

Article

Coronavirus and key workers in the UK

Estimates of the numbers and characteristics of those who could be considered as potential “key workers” in the response to the coronavirus (COVID-19).

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Correction

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There have been some minor data changes to section 4. The figure for key workers of ethnic minority in health and social care, and key workers who were of Asian ethnicity have been corrected. We apologise for the inconvenience.

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1 . Main points

- In 2019, 10.6 million of those employed (33% of the total workforce) were in key worker occupations and industries.
- The largest group of those employed in key worker occupations worked in health and social care (31%).
- 15% of key workers were at moderate risk from the coronavirus (COVID-19) because of a health condition.
- 31% of key workers have children aged between 5 and 15 years; 16% have children aged 4 years or under.
- Of all households with dependent children (under 16 years), 6% were key workers and lone parents; 9% were households where both members of the couple were key workers.
- 14% of key workers reported working from home at least one day in the past week in 2019.

2 . Introduction

The Office for National Statistics (ONS) can give an indication of the number of people who were employed in 2019 in key worker occupations and key worker industries, based on an interpretation of [UK government guidance](#) . This guidance is for defining who is eligible for childcare places. Key workers are also defined in Department of Health and Social Care [guidance on testing eligibility](#). This analysis is based on various sources (the Annual Population Survey, the Labour Force Survey and the Annual Survey of Hours and Earnings).

The definitions used by the ONS are indicative of the potential pool of employees in each key worker occupation group. The guidance is intentionally broad, and it is for employers to decide who is a key worker. Some workers under this definition may be furloughed; this is not captured in this definition.

In 2019, 10.6 million of those employed (33% of the total workforce) were in key worker occupations and industries.

Notes for Introduction:

1. Key worker occupations are defined using the 2010 Standard Occupational Classification (SOC) and the 2007 Standard Industrial Classification of Economic Activities (SIC). A detailed list of selected SOCs and SICs are provided in the reference tables.

3 . Health and social care was the most common key worker occupation group

In recent [UK government guidance](#), eight key worker occupation groups were defined. The largest groups of those employed in key worker occupations worked in health and social care (31%), education and childcare (20%), and food and necessary goods (14%).

Figure 1: The largest group of key workers worked in health and social care

Number of key workers by occupation group

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4 . Education and childcare employed the highest proportion of women key workers, at 81%

Nearly three-fifths of all key workers were women (58%) and 42% were men. These proportions differ to that of women and men in non-key worker roles (42% and 58% respectively).

However, the gender split was very different within different occupation groups. Women were most represented in education and childcare (81%), and health and social care (79%). Conversely, the majority of workers in transport occupations were male (90%).

The majority of key workers were of White ethnicity (86%), with 14% belonging to an ethnic minority. The ethnic minority categories included Black/African, Asian, mixed and other. Of these categories, Asian and Black/African had the highest proportions of key workers at 8% and 4% respectively.

Key workers who were White were most represented in transport (93%), education and childcare (91%), and national and local government (90%). Key workers who were of an ethnic minority were most represented in health and social care (19%).

5 . How many key workers are in your area?

The local authorities with the highest proportion of their employed population who were key workers were West Somerset (51%), Wyre (48%), Hambleton (47%). Use the interactive map to explore how many of those who live in your area are employed as key workers.

Figure 2: Explore the proportion of key workers employed in your area

Proportion of workforce who are key workers by Local Authority

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London, the South East and East of England were the only regions with lower than average percentages of key workers. Although, London and the South East still had the largest absolute numbers of key workers (1.3 million and 1.4 million respectively). These three regions have the lowest percentages of key workers in health and social care, which is the largest contributing group of key workers. Both London and the South East also have lower percentages of key workers in food and necessary goods than other regions.

Notes for How many key workers are in your area?:

1. These figures have been produced using the same definitions of key workers for each UK country. However, users should be aware that the definition used for developing policy in [Wales](#), [Scotland](#) and [Northern Ireland](#) will differ in practice. Therefore, any comparisons between the UK countries should be treated with caution and estimates may differ to those produced by each country.

6 . 15% of key workers were at moderate risk from COVID-19 because of a health condition

People with certain health conditions (such as asthma, heart disease and diabetes) are considered to be at "moderate risk" from the coronavirus (COVID-19). The UK government has advised them to [leave the house for very limited purposes](#) such as food shopping and going to work if they cannot work from home.

In 2019, 15% of key workers were at increased risk from coronavirus because of a health condition. The most common health conditions reported were heart problems (6%), followed by chest and breathing problems (5%). Non-key workers show similar proportions of those at risk (14%).

