COVID-19

To maximize protection from the Delta variant and prevent possibly spreading it to others, wear a mask indoors in public if you are in an area of substantial or high transmission.

What You Should Know About the Possibility of COVID-19 Illness After Vaccination

Updated Aug. 16, 2021   Print

A small percentage of people fully vaccinated against COVID-19 will still develop COVID-19 illness

COVID-19 vaccines are effective. However, a small percentage of people who are fully vaccinated will still get COVID-19 if they are exposed to the virus that causes it. These are called "**vaccine breakthrough cases**." This means that while people who have been vaccinated are much less likely to get sick, it will still happen in some cases. It's also possible that some fully vaccinated people might have infections, but not have symptoms (asymptomatic infections). Experts continue to study how common these cases are.

Large-scale clinical studies found that COVID-19 vaccination prevented most people from getting COVID-19. Research also provides growing evidence that mRNA COVID-19 vaccines (Pfizer-BioNTech, Moderna) offer similar protection in real-world conditions. While these vaccines are effective, no vaccine prevents illness 100% of the time. For any vaccine, there are breakthrough cases.

Other reasons why fully-vaccinated people might get COVID-19

It's possible a person could be infected just before or just after vaccination and still get sick. It typically takes about 2 weeks for the body to build protection after vaccination, so a person could get sick if the vaccine has not had enough time to provide protection.

If you get COVID-19 after vaccination, your symptoms might be less severe

There is some evidence that vaccination may make illness less severe in people who get vaccinated but still get sick. Despite this, some fully vaccinated people will still be hospitalized and die. However, fully vaccinated people are much less likely to be hospitalized or die than people with similar risk factors who are not vaccinated.

CDC is monitoring COVID-19 vaccine breakthrough cases for patterns

CDC is working with state and local health departments to investigate COVID-19 vaccine breakthrough cases. The goal is to identify any unusual patterns, such as trends in age or sex, the vaccines involved, underlying health conditions, or which of the SARS-CoV-2 variants made these people sick. To date, no unusual patterns have been detected in the data CDC has received.

Variants and Vaccines

- FDA-authorized COVID-19 vaccines help protect against Delta and other known variants.
- These vaccines are effective at keeping people from getting COVID-19, getting very sick, and dying.
- To maximize protection from the Delta variant and prevent possibly spreading it to others, you should wear a mask indoors in public if you are in an area of substantial or high transmission even if you are fully vaccinated.
- We don't know how effective the vaccines will be against new variants that may arise.

- CDC recommends you get a COVID-19 vaccine as soon as one is available to you.
- Fully vaccinated people can resume many activities they did before the pandemic.
  - Learn more about what you can do when you have been fully vaccinated.
  - If you haven't been vaccinated yet, find a vaccine near you. Keep taking all precautions until you are fully vaccinated.

For Public Health Professionals
COVID-19 Breakthrough Case Investigations and Reporting

Related Pages

› Ensuring Vaccines Work

› COVID-19 Vaccines Work

Last Updated Aug. 16, 2021