Article

Overview of the UK population: 2020

An overview of the UK population incorporating data related to 2020, how it has changed, why it has changed and how it is projected to change in the future.

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Next release:
To be announced

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1 . Main points

- The UK population at mid-year 2020 was estimated to be 67.1 million; this was an increase of roughly 284,000 (0.4%) since mid-year 2019.

- In the calendar year of 2020, the number of deaths in the UK exceeded the number of live births for the first time since 1976.

- There were 681,560 births and 689,629 deaths in the UK in 2020.

- The UK population is projected to rise by 2.1 million to 69.2 million over the decade to mid- 2030; this would be a 3.2% increase.

2 . Transforming our population and migration statistics

Understanding the size and characteristics of the UK population is vital when it comes to planning and delivering services such as education and healthcare. There were significant changes to the UK population during 2020 and this article brings together the main points from several publications.

This overview of the UK population covers the year ending December 2020, which includes the onset of the coronavirus (COVID-19) pandemic. This has had a significant impact on both the size and structure of the UK population and the data we use to estimate it. Our blog explains the possible effects on the demography of the UK.

The collection of certain data sources in 2020, such as the international passenger survey, was paused. This led to the acceleration of the admin-based migration estimates with statistical modelling.

The coronavirus pandemic highlighted the need for more frequent data about our population to understand the biggest challenges facing society. As part of our transformation programme, the Office for National Statistics (ONS) has been bringing together new sources of information to build the most detailed picture possible.

Some specific groups are more challenging to measure than others, such as students who are at an important life transition stage but where administrative data may struggle to keep up with rapid changes in their circumstances. We are also looking at the impact the coronavirus pandemic has had on the data sources we are using to ensure continuity in the estimates we produce.

The benefits of administrative data for measuring the population and migration go beyond single estimates. They provide us with a unique opportunity to be more inclusive by measuring outcomes from migrants and all people. Going forward, we want to provide population and migration statistics more quickly and frequently. Throughout 2022, we intend to transform our population and migration statistics and build towards "experimental" monthly age and sex profiles of the population relating to 2022.

Providing these monthly population totals in the future will give decision makers the most up to date information possible on the dynamics of the population. This will help ensure public services can be provided to the right population groups in the right places. This has never been more important, as we emerge from the coronavirus pandemic and following our departure from the EU.

We plan to publish mid-2021 population estimates, which will be rolled forward from Census 2021. Alongside those, we plan to publish for comparison the mid-2021 population estimates, which have been rolled forward from the 2011 Census. This will provide a basis for understanding the sources of error and bias that have occurred in the population estimates since the 2011 Census. It will also help inform our decisions leading to a rebased set of population estimates for the years between mid-2012 and mid-2020, which we plan to publish in early 2023.

3 . The UK's population continues to grow, but at a slower rate than previously

The UK population has grown year-on-year since 1982. In mid-2020, the population reached 67.1 million, up from 66.8 million in mid-2019. This means the population grew by 0.4%, or an additional 284,000 people, between mid-2019 and mid-2020.
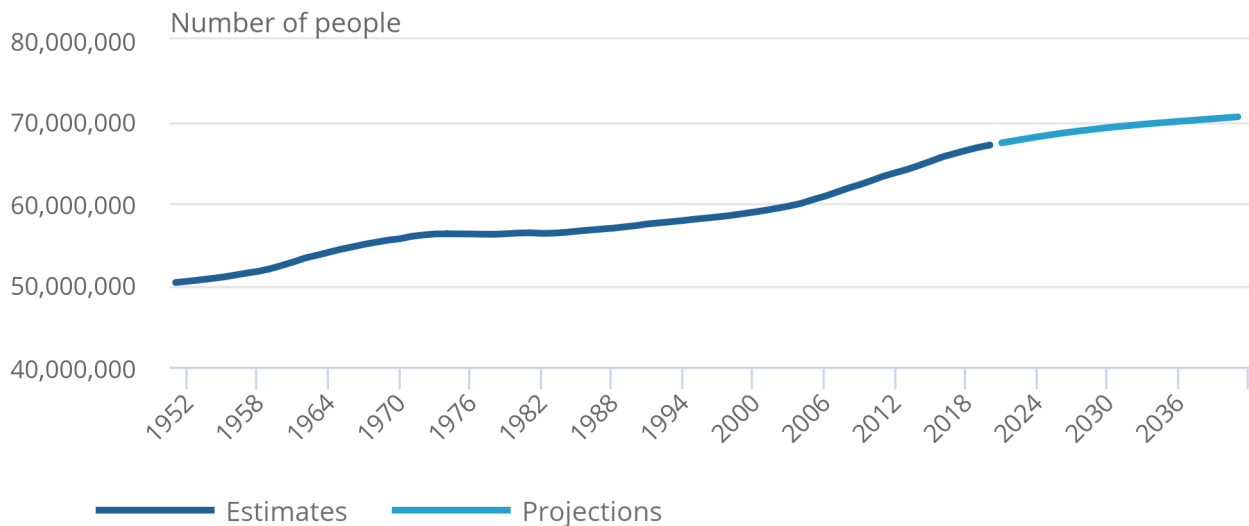
The UK population is projected to increase further; our 2020-based interim national population projections suggest the UK population will surpass 69.2 million by mid-2030 and reach 70.5 million by mid-2041.

