

What is happening to life expectancy in England?

10 August 2022  
25 comments

Authors

Veena Raleigh

This article was updated on 10 August 2022. It was previously updated in December 2021, April 2021 and June 2020 and originally published in August 2018.

There have been two turning points in trends in life expectancy in England in the past decade. From 2011 increases in life expectancy slowed after decades of steady improvement, prompting much debate about the causes. Then in 2020, the Covid-19 pandemic was a more significant turning point, causing a sharp fall in life expectancy, the magnitude of which has not been seen since World War II.

This article examines trends in life expectancy at birth up to 2021 and the impact of Covid-19 on life expectancy in 2020 and 2021, gender differences, inequalities in life expectancy, causes of the changing trends since 2011, and how life expectancy in England compares with other countries.

Note: This article presents findings for England, except where the published data relates to England and Wales or the UK. The article refers throughout to life expectancy at birth.

The data for 2021 is provisional.  
Life expectancy at birth is defined as how long, on average, a newborn can expect to live if current death rates do not change. However, if rates are falling, actual life spans will be higher than life expectancy calculated using current death rates. Life expectancy can also be calculated for specific ages, eg, age 65, which is the average lifespan for a 65-year-old person if current death rates at ages 65 and over do not change.

How has life expectancy changed over time?

Mortality has declined since the 19th century, leading to a long-term rise in life expectancy for both males and females (see Figure 1). Males born in 1841 could expect to live to only 40.2 years and females to 42.3 years (https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/ourpopulationwherewehowdwegetherwherewegow/2020-03-27), mainly because of high mortality rates in infancy and childhood. Improvements in nutrition, hygiene, housing, sanitation, control of infectious diseases and other public health measures have reduced mortality rates, increasing life expectancy to 56 years for males and 59 years for females by 1920.

Figure 1 Life expectancy at birth

The 20th century saw further dramatic improvements in life expectancy resulting from public health measures such as childhood immunisations, the introduction of universal health care, medical advances in treating adult diseases such as heart disease and cancer, and lifestyle changes including a decline in smoking. By 2019, life expectancy at birth in England had increased to 79.9 years for males and 83.6 years for females (https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/singleyearlifetablesuk1980to2018) (see Figure 2). However, the Covid-19 pandemic caused life expectancy in 2020 to fall by 1.3 years to 78.6 years for males and by 1 year to 82.6 years for females, the level of a decade ago (https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/singleyearlifetablesuk1980to2018); provisional data suggests there will be little change in 2021 (https://analytics.phe.gov.uk/apps/chime/#Life%20expectancy).

Figure 2 Life expectancy at birth

What's the difference in life expectancy between males and females?

Females have always lived longer than males, but the gender gap in 1841 (2 years) was relatively small because of the high prevalence in the 19th century of diseases that killed both sexes indiscriminately. In the late 19th and early 20th centuries the gender gap in life expectancy started to widen, peaking at 6.3 years by 1971 (see Figure 1). Reasons for the widening gender gap included poor working conditions and smoking among males in contrast to improved life chances for females, for example, lower risk of dying in childbirth and from tuberculosis, which affected women more than men.

The gender gap narrowed from the 1970s, to 3.7 years in 2019, with mortality falling faster in males than females because of decreases in smoking and mortality from cardiovascular diseases. However, in 2020 and 2021 the gender gap widened to 4 years (https://analytics.phe.gov.uk/apps/chime/#Life%20expectancy) because mortality rates from Covid-19 were higher in males than females.

Healthy life expectancy

Healthy life expectancy (https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/healthstatelifeexpectanciesuk/latest) has also increased over time, but not as much as life expectancy, so more years are spent in poor health. Although a male in England could expect to live 79.4 years in 2018–20, his average healthy life expectancy was only 63.1 years – ie, he would have spent 16.3 of those years (20 per cent) in ‘not good’ health (https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/datasets/healthstatelifeexpectancyallagesuk). In 2018–20 a female in England could expect to live 83.1 years, of which 19.3 years (23 per cent) would have been spent in ‘not good’ health. And although females live an average of 3.7 years longer than males, most of that time (3 years) is spent in poor health.

Similarly, disability-free life expectancy is almost two decades shorter than life expectancy, and is higher among males (62.4 years) than females (60.9 years) (https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/datasets/healthstatelifeexpectancyallagesuk).

