Office for National Statistics

Statistical bulletin

Self-reported long COVID symptoms, UK: 10 July 2023

Estimates of self-reported long COVID symptoms and associated activity limitation, using COVID-19 and Respiratory Infections Survey (CRIS) data. Experimental Statistics.

Contact:
Shelley Gammon and Michaela Rea
health.data@ons.gov.uk
+44 1329 444110

Release date:
10 July 2023

Next release:
Not applicable (standalone release)

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1 . Main points

- Of those respondents who self-reported long COVID, weakness or tiredness was the most common symptom reported as part of individuals' experience (60%), followed by shortness of breath (48%), muscle ache (42%), difficulty concentrating (37%) and joint pain (34%).

- Of those responding that their ability to undertake day-to-day activities had been "limited a lot" by long COVID (19% of all respondents with self-reported long COVID), the most frequently reported symptoms were weakness or tiredness (88%), followed by shortness of breath (73%), muscle ache (70%), difficulty concentrating (66%) and joint pain (61%).

- The median number of symptoms reported was 6 out of a possible total of 34 for those respondents who self-reported long COVID.

- The median number of symptoms reported was 12 for those who reported that their long COVID symptoms reduced their ability to carry out day-to-day activities "a lot", 6 for those whose activities were reduced "a little", and 2 for those whose symptoms did not reduce their activity levels at all.

- 55% of respondents who self-reported long COVID said their symptoms get worse after either mental or physical effort, or both, while 30% said their symptoms did not get worse and 15% answered as "don't know".

The data in this publication are not comparable with previous long COVID publications. Long COVID is a phenomenon that is not yet fully understood. These are Experimental Statistics. We advise caution when using the data.

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 (NHS) and Your COVID Recovery (NHS), 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.

2 . Overview of the survey and long COVID

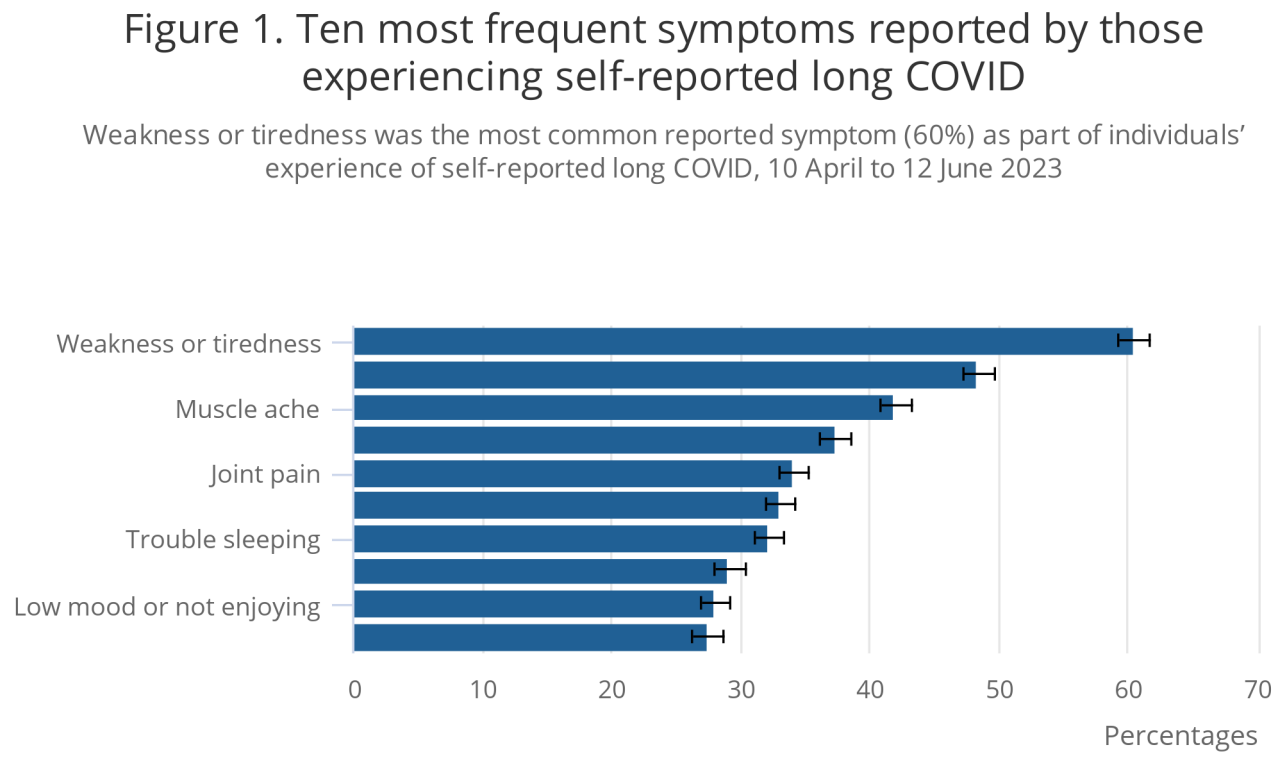
The COVID-19 and Respiratory Infections Survey (CRIS) collected data on the characteristics and symptoms of those with self-reported long COVID, alongside other factors. This built on the legacy of the world-leading UK Coronavirus (COVID-19) Infection Survey (CIS), which had been commissioned by the UK Health Security Agency (UKHSA). The data in this bulletin cover the 63 days to the 12 June 2023.

