

# Protecting Your Child Against Serious Diseases

Making Sure Kids Get All Their 'Shots'



Department of Health and Human Services  
Food and Drug Administration  
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(FDA) 02-9019

 **U.S. Food and Drug Administration**

The Food and Drug Administration (FDA) is part of the U.S. government's Department of Health and Human Services. One of the FDA's jobs is to make sure that vaccines are safe and effective.

## Vaccinations are Important

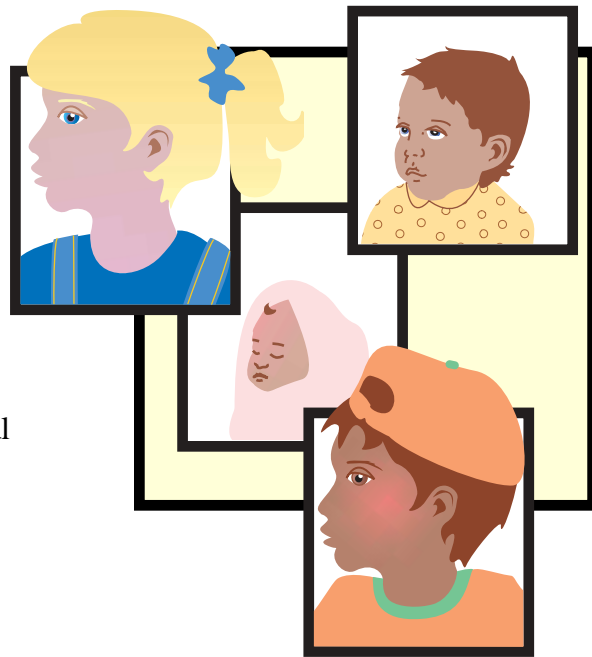
It's important that children get vaccinated—get their “shots”—so they don't get childhood diseases. Your child can be vaccinated at the doctor's office or your local health department. Ask the doctor to give you a list of the shots your child has received. Keep this list so that you have records for school, and so you'll know if your child needs more shots.



Vaccines are available today to protect your child against:

- diphtheria
- whooping cough (pertussis)
- tetanus
- polio
- measles
- mumps
- German measles (rubella)
- chickenpox (varicella)
- hepatitis B
- HIB (haemophilus influenzae type B)
- pneumococcal diseases

In most of the United States, many of these vaccinations are required for school or day care. The first shots for most of these illnesses should be given when the child is still a baby. This is important because most of the diseases these vaccines protect



your child against can be serious or even deadly.

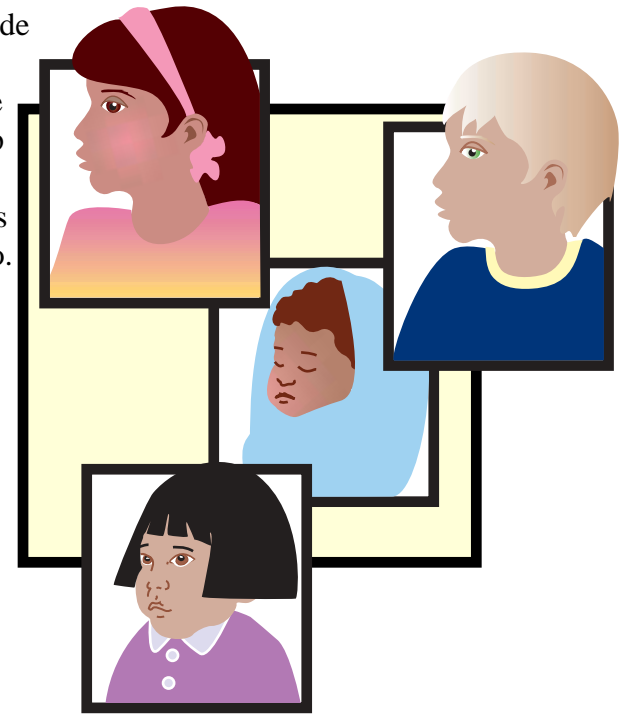
Like any medicine, vaccines carry a small risk of serious harm such as a severe allergic reaction. But side effects from shots are usually mild and last only a short time. Some children have no side effects at all. None of the possible side effects should keep your child from getting shots unless your doctor says so.

