,197 | ", 65-69 " | . | 3,788 | 2,429 | 6,217 |
| 9 years | 309 | 261 | 570 | ", 70-74 | . | 3,641 | 2,626 | 6,267 |
| 3 " | 225 | 204 | 429 | 75-79 | . | 2,827 | 2,201 | 5,028 |
| 4 ", | 168 | 131 | 299 | , 80-84 |  | 1,860 | 1,763 | 3,623 |
|  |  |  |  | $\because 85-89$ |  | 1,077 | 1,190 | 2,267 |
|  |  |  |  | ", 90-94 |  | 359 | 485 | 824 |
| Total under 5 years | 5,236 | 8,875 | 9,111 | ", 95-99 ", |  | 100 | 121 | 221 |
|  |  |  |  | ", 100 and over |  | 13 | 13 | 26 |
|  |  |  |  | Age Unspecifled | $\cdots$ | 34 | 3 | 37 |
| Total 5-9 years $\quad$, 10.14 | 531 408 | 426 | 957 728 |  |  |  |  | - |
| ", 15-19 ", | 680 | 469 | 1,129 | Total All Ages | $\cdots$ | 34,718 | 26,139 | 60,857 |

(ii) Rates. The death rate per 1,000 living at each age in each State for the three years 1920, 1921 , and 1922, i.e., the Census year 1921, and the years immediately preceding and following may be found in Official Year Book No. 22, page 975.
8. Deaths of Centenarians, 1929.-Particulars concerning the twenty-six personsthirteen males and thirteen females-who died in 1929 aged 100 years and upwards, are given in the following table. While the Registrars-General of the various States verify the figares as far as possible, absolute reliance cannot be placed on their accuracy, owing to the well-known tendency of very old people to overstate their ages. In connexion with this question it may be noted that while parish registers in the United Kingdom cften date very far back, compulsory registration of births dates practically from 1874 only, the Act of 1836 having left many loopholes for those unwilling to register the births of their children.

DEATHS OF CENTENARIANS.-AUSTRALIA, 1929.


Males.

| 112 | Brisbanc . | Queensland | Hypostatic Pneumonia | Not, stated | South Sea Islands. . | Unknown | Single |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 110 | Walcha | N.S.w. | Senility .. | Labourer. | England .. | 98 years | Married |
| 110 | Brown's Well | Sth. Aust. | ,, . | Not stated | India | 50 years | Not stated |
| 103 | Bowen | Queensland | , | Farm Labourer | Pacific Tslands | Unknown | Single |
| 105 | Maranoa |  | Pnemmonia | Pensioner | Ireland . | 68 years | Not stater |
| 104 | Tamarang South | N.S.W. | Senility | Labourer. | N.S.W. | Native | Married |
| 104 | Brisbane | Queensland | Myocarditis | None | India | Unknown | Single |
| 103 | Cowra | N.S.W. . | Senility | Not stated | N.S.W. | Native . | Married |
| 103 | Green Ponds | Tasmania |  | Farmer .. | Ireland . . | 70 years . . | " |
| 101 | Redfern | N.S.W. | Mrönditis | Cabourer. . | Scotland . . | Unknown | " |
| 100 | Turon |  | Myocarditis | Cabinetmaker | England . | 94 years .. | " |
| 100 | Malvern East | Victoria | Valvular Diseasc | Insurance Manager | Ireland | 77 years. | " |
| 100 | Northcote | " $\quad$ | Senility - | Farmer .. |  | 72 years . . | , |

Females.

| 104 | Tarro | N.S.W. . . | Senility |  |  | Yreland . ${ }^{\text {r }}$ | 79 year | Married |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 104 | Perth | W. Aust... | Preumonia | $\cdots$ |  | R.umania. | 30 years | , |
| 103 | Burrowa | N.S.W. . | Bronchitis.. |  |  | England | 9, years | " |
| 103 | Brighton | Vietoria .. | Myocarditis |  |  | Ireland | 75 years | ", |
| 10: | Carlton North | " . | Cardiar <br> Dilatation |  |  | England | 31 years | " |
| 182 | Northcote |  | Senility | $\cdots$ | $\cdots$ | Ireland | 78 years | Single |
| 101 | Goulburn . | N.S.W. .. | 兂 | . |  | ," | 80 years | Married |
| $\begin{aligned} & 101 \\ & 101 \end{aligned}$ | Kempsey ${ }^{\text {Rylstone }}$. |  | ", |  |  | England | 85 y years | ", |
| 101 | Portland .. | Victoria | ", $\quad$. |  |  | Ireland | 87 years |  |
| 101 | Brisbane . | Qucensland | Myocarditis | $\because$ |  |  | 66 years |  |
| 100 | Yarrawouga | Victoria .. | $\underset{\text { Arterio- }}{\text { Sclerosis }}$ |  |  | Ireland | 66 years | Single |
| 100 | Kew | " $\quad$. | Senility | $\cdot$ | . |  | 80 years | " |

NoTE.-The particulars shown in this table are those given in the death certificates, and no attempt has been made by the Commonwealth Bureau of Census and Statistics to rerify them.
9. Length of Residence in Australia of Persons who Died in 1929.-The length of residence in Australia of all persons whose deaths were registered in the year 1929 is shown in the following table:-

LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED IN 1929.

| length of Kesidence. | Male Deaths. | Female Denths. | Total Deaths. | Length of Residence. | Male Deaths. | Female Deaths. | ${ }^{\text {Thotal }}$ Deaths. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Born in Australia | 22,866 | 18,598 | 41,464 | Resident 25 to 29 years | 963 | 108 | 371 |
| Resident under 1 year | 97 | 33 | 130 | 30 to 34 , | 451 | 173 | $6 \underline{4}$ |
| " 1 year | 75 | 38 | 113 | 35 to 39 | 441 | 254 | 695 |
| ," 2 years | 100 | 67 | 167 | ", 40 to 44 | 1,427 | 730 | 2,157 |
| " 3 " | 88 | 67 | 155 | ", 45 to 49 | 1,239 | 746 | 1,985 |
| " 4 ", | 87 | 50 | 137 | ", 50 to 54 | 1,157 | 657 | 1,814 |
| ,, 5 | 91 | 59 | 150 | ", 55 to 59 | 497 | 335 | 832 |
| ", 6 | 91 | 44 | 135 | 60 to 64 | 585 | 587 | 1,172 |
| ," 7 | 69 | 57 | 126 | , 65 yrs. and over | 1,697 | 1,977 | 2,674 |
| ", 8 | 74 | 57 | 131 | Length of residence not |  |  |  |
| " 9 | 52 | 65 | 117 | stated | 1,859 | 564 | 2,423 |
| " 10 to 14 years | 193 | 137 | 330 |  |  |  |  |
| " 15 to 19 " | 791 | 585 | 1,376 |  |  |  |  |
| " 20 to 24 ,. | 498 | 151 | 579 | Total | $34, \bar{i} 18$ | 26,139 | 60,857 |

10. Birthplaces of Persons who Died in 1929.-The following table gives the birthplaces of persons whose deaths were registered in 1929. More detailed information will be found in "Australian Demography," Bulletin No. 47.

BIRTHPLACES OF PERSONS WHO DIED IN 1929.-AUSTRALIA.

| Birthplace. |  |  | 咢 | Birthplace. | 密 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AUSTRALASIA- |  |  |  | ASIA- |  |  |  |
| New South Wales | 9,003 | 7,391 | 16,394 | British India and |  |  |  |
| Victoria | 7,122 | 5,663 | 12,785 | Ceylon .. | 103 | $33^{\prime}$ | 136 |
| Queensland | 2,356 | 1,834. | 4,190 | China .. | 242 |  | 24.2 |
| South Australia | 2,27s | 1,862 | 4,136 | Japan | 35 |  | 3 |
| Western Australia | 817 | 650 | 1,467 | Philippine Islands | 9 |  |  |
| Tasmania | 1,284 | 1,191 | 2,475 | Syria . . . . | 24 | 11 | 35 |
| Northern Territory | 3 |  | 8 | Other Asiatic |  |  |  |
| Federal Capital |  |  |  | Countries . | 31 | 8 | 3 ! |
| Nerntory | 301 | 187 | 48 |  |  |  |  |
| New Zealand | 301 | 157 | 485 | AF |  |  |  |
| EUROPE- |  |  |  | Mauritius | 39 | $16^{\circ}$ | 10 |
| England and Wales | 5,560 | 3,784 | 9,344 | Egypt . . . | 3 | 1 |  |
| 8 cotland | 1,450 | 1,013 | $\stackrel{2}{2}, 463$ | Other African |  |  |  |
| Ireland .. | 1,798 | 1,699 | 3,497 | Countries . . | 2 |  |  |
| Other Brit. Possessions in Europe | 50 | 17 | 67 |  |  |  |  |
| Austria | 10 | 3 | 13 | Canada | 42 | 16 | ธ8 |
| Belgium . . | 3 | 2 | 5 | Other British |  |  |  |
| Czecho-Slovakia | 1 |  | 1 | Possessions in |  |  |  |
| Denmark | 128 | 43 | 171 | America | 13 | 2 |  |
| Finland | 33 | 3 | 36 | United States of |  | 2 |  |
| France | 54 | 99 | 83 | America .. | 91 | 36 | 127 |
| Germany | 410 | 270 | 680 | Other American |  |  |  |
| Greece | 46 | 6 | 52 | Countries . . | 25 | S | 33 |
| Italy | 141 | 23 | 164. |  | 2 | s |  |
| Jugo-Slavia | 22 | 5 | $\stackrel{27}{ }$ |  |  |  |  |
| Netherlands | 23 | 7 | 30 | Fiji .. | 2 | 1 |  |
| Norway | 66 | 8 | 74 | New Caledonia .. | 3 | 2 |  |
| Poland | 42 | 19 | 61 | New Hebrides . . | 1 |  |  |
| Russia | 37 | 22 | 59 | Other Polynesian |  |  |  |
| Spain | 15 | 4 | 19 | Islands .. | 51 | 7 | 58 |
| Sweden | 116 | 5 | 121 | At Sea .. | 72 | 62 | 134 |
| Switzerland .. | 36 | 16 | 5: | Unspecified | 694. | 163 | 857 |
| Other European |  |  |  | Unspecilied | - - | --.. |  |
| Countries | 21 | 7 | 28 | Total Deaths . . | 34,718 | 26,139 | 0,857 |

11. Occupations of Males who Died in 1929. -Information as to the main groups of the occupations of the 34,718 males who died in Australia in 1929 is contained in the following table:-

OCCUPATIONS OF MALES WHO DIED IN 1929.-AUSTRALIA.

| Occupations. | No. of Deaths. | Occupations. | No. of Deaths. |
| :---: | :---: | :---: | :---: |
| Class I.-Professional. <br> Government, Defence, Law | 661 | Class V.-Industrial. <br> Art and Mechanic productions .. | 1,200 |
| Others .. .. | 1,010 | Textiles and fibrous materials .. | 524 |
|  |  | Food and drinks | 342 |
| Total Class I. | 1,671 | Animal and vegetable substances | 120 |
|  |  | Metals and minerals | 666 |
| Per cent. of Total Male Deaths | 4.81 | Fuel, light and energy .. | 153 |
|  |  | Building and construction | 1,588 |
| Class II.-Domestic. |  | Others | 6,237 |
| Board and lodging .. | 492 |  |  |
| Others .. .. | 414 | Total Class V. | 10,830 |
| Total Class II. | 906 | Per cent. of Total Male Deaths | 31.20 |
| Per cent. of Total Male Deaths | 2.61 | Class VI.-Agricultural, Pas. |  |
| Class III.-Commercial. |  | Agricultural .. | 3,838 |
| Property and finance | 360 | Pastoral | 1,297 |
| Art, mechanic and textile products | 254 | Mining and quarrying .. | 1,163 |
| Food and drinks .. | 622 | Others .. | 267 |
| Animal and vegetable substances | 130 |  |  |
| Fuel, light and metals | 58 | Total Class VI. | 6,563 |
| Merchants and dealers . . | 735 |  |  |
| Others | 1,522 | Per cent. of Total Male Deaths | 18.91 |
| Total Class III. | 3,681 | Class VII.-Indefinite. |  |
| Per cent. of Total Male Deaths | 10.60 | Independent means | $790$ |
| Class IV.-Transport and Communication. |  | Total Class VII. | 2,032 |
| Railway traffic .. | 786 | Per cent. of Total Male Deaths | 5.85 |
| Road and tramway traffe Sea and River traffic .. | 777 593 |  |  |
| Others | 223 | Class VIII.-Dependents | 6,654 |
| Total Class IV. | 2,379 | Per cent. of Total Male Deaths | 19.17 |
| Per cent. of Total Male Deaths | 6.85 | Total Male Deaths | 34,718 |

12. Causes of Death.-(i) General. 'The classification adopted by the Commonwealth Bureau of Census and Statistics is that of the International Institute of Statistics, as amended by the Committees of Revision which met in Paris in 1909 and 1920. The Committee of Revision met again in October, 1929. It is hoped to use the revised classification in the Vital Statistics for 1931.
(ii) Mortality Statistics for 1907 and Subsequent Years. The statistics relating to causes of death in Australia from the year 1907 onward have been tabulated in the Commonwealth Bureau of Census and Statistics in accordance with the above-mentioned classification, and the system is being employed also in the various State statistical offices.
(iii) Classification of Causes of Death, 1925 to 1929, according to Abridged International Classification. An abridged classification, which enumerates thirty-eight diseases and groups of diseases according to the revised classification, is in use in many European countries and American States, and a table has been prepared showing the causes of death according to the abridged classification, so that the results may be compared with those of countries which use the abridged index.

