Centers for Disease Control and Prevention

COVID-19 Vaccines Work

Updated June 28, 2022

CDC is reviewing this page to align with updated guidance.

All currently approved or authorized COVID-19 vaccines are safe and effective and reduce your risk of severe illness. Vaccination can reduce the spread of disease, which helps protect those who get vaccinated and the people around them.

CDC Recommends

- Everyone ages 6 months and older should get a COVID-19 vaccine as soon as they can.
- To get the most protection, get all recommended doses of a COVID-19 vaccine. Take all precautions until you are up to date with your COVID-19 vaccinations.
- For the best protection, everyone 6 months and older is recommended to stay up to date with their COVID-19 vaccines, which includes getting boosters if eligible.

COVID-19 Vaccines Protect Against COVID-19 Infections and Hospitalizations

Vaccines reduce the risk of COVID-19, including the risk of severe illness and death among people who are fully vaccinated. In addition to data from clinical trials, evidence from real-world vaccine effectiveness studies show that COVID-19 vaccines help protect against COVID-19 infections, with or without symptoms (asymptomatic infections). Vaccine effectiveness against hospitalizations has remained relatively high over time, although it tends to be slightly lower for older adults and for people with weakened immune systems.

Most People Need Booster Shots

COVID-19 vaccines are working well to prevent severe illness, hospitalization, and death. However, public health experts see reduced protection over time against mild and moderate disease, especially among certain populations. For the best protection, everyone 6 months and older is recommended to stay up to date with their COVID-19 vaccines, which includes getting boosters if eligible.

Vaccine Breakthrough Infections

COVID-19 vaccines are effective at preventing severe disease, hospitalization, and death. However, since vaccines are not 100% effective at preventing infection, some people who are up to date with the recommended vaccines will still get COVID-19. This is called a breakthrough infection. When people who are vaccinated develop symptoms of COVID-19, they tend to experience less severe symptoms than people who are unvaccinated.

COVID-19 Vaccines Are Effective Against Most Variants

Viruses are constantly changing to create new types of the virus called variants. COVID-19 vaccines used in the United States continue to protect against severe disease, hospitalization, and death from known circulating variants. They may not be as effective in preventing infection from these variants. CDC will continue to monitor vaccine effectiveness to see what impact, if any, variants have on how well COVID-19 vaccines work in real-world conditions.

For More Information

The latest CDC data on COVID-19 vaccine effectiveness are summarized on the CDC COVID Data Tracker.

Information on CDC's Monitoring COVID-19 Vaccine Effectiveness

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