Be sure to tell your doctor if anyone in your immediate family has ever had a bad reaction to a vaccine, and ask if there are certain conditions under which vaccination is not recommended.

Also talk to your doctor about whether certain reactions to vaccines can be

controlled, such as by giving your child acetaminophen before or after vaccination.

Here are common vaccinations your child needs, the recommended age to get them, and possible side effects:



## DTaP

**Protects against:** diphtheria, whooping cough (pertussis), and tetanus. The vaccines against these three diseases are combined in a single shot.

Diphtheria is a serious infection of the throat, mouth, and nose, which can lead to suffocation, pneumonia, heart failure, and paralysis.

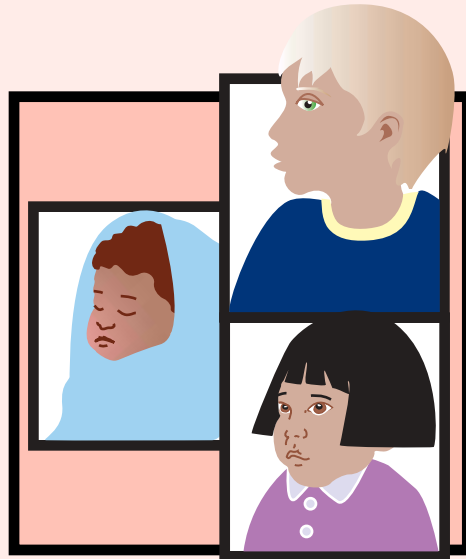
A child who catches whooping cough develops a bad cough that sounds like a “whoop.” The severe coughing can interfere with eating, drinking, and breathing. Whooping cough can be life-threatening, especially in children younger than 1.

Tetanus is caused by germs in dirt and rusty metal that get into the body through a cut. Tetanus attacks the jaw muscles first, often causing lockjaw. It can also affect the muscles used to breathe. It

causes death in 3 out of 10 people who get it.

**Ages to get vaccine:** Shot is given at 2 months, 4 months, 6 months, and 15-18 months, with a booster given between the ages of 4 and 6 years. After that, everyone should get a tetanus booster every 10 years throughout life.

**Possible side effects include:** Fever, soreness where shot is given, irritability. In rare cases, the shot can cause very high fever and convulsions.



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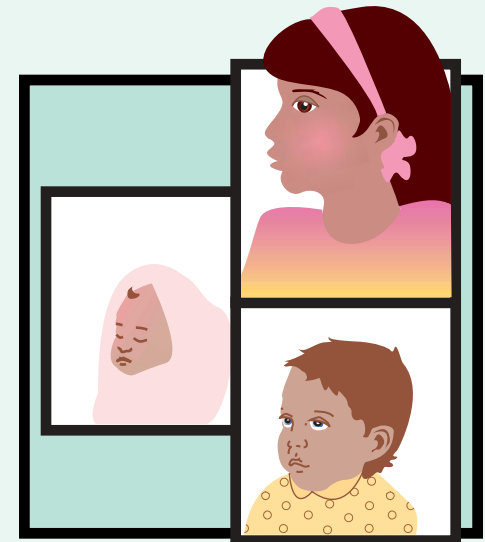
## Polio

**Protects against:** polio, a virus that can cause paralysis and death.

There are two kinds of polio vaccines: the inactivated polio virus (IPV), which is the shot recommended in the United States today, and a live, oral polio virus (OPV). OPV causes polio in a few people and experts believe that using OPV is no longer worth the slight risk, except in limited cases. IPV does not cause polio.

**Ages to get vaccine:** Shot is usually given at 2 months, 4 months, 6-18 months, and at 4-6 years.

**Possible side effects include:** The main side effect of IPV is soreness where the shot is given.



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## MMR

**Protects against:** measles, mumps, and German measles (rubella). The vaccines against these three diseases are combined in a single shot.

Measles is easy to catch and causes a rash, high fever, and cough. Measles can also cause hearing loss, convulsions, brain damage, and death.

