

ABOUT MORTALITY DATA FOR THE NETHERLANDS

By Domantas Jasilionis

Last Revised: 09 May 2006

GENERAL

Netherlands emerged as an independent state in the 17th century. Before the end of 18th century, which marks the French invasion, it was one of the greatest economic and political powers in the region. After the defeat of Napoleon's France, the Netherlands became united with Belgium and Luxemburg to form the United Kingdom of Netherlands. However, Belgium and Luxemburg separated to form independent states in 1830. Since then, the Netherlands has not experienced any territorial changes.

The early XIX century marks the foundation of the statistical system of the Netherlands. However, due to the lack of co-ordination between different governmental agencies, the quality of socio-economic statistics was rather low during this century (van Maarseveen, 1999). The collection and processing of population statistics (including censuses) was the responsibility of the Ministry of Interior and some other governmental bodies (van Maarseveen, 1999).

Statistics Netherlands (*Centraal Bureau voor de Statistiek* (CBS)) was established on January 9, 1899. The CBS became the main institution responsible for the collecting statistical data (including population statistics) in the Netherlands.

The first census of the Netherlands was conducted in 1895 (when the country was under the French rule) (van Bochove, 1999). From 1829 to 1971, population censuses were conducted regularly (every ten years from 1849 to 1909, then in 1920, 1930, 1947, 1960, and 1971). The 1971 population census was the last one in the Netherlands. Since then, the enumeration of the population has relied on information from the population registers, population surveys, or mini population censuses only (e.g. surveying about 5% of the labour force, etc.) (van Bochove, 1999).

Official population estimates date back to the beginning of the 1870s. During the period 1870-1930, these data were published together with the outcomes of the censuses or in the publications of the Dutch life tables (Tabeau, van Poppel, & Willekens, 1994). Since 1931, the information about the population has been published by the CBS on the annual basis.

Historical data on births and deaths, based on the church registers, are available back to the 16th century. However, these data are considered incomplete until the municipal population registers were started in 1811-1815 (Tabeau, van Poppel, & Willekens, 1994). The population register of the Netherlands was established in 1850. Consequently, the registration of births and deaths has become obligatory. The data on deaths were published for the first time in 1827. Later, the data and information on

births was published in different statistical abstracts (first by the Department of Internal Affairs, later by the CBS) (for more details see Tabeau, van Poppel, & Willekens, 1994).

Detail demographic data (since 1950) are freely available via an Internet database managed by the Statistics Netherlands (<http://statline.cbs.nl>). Historical data (from 1850 to 1949) have been harmonised and adjusted by the scientists from the Netherlands Interdisciplinary Demographic Institute (NIDI). For a more detail description of the NIDI mortality database, see a report published by Ewa Tabeau, Frans van Poppel, and Frans Willekens (1994).

Source of data

Official data on births, deaths, and population since 1950 were provided by the Statistics Netherlands (*Centraal Bureau voor de Statistiek*). Data for the most recent years have been obtained via the online database of the Statistics Netherlands (CBS StatLine). Corrected figures on deaths at advanced ages (after the age of 98) and adjusted historical data (population estimates, death counts and births for the period 1850-1950) come from the NIDI mortality database (see Tabeau, van Poppel, & Willekens, 1994).

TERRITORIAL COVERAGE

There were no territorial changes in the Netherlands during the period covered by the available data (1850-2004).

DEATH COUNT DATA

Coverage and completeness

Since 1815, registration of deaths has been considered complete and has covered the whole territory of Netherlands. Starting in 1869, the medical death certificate (completed by the medical examiner or general practitioner) became obligatory (Tabeau, van Poppel, & Willekens, 1994).

The CSB has made adjustments of the official data on infant deaths to follow the uniform definition of infant death across the time (starting from 1924). In the framework of the NIDI mortality database project, the harmonisation of the data series on infant deaths extended this period to 1850. For more details see Tabeau, van Poppel, and Willekens (1994). We have used both the harmonised official data and the adjusted data coming from the NIDI mortality database for our calculations.

POPULATION COUNT DATA

Coverage and completeness

Series of official population estimates date back to 1870. For the earlier periods, the official data on the Dutch population are available from the censuses only. For our calculations, we have used the adjusted population estimates from the NIDI mortality database. Descriptions of the adjustments are given in the NIDI report on "Mortality in the Netherlands: the Database" by Ewa Tabeau, Frans van Poppel, and Frans Willekens (1994). For the most recent years, we have used solely the CBS data.

BIRTH COUNT DATA

Coverage and completeness

Since 1815, the registration of births is considered complete and covers all the territory of the Netherlands. The CBS has harmonised data on live births according to the uniform international standard for the period since 1900. The NIDI mortality database includes the corrected data on live births back to 1850. For more details see Tabeau, van Poppel, and Willekens (1994). For our calculations, we have used both the harmonised official data and the adjusted data from the NIDI mortality database.

