Latest REACT-1 study findings show COVID-19 infection rates three times lower for double vaccinated people

- Interim findings covering 24 June to 5 July from Imperial College London and Ipsos MORI show infections have quadrupled since the last REACT-1 study, which took place from 20 May to 7 June, with 1 in 170 people infected and a recent doubling time of 6 days.
- Infection rates for double vaccinated under-65s are three times lower than in unvaccinated under-65s, demonstrating the impact of the vaccination roll out.
- Cases expected to continue rising as society opens up, with people urged to remain cautious and exercise personal responsibility

Interim findings from the latest report of REACT-1, one of the country's largest studies into COVID-19 infections in England, have been published today (Thursday 8 July) by Imperial College London and Ipsos MORI.

Over 47,000 volunteers returned PCR tests in England between 24 June and 5 July to examine the levels of COVID-19 in the general population. The latest data show infections in England have increased fourfold from 0.15% to 0.59% since the last REACT-1 report which covered 20 May to 7 June.

The main findings from the first half of the thirteenth round of the REACT-1 study show:

- overall prevalence nationally is substantially higher in round 13 interim (swabs taken 24 June to 5 July) than round 12 (swabs taken 20 May to 7 June), rising from 0.15% to 0.59% – an approximately fourfold increase with around 1 in 170 people testing positive;
- continued exponential growth in prevalence with an average doubling time of 15 days between round 12 (swabs taken 20 May – 7 June) and round 13;
- however, during the first half of round 13 only, there was a doubling time of 6.1 days with a corresponding R value of 1.87;
- there have been substantial increases in all age groups under the age of 75 years, and especially at younger ages, with the highest prevalence for 13 to 17 years at 1.33% and 18 to 24 years at 1.40%;
- infections have increased in all regions with the largest increase in London, where prevalence has increased more than eightfold from 0.13% in round 12 to 1.08% in round 13;
- in people aged 64 or younger, the prevalence of infection among those who had received two doses of vaccine was 0.35% compared with 1.15% among those who had not received any vaccine, demonstrating the impact of the vaccination rollout;
- prevalence is increasing to a lesser extent among those vaccinated, rising from 0.06% in people aged 65 and above who reported receiving two doses in round 12, to 0.24% in the same group in round 13.

The latest data from Public Health England (PHE) shows that our vaccination programme has saved over 27,000 lives and has prevented over 7 million people from getting COVID-19. It also shows that both doses of a COVID-19 vaccine can reduce symptomatic infection by almost 80%.

All those aged 18 and over can book their vaccination through the NHS booking service, and second doses are being accelerated by reducing the dosing interval from 12 weeks to 8 weeks.

Health and Social Care Secretary Sajid Javid said:

> As we unlock society and learn to live with COVID-19, we will inevitably see cases rise significantly over coming weeks. But today's finding show that infection rates are three times lower for those who have had two vaccine doses.
>
> It is more important than ever to get that life-saving second jab so we can continue to weaken the link between cases, hospitalisations and deaths and build a wall of defence against the virus.
>
> As we move from regulations to guidance and get back to our everyday lives, see our loved ones and return to work, it is vital people practice good sense and take personal responsibility for their own health and those around them.

COVID-19 Vaccine Deployment Minister Nadhim Zahawi said:

> It is hugely encouraging to see the vaccination rollout is having a significant impact on stopping the spread of the virus. Almost two thirds of adults – 64% – have had both doses, and so have got the fullest protection on offer.
>
> I urge everyone to get their first and second dose when invited, as every jab helps to curb transmission and serious illness. The small number of people who are double jabbed and experience symptoms should continue to get tested so we all play our part to stop the spread of this awful virus.

On Monday 5 July, the government confirmed that step 4 of the roadmap out of lockdown will go ahead on 19 July if its four tests are met, which means all current legal limits on social interactions and restrictions on large events, performances and life events will be lifted. Face coverings will also no longer be mandatory indoors although guidance will suggest where people might

choose to wear one.

The Prime Minister also made clear that cases are expected to rise as society opens up. He urged people to remain cautious and to get their vaccine when called, with the latest data showing the vaccination programme has weakened the link between cases, hospitalisations and deaths.

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

> In spite of the successful rollout of the vaccination programme, we are still seeing rapid growth in infections, especially among younger people.
>
> However, it is encouraging to see lower infection prevalence in people who have had both doses of a vaccine. It is therefore essential that as many people as possible take up both vaccine doses when offered.

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

> It looks very likely that the prevalence of COVID-19 will continue to rise as the country is unlocked further, but there are encouraging signs that the vaccine programme is working. These findings reiterate the importance of getting vaccinated. We are very grateful to all the research participants across England for their contribution to this study.

Restrictions in schools will also come to an end. 'Bubbles' will no longer be required for all children under 18, social distancing will no longer be necessary, and schools will not need to stagger start and finish times, though they can continue with existing arrangements until the end of term if they wish.

This report is the latest from the REACT-1 study which was commissioned by the Department of Health and Social Care and carried out by a world-class team of scientists, clinicians and researchers at Imperial College London, Imperial College Healthcare NHS Trust and Ipsos MORI.

Robust population surveillance studies like this are essential to understanding the rate of COVID-19 infection, how the virus is spreading across the country and the impact of measures taken to contain the virus in order to inform current and future actions.

- More information on the Real-time Assessment of Community Transmission (REACT) programme of work can be found here
- This study falls under Pillar 4 of the Covid-19 National Testing

Programme, which focuses on mass surveillance in the general population.