Following the government's transition to "Living with COVID-19" plans, and after careful consideration, CRIS formally ended on 28 June 2023. This is the only planned long COVID publication using CRIS data. For further information on the methodology please read our COVID-19 and Respiratory Infection Survey: QMI.

Unlike in our previous long COVID publications based on CIS data, estimates here are unweighted and reflect the characteristics of those who responded to the survey, rather than the wider UK population. In this publication, we therefore focus on the characteristics of CRIS respondents who self-reported long COVID, rather than estimating the prevalence of self-reported long COVID in the general population. For these reasons, and because of differences in study design, this publication is not comparable with previous CIS publications.

Figure 1. Ten most frequent symptoms reported by those experiencing self-reported long COVID

Weakness or tiredness was the most common reported symptom (60%) as part of individuals' experience of self-reported long COVID, 10 April to 12 June 2023



Source: COVID-19 and Respiratory Infections Survey (CRIS) from the Office for National Statistics

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-19 syndrome. Study participants were asked to respond to the following question: "Would you describe yourself as currently having 'long COVID'? Long COVID can be described as still experiencing symptoms more than 4 weeks after you first had COVID-19, that are not explained by something else."

2. Estimates include people aged 16 years and over and living in private households, and do not include those in communal establishments such as halls of residence, prisons, schools, hospitals, or care homes.

3. 11 new symptoms were included in CRIS in addition to the 23 original long COVID symptoms used in the CIS; these were added to reflect the most recent COVID-19 rapid guideline on managing the long-term effects of COVID-19, produced by the National Institute for Health and Care Excellence. A full list of symptoms can be found in our Self-reported long COVID symptoms, UK dataset.

4. Estimates are shown for the 63 days from 10 April to 12 June 2023 and are based entirely on data collected remotely (either online or via telephone) during the CRIS survey.

5. Data are unweighted and the sample is not necessarily representative of all people in the population with long COVID, so the results cannot be generalised to the UK population. Confidence intervals are presented to show the uncertainty around unweighted percentages and are at the 95% level.

3 . Self-reported long COVID symptoms, UK data

Self-reported long COVID symptoms, UK dataset
Dataset | Published 10 July 2023
Estimates of self-reported long COVID symptoms and associated activity limitation, using COVID-19 and Respiratory Infections Survey (CRIS) data. Experimental Statistics.

4 . Glossary

Long COVID

Long COVID is described in UK clinical guidelines, published on the National Institute for Health and Care Excellence (NICE) website, as "signs and symptoms that continue or develop after acute COVID19. It includes both ongoing symptomatic COVID19 (from 4 to 12 weeks) and postCOVID19 syndrome (12 weeks or more)." In this analysis, long COVID was self-reported according to the following CRIS question: "Would you describe yourself as currently having long COVID? Long COVID can be described as still experiencing symptoms more than 4 weeks after you first had COVID-19, that are not explained by something else."

Confidence interval

A confidence interval gives an indication of the degree of uncertainty of an estimate, showing the precision of a sample estimate. The 95% confidence intervals are calculated so that if we repeated the study many times, 95% of the time the true unknown value would lie between the lower and upper confidence limits. A wider interval indicates more uncertainty in the estimate. For more information, see our methodology page on statistical uncertainty.

Deprivation

Deprivation is based on an Index of Multiple Deprivation (IMD) (PDF, 2.2MB) score or equivalent scoring method for the devolved administrations. The value of 1 represents the most deprived quintile and the value of 5 represents the least deprived quintile.

