

# Families and households QMI

Quality and methodology information for families and households estimates, detailing the strengths and limitations of the data, methods used and data uses and users.

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## Table of contents

1. [Output information](#)
2. [About this Quality and Methodology Information report](#)
3. [Important points](#)
4. [Quality summary](#)
5. [Quality characteristics of the families and households data](#)
6. [Methods used to produce the families and households data](#)
7. [Other information](#)

# 1 . Output information

<b>National Statistic</b>	
<b>Survey name</b>	The Labour Force Survey (Household dataset)
<b>Frequency</b>	Annual
<b>How compiled</b>	Sample-based survey
<b>Geographic coverage</b>	UK
<b>Sample size</b>	Approximately 40,000 households per quarter
<b>Last revised</b>	2 March 2021

## 2 . About this Quality and Methodology Information report

This quality and methodology report contains information on the quality characteristics of the data (including the European Statistical System five dimensions of quality) as well as the methods used to create it.

The information in this report will help you to:

- understand the strengths and limitations of the data
- learn about existing uses and users of the data
- understand the methods used to create the data
- decide suitable uses for the data
- reduce the risk of misusing data

## 3 . Important points

- The families and households estimates are produced using the April to June quarter of the Labour Force Survey (LFS), a large-scale UK household survey we carry out that interviews approximately 40,000 households per quarter.
- Most communal establishments are excluded from the LFS, with the exception of National Health Service accommodation; students in halls of residence whose parents live in the UK are included through the parental home.
- The families and households estimates are subject to sampling variation; the precision of the estimates depends on the sample size but for some smaller groups, such as civil partner couple families and same-sex cohabiting couple families, the estimates are considered less precise and should be treated with more caution.
- The definition of a family in this release is a married, civil partnered or cohabiting couple with or without children, or a lone parent with at least one child who lives at the same address.
- The definition of a household in this release is one person living alone, or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room, sitting room or dining area.

## 4 . Quality summary

### Uses and users

An understanding of families and households is crucial for those involved in planning and decision-making. In addition, family and social relationships are one of the most important factors contributing to well-being.

The statistics are used by those who want to improve their understanding of the UK's families and households including:

- policy-makers
- MPs
- journalists
- charities
- the private sector
- students
- researchers and academics
- members of the general public

### Strengths and limitations

The main strengths of the families and households statistical bulletins include:

- these data provide users with valuable insight into the changing patterns of families and households back to 1996
- the survey estimates are sourced from the Labour Force Survey (LFS), which provides robust and representative survey estimates used for labour market, economic statistics and family and household statistics
- the use of survey estimates means that families statistics are adaptive to changes in legislation relating to legal marital status (for example, the introduction of civil partnerships and same-sex marriages); however, small sample sizes may mean that it takes a number of years before it is possible to produce robust estimates at lower geographies or by other demographic characteristics such as age
- [confidence intervals](#) and an indication of the size of the [coefficient of variation](#) are presented around the survey component of the estimates to give users an indication of the reliability of the estimates

The main limitations of the families and households statistical bulletins include:

- the LFS is a study of employment circumstances in the UK, used to provide information on the UK labour market; therefore, its primary function is not to provide information on demographics such as families and households
- the definitions used to describe families and households are constrained by the LFS and therefore a lot of the complexities of family and household formation cannot be explored; for example, families are constrained by the fact that they must all reside at the same address; more information on the complexities of the families and households definition can be found in the [explainer document](#)
- the LFS does not include the 2% of the population living in communal establishments such as prisons and nursing homes
- some demographic groups of the population, such as older people and those in same-sex unions, have small sample sizes within the LFS; so, estimates and trends are not always robust enough for meaningful commentary

## Recent improvements to the publication

Since our last National Statistics assessment we have made the following improvements to the publication:

- a breakdown of married couple families into opposite-sex and same-sex (Table 9)
- an [explainer document](#) to accompany the release from the August 2019 publication; this provides information around the complexities of families and households definitions and examples of families and households, and their categorisations
- adding feedback links to our datasets so users can more easily let us know which tables are useful and what else they would like

In response to user requests:

- our November 2019 publication included Tables 1 and 7 at regional level for the first time, with further tables at regional level in this year's publication
- for this release we have expanded Table 5 to include household size of six, and seven and over people for years 2015 onwards, prior to this there was a six and over category
- in the November 2015 release we started including estimates of young adults living with their parents

# 5 . Quality characteristics of the families and households data

## Relevance

(The degree to which the statistical outputs meet users' needs.)

