



VACCINES Back to school is a time for updating children’s immunizations. Immunizations, however, are **NOT** just for kids! Regardless of your age, we ALL need immunizations to keep us healthy. With time, immunity from childhood vaccines can fade and you may be at risk for old, new, and different diseases.

WHAT IS A VACCINE?

You have probably never had diphtheria or know anyone who has suffered from the disease. Similarly, diseases like whooping cough (pertussis), measles, mumps, and German measles (rubella) may be unfamiliar to you. In the 19th and early 20th centuries, these illnesses struck hundreds of thousands of people in the United States each year, mostly children, and tens of thousands of people died. These were known as fatal or deadly diseases, and today they are all but forgotten... largely because of vaccines.

As a child you have most likely been vaccinated against multiple diseases. Since that time, you may have been exposed to these same diseases, but the vaccines prepared your body to fight them off so quickly that you were unaware of the infection. What’s more is that your body “remembers” how to protect itself from the microbes (germs) it has encountered before. Collectively, the parts of your body that remember and repel microbes are called the immune system. Without the immune system, the simplest illness— could quickly turn deadly.

On average, your immune system takes more than a week to learn how to fight off an unfamiliar germ. Some microbes are so powerful, that they can overwhelm or escape your body’s natural defenses. In those situations, vaccines can make all the difference.

Traditional vaccines contain either parts of microbes or whole microbes that have been killed or weakened so that they don’t cause disease. When your immune system confronts these harmless versions of the germs, it quickly clears them from your body, thus preparing your immune system to fight specific diseases.

HOW DO VACCINES BENEFIT YOU?

Once your immune system is trained to resist a disease, you are said to be immune to it. Before vaccines, the only way to become immune to a disease was to actually get it and, with luck, survive it. This is called naturally acquired immunity. With naturally acquired immunity, you suffer the symptoms of the disease and also risk the complications, which can be quite serious or even deadly. Vaccines, which provide artificially acquired immunity, are an easier and less risky way to become immune.

Widespread use of vaccines in the United States has eliminated or almost eliminated infectious diseases that were once debilitating or fatal. Unfortunately, problems have resulted from lack of vaccinations. In 1989, low vaccination rates allowed a measles outbreak to occur in the United States which resulted in 136 measles associated deaths. An outbreak occurred again this past year in California.

The Impact of Vaccines in the United States

Disease	Baseline 20th Century Pre-Vaccine Annual Cases	2008 Cases*	Percent Decrease
Measles	503,282	55	99.9%
Diphtheria	175,885	0	100%
Mumps	152,209	454	95.7%
Pertussis	147,271	10,735	92.7%
Smallpox	48,164	0	100%
Rubella	47,745	11	99.9%
<i>Haemophilus influenzae</i> type b, invasive	20,000	30	99.9%
Polio	16,316	0	100%
Tetanus	1,314	19	98.6%

WHICH VACCINES DO YOU NEED?

The specific immunizations you need as an adult are determined by factors such as your age, lifestyle, high-risk conditions, type and locations of travel, and previous immunizations. Throughout your adult life, you need **immunizations** to get and maintain protection against:

- [Seasonal influenza \(flu\)](#) (for all adults)
- [Tetanus, diphtheria and pertussis \(whooping cough\)](#) (for all adults who have not previously received the Tdap vaccine)
- [Shingles](#) (for adults 50 years and older)
- [Pneumococcal disease](#) (pneumonia vaccine for adults 65 years and older and adults with specific health conditions)
- [Hepatitis B](#) infection (for adults who have diabetes or are at risk for hepatitis B)
- [Pneumovax13](#) (pneumonia vaccine)

There has been an increase in the number of pertussis cases in 37 states – well above the national average. As a result the Tdap (pertussis/tetanus) vaccine is advised in the 65 and older age group.

There is a simple way to learn which vaccines are appropriate for you by taking the 5 minute quiz “What Vaccines do You need?” A sample of the quiz can be accessed at the Center for Disease Control @ <http://www2a.cdc.gov/nip/adultimmsched/>. So ...

#1. Take the quiz and see which vaccines you are eligible for, then

#2. Contact your insurance company to see if it is covered, then

#3. Ask your Doctor where each vaccine is provided as not all vaccines are provided in a physician’s office. Some will be available at a local pharmacy or Pinellas County Health Department.

WHAT IF YOU ARE TRAVELING TO ANOTHER COUNTRY?

You may contact one of the following resources listed under references to inquire about vaccines required. These are specific for each country.

REFERENCES

F Zhou *et al.* [Economic Evaluation of the 7-Vaccine Routine Childhood Immunization Schedule in the United States](#) ^{PDF}, 2001. *Arch Pediatr Adolesc Med.*159(12): 1136-44 (2005).

http://www.doh.state.fl.us/Disease_ctrl/immune/dtap/index.html

www.nih.gov (National Institute of Health)

www.cdc.gov (Center for Disease Control)

Florida Bureau of Immunizations: Phone: 850 -245-4342 / Fax: 850 - 922-4195.

YOU WILL NEVER OUTGROW THE NEED FOR PROTECTION!!

~From the Desk of Melissa Schultz, MS, ARNP-C