Figure 1: The UK population has grown year-on-year since 1982

UK population estimates and projections, mid-1951 to mid-2041

Figure 1: The UK population has grown year-on-year since 1982

UK population estimates and projections, mid-1951 to mid-2041

Source: Office for National Statistics (ONS) – mid-year population estimates and projections

Notes:

1. Numbers from mid-year population estimates are rounded to the nearest thousand.

Families and households

The number of UK households in 2020 was estimated at 27.8 million. This is a 1.6 million increase from the estimated 26.2 million in 2010.

A similar trend can be seen in the number of families living in the UK. In 2020, the estimated number of UK families was 19.4 million. This is an increase of 1.3 million from 18.1 million in 2010.

4 . Migration to the UK has been the main driver of population growth since the 1990s

Change in population size at the UK level has four components: births, deaths, immigration, and emigration.

The difference between the number of live births and deaths is referred to as "natural change". When natural change is positive, there are more births than deaths in the timeframe. When it is negative, there are more deaths than births.

The difference between the number of long-term immigrants (people moving into the UK for at least 12 months) and the number of long-term emigrants (people moving out of the UK for more than 12 months) is termed "net migration". Those moving for less than 12 months are not recorded in the mid-year population estimates but are estimated elsewhere.

Natural change

In 2020, the UK experienced a natural change of negative 8,069, with 681,560 live births and 689,629 deaths. This is first time the population has decreased through natural change since 1976 and the second time since data has been collected. The number of births in 2020 is the lowest since 2002, with 31,120 fewer births than in 2019. The total fertility rate (TFR) is the lowest since records began in 1938; in 2020, women had 1.56 children on average.
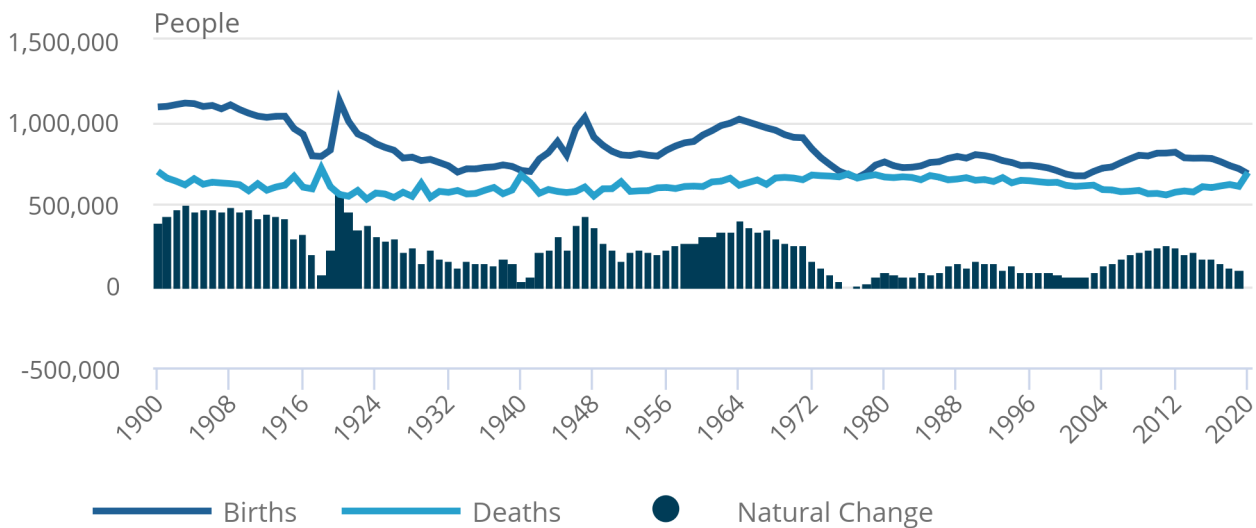
There were 689,629 deaths in 2020, which is the highest since 1918 when there were 715,246. That said, the population in 1918 was 39.6 million compared with 67.1 million in 2020. A fairer comparison of deaths over time comes from age-standardised mortality rates, which consider the changes in size and age structure of the population. The age-standardised mortality rate in 2020 was 1,062.5, which is the highest since 2008.

Figure 2: The number of deaths exceeded the number of live births in the UK for the first time since 1976

UK births, deaths, and natural change, 1900 to 2020

Figure 2: The number of deaths exceeded the number of live births in the UK for the first time since 1976

UK births, deaths, and natural change, 1900 to 2020

Source: Office for National Statistics (ONS), National Records of Scotland (NRS), and Northern Ireland Statistics and Research Agency (NISRA) – birth and death statistics

Notes:

1. Data are for whole calendar years.

Net migration

Natural change has previously been the main driver of UK population growth. However, since the 1990s, the influence of net migration has increased, becoming the main source of growth.

