

RISKS AND BENEFITS OF VACCINATIONS

Vaccinations can prevent dangerous diseases. Research has clearly shown that the benefits of being protected by a vaccination far outweigh the potential risks for serious side effects of vaccines.

Young children are at the highest risk for diseases, so it is important that they receive vaccinations to protect them and the people with whom they come in contact. Many states require vaccinations before children can enter school.

Some people are concerned about the safety of vaccines. However, most of the time vaccines work well and do not have side effects. If side effects occur, they are usually only mild reactions such as soreness or swelling at the immunization site, or a low-grade fever that lasts for a day or two.

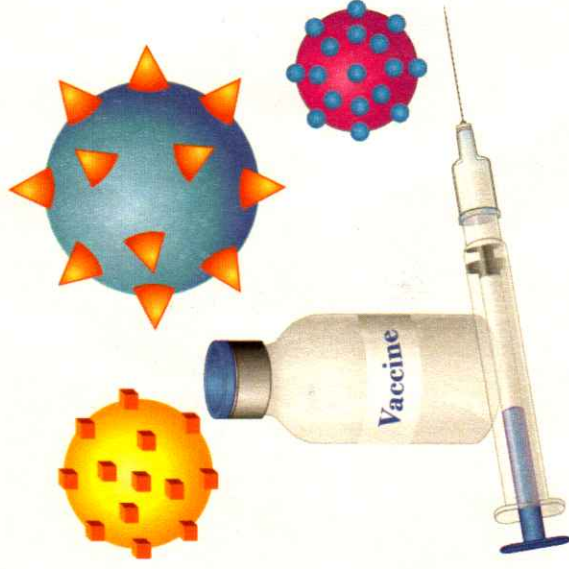
Just as some people have negative reactions to certain foods, some people may experience negative reactions to vaccines. Severe reactions to vaccines are VERY rare, but they can happen. Signs of a serious reaction can include difficulty breathing, hoarseness, wheezing, hives, paleness, dizziness, fainting, or a rapid heartbeat. This type of reaction will occur a few minutes to a few hours after the vaccination. Call 911 immediately if someone shows any of these symptoms.

For more information on vaccines and immunization visit:

US Center for Disease Control and Prevention: Vaccines and Immunizations

<http://www.cdc.gov/vaccines/>

Immunizations and the DTP Vaccine



ANTIBODIES and IMMUNITY

When you get an infection or a vaccine, your body produces disease-fighting substances called antibodies. These antibodies, or the white blood cells that can produce them, usually stay in your body to provide immunity that prevents getting the same disease again.

IMMUNIZATIONS and IMMUNITY

Immunizations are also called vaccinations, shots, or vaccines. They contain dead or weakened pathogens, or parts of pathogens that trigger your white blood cells to make antibodies that fight pathogens. Most vaccines need to be given several times to provide immunity.

THE DTP VACCINE

The DTP vaccine is used to prevent three dangerous diseases: **Diphtheria, Tetanus, and Pertussis**. The DTP vaccine does NOT contain any living bacteria. The DTP vaccine is a mixture of dead or weakened bacteria that causes diphtheria, tetanus, and pertussis. The vaccine may also contain antigens from these bacteria. These substances act to trigger the immune system to produce antibodies and memory cells without making you sick.



Diphtheria Diphtheria is an infection of the respiratory system characterized by sore throat, fever, and a thick mucus coating in the nose, throat, and airways. The mucus causes problems with breathing and swallowing. Diphtheria is caused by *Corynebacterium diphtheria* bacteria. Diphtheria is a contagious disease spread by direct physical contact or tiny drops of fluid from the mouth or nose of infected individuals. In cases that progress beyond a throat infection, diphtheria toxin spreads through the bloodstream and can lead to potentially life-threatening complications that damage other organs, such as the heart, kidneys, and nervous system. About 1 person in 10 who gets diphtheria dies of it.

Tetanus (Lockjaw) Tetanus (commonly called lockjaw) is a serious bacterial disease that affects muscles and nerves. It is characterized by muscle stiffness that usually involves the jaw and neck that then progresses to involve other parts of the body. Tetanus is caused by *Clostridium tetani* bacteria. Tetanus is not contagious — you can't catch it from someone who has it. The tetanus bacteria are found in soil contaminated with animal or human feces. People become infected when bacteria from the soil enters a wound. The disease requires treatment in a hospital. Complications include serious spasms of the respiratory system muscles and fractures of bones due to severe muscle contraction. About 3 out of 10 tetanus victims die.

Pertussis (Whooping Cough) Pertussis (commonly called whooping cough) begins with cold-like symptoms and fever. After a week or two, severe coughing spells begin, and these coughing spells can last for months. The coughing sometimes ends in a "whooping" sound when the person breathes in. Pertussis is caused by *Bordetella pertussis* bacteria. Pertussis is a contagious disease spread by direct physical contact or tiny drops of fluid from the mouth or nose of infected individuals. It mainly affects infants younger than 6 months old and adolescents (11 to 18 year olds) whose immunity has started to fade. Death occurs in about 1 out of 10 pertussis victims.

SCHEDULE FOR DTP IMMUNIZATION

- At 2 months, 4 months and 6 months
- Between 15 and 18 months
- Between 4 and 6 years old
- Between 11 and 12 years old, a booster shot
- For adults, a booster shot every ten years

IMMUNIZATION RECORDS

Doctors or public health clinics will keep a record of a child's immunizations and should also give parents a record. It is very important that the record of these immunizations be kept, particularly if you transfer from one doctor to another. Parents may need to provide a complete record of a child's immunizations to enroll a child in day care, elementary school, and college.