Office for National Statistics

Article

Coronavirus (COVID-19) weekly insights: latest health indicators in England, 27 November 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.

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Release date:
27 November 2020

Next release:
4 December 2020

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1 . Main points

- Compliance with preventative measures to slow the spread of the coronavirus (COVID-19) remains high, with the majority of people reporting that they washed their hands after returning home (88%), used a face covering (97%), avoided physical contact when outside their home (91%) and maintained social distance (86%) this week (Opinions and Lifestyle Survey, Great Britain, 18 to 22 November 2020).
- In England, 15% of people reported leaving their home to meet with others between 5 and 15 November (the first two weeks of lockdown), down from 26% in the two weeks prior to lockdown.
- Infections in the community increased rapidly between the end of August and November, although the rate of infection has shown signs of levelling off in recent weeks.
- The rate of COVID-19 confirmed hospital admissions fell to 15.5 people per 100,000 in the week to 22 November, from 16.7 per 100,000 in the previous week (weeks ending on 15 and 22 November respectively).
- Almost 20% of all deaths registered in England involved COVID-19 (week ending 13 November).
- The percentage of people who tested positive in the community is highest in the Yorkshire and The Humber region, the North West and the North East (15 to 21 November).
- The highest numbers of registered deaths are also currently seen in the North West and Yorkshire and The Humber (week ending 13 November).
- Secondary school-age children are most likely to test positive for COVID-19 (15 to 21 November).
- Multiple sources estimated 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 data related to the COVID-19 pandemic. 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 rise in infections in England shows signs of slowing down. The north and Midlands of England remain worst affected. Most people do not have antibodies to COVID-19, suggesting majority 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 18 to 22 November 2020). The majority of people reported that they washed their hands after returning home (88%), used a face covering (97%), avoided physical contact when outside their home (91%) and maintained social distance (86%).

People in most English regions were less likely to leave their home to meet others between 5 and 15 November (the first fortnight of lockdown) compared with the previous fortnight. This decrease was more pronounced in southern areas of the country. This may have been as a result of northern areas being likely to have been in higher tiers prior to the countrywide lockdown beginning in England on 3 November.

Figure 1: People in most regions were less likely to meet other people in lockdown compared to prior to lockdown

Change in proportion of people leaving home to meet with others during lockdown compared to before the lockdown, England, 21 October to 15 November 2020

Download the data

4 . Infections, hospital admissions and deaths

After the high number of coronavirus (COVID-19) cases in April 2020, the number of new cases fell to a low point during the summer. Since late August, infections, hospital admissions and deaths have all been rising. In the most recent week, infections have shown signs of levelling off, while the COVID-19 hospital admission rate in England has fallen for the first time since early September. Meanwhile, deaths are continuing to rise.

Figure 2: COVID-19 positivity rates and hospital admission rates appear to be levelling off, but the number of deaths is increasing

Estimated COVID-19 positivity rates, hospital admissions and number of deaths, England, 1 Aug – 22 Nov 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.

The Coronavirus (COVID-19) Infection Survey (CIS) estimated that 633,000 people in England had COVID-19 between 15 and 21 November 2020. This is equal to about 1 in 85 people (1.16%). This is over 16 times higher than in the first week of September, when only 1 in 1,400 people (0.07%) tested positive. However, the rate of increase has slowed in recent weeks, and there are now signs that infection rates may be levelling off at a national level.

The CIS tests people from randomly selected households to estimate how many have the virus. The resulting positivity rate is the percentage of people that tested positive for COVID-19.

The Real-time Assessment of Community Transmission (REACT) programme also measures COVID-19 infections in the community. REACT positivity rates from 16 October to 2 November were 10 times higher than at the beginning of September, increasing from 0.13% to 1.30%.

The number of COVID-19 patients admitted to hospital has fallen for the first time since early September. In the week to 22 November, the hospital admission rate decreased from 16.7 to 15.5 people per 100,000.

Deaths increased by 28% compared with the previous week

While infections may be levelling off, the number of deaths involving COVID-19 in England increased by 28.4% compared with the previous week to 2,274. This is the 10th week in a row in which deaths have risen (week ending 13 November). This represents 19.8% of all deaths in England, an increase from 16.2% in the previous week.