Healthy life expectancy is an estimate of the number of years lived in ‘very good’ or ‘good’ general health, based on how individuals perceive their general health. Disability-free life expectancy is an estimate of the number of years lived without a self-reported long-lasting physical or mental health condition that limits daily activities.

Inequalities in life expectancy

Life expectancy is affected by many factors, for example, behavioural risks to health such as smoking and a poor diet; access to and use of health care; wider socio-economic determinants such as income, education, housing and employment; geography; and specific characteristics such as sex, ethnicity, disability and social exclusion. Life expectancy is closely related to the overall level of deprivation in an area. People living in more affluent areas live significantly longer than people living in deprived areas (see Table 1). In 2018–20, males in the least deprived 10 per cent of areas in England could expect to live almost a decade longer than males in the 10 per cent most deprived areas (https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthinequalities/bulletins/healthstatelifeexpectanciesbyindexofmultipledeprivationind/2018to2020); for females the difference was 8 years. About one-third of these inequalities in life expectancy are caused by higher mortality rates from heart and respiratory disease, and lung cancer in more deprived areas (https://www.gov.uk/government/publications/health-profile-for-england-2018/chapter-5-inequalities-in-health). These conditions are potentially preventable: smoking and obesity, the main risk factors, are higher among more deprived groups.

The male–female difference in life expectancy is greater in more deprived areas: for example, females in the most deprived areas live 4.8 years longer than males, compared with a difference of 3.1 years in the least deprived areas.

Table 1 Life expectancy and healthy life expectancy by deprivation decile: England				
Period	Deprivation decile	Life expectancy	Healthy life expectancy	Proportion of life spent in 'good health' (%)
Males				
2011-13	Most-deprived	73.9	52.0	70.4
	Least-deprived	82.9	70.0	84.4
	Difference	9.0	18.0	14.0
2018-20	Most-deprived	73.5	52.3	71.1
	Least-deprived	83.2	70.5	84.6
	Difference	9.7	18.2	13.5
Females				
2011-13	Most-deprived	79.0	52.4	66.4
	Least-deprived	85.9	70.9	82.5
	Difference	6.9	18.5	16.1
2018-20	Most-deprived	78.3	51.9	66.3
	Least-deprived	86.3	70.7	82.0

	Difference	8.0	18.8	15.7
--	------------	-----	------	------

Source: ONS 2022 (<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthinequalities/bulletins/healthstatelifeexpectanciesbyindexofmultipledeprivationimd/2018to2020>)

The gap in healthy life expectancy between most and least deprived areas is even greater – almost two decades – than the gap in life expectancy (see Table 1). Not only do people living in more deprived areas have shorter life spans, they also live more years in poor health.

There are socio-economic inequalities also in disability-free life expectancy: in 2018–20 it was 17.6 years lower in the most deprived compared with the least deprived areas for males, and 16.1 years for females (<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthinequalities/bulletins/healthstatelifeexpectanciesbyindexofmultipledeprivationimd/2018to2020>).

**The deprivation divide in life expectancy and healthy life expectancy reflects a persistent north–south divide, with people in the south of England living longer on average and with more years in good health than those living further north.**