REFERENCES

- van Bochove, C. (1999). "Census, no census, virtual census". Pp. 151-164 in: *A Century Rounded Up: Reflections on the History of the Central Bureau of Statistics in the Netherlands*. Amsterdam, The Netherlands: CBS, Voorburg/Stichting beheer IISG.
- van Maarseveen, J. (1999). "A bird's eye view of CBS history". Pp. 13-46 in: *A Century Rounded Up: Reflections on the History of the Central Bureau of Statistics in the Netherlands*. Amsterdam, The Netherlands: CBS, Voorburg/Stichting beheer IISG.
- Tabeau, E., van Poppel, F., Willekens, F. (1994). *Mortality in the Netherlands: the Database*. NIDI, The Hague, Netherlands: 85p.

APPENDIX 1:

DESCRIPTION OF DATA USED FOR LEXIS DATABASE

DEATHS

Period	Type of Data	Age grouping	Comments	RefCode(s)†
1850-1859	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles). Recalculated and adjusted data.	0, 1, 2, ..., 99, 100	For descriptions of adjustments see the reference.	16
1860-1869	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles). Recalculated and adjusted data.	0, 1, 2, ..., 100, 101	For descriptions of adjustments see the reference.	16
1870-1879	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles). Recalculated and adjusted data.	0, 1, 2, ..., 101, 102	For descriptions of adjustments see the reference.	16
1880-1889	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles). Recalculated and adjusted data.	0, 1, 2, ..., 103, 104	For descriptions of adjustments see the reference.	16
1890-1899	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles, except for the open ended interval - rectangle). Recalculated and adjusted data.	0, 1, 2, ..., 109, 110+	For descriptions of adjustments see the reference.	16

† The reference code is used in the raw data files (Input Database) to link data with sources.

DEATHS (CONTINUED)

1900-1909	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles except for the open ended interval - rectangle). Recalculated and adjusted data.	0, 1, 2, ..., 105, 106+	For descriptions of adjustments see the reference.	16
1910-1919	Same as data for 1880-1889	Same as data for 1880-1889	For descriptions of adjustments see the reference.	16
1920-1929	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles except for the open ended interval - rectangle). Recalculated and adjusted data.	0, 1, 2, ..., 104, 105+	For descriptions of adjustments see the reference.	16
1930-1939	Same as data for 1900-1909	Same as data for 1900-1909	For descriptions of adjustments see the reference.	16
1940-1949	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles). Recalculated and adjusted data.	0, 1, 2, ..., 105, 106	For descriptions of adjustments see the reference.	16
1950-1979	Annual number of death by sex, single year of age, and birth cohort. Data are by period-cohort parallelograms for ages 0-98 and 108+; by Lexis triangles for ages 98-107 and age 0 (lower triangle); and open age interval from upper triangle age 108+. Data for the ages 99-108+ are re-estimated and adjusted by Ewa Tabeau.	0, 1, 2, ..., 107, 108+		01 02

DEATHS (CONTINUED)

1980-1993	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles).	0, 1, 2, ..., 107, 108+		03
1994	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles, except for the open ended - rectangle).	0, 1, 2, ..., 107, 108+		03
1995	Same as data for 1980-1993	Same as data for 1980-1993		R03
1996-1999	Annual number of death by sex, single year of age, and birth cohort (Lexis triangles).	0, 1, 2, ..., maximum age attained		04 05 06 07
2000-2004	Annual number of death by sex and single year of age (1x1).	0, 1, 2, ..., maximum age attained		08 20

POPULATION

Period	Type of Data	Age grouping	Comments	RefCode(s)
1850-1869	Annual population estimates as of December 31 st by sex and single year of age. Recalculated and adjusted data.	0, 1, ..., 99, 100+	For descriptions of adjustments see the reference.	12
1870-1919	Annual population estimates as of December 31 st by sex and single year of age. Recalculated and adjusted data.	0, 1, ..., 89, 90+	For descriptions of adjustments see the reference.	12
1920-1929	Annual population estimates as of December 31 st by sex and single year of age. Recalculated and adjusted data.	0, 1, ..., 94, 95+	For descriptions of adjustments see the reference.	12

POPULATION (CONTINUED)

1930-1938	Same as data for 1850-1869	Same as data for 1850-1869	For descriptions of adjustments see the reference.	12
1939-1949	Same as data for 1920-1929	Same as data for 1920-1929	For descriptions of adjustments see the reference.	12
1950-2000	Annual official population estimates as of January 1 st by sex and single year of age.	0, 1, ..., 107, 108+		09 10 14
2001-2002	Annual official population estimates as of January 1 st by sex and single year of age.	0, 1, ..., maximum age attained		13
2003-2005	Annual official population estimates as of January 1 st by sex and single year of age.	0, 1, ..., 98, 99+		17 19

BIRTHS

Period	Type of Data	Comments	RefCode(s)
1850-1949	Annual counts of births by sex. Recalculated and adjusted data.	For descriptions of the adjustments see the reference.	15
1950-2004	Annual counts of births by sex.		11 18