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, there can be a delay between a rise in infections and rise in the numbers of hospital admissions and deaths.

5 . Regional differences

There are different trends across regions. The north of England is still the most affected by the coronavirus (COVID-19) pandemic. Between 15 and 21 November 2020, the Coronavirus (COVID-19) Infection Survey (CIS) reported the highest positivity rates in Yorkshire and The Humber (1.89%), the North West (1.77%) and the North East (1.67%).

However, rates in the North West continued to decrease, with rates in the West Midlands, East of England, London, South East and South West also beginning to show signs of decline.

Positivity rates increased in the East Midlands, after showing signs of decreasing the previous week. Caution should be taken in over-interpreting any small movements in the latest trend.

Figure 3: Positivity rates are the highest in Yorkshire and The Humber, the North West and the North East

Estimated percentage of the population testing positive for the coronavirus (COVID-19) each day, by region since 11 October 2020, England

Notes:

1. All results 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.

Download the data

Hospital admissions vary by region

In the week ending 22 November, hospital admission rates were highest in the North East and Yorkshire and The Humber regions, at 30.1 and 22.9 people per 100,000, respectively.

Trends in admission rates varied between English regions, with rates increasing in London, the North East, South East, South West and West Midlands compared with the previous week. The East Midlands, North West and Yorkshire and The Humber all saw admission rates decline compared with the previous week (ending 15 November).

The biggest change in admission rates was seen in Yorkshire and The Humber, where the number of people admitted to hospital with COVID-19 decreased from 29.4 to 22.9 per 100,000 compared with the previous week. Despite this decrease, the region still has the second-highest hospital admission rate in England. The largest increase in admission rates was seen in the North East, where rates rose from 26.1 to 30.1 per 100,000.

Numbers of deaths are increasing in all English regions

The number of deaths involving COVID-19 has increased in all English regions in the week to 13 November compared with the previous week (up to 6 November), with the largest increase seen in Yorkshire and The Humber (121 more deaths).

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 13 November, 27% of all deaths involving COVID-19 were recorded in the North West (615 out of 2,274).

6 . Age differences

The Coronavirus (COVID-19) Infection Survey (CIS) estimated that coronavirus (COVID-19) positivity rates are highest among secondary school-age children and young adults, with over 2% of people in both age groups thought to be infected in the week to 21 November 2020. Similarly, the Real-time Assessment of Community Transmission (REACT)study reported the highest positivity rates among people aged 18 to 24 years between 16 October and 2 November, at 2.4%.

According to the CIS, rates for secondary school-age children are still rising, but they appear to be levelling off for primary school-age children and young adults. Over the last week, positivity rates decreased for people aged 35 years and over.

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 22 November, hospital admission rates for people aged over 85 years were more than 39 times higher than for those between 15 and 44 years, at 148.8 people per 100,000.

Of more than 57,800 deaths involving COVID-19 in England to date, almost 90% are among people aged 65 years and over. In the week ending 13 November, the number of deaths involving COVID-19 in England increased for all age groups except for those aged under 15 years. The biggest increase was seen for those aged over 85 years (242 more deaths).

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

Estimated percentage of the population testing positive for COVID-19 on 18 November, hospital admission rates per 100,000 in the week ending 22 November and deaths registered in the week ending 13 November 2020, England

Download the data

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.