The families and households tables published are:

- Table 1: Families by family type and presence of children
- Table 2: People in families by family type and presence of children
- Table 3: Families with dependent children by family type and number of dependent children
- Table 4: Dependent children in families by family type
- Table 5: Households by size
- Table 6: People living alone by age and sex
- Table 7: Households by type of household and family
- Table 8: People in households by type of household and family
- Table 9: Married couple families by type and presence of children

These tables are typically updated annually. The choice to publish these tables was based on analysis of ad hoc requests by users of families and households data during 2010. It would be impossible to provide tables to meet all user needs, but the tables published aim to answer the most basic and common questions on the number of families in the UK by family type and the number of people in such families, including children. The tables also answer basic questions on the number of households in the UK, what types of family are living in these households and the number of people living in these households.

In response to user demand for estimates of families and households at lower levels of geography, we have increased the number of datasets published in 2019 and 2020.

In the 2019 dataset release we published two additional datasets:

- Families by family type and presence of children for UK countries and English regions
- Households by type of household and family for UK countries and English regions

In the 2020 dataset release we published the previous two datasets as well as an additional three datasets:

- People in families by family type and presence of children for UK countries and English regions
- Households by size for UK countries and English regions
- People in households by type of household and family for UK countries and English regions

We have incorporated feedback links into our published datasets for 2020 to gather more information on whether the tables published meet user needs.

Further information about the strengths and limitations of other sources of data, which were considered when developing this output, are in [Section 7 Other information](#).

## Accuracy and reliability

(The degree of closeness between an estimate and the true value.)

As estimates of the UK's families and households are based on the Labour Force Survey (LFS), all estimates produced are subject to sampling variability. This is because the sample selected is only one of a large number of possible samples that could have been drawn from the population.

Samples are drawn from the "small user" Postcode Address File (PAF), which is a database of private addresses in England, Wales and Scotland. These are addresses that receive fewer than 25 pieces of mail per day. In Northern Ireland, Pointer, which is the government's central register of domestic properties, is used.

Estimates produced from a sample survey vary according to the specific characteristics of the respondents that have been sampled. Some inferences can be made as to the characteristics of non-respondents and whether non-response has an impact on the quality of the survey results.

Sampling and non-sampling error, along with information on measuring error, can be found in the [LFS QMI](#). [LFS quality measures](#) are also documented.

More detail on the quality assurance carried out on the LFS data can be found in [Section 6: Methods used to produce the families and households data](#).

The coronavirus (COVID-19) pandemic has affected the data collection and weighting methodology of the LFS. As a result, all face-to-face interviewing for the Labour Force Survey (LFS) was suspended and replaced with telephone interviewing. This change in the method for initial contact has changed the non-response bias of the survey, affecting interviews from March 2020 onwards.

Labour Force Survey (LFS) responses are weighted to official population projections. As the current projections are 2018-based they incorporate demographic trends that pre-date the COVID-19 pandemic.

We continue to examine potential non-response bias and to analyse the population totals used in the weighting process and may make adjustments if appropriate. Rates published from the LFS remain robust; however, levels and changes in levels should be used with caution.

Further information can be found by following the links:

- [Coronavirus and its impact on the LFS](#)
- [Measuring the labour market during the pandemic](#)
- [Understanding the impact of COVID-19 on UK population](#)
- [The impact of the change in weighting on main LFS indicators published in October 2020](#)

To mitigate the impact of the change in non-response bias, in October 2020, we introduced housing tenure into the LFS weighting methodology for periods from January to March 2020 onwards. For some very specific household types the impact of non-response bias may still be evident. The data for one person households aged 75 years and over particularly appear to present an implausible reduction when compared with data for 2019. We recommend that users refer to the number of one-person households aged 65 years and over, which have been less affected by this issue. In turn, this has contributed to there being no [statistically significant](#) change in the total number of households in the UK, in contrast with the overall trend for steady increase in household numbers in recent years.

## Coherence and comparability

(Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain, for example, geographic level.)

There are several other data sources, including administrative and survey data, that can be used to provide estimates of families and households. These include census data, registration data, Her Majesty's Revenue and Customs (HMRC) benefits data, and other surveys such as the English Housing Survey (EHS). More information on these other data sources for families and households can be found in the [explainer](#).

