

Article

Coronavirus (COVID-19) Infection Survey: characteristics of people testing positive for COVID-19 in countries of the UK, 22 April 2021

Data about the characteristics of people testing positive for the coronavirus (COVID-19) from the COVID-19 Infection Survey. This survey is being delivered in partnership with the University of Oxford, the University of Manchester, Public Health England and Wellcome Trust.

Contact:
Kara Steel, Zoë Willis and Emma
Bubb
infection.survey.analysis@ons.
gov.uk
+44 (0)1633 651689

Release date:
22 April 2021

Next release:
05 May 2021

Table of contents

1. [Main points](#)
2. [Overview](#)
3. [Percentage testing positive for COVID-19 by patient-facing and non-patient-facing job roles by age in England](#)
4. [Number and age of people individuals have come into contact with in England, Wales, Northern Ireland and Scotland](#)
5. [Coronavirus \(COVID-19\) Infection Survey data](#)
6. [Collaboration](#)
7. [Glossary](#)
8. [Data sources and quality](#)
9. [Related links](#)

1 . Main points

- In recent weeks, there is evidence that the percentage testing positive for the coronavirus (COVID-19) appears to have levelled off for those in both patient-facing and non-patient-facing job roles.
- The number of socially distanced and physical contacts that adults and school-age children reported with people outside their household has increased through March 2021 across the UK.

2 . Overview

In this article, we refer to the number of coronavirus (COVID-19) infections within the community population; community in this instance refers to private residential households, and it excludes those in hospitals, care homes and/or other institutional settings in England.

This article presents analysis on the characteristics of those testing positive for SARS-CoV-2 - the coronavirus causing the COVID-19 disease in the UK. We include current COVID-19 infections, which we define as testing positive for SARS-CoV-2, with or without having symptoms, on a swab taken from the nose and throat.

More information on our headline estimates of the overall number of positive cases in England, Wales, Northern Ireland and Scotland are available in our [latest bulletin](#). It should be noted that the analysis on the characteristics and behaviours of those testing positive in this article is for an older time period than the headline figures presented in the most recent bulletin. The reference periods for the various analyses are clearly stated at the start of each section.

More about coronavirus

- Find the latest on [coronavirus \(COVID-19\) in the UK](#).
- [Explore the latest coronavirus data](#) from the ONS and other sources.
- All ONS analysis, summarised in our [coronavirus roundup](#).
- View [all coronavirus data](#).
- Find out how we are [working safely in our studies and surveys](#).

Further information on what the analysis covers is provided at the start of each section. More information about the methods used for our models is available in our [methodology article](#).

3 . Percentage testing positive for COVID-19 by patient-facing and non-patient-facing job roles by age in England

About this analysis

This section provides the modelled estimates on positivity rates by patient-facing and non-patient-facing job roles and by age; with the two occupational groups split between those aged under 35 years and those 35 years and over. The comparison group used for patient-facing includes all individuals of working age. The models used to produce positivity rates for patient-facing and non-patient-facing job roles only include swab test results from individuals aged 16 to 74 years. This analysis covers the time period between 4 September 2020 and 6 April 2021. More information is available in our [accompanying dataset](#).

In the weeks prior to 6 April 2021, the percentage of the population testing positive for the coronavirus (COVID-19) appears to have levelled off in all groups: those who worked in both patient-facing and non-patient-facing job roles, and those aged under 35 years and 35 years and over. This continues the level seen in the last publication on [patient-facing analysis on 25 March 2021](#), following a decrease in all groups since the start of the year.

Figure 1: In recent weeks, there is evidence that the percentage testing positive appears to have levelled off for those in both patient-facing and non-patient-facing job roles

Modelled percentage of the population testing positive for COVID-19 on nose and throat swabs by patient-facing role and age, from 4 September 2020 to 6 April 2021, England

[Download the data](#)

Notes

1. All results are provisional and subject to revision.
2. These statistics refer to infections reported in the community, by which we mean private households. These figures exclude infections reported in hospitals, care homes and/or other institutional settings.
3. There are fewer people in patient-facing job roles in our sample than those in non-patient-facing job roles. Therefore the estimates for patient-facing roles have a larger degree of uncertainty, represented by wider confidence intervals.

4 . Number and age of people individuals have come into contact with in England, Wales, Northern Ireland and Scotland

About this analysis

This section looks at how often individuals are reporting social contact (either socially distanced or physical contact) with other people outside their own household. We asked individuals how many people aged 17 years and under, 18 to 69 years, and 70 years and over, outside their household, they have had contact with up to seven days prior to each visit. "Contact" refers to either of the following:

- socially distanced contact - direct contact with social distancing only
- physical contact - physical contact, such as a handshake or personal care, including wearing personal protective equipment (PPE)

This is the first time we have presented data on socially distanced and physical contacts for Wales, Scotland and Northern Ireland. This analysis covers the time period between 23 August 2020 and 3 April 2021 for England, and between 20 September 2020 and 3 April 2021 for Wales, Northern Ireland and Scotland.

