Office for National Statistics

Article

# Coronavirus (COVID-19) weekly insights: latest health indicators in England, 11 December 2020

This article brings together the latest coronavirus (COVID-19) data 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 looks at variations for different age groups and regions.

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## Table of contents

# 1 . Main points

- Infections in the community continued to decrease in the last week (week ending 5 December, Coronavirus (COVID-19) Infection Survey (CIS)).
- The percentage of people who tested positive in the community decreased in all English regions, apart from London and the East of England (CIS, week ending 5 December).
- The rate of confirmed coronavirus (COVID-19) hospital admissions fell slightly to 13.7 per 100,000 people in the week ending 6 December, from 14.2 per 100,000 in the previous week (week ending 29 November).
- The number of deaths involving COVID-19 in England increased by 14.1% in the week ending 27 November.
- The number of deaths involving COVID-19 increased in all English regions except the North West (week ending 27 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 November).
- In November, 19% of adults experienced some form of depression, which is almost double pre-pandemic levels (Opinions and Lifestyle Survey, Great Britain, 11 to 29 November).

# 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 (ONS), Joint Biosecurity Centre (JBC) and Public Health England (PHE).

Although the number of people testing positive for COVID-19 in England is still at a much higher level than during the summer months, infections and hospitalisations have started decreasing in recent weeks. The north and midlands regions of England remain the worst-affected areas. Most people do not have antibodies to COVID-19, suggesting most of the population is still vulnerable to infection.

**More about coronavirus**

- 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.

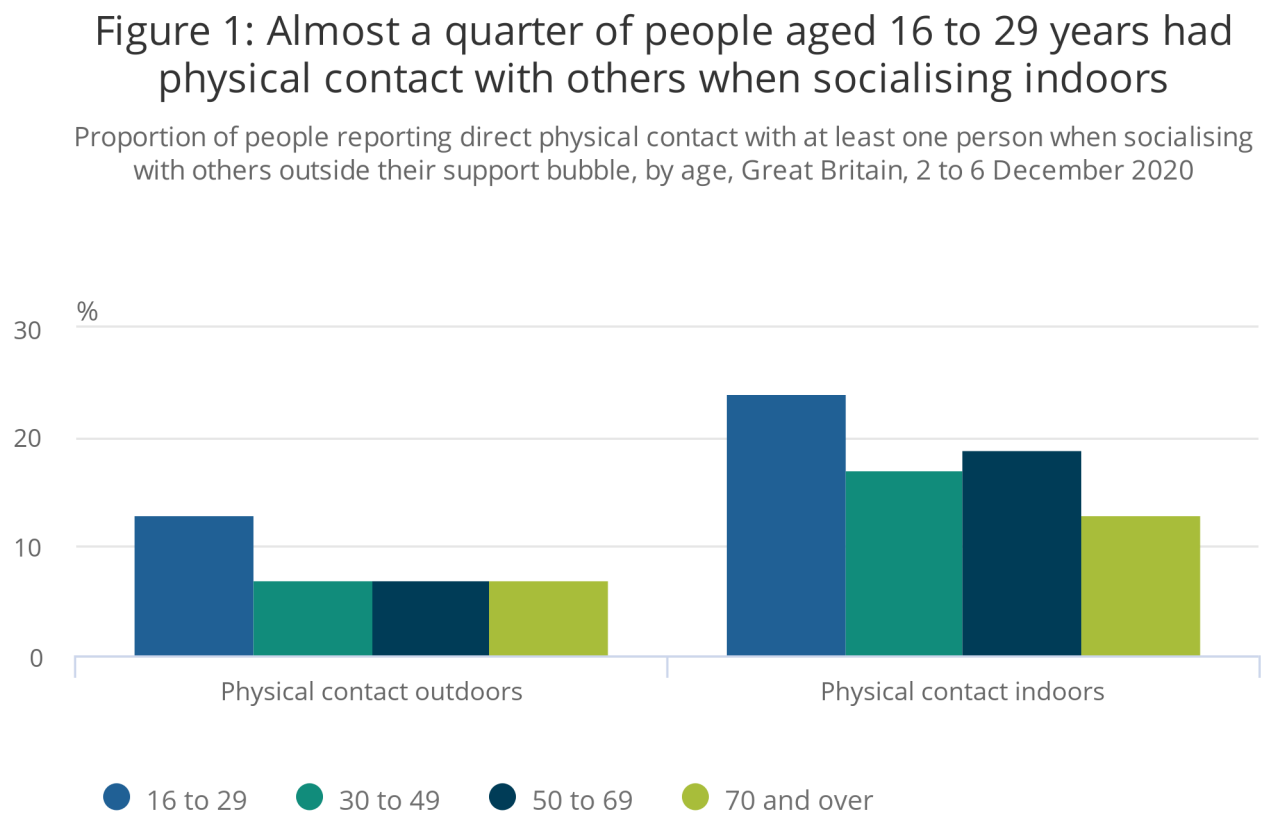
# 3 . Preventative measures and social contact

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, 2 to 6 December 2020). The majority of people reported that in the last seven days, they always or often washed their hands after returning home (89%), used a face covering (97%), avoided physical contact when outside their home (89%) and maintained social distance (85%).

