



Vaccines & Immunizations

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Possible Side effects from Vaccines

Any vaccine can cause side effects. For the most part these are minor (for example, a sore arm or low-grade fever) and go away within a few days. Listed below are vaccines licensed in the United States and side effects that have been associated with each of them. This information is copied directly from [CDC’s Vaccine Information Statements \(VISs\)](#), which in turn are derived from the [Advisory Committee on Immunization Practices \(ACIP\) recommendations](#) for each vaccine.

Remember, vaccines are continually monitored for [safety](#), and like any medication, vaccines can cause side effects. However, a decision not to immunize a child also involves risk and could put the child and others who come into contact with him or her at risk of contracting a potentially deadly disease.

Regularly Recommended Vaccines

[VISs en español](#) [↗](#), [other languages](#) [↗](#)

DTaP vaccine side effects (Diphtheria, Tetanus, and acellular Pertussis) [↗](#)

What are the risks from DTaP vaccine?

- Soreness or swelling where the shot was given, fever, fussiness, feeling tired, loss of appetite, and vomiting sometimes happen after DTaP vaccination.
- More serious reactions, such as seizures, non-stop crying for 3 hours or more, or high fever (over 105°F) after DTaP vaccination happen much less often. Rarely, vaccination is followed by swelling of the entire arm or leg, especially in older children when they receive their fourth or fifth dose.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [DTaP VIS](#).

Hepatitis A vaccine side effects [↗](#)

What are the risks from hepatitis A vaccine?

- Soreness or redness where the shot is given, fever, headache, tiredness, or loss of appetite can happen after hepatitis A vaccination.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Hepatitis A VIS](#).

Hepatitis B vaccine side effects

What are the risks from hepatitis B vaccine?

- Soreness where the shot is given, fever, headache, and fatigue (feeling tired) can happen after hepatitis B vaccination.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Hepatitis B VIS](#).

Hib vaccine side effects

What are the risks from Hib (*Haemophilus influenzae* type b) vaccine?

- Redness, warmth, and swelling where the shot is given and fever can happen after Hib vaccination.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Hib VIS](#).

HPV-Gardasil-9 vaccine side effects (Human Papillomavirus Gardasil-9 vaccine)

What are the risks from HPV (Human Papillomavirus) vaccine?

- Soreness, redness, or swelling where the shot is given can happen after HPV vaccination.
- Fever or headache can happen after HPV vaccination.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [HPV \(Human Papillomavirus\)](#).

Influenza (inactivated) vaccine side effects

What are the risks from inactivated influenza vaccine?

- Soreness, redness, and swelling where the shot is given, fever, muscle aches, and headache can happen after influenza vaccination.
- There may be a very small increased risk of Guillain-Barré Syndrome (GBS) after inactivated influenza vaccine (the flu shot).

Young children who get the flu shot along with pneumococcal conjugate vaccine and/or DTaP vaccine at the same time might be slightly more likely to have a seizure caused by fever. Tell your health care provider if a child who is getting flu vaccine has ever had a seizure.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Inactivated Influenza VIS](#).

Influenza (live) vaccine side effects



What are the risks from LAIV?

- Runny nose or nasal congestion, wheezing, and headache can happen after LAIV vaccination.
- Vomiting, muscle aches, fever, sore throat, and cough are other possible side effects.

If these problems occur, they usually begin soon after vaccination and are mild and short-lived.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [LAIV VIS](#).

MMR vaccine side effects (Measles, Mumps, and Rubella)



What are the risks from MMR vaccine?

- Sore arm from the injection or redness where the shot is given, fever, and a mild rash can happen after MMR vaccination.
- Swelling of the glands in the cheeks or neck or temporary pain and stiffness in the joints (mostly in teenage or adult women) sometimes occur after MMR vaccination.
- More serious reactions happen rarely. These can include seizures (often associated with fever) or temporary low platelet count that can cause unusual bleeding or bruising.
- In people with serious immune system problems, this vaccine may cause an infection that may be life-threatening. People with serious immune system problems should not get MMR vaccine.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [MMR VIS](#).

MMRV vaccine side effects (Measles, Mumps, Rubella, and Varicella)

What are the risks from MMRV vaccine?

- Sore arm from the injection, redness where the shot is given, fever, and a mild rash can happen after MMRV vaccination.
- Swelling of the glands in the cheeks or neck or temporary pain and stiffness in the joints sometimes occur after MMRV vaccination.
- Seizures, often associated with fever, can happen after MMRV vaccine. The risk of seizures is higher after MMRV than after separate MMR and varicella vaccines when given as the first dose of the two-dose series in younger children. Your health care provider can advise you about the appropriate vaccines for your child.
- More serious reactions happen rarely, including temporary low platelet count, which can cause unusual bleeding or bruising.
- In people with serious immune system problems, this vaccine may cause an infection that may be life-threatening. People with serious immune system problems should not get MMRV vaccine.

If a person develops a rash after MMRV vaccination, it could be related to either the measles or the varicella component of the vaccine. The varicella vaccine virus could be spread to an unprotected person. Anyone who gets a rash should stay away from infants and people with a weakened immune system until the rash goes away. Talk with your health care provider to learn more.

Some people who are vaccinated against chickenpox get shingles (herpes zoster) years later. This is much less common after vaccination than after chickenpox disease.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [MMRV VIS](#).

Meningococcal ACWY vaccine side effects

What are the risks from meningococcal vaccines?

- Redness or soreness where the shot is given can happen after meningococcal ACWY vaccination.
- A small percentage of people who receive meningococcal ACWY vaccine experience muscle pain, headache, or tiredness.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Meningococcal ACWY VIS](#).

