

September 3, 2021



Good Day Ladies and Gentlemen,

COVID-19 data points continue to be evaluated to include the effectiveness of vaccine. I have included a few key points and links you may find informative.

Key Points

- All COVID-19 vaccines currently authorized in the United States are effective against COVID-19, including serious outcomes of severe disease, hospitalization, and death.
- Available evidence suggests the currently authorized mRNA COVID-19 vaccines (Pfizer-BioNTech and Moderna) are highly effective against hospitalization and death for a variety of strains, including Alpha (B.1.17), Beta (B.1.351), Gamma (P.1), and Delta (B.1.617.2); data suggest lower effectiveness against confirmed infection and symptomatic disease caused by the Beta, Gamma, and Delta variants compared with the ancestral strain and Alpha variant. Ongoing monitoring of vaccine effectiveness against variants is needed.
- A growing body of evidence indicates that people fully vaccinated with an mRNA vaccine (Pfizer-BioNTech or Moderna) are less likely than unvaccinated persons to acquire SARS-CoV-2 or to transmit it to others. However, the risk for SARS-CoV-2 breakthrough infection in fully vaccinated people cannot be completely eliminated as long as there is continued community transmission of the virus.
- Studies are underway to learn more about the effectiveness of Johnson & Johnson/Janssen vaccine.



- At this time, there are limited data on vaccine effectiveness in people who are immunocompromised. People with immunocompromising conditions, including those taking immunosuppressive medications, should discuss the need for personal protective measures after vaccination with their healthcare provider.
- This updated science brief synthesizes the scientific evidence supporting CDC's <u>guidance for</u> <u>fully vaccinated people</u> and will continue to be updated as more information becomes available.

https://www.cnn.com/interactive/2020/health/coronavirus-questions-answers/#with-the-delta-variantspreading-how-much-does-vaccination-reduce-infection-hospitalization-and-death

https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/fully-vaccinated-people.html



TRAVEL RECOMMENDATIONS:

https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html https://www.cdc.gov/coronavirus/2019-ncov/travelers/testing-international-air-travelers.html https://www.cdc.gov/coronavirus/2019-ncov/travelers/international-travel-during-covid19.html https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-during-covid19.html



Activities, Gatherings & Holidays

Updated Aug. 16, 2021



Choosing Safer Activities

- If you are not fully vaccinated and aged 2 or older, you should wear a mask in indoor public places.
- In general, you do not need to wear a mask in outdoor settings.
 - In areas with <u>high numbers of COVID-19 cases</u>, consider wearing a mask in crowded outdoor settings and for activities with <u>close contact</u> with others who are not fully vaccinated.
- People who have a condition or are taking medications that weaken their immune system may not be fully protected even if they are fully vaccinated. They should continue to take all <u>precautions recommended for unvaccinated people</u>, including wearing a well-fitted mask, until advised otherwise by their healthcare provider.
- If you are fully vaccinated, 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 <u>of substantial or high</u> <u>transmission</u>.
- If you are fully vaccinated, see When You've Been Fully Vaccinated.





Antibody tests for COVID-19 look for the presence of antibodies made in response to a previous infection or vaccination. They are an indicator of the body's efforts to fight off the SARS-CoV-2 virus. None of the <u>currently authorized SARS-CoV-2 antibody testsexternal icon</u> have been validated to evaluate specific immunity or protection from SARS-CoV-2 infection.

Antibody testing is **NOT** currently recommended to assess

- Immunity to COVID-19 following COVID-19 vaccination
- The need for vaccination in an unvaccinated person

There are several issues to consider when interpreting an antibody test for SARS-CoV-2 infection:

- Scientists have not yet established a serologic correlate of protection, which is the measurable threshold above which a person is protected against SARS-CoV-2 infection. This makes it difficult to interpret how laboratory results might translate to clinical protection.
- Antibody testing does not evaluate the cellular immune response, which may also play a role in vaccine-mediated protection.
- Vaccines trigger antibodies to specific viral protein targets. Currently authorized COVID-19 vaccines induce antibodies to the spike protein but not to the nucleocapsid protein, which is likely detected only after a natural infection with SARS-CoV-2. Therefore, COVID-19-vaccinated people who have not had previous natural infection will receive a negative antibody test result if the antibody test is designed to detect nucleocapsid protein.
- Antibody tests have different levels of sensitivity (i.e., the true positive rate, or ability to identify people with antibodies to SARS-CoV-2) and specificity (i.e., the true negative rate, or ability to identify those without antibodies to SARS-CoV-2).





Why You Should Not Use Ivermectin to Treat or Prevent COVID-19

- FDA has not approved ivermectin for use in treating or preventing COVID-19 in humans. Ivermectin tablets are approved at very specific doses for some parasitic worms, and there are topical (on the skin) formulations for head lice and skin conditions like rosacea. Ivermectin is not an anti-viral (a drug for treating viruses).
- Taking large doses of this drug is dangerous and can cause serious harm.
- If you have a prescription for ivermectin for an FDA-approved use, get it from a legitimate source and take it exactly as prescribed.
- Never use medications intended for animals on yourself. Ivermectin preparations for animals are very different from those approved for humans.

When Can Taking Ivermectin Be Unsafe?

The FDA has not reviewed data to support use of ivermectin in COVID-19 patients to treat or to prevent COVID-19; however, some initial research is underway. Taking a drug for an unapproved use can be very dangerous. This is true of ivermectin, too.

There's a lot of misinformation around, and you may have heard that it's okay to take large doses of ivermectin. That is wrong.



Even the levels of ivermectin for approved uses can interact with other medications, like blood-thinners. You can also overdose on ivermectin, which can cause nausea, vomiting, diarrhea, hypotension (low blood pressure), allergic reactions (itching and hives), dizziness, ataxia (problems with balance), seizures, coma and even death.

Ivermectin Products for Animals Are Different from Ivermectin Products for People

For one thing, animal drugs are often highly concentrated because they are used for large animals like horses and cows, which can weigh a lot more than we do—a ton or more. Such high doses can be highly toxic in humans.

Moreover, FDA reviews drugs not just for safety and effectiveness of the active ingredients, but also for the inactive ingredients. Many inactive ingredients found in animal products aren't evaluated for use in people. Or they are included in much greater quantity than those used in people. In some cases, we don't know how those inactive ingredients will affect how ivermectin is absorbed in the human body.

Meanwhile, effective <u>ways to limit the spread of COVID-19</u> continue to be to wear your mask, stay at least 6 feet from others who don't live with you, wash hands frequently, and avoid crowds.