Office for National Statistics

Article

# Coronavirus (COVID-19) weekly insights: latest health indicators in England, 4 December 2020

This article brings together data about the coronavirus (COVID-19) pandemic in England. Exploring how these measures interact with each other can improve understanding of the severity and spread of the pandemic. This weekly summary gives an overview of the current situation and explores variations for different age groups and regions.

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# 1 . Main points

- Women (68%) are slightly more likely than men (63%) to always maintain social distance when socialising (Opinions and Lifestyle Survey, Great Britain, 25 to 29 November 2020).
- Infections in the community increased rapidly between the end of August and November, but started decreasing in recent weeks (Coronavirus (COVID-19) Infection Survey (CIS) and Real-time Assessment of Community Transmission (REACT) study).
- The percentage of people who tested positive in the community has decreased in all English regions except the North East, where it stayed at a similar level (CIS: 22 to 28 November).
- Secondary school-age children and young adults are most likely to test positive for COVID-19 (REACT: 13 to 24 November, CIS: 22 to 28 November).
- The rate of confirmed COVID-19 hospital admissions fell to 14.0 per 100,000 people in the week to 29 November, from 16.2 per 100,000 in the previous week (to 22 November).
- The number of deaths involving COVID-19 in England increased by 8.7% in the week ending 20 November, which is smaller than the 28.4% increase seen in the previous week.
- The number of deaths involving COVID-19 increased in all English regions except the East of England (week ending 20 November).
- Multiple sources report that between 4% and 7% of the population has COVID-19 antibodies, which suggests that most of the population is still vulnerable to infection (September to October).

# 2 . Overview

In this weekly summary, we present the main findings from the latest coronavirus (COVID-19) data for England. This article is a collaboration between the Office for National Statistics, Joint Biosecurity Centre and Public Health England.

Although the number of people being diagnosed with COVID-19 in England is still at a much higher level than during the summer months, the number of infections in England has started decreasing in recent weeks. The north and Midlands of England remain worst affected. Most people do not have antibodies to COVID-19, suggesting most of the population is still vulnerable to infection.

**More about coronavirus**

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

# 3 . Preventative measures and social contact

The proportion of people following preventative measures to help slow the spread of the coronavirus (COVID-19) remained high in the last week (Opinions and Lifestyle Survey, data for Great Britain for 25 to 29 November 2020). The majority of people reported that they washed their hands after returning home (89%), used a face covering (97%), avoided physical contact when outside their home (90%) and maintained social distance (88%).

Men and women reported similar levels of compliance for most measures. A high proportion of both men (87%) and women (92%) report either always or often handwashing after coming home this week, but women (73%) were more likely than men (65%) to report they were always doing it. This finding has been consistent when this question has been asked of respondents throughout the pandemic. Women (68%) were also slightly more likely than men (63%) to always maintain social distancing when meeting to socialise with someone outside their support bubble. These findings are similar to patterns seen in previous weeks.

### Table 1: Compliance with preventative measures to slow the spread of the coronavirus (COVID-19) remains high

Proportion of people complying with main preventative measures, Great Britain, 18 to 29 November 2020

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# 4 . Infections, hospital admissions and deaths

After the high number of coronavirus (COVID-19) cases in April 2020, the number of cases fell to a low point during the summer. Since late August, COVID-19 infections, hospital admissions and deaths have risen. In the most recent week, infections and hospital admission rates have decreased, while deaths are continuing to rise, but at a slower rate.

### Figure 1: COVID-19 positivity rates and hospital admission rates are decreasing, but the number of deaths is increasing

Estimated COVID-19 positivity rates, hospital admissions and number of deaths, England, 1 August to 29 November 2020

### Notes

1. All figures are provisional and subject to revision.
2. Infection statistics refer to infections reported in the community, by which we mean residential households. These figures exclude infections reported in hospitals, care homes and/or other institutional settings.
3. Figures exclude deaths of non-residents.
4. Based on date a death was registered rather than occurred.
5. The International Classification of Diseases, 10th edition (ICD-10) definitions are as follows: coronavirus (COVID-19) (U07.1 and U07.2).
6. We use the term “involving COVID-19” when referring to deaths that had COVID-19 mentioned anywhere on the death certificate, whether as an underlying cause or not.

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The Coronavirus (COVID-19) Infection Survey (CIS) estimated that 521,300 people in England had COVID-19 between 22 and 28 November 2020. This is equal to about 1 in 105 people (0.96%). Positivity rates have decreased in recent weeks but are still over 13 times higher than in the first week of September, when only 1 in 1,400 people (0.07%) tested positive.

