The BMJ

Cite this as: *BMJ* 2021;372:n528<http://dx.doi.org/10.1136/bmj.n528>

Published: 23 February 2021

Covid-19: Vaccine success drives England's lockdown exit

Gareth Iacobucci, Elisabeth Mahase

The government has announced plans for a gradual lifting of the current covid-19 lockdown in England from next month, based on its assessment of the current evidence (box 1).

Box 1: The evidence behind the government's decisions

Siren study

The Pfizer and BioNTech covid-19 vaccine is at least 70% effective against symptomatic and asymptomatic infection 21 days after the first dose and at least 85% seven days after the second dose, shows a UK study of healthcare workers. The Siren study previously investigated the effect of prior infection on protection against reinfection but has now been amended to investigate vaccine effectiveness. The first results following this update have looked at the eight weeks after the first Pfizer-BioNTech vaccine dose.

The report from Public Health England has said that there were 977 new infections during 710 587 person days of follow-up in the unvaccinated group, equating to an incidence density of 14 infections per 10 000 person days of follow-up. In comparison, there were 71 new infections 21 days after the first dose and nine cases seven days after the second dose in the vaccinated group. This equated to an incidence density of 8 per 10 000 and 4 per 10 000 person days of follow-up, respectively.

PHE surveillance report

A report by Public Health England linking the national vaccination system with hospital admissions has said that one dose of the Pfizer vaccine seems to be at least 57% effective in people aged over 80 years, 28 days after vaccination. This rose to 88% seven days after the second dose. Current observations also indicate a "higher level of protection (probably above 75%) against severe disease from a single dose of Pfizer vaccine in the over 80s," it said.

It is too early for results from the Oxford and AstraZeneca vaccine.

In a speech to the House of Commons on 22 February the prime minister gave details of the government's road map for exiting the current lockdown in four stages, subject to four conditions being met at each stage.¹ Boris Johnson said that although the threat "remains substantial," the "extraordinary success" of the covid-19 vaccine programme led by the NHS, alongside falling infections and hospital admissions, meant that a cautious lifting of restrictions was now possible.

"This road map should be cautious but irreversible," Johnson said. "This journey is made possible because of the pace of the vaccination programme."

From 8 March all schools in England will reopen, with outdoor after-school sports and activities allowed, while two people will be allowed to meet for recreation such as a coffee or picnic in public spaces such as parks. From 29 March outdoor gatherings of six people (or two households) will be permitted, including in private gardens, and outdoor sports facilities and retail venues will reopen.

In the second stage, happening no earlier than 12 April, non-essential retail, most outdoor attractions, and leisure facilities will reopen.

The third stage, which will occur no earlier than 17 May, could see groups of 30 permitted outdoors, six people or two households allowed to meet indoors, and the return of international travel, subject to review.

The final stage, no earlier than 21 June, would see no legal limits on social contact.

Johnson told MPs that the restrictions would be lifted only if four conditions were met at each stage:

- The covid-19 vaccine deployment programme continues successfully
- Evidence shows vaccines are sufficiently reducing numbers of deaths and hospital admissions
- Infection rates do not risk a surge in hospital admissions, and
- The government's assessment of the risks is not fundamentally changed by new variants.

Johnson said, "At every stage our decisions will be led by data not dates."

The devolved administrations in Scotland, Wales, and Northern Ireland will set out their own plans for easing lockdown.

In recognition of the speed at which covid-19 vaccines are being delivered the government has also moved forward its target for offering every adult a first dose, to the end of July.

In a joint statement the president of the Royal College of Anaesthetists, Ravi Mahajan, and the dean of the Faculty of Intensive Care Medicine, Alison Pittard, welcomed the government's commitment to maintaining a cautious approach to easing restrictions.

"With hospital admissions still high and the latest reported average daily number of covid related deaths currently at 447, any changes to restrictions based on dates not data would be irresponsible at best and at worse risk thousands more lives and extend the ongoing financial hardships for millions," they said.

Correction: On 23 February we corrected the details of the second stage of the lifting of the covid-19 lockdown.

¹ Cabinet Office. Covid-19 response: spring 2021. 22 Feb 2021. <https://www.gov.uk/government/publications/covid-19-response-spring-2021>.