Some common themes have emerged from [previous analysis into the differences between data sources](#), such as lower estimates of one-person households in the Labour Force Survey (LFS) compared with other non-survey sources, because of non-contact with one-person households in surveys. Surveys also generally provided higher estimates of civil partners than registration data, for a variety of possible reasons including people who have formed a civil partnership outside the UK, either before or after civil partnerships became legal in the UK in 2005. However, in general, estimates were found to be similar to the other sources, given the quite different collection methods.

In 2013, we undertook some initial comparisons with the results of the 2011 Census for families and households. The main findings from this comparison are in the [2013 statistical bulletin](#).

It may be necessary to make future revisions to the families and households estimates to reflect occasional or post-census revisions to the national mid-year population estimates, which will also have an impact on the weighting used for the LFS. This is in line with our [revisions policies for population statistics](#).

## Accessibility and clarity

(Accessibility is the ease with which users can access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the release details, illustrations and accompanying advice.)

- The recommended format for accessible content is HTML5 for narrative, charts and graphs.
- Data should be provided in open, reusable and machine-readable formats such as CSV and ODF.
- An option to download or print the content should be available.

In addition to this Quality and Methodology report, some quality and methods information is included in each [statistical bulletin](#).

For information regarding conditions of access to data, please refer to the following links:

- [Terms and conditions \(for data on the website\)](#)
- [Accessibility](#)

## Timeliness and punctuality

(Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the gap between planned and actual publication dates.)

Before publication of this output, estimates about the UK's families and households were published in an ad hoc manner in publications such as [Focus on families](#) and [Social trends](#). Neither of these continues to be published. The release described in this report provides important estimates of families and people in families, as well as households, and people in households. They are now updated annually, around five months after the end of the April to June reference period.

The Labour Force Survey (LFS) datasets are reweighted periodically to take account of the latest available population estimates and projections. This means that there are small revisions to previously published estimates.

The [2018 release of Families and households in the UK](#) was published in August 2019. This was delayed due to the re-weighting of the LFS data back to 2012. The impact of the reweighting on the 2012 to 2017 estimates is summarised in the [impact of reweighting dataset](#).

The most recent release adds the 2020 estimates to the previously published 1996 to 2019 dataset. This release was delayed from its original November 2020 publication date because of the impact of the coronavirus (COVID-19) pandemic on the data collection and weighting methodology of the LFS (see Accuracy and reliability section for further details).

For more details on related releases, the [GOV.UK statistics release calendar](#) provides up to 12 months' notice of release dates. In the event of a change to the pre-announced release schedule, public attention will be drawn to the change and the reasons for it explained fully at the same time, as set out in the [Code of Practice for Statistics](#).

## Concepts and definitions (including list of changes to definitions)

(Concepts and definitions describe the legislation governing the output, and a description of the classifications used in the output.)

Definitions used in the output are detailed in this section. They are nationally agreed definitions and consistent with other sources of data (such as those used for the census). No classifications are used in the output.

A family is a married, civil partnered or cohabiting couple with or without children, or a lone parent with at least one child who lives at the same address. Children may be dependent or non-dependent.

Dependent children are those living with their parent(s) and are either:

- aged under 16 years
- aged 16 to 18 years and are in full-time education, excluding children aged 16 to 18 years who have a spouse, partner or child living in the household

Non-dependent children are those living with their parent(s) and are either:



- aged 19 years or over and have no spouse, partner or child living in the household, or
- aged 16 to 18 years and are not in full-time education and have no spouse, partner or child living in the household

Non-dependent children are sometimes called adult children.

For 1996 to 2010, a household is defined as a person living alone, or a group of people living at the same address who have the address as their only or main residence and either share one main meal a day or share living accommodation (or both). For 2011 onwards, it is defined as one person living alone, or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room, sitting room or dining area.

To measure the impact of the introduction of the new household definition, we developed a set of questions to be asked by interviewers for each address they visited. Overall, only two addresses out of 2,188 productive cases (less than 0.1% of interviewed households) would change classification under the new household definition.

For more details on definitions and concepts used in the families and households publication please see the [families and household statistics explainer](#).

## Geography (including list of changes to boundaries)

Up until 2018, families and households estimates were produced routinely by the Office for National Statistics (ONS) at the UK level. In the 2019 and 2020 releases, in response to user demand, a subset of tables have also been produced for UK countries and English regions.

