Vaccines highly effective against B.1.617.2 variant after 2 doses

Vaccine effectiveness against symptomatic disease from the B.1.617.2 variant is similar after 2 doses compared to the B.1.1.7 (Kent) variant dominant in the UK, and we expect to see even higher levels of effectiveness against hospitalisation and death.

The study found that, for the period from 5 April to 16 May:

- the Pfizer-BioNTech vaccine was 88% effective against symptomatic disease from the B.1.617.2 variant 2 weeks after the second dose, compared to 93% effectiveness against the B.1.1.7 variant
- 2 doses of the AstraZeneca vaccine were 60% effective against symptomatic disease from the B.1.617.2 variant compared to 66% effectiveness against the B.1.1.7 variant
- both vaccines were 33% effective against symptomatic disease from B.1.617.2, 3 weeks after the first dose compared to around 50% effectiveness against the B.1.1.7 variant

The analysis included data for all age groups from 5 April to cover the period since the B.1.617.2 variant emerged. It included 1,054 people confirmed as having the B.1.617.2 variant through genomic sequencing, including participants of several ethnicities. Data published on Thursday 20 May for vaccine effectiveness covered the period since December for those aged over 65.

The difference in effectiveness between the vaccines after 2 doses may be explained by the fact that rollout of second doses of AstraZeneca was later than for the Pfizer-BioNTech vaccine, and other data on antibody profiles show it takes longer to reach maximum effectiveness with the AstraZeneca vaccine.

As with other variants, even higher levels of effectiveness are expected against hospitalisation and death. There are currently insufficient cases and follow-up periods to estimate vaccine effectiveness against severe outcomes from the B.1.617.2 variant. PHE will continue to evaluate this over the coming weeks.

Health and Social Care Secretary Matt Hancock said:

> This new evidence is groundbreaking – and proves just how valuable our COVID-19 vaccination programme is in protecting the people we love.
>
> We can now be confident that over 20 million people – more than 1 in 3 – have significant protection against this new variant, and that number is growing by the hundreds of thousands every single day as more and more people get that vital second dose. I want to

> thank the scientists and clinicians who have been working around the clock to produce this research.
>
> It’s clear how important the second dose is to secure the strongest possible protection against COVID-19 and its variants – and I urge everyone to book in their jab when offered.

Dr Mary Ramsay, Head of Immunisation at PHE, said:

> This study provides reassurance that 2 doses of either vaccine offer high levels of protection against symptomatic disease from the B.1.617.2 variant.
>
> We expect the vaccines to be even more effective at preventing hospitalisation and death, so it is vital to get both doses to gain maximum protection against all existing and emerging variants.

Minister for COVID-19 Vaccine Deployment Nadhim Zahawi said:

> Almost every day we get more and more encouraging evidence about the difference our COVID-19 vaccines are making to people’s lives – with 13,000 lives saved and 39,100 hospitalisations prevented overall.
>
> Today’s data is astounding and a true reflection of just how important it is to get both your jabs when offered.
>
> I encourage all those offered an appointment to get their jab booked in as soon as possible and take full advantage of the high levels of protection the vaccines bring.

Separate PHE analysis indicates that the COVID-19 vaccination programme has so far prevented 13,000 deaths and around 39,100 hospitalisations in older people in England, up to 9 May.