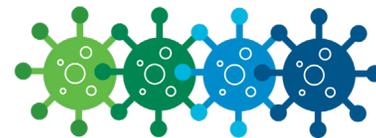


Vaccines and variants



The following information on vaccines and variants includes excerpts from a review of **scientific literature** published through 5 July 2021 and should be used in conjunction with other timely resources to ensure that decision-making in archives, libraries, and museums reflects the latest scientific understanding. Additional literature reviews and research briefings **are available** from REALM.

COVID-19 vaccines

The Centers for Disease Control and Prevention (CDC) recommends that everyone age 12 or older get a COVID-19 vaccine and has indicated that people who are fully vaccinated can **resume some activities** they stopped due to the pandemic. Studies continue to show that COVID-19 vaccines offer protection against the infectiousness, transmissibility, and disease burden of SARS-CoV-2 and its variants:

- COVID-19 vaccines reduce transmission rates by approximately 54%.
- The average vaccine efficacy (VE) against COVID-19 is 85% after a full course of vaccination.
- VE against severe disease, hospitalization, or death averages close to 100%.
- High vaccine coverage and moderate use of nonpharmaceutical interventions (e.g., masks and physical distancing) can lead to low COVID-19 hospitalizations and death in the US.

SARS-CoV-2 variants

Viruses inherently replicate, which can result in genetic changes or mutations. After enough mutations occur, the new version is called a variant. Multiple SARS-CoV-2 variants have been found in the US and abroad during this pandemic. A variant of concern (VOC) is a variant that can be more easily transmitted, cause more severe disease (increased hospitalizations or deaths), or reduce the effectiveness of treatments or vaccines. Several studies have shown that current vaccines are still effective against known VOCs. **Information about reported cases of variants by region and state is available from the CDC.**

Current variants of concern in the US

(as of 14 July 2021)

Variant	WHO label	First detected	Other names
B.1.1.7	Alpha	United Kingdom (UK)	20I/501Y.V1
B.1.351	Beta	South Africa	20H/501Y.V2
P.1	Gamma	Japan/Brazil	20J/501Y.V3
B.1.617.2	Delta	India	20A/S:478K

Key resources about vaccines

- [DHS Master Question List for COVID-19](#)
- [CDC: Vaccines for COVID-19](#)
- [Community-Based Organization's COVID-19 Vaccination Toolkit](#)
- [Interim Public Health Recommendations for Fully Vaccinated People](#)
- [Key Things to Know About COVID-19 Vaccines](#)
- [Facts about COVID-19 Vaccines](#)
- [COVID-19 Vaccinations in the United States](#)

Key resources about variants

- [Variants and Genomic Surveillance for SARS-CoV-2](#)
- [About Variants of the Virus that Causes COVID-19](#)
- [Variant Proportions \(US COVID-19 Cases Caused by Variants\)](#)
- [Science Brief: Emerging SARS-CoV-2 Variants](#)

Visit oclc.org/realm for full research briefings, project plans, test results, and new resources as they become available.

