# ABOUT MORTALITY DATA FOR IRELAND 

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We are still working on the Background and Documentation file for Ireland. For a description of the original data used to estimate the mortality surface for Ireland, see Appendix 1.

Due to limited availability of data on population counts and deaths and serious quality issues related to the data before 1950, the current series for Ireland start in 1950.

## DATA QUALITY ISSUES

There is a strong evidence of age heaping problems in both deaths and census counts for the period 1950-1985 (Appendix 2). For this period, we would advise using the life tables by 5 -year (or 10-year) age groups, which smooth out the age heaping, rather than using the life tables by single year of age.

Official data on the total number of births for 2020, deaths for 2019-2020, and population estimates for 2017-2021 are provisional. Because births are not available by month from the Irish Central Statistics Office (CSO) for the most recent years 2019-2020, we used the provisional data published by EUROSTAT for this year. However, when aggregated to the total number of births by year, the two sources of data are discrepant (presumably because EUROSTAT data have not been updated). Consequently, we use the total count from the CSO and the proportionate distribution by month from EUROSTAT.

## REVISION HISTORY

## Changes with the June 2019 revision:

- Life tables: All life tables have been recalculated using a modified methods protocol. The revised protocol (Version 6) includes two changes: 1) a more precise way to calculate a0, the mean age at death for children dying during the first year of life and 2) the use of birth-by-month data (where and when available) to more accurately estimate population exposures. These changes have been implemented simultaneously for ALL HMD series/countries. For more details about these changes, see the revised Methods Protocol (at http://www.mortality.org/Public/Docs/Methods
Protocol.pdf), particularly section 7.1 on Period life tables and section 6 and Appendix E, on death rates. The life tables calculated under the prior methods (Version 5) remain available at v5.mortality.org but they have not been, and will not be, updated.


## APPENDIX 1:

DESCRIPTION OF DATA USED FOR LEXIS DATABASE

## DEATHS

| Period | Type of Data | Age grouping | Comments | RefCode(s) |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 1950-1959, } \\ & \text { 1960-1963 } \end{aligned}$ | Annual number of deaths by sex and single year of age (Lexis square) | $\begin{aligned} & 0,1, \ldots, 99 \\ & 100+, \\ & \text { unknown } \end{aligned}$ |  | 7, 8 |
| 1964-2004 | Annual number of deaths by sex and single year of age (Lexis square) | $0,1, \ldots$, <br> up the highest attained age |  | $\begin{aligned} & 8,9,10,11 \\ & 12,14 \end{aligned}$ |
| 2005 | Annual number of deaths by sex and single year of age (Lexis square) | $\begin{aligned} & 0,1, \ldots, 99 \\ & 100+ \\ & \text { unknown } \end{aligned}$ |  | 24 |
| 2006-2011 | Annual number of deaths by sex and single year of age (Lexis square) | $0,1, \ldots$ <br> up the highest attained age |  | 13, 16 |
| 2012-2016 | Annual number of deaths by sex and single year of age (Lexis square) | $\begin{aligned} & 0,1, \ldots, 99 \\ & 105+, \\ & \text { unknown } \end{aligned}$ |  | 16,25 |
| 2017-2018 | Annual number of deaths by sex and single year of age (Lexis square) | $\begin{aligned} & 0,1, \ldots, 99 \\ & 100+ \\ & \text { unknown } \end{aligned}$ | Final data by occurence | 32 |
| 2019-2020 | Annual number of deaths by sex and single year of age (Lexis square) | $\begin{aligned} & 0,1, \ldots, 99 \\ & 100+, \\ & \text { unknown } \end{aligned}$ | Provisional data by registration | 33, 40 |

## POPULATION

| Period | Type of Data | Age grouping | Comments | RefCode(s) |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1951, \\ & 1961, \\ & 1966, \\ & 1971, \\ & 1979, \\ & 1981, \\ & 1986 \end{aligned}$ | Census counts by sex and single year of age. Census dates: <br> April 08, 1951 <br> April 09, 1961 <br> April 17, 1966 <br> April 18, 1971 <br> April 01, 1979 <br> April 05, 1981 <br> April 13, 1986 | $0,1, \ldots, 99,100+$ unknown |  | 1 |
| 1987-1995 | Annual January $1^{\text {st }}$ population estimates by sex and single year of age | $0,1, \ldots, 98,99+$ unknown |  | 20 |

## POPULATION (CONTINUED)

| Period | Type of Data | Age grouping | Comments | RefCode(s) |
| :--- | :--- | :--- | :--- | :--- |
| $1996-2011$ | Annual April 15th <br> population estimates by <br> sex and single year of <br> age | $0,1, \ldots, 98,99+$, <br> unknown | Inter-censal population <br> estimates | 4,15 |
| $2012-2016$ | Annual April 15th <br> population estimates by <br> sex and single year of <br> age | $0,1, \ldots, 98,99+$, <br> unknown | Inter-censal population <br> estimates | 23,30 |
| $2017-2021$ | Annual April 15th <br> population estimates by <br> sex and single year of <br> age | $0,1, \ldots, 98,99+$, <br> unknown | Post-censal population <br> estimates. Provisional <br> data. | 38,42 |

## BIRTHS BY SEX

| Period | Type of Data | Comments | RefCode(s) |
| :---: | :--- | :--- | :--- |
| $1950-2011$ | Annual counts of births <br> by sex | 6 |  |
| $2012-2016$ | Annual counts of births <br> by sex |  | 21 |
| $2017-2019$ | Annual counts of births <br> by sex | Final data by <br> occurence. | 34,35 |
| 2020 | Annual counts of births <br> by sex | Provisional data by <br> registration | 39 |

## BIRTHS BY MONTH

Type of data: Annual live birth counts by month.
Period covered: 1978-2020.
RefCode(s): 18, 36, 37, 41.

## APPENDIX 2:

Figure 1. Raw death counts for males in 1950, 1960, 1970, and 1980


## APPENDIX 2 (continued):

Figure 2. Raw census counts for females in 1951, 1961, 1971, 1981, and 1986


Figure 3. Mortality rates for age 78, 79, 80, 81, and 82. Irish females and males, 19502006.



## APPENDIX 2 (continued):

Figure 3 (continued). Mortality rates for selected ages. Ireland, females and males, 1950-2006.





