

Childhood Immunization Frequently Asked Questions

- [Why are shots so important?](#)
- [Are these diseases very serious?](#)
- [Are shots safe?](#)
- [How do vaccines work?](#)
- [Why are vaccines given at such a young age? Why so many at one visit?](#)
- [Why does my baby need so many doses of some vaccines and not as many of others?](#)
- [Are infants completely immune to disease?](#)
- [Do breastfed babies need to be immunized?](#)
- [Why should I immunize my child?](#)
- [Will my child get sick if I don't immunize him?](#)
- [What happens during an outbreak if my child is not immunized?](#)
- [What if my child didn't get her shots when she was supposed to, or has gotten behind schedule?](#)

Why are shots so important?

Shots (also known as immunizations or vaccines) protect your child from fifteen serious, and sometimes deadly, diseases. These diseases are listed below in the order they appear on the Centers for Disease Control and Prevention's Recommended Childhood Immunization Schedule:

- Hepatitis B
- Rotavirus
- Diphtheria
- Tetanus (lockjaw)
- Pertussis (whooping cough)
- *Haemophilus Influenzae* type b (Hib)
- Pneumococcal
- Polio
- Influenza (flu)
- Measles
- Mumps
- Rubella (German measles)
- Varicella (chickenpox)
- Hepatitis A
- Meningococcal

Are these diseases very serious?

Yes. Even though we might not think of some diseases as serious because we don't see them as often, vaccine-preventable diseases can still be deadly. For example, before vaccines were routinely given:

- Measles killed hundreds, sometimes thousands, of people a year.
- Diphtheria killed over 10,000 people a year in the 1920s.
- Polio disabled and killed tens of thousands of kids in the 1940s and 1950s.

More common illnesses can be serious as well. Chickenpox hospitalized 12,000 people and killed about 100 people each year before vaccination was available. Rotavirus is the most common form of diarrhea in kids worldwide. It infects almost all U.S. kids by age 5 and is responsible for about 250,000 hospitalizations every year in this country.

Are shots safe?

Yes, shots are safe. The United States has the safest, most effective vaccine supply in its history. Like any medicine, however, they are not 100 percent risk free. Vaccines can sometimes cause mild reactions, like a sore arm or a mild fever. Serious reactions are rare, but they can happen. Your doctor or nurse will talk to you about these before giving a vaccine.

How is vaccine safety monitored?

The CDC monitors the safety of vaccines by:

- Performing high-quality vaccine safety research.
- Making determinations about whether vaccines caused reactions in certain cases and helping to learn about preventable risk factors.
- Identifying vaccine adverse events through public health surveillance

The Vaccine Adverse Event Reporting System (VAERS) is a national vaccine safety surveillance program run by CDC and the Food and Drug Administration (FDA). VAERS serves as an early warning system to detect possible safety issues with U.S. vaccines by collecting information about adverse events (possible side effects or health problems) that occur after vaccination.

How do vaccines work?

When a person gets an infection, the body reacts by producing antibodies. These antibodies fight the disease and help the person recover from the illness. Antibodies stay in the body, even after the disease is gone, and protect the person from getting the same disease again. This is called immunity.

Vaccines work in a similar way, by preparing your child's immune system to fight a disease without actually giving your child the disease. When a child gets a vaccine, her or his body makes antibodies against the disease. These antibodies will recognize and fight the real disease if she or he is ever exposed to it.

Why are vaccines given at such a young age? Why so many at one visit?

Babies will need several vaccinations starting at birth. They need immunizations early and often get several shots at one visit. This is because a baby's immune system is like an eggshell--strong, yet fragile. It's strong because it can handle many immunizations at the same time. It's fragile because when babies get a vaccine-preventable disease they can have serious side effects.

Remember:

- Infants and toddlers are more likely than older kids to become very ill from diseases that vaccines prevent.
- The sooner babies are protected by immunization, the better.
- Only a very small part of a baby's immune system is "used" to make antibodies.
- A baby's immune system can easily handle many vaccines at one visit without being overloaded.
- Vaccines make the immune system stronger.

Why does my baby need so many doses of some vaccines and not as many of others?

The number of doses your baby needs depends on if the vaccine is "live" (but weakened) or "killed" (inactivated). Live vaccines are very effective and usually provide life-long protection with only one or two doses. Killed vaccines need several doses to build immunity. "Boosters" of some vaccines are needed later in life (and sometimes throughout life) to maintain protection. Children should get their first shot at birth, before leaving the hospital (hepatitis B). Then at each well-child visit, they should get more shots, sometimes up to six at one visit. To find the recommended immunization schedule for children aged 0-6 and 7-18 (and for adults 19 and older), [visit CDC's Web site](#).

Are infants completely immune to disease?

No. Newborn babies often have immunity to some diseases because they have antibodies from their mothers (called maternal antibodies). However, maternal antibody immunity is only temporary and may not occur at all if the mother does not have immunity herself.

Do breastfed babies need to be immunized?

Yes. Despite the known benefits of breastfeeding, such as enhanced protection against some colds, ear infections, and diarrhea, breastfeeding does not prevent vaccine-preventable diseases. Unlike vaccines, breastfeeding does not stimulate the infant's own immune system to produce the antibodies needed to fight very specific diseases. Fortunately, vaccines do not interfere with the beneficial immunity gained from breastfeeding, just as breastfeeding does not hinder the effectiveness of immunization.

Why should I immunize my child?

Immunization is the single most important way parents can protect their children against serious diseases. The decision to immunize your child is an important one. Consider the following reasons when making your decision.

Immunize:

- To prevent common but serious illnesses. Some diseases, like pertussis (whooping cough), flu, varicella (chickenpox), and rotavirus, are very common in the U.S. Choosing not to vaccinate is a choice to risk getting a serious and sometimes deadly disease.
- To prevent diseases that still exist. Some diseases, like measles and mumps, still occur in the U.S. at low levels. If fewer people are immunized against these diseases, outbreaks can occur.
- To prevent diseases that are common in other parts of the world. Although some diseases, like polio, are rare or do not exist in the U.S., they are still common in other parts of the world. With frequent international travel, these diseases are literally only a plane ride away.
- To protect others in your family and community. By immunizing your child, you also protect those who:
 - Have weak immune systems.
 - Are not fully immunized.
 - Cannot get shots because of a medical condition or because they are too young or too old.

Will my child get sick if I don't immunize him?

Maybe. If kids are never exposed to any of these diseases, they won't get sick. If unimmunized kids are exposed to any of these diseases, there's a good chance they'll get the disease. What happens then depends on the child and the disease. At the least, kids could get a mild rash and have to stay home from child care or school for a few days. On the other hand, they may become sick enough to be hospitalized, suffer a permanent disability, or die.

If kids get one of these diseases, they could also spread it to other kids who aren't protected. If there are enough unprotected kids in your community, it could lead to an epidemic, with many kids getting sick.

What happens during an outbreak if my child is not immunized?

There is a good chance your child could catch the disease and spread it to others during an outbreak. Your child can be legally excluded from child care and school for the duration of an outbreak of a vaccine-preventable disease that he or she is not immunized against.

What if my child didn't get her shots when she was supposed to, or has gotten behind schedule?

Kids who didn't begin their immunizations at age two months, or who have had only some of their shots, can still be immunized. It's never too late to start getting immunizations! If kids have had only some shots, they don't have to start over--the shots already given will count. Simply continue the schedule where you left off. If you have children who weren't immunized when they were infants, contact your doctor, nurse, or clinic. They can tell you when to bring kids in for which vaccinations.