Socio-economic inequalities in life expectancy were widening before the Covid-19 pandemic, which has exacerbated inequalities (<https://www.kingsfund.org.uk/blog/2021/10/rising-health-inequalities-office-health-improvement-disparities>), further (see below for further details). For males, the life expectancy gap between the most and least deprived areas increased from 9 years in 2011–13 to 9.7 years in 2018–20, while the gap for females has grown from 6.9 to 8 years. Moreover, it is particularly noteworthy that female life expectancy in the most deprived ten per cent of areas has actually been falling since 2011–13. The deprivation divide in life expectancy and healthy life expectancy reflects a persistent north–south divide, with people in the south of England living longer on average and with more years in good health than those living further north. For example, in 2018–20, life expectancy for males was almost nine years lower and for females almost eight years lower in Blackpool, Middlesbrough, Manchester and Liverpool than in Westminster, Camden, and Kensington and Chelsea (<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthinequalities/datasets/healthstatelifeexpectancyallagesuk>). Moreover, the north–south divide in longevity has also widened over (<https://www.kingsfund.org.uk/blog/2021/10/rising-health-inequalities-office-health-improvement-disparities>), the past decade. Some population groups have significantly shorter life expectancy than the general population. For example, men and women who are homeless at or around the time of their death live 31 years and 38 years fewer (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsofhomelesspeopleinenglandandwales/2018>), than the average respectively. People with learning disabilities also have significantly shorter lives ([https://www.hqip.org.uk/resource/the-learning-disabilities-mortality-review-annual-report-2018/#\\_YUE9bD3MI2w](https://www.hqip.org.uk/resource/the-learning-disabilities-mortality-review-annual-report-2018/#_YUE9bD3MI2w)); life expectancy is 14 years shorter for men with a learning disability than for men in the general population, and the difference for women is 18 years (<https://www.mencap.org.uk/learning-disability-explained/research-and-statistics/health/health-inequalities#:~:text=LeDeR%20also%20reported%20the%20median%20age%20of%20death,for%20people%20with%20profound%20and%20multiple%20learning%20disabilities>).

About 14 per cent of the population of England is non-white. Ethnicity is not currently recorded at death registration (<https://www.kingsfund.org.uk/publications/health-people-ethnic-minority-groups-england>), but, following the disproportionate impact of Covid-19 on ethnic minority communities, the government has said ethnicity recording will be introduced in England (<https://www.gov.uk/government/publications/quarterly-report-on-progress-to-address-covid-19-health-inequalities>). (Scotland introduced it in 2012). However, by linking death records to 2011 census records to derive ethnicity, the Office for National Statistics (ONS) produced life expectancy estimates by ethnicity for England and Wales for 2011–14 for the first time (<https://www.ons.gov.uk/releases/ethnicvariationsinlifeexpectancy2011to2014englandandwales>)

The ONS data showed that, despite higher levels of deprivation (<https://www.kingsfund.org.uk/publications/health-people-ethnic-minority-groups-england>), male and female life expectancy in 2011–14 was higher in ethnic minority groups than in the white and mixed groups (see Figures 3 and 4). This may be due in part to the 'healthy migrant effect' (<https://doi.org/10.1007/s12134-014-0340-x>), whereby people who migrate tend to be in good health, and lower rates of smoking (<https://www.ethnicity-facts-figures.service.gov.uk/health/alcohol-smoking-and-drug-use/adult-smokers/latest>), and alcohol consumption (<https://www.ethnicity-facts-figures.service.gov.uk/health/alcohol-smoking-and-drug-use/harmful-and-probable-dependent-drinking-in-adults/latest>), in ethnic minority groups, which may mitigate some impacts of socio-economic disadvantage. Most ethnic minority groups also have lower mortality than the white group from cancer, dementia and several other leading causes of death (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/mortalityfromleadingcausesofdeathbyethnicgroupenglandandwales/2012to2019>). The pandemic has had a disproportionate impact on ethnic minority communities, but the picture is complex, and differs between ethnic groups and over time (<https://www.kingsfund.org.uk/publications/health-people-ethnic-minority-groups-england>) (see section below).

Use the arrows to look through Figure 3 and Figure 4.

Figure 3 Life expectancy by ethnic group, males

Figure 4 Life expectancy by ethnic group, females

Covid-19 and inequalities in life expectancy and mortality

Although the Covid-19 pandemic has caused life expectancy to fall in all population sub-groups in England, it has had an unequal impact on different groups and exacerbated health inequalities (<https://www.kingsfund.org.uk/publications/deaths-covid-19>). Covid-19 mortality rates have been significantly higher in more deprived areas, causing a fall in life expectancy between 2019 and 2021 of almost 2 years for males and 1.4 years for females in the most deprived areas, compared with 0.7 years for males and females in the least deprived areas (<https://analytics.phe.gov.uk/apps/chime/#Life%20expectancy>). (see Figure 5). As a result, inequalities have widened further (see Figure 6): the gap in life expectancy between the most and least deprived decile of areas in 2021 increased to 10.4 years for males and 8.6 years for females, 1.1 and 0.7 years higher respectively than in 2019.

Use the arrows to look through Figure 5 and Figure 6.