People aged 16 to 29 years were more likely to have physical contact with others outside their support bubble when socialising than older age groups.

**Figure 1: Almost a quarter of people aged 16 to 29 years had physical contact with others when socialising indoors**

**Proportion of people reporting direct physical contact with at least one person when socialising with others outside their support bubble, by age, Great Britain, 2 to 6 December 2020**




**Source: Office for National Statistics – Opinions and Lifestyle Survey**

**Notes:**

1. Question: "Over the last 24 hours, how many people have you had direct physical contact with when socialising indoors both at home and at venues such as cafés, pubs or restaurants?"

2. Question: “Over the last 24 hours, how many people outside of your household have you had direct physical contact with when socialising outdoors?”

3. Base population: all adults.

# 4 . Infections, hospital admissions and deaths

From late August, coronavirus (COVID-19) infections, hospital admissions and deaths in England all began to rise following a low point in summer 2020. In recent weeks, infections and hospital admission rates have fallen, while deaths are continuing to rise.

### Figure 2: Infection rates and hospital admission rates are falling, but deaths are rising

**Estimated COVID-19 positivity rates, hospital admissions and number of deaths, England, 1 August to 6 December 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.

Data download

The Coronavirus (COVID-19) Infection Survey (CIS) estimated that 481,500 people in England had COVID-19 between 29 November and 5 December 2020. This is equal to about 1 in 115 people (or 0.88% of the population). The percentage of people testing positive (positivity rate) has decreased in the recent weeks. However, it is still over 12 times higher than in the first week of September, when only 1 in 1,400 people (0.07% of the population) tested positive.

The Real-time Assessment of Community Transmission (REACT) programme found a similar trend. CIS and REACT both estimate how many infections there are in the community, although use different methods. Between 13 and 24 November, REACT estimated 0.96% of the population to be infected, a decrease from 1.30% in the previous round (16 October to 2 November). Nevertheless, the most recent REACT positivity rates remain over seven times higher than in early September (0.13%).

The number of COVID-19 patients admitted to hospital has continued to fall, but at a slower rate than in previous weeks. In the week ending 6 December, the hospital admission rate decreased slightly from 14.2 to 13.7 per 100,000 people.

## Number of deaths involving COVID-19 increased by 14%

While infections and hospital admissions may be falling, the number of deaths involving COVID-19 in England rose by 14.1% to 2,820 in the week ending 27 November. This is the 12th week in a row in which the number of deaths involving COVID-19 has increased. Deaths involving COVID-19 represented 24.2% of all deaths in England, an increase from 21.2% 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, we expect to see a delay between a change in infection levels and corresponding changes in the numbers of hospital admissions and deaths.

# 5 . Regional differences

Between 29 November and 5 December 2020, the Coronavirus (COVID-19) Infection Survey (CIS) reported that positivity rates decreased in all regions except London and the East of England. The percentage of people testing positive for COVID-19 has increased in London, following a drop at the end of November. There are also early signs of increase in the East of England.

Positivity rates vary substantially across English regions. The CIS estimated the highest positivity rates to be in the North West (1.29%), Yorkshire and The Humber (1.16%) and the North East (1.14%). However, the gap between these regions and other English regions has narrowed over the last week.

### Figure 3: The percentage of people testing positive increased in London

**Modelled daily rates of the percentage of the population testing positive for COVID-19 by region, England, 25 October to 5 December 2020**

### Notes:

1. 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.
2. This analysis is based on statistical modelling conducted by CIS research partners at the University of Oxford.
3. As this is based on Bayesian analysis, the appropriate uncertainty measure to use is credible intervals rather than confidence intervals. However, they can be interpreted in the same way.
4. Please see our methods article for more methodological information on the COVID-19 Infection Survey.
5. This table is based on analysis of nose and throat swabs.

Data download

## Hospital admission rates increased in the East Midlands, South East and East of England

In the week ending 6 December 2020, confirmed COVID-19 hospital admission rates fell in five of the nine English regions. More people were admitted to hospital in the East Midlands, South East and East of England than in the previous week. Hospital admission rates in London remained at a similar level to the week before. The largest decrease in admission rates was seen in the South West and the largest increase in the East Midlands.