The CIS tests people from randomly selected households to estimate how many have the virus. The percentage of people who test positive for COVID-19 is called the positivity rate. The Real-time Assessment of Community Transmission (REACT) programme also measures COVID-19 infections in the community. REACT positivity rates from 13 to 24 November were at 0.96%, which is a decrease from 1.30% in the previous round (16 October to 2 November). Nevertheless, rates remain over seven times higher than in early September (0.13%).

The number of COVID-19 patients admitted to hospital has fallen for the second week in a row. In the week to 29 November, the hospital admission rate decreased from 16.2 to 14.0 per 100,000 people.

### Number of deaths involving COVID-19 increased by 9%

There were 508,780 deaths registered in England up to 20 November this year. This is 60,415 (13.5%) more than the five-year average. Of these, 60,308 (11.9%) mentioned COVID-19 on the death certificate.

While infections may be decreasing, the number of deaths involving COVID-19 in England increased by 8.7% to 2,471 in the week ending 20 November. This is the 11th week in a row in which the number of deaths involving COVID-19 has increased. However, this week's increase is smaller than the 28.4% increase seen in the previous week. Similar to the previous week, however, deaths involving COVID-19 represented 19.4% of all deaths in England.

There is a period of time between a person becoming infected with COVID-19 and being admitted to hospital or dying because of it. Therefore, we expect to see a delay between a downturn in infections and downturns in the numbers of hospital admissions and deaths.

## 5 . Regional differences

Between 22 and 28 November 2020, the Coronavirus (COVID-19) Infection Survey (CIS) reported that positivity rates decreased in all regions, except the North East, where they stayed at a similar level.

Positivity rates vary substantially across English regions. The CIS estimated highest positivity rates in Yorkshire and The Humber (1.72%), the North East (1.62%) and the North West (1.55%). The Real-time Assessment of Community Transmission (REACT) reported highest positivity rates in the West Midlands (1.55%) and East Midlands (1.27%), followed by Yorkshire and The Humber (1.17%) and the North West (1.08%). Both studies show higher positivity rates in the north and Midlands of England and lower rates in the south. The CIS and REACT showed lowest rates in the East of England (0.37% and 0.57% respectively).

### Figure 2: Coronavirus (COVID-19) Infection Survey (CIS) and Real-time Assessment of Community Transmission (REACT) report similar positivity rates across regions

Estimated percentage of the population testing positive for the coronavirus (COVID-19), England, 13 to 28 November 2020

### Notes

1. All figures are provisional and subject to revision.
2. These statistics refer to infections reported in the community, by which we mean residential households. These figures exclude infections reported in hospitals, care homes and/or other institutional settings.
3. All figures contain uncertainty marked by confidence/credible intervals.
4. CIS values are based on model estimates from the reference point of the most recent week (22 to 28 November 2020), Wednesday 25 November 2020.

Download the data

## Hospital admission rates decreased in all regions except the South East

In the week ending 29 November 2020, hospital admission rates were highest in the North East and West Midlands regions, at 23.8 and 21.1 people per 100,000, respectively.

Hospital admission rates decreased in all English regions apart from the South East, which saw a slight increase (from 9.7 to 10.0 per 100,000 people).

The largest declines in hospital admission rates were seen in the North East, West Midlands and Yorkshire and The Humber.

### Figure 3: Hospital admissions and deaths by region

Change in hospital admission rates and numbers of deaths from previous week, England, weeks ending 29 and 20 November respectively

### Notes

1. All figures are provisional and subject to revision.

2. Figures exclude deaths of non-residents.

3. Based on date a death was registered rather than occurred.

4. The International Classification of Diseases, 10th edition (ICD-10) definitions are as follows: coronavirus (COVID-19) (U07.1 and U07.2).

5. We use the term "involving COVID-19" when referring to deaths that had COVID-19 mentioned anywhere on the death certificate, whether as an underlying cause or not.

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### A quarter of deaths involving COVID-19 were recorded in the North West

In the week ending 20 November, the number of deaths involving COVID-19 increased in all English regions apart from the East of England. However, this week's increase was smaller in every region compared with the previous week.

