

Statistical bulletin

Life expectancy for local areas in England, Northern Ireland and Wales: between 2001 to 2003 and 2020 to 2022

Subnational trends in period life expectancy at birth and other age groups at regional and local authority levels in selected constituent countries.

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Release date: 26 January 2024

Next release: To be announced

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1. Main points

- In all English regions, Northern Ireland and Wales, life expectancy at birth in 2020 to 2022 was lower than in 2017 to 2019.
- In 2020 to 2022, the English regions with the highest and lowest male life expectancy, respectively, were the South East (80.1 years) and the North East (77.2 years), a gap of 3.0 years.
- In 2020 to 2022, the English regions with the highest and lowest female life expectancy, respectively, were the South West (83.9 years) and the North East (81.2 years), a gap of 2.8 years.
- In 2020 to 2022 across all local areas, male life expectancy was highest in Hart (83.7 years) and lowest in Blackpool (73.4 years), a gap of more than a decade; female life expectancy was highest in Kensington and Chelsea (86.3 years) and lowest in Blaenau Gwent (78.9 years), a gap of 7.5 years.
- The coronavirus (COVID-19) pandemic led to increased mortality in 2020 and 2021, and the impact of this
 is seen in the regional and local area life expectancy estimates for 2020 to 2022.
- A fall in period life expectancy does not mean that a baby born in 2020 to 2022 will go on to live a shorter life than a baby born in 2017 to 2019; average lifespan will be determined by changes in mortality rates across their lifetime and if mortality rates improve, then period life expectancy will go back up.

The estimates from 2010 to 2012 onwards for England, Northern Ireland and Wales have been updated using rebased population estimates from the 2021 Census. Estimates for Scotland will be added following publication of its populations rebased on Census 2022.

2. Period life expectancy estimates in constituent countries and English regions: 2020 to 2022

This bulletin updates the sub-national period life expectancy time series with periods 2019 to 2021 and 2020 to 2022. The commentary refers to life expectancy at birth unless otherwise stated. Life expectancy at other ages, and the time series, can be found in the accompanying datasets. National life tables - life expectancy in the UK: 2020 to 2022 bulletin provides further information for countries in the UK.

Among constituent countries of the UK included in this release, life expectancy between 2020 and 2022 was highest in England (78.9 years for males, 82.8 years for females) and lowest in Wales (77.9 years for males, 81.8 years for females).

Within England, sizeable regional differences were present for each sex (Figure 1 and Table 1).

This release provides estimates of <u>period life expectancy</u> averaging mortality seen over three years. While the coronavirus (COVID-19) pandemic disrupted a largely improving trend in life expectancy, it does not necessarily mean a baby born between 2020 and 2022 will go on to live a shorter life than one born between 2017 and 2019. If mortality rates improve, then period life expectancy will go back up. More information can be found in our <u>National life tables - life expectancy in the UK: 2020 to 2022 bulletin.</u>

Figure 1: Life expectancy in 2020 to 2022 was highest in southern regions and lowest in northern regions

Life expectancy at birth (by sex) in 2020 to 2022 for England, Northern Ireland, Wales, and English regions

Notes

1. Deaths of non-residents are excluded for England, Wales and English regions but are included for Northern Ireland. Figures are based on deaths registered in each calendar year.

Table 1: Life expectancy in 2020 to 2022 decreased in all countries and English regions compared with 2017 to 2019

Summary statistics of life expectancy at birth (by sex) in 2020 to 2022 and changes since 2017 to 2019 for England, Northern Ireland, Wales, and English regions