The compilations for the years 1925 to 1929 will be found in full in Bulletins Nos. 43 to 47 of "Australian Demography." In the following tables showing deaths of males, females, and persons for the year 1929 the abridged classification has been employed.

CAUSES OF DEATH.-MALES, 1929.

| Causc. | N.S.W. | Vic. | Q'land. | S. Aus. | W. Aus. | Tas. | $\begin{aligned} & \text { Nor. } \\ & \text { Ter. } \end{aligned}$ | $\begin{aligned} & \text { Fed. } \\ & \text { Cap } \\ & \text { Ter. } \end{aligned}$ | $\begin{aligned} & \text { Aus- } \\ & \text { tralia. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Typhoid Fever | 25 | 13 | 10 | 3 | 7 | 9 | $\cdots$ |  | 67 |
| 2 Typhus Fever | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ | . | $\cdots$ | $\cdots$ | $\cdots$ |  |
| 3 Malaria | 2 | 1 | 9 |  | 1 | . | $\cdots$ |  | 13 |
| 4 Small-pox | ¢ | 24 |  |  |  |  |  |  |  |
| 5 Measles | 38 | 24 | 2 | 2 | 10 |  | $\ldots$ | $\cdots$ | 76 |
| 6 Scarlet Fever | 30 | 4 | 1 | . | 1 | , | $\cdots$ |  | 36 |
| 7 Whooping Cough | 90 | 30 | 10 | - | 10 | 6 |  | $\cdots$ | 146 |
| 8 Diphtheria .. | 102 | 54 | 41 | 6 | 19 | 12 |  | 2 | 236 |
| $9 a$ Influenza-Pneumonic | 192. | 40 | 82 | 11 | 13 | 6 | $\cdots$ | 3 | 347 |
| $9 b$ Influenza-other | 96 | 21 | 61 | 7 | 5 | 11 | $\cdots$ | . . | 201 |
| 10 Asiatic Cholera | . | , | . |  | . |  |  |  | . |
| 11 Cholera Nostras |  |  |  |  | Il |  |  |  |  |
| 12 Other EpidemicDiseases | 88 | 52 | 21 | 9 | 11 | 1 | 2 | $\cdots$ | 184 |
| 13 Tuberculosis of the Respiratory System | 688 | 530 | 216 | 160 | 182 | 41 | 1 | $\cdots$ | 1,818 |
| 14 Tuberculosis of the Meninges | 39 | 30 | 4 | 7 | 8 | 4 | $\cdots$ | $\cdots$ | 92 |
| 15 Other forms of Tuberculosis | 46 | 50 | 18 | 14 | 12 | 8 | $\ldots$ | . | 148 |
| 16 Cancer and other Malignant Tumours .: | 1,228 | $932 \cdot$ | 463 | 351 | 221 | 97 | 5 |  | 3,297 |
| 17 Meningitis . $\quad$. | 61 | 36 | 24 | 8 | 10 | 12 | . | 1 | 152 |
| 18 Hæmorrhage, Embolism, and Softening of Brain | 746 | 478 | 191 | 165 | 79 | 63 | 1 | 2 | 1,725 |
| 19 Diseases of the Heart | 2,274 | 1,415 | 702 | 361 | 287 | 168 | 1 | 3 | 5,211 |
| 20 Acute Bronchitis | 85 | 29 | 27 | 13 | 3 | 4 | . |  | 161 |
| 21 Chronic Bronchitis | 167 | 109 | 67 | 48 | 26 | 15 |  |  | 432 |
| 22 Pneumonia .. | S09 | 482 | 209 | 128 | 113 | 87 | 1 | 1 | 1,830 |
| 23 Other Diseases of the Respiratory System (Tuberculosis excptd.) | 652 | 531 | 249 | 120 | 145 | 52 | 2 | 1 | 1,752 |
| 24 Diseases of the Stomach <br> (Cancer excepted) | 117 | 90 | 53 | 25 | 13 | 11 | $\cdots$ | $\cdots$ | 309 |
| 25aDiarrhœa and Enteritis (children under 2 years of age) | 285 | 107 | 82 | 22 | 88 | 13 | . | . . | 597 |
| 25bDiarrhœa and Enteritis (2 years and over) .. | 75 | 39 | 49 | 21 | 17 | 2 | - | $\ldots$ | 203 |
| 26 Appendicitis \& Typhlitis | 139 | 89 | 54 | 20 | 17 |  | . | $\cdots$ | 323 |
| 27 Hernia, Intestinal Obstruction | 111 | 98 | 51 | 28 | 23 | 12 | 1 |  | 324 |
| 28 Cirrhosis of the Liver | 75 | 61 | 32 | 20 | 22 | 1 | 1 | $\cdots$ | 212 |
| 29 Acute and Chronio Nephritis .. | 767 | 527 | 289 | 152 | 121 | 42 | 3 | . | 1,901 |
| 30 Non-cancerous Tumours and other Diseases of Female Genital Organs |  |  | . . | . . |  |  |  |  |  |
| 31 Puerperal Septicæmia (Puerperal Fover) | . | $\ldots$ | . | $\cdots$ |  |  |  |  |  |
| 32 Other Puerperal Accidents of Pregnancy and Confinement .. |  |  | . |  |  |  |  |  |  |
| 33 Congenital Debility and |  |  |  |  |  |  |  |  |  |
| Malformation . | 899 | 560 | 278 | 151 | 140 | 83 |  | 1 | 2,112 |
| 34 Senility . - | 603 | 483 | 364 | 184 | 155 | 96 | 12 | . . | 1,897 |
| $35 a \mathrm{Homicide}$ | 28 | 22 | 6 | 3 | 3 | 3 |  |  | 65 |
| $35 b$ Other Accidental Deaths | 1,146 | 664 | 415 | 215 | $\bigcirc 38$ | 96 | 10 | 3 | 2,787 |
| 36 Suicide . . | 239 | 153 | 109 | 58 | 69 | 12 | 4 |  | 644 |
| 37 Other Diseases | 2,903 | 1,288 | 822 | 380 | 344 | 181 | 9 | 6 | 5,033 |
| 38 Unspecified or Ill-defined Diseases .. | 73 | 89 | 43 | 107 | 59 | 12 | 4 |  | 387 |
| Total-Males .. | 14,918 | 9,131 | 5,054 | 2,799 | 2,472 | 1,164 | 57 | 23 | 34,718 |

CAUSES OF DEATH.-FEMALES. 1929.

| Cause. | N.S.W. | Vic. | Q'land.l | S. Aus. | W. Aus. | 'Tas. | Nor. Ter. | Fed. <br> Cap. <br> Ter. | $\begin{aligned} & \text { Aus- } \\ & \text { tralia. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Typhoid Fever | 20 | 6 | 5 | 1 | 3 | 4 | $\cdots$ | $\cdots$ | 39 |
| 2 Typhus Fever | .. | . |  |  |  |  |  |  |  |
| 3 Malaria |  |  | 4 |  |  |  | $\cdots$ | $\cdots$ | 4 |
| 4 Small-pox |  |  |  |  |  |  |  |  |  |
| 5 Measles | 23 | 21 | 3 | 6 | S | 1 |  | $\cdots$ | 67 |
| 6 Scarlet Fever | 48 | 10 | 1 |  | 4 | 2 |  |  | 65 199 |
| 7 Whooping Cough | 122 | 49 | 11 | 1 | 8 | 8 |  |  | 199 |
| 8 Diphtheria ... | 111 | 47 | 39 | 7 | 14 | 6 |  |  | 924 |
| $9 a$ Influenza-Pneumonic | 167 | 45 | 66 | 5 | 11 | , |  |  | 299 |
| $9 b$ Influenza-other | 76 | 28 | 45 | 5 | 8 | 9 |  | 1 | 172 |
| 10 Asiatic Cholera |  | . |  |  |  |  |  |  |  |
| 11 Cholera Nostras |  |  |  |  |  |  |  |  |  |
| 12 Other Epidemic Diseases | 73 | 49 | 2 S | 14 | 11 | 3 |  |  | 178 |
| 13 Tuberculosis of the Respiratory System | 467 | 348 | 110 | 141 | 63 | 54 |  | 1 | 1,184 |
| 14 Tuberculosis of the Men. inges | 27 | 40 | 5 | 10 | 5 | 6 |  | $\ldots$ | 93 |
| 15 Other forms of Tuberculosis | 44 | 43 | 9 | 11 | 10 | 12 |  |  | 129 |
| 16 Cancer and other Malignant Tumours .. | 1,101 | 958 | 347 | 234 | 159 | 108 | 1 | 1 | 2,059 |
| 17 Meningitis . . | 54 | 21 | 19 | 5 | 5 | 8 | . | . | 112 |
| 18 Hæmorrhage, Embolism, and Softening of Brain | 666 | 635 | 173 | 155 | 91 | 70 |  | 3 | 1,826 |
| 19 Diseases of the Heart | 1,810 | 1,202 | 470 | $\because 66$ | 163 | 157 | $\cdots$ | 2 | 4,070 |
| 20 Acute Bronchitis | 87 | 26 | 15 | 12 | 1 | 5 | $\cdots$ |  | 146 |
| 21 Chronic Bronchitis | 169 | 89 | 51 | 41 | 25 | 14 |  |  | 389 |
| 22 Pneumonia .. | 531 | 280 | 121 | 88 | 67 | 65 |  | $\ldots$ | 1,152 |
| 23 Other Diseases of the Respiratory System (Tuberculosis excptd.) | 566 | 362 | 132 | 128 | 64 | 33 | 1 | 1 | 1,287 |
| 24 Diseases of the Stomach (Cancer excepted) .. | 58 | 41 | 17 | 13 | 8 | 6 |  | $\cdots$ | 143 |
| 25aDiarrhœa and Enteritis (children under 2 years of age) | 185 | 52 | 34 | 11 | 69 | 14 |  | 1 | 366 |
| 25bDiarrhœa and Enteritis <br> (2 years and over) .. | 91 | 73 | 43 | 12 | 12 | 7 |  | 1 | 239 |
| 26 Appendicitis \& Typhlitis | 76 | 36 | 19 | 16 | 8 | 3 | $\cdots$ | . | 158 |
| 27 Hernia, Intestinal Obstruction .. | 108 | 75 | 28 | 25 | 14 | 9 | $\cdots$ |  | 259 |
| 28 Cirrhosis of the Liver | 36 | 30 | 11 | 6 | 3 | 3 |  |  | 89 |
| 29 Acute and Chronic Nephritis . | 596 | 459 | 209 | 8 | 85 | 25 |  | 3 | 1,505 |
| 30 Non-cancerous Tumours and other Diseases of Female Genital Organs | 102 | 51 | 29 | 16 | 13 | 7 |  |  | 218 |
| 31 Puerperal Septicæmia (Puerperal Fever) .. | $10-2$ | 71 | 16 | 16 | 10 | 7 | $\cdots$ |  | 222 |
| 32 Other Puerperal Accidents of Pregnancy and Confinement | 172 | 112 | 71 | 36 | 35 | 9 | 1 |  | 436 |
| 33 Congenital Debility and |  |  |  |  |  |  |  |  |  |
| Malformation | 638 | 353 | 194 | 97 | 89 | 55 |  |  | 1,426 |
| 34 Senility .. .. | 444 | 562 | 222 | 210 | 88 | 108 | 1 |  | 1,635 |
| $35 a \mathrm{Homicide}$ | 15 | 11 | 12 | 8 | 1 | 6 | . |  | 53 |
| $35 b$ Other Accidental Deaths | 300 | 183 | 128 | 54 | 55 | 37 | $\cdots$ |  | 757 |
| 36 Suicide | 63 | 27 | 20 | 14 | 10 | 7 |  |  | 141 |
| 37 Other Diseases | 1,394 | 1,134 | 533 | 333 | 219 | 133 | 1 | 2 | 3,749 |
| 38 Unspecified or Ill-defined <br> Diseases | 17 | 54 | 15 | 35 | 19 | 6 | 3 |  | 149 |
| Total-Female3 .. | 10,564 | 7,586 | 3,255 | 2,240 | 1,458 | 1.012 | 8 | 16 | 26,139 |

