

Oxford University study shows herd immunity a fiction as UK infections rise

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A major study by Oxford University, not yet peer reviewed, provides more proof that a strategy for combatting COVID-19 cannot rely on vaccination alone.

The study is the largest yet of the effectiveness of vaccines against the Delta variant. Working with the Office for National Statistics (ONS) and the Department of Health and Social Care, the Oxford scientists looked at over 3.4 million test results from over 740,000 different adults in the UK.

According to their research, Pfizer's efficacy in preventing symptomatic infection against the Delta variant was 90 percent after one month, 85 percent after two months and 78 percent after three months. AstraZeneca's efficacy was 67 percent after one month, 65 percent after two and 61 percent after three. The faster decline for Pfizer led the researchers to speculate that efficacy for the two vaccines would converge after 4-5 months.

These numbers are significantly lower than those for protection against the Alpha variant.

Oxford's findings are in line with those of two smaller studies conducted in the United States and Qatar, both of which found a higher-than-expected number of "breakthrough" infections in vaccinated people. Research in Israel has also reported substantially reduced vaccine effectiveness against symptomatic infection.

The study chimes with data from Imperial College London's REACT survey for May to July, which found that, for adults up to the age of 64, the likelihood of someone who comes into contact with a positive COVID case themselves being infected is only reduced by half by full vaccination.

Another difference between the variants identified by the Oxford study was that those infected with Delta after full vaccination had a much higher viral load than those fully vaccinated and infected with Alpha. The viral load refers to the amount of virus carried by the infected

person, in this case in the nose and throat, which can be "shed", for example through coughing and sneezing, and transmitted to others. Fully vaccinated adults infected with Delta had similar peak viral loads to unvaccinated individuals.

Although the exact amount of transmission from vaccinated people cannot be estimated from this study, its findings clearly indicate that the Delta variant has reduced the effectiveness of vaccination in bringing the pandemic under control.

Sarah Walker, professor of medical statistics and epidemiology at the University of Oxford, commented, "We don't yet know how much transmission can happen from people who get Covid-19 after being vaccinated—for example, they may have high levels of virus for shorter periods of time.

"But the fact that they can have high levels of virus suggests that people who aren't yet vaccinated may not be as protected from the Delta variant as we hoped."

If vaccinated people can still contribute substantially to the spread of COVID-19, then even high levels of immunisation will not be enough to stop the virus circulating, especially in the face of more transmissible variants. "The fact that you see more viral load [with the Delta variant] hints towards herd immunity being more challenging," warned Dr Koen Pouwels, one of the lead researchers on the Oxford study.

Although every effort is made in the capitalist media to downplay the dangers of this development, the continued spread of COVID-19 poses a serious threat.

Firstly, there are still huge numbers of people globally who remain unvaccinated. In the UK, this applies to most children. Even those who are vaccinated can still suffer severe disease and death in a small minority of cases, which nonetheless translates into large numbers of hospital patients in situations of high community transmission, stretching healthcare services.

Secondly, the more prevalent the virus is, the more chance it has of developing new, more dangerous variants. The Delta variant is the product of the herd immunity strategy pursued by the world's governments, likely arising in the massive surge of cases which swept through India this spring and then allowed to spread across the world.

There are already two further mutations of the Delta variant that are causing concern. Eight cases have been identified in Upsala in Sweden of the E484Q mutation, which studies indicate could be more transmissible. All these cases are linked to travel abroad.

In the US, the AY.3 subtype of Delta now accounts for roughly 9 percent of cases, and it appears to be outcompeting the Delta variant in the UK, although currently at very low numbers. Early data from India suggests it is more immune evasive than its predecessor.

The only rational conclusion to draw from these developments is for public health measures to be urgently implemented as the first step of a globally coordinated programme for the eradication of the virus. But capitalist governments the world over are pursuing the opposite policy, removing restrictions and allowing the virus to spread freely.

The Oxford study comes with the UK already well into the early stages of a resurgence of the virus, after a brief fall in recorded infections. Another 36,572 cases were recorded yesterday, taking the total for the last seven days to 214,736, a 7.8 percent increase on the week before.

Deaths and hospitalisations are also increasing. 113 new deaths were recorded yesterday, bringing the total for the last week to 674, a 9.6 percent increase.

The latest data for hospitalisations shows 804 people were admitted with COVID-19 on August 15, giving 5,698 in the prior seven days, a 5.6 percent increase. There were a total of 6,379 people in hospital with COVID-19 on Wednesday, 909 on ventilators.

Dr Simon Clarke, associate professor in cellular microbiology at the University of Reading, commented last Friday that high and rising case numbers and rising hospitalisations were giving "an early sense of what living with COVID-19 looks like. As restrictions are lifted and the economy rebounds, we are 'running hot' when it comes to managing COVID spread." He warned that although vaccines currently significantly reduce rates of hospitalisation, high case numbers "still place an unnecessary burden on the NHS."

Infections will rise far more sharply in the next months as schools and universities, major vectors for the spread

of the virus, reopen with next to no mitigation measures in place. The latest available data from the ONS shows that infection rates are still highest among, in descending order, secondary school-age pupils, young adults up to 24 years old, and primary school-age pupils.

Other factors like the ending of self-isolation for doubled-jabbed contacts and all under-18s, the ongoing efforts to force the last workers back into workplaces, the continuous propaganda that things are back to normal, and the worsening of the weather will add fuel to the fire. Leading government modeller Professor Neil Ferguson told *BBC Radio 4*'s Today programme that the country confronts a "sobering situation," with "the potential of quite a large wave of infection in September, October".

Heading into winter, when the under-resourced, understaffed NHS was annually put under extreme pressure before the pandemic, the crisis will be all the more severe.

Professor Peter Openshaw, a member of the government's New and Emerging Respiratory Virus Threats Advisory Group (Nervtag), spoke to *Times Radio* yesterday and described the recent daily increases in new infections as "very worrying":

"This is a very large number. If you think, 34,000 people, that's a lot of people testing positive, and to be seeing over 100 deaths a day at this stage, you know before schools have gone back, while the weather is still relatively good, we're not back into winter yet.

"I think we're all really anxious about what's going to happen once we return to normality.

"We're going into the winter with really very high levels of infection out there in the community and we just don't really know what's going to happen."



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