

Latest REACT-1 findings show Omicron infections rising fast, while highlighting success of vaccination programmes

Over 97,000 volunteers in England took part in the study to examine the levels of COVID-19 in the general population between 23 November and 14 December.

The latest findings from Imperial College London and Ipsos MORI, covering 23 November to 14 December 2021 (round 16 of the study), detected 11 cases of the Omicron variant for data sequenced up to and including 11 December, with further sequencing underway for the remaining samples.

All other positive cases where a lineage was determined have been confirmed as the Delta variant or sub-lineages of Delta, but the proportion of Omicron cases in the results was increasing rapidly at the time reporting was stopped.

For samples collected up until 11 December, no cases of Omicron were detected in those who had received their booster jab, and the 11 who did test positive were double vaccinated and aged from 18 to 54 years.

The overall prevalence recorded in round 16 was 1.41%, meaning around one in 70 people were infected with the virus. This is a decrease from the 1.57% prevalence (one in 64 people infected) reported in round 15. However, prevalence continued to rise rapidly in round 16 from the beginning of December, after there had been a small dip at the end of November.

Prevalence in 12 to 17 year olds dropped by over half from rounds 15 to 16 and prevalence dropped by approximately two-thirds in those aged 75 and over. There was also a drop off in prevalence from rounds 15 to 16 in those aged 65 to 74.

As reporting for this round ended on 14 December, it only picked up the beginning of the large rise and the record number of cases now being reported across the England due to the prevalence of the Omicron variant.

Dr Jenny Harries, Chief Executive of the UK Health Security Agency (UKHSA), said:

I'd like to say a really big thank you to the members of the public who continue to take part in the REACT-1 study. It provides vital insight into the prevalence of COVID-19 and, crucially, is helping us understand more about the Omicron variant.

Omicron is spreading fast and the COVID-19 vaccine remains our best

line of defence against it.

I urge everyone who is eligible to come forward to receive their latest jab without delay – whether that’s a first, second, third or booster dose.

The main findings from the report are as follows:

There were 1,192 positives from 97,089 valid swabs in round 16, giving an overall weighted prevalence of 1.41%. This is down on the weighted prevalence recorded in round 15, which stood at 1.57%.

The highest weighted prevalence was recorded in London at 1.84%, a significant increase from the 1.23% recorded in round 15.

At a Lower Tier Local Authority level, 8 of the 10 highest estimates of prevalence based on a nearest neighbour method were found in London (Lambeth, Kensington and Chelsea, Hammersmith and Fulham, Southwark, Islington, Westminster, Wandsworth, Camden), with the 2 others, Cornwall and Plymouth, based in the South West.

BA.1 (Omicron) accounted for 1.69% (11 of 650) of the recorded COVID-19 infections where the sequencing was determined in this round (up to 11 December).

Of the 11 Omicron cases recorded in this round up to 11 December, 7 cases were symptomatic (5 with classic COVID-19 symptoms) and 2 were asymptomatic. The symptoms for the remaining 2 cases were unknown.

Based on the confirmed number of Omicron infections for swabs collected between 1 to 11 December, the estimated average prevalence of Omicron infections in England was 31,000 over this period.

In round 16 data the first Omicron infection was detected in London on 3 December, and subsequent confirmed Omicron infections appeared concentrated mainly in the South of England.

Prevalence in 12 to 17 year-olds dropped by over 50%, from 5.35% in round 15 to 2.31% in round 16. There was also a significant drop in prevalence from rounds 15 to 16 amongst the older age groups: 0.84% to 0.48% in those aged 65 to 74 and 0.63% to 0.21% in those aged 75 and over.

Prevalence in children between the ages of 5 and 11 was similar between rounds 15 and 16, 4.76% in the former and 4.74% in the latter, while there was a rise for those aged 18 to 24 0.93% (0.57%, 1.51%), 25 to 34 to 1.38% (1.10%, 1.74%) and 35 to 44 to 1.71% (1.48%, 1.98%).

Health and Social Care Secretary Sajid Javid said:

The latest REACT-1 data is yet more evidence that boosters are vital in protecting us from the Omicron variant.

While infections may be rising rapidly across the country, you can protect yourself, your friends, family and community by getting boosted now – like 28 million others across the UK so far.

Professor Paul Elliott, director of the REACT programme from Imperial's School of Public Health, said:

The results reported in this round of REACT show that Omicron is spreading rapidly in England and especially in London, which now has the highest prevalence of COVID-19 in the country. Compared to the Delta variant, the proportion of Omicron cases is increasingly rapidly.

The positive news is that the both the teenage vaccination and booster programmes have already shown encouraging results, with prevalence amongst 12 to 17 year olds and those aged 65 and above dropping significantly since the beginning of November.

However, we have seen prevalence overall rise sharply again since the beginning of December, which aligns with the rapid increase in the Omicron variant and the growing number of COVID-19 cases being reported nationally. It is therefore vital that as many people as possible get vaccinated, including getting their boosters, and take sensible precautions such as mask-wearing to reduce the risk of infection.

Kelly Beaver, CEO at Ipsos MORI, said:

The latest REACT round finds an R number above 1 and high prevalence of COVID-19 in England, so it remains critical that people get vaccinated and boosted.

We have found a number of cases of the Omicron variant, demonstrating the speed at which it is becoming the dominant variant and highlighting why we must all exercise caution over the festive period to ensure that prevalence does not continue to rise even further in the new year.