CAUSES OF DEATH.-PERSONS, 1929.

| Calse. | N.S.W. | Vic. | Q'land. | S. Aus. | W. Aus. | Tas. | Nor. Ter. | Fed. Cap. Ter. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Typhoid Fever | 45 | 19 | 15 | 4 | 10 | 13 | $\cdots$ | $\cdots$ | 106 |
| 2 Typhus Fever | $\cdots$ | $\cdots$ | . | . | $\cdots$ | . |  |  |  |
| 3 Malaria | 2 | 1 | 13 | $\cdot$ | 1 |  |  |  | 17 |
| 4 Smali-pox |  | $\cdots$ |  |  |  |  |  |  |  |
| 5 Measles | 66 | 45 | 5 | 8 | 18 | 1 | $\cdots$ | $\cdots$ | 143 |
| 6 Scarlet Fever | 78 | 14 | 2 |  | 5 | 2 |  |  | 101 |
| 7 Whooping Cough | 212 | 79 | 21 | 1 | 18 | 14 |  |  | 345 |
| 8 Diphtheria .. | 213 | 101 | 80 | 13 | 33 | 18 |  | $\because$ | 460 |
| 9aInfluenza-Pneumonic | 359 | 85 | 148 | 16 | 24 | 11 |  | 3 | 646 |
| $9 b$ Influenza-other | 17: | 49 | 106 | 12 | 13 | 20 |  | 1 | 373 |
| 10 Asiatic Cholera |  | . . | . |  |  |  |  | . | . . |
| 11 Cholera Nostras |  |  | , | - |  | $\cdots$ |  |  |  |
| 12 Other Epidemic Diseases | 161 | 101 | 49 | 23 | 22 | 4 | $\geq$ |  | 362 |
| 13 Tuberculosis of the Respiratory System | 1,155 | 878 | 326 | 301 | 245 | 95 | 1 | 1 | 3,002 |
| 1t Tuberculosis of the Meninges | 66 | 70 | 9 | 17 | 13 | 10 |  |  | 185 |
| 15 Other forms of Tuberculosis | 90 | 93 | 27 | 25 | 22 | 20 |  |  | 277 |
| 16 Cancer and other Malignant Tumours | 2,329 | 1,890 | 810 | 635 | 380 | 205 | 6 | 1 | 6,256 |
| 17 Meningitis | 115 | 57 | 43 | 13 | 15 | 20 | . | 1 | 264 |
| 18 Hæmorrhage, Embolism, and Softening of Brain | 1,412 | 1,116 | 364 | 350 | 170 | 133 | 1 | 5 | 3,551 |
| 19 Diseases of the Heart | 4,084 | 2,617 | 1,172 | 627 | 450 | 325 | 1 | 5 | 9.281 |
| 20 Acute Bronchitis | 172 | 55 | 42 | 25 | 4 | 9 | . | . | 307 |
| 21 Chronic Bronchitis . . | 336 | 198 | 118 | 89 | 51 | 29 |  |  | 821 |
| 22 Pneumonia .. .. | 1,340 | 762 | 330 | 216 | 180 | 152 | 1 | 1 | 2,952 |
| 23 Other Diseases of the Respiratory System (Tuberculosis excptd.) | 1,215 | 893 | 381 | 248 | 209 | 85 | 3 | 2 | 3,039 |
| 24 Diseases of the Stomach (Cancer excepted) | 175 | 131 | 70 | 38 | 21 | 17 |  | . | 452 |
| 25aDiarrhœa and Enteritis (children under 2 years of age) | 470 | 159 | 116 | 33 | 157 | 27 | . | 1 | 963 |
| $25 b$ Diarrhœa and Enteritis <br> (2 years and over) .. | 166 | 112 | 92 | 33 | 29 | 9 |  | 1 | 449 |
| 26 Appendicitis \& Typhlitis | 215 | 125 | 73 | 36 | 25 | 7 |  | . | 481 |
| 27 Hernia, Intestinal Obstruction .. | 219. | 173 | 79 | 53 | 37 | 21 | , |  | 583 |
| 28 Cirrhosis of the Liver | 111 | 91 | 43 | 26 | 25 | 4 | 1 |  | 301 |
| 29 Acute and Chronic Nephritis | 1,363 | 086 | 498 | 280 | 206 | 67 | 3 | 3 | 3,406 |
| 30 Non-cancerous Tumours and other Diseases of Female Genital Organs | 102 | 51 | 29 | 16 | 13 | 7 | . | . . | 218 |
| 31 Puerperal Septicæmia (Puerperal Fever) | 102 | 71 | 16 | 16 | 10 | 7 | $\cdots$ | $\ldots$ | 229 |
| 32 Other Puerperal Accidents of Pregnancy and Cunfinement .. | 172 | 112 | 71 | 36 | 35 | 9 | 1 |  | 436 |
| 33 Congenital Debility and |  |  |  |  |  |  |  |  |  |
| Malformation . | 1,537 | 913 | 472 | 248 | 229 | 138 |  | 1 | 3,53S |
| 34 Senility | 1,047 | 1,045 | 586 | 394 | 243 | 204 | 13 |  | 3,532 |
| 35aHomic:de | 43 | 33 | 18 | 11 | 4 | 9 |  |  | 118 |
| 356 Other Accidental Deaths | 1,446 | 847 | 543 | 269 | 293 | 133 | 10 | 3 | 3,544 |
| 36 Suicide . . | 302 | 180 | 129 | 72 | 79 | 19 | 4 |  | 785 |
| 37 Other Diseases | 3.397 | 2,422 | 1,355 | 713 | 563 | 314 | 10 | 8 | 8,782 |
| 3S Unspecified or Ill-defined Diseases | 90 | 143 | 58 | 142 | 78 | 18 | 7 |  | 536 |
| Total-Persons .. | 24.582 | 16,717 | 8.309 | 5.039 | 3,930 | 2,176 | 65 | 39 | 60,857 |

The next table shows the total deaths in Australia during the last five years in accordanee with the abridged classification alluded to previously.

CAUSES OF DEATH.-AUSTRALIA, 1925 T0 1929.
Persons.


Note.-In consequence of changes made in the classification of the causes of death the flgures given in the table abo ie are not on identical lines throughout the period covered.
13. Deaths from Specific Causes.-The above table furnishes particulars for the last. five years only, and comparisons will, therefore, generally be restricted to that period.
(i) Typhoid Fever. The number of deaths from typhoid fever declined from 170 in 1925 to 106 in 1929, the rate for the latter year being 2 per 100,000 living, and much lower than the average for the last five years. Of the 106 who died, 67 were males and 39 females.
(ii) Typhus. Deaths from typhus have been rare in Australia, and none was recorded in 1929. During 1928, 5 deaths were recorded from this cause, 3 of which occurred in Queensland and 2 in Western Australia. In 1927, 1 death occurred in South Australia and 1 in Western Australia. In 1926, 1 death occurred in Victoria and 1 in South Australia. In 1925 there were 2 deaths in Queensland and 1 in South Australia.
(iii) Maluria. Deaths from malarial diseases are mainly confined to the tropisal districts of Northern Queensland and Western Australia, and to the Northern Territory; 13 out of the 17 deaths registered in 1929 occurred in Queensland, 2 in New South Wales, and 1 oach in Victoria and Western Australia.
(iv) Small-pox. The number of deaths from small-pox in Australia is very small and during the five years under review only one death occurred from thjs cause.
(v) Measles. Of the deaths from measles the greatest number occurred during 1928, when 201 were registered, while the minimum was in 1926 with a total of 108 deaths. Of the 143 deaths during 1929, 76 were males and 67 females; of these 66 were registered in New South Wales, 45 in Victoria, 5 in Queensland, 8 in South Australia, 18 in Western Australia, and 1 in Tasmania.
(vi) Scarlet Fever. The number of deaths decreased during 1929, when there were 101 deaths, of which 36 were males and 65 females. Of these deaths 78 occurred in New South Wales.
(vii) Whooping Cough. During 1929 there was a heavy increase in deaths from whooping cough, the number 345 ( 146 males and 199 females) representing a death rate of 5 per 100,000 persons. The deaths in each State were as follow :-New South Wales 212, Victoria 79, Queensland 21, South Australia 1, Western Australia 18, and 14 in Tasmania.
(viii) Diphtheria. The number of deaths due to diphtheria was 460 in 1929. Of these deaths (representing a death rate of 7 per 100,000 persons) 236 were males and 224 females. The deaths in each State were as follow :-New South Wales 213, Victoria 101, Queensland 80, South Australia 13, Western Australia 33, and Tasmania 18, and 2 in the Federal Capital Territory.
(ix) Influenza. The deaths from influenza during 1929 were higher than in the previous four years. Of the 1,019 deaths during 1929 from this disease, 646 were ascribed to pneumonic influenza and 373 to ordinary influenza.
(x) Asiatic Cholera. No deaths from Asiatic cholera have been recorded in Australia.
(xi) Cholera Nostras. For the five years under review only 3 deaths have been due to this cause.
(xii) Other Epidemic Diseases. The deaths registered under this heading numbered 362 in 1929, including 87 from dysentery, erysipelas 95 , lethargic encephalitis 64, acute poliomyelitis 61 , meningococcal meningitis 36 , mumps 7 , leprosy 4 , spirochetal haemorrhagic jaundice 1, and other epidemic diseases 7. During the period 1925-29 there were no deaths from plague.
(xiii) Tuberculosis of the Respiralory System. Of the various forms of tuberculosis prevalent in Australia, phthisis, or tuberculosis of the lungs, has attracted the most attention. The intimate relation, however, between tuberculosis of the lungs and of other parts of the respiratory system renders it desirable that all forms of tuberculosis of the respiratory system should be brought under one head for investigations concerning the age incidence and duration of this disease.