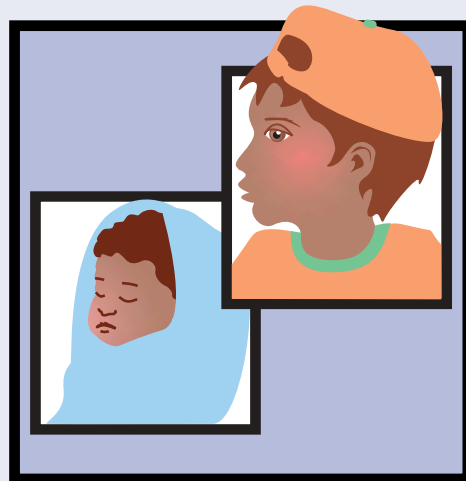
Mumps makes the saliva glands under the jaws swell and hurt. It also usually causes fever and headache, and can have serious complications. It is even more painful for teen-age boys, whose testicles may swell.

German measles is mild in children but can damage the unborn baby if a woman gets it while she is pregnant.

**Ages to get vaccine:** One shot is given at 12-15 months

and another is usually given at 4-6 years. Women who do not know if they are immune to rubella can be tested to see if they are. If they have no immunity they should get the rubella vaccine more than three months before they plan to get pregnant.

**Possible side effects include:** Pain where the shot is given and a rash. The shot can also cause swollen glands or mild joint pain, but these are rare.



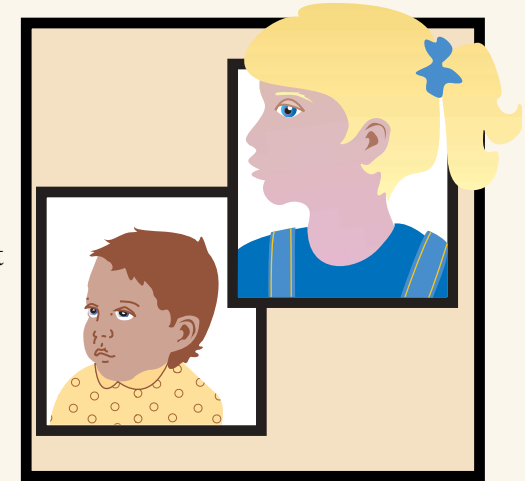
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## Chickenpox

**Protects against:** chickenpox, which is usually a mild disease that causes an itchy rash and fever. But some children experience serious complications.

**Ages to get vaccine:** One shot is given for children between the ages of 12 months and 12 years. It is recommended that children receive the shot at 12 to 18 months of age. Adults and adolescents older than 13 who have not had chickenpox get two shots, at least 4-8 weeks apart.

**Possible side effects include:** Pain where the shot is given, rash, fever.



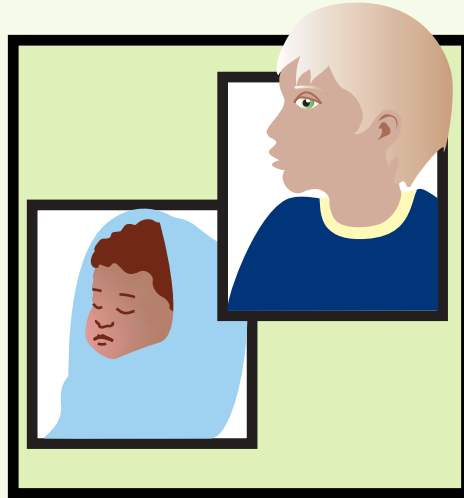
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## Hepatitis B

**Protects against:** hepatitis B, a disease of the liver caused by the hepatitis B virus. It can cause lifelong liver problems or death.

**Ages to get vaccine:** For babies, three shots are given before 18 months of age. Older children, adolescents, and adults who didn't get the shot when they were babies can get the first shot any time, a second shot 1-2 months later, and a third shot 4-6 months after the first shot.

**Possible side effects include:** Soreness where the shot is given and fever.

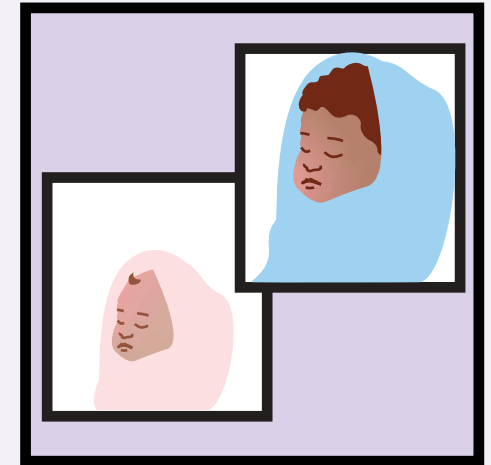


## HIB

**Protects against:** *Haemophilus influenzae* type b, an infection that can seriously harm a child's brain, blood, bones, throat, and the area around the heart.