The highest numbers of deaths involving COVID-19 continue to be recorded in the North West, which has been the region with the highest number of deaths since the week ending 11 September. In the week ending 20 November, over a quarter (25.4%) of all deaths involving COVID-19 in England were recorded in the North West (629 out of 2,471).

## 6 . Age differences

The Coronavirus (COVID-19) Infection Survey (CIS) estimated that coronavirus (COVID-19) positivity rates were highest among secondary school-age children (1.9%) and young adults (1.7%) in the week ending 28 November 2020. Similarly, the latest Real-time Assessment of Community Transmission (REACT) study reported the highest positivity rates for teenagers (13 to 17 years) and young adults (18 to 24 years) between 13 and 24 November, at 2% and 1.7% respectively.

According to the CIS, positivity rates have decreased in all the age groups over the last week.

### Older people are more likely to be admitted to hospital or die from COVID-19

Even though more young people have been infected, hospital admissions and deaths involving COVID-19 are highest among those aged over 65 years. In the week ending 29 November, hospital admission rates decreased for all age groups above 14 years old. Nevertheless, the rates for people aged over 85 years were more than 36 times higher than for those between 15 and 44 years, at 137.2 per 100,000 people.

Of more than 60,300 deaths involving COVID-19 in England to date, almost 90% were among people aged 65 years and over. In the week ending 20 November, the number of deaths involving COVID-19 in England increased for all age groups aged 65 years and over. The biggest increase was seen for those aged between 75 and 84 years (117 more deaths).

### Figure 4: COVID-19 infections, hospital admissions and deaths by age

Estimated percentage of the population testing positive for COVID-19 in the week ending 28 November, hospital admission rates per 100,000 in the week ending 29 November and deaths registered in the week ending 20 November 2020, England

### Notes

1. All figures are provisional and subject to revision.
2. Infection statistics refer to infections reported in the community, by which we mean residential households. These figures exclude infections reported in hospitals, care homes and/or other institutional settings.
3. Infection statistics are based on model estimates from the reference point of the most recent week (22 to 28 November 2020), Wednesday 25 November 2020.
4. Figures exclude deaths of non-residents.
5. Based on date a death was registered rather than occurred.
6. The International Classification of Diseases, 10th edition (ICD-10) definitions are as follows: coronavirus (COVID-19) (U07.1 and U07.2).
7. We use the term "involving COVID-19" when referring to deaths that had COVID-19 mentioned anywhere on the death certificate, whether as an underlying cause or not.

Download the data

# 7 . COVID-19 antibody prevalence

## Most people do not have COVID-19 antibodies

Multiple sources report that between 4% and 7% of the population had detectable antibodies during September and October 2020, which suggest they previously had the coronavirus (COVID-19). This is shown by the Coronavirus (COVID-19) Infection Survey (CIS) (6.9%, October), the Real-time Assessment of Community Transmission (REACT) (4.4%, 15 to 28 September) and in NHS blood donors (6.0%, 21 October to 13 November), which all test for coronavirus antibodies. This suggests that most of the population remains vulnerable to infection.

# 8 . Well-being

In the last week (25 to 29 November 2020) in Great Britain, average personal well-being scores for happiness decreased slightly compared with last week, and there was a slight increase in the anxiety score. Women reported a higher average anxiety score than men. Meanwhile, men reported slightly higher average scores for life satisfaction, feelings that things done in life are worthwhile, and happiness than women.

Before the coronavirus (COVID-19) pandemic, research has tended to show that women in the UK usually report higher average scores than men for life satisfaction, feeling that things done in life are worthwhile, and happiness. Differences in these scores between men and women have varied during the pandemic. Previous research also found that women usually report higher average scores of anxiety than men, this has remained true throughout the pandemic.

# 9 . Collaboration

This report was prepared by the Office for National Statistics (ONS) in collaboration with our research partners at the Joint Biosecurity Centre (JBC) and Public Health England (PHE).

# 10 . Data

Coronavirus (COVID-19) Infection Survey
Dataset | Released 4 December 2020
Findings from the Coronavirus (COVID-19) Infection Survey, England, Wales, Northern Ireland and Scotland.

Coronavirus (COVID-19) infections in the community in England
Dataset | Released 24 November 2020
Characteristics of people testing positive for the coronavirus (COVID-19) in England taken from the COVID-19 Infection Survey.

Deaths registered weekly in England and Wales, provisional
Dataset | Released on 1 December 2020
Provisional counts of the number of deaths registered in England and Wales, by age, sex and region, in the latest weeks for which data are available. Includes the most up-to-date figures available for deaths involving the coronavirus (COVID-19).