During 1929 there were 3,002 deaths from tuberculosis of the respiratory system, which compares favourably with the average of 3,092 for the preceding four years. The 3,002 deaths in 1929 represented a rate of 47 per 100,000 persous. Of these deaths, 1,818 were males and 1,184 females.
(xiv) Tuberculosis of the Meninges. The number of deaths ascribed to this cause in 1929 was 185, which is above the average number for the preceding four years.
(xv) Other Forms of Tuberculosis. The deaths in 1929 include the following:Tuberculosis of the intestines and peritoneum, 69; tuberculosis of the spinal column, 40; tuberculosis of the joints, 16; tuberculosis of other organs, 53; acute disseminated tuberculosis, 70 ; and chronic disseminated tuberculosis, 29.
(xva) All Forms of Tuberculosis.-(a) General. The total number of deaths in 1929 was 3,464 , viz., 2,058 males and 1,406 females.
(b) Ages at Death. The following table shows the ages of these 3,464 persons :-

| Ages. |  |  |  | Male. | Female. | Total. |  |  | es. |  | Male. | Female. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 5 years |  |  |  | 82 | S3 | 165 |  | ars | d und |  | 201 | 65 | 266 |
| 5 years and under 10 |  |  |  | $\stackrel{1}{1}$ | 19 | 40 | 55 | , | ," | 60 | 147 | 69 | 216. |
| 10 | " | , | 15 | 18 | 27 | 45 | 60 | ," | " | 65 | 151 | 37 | 188 |
| 15 | ," | ," | 20 | 66 | 118 | 184 | 65 |  | ," | 70 | 110 | 30 | 140 |
| 20 | ", | " | 25 | 140 | 207 | 347 | 70 | ", | ", | 75 | 65 | 24 | 89 |
| 25 | ," | " | 30 | 180 | 202 | 382 | 75 |  | " | 80 | 19 | 7 | 26 |
| 30 | " | " | 35 | 183 | 172 | 355 | 80 |  | over | . . | 6 | 5 | 11 |
| 35 | ,, | " | 40 | 215 | 156 | 371 |  |  |  |  |  |  |  |
| 40 | " | " | 45 | 233 | 92 | 325 |  |  |  |  |  |  |  |
| 45 | , | " | 50 | 221 | 93 | 314 |  | Tot |  | . | 2,058 | 1,406 | 3,464 |

(c) Occupations at Death, Males. A tabulation of occupations of the males who died. from tubercular diseases in 1929 is given hereunder :-
OCCUPATIONS OF MALES WHO DIED FROM TUBERCULAR DISEASESAUSTRALIA, 1929.

| Occupations. | No. of Male Deaths. | Occupations. | No. of Male Deaths |
| :---: | :---: | :---: | :---: |
| Professional Class- |  | Industrial Class - |  |
| Government, Defence, Law | 53 | Art and Mechanic Productions | 115 |
| Others .. | 71 | Textiles and Fibrous Materials | 51 |
|  |  | Food and Drinks | 19 |
| Domestic Class- |  | Animal and Vegetable Sub- |  |
| Board and Lodging .. | 38 | stances . | 9 |
| Others .. | 26 | Metals and Minerals | 36 |
|  |  | Fuel, Light and Energy | 16 |
| Commercial Class- |  | Building and Construction | 103 |
| Property and Finance | 25 | Others | 412 : |
| Art, Mechanic and Textile Products .. .. .. | 12 | Agricultural, Pastoral, |  |
| Food and Drinks | 46 | Mining, etc., Class- |  |
| Animal and Vegetable Substances | 7 | Agricultural .. . <br> Pastoral   | 114 38. |
| Fuel, Light and Metal | 3 | Mining and Quarrying | 138 |
| Merchants and Dealers | 42 | Others .. .. | 10. |
| Others | 184 |  |  |
|  |  | Independent Means .. | 41 |
| Transport and Communication Class- |  | Dependents .. | 175 |
| Railway Traffic | 55 |  |  |
| Road and Tramway Traffic | 6248 | Occupation Not Stated | 91 |
| Sea and River Traffic |  |  |  |
| Others .. . . . | 18 | Total Male Deaths | 2,05S |

(d) Length of Residence in Australia. The length of residence in Australia of persons: who died from tubercular diseases in 1929 is given in the next table.

| TUBERCULAR DISEASES, 1929. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Length of Residence in Australia. | Male. | Fem. | Total. | Length of Residence in Australia. | Male. | Fem. | Total. |
| Born in Australia $\quad$. | 1,525 | 1,207 | 2,732 | Resident 10 years \& under 15 | 26 | 12 | 38 |
| Resident under 1 year .. | 12 | 1,2 3 | 2, 15 | " 15 ", ${ }^{\text {, }} 20$ | 77 | 31 | 108 |
| , 1 year .. .. | 9 | 3 | 12 | ", 20 ", over $\quad \therefore$ | 224 | 62 | 286 |
| ", $\frac{2}{3}$ ycars | 19 | 7 9 | 14 | Length of residence not stated | 103 | 23 | 126 |
|  | 19 | 9 11 | 28 |  | , |  | - |
| $"$ ", 5 ", and under 10 | 49 | 38 | 87 | Total Deaths | 2,058 | 1,406 | 3,464 |

(e) Death Rates. The preceding table and the table on page 727 show that among persons who have lived less than five years in Australia, 702 deaths occurred, and of these 87 , or 12.4 per cent., were due to tubercular diseases.

In order to show the prevalence of tuberculosis in the several States, the death rates from tubercular diseases are given in the following table, together with the proportion which deaths from tuberculosis bear to 10,000 deaths from all causes :-

## TUBERCULOSIS (ALL FORMS).-DEATH RATES (a) AND PROPORTION OF TOTAL

 DEATHS, 1929.| State. | Death Rates (a) from Tuberculosis. |  |  | Propurtion per 10,000 Deaths from all Causes. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Total. |
| New South Wales | 62 | 45 | 53 | 551 | 509 | 533 |
| Victoria | 69 | 48 | 59 | 668 | 568 | 623 |
| Queensland | 49 | 29 | 39 | 471 | 381 | 436 |
| South Australia | 60 | 5 S | 59 | 647 | 723 | 681 |
| Western Australia | 91 | 41 | 68 | 817 | 535 | 712 |
| Tasmania . . | 50 | 67 | 58 | 455 | 711 | 574 |
| Northern Territory | 35 | $\ldots$ | 24 | 175 | $\ldots$ | 154 |
| Federal Capital Territory | . | 27 | 12 | . | 625 | 256 |
| Australia | 63 | 45 | 54 | 593 | 538 | 569 |

(a) Number of deaths from tuberculosis per 100,000 of mean population.
(f) Death Rates, Various Countries. The following comparative table for various countries shows that Australia occupies a very favourable position as regards the death rate from this disease.

## TUBERCULOSIS.-DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

| Country. | Year. | Respiratory System. | $\begin{aligned} & \text { All } \\ & \text { Forms. } \end{aligned}$ | Country. | Year. | Respiratory System. | $\underset{\text { Forms. }}{\text { All }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Queensland | 1929 | 35 | 39 | England and |  |  |  |
| New Zealand | 1928 | 41 | 46 | Wales | 1928 | 76 | 93 |
| Union of South |  |  |  | Scotland | 1929 | 67 | 94 |
| Africa (Whites) | 1928 | 36 | 51 | Great Britain and |  |  |  |
| New South Wales | 1929 | 47 | 53 | Northern Ire- |  |  |  |
| Australia | 1929 | 47 | 54 | land | 1928 | 75 | 95 |
| Tasmania | 1929 | 44 | 58 | Belgium | 1927 | 68 | 97 |
| South Australia | 1929 | 52 | 59 | Rumania | 1926 | (a) | 99 |
| Victoria | 1929 | 50 | 59 | Sweden | 1928 | (a) | 126 |
| Ceylon | 1928 | (a) | 63 | Irish Free State | 1929 | 102 | 127 |
| Western Australia | 1929 | 60 | 68 | Italy | 1927 | 99 | 134 |
| Denmark | 1927 | 61 | 78 | Switzerland | 1928 | 101 | 135 |
| Canada (including |  |  |  | Greece | 1924 | 120 | 138 |
| Quebec) .. | 1929 | 66 | 80 | Northern Ireland | 1928 | 103 | 140 |
|  |  |  |  | Spain | 1927 | 123 | 153 |
| istration Area) | 1927 | 71 | 81 | France | 1926 | 140 | 164 |
| Netherlands .. | 1928 | 61 | 84 | Norway | 1926 | 127 | 164 |
| Egypt.. | 1927 | 66 | 85 | Japan | 1927 | 139 | 195 |
| Germany . . | 1928 | (a) | 88 | Czecho-Slovakia | 1927 | 174 | 195 |

(a) Not available.
(xvi) Cancer and other Malignant Tumours.-(a) General. The number of deaths from cancer has increased continuously to 6,256 in 1929. Of the deaths registered 3,297 were of males, viz., 1,228 in Now South Wales, 932 in Victoria, 463 in Queensland, 351 in South Australia, 221 in Western Australia, 97 in Tasmania, 5 in the Northern Territory, while 2,959 were of females, viz., 1,101 in New South Wales, 958 in Victoria, 347 in Queensland, 284 in South Australia, 159 in Western Australia, and 108 in Tasmania, and 1 each in the Northern Territory and the Federal Capital Territory.
(b) Type and Seal of Disease. Tables showing the type and seat of disease, in conjunction with age, and with conjugal condition, of the persons dying from cancer in 1929 will be found in Bulletin No. 47 of "Australian Demography." A summary regarding type and seat of disease for the year 1929 is given hereunder :-

DEATHS FROM CANCER.-TYPE AND SEAT OF DISEASE, AUSTRALIA, 1929.

| Type of Disease. | Males. | Females | Persons. | Seat of Disease. | Males. | Females | Persons. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carcinoma | 2,253 | 2,143 | 4,401 | Stomach and liver. . | 1,399 | 786 | 2,185 |
| Cancer | 402 | 341 | 743 | Peritoneum, intes- |  |  |  |
| Malignant disease | 189 | 194 | 383 | tines and rectum | 496 | 505 | 1,001 |
| Sarcoma . | 211 | 123 | 334 | Female genital |  |  |  |
| Epithelioma | 144 | 55 | 199 | organs |  | 581 | 581 |
| Malignant tumour | 16 | 27 | 43 | Breast |  | 532 | 532 |
| Rodent ulcer | 50 | 26 | 76 | Buccal cavity | 299 | 31 | 330 |
| Scirrhus | 3 | 23 | 26 | Skin | 124 | 74 | 198 |
| Neoplasm | 16 | 14 | 30 | Other organs .. | 979 | 450 | 1,429 |
| Hypernephroma | 13 | 8 | 21 |  |  |  |  |
| Total Deaths | 3,297 | 2,959 | 6,256 | Total Deaths | 3,297 | 2,959 | 6,256 |

(c) Ages at Death. The ages of the 6,256 persons who died from cancer in 1929 are given in the following table, which shows that while the ages below 35 are not immune from the disease, the great majority of deaths occurred at ages from 35 upwards, the maximum being found in the age-group 65 to 70 :-

DEATHS FROM CANCER.-AGES, AUSTRALIA, 1929.

(d) Occupations. A tabulation in summarized form of occupations of the males who died from cancer in 1929 is given hereunder :-

OCCUPATION OF MALES WHO DIED FROM CANCER.—AUSTRALIA, 1929.

| Orcupation. | No. of Male Deaths. | Occupation. | No. oi Male Deaths. |
| :---: | :---: | :---: | :---: |
| Professional Class- |  | Industrial Class- |  |
| Government, Defence, Law | 64 | Art and Mechanio Productions | 142 |
| Others | 107 | Textiles and Fibrous Materials | 71 |
|  |  | Food and Drinks .. | 45 |
| Domestic Class- |  | Animal and Vegetable Sub- |  |
| Board and Lodging | 43 | stances . . .. .. | 17 |
| Others .. | 40 | Metals and Minerals | 89 |
|  |  | Fuel, Light and Energy . . | 12 |
| Commerctal Class- |  | Building and Construction .. | 203 |
| Property and Finance .. | 37 | Others | 694 |
| Art, Mechanic, and Textile Products | 29 | Agricultural Pastoral, |  |
| Food and Drinks .. .. | 76 | Mining, etc., Class- |  |
| Animal and Vegetable Sub- |  | Agricultural | 492 |
| stances .. .. .. | 11 | Pastoral .. .. | 181 |
| Fuel, Light and Metals | 10 | Mining and Quarrying | 106 |
| Merchants and Dealers | 83 | Others | 26 |
| Others . | 162 | Independent Means | 104 |
| Transport and Communication Class- |  | Dependent | 60 |
| Railway Traffic | 109 |  |  |
| Road and Tramway Traffic | 85 | Occupations Unspecified | 119 |
| Sea and River Traftic | 59 |  | -- |
| Others .. . | 21 | Total Male Deaths | 3,297 |

(e) Death Rates. The following table shows the death rates and the proportion per 10,000 deaths from cancer in each State for the year 1929.