Further information on the schedule for school re-openings can be viewed for [England](#), [Wales](#), [Northern Ireland](#) and [Scotland](#).

We have produced estimates that have been weighted to be representative of the total population in England, Wales, Northern Ireland and Scotland. Analysis includes all people taking part in the survey and we present contact analysis for school-age children (age two years to school Year 11 in England and Wales, age two years to school Year 12 in Northern Ireland and age two years to school Year S4 in Scotland) and adults (school Year 12 and above in England and Wales, school Year 13 and above in Northern Ireland and school Year S5 and above in Scotland). We report the number of contacts in the following groups:

- 0 (no reported contact)
- 1 to 5 (reported contacts)
- 6 to 10 (reported contacts)
- 11 to 20 (reported contacts)
- 21 or more (reported contacts)

Socially distanced contacts – school-age children

We present the proportion of school-age children reporting each category of socially distanced contact in England, Wales, Northern Ireland and Scotland in Figure 2.

In England, the proportion of socially distanced contacts school-age children had with those aged under 70 years rose sharply in mid-March 2021 and has remained high since. This resembles levels seen prior to schools closing in December 2020. There is a less pronounced rise in the proportion of socially distanced contacts with people aged over 70 years.

In Wales, the proportion of socially distanced contacts school-age children had with those aged under 70 years has increased since early March 2021, coinciding with the phased re-opening of schools.

In Northern Ireland, the proportion of socially distanced contacts school-age children had with those aged under 70 years has increased throughout March 2021, coinciding with the phased re-opening of schools.

In Scotland, the proportion of socially distanced contacts school-age children had with those aged under 70 years has increased since mid-March 2021, coinciding with the phased re-opening of schools.

There is a consistent trend over time, with school-age children reporting more socially distanced contacts with those aged under 18 years than with people aged 18 to 69 years or those aged 70 years and over.

Figure 2: In school-age children, the number of socially distanced contacts with those aged under 70 years increased over March 2021 across the UK

Proportion of school-age children by number of socially distanced contacts with different age groups, from 23 August 2020 to 3 April 2021, UK

[Download the data](#)

Notes

1. These results are provisional and subject to revision.
2. These statistics refer to infections reported in the community, by which we mean private households. These figures exclude infections reported in hospitals, care homes or other institutional settings.
3. This analysis includes all participants between 23 August 2020 and 3 April 2021 for England and between 20 September 2020 and 3 April 2021 for Wales, Northern Ireland and Scotland, regardless of whether they tested positive or negative for COVID-19.

Socially distanced contacts – adults

We present the proportion of adults reporting each category of socially distanced contact in England, Wales, Northern Ireland and Scotland in Figure 3.

In England, the proportion of socially distanced contacts adults had with all age groups has been increasing throughout March 2021 after a decrease in early to mid-January 2021.

In Wales, the proportion of socially distanced contacts adults had with all age groups has been increasing since early March 2021, after a decrease in early to mid-January 2021.

In Northern Ireland, the proportion of socially distanced contacts adults had with all age groups has been increasing throughout March 2021, after a decrease in early to mid-January 2021. There is less of a pronounced rise in the proportion of socially distanced contacts with people aged over 70 years.

In Scotland, the proportion of socially distanced contacts adults had with all age groups has increased since early March 2021, after a decrease in early to mid-January 2021. There is less of a pronounced rise in the proportion of socially distanced contacts with people aged over 70 years.

There is a consistent trend over time, with adults reporting more socially distanced contacts with those aged 18 to 69 years than with people under the age of 18 years or 70 years and over.

Figure 3: In adults, the number of reported socially distanced contacts with all age groups increased over March 2021 across the UK

Proportion of adults by number of socially distanced contacts with different age groups, from 23 August 2020 to 3 April 2021, UK

[Download the data](#)

Notes

1. These results are provisional and subject to revision.
2. These statistics refer to infections reported in the community, by which we mean private households. These figures exclude infections reported in hospitals, care homes or other institutional settings.
3. This analysis includes all participants between 23 August 2020 and 3 April 2021 for England and between 20 September 2020 and 3 April 2021 for Wales, Northern Ireland and Scotland, regardless of whether they tested positive or negative for COVID-19.

Physical contacts – school-age children

Among school-age children, the trends in physical contacts are very similar to socially distanced contacts trends across the UK, with increases in contacts through March 2021.