Families and households estimates for lower-level geographies and alternative aggregations may be available on request. These requests may be [chargeable](#) depending on specific requirements.

## Output quality

The original output objective was to provide summary statistics covering the most basic and commonly asked questions posed by users regarding families and households. This includes the number of families in the UK, number of cohabiting couples and families with children.

Surveys such as the Labour Force Survey (LFS) provide estimates of population characteristics rather than exact measures. In principle, many random samples could be drawn from the population and each would give different results, since each sample would be made up of different people who would give different answers to the questions asked on the LFS. The spread of these results is the sampling variability, which generally reduces with increasing sample size.

[Confidence intervals](#) can be used to present the sampling variability. A 95% confidence interval can be interpreted as the interval within which 95 times out of 100, the true value will lie if the sample were repeated 100 times. Pragmatically, if you assume the confidence interval contains the true mean, you will be wrong 5% of the time.

For users to gain an understanding of the level of accuracy of the families and households estimates, the estimates in the [datasets](#) are presented with confidence intervals and an indication of the size of the coefficient of variation (CV). The CV indicates the robustness of each estimate. This is calculated by dividing the estimate by the [standard error](#).

## 6 . Methods used to produce the families and households data

### How we collect the data, main data sources and accuracy

The Labour Force Survey (LFS) is a quarterly social survey of the resident population in private households in the UK. It covers people in private households, NHS accommodation and students in halls of residence whose parents live in the UK. The main purpose of the survey is to provide information on the UK labour market, but it includes data on a variety of other variables such as marital status and living arrangements. The survey does not cover the 2% of the population who live in communal establishments such as prisons and nursing homes.

Each quarter's LFS sample is composed of approximately 40,000 households containing around 100,000 individuals. Families and households data are produced using the LFS household dataset. The household dataset ensures that the weight given to each member of the same household is the same, which differs from the person-level dataset.

The LFS household datasets are produced on a quarterly basis. Families and households estimates use the April to June quarter each year as this includes the mid-year point (30 June). Other publications, such as [Population estimates by marital status and living arrangements](#) and [Families and the labour market](#), also use the April to June quarter of the LFS.

More information on the LFS can be found in the [Labour Force Survey user guide](#).

More detail on why the LFS was chosen as the best source of data to use for this publication can be found in [Section 7 Other information](#).

### How we analyse and interpret the data

Weighted estimates from the Labour Force Survey (LFS) are calculated for each year for the various families and households breakdowns; by union status and presence of children for family types and by size of household, family type and age for households (see table breakdown in [Section 5 Quality characteristics of the families and households](#)). The weighted estimates are of numbers of families and households and are provided at the UK level, although some of these estimates are presented as proportions throughout the bulletin.

All estimates have been provided with [confidence intervals](#) and [coefficients of variation](#). These quality measures provide users with sufficient information to judge whether the data are of sufficient quality for their intended use.

In addition to the main families and households dataset, we also produce a young adults dataset. This dataset shows the estimates of 15- to 34-year-olds who live with their parents.

Same-sex marriages have only been legal in England and Wales since 13 March 2014, in Scotland since 16 December 2014 and in Northern Ireland from 13 January 2020 and therefore do not appear on any LFS datasets prior to 2015. In household datasets from 2015, we have flagged households with a same-sex marriage. We must ensure this flag has been applied correctly before calculating estimates for these families.

Estimates based on sample sizes of fewer than three are suppressed in published tables, but the tables have been designed to minimise the need for suppression by combining age groups and categories when necessary. Suppression may be needed for small groups of people, such as those in same-sex marriages in the early years following the introduction of this marital status.

Civil partnerships were first granted for same-sex couples under the [Civil Partnership Act 2004](#). There have been recent changes to civil partner legislation with the provision of opposite-sex civil partnerships in [England and Wales from December 2019](#), shortly followed by [Scotland in July 2020](#). In [Northern Ireland opposite-sex civil partnerships became legal with effect from January 2020](#). However, estimates for families and households containing couples in opposite-sex civil partnerships will not be available until sample sizes become large enough to produce robust estimates. This will be reviewed annually.

Most estimates provided in the datasets are rounded to the nearest thousand and may differ from figures in the publication that are based on the unrounded estimates.