DEATHS FROM CANCER.-RATES(a) AND PROPORTIONS, 1929.

| State or Territory. | Death Rates (a) from Cancer. |  |  | Proportion of 10,000 Total Deaths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Matcs. | Fcmales. | Total. | Males. | Femaics. | Totai, |
| New South Wales | 98 | 91 | 95 | 876 | 1,042 | 947 |
| Victoria . . | 106 | 108 | 107 | 1,021 | 1,263 | 1,131 |
| Queensland | 94 | 80 | 87 | 916 | 1,066 | 975 |
| South Australia | 117 | 101 | 109 | 1,254 | 1,268 | 1,260 |
| Western Australia | 99 | 84 | 92 | 894 | 1,091 | 967 |
| Tasmania | 91 | 100 | 96 | 833 | 1,067 | 942 |
| Northern Territory | 176 | 75 | 144 | 877 | 1,250 | 923 |
| Federal Capital Territory | . . | 27 | 12 |  | 625 | 256 |
| Australia | 101 | 95 | 98 | 950 | 1,132 | 1,028 |

(a) Number of deaths from cancer per 100,000 of mean population.
(f) Comparison with Tuberculosis. In recent years the death rate from tuberculosis has shown a tendency to decrease, while that from cancer has displayed an almost continuous increase. The table hereunder shows that for each of the years under review the death rate for cancer has been greater than that from tuberculosis, the excess varying from 34 per 103,060 persons in 1925 to 44 in 1929.

TUBERCULOSIS AND CANCER.—DEATH RATES(a) AUSTRALIA, 1925 TO 1929.

(a) Number of deaths per 100,000 of mean population.
(g) Dealh Rates, Various Countrics. The following table shows the Australian death rate from cancer in comparison with that for other countries:-

CANCER.-DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

| Country. | Year. | Rate. | Country. | Year. | Rate. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Greece | 1924 | 19 | Irish Free State | 1929 | 101 |
| Egypt | 1927 | 20 | New Zealand | 1929 | 104 |
| Rumania | 1926 | 30 | Czecho-Slovakia | 1927 | 109 |
| Italy | 1927 | 59 | Northern Ireland | 1928 | 117 |
| Spain | 1927 | 70 | Norway | 1926 | 119 |
| Japan .. .. | 1927 | 70 | Netherlands | 1928 | 120 |
| Union of South Africa (Whites) | 1928 | 78 | Germany . Sweden | 1928 | 126 130 |
| France .- | 1926 | 84 | Switzerland | 1928 | 137 |
| Belgium | 1927 | 87 | Denmark . . | 1927 | 140 |
| $\begin{aligned} & \text { Canada } \\ & \text { Quebec) } \end{aligned}$ | 1929 | 90 | Great Britain and | 1928 | 142 |
| United States (Regis. tration Area) | 1927 | 96 | England and Wales Scotland | $\begin{aligned} & 1928 \\ & 1929 \end{aligned}$ | 143 |
| Australia .. | 1929 | 98 |  |  |  |

(xvii) Meningitis. The deaths during 1929 from meningitis numbered 264, of which 115 occurred in New South Wales, 57 in Victoria, 43 in Queensland, 13 in South Australia, 15 in Western Australia, 20 in Tasmania, and 1 in Federal Capital Territory.
(xviii) Cerebral Hamorrhage, Embolism and Softening of the Brain. The deaths under this heading have increased in number during the period under review. The figures for 1929 are made up as follows :-Cerebral hæmorrhage and apoplexy (including cerebral hæmorrhage, etc., associated with arterio-sclerosis), 1,447 males, 1,530 females; cerebral embolism, 36 males, 51 females; cerebral thrombosis, 199 males, 213 females; and softening of the brain, 43 males, 32 fomales.
(xix) Diseases of the Heart. The number of deaths in 1929 was 0,281 , viz., 5,211 males and 4,070 females. Of the 9,281 deaths, 51 were attributed to pericarditis, 358 to acute endocarditis and myocarditis, 566 to angina pectoris, and 8,306 to other diseases of the heart. Of these deaths, New South Wales contributed 2,274 males and 1,810 females; Victoria, 1,415 males and 1,202 females; Queensland, 702 males and 470 females; South Australia, 361 males and 266 females; Western Australia, 287 males and 163 females; Tasmania, 168 males and 157 females; Northern Territory, 1 male and Foderal Capital Territory, 3 males and 2 females. The death rates and proportions per 10,000 deaths in 1929 were as follow :-

## dEATH RATES $(\alpha)$ FROM DISEASES OF THE HEART AND PROPORTION OF 10,000 TOTAL DEATHS, AUSTRALIA, 1929.

| State or Territory. | Death Ratcs (a) from Diseases of the Heart. |  |  | Proportion of 10,000 Deaths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Fcmales. | Total. |
| New South Wales | 181 | 150 | 166 | 1,629 | 1,713 | 1,661 |
| Victoria .- | 161 | 135 | 148 | 1,550 | 1,588 | 1,566 |
| Queensland | 143 | 108 | 127 | 1,389 | 1,444 | 1,410 |
| South Australia | 121 | 95 | 108 | 1,290 | 1,187 | 1,244 |
| Western Australia | 129 | 87 | 109 | 1,161 | 1,118 | 1,145 |
| Tasmania.. | 155 | 146 | 152 | 1,443 | 1,551 | 1,494 |
| Northern Territory | 35 |  | 24 | 175 |  | 151 |
| Federal Capital Territory | 64 | 55 | 60 | 1,304 | 1,250 | 1,282 |
| Australia | 160 | 131 | 146 | 1,501 | 1,557 | 1,525 |

(a) Number of deaths from diseases of the heart per 100,000 of mean population.
(xx) Acule Bronchitis. Deaths from bronchitis are classified under the following headings :-(a) Acute, (b) chronic, (c) unspecified, under five years of age, and (d) unspecified, five years and over. For the purpcse of the abridged classification, (a) and (c) are treated as " acute," and (b) and ( $d$ ) as " chronic " bronchitis. Acute bronchitis caused 260 deaths in 1925; 248 in 1926; 344 in 1927; 260 in 1928; and 307 in 1929 , viz., 161 males and 146 females.
(xxi) Chronic Bronchitis. The deaths from this cause in 1929 numbered 821, viz., 432 males and 389 females, which was above the average for the previous four years.
(xxii) Pneumonia. The deaths from pneumonia during 1929 were 2,982-1,830 males and 1,152 females-which is 14 per cent. higher than the average, 2,605 , for the previous four years.
(xxiii) Other Diseases of the Respiratory System. Deaths under this heading in 1925 numbered 2,522 ; in 1926, 2,534 ; in 1927, 2,767 ; in 1928, 2,762; and in 1929, 3,039. The total for 1929 is made up as follows, riz. :-Diseases of the nasal fossae, 35 ; diseases of the larynx, 35 ; broncho-pneumonia, 1,952; capillary bronchitis, 14; pleurisy, 210; pulmonary congestion and apoplexy, 311; gangrene of the lungs, 15; asthma, 158 ; pulmonary emphysema, 11 ; chronic interstitial pneumonia, 224 ; and other diseases of the respiratory system (tuberculosis excepted), 65.
(xxiv) Diseases of the Stomach (Cancer excepted). In 1929 this heading includes ulcer of the stomach, 143 males, 57 females; ulcer of the duodenum, 82 males, 17 females; and other diseases of the stomach (cancer excepted), 84 males, 69 females; a total of 452.
(xxva) Diarrhoea and Enteritis (Children under two years only). The number of deaths due to these causes was 963 in 1929, the lowest number recordod for many years. During 1929, 6,616 children died before reaching their second birthday, and of these 963 , or 14.5 per cent., died from diarrhoes and enteritis. The ages of children dying from these diseases during the first year of life will be found on page 724.

The number of deaths (under 2 years of age), the death rates, and proportions of 10,000 deaths due to diarrhœa and enteritis are given below :-

DEATHS, DEATH RATES( $a$ ), ETC., DIARRHEA AND ENTERITIS (UNDER 2 YEARS OF AGE).-AUSTRALIA, 1929.

(a) Number of deaths from these discases per 100,000 of mean population.
(xxvb) Diarrhcea and Enteritis (2 years and over). The number of deaths from the same causes in older ages, viz., 442, compared favourably with the average of 506 for the period 1925 to 1928.
(xxvi) Appendicitis and Typhlitis. Deaths under this heading numbered 438 in 1925, 476 in 1926, 483 in 1927, 470 in 1928, and 481 in 1929 ; the total for the last year included 323 males and 158 females.
(xxvii) Hernia, Intestinal Obstruction. The deaths under this heading have not varied greatly from year to year, the number registered in 1929 being 583, viz., hernia, 159 , and intestinal obstruction, 424.
(xxviii) Cirrhosis of the Liver. The deaths from this cause during 1929 numbered 301, and include 31 deaths from alcoholic cirrhosis.
(xxix) Acute and Chronic Nephritis. The number of deaths attributable to these diseases shows a considerable increase on the number for previous years. In 1925 there were 2,978 deaths ; in 1926, 2,989; in 1927, 3,098 ; in 1928, 3,189; and in 1929, 3,406, viz., 1,901 males and 1,505 females. Of the deaths registered in 1929, 178 were ascribed to acute nephritis, and 3,228 to chronic nephritis, of which 1,363 deaths occurred in New South Wales; 986 in Victoris; 498 in Queensland; 280 in South Australia; 206 in Western Australia; 67 in Tasmania; 3 in Northern Territory; and 3 in the Federal Capital Territory.
( xxx ) Non-Cancerous Tumours and other Diseases of the Female Genital Organs. Deaths in 1925 numbered 165 ; in 1926, 166 ; in 1927, 179 ; in 1928, 196; and in 1929, 218. Included in the 218 deaths in 1929 were the following :-Cysts, etc., of the o vary, 45; salpingitis and pelvic abscess, 73 ; benign tumours of the uterus, 65 ; uterine bæmorthage (non-puerperal), 7 ; and other diseases of the female genital organs, 28.
(xxxi) Puerperal Septicxnia (Puerperat Ferer). The 222 deaiths from puerperal septicæmia during 1929 showed a decrease from the arerage of the previous four years, being 1.71 to every 1,000 live births. The corresponding rates during the preceding five years were :- $1924,1.96 ; 1925,1.74 ; 1926,1.64 ; 1927,2.15$; and 1928, 2.05. The following table shows the death rate per 1,000 live births from puerperal causes in various countries.

CHILDBIRTH.-DEATHS PER 1,000 LIVE BIRTHS, VARIOUS COUNTRIES.

(xxxiia) Other Puerperal Accidents of Pregnancy and Confinement. The deaths under this heading in 1925 numbered $530 ; 488$ in $1926 ; 504$ in 1927 ; 527 in 1928 ; and 436 in 1929. Included in the 436 deaths in 1929 were the following :-Accidents of pregnancy, 110; puerperal hæmorrhage, 93 ; other accidents of childbirth, 70; puerperal phlegmasia alba dolens, embolus, sudden death, 47; puerperal albuminuria and convulsions, $109 ; 5$ deaths following childbirth; and 2 puerperal diseases of the breast.
(xxxiib) All Puerperal Causes. The 658 deaths in 1929 under the two preceding headings correspond to a death rate of 21 per 100,000 females. It may be expressed in other terms by stating that 1 of every 195 women confined in 1929 died from puerperal causes. The corresponding ratios for married women were 1 of every 199, and for single women 1 of every 125. More detailed information will be found in a geries of tables in Bulletin No. 47 "Australian Demography."

The ages of the mothers whe died varied from 15 to 47 years as shown herounder :DEATHS FROM PUERPERAL CAUSES.-AGES OF MOTHERS, AUSTRALIA, 1929.


The total number of children left by the married mothers was 1,824 , an average of 2.8 children por mother.

Twenty-eight of the mothers who died had been narried less than one year, 73 between one and two years, and 50 between two and three years. The duration of marriage ranged up to 30 years, apart from 6 cases in which the date of marriage was not stated. A tabulation, distinguishing the ages at marriage, will be found in Bulletin No. 47 "Australian Demography," which also includes a table, showing in combination the duration of marriage and previous issue.
(xxxiii) Congenital Malformation, Debility, and Premature Birth. The deaths under this heading in 1929 numbered 3,538 , of which 3,475 were of children under one year of age. Of the deaths of children under one year of age 54 per cent. were due to those causes. The number of deaths for 1929 is given in the following table:-

DEATHS FROM CONGENITAL DEBILITY, ETC., AND MALFORMATION, 1929.

(xxxiv) Senility. In 1929, 3, 332 deaths were attributed to this cause, as follows:1,047 occurred in New South Wales, viz., 603 males and 444 females; 1,045 in Victoria, viz., 483 males and 562 females; 586 in Queensland, viz.. 364 males and 222
females; 394 in South Australia, viz., 184 males and 210 females; 243 in Western Australia, viz., 155 males and 88 females; 204 in Tasmania, viz., 96 males and 108 females; and 12 males and 1 female in the Northern Territory.

