

## **Vaccines Patient Education:**

### **What Are Vaccines?**

Vaccines can prevent certain serious or deadly infections. They are a way of teaching your body how to fight the germs that cause infections. Thanks to vaccines, many fewer people get seriously ill or die from infections than in the past. Vaccines usually come in shots, but some come in nose sprays or medicines you swallow. When a person gets a vaccine, this is called "vaccination" or "immunization." It's important to keep track of which vaccines you have had and when.

### **How Do Vaccines Work?**

To understand how vaccines work, it helps to understand what happens when you get an infection. Infections are caused by germs, such as bacteria or viruses. When a germ gets into your body, it multiplies (makes copies of itself) and attacks your cells. This is what makes you sick. Your "immune system," or infection-fighting system, recognizes that the germ should not be there. In response, it starts to make proteins called "antibodies" to fight the germ. Some vaccines come in just 1 dose. Others require 2 or more doses to fully protect you from infection. After you get a vaccine, it usually takes a couple of weeks before you are fully protected. This is because it takes time for your immune system to make the antibodies.

### **Why Should I Get Vaccinated?**

Getting vaccinated can help keep you from getting certain infections. If you do get an infection, being vaccinated can also keep you from getting severely ill. In some cases, being vaccinated also helps protect other people around you. For diseases that can spread from person to person, the goal of vaccines is to get to "herd immunity." Herd immunity is when enough people are immune to a disease that it can no longer spread easily. To get herd immunity, lots of people need to get vaccinated. This helps protect people who cannot get vaccinated for some reason.

### **Are Vaccine Safe?**

Yes. Before a vaccine is approved for use, it has to go through a specific process to test it for safety. This involves running "clinical trials" with lots of people who volunteer to try the vaccine. During these trials, researchers study how well the vaccine works and how many people had side effects. The results are reviewed by doctors and other experts who do not work for the drug companies that made the vaccine. These experts must agree that the vaccine is safe and effective enough to be given to the public.

### **What Vaccines Should I Get and When?**

In general, people need different vaccines at different times:

- Infants and children usually need vaccines against infections that can happen at any time in life. Childhood vaccines include those against measles, mumps, rubella, and polio.
- Children older than 6 months and adults need a flu vaccine every year. Some adults also need a vaccine against the most common type of pneumonia (a lung infection).
- Adults sometimes need vaccines that they never got as children. Some adults also need vaccines to protect them from more serious illnesses or those that are more common later in life. Examples include shingles and pneumonia.
- Travelers sometimes need vaccines against infections that exist in the area they are visiting.
- When a new infection spreads, people might need to get a new vaccine. Examples include vaccines to protect against COVID-19.

Your doctor or nurse can talk to you about what vaccines you should get and when to get them.

**To schedule an appointment please call 1-888-296-GPHA (4742)**