Figure 5 Fall in life expectancy by deprivation decile

Figure 6 Life expectancy by deprivation decile

Mortality data for some other groups also shows inequalities, which in turn will have an impact on life expectancy. For example:

- disabilities: mortality from Covid-19 is about 1.5 times higher among people with a learning disability (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronaviruscovid19relateddeathsbysdisabilitystatusenglandandwales/24januaryto20november2020>) or self-reported disability (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronaviruscovid19relateddeathsbysdisabilitystatusenglandandwales/24january2020to9march2022>), compared with those without a disability
- ethnicity: the pandemic has had a disproportionate impact on ethnic minority groups, who have experienced higher Covid-19 mortality than the White British group (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/updatingethnicontrastsindeathsinevolvingthecoronaviruscovid19englandandwales/latest>). Although most ethnic minority groups had lower overall mortality than the white population in the decade before the pandemic (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/mortalityfromleadingcausesofdeathbyethnicgroupenglandandwales/2012to2019>), that differential was reversed between January 2020 and February 2022 in some ethnic groups (Bangladeshi males and females, and Pakistani and Black Caribbean males) who experienced the highest Covid-19 (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/updatingethnicontrastsindeathsinevolvingthecoronaviruscovid19england>) mortality during the pandemic. In other ethnic minority groups, overall mortality during the pandemic remained lower than or similar to the white population despite higher Covid-19 mortality. The ONS has not yet analysed the pandemic's impact on ethnic differences in life expectancy.

How and why did trends in life expectancy change after 2011?

2011 marked a turning point in long-term mortality trends (<https://www.ons.gov.uk/releases/changingtrends inmortalityinenglandandwales1990to2017experimentalstatistics>), with improvements tailing off after decades of steady decline. In the 100 years to 2010–12, life expectancy increased by nearly 3 years every decade (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/bulletins/englishlifetablesno17/2015-09-01>), but between 2011–18 it increased by only 0.5 years for males and 0.2 years for females, virtually flat-lining between 2014–18 (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/singleyearlifetablesuk1980to2018>). However, between 2018–19 life expectancy increased by 0.3 years in males and 0.4 years in females (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/singleyearlifetablesuk1980to2018>), and in January–March 2020, before the Covid-19 pandemic took effect, mortality was again at the lower level seen in early 2019 (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/quarterlymortalityreports/octobertodecember2019>), and the fall in mortality in early 2020 (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/excesswintermortalityinenglandandwales/2019to2020provisionaland2018to2019final>), were associated with mild influenza (flu) seasons and lower winter mortality (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/analysisofdeathregistrationsnotinvolvingcoronaviruscovid19englandandwales28december2019to1may2020/technical annex>).

**A review of mortality trends in England (<https://www.gov.uk/government/publications/recent-trends-in-mortality-in-england-review-and-data-packs>), to 2017 found that improvements in life expectancy since 2010 had slowed in most areas of England and among all socio-economic groups, but the slowdown was greater among the most deprived groups and inequalities had widened.**

In the pre-pandemic decade, one year deserves special mention – 2015, when life expectancy fell across virtually all of Europe. In England and Wales there was a significant increase in mortality from respiratory diseases, including flu (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsregistrationssummarytables/2015>), and life expectancy fell by 0.2 years in both males and females (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/bulletins/nationallifetablesunitedkingdom/2017to2019>). – unprecedented for decades until the Covid-19 pandemic in 2020. As in Europe, most 'excess' deaths in 2015 occurred among older people, with deaths from respiratory disease (including flu and pneumonia) being a key contributor to the largest annual rise in deaths since the 1960s (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/dementiaandrespiratorydiseasebehindbiggestannualdeathsincreasesincethe1960s/2016-04-07>). The flu virus circulating in 2015 was known to predominantly affect older people (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/dementiaandrespiratorydiseasebehindbiggestannualdeathsincreasesincethe1960s/2016-04-07>).

A review of mortality trends in England (<https://www.gov.uk/government/publications/recent-trends-in-mortality-in-england-review-and-data-packs>), to 2017 found that improvements in life expectancy since 2010 had slowed in most areas of England and among all socio-economic groups, but the slowdown was greater among the most deprived groups and inequalities had widened. Slowing mortality improvements among people aged 50 years and over played a significant role.

The reasons for the post-2011 slowdown in life expectancy improvements are unclear and have been hotly debated.

