

# Immunization: Defense Against Disease

Before vaccines, polio paralyzed thousands of children nationwide every year, and measles infected millions. At the turn of the 20th century, diphtheria was one of the most common causes of death in school-age children. Today, however, these are best known as the names of shots kids get at the pediatrician's office. Cases of vaccine-preventable diseases have reached an all-time low, according to the U.S. Centers for Disease Control and Prevention. Despite some controversy, health officials stress that the benefits of vaccination far outweigh the risks.



## Facts About Vaccine-Preventable Diseases

- Between 3,000 - 49,000 people die from influenza in the U.S. annually.
- Influenza can infect 5%-20% of the population in any given year.
- In the United States, an estimated 800,000 to 1.4 million people are chronically infected with the hepatitis B virus and can infect household members and romantic partners.
- By the age of 50, 80% of women will be infected with human papillomavirus. While most women will clear the virus, some will not. This virus causes 70% of all cervical cancers.
- Adults are much more likely to die from chickenpox than children.

## Facts About Immunization

- As more people in a population get vaccinated, it becomes harder for pathogens to spread. Experts call this the herd-immunity effect.
- Vaccines enhance immunity by priming a host's immune system and building up memory to improve the body's response when exposed to the pathogen later.
- The hepatitis B vaccine prevents cancer, specifically liver cancer caused by chronic hepatitis B infection.
- Due to high immunization rates, 50 or fewer cases of tetanus occur each year in the United States.
- Immunization currently prevents between two and three million deaths per year.

Speak with your doctor about which vaccines are appropriate for you.

### References:

1. World Health Organization - <http://www.who.int/features/factfiles/immunization/en/>
2. Dartmouth - [https://issuu.com/dartmouth\\_science/docs/13f\\_final\\_issue\\_corrected/20](https://issuu.com/dartmouth_science/docs/13f_final_issue_corrected/20)
3. Centers for Disease Control & Prevention - <https://www.cdc.gov/vaccines/schedules/index.html>

IT'S  
WORTH  
A SHOT

---

GET  
VACCINATED  
TODAY