

US COVID cases rising rapidly as Delta dominates

7 July 2021

Coronavirus variant: Delta

B.1.617.2
 "Variant of concern"
 First record: October 2020
 Place of first detection:
India Maharashtra state (west)

Key mutations in the spike protein

E484Q
 Close to the one seen in South African and Brazilian variants -- E484K

L452R
 Also present in a variant seen in California

Main concerns

TRANSMISSIBILITY

- 43% to 90% more transmissible than previous COVID-19 variants, according to different experts
- Around 60% more than the Alpha variant (B.1.1.7)
- Detected as of June 2021

SEVERITY

Data from England and Scotland suggest a person infected with Delta is twice as likely to be hospitalised than someone infected with Alpha

VACCINE ESCAPE

Moderately resistant to vaccines

Single dose efficacy:

- Around 33%
- Compared to 50% for the Alpha variant

Second dose efficacy:

- AstraZeneca: 60%
- Pfizer: 86%
- Compared to 66 and 93% respectively for the Alpha variant

Hospitalisation:

- Single dose -- 75% less likely
- Two doses -- 94% less likely

*Data from Public Health England

Sources: [sciencemediacentre.org](https://www.sciencemediacentre.org/)/[New Scientist](https://www.newscientist.com/)/[Nature](https://www.nature.com/)/[webmd.com/bmj.com](https://www.webmd.com/bmj.com/)/[Public Health England](https://www.publichealthengland.org/)

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having 70 percent adults at least partly vaccinated by Independence Day, with the current figure at 67 percent.

Regions in the Midwest and South with lower vaccination rates are experiencing higher case rates than regions with high vaccination rates such as the Northeast, a trend that has become increasingly clear in recent weeks.

A hospital in Springfield, Missouri, ran out of ventilators to treat hospitalized COVID patients over the weekend, local media reported.

The city of 160,000's two hospitals were treating 213 COVID-19 patients as of Monday, up from 168 on Friday and 31 on May 24, the Kansas City Star said.

"The trajectory that we're likely to see is two different flavors of the pandemic in the United States, one in which it's more of a problem in places where there's a high level of unvaccinated individuals," Amesh Adalja of the Johns Hopkins Center for Health Security told AFP.

"In other parts of the country, the pandemic is largely going to be something that's managed as more of an ordinary respiratory virus," he added.

Adalja said that even with Delta becoming the dominant strain he envisioned a "decoupling" of hospitalizations and deaths from rising cases in highly vaccinated regions, as has been seen in Israel.

"Increasingly, I think we have to start to shift our focus away from cases and really look at hospitalizations, because that's what the vaccine was designed to do—it was designed to decouple cases from hospitalization," he said.

Real world data has shown that the Pfizer, Johnson & Johnson and AstraZeneca vaccines have

Factfile on the Delta Covid-19 variant first identified in India, updated with what we know so far as of June 28.

COVID cases are rising rapidly in the United States as the highly contagious Delta variant dominates and vaccinations stagnate, data showed Wednesday.

The seven-day-average of new cases was 13,859 as of July 6, up 21 percent compared to two weeks earlier, according to the Centers for Disease Control and Prevention (CDC).

Cases attributed to the most recent days might rise further because of a reporting lag following the July 4 holiday weekend.

The spike comes as the Delta variant, which is more transmissible than any previous strain, accounted for around 52 percent of cases in the two weeks ending July 3, according to the CDC.

Despite having among the highest availability of vaccines of any country, America's immunization campaign has dropped off steeply since April.

President Joe Biden narrowly missed his goal of

retained high efficacy against severe COVID and the same is almost certainly true of the Moderna vaccine, according to experts.

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