5 . Measuring the data

This analysis was based on 6,119 respondents to our COVID-19 and Respiratory Infections Survey (CRIS) who self-reported long COVID during the 63-day period ending 12 June 2023. The data are unweighted and include people aged 16 years and over living in private households in the UK. All respondents provided responses remotely, either online or via telephone, during the 63-day period.

The estimates presented in this analysis relate to self-reported long COVID symptoms, as experienced by study participants who responded to a survey, rather than clinically diagnosed ongoing symptomatic coronavirus (COVID-19) or post-COVID-19 syndrome in the full population. 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.

The estimates are based on respondents who reported having long COVID over the survey period. If a respondent provided more than one response to the survey while reporting long COVID, their latest response was selected for analysis.

One new long COVID-related variable, as well as multiple new long COVID symptoms, were added to the CRIS survey. The new question, asked only to respondents who reported experiencing long COVID, is as follows:

"Do your symptoms tend to get worse after mental and/or physical effort? For example, completing a crossword, doing tasks on a computer, going for a walk or doing housework. This includes if your symptoms get worse more so than you would usually expect based on the activity you are doing. The worsening could start hours or days after you undertook the activity."

The new question on whether or not long COVID symptoms worsen after either exerting mental or physical effort, or both, is not a reflection on whether physical exercise is good or bad for a person's health in general, and different people will respond to exertion in different ways.

Data on 34 individual symptoms were collected only from study participants who reported experiencing long COVID in CRIS. There were 11 new symptoms added to the 23 original long COVID symptoms used in CIS.

The new symptoms are:

- problems with eyesight or sore eyes
- tinnitus or problems hearing
- ear pain
- nasal congestion
- joint pain
- mobility problems
- general pain
- allergies or intolerances
- hair loss
- pins and needles or numbness
- skin rashes or itchy skin

A full list of symptoms can be found in our Self-reported long COVID symptoms, UK dataset.

Quality

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in our COVID-19 and Respiratory Infections Survey: QMI.

6 . Strengths and limitations

Strengths

This analysis was based on data from the COVID-19 and Respiratory Infections Survey (CRIS), a UK-wide study that built on the legacy of the world-leading UK Coronavirus (COVID-19) Infection Survey (CIS), which had been commissioned by the UK Health Security Agency (UKHSA) by inviting a subset of CIS respondents aged 16 years and over to participate. Additional information on response rates can be found in our COVID-19 and Respiratory Infections Survey: QMI.

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

As with all surveys, not all individuals invited to participate in the study actually did, and some individuals may have dropped out over time. Data are unweighted and the sample is not necessarily representative of all people in the population with long COVID, so the results cannot be generalised to the UK population. Individuals may have been more willing, or less able, to take part in the study because of their circumstances and health status, including whether or not they are experiencing long COVID symptoms. The CRIS study did not offer financial incentives for participation, meaning some participants might have been less willing to take part than others.

Long COVID status was self-reported by study participants and so misclassification is possible. For example, some participants may have been experiencing symptoms because of a health condition unrelated to COVID-19 infection. Others who did have symptoms caused by COVID-19 may not have described 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).

7 . Related links

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 (ONS) and other official sources.

About the Study
Webpage | 26 June 2023
Information on what the COVID-19 and Respiratory Infections Survey (CRIS) is and why it was created.

COVID-19 and Respiratory Infections Survey: QMI
Methodology | Released 10 July 2023
Quality and Methodology Information (QMI) for the COVID-19 and Respiratory Infections Survey (CRIS), detailing strengths and limitations, methods, and data uses.

Prevalence of symptoms and impact of respiratory infections, UK
Bulletin | Released 10 July 2023
Percentage of people reporting symptoms of respiratory infections in private households in the UK and the impact on work, education and healthcare services, from the COVID-19 and Respiratory Infections Survey.

COVID-19 rapid guideline: managing the long-term effects of COVID-19
Guideline | Released 11 March 2022
List of common long COVID symptoms, published by the National Institute for Health and Care Excellence.

Prevalence of ongoing symptoms following coronavirus (COVID-19) infection in the UK
Bulletin | Last updated 30 March 2023
Estimates of the prevalence of self-reported long COVID and associated activity limitation, using UK Coronavirus (COVID-19) Infection Survey data.

8 . Cite this statistical bulletin

Office for National Statistics (ONS), released 10 July 2023, ONS website, statistical bulletin, Self-reported long COVID symptoms, UK: 10 July 2023