Long-term international migration from the year ending December 2020 shows that migrants continued to add to the UK population. From the modelled estimates, an estimated 33,000 more people moved to the UK than left in the year ending December 2020. This is significantly lower than previous years when levels reached a peak of 331,000 in the year ending March 2015. This is expected because of limited travel caused by the coronavirus (COVID-19) pandemic. Changes in methodology mean the estimates are not directly comparable with before the coronavirus pandemic.

Figure 3: Long-term immigration, emigration, and net migration

Long-term international migration, UK, year ending June 2010 to year ending December 2020

Notes:

1. The 2010 to 2019 estimates are based on published Long-term International Migration estimates and derived from the International Passenger Survey (IPS). Solid lines indicate adjustments have been applied. Dashed lines indicate no adjustment has been made because of data availability.

2. The 2020 estimates are the latest official estimates of international migration. However, they are derived from statistical modelling using administrative data, entail a level of uncertainty, and are therefore badged as experimental.

3. Refugees and asylum seekers are excluded from modelling.

Download the data

.xlsx

5 . The UK's population is ageing

The UK's age structure is shifting towards older ages because of declining fertility rates and people living longer.

One traditional measure used to consider the impact of an ageing population is the old-age dependency ratio (OADR). This measures the number of people of state pensionable age (SPA) and over per 1,000 people aged 16 years up to SPA. The UK OADR during 2020 was 280 and is projected to reach 352 by 2041. This means the number of people of pensionable age relative to the size of those of expected working age is increasing.

Improvements in life expectancy continue to be slow

The UK life expectancy at birth in 2018 to 2020 was 79.0 years for males and 82.9 years for females. These period life expectancy figures taken from the National life tables show that the slowdown in improvements in life expectancy across the UK is continuing, and reflects increased mortality in 2020 during the coronavirus pandemic.

Our projections of cohort life expectancy consider future assumed improvements in mortality. Using this measure, life expectancy at birth in the UK in 2020 is 87.3 years for males and 90.2 years for females.

6 . UK population data

[Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland](#)
Dataset | Released 25 June 2021
National and subnational mid-year population estimates for the UK and its constituent countries by administrative area, age and sex (including components of population change, median age and population density). The mid-2001 to mid-2019 detailed time-series contains the latest available mid-year population estimates and components of change from mid-2019 back to mid-2001.

[National population projections QMI](#)
Dataset | Released 12 January 2022
Quality and methodology information (QMI) for national population projections, detailing the strengths and limitations of the data, methods used and data uses and users.

[National population projections table of contents](#)
Dataset | Released 12 January 2022
Tools to locate the dataset tables and supporting documentation for the 2014, 2016, 2018 and 2020-based interim national population projections. Contains links to the principal and (where available) variant projections for the UK and constituent countries for 100 years ahead.

[National life tables: UK](#)
Dataset | Released 23 September 2021
Period life expectancy by age and sex for the UK. Each national life table is based on population estimates, births and deaths for a period of three consecutive years. Tables are published annually.

7 . Glossary

Age-standardised mortality rates

A weighted average of the age-specific mortality rates per 100,000 persons.

International passenger survey (IPS)

A survey that collected information about passengers entering and leaving the UK, suspended in March 2020.

Long-term international migration

An event in which a person moves to a country other than that of their usual residence for a period of at least a year (12 months).

Natural change

The difference between the number of live births and deaths in a given time period.

Net migration

The difference between the number of people moving into the UK for at least 12 months and the number of people moving out of the UK for at least 12 months.

Old age dependency ratio (OADR)

The number of people of state pensionable age (SPA) and over per 1,000 people aged 16 years up to SPA.

State pensionable age (SPA)

The earliest age a person can start receiving their state pension.

Total fertility rate (TFR)

The average number of live children that a woman would bear if she experienced the age-specific fertility rates for a given year throughout her childbearing lifespan.

8 . Data sources and quality

The data used in this article come from a variety of other sources. Their quality is described in more detail in each publication.

In particular, the quality and methodology information (QMI) for the mid-2020 population estimates and the QMI for the 2020-based interim national population projections are available.

9 . Related links

Population estimates for the UK, England and Wales, Scotland and Northern Ireland: mid-2020
Bulletin | Released 25 June 2021
National and subnational mid-year population estimates for the UK and its constituent countries by administrative area, age and sex.

National population projections: 2020-based interim
Bulletin | Released 12 January 2022
The potential future population size of the UK and its constituent countries. This is widely used in planning, for example, fiscal projections, health, education and pensions.

Families and households in the UK: 2020
Bulletin | Released 2 March 2021
Trends in living arrangements including families (with and without dependent children), people living alone and people in shared accommodation, broken down by size and type of household.

Births in England and Wales: 2020
Bulletin | Released 14 October 2021
Live births, stillbirths and the intensity of childbearing, measured by the total fertility rate.

Deaths registered in England and Wales: 2020
Bulletin | Released 6 July 2021
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.

Long-term international migration, provisional: year ending December 2020
Bulletin | Released 25 November 2021
Experimental statistics on UK international migration throughout 2020, including the impact of the coronavirus (COVID-19) pandemic.

National life tables -- life expectancy in the UK: 2018 to 2020
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.