

Statistical bulletin

# Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK: 5 January 2023

Estimates of the prevalence of self-reported long COVID and associated activity limitation, using UK Coronavirus (COVID-19) Infection Survey data. Experimental Statistics.

Contact:  
Matt Bosworth, Piotr Pawelek  
and Daniel Ayoubkhani  
[health.data@ons.gov.uk](mailto:health.data@ons.gov.uk)  
+44 1633 455825

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# 1 . Main points

- An estimated 2.1 million people living in private households in the UK (3.3% of the population) were experiencing self-reported long COVID (symptoms continuing for more than four weeks after the first confirmed or suspected coronavirus (COVID-19) infection that were not explained by something else) as of 4 December 2022.
- Of people with self-reported long COVID, 191,000 (9%) first had (or suspected they had) COVID-19 less than 12 weeks previously, 1.9 million people (87%) at least 12 weeks previously, 1.2 million (57%) at least one year previously and 645,000 (30%) at least two years previously.
- Of people with self-reported long COVID, 637,000 (30%) first had (or suspected they had) COVID-19 before Alpha became the main variant; this figure was 251,000 (12%) in the Alpha period, 382,000 (18%) in the Delta period and 778,000 (37%) in the Omicron period.
- Long COVID symptoms adversely affected the day-to-day activities of 1.6 million people (76% of those with self-reported long COVID), with 389,000 (18%) reporting that their ability to undertake their day-to-day activities had been "limited a lot."
- Fatigue continued to be the most common self-reported symptom of long COVID (71%), followed by difficulty concentrating (49%), shortness of breath (47%) and muscle ache (46%).
- As a proportion of the UK population, the prevalence of self-reported long COVID was greatest in people aged 35 to 69 years, females, people living in more deprived areas, those working in social care, those aged 16 years and over who were not working and not looking for work, and those with another activity-limiting health condition or disability.

We have recently moved to a [more flexible, remote data collection method](#). The results in this bulletin are based on remote data collection only. Therefore, they are not comparable with previous bulletins published before 6 October 2022, where data were collected either entirely or partly via face-to-face interviews.

If you are worried about new or ongoing symptoms four or more weeks after having COVID-19, there are resources available to help. See the NHS webpages [Long-term effects of coronavirus](#) and [Your COVID Recovery](#), which can help you to understand what has happened and what you might expect as part of your recovery. The time it takes to recover from COVID-19 is different for everyone, and the length of your recovery is not necessarily related to the severity of your initial illness or whether you were in hospital.

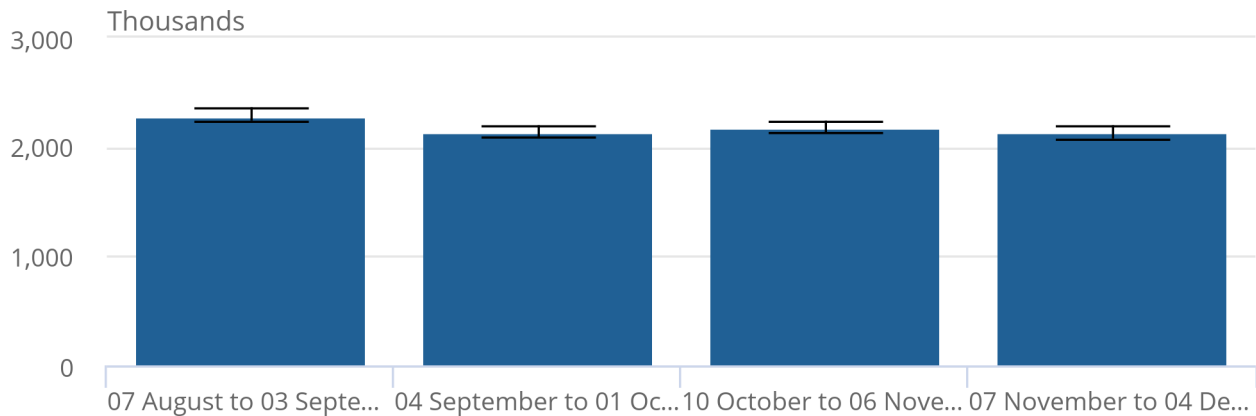
Long COVID is an emerging phenomenon that is not yet fully understood. These are [Experimental Statistics](#). The estimates are currently under development, which means that they may change as scientific understanding of long COVID improves. We advise caution when using the data.

## Figure 1: 2.1 million people were experiencing self-reported long COVID as of 4 December 2022

Estimated number of people living in private households with self-reported long COVID of any duration, UK, four-week periods ending 3 September 2022 to 4 December 2022

### Figure 1: 2.1 million people were experiencing self-reported long COVID as of 4 December 2022

Estimated number of people living in private households with self-reported long COVID of any duration, UK, four-week periods ending 3 September 2022 to 4 December 2022



Source: Office for National Statistics – Coronavirus (COVID-19) Infection Survey (CIS)

#### Notes:

1. Estimates relate to self-reported long COVID, as experienced by study participants, rather than clinically diagnosed ongoing symptomatic COVID-19 or post-COVID syndrome. Study participants were asked to respond to the following question: “Would you describe yourself as having ‘long COVID’, that is, you are still experiencing symptoms more than 4 weeks after you first had COVID-19, that are not explained by something else?”
2. Estimates include people living in private households and do not include those in communal establishments such as halls of residence, prisons, schools, hospitals, or care homes.
3. Estimates are only shown for four-week periods, which are based entirely on remote data collection. Estimates for previous periods, where data were collected partially or entirely via face-to-face visits, are available in the [accompanying datasets](#).