## How we quality assure and validate the data

Once Labour Force Survey (LFS) household datasets are received for use in the publication, quality assurance is carried out on the most commonly used family and household type variables by tabulating one variable against another. The edit rules that are applied include verifying that:

- lone parents do not have a partner in the household
- no children aged under 16 years are married
- nobody is in a civil partnership before 2005
- children are not heads of families
- same-sex marriage flag has been applied correctly

If any substantial failures are found, these are referred to the Social Survey Division in the Office for National Statistics (ONS) for validation and correction. If failures are found for a very small number of cases, these are manually corrected by the Demographic Analysis Unit before estimates of families and households are published.

Aside from quality assurance of the raw LFS data received, we also undertake quality assurance at all stages of the production process. Any errors or inconsistencies are documented and investigated, and the outcomes are captured to improve production processes in future years.

## How we disseminate the data

Families and households estimates are available from 1996 to 2020 using data from the Labour Force Survey (LFS).

Links from the [GOV.UK statistics release calendar](#) make the release date and location of each new set of estimates clear. The estimates can be downloaded free of charge in Microsoft Excel format and are available, alongside supporting documentation, from the [families and households web page](#). A statistical bulletin accompanies each publication. The underlying data for the charts and tables in the bulletin can be downloaded. Please note for the 2020 release a headline bulletin rather than a full statistical bulletin has been published.

Most queries can be answered from the website datasets or supporting methods documents. Other data not published on the web may be available on request by emailing [pop.info@ons.gov.uk](mailto:pop.info@ons.gov.uk). These requests may be [chargeable](#) depending on specific requirements. Metadata describing the limitations of the data for more detailed tables are provided with each individual request. Any additional enquires regarding the families and households estimates can be made by emailing [pop.info@ons.gov.uk](mailto:pop.info@ons.gov.uk).

## How we review and maintain the data

Future revisions to the families and households estimates may be required to reflect occasional or post-census revisions to the national mid-year population estimates that impact upon the weighting used for the Labour Force Survey (LFS). This is in line with the [ONS revision policy for population statistics](#).

## 7 . Other information

### Why the Labour Force Survey is used for this publication

The data are produced using the Labour Force Survey (LFS). When deciding the best source of data to use for the Families and households publication, we considered using the LFS, the [Annual Population Survey \(APS\)](#), the [General Lifestyle Survey \(GLF\)](#) and the [Integrated Household Survey \(IHS\)](#). Both the GLF and the IHS have since ceased production.

The [APS](#) combines results from the LFS and the English, Welsh and Scottish LFS boosts. As such, the APS provides similar information to the LFS and has a larger sample size, so it is more commonly used for estimates for smaller geographical areas, such as local authorities, than the LFS. The APS is available annually from 2004 onwards.

The [GLF](#) was a multipurpose continuous survey carried out by the Office for National Statistics (ONS), which collected information from people living in Great Britain on a range of topics including households, families, marriage and cohabitation. The survey ran continuously between 1971 and 2011, when it finished. It had a smaller sample size than the LFS.

The [IHS](#) was a composite survey combining questions asked on a number of our social surveys to produce a dataset of "core" variables, including those on families and households. In 2009 to 2010, the IHS was created from six of our surveys including the APS. After April 2011, the number of surveys contributing to the IHS dataset fell, as two surveys could not continue asking the core questions. The GLF finished at the end of December 2011, and then the IHS comprised only of the Living Costs and Food Survey and APS. In February 2014, we announced the result of a consultation that ceased the "core" questions being asked in the [Living Costs and Food Survey](#). This effectively ended the IHS as it now consists only of the APS. The IHS had a larger sample size than the LFS but a shorter data time series because data are only available from April 2009 onwards.

The surveys were originally evaluated against four main factors to determine which one was the best source of data:

- timeliness
- sample size
- length of data time series
- consistency

The LFS was determined as the most appropriate data source because it:

- was the timeliest, with the quarterly data being available two to three months after the April to June reference date
- had a large sample size of approximately 40,000 households
- had the longest data time series available of an ongoing survey (back to 1996)
- was conducted on a consistent basis across the UK

It was decided that the LFS was the best data source because users were keen to have a long data time series and the quality of estimates is robust at UK level. Further, estimates of families and households produced from interviews in the April to June quarter are thought to be representative of the rest of the year.

## Useful links

Families and households web page for links to:

- [Datasets](#)
- [Statistical bulletin](#)
- [Families and households statistics explained document](#)
- [Labour Force Survey user guidance](#)

## How to cite this document

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