Country or region	Males Life expectancy in 2020 to 2022 (years)	Males Life expectancy in 2017 to 2019 (years)	Males Change (years)	Males Change (months)	Females Life expectancy in 2020 to 2022 (years)	Females Life expectancy in 2017 to 2019 (years)	remaies	Females Change (months)
North East	77.2	78.0	-0.8	-9.6	81.2	81.8	-0.6	-7.2
North West	77.3	78.4	-1.1	-13.2	81.3	82.0	-0.7	-8.4
Yorkshire and the Humber	77.9	78.7	-0.9	-10.8	81.9	82.4	-0.6	-7.2
East Midlands	78.6	79.5	-0.9	-10.8	82.4	82.9	-0.5	-6.0
West Midlands	78.1	79.0	-1.0	-12.0	82.2	82.9	-0.7	-8.4
East of England	79.8	80.4	-0.6	-7.2	83.5	83.8	-0.3	-3.6
London	79.1	80.4	-1.2	-14.4	83.6	84.4	-0.7	-8.4
South East	80.1	80.7	-0.6	-7.2	83.8	84.2	-0.4	-4.8
South West	80.0	80.4	-0.4	-4.8	83.9	84.1	-0.1	-1.2
England	78.9	79.7	-0.8	-9.6	82.8	83.3	-0.5	-6.0
Northern Ireland	78.4	78.8	-0.4	-4.8	82.3	82.6	-0.3	-3.6
Wales	77.9	78.3	-0.4	-4.8	81.8	82.2	-0.4	-4.8

Source: Office for National Statistics

Notes

1. Deaths of non-residents are excluded for England, Wales and English regions but are included for Northern Ireland. Figures are based on deaths registered in each calendar year.

3. Period life expectancy at local level

In 2020 to 2022, male life expectancy was highest in Hart (83.7 years) and lowest in Blackpool (73.4 years), a gap of more than a decade. Female life expectancy was highest in Kensington and Chelsea (86.3 years) and lowest in Blaenau Gwent (78.9 years), a gap of more than 7 years.

Figure 2: In 2020 to 2022, the gap in life expectancy between the areas with the highest and lowest life expectancy was over 10 years for males and over 7 years for females

Life expectancy at birth and aged 65 years by sex across local areas in England, Northern Ireland and Wales, between 2001 to 2003 and 2020 to 2022

Notes

- 1. PE is a three-year period ending in the calendar year shown.
- 2. If you wish to compare the change in life expectancy across the time series between areas, you would need to take into account the confidence intervals provided in the pivot table (data table).
- 3. For further notes, see data download.

Figure 2 shows a clear geographical divide. Out of the 10 local areas with the highest male life expectancy, 9 areas were in the south of England. For females, all 10 areas with the highest life expectancy were in the south of England. Out of the 10 local areas with the lowest male life expectancy, all 10 were in the north of England. For females, 8 of the 10 areas with the lowest life expectancy were in the north of England and 2 were in Wales.

For the years 2020 to 2022, compared with 2017 to 2019, most local areas (89%) had a fall in male life expectancy, including all areas in London. The largest falls occurred in Newham (minus 2.5 years) and Blackburn with Darwen (minus 2.4 years).

Female life expectancy also fell in most local areas (84%) including 30 of the 32 areas in London. The largest fall was in Epsom and Ewell (minus 2.2 years).

The increase in mortality rates during the coronavirus (COVID-19) pandemic led to more areas experiencing sizeable falls in life expectancy than previous comparisons between adjacent non-overlapping periods.

4. Trend in life expectancy between 2011 to 2013 and 2020 to 2022

The coronavirus (COVID-19) pandemic further disrupted the small and partially stalling improvement in life expectancy observed between 2011 to 2013 and 2017 to 2019, with life expectancy decreasing from 2018 to 2020 onwards, at a country and region level (Figure 3), and in many local areas (Figure 4).

Figure 3: Life expectancy for both males and females increased slightly between 2011 to 2013 and 2017 to 2019, then decreased during the years of the COVID-19 (coronavirus) pandemic

Life expectancy at birth by sex across England, Northern Ireland and Wales, and regions in England, between 2001 to 2003 and 2020 to 2022

Notes

- 1. Vertical (y) axis showing years of life expectancy does not start at 0.
- 2. PE is 3-year period ending in calendar year shown.
- 3. For further notes, see data download

Figure 4: Most local areas experienced a decrease in life expectancy between periods 2011 to 2013 and 2020 to 2022

Change in life expectancy at birth (by sex) across local areas in England, Northern Ireland and Wales between 2011 to 2013 and 2020 to 2022

Notes

- 1. Change in months is calculated using non-rounded data.
- 2. If you wish to compare the change in life expectancy across the time series between areas, you would need to take into account the confidence intervals provided in the pivot table (data table).
- 3. For further notes, see data download.