Of the deaths described as due to senility, 8 males and 7 females were stated to be aged 100 years or over.
(xxxva) Violent Deaths, Homicides. Deaths from homicide in 1929 numbered 118, this figure being slightly higher than the average for the previous four years.
(xxxvb) Other Accidental Deaths. Deaths from accidents in 1929 numbered 3,544, compared with an average of 3,355 for the previous four years. Of the deaths in 1929, 1,446 occurred in New South Wales; 847 in Victoria; 543 in Queensland; 269 in South Australia; 293 in Western Australia; 133 in Tasmania; 10 in Northern Territory; and 3 in the Federal Capital Territory.

The following table shows the various kinds of violent deaths, including homicides, but excluding suicides, recorded in Australia for the year 1929 :-

DEATHS FROM EXTERNAL VIOLENCE.-AUSTRALIA, 1929.

| Cause of Death. | Males. | Females. | Persons. |
| :---: | :---: | :---: | :---: |
| Poisoning by food | 15 | 12 | 27 |
| Poisoning by venomous animals- |  |  |  |
| (a) Snakebite .. .. | 6 | 3 | 9 |
| (b) Other .. .. .. | 1 | 4 | 5 |
| Other acute accidental poisonings (gas excepted) | 47 | 29 | 76 |
| Conflagration .. .. .. | 15 | 6 | 21 |
| Accidental burns (conflagration excepted) | 136 | 133 | 269 |
| Accidental mechanical suffocation | 27 | 16 | 43 |
| Accidental absorption of irrespirable or poisonous gas | 12 | 11 | 23 |
| Accidental drowning .. .. .. .. | 407 | 86 | 493 |
| Accidental injury by firearms .. .. | 91 | 5 | 96 |
| Accidental injury by cutting or piercing instruments |  |  |  |
| Accidental injury by fall .. | 351 | 121 | 472 |
| Accidental injury in mining or quarrying | 45 | .. | 45 |
| Accidental injury by machinery | 61 |  | 61 |
| Accidental injury by other crushing - |  |  |  |
| Railway accidents .. .. | 134 | 10 | 144 |
| Tramway accidents .. | 46 | 15 | 61 |
| Automobile accidents | 808 | 190 | 998 |
| Injuries by other vehicles | 93 | 10 | 103 |
| Aeroplane accidents .. | 151 | 15 | 166 |
| Other crushings | 18 | 1 | 19 |
| Injuries by animals (not poisoning) | 25 | 5 | 30 |
| Wounds of war | 4 |  | 4 |
| Starvation, thirst, fatigue .. | 15 | 5 | 20 |
| Excessive cold | 3 |  | 3 |
| Excessive heat | 31 | 16 | 7 |
| Lightning $\quad \because \quad .$. | 5 | 2 | 7 |
| Other accidental electrit shocks | 45 | 3 | 48 |
| Homicide by firearms | 29 | 19 | 48 |
| Homicide by cutting or piercing instruments | 8 | 12 | 20 |
| Homicide by other means $\quad . \quad .$. | 22 | 21 | 43 |
| Infanticide (murder of children under 1 year) |  | 1 | ${ }^{7}$ |
| Fractures (cause not specified) .. | 73 | 27 |  |
| Other external violence (cause specified) | 103 | 27 | 130 |
| Other external violence (cause unspecified) | 19 | 5 | 24 |
| Total Deaths Death Rate per lo | $\begin{array}{r} 2,852 \\ 88 \end{array}$ | $\begin{array}{r} 810 \\ 26 \end{array}$ | $\begin{array}{r} 3,662 \\ 57 \end{array}$ |

(xxxvi) Suicide.-(a) General. Deaths by suicide in 1929 showed an increase on the figures for each of the previous four years, the number in 1925 being 700 , viz., 569 males and 131 females; in 1926, 711, viz., 583 males and 128 females; in 1927, 740, viz., 598 males and 142 females; in 1928, 777, viz., 635 males and 142 females; and in 1929, 785, viz., 644 males and 141 females.
C.5408.-25
(b) Modes Adopted. The modes adopted by persons who committed suicide in the years 1925 to 1929 were as follow :-

SUICIDES, MODES ADOPTED.-AUSTRALIA, 1925 TO 1929.

| Mode of Death. | Males. |  | Females. |  | Persons. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total of 4 years. 1925-28. | 1829. | $\begin{gathered} \text { Total } \\ \text { of } 4 \text { years, } \\ 1925-28 . \end{gathered}$ | 1929. | Total of 4 years, 1925-28. | 1929. |
| Poisoning .. .. | 544 | 152 | 233 | 62 | 777 | 214 |
| Poisonous gas .. | 62 | 23 | 25 | 14 | 87 | 37 |
| Hanging or Strangulation | 358 | 93 | 93 | 18 | 451 | 111 |
| Drowning .. .. | 171 | 41 | 74 | 18 | 245 | 59 |
| Firearms . . . $\quad$. | 711 | 203 | 28 | 7 | 739 | 210 |
| Cutting or piercing instruments | 417 | 98 | 50 | 9 | 467 | 107 |
| Jumping from a high place . . | 31 | 11 | 10 | 7 | 41 | 18 |
| Crushing .. .. | 55 | 14 | 14 | 6 | 69 | 20 |
| Other Modes | 36 | 9 | 16 |  | 52 | 9 |
| Total | 2,385 | 644 | 543 | 141 | 2,928 | 785 |

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

SUICIDE.-DEATHS, DEATH RATES $(a)$, AND PROPORTION OF TOTAL DEATHS, 1929.

| State or Territory. | Number of Deaths. |  |  | Death Hates (a) from Suicide. |  |  | Proportion of 10,000 Total Deaths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Total. | Males. | Females. | Total. |
| New South Wales | 239 | 63 | 302 | 19 | 5 | 12 | 171 | 60 | 123 |
| Victoria | 153 | 27 | 180 | 17 | 3 | 10 | 168 | 36 | 108 |
| Queensland .. | 109 | 20 | 129 | 22 | 5 | 14 | 216 | 61 | 155 |
| South Australia .. | 58 | 14 | 72 | 10 | 5 | 12 | 207 | 63 | 143 |
| Western Australia | 69 | 10 | 79 | 31 | 5 | 19 | 279 | 69 | 201 |
| Tasmania .. | 12 | 7 | 19 | 11 | 7 | 9 | 103 | 69 | 87 |
| Northern Territory | 4 | . . | 4 | 141 | . | 96 | 702 | .. | 615 |
| Fed. Cap. Territory | . |  | . . | .. | . | . | . | . | .. |
| Australia | 644 | 141 | 785 | 20 | 5 | 12 | 186 | 54 | 129 |

(a) Number of deaths from suicide per 100,000 of mean population.
(d) Ages. From the following table, which shows the ages of the persons who committed suicide in 1929, it will be seen that both extreme youth and extreme old age are represented:-

AGES OF PERSONS WHO COMMITTED SUICIDE.-AUSTRALIA, 1929.

| Ages. |  |  |  | M. | F. | Total. | Age |  |  | M. | F. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 years and under 20 |  |  |  | 14 | 4 | 18 | 60 years an |  | r 6 | 51 | 5 | 56 |
| 20 | " | " | 25 | 34 | 9 | 43 | 65 " | , | 70 | 42 | 8 | 50 |
| 25 | , | , | 30 | 57 | 17 | 74 | 70 ." | , |  | 17 | 1 | 18 |
| 30 | " | " | 35 | 64 | 14 | 78 | 75 " | " |  | 12 | 1 | 13 |
| 35 | " | ", | 40 | 71 | 21 | 92 | 80 " | ," |  | 2 | . . | 2 |
| 40 | " | " | 45 | 76 | 22 | 98 | 85 ", | " |  |  |  |  |
| 45 |  | , | 50 | 64 | 19 | 83 | Not stated |  |  | 6 | $\ldots$ | 6 |
| 50 |  |  | 55 | 78 | 13 | 91 |  |  |  |  |  |  |
| 55 | , | ," | 60 | 56 | 7 | 63 | Total D | ths | . | 644 | 141 | 785 |

(e) Occupations of Males. The next table gives the ocoupations of the moles who committed suicide in 1929 :-

OCCUPATIONS OF MALES WHO COMMITTED SUICIDE.-AUSTRALIA, 1929.

| Occupation. | Deaths. | Occupation. | Deaths. |
| :---: | :---: | :---: | :---: |
| Profrssional Class- |  | Industrial Class- |  |
| Government, Defence, Law | 12 | Art and Mechanic Productions | 19 |
| Others .. | 28 | Textiles and Fibrous Materials | 9 |
| Domestic Class- |  | Food and Drinks | 9 |
| Board and Lodging | 19 | Animal and Vegetable Sub. |  |
| Others | 12 | stances .. |  |
| Combierclal Class- |  | Metals and Minerals | 6 |
| Property and Finance | 4 | Fuel, Light and Energy | 1 |
| Art, Mechanic and Textile |  | Building and Construction | 30 |
| Products | 3 | Others | 158 |
| Food and Drinks | 18 | Agricultural, Pastoral, |  |
| Animal and Vegetable Substances | 1 | Mining, etc., ClassAgricultural | 86 |
| Fuel, Light, and Energy | 1 | Pastoral . | 34 |
| Merchants and Dealers | 25 | Mining and Quarrying | 19 |
| Others | 50 | Others | 4 |
| Transport and Communication |  | Independent Means | 11 |
| Class- |  | Dependenits | 5 |
| Railways | 14 | Occupation not stated | 32 |
| Roads and Trams | 15 |  |  |
| Sea and Rivers | 13 | Total .. | 644 |
| Others | 6 |  |  |

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

| SUICIDE.-DEATHS | R I |  | ONS LIVING, VAR | CO |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Country. | Year. | Rate. | Country. | Year. | Rate. |
| Greece | 1924 | 1.7 | New South Wales | 1929 | 12.3 |
| Egypt | 1927 | 3.2 | Australia . . | 1929 | 12.3 |
| Irish Free State | 1928 | 3.3 | South Australia | 1929 | 12.4 |
| Spain | 1927 | 4.2 | England and Wales | 1928 | 12.4 |
| Northern Ireland | 1928 | 5.1 | Sweden | 1928 | 13.1 |
| Norway | 1926 | 6.3 | United States | 1927 | 13.3 |
| Netheriands | 1928 | 6.8 | Queensland | 1929 | 13.9 |
| Rumania | 1926 | 7.8 | Belgium . . | 1227 | 15.5 |
| Canada | 1929 | 8.5 | New Zealand | 1929 | 15.7 |
| Tasmania | 1929 | 8.9 | Denmark | 1927 | 15.9 |
| Scotland | 1929 | 9.7 | France | 1926 | 19.0 |
| Viotoria | 1929 | 10.2 | Western Australia | 1929 | 19.2 |
| Italy | 1927 | 10.4 | Japan | 1927 | 20.9 |
| Union of South Africa (a) | 1928 | 11.2 | Switzerland | 1928 | 25.4 |
| Great Britain and Nor- |  |  | Czecho-Slovakia | 1927 | 25.6 |
| thern Ireland . . | 1928 | 11.9 | Germany . . | 1928 | 26.0 |

(a) White population only.
(xxxvii) Other Diseases. The number of canses included under this heading is very large, amounting to no less than 90 of the items shown in the detailed classification, and deaths were recorded under each of these with the exception of the following five causes :-Glanders, rabies, soft chancre, chyluria, and amputation. The total number of deaths under " other diseases" in 1925 was 7,924 , viz., 4,640 males and 3,284 females; in 1926, 8,133 , viz., 4,643 males and 3,490 females; in $1927,8,389$, viz., 4,657 males and 3,732 females; in 1928, 8,386, viz., 4,740 males and 3,646 femates; and in. 1929

8,782 , viz., 5,033 males and 3,749 females. Some of the diseases included here account for very considerable numbers of deaths. Particulars for 1929 are shown in the following table :-

DEATHS FROM "OTHER DISEASES."-AUSTRALIA, 1929.