Several studies attributed both the 2015 fall in life expectancy and the slowdown in mortality improvements after 2011 to the consequences of austerity-driven constraints on health, social care and other public spending and their impact on services.<sup>1-6</sup> While acknowledging that austerity may have had an impact on the quality of care and resulted in some excess deaths, others suggest that this does not prove causality and there could be other explanations. For example, the growing complexity of medical conditions in an ageing population, and the contribution of decelerating improvements in cardiovascular disease (CVD) mortality and periodic bad flu seasons to the decelerating mortality improvements seen in many high-income countries.<sup>7-10</sup> Moreover, some European countries that didn't adopt austerity policies also experienced slowdowns in life expectancy (<https://www.bmj.com/content/362/bmj.k4050.abstract>), improvements (eg, Germany and Sweden), while life expectancy increased in others that introduced severe austerity measures (eg, Spain, Ireland, Greece).<sup>11</sup>

**While a slowdown in improvements in life expectancy between 2010 and 2019 was seen in many European countries, it was greatest in the UK.**

A review by Public Health England identified some of the factors contributing to slowing improvements in life expectancy (<https://www.gov.uk/government/publications/recent-trends-in-mortality-in-england-review-and-data-packs>) seen until 2017: increasing numbers of older people vulnerable to flu and other winter risks; slowing improvements in mortality from heart disease and stroke; widening inequalities; and rising death rates from accidental

poisoning among younger adults (mainly due to drug misuse). It noted that the slowdown occurred across much of the population, at a time when health and social care services faced increasing demand and unprecedented financial pressures.

While a slowdown in improvements in life expectancy between 2010 and 2019 was seen in many European countries, it was greatest in the UK. It's likely that there were [several reasons for these trends](https://www.bmj.com/content/362/bmj.k4050.abstract), some specific to the UK (such as widening inequalities) and some common to the UK and other European countries (such as the swings in flu-related mortality and slowdown in CVD mortality improvements in some countries).<sup>11-13</sup> The uptake of smoking in women occurred after men, and is cited as one possible explanation for the relatively small increases in female life expectancy in the UK in recent years, and why it compares poorly with Europe.<sup>14</sup>

The impact of the Covid-19 pandemic

However, the slowdown in life expectancy improvements between 2011 and 2019 was nothing compared with what was to follow. [The Covid-19 pandemic caused 128,000 excess deaths in England between March 2020 and December 2021 compared with the 2015–19 average](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/excessdeathsinenlandandwales/march2020todecember2021) (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/excessdeathsinenlandandwales/march2020todecember2021>), resulting in the largest fall in life expectancy in England since World War II. Compared with 2019, life expectancy in 2020 fell by 1.3 years in males and 1 year in females (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/singleyearlifetablesuk1980to2018>), and remained virtually unchanged between 2020 and 2021 (<https://analytics.phe.gov.uk/apps/chime/#Life%20expectancy>).

However, mortality trends in 2022 to date are the lowest they have been in the past two decades. [The overall mortality rate for England from January to May 2022 was lower than for the same period in any year since 2001](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/monthlymortalityanalysisenglandandwales/may2022) (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/monthlymortalityanalysisenglandandwales/may2022>). This suggests that some excess deaths in 2020 and 2021 occurred prematurely ie, [that as Covid-19 mortality rates and numbers of deaths are highest in older people, some people who died during this period would have been expected to die in the near future](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/excessmortalityandmortalitydisplacementinenlandandwales/latest) (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/excessmortalityandmortalitydisplacementinenlandandwales/latest>). This could explain why some periods of excess deaths during the pandemic have been followed by below average numbers of deaths in the ensuing periods. However, it is unclear whether the trend thus far in 2022 will continue and [what impact Covid-19 may have on long-term mortality trends](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/articles/mortalityinenlandandwales/pastandprojectedtrendsinaverage lifespan) (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/articles/mortalityinenlandandwales/pastandprojectedtrendsinaverage lifespan>).

Further details about mortality from Covid-19 are available in our explainer, [Deaths from Covid-19 \(coronavirus\): how are they counted and what do they show?](https://www.kingsfund.org.uk/publications/deaths-covid-19) (<https://www.kingsfund.org.uk/publications/deaths-covid-19>).