In total, 238 local areas experienced a fall in male life expectancy at birth over the decade, while 102 areas experienced an increase. The local area in England with the largest decrease was Boston (minus 2.1 years); the largest increase over the decade was Oxford (1.4 years).

In Northern Ireland only one local government district had a decrease (Mid Ulster, minus 0.1 years), and the largest increase was in Lisburn and Castlereagh (1.1 years).

In Wales, the largest decrease occurred in Wrexham, also known as Wrecsam (minus 1.2 years), the largest increase in Monmouthshire, also known as Sir Fynwy (0.5 years).

For females, 211 local areas experienced a decrease in life expectancy at birth over the decade, while 129 local areas had an increase. The largest fall in England occurred in Bolsover (minus 1.8 years), and the largest increase was in Ryedale (2.3 years).

In Northern Ireland, the largest fall was in Belfast (minus 0.5 years) and the largest increase was in Antrim and Newtownabbey (0.5 years).

In Wales, the largest fall was in Merthyr Tydfil, also known as Merthyr Tudful (minus 1.4 years) and the largest increase was in Bridgend, also known as Pen-y-bont ar Ogwr (0.6 years).

Around a third of local areas that observed a fall in life expectancy over the last decade had already experienced a fall in 2017 to 2019 when compared with 2011 to 2013.

This release uses <u>rebased population estimates</u> aligned with Census 2021 for estimates from 2010 to 2012 onwards and therefore provides updates to previously published estimates of life expectancy. For local areas in 2018 to 2020, most life expectancy estimates have had only minor revisions. Compared with previous published estimates, overall 94% of areas for males, and 97% for females, have been revised by fewer than 0.5 years.

However, some London areas have had substantial downward revisions. The largest decreases for 2018 to 2020 are in Westminster (minus 3.7 years for males and minus 2.3 years for females) and Camden (minus 3.5 years for males and minus 2.9 years for females). This is because populations in these areas were previously overestimated.

5 . Life expectancy for local areas in England, Northern Ireland and Wales: between 2001 to 2003 and 2020 to 2022 data

Life expectancy for local areas in England, Northern Ireland and Wales: between 2001 to 2003 and 2020 to 2022

Dataset | Released 26 January 2024

Pivot table for life expectancy by sex and area type, divided by three-year intervals starting from 2001 to 2003 and by single years for 2020, 2021 and 2022.

6. Glossary

Period life expectancy

The life expectancy estimates reported in this bulletin are period-based. Period life expectancy at a given age for an area is the average number of years a person would live if they experienced the area's age-specific mortality rates for that time-period, throughout their lives. More information can be found in our <u>Period and cohort life expectancy explained methodology</u>.

95% confidence intervals

A confidence interval is a measure of the uncertainty around a specific estimate. As intervals around estimates widen, the level of uncertainty about where the true value lies increases. At a national level, the overall level of error will be small compared with the error associated with a local area or a specific age and sex breakdown. Therefore, the widths of the confidence intervals reported in this release will have sizeable differences.

7. Measuring the data

This statistical bulletin presents estimates of life expectancy, the number of years people are expected to live, assuming that current levels of mortality will continue for the rest of someone's life. These are subnational estimates for local government administrations including combined authorities in England, Northern Ireland and Wales, as well as regions in England and Welsh health boards in Wales. It also provides national estimates for England, Northern Ireland and Wales for comparison purposes.

Coverage is limited to England, Northern Ireland and Wales using rebased population estimates from the 2021 Census. Estimates for Scotland will be added following publication of its rebased population estimates from the Scotland 2022 Census.

This release is calculated based on death registrations in the period 2020 to 2022, which includes the coronavirus (COVID-19) pandemic. Life expectancy estimates for 2020 to 2022 are lower for all regions and many local areas compared with 2017 to 2019. This does not mean that a baby born in 2020 to 2022 will go on to live a shorter life.

