

Metadata - Life expectancy

Description	<p>Life Expectancy (LE) at a given age, and in a given calendar year, represents the (average) number of years remaining to be lived by the persons of that age if they were to experience the mortality rates of that particular calendar year.</p> <p>In particular, life expectancy at birth is the average number of years expected to be lived by a newborn in a given calendar year. Life expectancy at birth represents a summary measure of the age-specific all-cause mortality rates in an area in a given period.</p>
Rationale	<p>Life expectancy is a basic indicator for population health. It reflects the cumulative effect of the impact of risk factors, occurrence and severity of diseases, and the effectiveness of interventions and treatments. It is one of the indicators recommended by the European project ECHI (1).</p>
Primary Data source	<p>Statistics Belgium https://statbel.fgov.be/fr</p> <p>Statistics Belgium for the census linked with the national registry, for the LE by Socio-Economic Status (SES) (Census 2001 and Census 2011)</p>
Indicator source	<p>Statistics Belgium for national and regional life expectancies</p> <p>EUROSTAT for international comparison; the EU also produced an interactive tool allowing a visual comparison of the data by country (2). The results are also published and commented in the OECD publication "Health at a glance" (3).</p>
Periodicity	<p>Yearly for the LE at birth</p> <p>Every 10 years for the LE by SES</p>
Calculation, Technical definitions and limitations	<p>The indicator can be calculated from slightly different ways. The difference in the calculation comes mainly from how to calculate the mortality in the first year. National methods differ slightly between countries. Therefore, calculations made by EUROSTAT, that are harmonized, are best suited for international comparisons. Life expectancies are calculated using (abridged) life tables presenting age-specific mortality rates. Life expectancy tables are calculated based on death probabilities according to Farr's death rate method: $q_x = M_x / (B_x + (M_x/2))$ where M_x = the number of deaths at the age of x to under $x+1$ years in the reported period; B_x = average population aged x to under $x+1$ in the base period; q_x = death probability from age x to $x+1$. Farr's method of calculation of abridged life-tables assumes that the mortality is constant within the age intervals and thus the years of life lived by a person dying in the interval is (on average) half of the length of the interval.</p> <p>To measure the life expectancy by socio-economic levels, the data from the Census 2011 were matched to the mortality data by Statistics Belgium. The LE calculations from the census linked with the national registry were made in specific researches (4;5). Age-specific mortality rates were computed according to a cohort follow up methodology using Lexis expansion, to account for the ageing of population during follow up.</p>
International comparability	<p>Availability: Yes</p> <p>Comparability for LE at birth: Yes</p>

Reference List

- (1) Verschuuren M, Achterberg PW, Gijssen R, Harbers MM, Vijge E, Wilk EA, et al. ECHI Indicator Development and Documentation - Joint action for ECHIM final Report Part II. II ed. RIVM; 2012.
- (2) DG SANCO. Heidi Data tool: European Community Health Indicators: http://ec.europa.eu/health/indicators/indicators/index_en.htm. DG SANCO; 2012.
- (3) OECD. Health at a glance: Europe 2018 OECD. Paris: OECD Publishing; 2018.
- (4) Renard F, Devleesschauwer B, Van Oyen H, Gadeyne S, Deboosere P. Evolution of educational inequalities in life and health expectancies at 25 years in Belgium between 2001 and 2011: a census-based study. Arch Public Health 2019;77(6).
- (5) Deboosere P, Gadeyne S, Van Oyen H. The 1991–2004 Evolution in Life Expectancy by Educational Level in Belgium Based on Linked Census and Population Register Data. European Journal of Population 2008;25(2):175-96.