How does the UK compare with other European countries?

This section focuses on comparisons between the UK and selected European and other high-income countries in the Organisation for Economic Co-operation and Development (OECD).<sup>d</sup> Within Europe, we focus mainly on western European countries as they are more comparable to the UK on economic measures than eastern European countries, where life expectancy has historically been lower.

**Male life expectancy in pre-pandemic UK** (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/singleyearlifetablesuk1980to2018>), **was below that of several western European and other high-income countries, while female life expectancy was among the lowest in comparator countries** ([https://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-health-statistics/oecd-health-data-health-status\\_data-00540-en?parentId=http%3A%2F%2Finstance.metastore.ingenta.com%2Fcontent%2Fcollection%2Fhealth-data-en](https://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-health-statistics/oecd-health-data-health-status_data-00540-en?parentId=http%3A%2F%2Finstance.metastore.ingenta.com%2Fcontent%2Fcollection%2Fhealth-data-en)).

Figures 7 and 8 show trends in life expectancy in selected OECD countries. **Male life expectancy in pre-pandemic UK** (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datasets/singleyearlifetablesuk1980to2018>), **was below that of several western European and other high-income countries, while female life expectancy was among the lowest in comparator countries** ([https://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-health-statistics/oecd-health-data-health-status\\_data-00540-en?parentId=http%3A%2F%2Finstance.metastore.ingenta.com%2Fcontent%2Fcollection%2Fhealth-data-en](https://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-health-statistics/oecd-health-data-health-status_data-00540-en?parentId=http%3A%2F%2Finstance.metastore.ingenta.com%2Fcontent%2Fcollection%2Fhealth-data-en)). An exception is the US, where male and female life expectancy has historically been lower than in other high-income countries; and contrary to the rising trend in most developed nations, [life expectancy in the US fell between 2014–17 due to drug-related deaths in particular, but also deaths by suicide and alcohol-related deaths](https://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-health-statistics/oecd-health-data-health-status_data-00540-en?parentId=http%3A%2F%2Finstance.metastore.ingenta.com%2Fcontent%2Fcollection%2Fhealth-data-en) ([https://jamanetwork.com/journals/jama/article-abstract/2756187?questaccesskey=c1202c42-e6b9-4c99-a936-0976a270551f&utm\\_source=for\\_the\\_media&utm\\_medium=referral&utm\\_campaign=ftm\\_links&utm\\_content=ftf&utm\\_term=112619&alert=article](https://jamanetwork.com/journals/jama/article-abstract/2756187?questaccesskey=c1202c42-e6b9-4c99-a936-0976a270551f&utm_source=for_the_media&utm_medium=referral&utm_campaign=ftm_links&utm_content=ftf&utm_term=112619&alert=article)). Life expectancy is also lower in eastern compared with western European countries. As in the UK, [improvements in life expectancy slowed in many European countries in the decade to 2019](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/articles/changingtrendsinternationallcomparison2000to2016) (<https://doi.org/10.1787/223159ab-en>). However, [the slowdown was greater in the UK than in most EU countries](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/articles/changingtrendsinternationallcomparison2000to2016) (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/articles/changingtrendsinternationallcomparison2000to2016>).

The periodic spikes in excess deaths in some recent winters, especially among older people, show similar patterns across the UK and several European countries, and, according to [official agencies](https://www.euro-momo.eu/) (<https://www.euro-momo.eu/>), are associated with flu and cold spells. In particular, as in the UK, European agencies reported increased mortality in 2015 that disproportionately affected older people (women in particular), with life expectancy falling in most European countries (see Figures 7 and 8). European monitoring agencies associated this widespread [fall in life expectancy from excess winter mortality with flu](https://www.euro-momo.eu/) (<https://www.eurosurveillance.org/content/10.2807/1560-7917.ES2015.20.11.21065>).

