

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: 5 doses – 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.
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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** childhood 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.