

FAQ: Vaccine 101

Updated: Dec. 23, 2020

We will continue to provide updates to this material as new information becomes available. Please look for our additional FAQs: COVID-19 Vaccine Information and UCMC & BSD Employee Vaccination Logistics.

1. What is vaccination?

Vaccination is a safe and effective way of protecting people against harmful and infectious diseases. Vaccines stimulate your body's natural defenses to build resistance and make your immune system stronger. They cannot cause the disease or put you at risk of its complications. Most vaccines are given by an injection, and some are given orally (by mouth) or sprayed into the nose. COVID-19 vaccines in development are given by injection.

2. Why is vaccination important?

Vaccination safely prevents disease and saves lives. Today, there are vaccines available to protect against at least 20 diseases, such as diphtheria, influenza, tetanus, measles, meningitis and pneumonia. All together, these vaccines save the lives of up to 3 million people every year. When we get vaccinated, we aren't just protecting ourselves, but also those around us. Some people, including those who are seriously ill, are advised not to get certain vaccines and depend on the rest of us to get vaccinated to help protect them and reduce the spread of disease.

3. How does a vaccine work?

Vaccines reduce the risk of getting a disease by working with your body's natural defenses to build protection. When you get a vaccine, your immune system typically responds by:

- Recognizing the invading germ, such as a virus or bacteria.
- Producing antibodies. Antibodies are proteins produced naturally by the immune system to fight disease.
- Remembering the disease and how to fight it. If you are exposed to the germ in the future, your immune system can destroy it before you become unwell.

You can learn more about how vaccines work, different types of vaccines, how vaccines are made, and how the FDA approves vaccines.

4. How do vaccines protect communities?

When a person gets vaccinated against a disease, their risk of infection is also reduced. That means they're far less likely to transmit the disease to others. As more people in a community get vaccinated, fewer people remain vulnerable to infection, which means there's less possibility of people passing the pathogen from one person to another. Lowering the possibility for a pathogen to circulate in a community protects those who cannot be vaccinated due to other serious health conditions from the disease targeted by the vaccine. This is called "herd immunity."

###