Coronavirus and the social impacts on Great Britain
Dataset | Released 4 December 2020
Indicators from the Opinions and Lifestyle Survey (OPN) to understand the impact of the coronavirus (COVID-19) pandemic on people, households and communities in Great Britain. Includes breakdowns by at-risk age, sex and underlying health condition.

This release uses data from REACT and Public Health England. For links to the data and an explanation of how the sources differ, see Data sources and quality.

# 11 . Glossary

## Positivity rate

In this article we refer to the positivity rate as the proportion of people that have tested positive for COVID-19 using nose and throat swab tests. The COVID-19 Infection Survey estimates positivity in the community population. CIS positivity rates refer to everybody that had the infection within a given week. This is different to the incidence rate, which refers to the proportion of "new" positive COVID-19 cases.

Please note that the NHS Test and Trace records infections among people experiencing symptoms or referred for testing (for example, by their employer). It only includes new COVID-19 cases when computing the positivity rates (incidence of the disease).

## Antibodies

Evidence of a previous infection and a degree of immunity to the virus. You can read more about antibody testing in the Department of Health and Social Care guidance.

# 12 . Data sources and quality

## Coronavirus (COVID-19) Infection Survey

The Office for National Statistics (ONS) COVID-19 Infection Survey estimates the number of infections in the community population in England, Wales, Northern Ireland and Scotland.

People tested are from randomly selected residential households and may or may not have any COVID-19 symptoms. Nose and throat swabs are taken from all household members aged two years and over. It excludes those in hospitals, care homes or other institutional settings. Positivity rates are calculated for seven-day periods and adjusted to represent the population. Results are published in a weekly bulletin, with a release on the characteristics of people testing positive published monthly. The survey is delivered in partnership with University of Oxford, University of Manchester, Public Health England and Wellcome Trust.

## Real-time Assessment of Community Transmission (REACT) Study

The REACT Study also estimates the number of infections in the community population. The study tests randomly selected individuals (rather than households) over age five. Results are calculated for time periods ranging from 18 to 32 days for each testing round.

Differences between REACT and CIS include data collection procedures and modelling approaches. Unlike CIS, REACT does not carry out follow-up visits with subjects. Because of this, the incidence rate cannot be calculated for REACT studies. REACT-2 additionally tracks COVID-19 antibody prevalence using finger-prick blood tests. REACT is commissioned by the Department of Health and Social Care and carried out by Imperial College in partnership with Ipsos MORI.

## Hospital admissions

Data on hospital admissions is provided by Public Health England and comes from the Severe Acute Respiratory Infection (SARI) Watch surveillance system. SARI Watch monitors the number of patients with confirmed flu and COVID-19 admitted to hospital and critical care units (ICU/HDU). Admission rates are recorded by age and region.

## Deaths

Figures for deaths involving COVID-19 included in this publication are from the ONS's weekly provisional counts of the number of deaths registered in England and Wales. This includes deaths with COVID-19 mentioned on the death certificate. Figures are based on the date the death was registered, not when it occurred. There is usually a delay of at least five days between occurrence and registration. More information on this issue can be found in Impact of registration delays release.

## Preventative measures, social contact and lockdown experiences

This publication includes indicators from the Opinions and Lifestyle Survey collected to understand the impact of the coronavirus pandemic on people, households and communities in Great Britain.

## Strengths and limitations of data sources

This publication collates data from a range of sources reporting on the COVID-19 pandemic. Each of these sources has their own strengths and limitations.

Coronavirus (COVID-19) Infection Survey and REACT data both track COVID-19 infections in the community, by testing samples of the population. Their estimates of positivity rates contain uncertainty. There is uncertainty in the estimates, swab tests results and in the quality of data collected in the questionnaire.

Death figures in this article are based on the date the death was registered, not when it occurred. There is usually a delay of at least five days between occurrence and registration. More information on this issue can be found in our Impact of registration delays release.

# 13 . Related links

COVID-19 Infection Survey (Pilot): methods and further information
Methodology article | Updated 21 September 2020
Information on the methods used to collect the data, process it, and calculate the statistics produced from the Coronavirus (COVID-19) Infection Survey (pilot).

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.

National flu and COVID-19 surveillance reports
Reports | Updated weekly
National influenza and COVID-19 reports, monitoring COVID-19 activity, seasonal flu and other seasonal respiratory illnesses.