Hospital admission rates remain the highest in the North East and West Midlands, despite both regions recording a decrease in the latest week. There were 21.0 admissions per 100,000 people in the North East, and 20.4 per 100,000 in the West Midlands. London had the lowest admission rates in England, at 9.9 per 100,000 people.

### Figure 4: Hospital admissions and deaths involving COVID-19 by region

**Change in hospital admission rates and numbers of deaths involving COVID-19 from previous week, England, weeks ending 6 December and 27 November**

**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.

Data download

### Highest number of deaths involving COVID-19 continues to be recorded in the North West

The number of deaths involving COVID-19 increased in all English regions apart from the North West in the week ending 27 November. Even though the North West saw a decrease, it still recorded the highest number of deaths involving COVID-19 (546) followed by Yorkshire and The Humber (537) and the West and East Midlands (361 in both regions). The biggest increases were seen in the South East and South West.

## 6 . Age differences

According to the Coronavirus (COVID-19) Infection Survey (CIS), coronavirus positivity rates continue to be highest among secondary school-age children (1.9%). In the week ending 5 December 2020, the percentage of people testing positive has decreased in older teenagers and young adults (School Year 12 to age 24 years), those aged 25 to 34 years and 50 to 69 years. Positivity rates have levelled off for those aged 35 to 49 years.

### 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 the coronavirus (COVID-19) are highest among those aged over 65 years. Hospital admissions increased among all age groups above 75 years in the week ending 6 December.

Hospital admission rates increased the most among people aged 85 years and over in the latest week, rising from 139.1 to 144.8 per 100,000 people. Rates have been the highest in this age group throughout the pandemic. Their hospital admission rates are more than 41 times higher than for those aged between 15 and 44 years. Hospital admission rates are lowest among children aged between 5 and 14 years, at 0.8 per 100,000 people.

Of more than 63,140 deaths involving COVID-19 in England to date, almost 90% were among people aged 65 years and over. In the week ending 27 November, the number of deaths involving COVID-19 in England increased for all age groups apart from children under one year. The biggest increase was seen for those aged 85 years and over (230 more deaths).

#### Figure 5: COVID-19 infections, hospital admissions and deaths by age

**Estimated percentage of the population testing positive for COVID-19 in the week ending 5 December, hospital admission rates per 100,000 in the week ending 6 December and deaths registered in the week ending 27 November 2020, by age, 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 statistical modelling conducted by CIS research partners at the University of Oxford.
4. Infection estimates are given for the reference date: 2 December.
5. Figures exclude deaths of non-residents.
6. Based on date a death was registered rather than occurred.
7. The International Classification of Diseases, 10th edition (ICD-10) definitions are as follows: coronavirus (COVID-19) (U07.1 and U07.2).
8. 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.

Data dowmload

# 7 . COVID-19 antibody prevalence

## Most people do not have COVID-19 antibodies

Multiple sources report that between 4% and 7% of the population has detectable antibodies, which suggest they previously had the coronavirus (COVID-19). This suggests that most of the population remains vulnerable to infection.

This is shown by the Coronavirus (COVID-19) Infection Survey (CIS) (6.9%, October 2020), the Real-time Assessment of Community Transmission (REACT) (4.4%, 15 to 28 September 2020) and in NHS blood donors (6.5%, 2 to 29 November 2020), which all test for COVID-19 antibodies.

# 8 . Mental health

The percentage of people experiencing some form of depression in November 2020 was almost twice as high as before the coronavirus (COVID-19) pandemic (Opinions and Lifestyle Survey, Great Britain, July 2019 to March 2020), with nearly one in five (19%) adults reporting moderate to severe depressive symptoms. This is the same proportion as earlier in the pandemic (19% in June 2020).

Younger age groups were more likely to have experienced some form of depression and some form of anxiety than older adults. Around 3 in 10 people aged 16 to 29 years experienced some form of depression (31%) and anxiety (29%), compared with 8% and 6% respectively of those aged 70 years and over. Almost half of the population (48%) reported that their well-being was being affected by the pandemic in November.

# 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 . Coronavirus 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 8 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 the coronavirus (COVID-19) using nose and throat swab tests. The Coronavirus COVID-19 Infection Survey (CIS) 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) Coronavirus (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 coronavirus (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 the age of five years. 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 (DHSC) 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 and HDU). Admission rates are recorded by age and region. These data are provisional and subject to revision, and previous estimates may be updated in subsequent weeks.

## 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 the 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 coronavirus pandemic. Each of these sources has their own strengths and limitations.

The 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

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

Real-time Assessment of Community Transmission study findings
Web page | Updated as and when data become available
REACT is a research program looking at how the virus is spreading across the country. The study was commissioned by the Department of Health and Social Care and carried out by Imperial College London, Imperial College Healthcare NHS Trust and Ipsos MORI.

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.

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.

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