In school-age children in England, the proportion of physical contacts with those aged under 70 years rose sharply in mid-March 2021, and has remained high since. Physical contacts with those aged under 18 years resemble levels seen prior to schools closing in December 2020.

In school-age children in Wales, the proportion of physical contacts with those aged under 70 years has increased since early March 2021. Physical contacts with those aged under 18 years resemble levels seen prior to schools closing in December 2020.

In school-age children in Northern Ireland, the proportion of physical contacts with all age groups has increased throughout March 2021. Physical contacts with those aged under 18 years resemble levels seen prior to schools closing in December 2020.

In school-age children in Scotland, the proportion of physical contacts with all age groups has increased since March 2021, particularly in those aged under 70 years. Physical contacts with those aged under 18 years resemble levels seen prior to schools closing in December 2020.

There is a consistent trend over time, with school-age children reporting to have more physical contacts with those aged under 18 years than with those aged 18 to 69 years or 70 years and over.

Physical contacts – adults

Among adults, trends in physical contacts over time are very similar to socially distanced contact trends across the UK, with increases in contacts through March 2021.

In adults in England and Wales, the proportion of physical contacts with all age groups has been increasing since mid-January 2021. There is a less pronounced rise in the proportion of physical contacts with people aged over 70 years.

In adults in Northern Ireland, the proportion of physical contacts with all age groups has increased since early March 2021. There is a less pronounced rise in the proportion of physical contacts with people aged over 70 years.

In adults in Scotland, the proportion of physical contacts with those aged under 18 years has been increasing throughout March 2021. Physical contacts with those aged over 18 years appear to be level in recent weeks.

There is a consistent trend over time, with adults reporting more physical contacts with those aged 18 to 69 years than with people under the age of 18 years and those 70 years and over.

Additional information on the proportions of physical contacts by school-age children and adults can be found in the [accompanying dataset](#).

More information on socially-distanced and physical contact is also available in the [Opinions and Lifestyle Survey](#), which examines the impact of the coronavirus (COVID-19) pandemic on people, households and communities in Great Britain.

5 . Coronavirus (COVID-19) Infection Survey data

[Coronavirus \(COVID-19\) infections in the community in England](#)

Dataset | Released 22 April 2021

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

6 . Collaboration

The Coronavirus (COVID-19) Infection Survey analysis was produced by the Office for National Statistics (ONS) in partnership with the University of Oxford, the University of Manchester, Public Health England and Wellcome Trust. Of particular note are:

- Sarah Walker - University of Oxford, Nuffield Department for Medicine: Professor of Medical Statistics and Epidemiology and Study Chief Investigator
- Koen Pouwels - University of Oxford, Health Economics Research Centre, Nuffield Department of Population Health: Senior Researcher in Biostatistics and Health Economics
- Thomas House - University of Manchester, Department of Mathematics: Reader in mathematical statistics

7 . Glossary

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. Overlapping confidence intervals indicate that there may not be a true difference between two estimates.

For more information, see our [methodology page on statistical uncertainty](#).

8 . Data sources and quality

More information on [measuring the data](#) and its [strengths and limitations](#) is available in the Coronavirus (COVID-19) Infection Survey statistical bulletin.

Our [methodology article](#) provides further information around the survey design, how we process data and how data are analysed.

9 . Related links

[Coronavirus \(COVID-19\) Infection Survey, UK](#)

Bulletin | Updated weekly

Estimates for England, Wales, Northern Ireland and Scotland. This survey is being delivered in partnership with University of Oxford, University of Manchester, Public Health England and Wellcome Trust.

[Coronavirus \(COVID-19\) Infection Survey: antibody and vaccination data for the UK](#)

Article | Updated fortnightly

Antibody data by UK country and regions in England from the Coronavirus (COVID-19) Infection Survey. This survey is being delivered in partnership with University of Oxford, University of Manchester, Public Health England and Wellcome Trust.

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

Article | 22 February 2021

The analyses in this article compares the likelihood of testing positive for the coronavirus (COVID-19) on a swab test at any time between 1 September 2020 and 7 January 2021 between occupations.

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

Methods article | Updated 26 March 2021

Information on the methods used to collect the data, process it, and calculate the statistics produced from the COVID-19 Infection Survey pilot.

[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 ONS and other official sources.

[Coronavirus \(COVID-19\) roundup](#)

Web page | Updated as and when data become available

Catch up on the latest data and analysis related to the coronavirus pandemic and its impact on our economy and society.

[COVID-19 Infection Survey \(CIS\)](#)

Article | Updated regularly

Whether you have been invited to take part or are just curious, find out more about our COVID-19 Infection Survey and what is involved.