Statistical bulletin

Trend in life expectancy by National Statistics Socioeconomic Classification, England and Wales: 1982 to 1986 and 2012 to 2016

Estimates of life expectancy by personal socio- economic position using the National Statistics Socio-economic Classification based on occupation.

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1 . Main points

- Male life expectancy at birth in 2012 to 2016 was highest among higher managerial and professional occupations (National Statistics Socio-economic Classification (NS-SEC) Class 1) at 83.6 years, 5.5 years longer than routine occupations (NS-SEC Class 7) at 78.1 years, and 9.1 years longer than males not classified to a socioeconomic class (Unclassified) at 74.5 years.

- Female life expectancy at birth in 2012 to 2016, was highest in NS-SEC Class 1 at 85.5 years, 4.0 years longer than NS-SEC Class 7 at 81.5 years, and 5.7 years longer than Unclassified at 79.8 years.

- In 2012 to 2016, the slope index of inequality (SII) in male life expectancy at birth between the least and most advantaged socioeconomic classes (excluding NS-SEC Unclassified) stood at 6.4 years, 1.2 years narrower than in 1997 to 2001 (the widest point in the time series) when it had stood at 7.6 years.

- In 2012 to 2016, the SII in female life expectancy at birth between the least and most advantaged socioeconomic classes (excluding unclassified) stood at 4.9 years, 0.5 years narrower than in 2002 to 2006 when it had stood at 5.4 years.

- Between 1982 to 1986 and 2012 to 2016, the largest growth in male life expectancy at birth across the occupied socioeconomic classes was observed in Class 3, gaining 8.0 years, while the smallest growth was observed in Class 4, gaining only 6.7 years.

- Between 1982 to 1986 and 2012 to 2016, the largest growth in female life expectancy at birth across the occupied socioeconomic classes was observed in Class 4, gaining 5.3 years, while the smallest growth was observed in Class 5, gaining only 3.2 years.

2 . Trend in life expectancy by National Statistics Socioeconomic Classification data

[ONS Longitudinal Study (LS) based estimates of Life Expectancy (LE) by the National Statistics Socioeconomic Classification (NS-SEC): England and Wales](#)
Dataset | Released 23 August 2022
Estimates of life expectancy and the slope index of inequality measure by NS-SEC

3 . Measuring the data

Data source

The life expectancy estimates by socioeconomic class included in this release are based on Office for National Statistics (ONS) Longitudinal Study data. Our [ONS Longitudinal Study](#) is a 1% representative sample of the population of England and Wales, which links census, life events and migration records since 1971.

Measurement of socioeconomic class

Socioeconomic class is derived using the National Statistics Socioeconomic Classification (NS-SEC). It is based on occupation and employment status (whether someone is a manager, self-employed or an employee). This is collected on census, birth and death records. The earliest point in the study that a NS-SEC analytic class can be derived from is the 1981 Census.

Sample members are assigned a socioeconomic class on entry to the study. If they cannot be assigned to a socioeconomic class on entry, they are unclassified for the remainder of the follow-up period. Illustrative examples of the occupations contained within the various socioeconomic classes are shown below:

Class 1: Higher managerial and professional includes:

- doctors

- lawyers

- IT project managers

Class 2: Lower managerial and professional includes:

- nurses

- teachers

- journalists

Class 3: Intermediate includes:

- armed forces (sergeant and below)

- paramedics

- bank staff

Class 4: Small employers and own account workers includes:

- farmers

- shopkeepers

- driving instructors

Class 5: Lower supervisory and technical includes (if not self-employed):

- electricians

- plumbers

- chefs

Class 6: Semi routine includes:

- receptionists

- telephone salespersons

- care workers

Class 7: Routine includes:

- labourers

- bar staff

- lorry drivers

Unclassified includes those who:

- are long-term unemployed

- have never worked

- are students

- have occupations inadequately described

- are unclassified for other reasons

Coverage

The analyses cover the periods between 1982 to 1986 and 2012 to 2016 inclusive. Analysis data points are pooled to cover five years, which enables sufficient statistical power to estimate life expectancy accurately and detect statistically significant differences if they exist.

Upcoming changes

ONS are currently testing the impact of a new socioeconomic class assignment method, which enables transitions from unclassified at entry to a socioeconomic class at a future point in the study and for proxy assigned children to change class into their own class once they have their own occupational data on their record. It is thought that this better represents socioeconomic class estimates and prevents the unclassified population containing people that have the potential to be classified later in the study. We will report findings in a future article planned for publication in January 2023, and canvass user views on using the revised assignment method in future updates.

We will start working on updating the series to cover the period 2017 to 2021 once deaths data covering the years 2020 and 2021 have been linked to the ONS Longitudinal Study.

An overview of the detailed methods on how these estimates are calculated can be found in the previous bulletin in this series. A modification to the treatment of re-entrants and resolution of a number of implausible discrepant year of birth records may cause differences from previous published estimates of life expectancy by socioeconomic class.

Strengths

ONS Longitudinal Study estimates of life expectancy are based on linked mortality records to individuals reducing the risk of ecological fallacy.

The ONS Longitudinal Study is a reputable source of high-quality micro data, used in many research projects investigating the relationship between social disadvantage and mortality.

Person time denominators are used, improving the accuracy of time at risk measurement.

Limitations

The constraints presented with using a 1% sample means we must pool five years of mortality data, to enable estimates of life expectancy to have sufficient statistical precision and accuracy to make valid inferences on health improvement and social inequality.

The series is usually only updated every five years, affecting the timeliness of the estimates reported.

4 . Related links

Life expectancy for local areas of the UK: between 2001 to 2003 and 2018 to 2020
Bulletin | Released 23 September 2021
Subnational trends in the average number of years people will live beyond their current age measured by "period life expectancy".