The reported life expectancies assume that the higher-than-average mortality that we observed in 2020 to 2022 will continue. It is possible that life expectancy will return to an improving trend in the future. A more detailed explanation can be found in our <u>Has the coronavirus pandemic caused life expectancy in the UK to fall? blog post</u>.

The differences in life expectancy between regions or over time that are reported in this bulletin are not necessarily statistically significant. No formal statistical significance testing was applied.

Feedback

The Department of Health and Social Care (DHSC), NHS Business Services Authority (NHSBSA), Office for National Statistics (ONS), United Kingdom Health Security Agency (UKHSA) and NHS England (NHSE) launched a joint consultation on 12 December 2023 about possible changes to their health and social care statistical products.

Users are encouraged to respond to this joint consultation, which closes at 11:59pm on Tuesday 5 March 2024.

Data sources

Life expectancy uses death registrations data for England and Wales held by the Office for National Statistics (ONS), which are compiled from information supplied when deaths are certified and registered as part of civil registration. Death registration data for Northern Ireland are provided by the Northern Ireland Statistics and Research Agency (NISRA).

Rebased mid-year population estimates aligned with Census 2021 are used in combination with death registrations to calculate mortality rates used in life tables.

Method for estimating life expectancy

The estimates reported in this bulletin are period-based life expectancies, estimated using an abridged life table. Our <u>Health state life expectancy estimates template</u> is available, which shows how the abridged life table is deployed to derive life expectancy estimates.

Abridged life tables are used in preference to complete life tables for smaller populations, because death counts can be too sparse for examining mortality for single years of age, and because mid-year population estimates are not available or sufficiently reliable to produce these by single year of age.

All constituent country estimates in this bulletin are calculated using an abridged life table to be consistent with local area estimates. These national estimates differ slightly from our National life tables - life expectancy in the UK: 2020 to 2022 bulletin published 11 January 2024, which uses a "complete" life table approach. For further details, see our Life expectancy releases and their different uses article.

More quality and methodology information is available in our Health state life expectancies, UK QMI.

8. Strengths and limitations

The strengths of the release are that:

- it covers local areas of England, Northern Ireland and Wales and estimates are comparable with countries and regions
- data for Scotland will be added once Scotland Census 2022 populations are available
- the estimates using abridged life tables align closely with those based on complete life tables
- the mortality data used has complete population coverage; estimates have high precision and are representative of the underlying population at risk

A limitation is that it is necessary to pool data over three calendar years to enable sufficiently reliable and accurate measurement of life expectancy for local areas. The scope to measure change in a timely manner is reduced because of reliance on non-overlapping time periods.

9. Related links

National life tables - life expectancy in the UK: 2020 to 2022

Statistical bulletin | Released 23 September 2021

Trends in period life expectancy, a measure of the average number of years people will live beyond their current age, analysed by age and sex for the UK and its constituent countries.

Life expectancy in Northern Ireland: 2020 to 2022

Publication | Released 6 December 2023

Latest estimates of life expectancy, healthy life expectancy and disability-free life expectancy for Northern Ireland.

Life expectancy in Scotland: 2020 to 2022, provisional

Publication | Released 26 September 2023

The latest statistics on life expectancy in Scotland, council areas, health boards and other areas.

Health expectancies in Wales with the inequality gap

Publication | Released 9 June 2022

The latest statistics on life expectancy and healthy life expectancy in Wales, including analysis of the inequality gap.

Deaths registered in England and Wales: 2022

Statistical bulletin | Released 15 December 2023

Registered deaths by age, sex, selected underlying causes of death and the leading causes of death. Contains death rates and death registrations by area of residence and single year of age.

Rebasing of mid-year population estimates following Census 2021, England and Wales

Statistical bulletin |Released 23 November 2023

Rebased mid-year estimates for 2012 to 2021 to align with Census 2021 results. Includes a revised back series of components of population change.

10. Cite this statistical bulletin

Office for National Statistics (ONS), released 26 January 2024, ONS website, statistical bulletin,Life expectancy for local areas in England, Northern Ireland and Wales: between 2001 to 2003 and 2020 to 2022