**In 2020, the start of the pandemic, life expectancy fell in all but a handful of OECD countries** ([https://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-health-statistics/oecd-health-data-health-status\\_data-00540-en?parentId=http%3A%2F%2Finstance.metastore.ingenta.com%2Fcontent%2Fcollection%2Fhealth-data-en](https://www.oecd-ilibrary.org/social-issues-migration-health/data/oecd-health-statistics/oecd-health-data-health-status_data-00540-en?parentId=http%3A%2F%2Finstance.metastore.ingenta.com%2Fcontent%2Fcollection%2Fhealth-data-en)), (see Figures 7 and 8); the greatest falls were in Spain, Italy, Belgium, the US and the UK. Many eastern European countries, such as Poland, Hungary and the Czech Republic experienced large falls despite their lower life expectancies pre-pandemic. [For western European countries such as Spain, Italy, Belgium and the UK, the last time such a large loss of life was observed in a single year was during World War II](https://academic.oup.com/ije/advance-article/doi/10.1093/ije/dyab207/6375510) (<https://academic.oup.com/ije/advance-article/doi/10.1093/ije/dyab207/6375510>). The exceptions to this general pattern of falling life expectancies in 2020 were Denmark, Finland, Norway and Japan, which, the pandemic notwithstanding, experienced small increases or no change. Data for life expectancy in 2021 is not yet available for several OECD countries, including the UK.

Following its weak gains in life expectancy over the pre-pandemic decade, the UK is among the few countries where the pandemic caused life expectancy to fall to about the level of a decade ago. The combined impact of the UK's relatively poor track record on pre-pandemic life expectancy, and [on mortality during the pandemic](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/comparisonsofcausesofmortalitybetweeneuropancountriesandregions/datauptoweekending3september2021) (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/comparisonsofcausesofmortalitybetweeneuropancountriesandregions/datauptoweekending3september2021>), has been to worsen the UK's standing compared to other countries.

Use the arrows to look through Figure 7 and Figure 8.

Figure 7 Life expectancy at birth, males

Figure 8 Life expectancy at birth, females

<sup>d</sup> [OECD data on life expectancy \(https://doi.org/10.1787/ae3016b9-en\)](https://doi.org/10.1787/ae3016b9-en), is used in this section. OECD uses data from Eurostat for EU countries, and from national sources elsewhere. Methodological differences between Eurostat and individual non-EU countries in how life expectancy is calculated could affect the results.

Conclusion

The excess mortality associated with Covid-19 in 2020 and 2021, and evidence that many lives have been cut short, is unprecedented in recent decades. Covid-19 deaths have now fallen in many countries, including England, due in part to wider vaccination coverage and greater population immunity. The many premature deaths in 2020 and 2021 may cause death rates in the next few years to fall below pre-pandemic levels. However, trends in future life expectancy in England depend on many factors, including any resurgence in Covid-19, the indirect impacts of the pandemic such as deaths resulting from the backlog of untreated care for other conditions, and trends in the wider determinants of life expectancy.

With the exception of the US, the UK's pre-pandemic life expectancy was lower than in many comparator countries for males and was the lowest for females, and it experienced among the lowest gains in the pre-pandemic decade. The UK has also seen larger falls in life expectancy during the pandemic relative to several comparator countries. Meaningful long-term gains in life expectancy, reducing inequalities and improving the UK's standing in international comparisons of life expectancy will be major challenges in the future.

References

1. Hiam L, Dorling D, Harrison D, McKee M (2017). 'What caused the spike in mortality in England and Wales in January 2015?' *Journal of the Royal Society of Medicine*, vol 110, no 4, pp 131–7. doi: 10.1177/0141076817693600. Available at: <http://journals.sagepub.com/doi/abs/10.1177/0141076817693600?journalCode=jrsb> (accessed on 23 June 2020).

2. Hiam L, Dorling D, Harrison D, McKee M (2017). 'Why has mortality in England and Wales been increasing? An iterative demographic analysis'. *Journal of the Royal Society of Medicine*, vol 110, no 4, pp 153–62. doi: 10.1177/0141076817693599. Available at: <http://journals.sagepub.com/doi/full/10.1177/0141076817693599> (accessed on 23 June 2020).

3. Loopstra R, McKee M, Katikireddi SV, Taylor-Robinson D, Barr B, Stuckler D (2016). 'Austerity and old-age mortality in England: a longitudinal cross-local area analysis, 2007–2013'. *Journal of the Royal Society of Medicine*, vol 109, pp 109–16. Available at: <http://journals.sagepub.com/doi/full/10.1177/0141076816632215> (accessed on 23 June 2020).