7 . COVID-19 antibody prevalence

Most people do not have COVID-19 antibodies

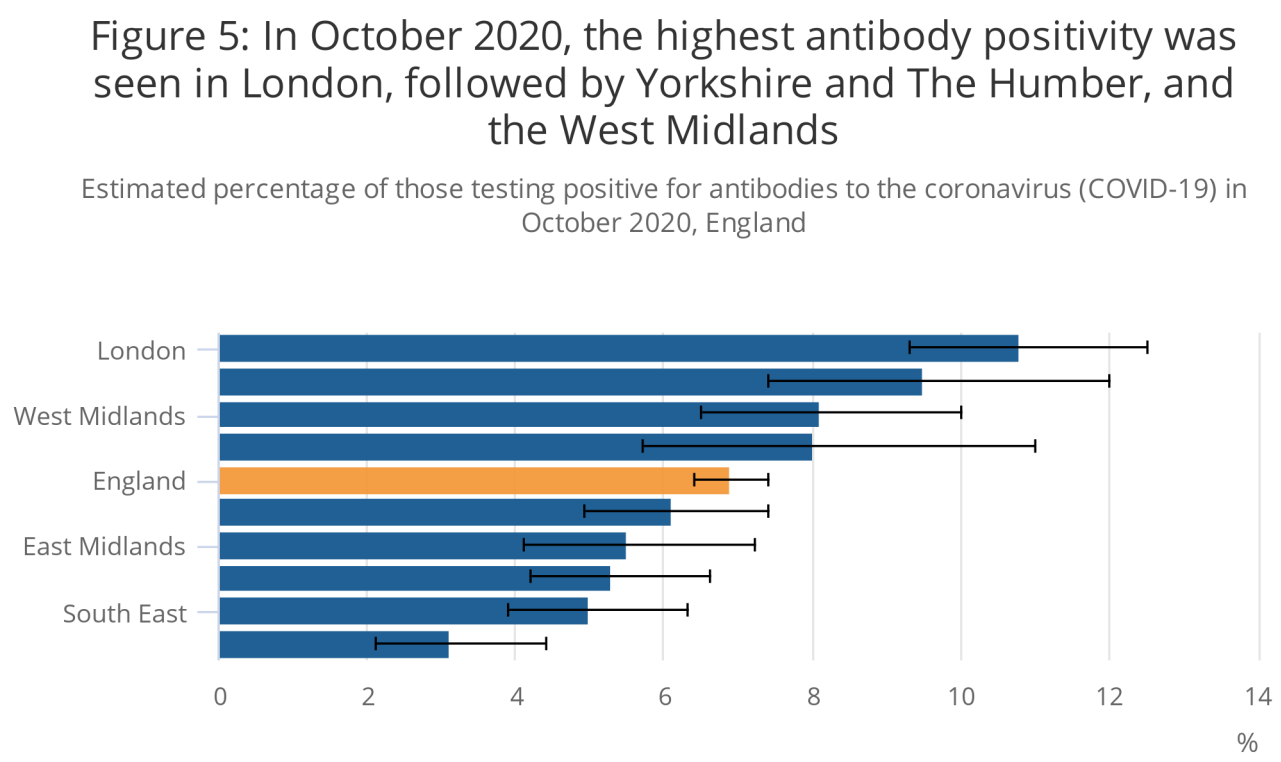
Multiple sources estimated that between 4% and 7% of the population had detectable antibodies during September and October 2020, which suggest they previously had coronavirus (COVID-19). This is shown in studies by the Coronavirus (COVID-19) Infection Survey (CIS) (6.9%, October), the Real-time Assessment 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 coronavirus antibodies. The CIS reported a slight increase compared with 5.6% in October, but this still suggests that most of the population remains vulnerable to infection.

Antibody prevalence varies by region

Data from the CIS showed a substantial variation in the percentage of people testing positive for coronavirus antibodies in different English regions during October. Almost 11% of people are estimated to have antibodies in London, while just over 3% of people would test positive in the South West.

Figure 5: In October 2020, the highest antibody positivity was seen in London, followed by Yorkshire and The Humber, and the West Midlands

Estimated percentage of those testing positive for antibodies to the coronavirus (COVID-19) in October 2020, England



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

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.

REACT also found the highest antibody positivity rates in London (9.5%) and the lowest in the South West (1.6%) between 15 and 28 September. The second-highest positivity was seen in the West Midlands at 4.8%, followed by the North West at 4.5%.

Among NHS blood donors, antibody positivity was also highest in London, though there have been increases in antibody positivity in the North West in recent weeks (7.8% between weeks ending 25 October and 15 November), which may reflect increased transmission in this region since September.

8 . Lockdown experiences

In the first fortnight of lockdown, the majority of areas of England reported a decrease in the proportion of people who were very or somewhat worried about the impacts of the coronavirus (COVID-19) on their lives compared with the fortnight prior to lockdown.

North Yorkshire, and Dorset and Somerset both showed the largest decrease (13 percentage points) in the proportion of adults reporting that they were very or somewhat worried.

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 . Glossary

Positivity rate

In this article we refer to 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.

11 . 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.

12 . 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.