| Canses. | I | F. | Total. ${ }^{\prime}$ | Causes. | M. | F. | otal. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthrax | 1 |  | 1 | Other Diseases of the Ner- |  |  |  |
| Tetanus. | 71 | 27 | 98 | vous System .. | 47 | 41 | 88 |
| Mycoses | 7 | 1 | 8 | Diseases of the Eye | 2 | 2 | $4$ |
| Syphilis | 102 | 44 | 146 | Diseases of the Ear | 53 | 50 | 103 |
| Gonococcus Infection | 3 |  | 5 | Aneurism | 169 637 | 40 328 | 209 965 |
| Purulent Infection and Septi- | 72 | 58 | 130 | Other $\begin{aligned} & \text { Arterio-sclerosis } \\ & \text { Diseases }\end{aligned} \cdots$ of the | 637 | 328 | 065 |
| Other Infectious Diseases | 2 |  | 2 | Arteries | 69 | 20 | 80 |
| Other Tumours (Tumours of the female genital organs |  |  |  | Embolism and Thrombosis | 119 | 73 | 192 |
| excepted) .. .. | 45 | 35 | 80 | Diseases of the Veins | 10 | 16 | 26 |
| Acute Rheumatic Fever | 123 | 109 | 232 | Diseases of the Lymphatic |  |  |  |
| Chronic Rheumatism and | 17 | 23 | 40 | System ${ }_{\text {Hxmorrhage ( }}$ (without speci- | 8 | 6 | 14 |
| Rheumatoid and Osteo- |  |  |  | fled cause) | 4 | 8 | 12 |
| arthritis .. | 42 | 76 | 118 | Other Diseases of the Circu- |  |  |  |
| Gout .. | 3 | 1 |  | latory System |  | 23 | 40 |
| Scurvy .. | 1 |  | 1 | Diseases of the Mouth and | 17 |  |  |
| Pellagra | 1 |  | 10 | its Associated Organs | ${ }_{38} 23$ | 13 | ${ }_{94}^{36}$ |
| Beri-beri | 10 |  | 10 | Diseases of the Pharynx | 38 | 56 | ${ }_{10}^{94}$ |
| Rickets. | 13 | 49 | 18 | Diseases of the Gsophagus | 4 | $\stackrel{4}{2}$ | 6 |
| Diabetes ${ }_{\text {Pernicious Anmmia }}$ | 329 | 494 | 823 | Ankylostomiasis | 4 | 12 | ${ }_{25}^{6}$ |
| Pernicious Anæmia | 119 | 119 | 238 | Intestinal Parasites | 13 | 12 | 5 |
| Other Chlorosis Anmmias and ar | 32 | 28 | 60 | Other Diseases of the In- | 36 | 30 | 66 |
| Diseases of the Pituitary | 5 | 5 | 10 | Acute Yellow Atrophy of the Liver | 7 | 18 | 25 |
| Exophthalmic Goitre | 12 | 87 | 99 | Hydatid Tumours of the |  |  |  |
| Other Diseases of the Thyroid |  |  |  | Liver .. | 17 | 20 | 37 |
| Glands | 19 | 48 | 67 | Biliary Calculi ${ }^{\text {Of }}$ the Liv |  | 116 | ${ }_{234}^{181}$ |
| Diseases of the Parathyroid Glands | 1 |  | 1 \| | Diseases of the Pancreas | 33 | 38 | 71 |
| Diseases of the Thymus |  |  |  | Peritonitis (without specified |  |  |  |
| Gland .. | 13 | 9 | 22 | cause) | 49 | 62 | 111 |
| Addison's Disease | 15 | 22 | 37 | Other Diseases of the Digest- |  |  |  |
| Diseases of the Spleen |  | 3 | ${ }^{3}$ | ive system. (Cancer and |  |  |  |
| Leucmmia | 67 | 53 | 120 | Tuberculosis excepted) | 2 | 1 | 3 |
| Hodgkin's Disease | 51 | 24 | 75 | Other Diseases of the Kid- |  |  |  |
| Acute and Chronic Alcoholism | 81 | 23 | 104 | neys and their Adnexa ${ }^{\text {n }}$ | 151 34 | 151 | 62 |
| Chronic Lead Poisoning | 16 | 1 | 17 | Diseases of the Bladder | 91 | 30 | 121 |
| Other Chronic Mineral |  |  |  | Other Diseases of the Urethra,' |  |  |  |
| Poisoning | 1 | 1 | 1 | Diseases of the Prostate. | $\begin{array}{r} 35 \\ 204 \end{array}$ | 2 | 37 394 |
| Other General Diseases | 58 | 59 | 117 | Non-venereal Diseases of the |  |  |  |
| Encephaliti |  |  |  | Male Genital Organs | 5 |  | 5 |
| Abscess | 28 | 24 | 52 | Non-puerperal Diseases of |  |  |  |
| Encephalitis-Other Discases | 61 | 46 | 107 | the Breast |  | $\stackrel{2}{2}$ |  |
| Locomotor Ataxia | 49 | 16 | 65 | Gangrene | 55 | 30 | 85 |
| Other Diseases of the Spinal |  |  |  | Furuncle | 23 77 | 17 55 | 40 |
| Cord ${ }^{\text {Caralysis }}$ without | 11 | 81 | 192 | Phlegmon, Acute Abscess | 77 | 55 |  |
| Paralysis without specifled cause | 148 | 139 | 287 | and Adnexa | 25 | 30 | 55 |
| General Paralysis of the Insane | 92 | 17 | 109 | Non-tuberculous Diseases of the Bones | 78 | 53 | 131 |
| Other Forms of Mental Alienation | 49 | 52 | 101 | Other Diseases of the Joints (Tuberculosis and Rheu- |  |  |  |
| Epilepsy $\quad$ : ${ }^{\text {a }}$ | 130 | 82 | 212 | matism excepted) .. | 12 | 8 | 20 |
| Convulsions (non-puerperal) | 4 | 4 | 8 | Other Diseases of the Organs |  |  |  |
| Convulsions of Children under |  |  |  | Diseases of the Um | 13 | 8 | ${ }_{1}^{6}$ |
| Chorea .. | 1 | 8 | 98 | Atelectasis | 141 | 119 | 260 |
| Neuralgia and Neuritis | 11 | 11 | 22 | Other Diseases pecullar to |  |  |  |
| Idiocy, Imbecility | 18 |  | 25 | Infancy $\quad \cdots$. | 63 | 63 | 6 |
| Cerebral Tumour | 110 | 77 | 18 | Lack of Care (Infants) |  | . |  |
| Disseminated Sclerosis | ${ }_{61}^{41}$ | 42 | 103 | Total Deaths | 5,033 | 3,749 | 8,782 |

(xxxviii) Unspecified or Ill-defined Diseases. The number of deaths included under this heading was 648 in 1925, 690 in 1926, 570 in 1927, 603 in 1928, and 536 in 1929, of which 387 were males and 149 females. The detailed classification shows these illdefined diseases under two headings-sudden death, including syncope; and unspecified or ill-defined causes, of which the following are specimens:-Heart failure, asthenia, anasarca, atrophy, exhaustion, dropsy, ascites, and general œdema, etc. In 1929, the number of deaths which came under the first of these categories was 51 , and under the
second, 485. It is inevitable that cases will occur regarding which the available informa. tion is insufficient to permit of a clear definition of the fatal disease in the certificate of death. In the majority of cases, however, there is little doubt that more satisfactory certificates might have been given.
14. Causes of Deaths in Classes.-The figures in the preceding sub-sections relate to specific causes of death, and are of greater value in medical statistics than a mere grouping under general headings. The classification under fifteen general headings adopted by the compilers of the International Nomenclature is, however, shown in the following table, together with the death rates and proportions on total deaths pertaining to those classes :-

DEATHS, DEATH RATES $(a)$, ETC., IN CLASSES.—AUSTRALIA, 1929.

| Class. | Total Deaths. |  |  | Death Rates.(a) |  |  | Proportion of 10,000 Deaths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M. | F. | Total. | M. | F. | Total. | M. | F. | Total. |
| 1. Epidemic, Endemic, and Infectious Diseases | 3,622 | 2,785 | 6,407 | 111 | 89 | 101 | 1,044 | 1,065. | 53 |
| 2. General diseases not ${ }^{\text {a }}$ included | 3,622 |  |  |  |  |  |  |  |  |
| 2. above .. | 4,371 | 4,185 | 8,556 | 134 | 134 | 134 | 1,259 | 1,601 | 1,408 |
| 3. Diseases of the Nervous System and of the Organs of Sense | 2,524 | 2,311 | 4,835 | 78 | 74 | 76 | 727 | 884 | 795 |
| 4. Diseases of the Circulatory System | 6,666 | 4,983 | 11,649 | 205 | 160 | 183 | 1,920 | 1,906 | 1,914 |
| 5. Diseases of the Respiratory System | 4,175 | 2,974 | 7,149 | 128 | 95 | 112 | 1,203 | 1,138 | 1,175 |
| 6. Diseases of the Digestive Organs | 2,360 | 1,761 | 4,121 | 72 | 57 | 65 | 680 | 674 | 677 |
| 7. Diseases of the Genito-Urinary System and Adnexa.. | 2,611 | 1,936 | 4,547 | 80 | 62 | 71 | 752 | 741 | 747 |
| 8. Puerperal Condition $\cdots$.. | 2,011 | 1,658 | -658 | . | 21 | 10 | . | 252 | 108 |
| 9. Diseases of the Skin and of the Cellular Tissue | 180 | 132 | 312 | 6 | 4 | 6 | 51 | 50 | 51 |
| 10. Diseases of the Bones and Organs of Locomotion | 94 | 63 | 157 | 3 | 2 | 2 | 27 | 24 | 26 |
| 11. Malformations .. | 403 | 284 | 687 | 12 | 9 | 11 | 116 | 109 | 113 |
| 12. Early Infancy | 1,932 | 1,332 | 3,264 | 59 | 43 | 51 | 557 | 510 | 536 |
| 13. Old Age . . | 1,897 | 1,635 | 3,532 | 58 | 53 | 55 | 546 | 625 | 580 |
| 14. External Causes | 3,496 | 951 | 4,447 | 107 | 31 | 70 | 1,007 | 364 | 731 |
| 15. Ill-defined Diseases | 387 | 149 | 536 | 12 | 5 | 8 | 111 | 57 | 88 |
| Total | 34,718 | 26,139 | 60,857. | 1,065 | 839 | 955 | 10,000 | 10,000 | 10,000 |

(a) Number of deaths per 100,000 of mean population.
15. Ages at Death of Married Males and Females, and Issue.-Bulletin No. 47 "Australian Demography" contains a number of tables showing the age at marriage, age at death, birthplaces, and occupations, in combination with the issue of married persons who died in Australia in 1929. A summary of those tables is given hereunder. Deaths of married males in 1929 numbered 19,754, and of married females, $17,600$. The tabulations which follow deal, however, with only 19,245 males and 17,247 females, the information in the remaining 862 cases being incomplete. The total number of children in the families of the 19,245 males was 87,967 , and of the 17,247 females, 83,558 . The average number of children is shown for various age-groups in the following table :-
AGES AT DEATH OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.AUSTRALIA, 1929.

| Age at Death. |  | A verage Family of Males. | Average Family of Females. | Age at Death. | Average Family of Males. | Average Family of Females. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 20 years |  | 0.50 | 0.66 | 70 to 74 years | 5.34 | 5.78 |
| 20 to 24 years |  | 0.97 | 1.25 | 75 , 79 , | 5.83 | 6.24 |
| 25 ,, 29 |  | 1.34 | 1.75 | 80 " 84 | 6.38 | 6.33 |
| 30 ," 34 |  | 1.90 | 2.47 | 85 " 89 | 6.58 | 6.45 |
| 35 ,, 39 |  | 2.44 | 2.79 | 90 ,, 94 | 6.64 | 6.82 |
| 40 ,, 44 |  | 2.91 | 3.52 | 95 ", 99 ," | 7.26 | 7.01 |
| 45 , 49 |  | 3.47 | 3.44 | 100 years and up- |  |  |
| 50 ,, 54 |  | 3.54 | 3.64 | wards . . | 3.57 | 4.56 |
| 55 ," 59 ,, | $\bullet$ | 3.93 | 4.25 | Age not stated | 6.57 | - |
| 60 ,, 64 ,, | . | 4.13 | 4.61 |  | - | -- |
| 65 , 69 ,, | . | 4.71 | 5.30 | All ages | 4.57 | 4.84 |

The figures in the preceding table include the issue both living and dead, the proportion between them, taking the issue of deceased males and females together, being about 1,000 to 264 . The totals are shown in the following table :-

ISSUE OF MARRIED MALES AND FEMALES.-AUSTRALIA, 1929.