4. Hiam L, Harrison D, McKee M, Dorling D (2018). 'Why is life expectancy in England and Wales "stalling"? *Journal of Epidemiology and Community Health*, vol 72, pp 404–8. Available at: <http://jech.bmj.com/content/early/2018/02/20/jech-2017-210401> (accessed on 23 June 2020).

5. Green MA, Dorling D, Minton J, Pickett KE (2017). 'Could the rise in mortality rates since 2015 be explained by changes in the number of delayed discharges of NHS patients?' *Journal of Epidemiology and Community Health*, vol 71, pp 1068–971. Available at: <https://jech.bmj.com/content/jech/71/11/1068> (accessed on 23 June 2020).

6. Watkins J, Wulaningsih W, Da Zhou C, Marshall D, Syliainteng G, Dela Rosa P, Miguel V, Raine R, King L, Maruthappu M (2017). 'Effects of health and social care spending constraints on mortality in England: a time trend analysis'. *BMJ Open*. Available at: <https://bmjopen.bmj.com/content/7/11/e017722> (accessed on 23 June 2020).

7. Fordham R, Roland M (2017). 'Expert reaction to paper on health and social care spending and excess deaths in England'. Blog. Social Media Centre website. Available at: [sciemediacentre.org/expert-reaction-to-paper-on-health-and-social-care-spending-and-excess-deaths-in-england/](https://sciemediacentre.org/expert-reaction-to-paper-on-health-and-social-care-spending-and-excess-deaths-in-england/) (accessed on 23 June 2020).

8. Stevenon A (2017). 'Can you really link delayed discharge to mortality? The evidence is far from clear'. Blog. The Health Foundation website. Available at: [health.org.uk/blog/can-you-really-link-delayed-discharge-mortality-evidence-far-clear](https://www.health.org.uk/blog/can-you-really-link-delayed-discharge-mortality-evidence-far-clear)

9. Milne E (2017). 'Why the "120,000 deaths" claim is unsupportable'. Blog. Available at: <https://eugenemilne.com/2017/11/17/why-the-120000-deaths-claim-is-unsupportable/> (accessed on 23 June 2020).

10. RaleighVS (2018). 'Stalling life expectancy in the UK'. *BMJ*, vol 362, k4050. Available at: [kingsfund.org.uk/publications/stalling-life-expectancy-uk](https://www.kingsfund.org.uk/publications/stalling-life-expectancy-uk) (accessed on 23 June 2020).

11. Raleigh V (2019). *Trends in life expectancy in EU and other OECD countries: why are improvements slowing?* OECD Health Working Papers, 108. Paris: OECD Publishing. Available at: <https://doi.org/10.1787/223159ab-en> (accessed on 23 June 2020).

12. Euro-momo (2021). Euro-momo website. Available at: [euro-momo.eu/](https://www.euro-momo.eu/) (accessed on 9 April 2021).

13. OECD, The King's Fund (2020). *Is cardiovascular disease slowing improvements in life expectancy? OECD and The King's Fund workshop proceedings*. Paris: OECD Publishing. Available at: <https://doi.org/10.1787/47a94a11-en> (accessed on 23 June 2020).

14. Leon DA, Jdanov DA, Shkolnikov VM (2019). 'Trends in life expectancy and age-specific mortality in England and Wales, 1970–2016, in comparison with a set of 22 high-income countries: an analysis of vital statistics data'. *Lancet*, vol 4, no 11, e575–82.

Related content

### **Deaths from Covid-19 (coronavirus): how are they counted and what do they show?**

Veena Raleigh examines the methods being used to count deaths from Covid-19 and discusses what the numbers to date show.

By Veena Raleigh - 23 August 2022 15-minute read

[\(/publications/deaths-covid-19\)](#)

### **Is the problem of excessive winter deaths unique to the UK?**

Veena Raleigh assesses patterns in the latest mortality data for European countries.

By Veena Raleigh - 2 July 2018

[\(/blog/2018/07/problem-excessive-winter-deaths-unique-uk\)](#)

### **The health of people from ethnic minority groups in England**

This long read examines ethnic differences in health outcomes, highlighting the variation across ethnic groups and health conditions, and considers what's needed to reduce health inequalities.

By Veena Raleigh et al - 17 September 2021

[\(/publications/health-people-ethnic-minority-groups-england\)](#)