## 2 . Prevalence of ongoing symptoms following coronavirus infection in the UK data

[Prevalence of ongoing symptoms following coronavirus \(COVID-19\) infection in the UK](#)

Dataset | Published 5 January 2023

Estimates of the prevalence of self-reported long COVID and associated activity limitation, using UK Coronavirus (COVID-19) Infection Survey data. Experimental Statistics.

## 3 . Measuring the data

This analysis was based on 236,142 responses to our [Coronavirus \(COVID-19\) Infection Survey](#) (CIS) collected over the four-week period ending 4 December 2022. The analysis was weighted to represent people aged 2 years and over living in private households in the UK. The estimates presented in this analysis relate to self-reported long COVID, as experienced by study participants who responded to a representative survey, rather than clinically diagnosed ongoing symptomatic COVID-19 or post-COVID syndrome in the full population.

All participants provided responses remotely during the current four-week period. The estimates reported in our [Prevalence of ongoing symptoms following coronavirus \(COVID-19\) infection in the UK: 1 September 2022 bulletin](#) were based on a mixture of remote and face-to-face data collection. Estimates in earlier bulletins were based entirely on face-to-face responses. Therefore, these estimates are only fully comparable with those in our [Prevalence of ongoing symptoms following coronavirus \(COVID-19\) infection in the UK: 6 October 2022 bulletin](#) onwards and not with those in earlier bulletins. This is because the estimates from our 6 October 2022 bulletin onwards were also based on remotely collected data.

Self-reported long COVID was defined as symptoms persisting for more than four weeks after the first suspected COVID-19 infection that were not explained by something else. Parents and carers answered the survey questions on behalf of children aged under 12 years.

Date of first (suspected) COVID-19 infection was taken to be the earliest of:

- the date of the first positive test for COVID-19 during the study follow-up
- the date of the first self-reported positive test for COVID-19 outside of the study follow-up
- the date of the first suspected COVID-19 infection, as reported by the participant

Those with an unknown date of their first (suspected) COVID-19 infection are in the estimates for "any duration," but not in duration-specific estimates. All estimates by duration are calculated from the date of the first (suspected) COVID-19 infection, and reinfections are not taken into consideration.

The survey questions relating to self-reported long COVID can be found in Section F of the enrolment and Section D of the follow-up [CIS questionnaire](#).

## 4 . Strengths and limitations

## Strengths

This analysis is based on data from the Coronavirus (COVID-19) Infection Survey (CIS), which is a large study that provides an important indicator of national COVID-19 positivity. CIS responses are weighted to represent the UK population in private households according to age group, sex, and region. The sampling weights are adjusted to account for non-response to the survey over the reference period.

All participants had the opportunity to answer the survey questions relating to long COVID, regardless of whether they had previously tested positive for COVID-19.

## Limitations

Like all household surveys, not all sampled households invited to participate in the study actually enrol, and individuals may drop out over time (see Tables 2a to 2f of our [technical dataset](#) accompanying our latest Coronavirus (COVID-19) Infection Survey statistical bulletin for survey response rates). Our estimates are weighted to account for non-response. However, bias may be introduced if non-response is related to long COVID, for example, participants being more willing, or less able, to continue in the study because of their symptoms.

Long COVID status was self-reported by study participants and so misclassification is possible. For example, some participants may be experiencing symptoms because of a health condition unrelated to COVID-19 infection. Others who do have symptoms caused by COVID-19 may not describe themselves as experiencing long COVID (for example, because of lack of awareness of the term or not knowing they were initially infected with COVID-19).

## 5 . Related links

### [Self-reported long COVID and labour market outcomes, UK: 2022](#)

Bulletin | Released 5 December 2022

Estimates of associations between self-reported long COVID and labour market outcomes, using UK Coronavirus (COVID-19) Infection Survey data. Experimental Statistics.

### [Self-reported long COVID after infection with the Omicron variant in the UK: 18 July 2022](#)

Bulletin | Released 18 July 2022

The likelihood of self-reported long COVID after a first coronavirus (COVID-19) infection compatible with the Omicron BA.1 or BA.2 variants, compared with the Delta variant, using data from the COVID-19 Infection Survey.

### [Coronavirus \(COVID-19\) Infection Survey quality report: August 2022](#)

Methodology | Last revised 18 August 2022

This quality report presents information on the Coronavirus (COVID-19) Infection Survey data collection method change from study worker home visit to remote data collection.

### [COVID-19 Infection Survey: methods and further information](#)

Methodology | Last updated 5 August 2022

This methodology is intended to provide information on the methods used to collect the data, process it, and calculate the statistics produced from the Coronavirus (COVID-19) Infection Survey.

### [Coronavirus \(COVID-19\) latest insights](#)

Interactive tool | Updated as and when data become available

Explore the latest data and trends about the coronavirus (COVID-19) pandemic from the Office for National Statistics and other official sources.

### [Coronavirus \(COVID-19\) Infection Survey: characteristics of people testing positive for COVID-19 in England](#)

Bulletin | Released fortnightly

Characteristics of people testing positive for coronavirus (COVID-19) from the Coronavirus (COVID-19) Infection Survey.

## 6 . Cite this statistical bulletin

Office for National Statistics (ONS), released 5 January 2023, ONS website, statistical bulletin, [Prevalence of ongoing symptoms following coronavirus \(COVID-19\) infection in the UK: 5 January 2023](#)