

Routine Baby Vaccines

Vaccine	Number of Doses	Recommended Ages	Other Information
DTaP (diphtheria, tetanus, pertussis)	5	2 months, 4 months, 6 months, 15-18 months, 4-6 years	Some children should not get pertussis vaccine. These children can get a vaccine called DT.
Hepatitis B	3	Birth, 1-2 months, 6-18 months	Children may get an additional dose at 4 months with some "combination" vaccines.
Polio	4	2 months, 4 months, 6-18 months, 4-6 years	
Hib (<i>Haemophilus influenzae</i> type b)	3 or 4	2 months, 4 months, (6 months), 12-15 months	There are 2 types of Hib vaccine. With one type the 6-month dose is not needed.
PCV13 (pneumococcal)	4	2 months, 4 months, 6 months, 12-15 months	Older children with certain chronic diseases may also need this vaccine.
Rotavirus	2 or 3	2 months, 4 months, (6 months)	Not a shot, but drops that are swallowed. There are 2 types of rotavirus vaccine. With one type the 6-month dose is not needed.

Annual **flu vaccination** is also recommended for children 6 months of age and older.

Precautions

Most babies can safely get all of these vaccines. But some babies should not get certain vaccines. Your doctor will help you decide.

- A child who has ever had a serious reaction, such as a life-threatening allergic reaction, after a vaccine dose should not get another dose of that vaccine. *Tell your doctor if your child has any severe allergies, or has had a severe reaction after a prior vaccination.* (Serious reactions to vaccines and severe allergies are rare.)
- A child who is sick on the day vaccinations are scheduled might be asked to come back for them.

Talk to your doctor . . .

- . . . before getting **DTaP vaccine**, if your child ever had any of these reactions after a dose of DTaP:
 - A brain or nervous system disease within 7 days,
 - Non-stop crying for 3 hours or more,
 - A seizure or collapse,
 - A fever of over 105°F.
- . . . before getting **Polio vaccine**, if your child has a life-threatening allergy to the antibiotics neomycin, streptomycin or polymyxin B.
- . . . before getting **Hepatitis B vaccine**, if your child has a life-threatening allergy to yeast.
- . . . before getting **Rotavirus Vaccine**, if your child has:
 - SCID (Severe Combined Immunodeficiency),
 - A weakened immune system for any other reason,
 - Digestive problems,
 - Recently gotten a blood transfusion or other blood product,
 - Ever had intussusception (bowel obstruction that is treated in a hospital).
- . . . before getting **PCV13** or **DTaP** vaccine, if your child ever had a severe reaction after any vaccine containing diphtheria toxoid (such as DTaP).

Risks

Vaccines can cause side effects, like any medicine.

Most vaccine reactions are **mild**: tenderness, redness, or swelling where the shot was given; or a mild fever. These happen to about 1 child in 4. They appear soon after the shot is given and go away within a day or two.

Other Reactions: Individual childhood vaccines have been associated with other mild problems, or with moderate or serious problems:

DTaP Vaccine

Mild Problems: Fussiness (up to 1 child in 3); tiredness or poor appetite (up to 1 child in 10); vomiting (up to 1 child in 50); swelling of the entire arm or leg for 1-7 days (up to 1 child in 30) – usually after the 4th or 5th dose.

Moderate Problems: Seizure (1 child in 14,000); non-stop crying for 3 hours or longer (up to 1 child in 1,000); fever over 105°F (1 child in 16,000).

Serious problems: Long term seizures, coma, lowered consciousness, and permanent brain damage have been reported. These problems happen so rarely that it is hard to tell whether they were actually caused by the vaccination or just happened afterward by chance.

Polio Vaccine / Hepatitis B Vaccine / Hib Vaccine

These vaccines have not been associated with other mild problems, or with moderate or serious problems.

Pneumococcal Vaccine

Mild Problems: During studies of the vaccine, some children became fussy or drowsy or lost their appetite.

Rotavirus Vaccine

Mild Problems: Children who get rotavirus vaccine are slightly more likely than other children to be irritable or to have mild, temporary diarrhea or vomiting. This happens within the first week after getting a dose of the vaccine.

Serious Problems: Studies in Australia and Mexico have shown a small increase in cases of intussusception within a week after the first dose of rotavirus vaccine. So far, this increase has not been seen in the United States, but it can't be ruled out. If the same risk were to exist here, we would expect to see 1 to 3 infants out of 100,000 develop intussusception within a week after the first dose of vaccine.

What if my child has a serious problem?

What should I look for?

Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever, or behavior changes.

Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, and weakness. These would start a few minutes to a few hours after the vaccination.

What should I do?

- If you think it is a severe allergic reaction or other emergency that can't wait, call 9-1-1 or get the person to the nearest hospital. Otherwise, call your doctor.
- Afterward, the reaction should be reported to the "Vaccine Adverse Event Reporting System" (VAERS). Your doctor might file this report, or you can do it yourself through the VAERS web site at www.vaers.hhs.gov, or by calling 1-800-822-7967.

VAERS is only for reporting reactions. They do not give medical advice.

The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) was created in 1986.

People who believe they may have been injured by a vaccine can learn about the program and about filing a claim by calling **1-800-338-2382**, or visiting the VICP website at www.hrsa.gov/vaccinecompensation.

For More Information

- Ask your doctor or other healthcare professional.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
 - Call **1-800-232-4636 (1-800-CDC-INFO)** or
 - Visit CDC's website at www.cdc.gov/vaccines