## **Routine Childhood Vaccines**

Six vaccines are recommended for children between birth and 6 months of age. They can prevent the 8 diseases described on the previous page. Children will also get at least one "booster" dose of most of these vaccines when they are older.

- DTaP (Diphtheria, Tetanus & Pertussis) Vaccine: <u>5 doses</u> 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**, which does not contain pertussis.
- Hepatitis B Vaccine: 3 doses Birth, 1-2 months, 6-18 months.
- Polio Vaccine: 4 doses 2 months, 4 months, 6-18 months, 4-6 years.
- Hib (Haemophilus influenzae type b) Vaccine: 3 or 4 doses 2 months, 4 months, 6 months, 12-15 months. Several Hib vaccines are available. With one type, the 6-month dose is not needed.
- Pneumococcal Vaccine: 4 doses 2 months, 4 months, 6 months, 12-15 months. Older children with certain diseases may also need this vaccine.
- Rotavirus Vaccine: 2 or 3 doses 2 months, 4 months, 6 months. Rotavirus is an oral (swallowed) vaccine, not a shot. Two rotavirus vaccines are available. With one type, the 6 month dose is not needed.

## **Vaccine Risks**

Vaccines can cause side effects, like any other medicine. Mostly these are mild "local" reactions such as **tenderness**, **redness** or **swelling** where the shot is given, or a **mild fever**. They happen in up to 1 child out of 4 with most child-hood vaccines. They appear soon after the shot is given and go away within a day or two.

More severe reactions can also occur, but this happens much less often. Some of these reactions are so uncommon that experts can't tell whether they are caused by vaccines or not.

Among the most serious reactions to vaccines are **severe allergic reactions** to a substance in a vaccine. These reactions happen very rarely – less than once in a million shots. They usually happen very soon after the shot is given. Doctor's office or clinic staff are trained to deal with them.

The risk of any vaccine causing serious harm, or death, is extremely small. Getting a disease is much more likely to harm a child than getting a vaccine.

#### Other Reactions

The following conditions have been associated with routine childhood vaccines. By "associated" we mean that they appear more often in children who have been recently vaccinated than in those who have not. An association doesn't prove that a vaccine caused a reaction, but does mean it is probable.

## **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 (jerking or staring)(1 child in 14,000); non-stop crying for 3 hours or more (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 very rarely after DTaP vaccine. They are so rare we can't be sure they are caused by the vaccine.

#### Polio Vaccine / Hepatitis B Vaccine / Hib Vaccine

These vaccines have not been associated with mild problems other than local reactions, 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 vaccine. Rotavirus vaccine does not appear to cause any serious side effects.

## **Precautions**

If your child is sick on the date vaccinations are scheduled, your provider may want to put them off until she recovers. A child with a mild cold or a low fever can usually be vaccinated that day. But for a more serious illness, it may be better to wait.

Some children should **not get certain vaccines**. Talk with your provider if your child had a serious reaction after a previous dose of a vaccine, or has any life-threatening allergies. (These reactions and allergies are rare.)

- If your child had any of these reactions to a previous dose of DTaP:
  - A brain or nervous system disease within 7 days
  - Non-stop crying for 3 or more hours
  - A seizure or collapse
  - A fever over 105°F

Talk to your provider before getting DTaP Vaccine.

- If your child has:
  - A life-threatening allergy to the antibiotics neomycin, streptomycin, or polymyxin B Talk to your provider before getting **Polio Vaccine**.
- If your child has:
  - A life-threatening allergy to yeast

Talk to your provider before getting Hepatitis B Vaccine.

- If your child has:
  - A weakened immune system
  - Ongoing digestive problems
  - Recently gotten a blood transfusion or other blood product
  - -Ever had intussusception (an uncommon type of intestinal obstruction)

Talk to your provider before getting Rotavirus Vaccine.

## What if my child has a moderate or severe reaction?

## What should I look for?

Look for any unusual condition, such as a serious allergic reaction, high fever, weakness, or unusual behavior.

Serious allergic reactions are extremely rare with any vaccine. If one were to happen, it would most likely come within a few minutes to a few hours after the shot.

Signs of a serious allergic reaction can include:

- difficulty breathing

- weakness

- hives

- hoarseness or wheezing

dizziness

- paleness

- swelling of the throat

- fast heart beat

## What should I do?

Call a doctor, or get the child to a doctor right away.

Tell your doctor what happened, the date and time it happened, and when the shot was given.

Ask your healthcare provider to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form. Or you can file this report yourself through the VAERS website at www.vaers.hhs.gov, or by calling 1-800-822-7967.

VAERS does not provide medical advice.

# The National Vaccine Injury Compensation Program

A federal program exists to help pay for the care of anyone who has a serious reaction to a vaccine.

For information about the National Vaccine Injury Compensation Program, call 1-800-338-2382 or visit their website at www.hrsa.gov/vaccinecompensation.

## For More Information

Ask your healthcare provider. They can show you the vaccine package insert or suggest other sources of information.

Call your local or state health department.

Contact the Centers for Disease Control and Prevention (CDC) at 1-800-232-4636 (1-800-CDC-INFO).

Visit CDC websites at www.cdc.gov/vaccines and www.cdc.gov/ncidod/diseases/hepatitis.