Nearly 19% of key workers in national and local government reported having a health condition – the most of any group – that put them at moderate risk from COVID-19. This was followed by those in key public services (17%).

Government guidance also defines those aged 70 years or older as at moderate risk from COVID-19. Of all key workers, 1% (130,000) were aged 70 years and over. This compares with 2% of non-key workers.

Figure 3: Heart problems were the most common condition for key workers at moderate risk

Key workers at moderate risk, by risk type

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7 . Food and necessary goods key workers were most represented in the lowest-paid decile

Employees in food and necessary goods were most represented in the lowest-paid decile (the lowest 10%), with 9% earning under £146.26 per week. Employees in health and social care also earn lower wages, with 8% of them in the lowest-paid decile. Looking at the highest paid decile, the health and social care occupations are most represented here. Nearly 248,000 (9%) of workers earned over £961.79 per week.

Figure 4: Employees in food and necessary goods occupations are most represented in lower paid deciles

Proportion of key workers in each occupation group by pay decile

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8 . Of all households with dependent children, 6% were key workers and lone parents

Schools in the UK are providing care for a limited number of children – children who are vulnerable, and children whose parents are critical to the coronavirus response. These estimates show the number of children who could potentially attend school. Some children may not be attending school because their key worker parents may be able to work from home, rearrange shifts, or draw on informal childcare.

In 2019, 31% of key workers had dependent children aged between 5 and 15 years, while 16% had children aged 4 years or under.

Of all households with dependent children (under 16 years), 6% were key workers and lone parents, while 9% were households where both members of the couple were key workers. Over a quarter (30%) lived in a household where one member of the couple was a key worker.

Of all key workers, 12% reported having unpaid care responsibilities compared with 10% of non-key workers. This was highest among those employed in national and local government (18%), health and social care (14%), and education and childcare (13%).

9 . 14% of those in key public service occupations reported being able to work from home

In 2019, 14% of key workers said they worked from home at least one full day in the week before being interviewed. More key workers may be able to work from home than this estimate. In comparison, 20% of non-key workers reported working from home. This may suggest key workers are less able to work from home.

Working from home was highest among those employed in key public services (26%), and national and local government (26%). Working from home was least common among key workers in transport (5%) and public safety (5%).

Figure 5: Key workers in transport and public safety are least likely to have worked from home

Proportion of key workers in each occupation group that have worked from home

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10 . 16% of key workers report travelling to work by public transport

In 2019, 16% of key workers travelled to work by public transport. This was most prevalent among national and local government (30%), key public services (30%), and utilities and communications (28%). The most common modes of public transport were bus (6%), railway train (5%), and underground train, light railway and tram (4%).

11 . Data and methodology

There are several ways to estimate the number of key workers. For this analysis, we matched a combination of the [2010 Standard Occupational Classifications](#) and [2007 Standard Industrial Classifications](#) to the [UK government definition](#). The key workers publication is classed as [Experimental Statistics](#) in order to support the development our definition.

The occupation and industry groups in the Labour Force Survey (LFS) that were used as a basis for these estimates do not exactly match the occupation groups listed by the UK government. The UK government guidance is intentionally broad, and it is for employers to decide who is a key worker. Some workers under this definition may be furloughed; this is not captured in this definition.

The analysis presented here has been compiled using the January to December 2019 Annual Population Survey (APS), Quarter 1 (Jan to Mar) and Quarter 4 (Oct to Dec) 2019 LFS, and 2019 Annual Survey of Hours and Earnings (ASHE) datasets. Respondents to the APS and LFS who are employed are asked questions regarding their occupation and industry. Employers respond to ASHE and are asked questions regarding the occupations of their employees. The ONS matches employers against the [Inter-Departmental Business Register](#) to identify their industry classification.

The LFS focuses on the labour market, and is designed to provide estimates of employment and unemployment, as well as information on the characteristics of those working in the UK. The LFS and APS are designed to measure resident population stocks within the UK (the number of people living in the UK on a permanent basis). Please see [Labour Force User Guides and LFS/APS information papers](#) for details of the surveys' design and coverage. In the charts and accompanying datasets, we have indicated those estimates that are based on small sample sizes and are therefore likely to be subject to greater uncertainty.

As part of the global coronavirus (COVID-19) response, other national statistics institutes have produced key worker estimates based on their country's definition of what constitutes a key worker. As these figures are based on different policies, methodology and definitions, comparisons made should be treated with caution. The ONS plans to liaise with other national statistics institutes to discuss the possibilities of comparing figures cross-country.