Latest REACT-1 study findings show rise in COVID-19 infection rates

Over 67,000 volunteers took part in the study in England to examine the levels of COVID-19 in the general population between 19 and 29 October.

The main findings from the interim report were as follows:

There were 1,021 positives from 67,208 swabs, giving a prevalence of 1.72%.

This represents the highest overall prevalence of REACT-1 since it began in May 2020. This is more than 2-fold higher than prevalence in the last report (9 to 27 September 2021), which was 0.83%.

The reproduction rate of the virus ('R') is estimated at 1.12.

The highest prevalence was found in South West at 2.18%, increasing almost 4fold from round 14. Rates are up in every region over this period with the exception of Yorkshire and the Humber.

Highest prevalence was observed in those aged 5 to 12 years at 5.85% and those aged 13 to 17 years at 5.75%.

Prevalence for those aged 45 to 54 and 35 to 44 were the next highest, at 1.53% and 1.48% respectively.

For those aged 65 to 74 years, prevalence was 0.82%. At 75 years and over it was 0.67% – both representing increases of approximately 2-fold from the last report.

In larger households of 5 people or more the rate of infection was 3.68%, compared to 0.78% in single-person households.

Among people who were in contact with a confirmed COVID-19 case, prevalence was 10.1% compared with 0.83% among those without such contact.

The newest tranches of data indicate a recent dip in infections, coinciding with the current half-term school holiday. This mirrors the pattern recorded in 2020 when infections dipped at the same point in the school calendar (but rose again following half term).

A total of 126 positive samples have been sequenced to date, all of which were Delta variant. Of these, 13 (10.3%) were the AY.4.2 Delta sublineage which has been classified by the UK Health Security Agency (UKHSA) as a variant under investigation (VUI).

Dr Jenny Harries, Chief Executive of UKHSA, said:

Although the number of hospitalisations and deaths remain lower

than in previous peaks, these findings are a powerful reminder that the pandemic is far from over and remains a serious threat to health and wellbeing. This new data strongly reinforces the need for all eligible age groups to get vaccinated and to take mitigating measures such as wearing a face covering in crowded places and ensuring good ventilation indoors.

This is particularly urgent for older people whose immunity may be waning given that several months have passed since they received their jabs. I strongly encourage everyone who is eligible for a third dose or a booster shot to come forward without delay.

Around 10% of the sequenced positive samples were Delta sublineage AY.4.2. in keeping with the national picture from UKHSA which has classified this as a VUI. UKHSA will continue to monitor the spread of this variant across the population and investigate the possible reasons for this increase.

Health and Social Care Secretary, Sajid Javid said:

Today's report sends an important message that we need to stay vigilant as we head into the winter months.

Vaccines continue to be our first line of defence against this disease and it is crucial we all get jabbed to keep the virus at bay. Whether you have yet to receive your first dose, second dose or if you are eligible for your booster jab — the best thing you can do is get vaccinated to protect yourself and those around you.

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

These very recent data show that infections are still very high, especially in school-aged children. We continue to find that households with children have higher prevalence of infection, indicating that children could be driving up infection rates by spreading the virus to others in their homes.

The vaccination programme in children ages 12 and above should help control infection rates in children of secondary school age, helping to ensure their education does not suffer due to the impact of the pandemic.

Kelly Beaver, Managing Director, Public Affairs at Ipsos MORI said:

This interim report shows the highest levels of prevalence that the REACT study has found at any point during the pandemic. This reinforces the need for continued vigilance and for people to take

up the vaccine as well as the booster when offered to them. Thank you to all those who have voluntarily participated in the REACT research programme; they are playing an important part in supporting management of the pandemic.

The REACT-1 study was commissioned by the Department of Health and Social Care (DHSC) and is carried out by a world-class team of scientists, clinicians and researchers at Imperial College London, Imperial College Healthcare NHS Trust and Ipsos MORI.

UKHSA estimates that the vaccination programme in England has prevented hundreds of thousands of hospitalisations and deaths. It is easier than ever to get vaccinated, and the vaccination programme has been successful in weakening the link between infection, hospitalisation and deaths.