

Vaccine Reactions - Normal

Definition

- A reaction to a recent immunization (vaccine) shot
- Most reactions are at the injection site (such as pain, swelling, redness)
- General reactions (such as a fever or being fussy) also are common

Health Information

Symptoms

- Shot sites can have swelling, redness and pain. Most often, these symptoms start within 24 hours of the shot. They most often last 2 to 3 days. With the DTaP vaccine, they can last up to 7 days. This is a normal reaction to the vaccine, not an infection. It is usually the only side effect of the vaccine.
- In some children, severe swelling can occur with the 4th (15 months) DTaP shot. The swelling can be up to 2 inches (5 cm). Swelling up to 3 inches (7.5 cm) can normally occur with 5th (4 years) dose. This is not an allergic reaction. Future DTaP vaccines are safe to give.
- Any hives and itching around the shot site is normal. It does not mean your child is allergic to the vaccine.
- Fever with most vaccines begins within 24 hours and lasts 1 to 2 days.
- With the MMR and chickenpox shots, fever and rash occurs in 10% of children. These symptoms start later. They usually begin between 1 and 4 weeks.
- Severe allergic reactions are very rare, but can occur with any vaccine. They start within 2 hours.
- **Abnormal reaction:** A secondary bacterial infection at the shot site. This is very rare (less than 1 per 1000). Suspect if the redness or fever begins over 48 hours after the shot was given. Also, be on the lookout for redness or pain that increases after 3 days.

Causes

- The vaccines contain substances that turn on your immune system.
- About 25% of children have a skin reaction to the substances at the shot site.
- This happens most with the DTaP vaccine. However, it can happen with other vaccines, including the flu vaccine.
- It means the vaccine is doing what it is supposed to do.

Care Advice

1. Overview:

- Immunizations (vaccines) protect your child against serious diseases.
- All of these reactions mean the vaccine is working.
- Your child's body is making new antibodies to protect against the real disease.
- There is no need to see your child's doctor for normal reactions. Examples of normal reactions are redness around the shot site and fever. Redness and fever starting on day 1 of the shot is always normal.
- Here is some care advice that should help.

2. **Reaction at Shot Site:**

- **Heat:** For pain at the shot site, use a heating pad. You can also put a warm wet washcloth on the sore shot site. Use for 20 minutes as needed. Can use a cold pack on the day of the shot if your doctor recommends it.
- **No Pain Medicine:** Try not to give any pain medicines for local reactions. They may reduce the body's normal immune response. Use local heat instead.
- **Hives at the Shot Site:** If itchy, can put on 1% hydrocortisone cream. No prescription is needed. Use twice daily as needed.

3. **Fever With Vaccines:**

- Fever with vaccines is normal, harmless and probably helpful. Fevers may improve antibody production.
- Fever with most vaccines begins within 12 hours and lasts 1 or 2 days.
- For low grade fevers 100-102 F (37.8 to 39 C), do not give fever medicines.
- For fevers above 102° F (39° C), can give medicine for discomfort. Give acetaminophen (such as Tylenol). If over 6 months old, can give ibuprofen.
- **For all fevers:** Give extra fluids. Keep your child well hydrated. Fluids can also lower fevers.

4. **General Reactions:**

- General symptoms start at about 24 hours after the shot. They mean the immune system is turned on and doing its job.
- Tiredness: encourage you child to rest or even sleep. The body needs all its energy to build antibodies against the vaccine.
- Muscle aches: take a warm bath or shower.
- Poor appetite or nausea: drink extra fluids. Stay well hydrated.
- Younger children may be more fussy. They will need to be held and comforted more.
- Symptoms usually only last for one or two days.

5. **What to Expect:**

- Most local reactions last 2 or 3 days.
- Most fever lasts 2 days.

Call Your Doctor If

- Redness starts after 2 days (48 hours)
- Redness becomes larger than 2 inches (5 cm)
- Pain or redness gets worse after 3 days
- Pain or redness lasts more than 7 days
- Fever starts after 2 days
- Fever lasts more than 3 days
- You think your child needs to be seen
- Your child becomes worse

Pediatric Care Advice

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