The importance of vaccines
Vaccines have the power to protect against some of the most dangerous diseases. There's a long history of lifesaving vaccines developed for polio, smallpox, whooping cough, tetanus, influenza and more. Even with all the progress made, we're facing a constant battle against infectious diseases. Researchers are working hard to respond to new and evolving threats. Boosting your knowledge about vaccines and how they work can help protect even more people.

What is an immune system response?
Your immune system defends your body from harmful germs. When viruses, bacteria and other germs cause an infection, your immune system responds to protect you from disease. Your body releases antibodies to fight and destroy the germ.

How do vaccines work?
Vaccines are made with weakened or killed germs, called antigens. Antigens won't give you the disease. Instead, they cause your body to make antibodies against it. Your body then remembers the germs so you can quickly make antibodies to fight the disease if you ever come into contact with it.

What is herd immunity?
When enough people get vaccinated against a disease, it can protect an entire community from illness. This is called herd immunity. Herd immunity can help protect vulnerable groups such as babies and people who can't get vaccines due to health reasons. Herd immunity helps because a contagious illness won't spread quickly through a community where most people are vaccinated against it.

How long does immunity last?
Some vaccines provide lifetime immunity. Others can protect you for many years or just one year. Viruses can change from year to year, and scientists are always working to create new vaccines or update them.

What vaccines do I need?
Talk to your primary care provider about the types of vaccinations you and your family need and when to get them. Learn more about vaccine schedules at cdc.gov/vaccines.