**Ages to get vaccine:** Shot is given at 2 months, 4 months, 6 months, and 12-15 months.

**Possible side effects include:** Soreness where the shot is given and fever.

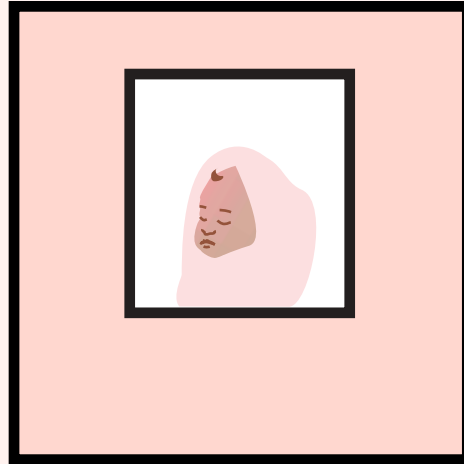


## Pneumococcal conjugate

**Protects against:** invasive pneumococcal diseases, which can cause brain damage and death.

**Ages to get vaccine:** Shot is given at 2 months, 4 months, 6 months, and 12 to 15 months.

**Possible side effects include:** Soreness where the shot is given and mild fever.



## Reporting Injuries Caused by Vaccines

When there are side effects from childhood vaccinations, they are usually mild. But because there have been rare reports of more serious side effects, Congress passed the National Childhood Vaccine Injury Act in 1986. This law set up a way for people to report side effects that they believe are associated with the vaccine, and a way for families to be compensated for injuries related to vaccines.

The FDA encourages you to report unexpected problems after vaccines to your doctor and the FDA's Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967. Also visit [www.fda.gov/cber/vaers/vaers.htm](http://www.fda.gov/cber/vaers/vaers.htm).

For more information about The National Vaccine Injury Compensation Program, call 1-800-338-2382, or visit [www.bhpr.hrsa.gov/vic/](http://www.bhpr.hrsa.gov/vic/).

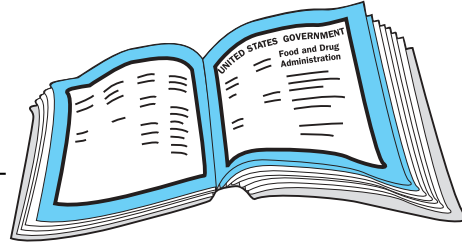
## More Vaccine Resources

The U.S. Department of Health and Human Services  
National Vaccine Program Office  
[www.cdc.gov/od/nvpo/](http://www.cdc.gov/od/nvpo/)

The Centers for Disease Control and Prevention  
National Immunization Program  
[www.cdc.gov/nip/](http://www.cdc.gov/nip/)

National Immunization Hotline  
1-800-232-2522 (English),  
1-800-232-0233 (Spanish)

The FDA may have an office near you. Look for the number in the blue pages of the phone book. You can also contact the FDA through its toll-free number, 1-888-INFO-FDA (1-888-463-6332). Or, visit the FDA's Web site at [www.fda.gov](http://www.fda.gov).



Recommended Childhood Immunization Schedule United States, January-December 2001												
Vaccine	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	24 months	4-6 years	11-12 years	14-18 years
Hepatitis B		1st dose	2nd dose			3rd dose					catch up	
Diphtheria, Tetanus, Pertussis			1st dose	2nd dose	3rd dose		4th dose			5th dose	Td	
H. influenzae type b			1st dose	2nd dose	3rd dose	4th dose						
Inactivated Polio			1st dose	2nd dose	3rd dose					4th dose		
Pneumococcal Conjugate			1st dose	2nd dose	3rd dose	4th dose						
Measles, Mumps, Rubella						1st dose				2nd dose	catch up	
Varicella (Chickenpox)						1 dose					catch up	
Hepatitis A										1 dose (in selected areas)		

Source: The Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians (AAFP).

Bars indicate recommended ages for shots. Any dose not given at the recommended age should be given as a “catch up” shot at a following visit. For the complete details, visit the Web site [www.cdc.gov/nip/](http://www.cdc.gov/nip/).