16. Ages at Marriage of Deceased Males and Females, and Issue.-While the table giving the average families of married males and females naturally shows an increase in the averages with advancing ages at death, the following table, which gives the average families of males and females according to the age at marriage of the deceased parents, shows a corresponding decrease in the averages as the age at marriage advances :-

## ages at marriage of deceased males and females, and average

 ISSUE.-AUSTRALIA, 1929.| Age at Marriage. | $\begin{aligned} & \text { A verage } \\ & \text { Family of } \\ & \text { Males. } \end{aligned}$ | Average Family of Females | Age at Marriage. | $\begin{aligned} & \text { Average } \\ & \text { Family of } \\ & \text { Males. } \end{aligned}$ | $\begin{array}{\|l} \text { Average } \\ \text { Family of } \\ \text { Females. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Under 15 years |  | 4.75 | 50 to 54 years | 1.74 | $\cdots$ |
| 15 to 19 " | 6.03 | 6.70 | 55 , 59 " | 1.49 | $\cdots$ |
| 20 ,, 24 , | 5.58 | 5.30 | 60 , 64 | 0.69 |  |
| $25,{ }^{29}$, | 4.82 | 3.88 | 65 years and upwards | 0.77 |  |
| 30 , 34 , | 3.93 | 2.59 | Age unspecified | 4.59 | 4.35 |
| 35 , 39 " | 3.26 | 1.37 |  |  |  |
| 40 ", 44 | 2.48 | 0.54 |  |  |  |
| 45 , 49 " | 1.83 | 0.01 | All Ages | 4.67 | 4.84 |

17. Birthplaces of Deceased Married Males and Females, and Issue.-The following table shows the birthplaces of married males and females who died in 1929, together with their average issue. No generalizations can, of course, be made in those cases in which the number of deaths was small, but where the figures are comparatively large, as in the case of natives of Australia, differences occur between the averages of the individual States, which appear inexplicable on any other ground than that of different age constitution of the locally born population of the tarious States due to the different dates of the foundation of settlement. Thus, New South Wales and Tasmania, owing to their early settlement, contain a larger number of locally-born inhabitants of advanced ages than Victoria and Queensland, in which colonization was begun almost fifty years after the foundation of New South Wales. It will be noted that the differences occur both in the male and female averages.

BIRTHPLACES OF DECEASED MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.-AUSTRALIA, 1929.

| Birthplace. | Married Males. |  | Married Females. |  | Birthplace. | Married Malea. |  | Married Females. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \stackrel{9}{4} \\ & \stackrel{\rightharpoonup}{\leftrightarrows} \\ & \stackrel{\oplus}{0} \end{aligned}$ |  | $\begin{aligned} & \text { 哭 } \\ & \text { せ } \\ & \text { § } \end{aligned}$ |  |
| New South Wales | 4,306 | 4.69 | 4,244 | 4.88 | Switzcrland | 19 | 5.47 | 13 | 6.38 |
| Victoria | 3,882 | 4.12 | 3,503 | 4.22 | Other European |  |  |  |  |
| Queensland | 787 | 4.18 | 829 | 4.16 | Countries $\quad \therefore$ | 12 | 3.42 | 6 | 5.00 |
| South Australia | 1,391 | 4.47 | 1,283 | 4.79 | British India and |  |  |  |  |
| Western Australia | 183 | 4.56 | 208 | 4.01 | Ceylon | 45 | 4.18 | 29 | 5.31 |
| Tasmania . | 730 | 5.09 | 765 | 5.08 | China | 60 | 3.25 |  |  |
| Northera Territory |  | . . | 3 | 4.33 | Japan .. | 7 | 1.57 |  |  |
| Federal Capital Terri- | - | 3.25 |  |  | Philippine Islands | 1 | 4.00 |  |  |
| tory . | ${ }^{4}$ | 3.25 |  |  | Syria | 16 | 3.75 | 9 | 3.89 |
| New Zealand | 207 | 3.28 | 142 | 3.56 | Other Asiatic Coun- |  |  |  |  |
| England and Wales | 4,270 | 4.71 | 3,349 | 5.08 | tries .. | 8 | 2.25 | 4 | 6.75 |
| Scotland | 1,079 | 4.49 | 878 | 5.31 | Mauritius Sonit | 7 | 5.71 | 3 | 3.00 |
| Ireland $\quad .$. | 1,182 | 5.44 | 1,406 | 5.64 | Union of South |  |  |  |  |
| Other British Posses- |  |  |  |  | Africa . | 20 | 3.35 | 15 | 5.07 |
| sjons in Europe | 34 | 4.47 | 12 | 5.25 | Egypt | 2 | 1.50 | 1 | 3.00 |
| Austria .. | 8 | 3.00 | 2 | 4.00 | Other African Coun- |  |  |  |  |
| Belgium | 2 | 6.50 | 2 | 1.00 | tries .. | 2 | 6.50 |  |  |
| Czecho-Slovakia | 1 | 5.00 |  |  | Canada $\because$. | 28 | 2.93 | 11 | 4.91 |
| Denmark | 97 | 4.75 | 37 | 0.41 | Other British Posses- |  |  |  |  |
| Finland | 11 | 4.55 | 1 | 3.00 | sions in Americs | 7 | 3.29 | 1 | 3.00 |
| France | 34 | 4.50 | 23 | 2.48 | United States .. | 59 | 4.02 | 29 | 4.66 |
| Germany | 319 | 6.06 | 253 | 6.71 | Other American |  |  |  |  |
| Greece | 19 | 2.89 | 3 | 2.00 | Countries | 15 | 3.00 | 7 | 5.86 |
| Italy | 75 | 3.73 | 18 | 4.44 | New Caledonia .. | 1 |  |  |  |
| Jugo-Slavia | 12 | 3.08 | 5 | 2.20 | Other Polynesian |  |  |  |  |
| Netherlands | 12 | 4.75 | 6 | 5.17 | Islands .. | 9 | 5.22 | 6 | 3.00 |
| Norway | 37 | 4.54 | 8 | 5.63 | At Sea | 55 | 6.11 | 55 | 6.31 |
| Poland | 29 | 4.03 | 17 | 5.29 | Unspecifted | 53 | 4.13 | 36 | 4.56 |
| Russia | 23 | 3.70 4.18 | 18 | 3.56 4.00 |  |  |  |  |  |
| Spain | 11 | 4.18 3.36 | 3 4 | 4.00 5.00 | Total | 19,245 | 4.57 | 17,247 | 4.84 |
| Sweden | 74 | 3.35 |  |  |  |  |  |  |  |

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

## OCCUPATIONS OF DECEASED MARRIED MALES AND AVERAGE ISSUEAUSTRALIA, 1929.

| Occupation. | Deaths of Married Males. | Average Family. | Occupation. | Deaths of Married Males. | Average Family. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Professional ctars- |  |  | INDUSTRTAL CLAES- |  |  |
| Government, Defence, and |  |  | Art and Mechanic Products | 845 | 4.18 |
| Law .. .. .. | 562 | 4.09 | Textiles and Fibrous Materials | 397 | 4.17 |
| Others | 718 | 3.60 | Food and Drinks | 257 | 4.25 |
| Domestic Class- |  |  | Animal and Vegetable Suh- |  |  |
| Board and Iodging | 327 | 3.39 | stances morais | 93 530 | 4.61 |
| Others .. . | 300 | 4.21 | Fuet, Light, and Finergy | 530 108 | 4.65 3.83 |
| Commerclal Class- |  |  | Building and Construction. | 1,253 | 4.61 |
| Property and Finance .. | 306 | 3.50 | Others | 3,457 | 4.57 |
| Art, Mechanic and Textile Products | 213 | 4.05 | agrioultural, Pastoral, |  |  |
| Food and Drinks .. $\quad$. | 484 | 4.28 | Minivg, eto., Class- |  |  |
| Animal and Vegetable Substances | 106 | 4.76 | $\begin{array}{lll}\text { Agricultural } \\ \text { Pastoral } & \cdots & \cdots\end{array}$ | 2,897 881 | 5.72 5.07 |
| Fuel, Light and Metals | 106 | 4.76 4.20 | Mining and Quarrying | 775 | 5.00 |
| Merchants and Dealers | 568 | 4.03 | Others | 163 | 4.97 |
| Others | 1,063 | 3.19 | Independrnt Means | 536 | 4.93 |
| Transport and Communioation Class- |  |  | Dependents | 115 | 5.61 |
| Railways. | 655 | 4.78 | OcCupation not stated | 476 | 5.07 |
| Roads and Trams | 575 | 4.42 |  |  |  |
| Sea and Rivers | 381 | 8.85 | Total | 19,245 | 4.57 |
| Others | 154 | 4.00 |  |  |  |

## § 4. Australian Life Tables.

Official Year Book, No. 20, pp. 962 and 969 to 973 , contained a synopsis of the various Australian Life Tables, also comparisons with other countries of the expectation of life at various ages. Considerations of space, however, do not permit of their repetition herein.

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

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

Towards the end of 1929, however, the Registration of Births, Deaths and Marriages Ordinances were made, providing for the assumption by the Commonwealth Government of the function of registration within the Territory as from 1st January, 1930. The system has been successfully inaugurated and has functioned satisfactorily since that date. The Commonwealth Statistician is the Principal Registrar, and all registrations are made at Canberra.

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

## § 6. Graphical Representation of Vital Statistics.

(See Graphs pp. 705 to 710 .)

1. General.-The progressive fluctuations of the number of births, marriages, and dexths are important indexes of the economic conditions and social ideals of a community. Graphs have accordingly been prepared which show these fluctuations. It should be remembered, however, that, normally, the incroase of births and marriages should be proportional to the growth of population.
2. Graphs of Annual Births, Marriages, and Deaths.-The outstanding features of the graph representing births are:-An almost continuous rise in the numbers from 1860 to 1891 ; a decline till 1898, associated with the commercial crisis of 1891-93; a sharp fall in 1903 which accompanied a severe drought; an uninterrupted increase from 1903 to 1914, the total for 1914 being the highest recorded; a rapid decline until 1920, the result of war conditions. The figures for the last nine years show a tendency to greater stability, though with a general downward tendency.

The graph for marriages up to 1914 discloses approximately the same features as that for births-financial crises and droughts having a similar effect. The numbers for 1914 and 1915 showed a considerable increase over previous years. From 1916 to 1918 there was a rapid fall, the numbers being much below those of pre-war years. During 1919 and 1920 the recovery was very rapid, the total for the latter year being the highest ever recorded. The totals for 1923 to 1929 were not so favourable.

The oharacteristic feature of the graph of deaths is its irregular nature. On the whole, however, there is an increase which is due to the growth of population.
3. Graphs of Annual Birth, Marriage, and Death Rates, and Rate of Natural Increase.-The graph of the birth rate indicates a well-marked decline throughout the whole period. This reduction of rate has been subject to fuctuations, there being two periods of arrested decline, viz., from 1877 to 1890, and from 1903 to 1912.

The variations in the marriage rates, though less abrupt than those in the birth and death rates, have ranged from a minimum of 6.08 per 1,000 which marked the culmination of a commercial depression in 1894 to a maximum of 9.62 per 1,000 in 1920.

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

The graph of natural increase shows roughly the same variations as that for the birth rate, but the influence of the death rate is indicated by the very low rates of natural increase for 1875,1898 , and 1919 , which resulted from the exceptionally high death rates of those years.


[^0]:    (a) Number of births per 1,000 of the mean population.
    (b) Figures for " existing birth-regig-

[^1]:    11. Mother's Age, Duration of Marriage, and Issue.-(i) General. The total number of nuptial confinements in 1929 was 122,150 , viz., 120,891 single births, 1,250 cases of twins, and 9 cases of triplets, but in 37 cases the necessary information was lacking, and the following series of tables refers therefore, to 122,113 nuptial confinements. Ex-nuptial children-previous issue by the same father-are included as previous issue, but children by former marriages, and stillborn children are excluded. The tables cannot be given in extenso, but the following are their most salient features. The complete iabulations are shown in "Australian Demography," No. 47.
    C.5408.-24
[^2]:    The masculinity of first births was 3.27 as compared with 2.91 for total births.

[^3]:    (a) Number of deaths under 1 year per 1,000 births registered.
    (b) Number of births per 1.000 of

