MARCH OF DIMES | READY FOR LIFE

Immunizations

Does it impact our quality of life, our access to school, our interactions with one another? What, you may ask? Immunization! We have experienced something since our first few minutes of birth and something that we will share for the rest of our lives. It keeps us safe and prevents us from contracting or spreading disease, and it aids in the creation of herd immunity for the safety of others. Let's get into the topic of being "Vaxxed," or as the health professionals like to say, immunization.

Immunization is a global health and development success story, saving millions of lives every year. Vaccines reduce the risks of getting a disease by working with your body's natural defenses to build protection. When you get a vaccine, your immune system responds.

We now have vaccines to prevent more than 20 life-threatening diseases, helping people of all ages live longer, healthier lives. Immunization currently prevents 2-3 million deaths every year from diseases like diphtheria, tetanus, pertussis, influenza, and measles.

Immunization is a critical component of primary health care and an indisputable human right. It's also one of the best health investments money can buy. Vaccines are also essential for the prevention and control of infectious disease outbreaks. They underpin global health security and will be a vital tool in the battle against antimicrobial resistance.

What are vaccines?

Vaccines are injections (shots), liquids, pills, or nasal sprays that you take to teach your body's immune system to recognize and defend against harmful germs. For example, there are vaccines to protect against

- Viruses, like the ones that cause the flu and COVID-19
- Bacteria, including tetanus, diphtheria, and pertussis

What are the types of vaccines?

There are several types of vaccines:

- **Live-attenuated vaccines** use a weakened form of the germ
- **Inactivated vaccines** use a killed version of the germ
- **Subunit, recombinant, polysaccharide, and conjugate vaccines** use only specific pieces of the germ, such as its protein, sugar, or casing
- **Toxoid vaccines** that use a toxin (harmful product) made by the germ
- **mRNA vaccines** use messenger RNA, which gives your cells instructions for how to make a protein or (a piece of a protein) of the germ
- **Viral vector vaccines** use genetic material, which gives your cells instructions for making a protein of the germ. These vaccines also contain a different, harmless virus that helps get the genetic material into your cells.

Vaccines work in different ways, but they all spark an immune response. The immune response is the way your body defends itself against substances it sees as foreign or harmful. These substances include germs that can cause disease.

What happens in an immune response?

There are different steps in the immune response:

- When a germ invades, your body sees it as foreign
- Your immune system helps your body fight off the germ
- Your immune system also remembers the germ. It will attack the germ if it ever invades again. This "memory" protects you against the disease that the germ causes. This type of protection is called immunity.

What are immunization and vaccination?

Immunization is the process of becoming protected against a disease. It can also mean the same thing as vaccination, which is getting a vaccine to become protected against a disease.

Why are vaccines necessary?

Vaccines are essential because they protect you against many diseases. These diseases can be severe. So getting immunity from a vaccine is safer than getting

immunity by being sick with the disease. And for a few vaccines, getting vaccinated can give you a better immune response than getting the disease would.

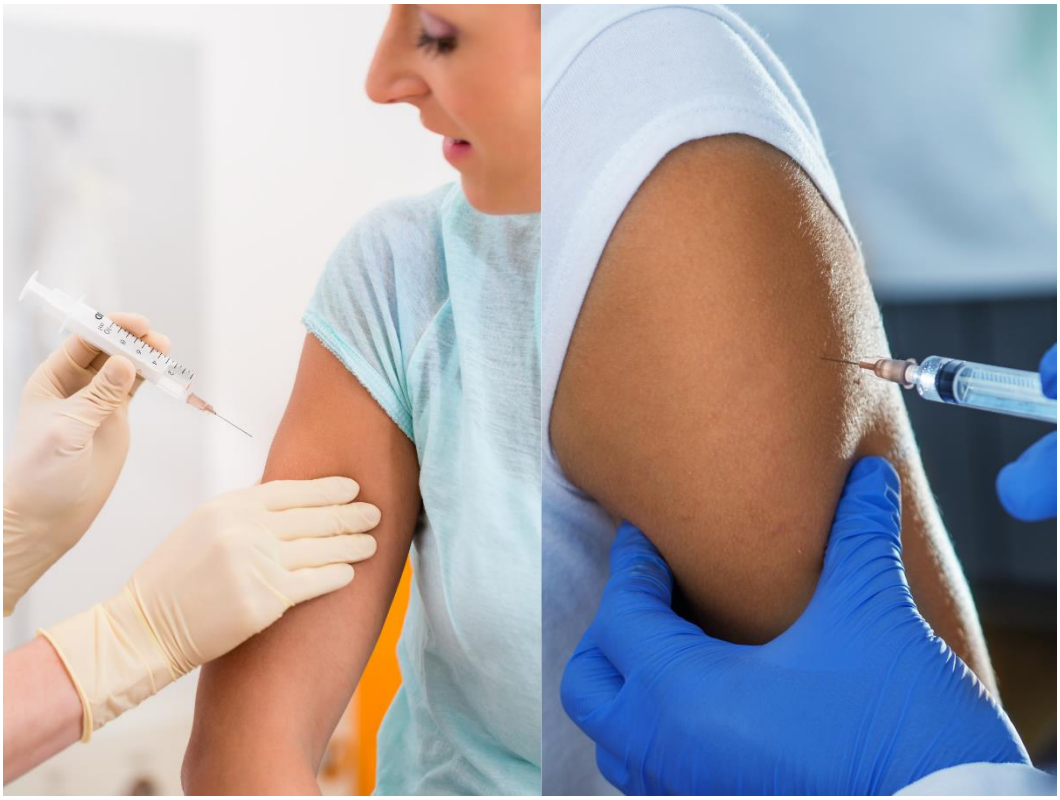
But vaccines don't just protect you. They also protect the people around you through community immunity.

What is community immunity?

Community immunity, or herd immunity, is the idea that vaccines can help keep communities healthy.

Usually, germs can travel quickly through a community and make a lot of people sick. If enough people get sick, it can lead to an outbreak. But when enough people are vaccinated against a specific disease, it's more complicated for that disease to spread to others. This type of protection means that the entire community is less likely to get the disease.

Community immunity is vital for people who can't get certain vaccines. For example, they may not be able to get a vaccine because they have weakened immune systems. Others may be allergic to certain vaccine ingredients. And newborn babies are too young to get some vaccines. Community immunity can help to protect them all.



Are vaccines safe?

Vaccines are safe. They must go through extensive safety testing and evaluation before they are approved in the United States.

What is a vaccine schedule?
A vaccine, or immunization, schedule lists which vaccines are recommended for different groups of people. It includes who should get the vaccines, how many doses they need, and when they should get them. In the United States, the Centers for Disease Control and Prevention (CDC) publishes the vaccine schedule.

Both children and adults need to get their vaccines according to the schedule. Following the schedule allows them to get protection from the diseases at precisely the right time.

**information has been adapted for your information from medlineplus.gov*

March of Dimes calls on families to learn more about the importance of vaccinations and calling on legislators to address vaccine exemptions in their states. We need to protect more families across the country from preventable infectious disease.

For more information or to understand the immunization schedule, click the links below

Immunization Schedules | CDC

Birth-18 Years Immunization Schedule | CDC

Vaccines and immunization (who. int)