Vaccines are medical preparations given to help the body produce immunity or to fight disease. Vaccines can prevent outbreaks of disease and save lives. Some diseases are rare in the U.S. as a result of safe and effective vaccines.

# Vaccines

## You can get vaccinnated for many common infections such as:

- Influenza.
- Hepatitis A.
- Hepatitis B.
- Human papillomavirus (HPV).
- Streptococcus pneumococcal pneumonia.
- Pertussis (whooping cough).

#### Are vaccines safe?

Vaccines are some of the safest medical products. But, like any other medical product, there may be risks. Talk to your health care provider about the value of vaccines as well as their side-effects. Vaccines are held to a high standard of safety. In the U.S.:

- Vaccine supplies in the U.S. are the safest, most effective in history.
- Vaccines are monitored for safety and effectiveness.
- Vaccines undergo rigorous and extensive testing.
- Vaccine manufacturers must follow strict production standards.

To see which vaccinations you should get, see *Vaccinations for Adults* on page 96.

- The Department of Health and Human Services (HHS) and three federal agencies primarily work on vaccine safety:
  - Centers for Disease Control and Prevention (CDC).
  - National Institutes of Health (NIH).
  - Food and Drug Administration (FDA).
- Scientists from FDA and CDC work closely to monitor reports of vaccine side effects (adverse events). The Veterans Health Administration monitors vaccine side effects within its facilities as well.
- Everyone getting a vaccine should receive a Vaccine Information Statement (VIS) that:
  - Explains vaccine benefits and risks.
  - Is handed out before each dose of some vaccines.
  - Is available in Spanish and other languages at: *www.cdc.gov/vaccines/pubs/vis.*

Vaccines are the most effective tool we have to prevent infectious diseases.

#### Are vaccines effective?

Most childhood vaccines produce immunity about 90 - 100% of the time. No medicine is perfect, so each vaccine has its own degree of effectiveness. History shows that the number of cases of disease starts to drop when a new vaccine starts to be given.

### How do vaccines work with your immune system to prevent disease?

- Vaccines help your body's immune system prepare to fight germs and infection.
- When vaccinated, your immune system attacks the harmless vaccine and prepares for future "infections".
- When the infection comes along, your body will know how to stop it.



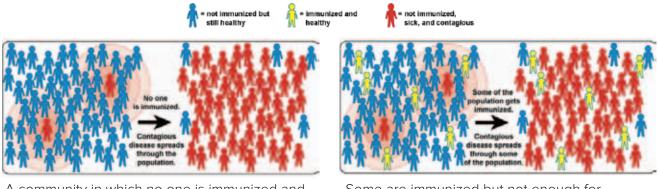
### How do vaccines protect you and your community?

Vaccines can prevent disease and save lives. If enough people get vaccinated, large outbreaks of disease can be avoided. Even those not vaccinated get some protection when the spread of contagious disease is contained. This is known as "community" or "herd" immunity. This is true for many diseases, including:

- Influenza.
- Measles.
- Mumps.
- Rotavirus.
- Pneumococcal disease.
- Pertussis.
- Polio.
- Rubella.

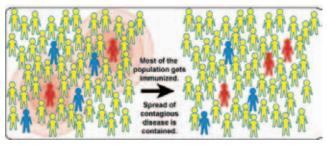
Your health care provider should have a record of all the vaccines have been given. You should also keep a record.

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A community in which no one is immunized and an outbreak occurs.

Some are immunized but not enough for herd immunity.



Herd immunity – enough people are immunized, protecting most in the community.

Image Source: The National Institute of Allergy and Infectious Diseases (NIAID) at: www.vaccines.gov

#### For more on vaccines see:

Centers for Disease Control and Prevention (CDC): Key Facts About Seasonal Flu Vaccine www.cdc.gov/flu/protect/keyfacts.htm

Immunizations for Infants and Toddlers www.cdc.gov/vaccines/parents/infants-toddlers.html

Pregnant Women and Vaccines www.cdc.gov/vaccines/parents/pregnant.html

U.S. Department of Health and Human Services (HHS): Flu Vaccination & Vaccine Safety www.flu.gov/prevention-vaccination/vaccination/index.html

Vaccines, Who & When: Adults www.vaccines.gov/who\_and\_when/adults/index.html



### Vaccinations for Adults You're <u>NEVER</u> too old to get immunized!

Getting immunized is a lifelong, life-protecting job. Don't leave your healthcare provider's office without making sure you've had all the vaccinations you need.

Age ► Vaccine ▼	19–49 years	50–64 years	65 years & older
Influenza	You need a dose every fall (or winter) for your protection and for the protection of others around you.		
Pneumococcal	You need 1–2 doses if you smoke cigare medical conditions.*	ettes or if you have certain chro	vonicYou need 1 dose at age 65 (or older)if you've never been vaccinated.
Tetanus, diphtheria, pertussis (whooping cough) (Td, Tdap)	Be sure to get a 1-time dose of "Tdap" vaccine (the adult whooping cough vaccine) if you are younger than age 65 years, are 65+ and have contact with an infant, are a healthcare worker, or simply want to be protected from whooping cough. You need a Td booster dose every 10 years. Consult your healthcare provider if you haven't had at least 3 tetanus- and diphtheria-containing shots sometime in your life or have a deep or dirty wound.		
Hepatitis B (HepB)	You need this vaccine if you have a specific risk factor for hepatitis B virus infection* or you simply wish to be protected from this disease. The vaccine is given in 3 doses, usually over 6 months.		
Hepatitis A (HepA)	You need this vaccine if you have a specific risk factor for hepatitis A virus infection* or you simply wish to be protected from this disease. The vaccine is usually given as 2 doses, 6–18 months apart.		
Human papillomavirus (HPV)	You need this vaccine if you are a woman who is age 26 years or younger. One brand, Gardasil, can be given to men age 26 years or younger to prevent genital warts. The vaccine is given in 3 doses over 6 months.		
Measles, mumps, rubella (MMR)	You need at least 1 dose of MMR if you were born in 1957 or later. You may also need a 2nd dose.*		
Varicella (Chickenpox)	If you've never had chickenpox or you were vaccinated but received only 1 dose, talk to your healthcare provider to find out if you need this vaccine.*		
Meningococcal	If you are going to college and plan to live in a dormitory, or have one of several medical conditions*, you need to get vaccinated against meningococcal disease. You may also need additional booster doses.*		
Zoster (shingles)			ou are age 60 years or older, you should this vaccine now.

\* Consult your healthcare provider to determine your level of risk for infection and your need for this vaccine.

**Do you travel outside the United States?** If so, you may need additional vaccines. The Centers for Disease Control and Prevention (CDC) provides information to assist travelers and their healthcare providers in deciding the vaccines, medications, and other measures necessary to prevent illness and injury during international travel. Visit CDC's website at www.cdc.gov/travel or call (800) CDC-INFO ([800] 232-4636). You may also consult a travel clinic or your healthcare provider.

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www.immunize.org/catg.d/p4030.pdf • Item #P4030 (12/10)

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