Meningococcal B vaccine side effects



What are the risks from meningococcal vaccines?

- Soreness, redness, or swelling where the shot is given, tiredness, fatigue, headache, muscle or joint pain, fever, chills, nausea, or diarrhea can happen after meningococcal B vaccination. Some of these reactions occur in more than half of the people who receive the vaccine.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Meningococcal B VIS](#).

PCV vaccine side effects (Pneumococcal Conjugate Vaccine)



What are the risks from PCV?

- Redness, swelling, pain, or tenderness where the shot is given, and fever, loss of appetite, fussiness (irritability), feeling tired, headache, muscle aches, joint pain, and chills can happen after pneumococcal conjugate vaccination.

Young children may be at increased risk for seizures caused by fever after a pneumococcal conjugate vaccine if it is administered at the same time as inactivated influenza vaccine. Ask your health care provider for more information.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Pneumococcal Conjugate \(PCV\) VIS](#).

PPSV23 vaccine side effects (Pneumococcal Polysaccharide)



What are the risks from PPSV?

- Redness or pain where the shot is given, feeling tired, fever, or muscle aches can happen after PPSV23.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Pneumococcal Polysaccharide VIS](#).

Polio vaccine side effects



- A sore spot with redness, swelling, or pain where the shot is given can happen after polio vaccination.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [IPV VIS](#).

Rabies vaccine side effects



What are the risks from rabies vaccine?

- Soreness, redness, swelling, or itching at the site of the injection, and headache, nausea, abdominal pain, muscle aches, or dizziness can happen after rabies vaccine.
- Hives, pain in the joints, or fever sometimes happen after booster doses.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Rabies VIS](#).

Rotavirus vaccine side effects



What are the risks from rotavirus vaccine?

- Irritability or mild, temporary diarrhea or vomiting can happen after rotavirus vaccine.

Intussusception is a type of bowel blockage that is treated in a hospital and could require surgery. It happens naturally in some infants every year in the United States, and usually there is no known reason for it. There is also a small risk of intussusception from rotavirus vaccination, usually within a week after the first or second vaccine dose. This additional risk is estimated to range from about 1 in 20,000 U.S. infants to 1 in 100,000 U.S. infants who get rotavirus vaccine. Your health care provider can give you more information.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Rotavirus VIS](#).

Td vaccine (Adult Tetanus & Diphtheria)



What are the risks from Td vaccine?

- Pain, redness, or swelling where the shot was given, mild fever, headache, feeling tired, and nausea, vomiting, diarrhea, or stomachache sometimes happen after Td vaccination.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Td VIS](#).

Tdap vaccine (Combined Tetanus, Diphtheria & Pertussis)

What are the risks from Tdap vaccine?

- Pain, redness, or swelling where the shot was given, mild fever, headache, feeling tired, and nausea, vomiting, diarrhea, or stomachache sometimes happen after Tdap vaccination.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Tdap VIS](#).

Varicella (Chickenpox) vaccine side effects

What are the risks from chickenpox vaccine?

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This information is based on the [Varicella VIS](#).

Yellow Fever vaccine side effects

What are the risks from Yellow Fever vaccine?

- Soreness, redness, or swelling where the shot was given are common after yellow fever vaccine.
- Fever sometimes happens.
- Headache and muscle aches can occur.
- More serious reactions happen rarely after yellow fever vaccine. These can include:
 - Nervous system reactions such as inflammation of the brain (encephalitis) and/or spinal cord covering (meningitis), or Guillain-Barré Syndrome (GBS), among others.
 - Life-threatening severe illness with organ dysfunction or failure.

People 60 years and older and people with weakened immune systems might be more likely to experience serious reactions to yellow fever vaccine.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Yellow Fever VIS](#).

Zoster (Shingles) Vaccine, RZV side effects



What are the risks from shingles vaccine?

- A sore arm with mild or moderate pain is very common after recombinant shingles vaccine. Redness and swelling can also happen at the site of the injection.
- Tiredness, muscle pain, headache, shivering, fever, stomach pain, and nausea are common after recombinant shingles vaccine.

These side effects may temporarily prevent a vaccinated person from doing regular activities. Symptoms usually go away on their own in 2 to 3 days. You should still get the second dose of recombinant shingles vaccine even if you had one of these reactions after the first dose.

Guillain-Barré syndrome (GBS), a serious nervous system disorder, has been reported very rarely after recombinant zoster vaccine.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Shingles VIS](#).

Travel & Special Circumstance Vaccines

Adenovirus vaccine side effects



What are the risks from Adenovirus vaccine?

- Headache, upper respiratory tract infection, stuffy nose, sore throat, abdominal pain, cough, nausea, diarrhea, fever or joint pain can happen after adenovirus vaccine.
- More serious problems including blood in the urine or stool, pneumonia, or inflammation of the stomach or intestines occur rarely after adenovirus vaccination.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

Note: Adenovirus vaccine is approved for use only among military personnel.

This information is based on the [Adenovirus VIS](#).

Anthrax vaccine side effects



What are the risks from anthrax vaccine?

After getting a shot of anthrax vaccine, you may have:

- Tenderness, redness, itching, or a lump or bruise where the shot is given
- Muscle aches or short-term trouble moving your arm
- Headaches or fatigue

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Anthrax VIS](#).

Cholera vaccine side effects



What are the risks from Cholera vaccine?

- Tiredness, headache, abdominal pain, nausea, vomiting, lack of appetite, and diarrhea can happen after cholera vaccine.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Cholera VIS](#).

JE-IXIARO vaccine side effects (Japanese Encephalitis - IXIARO)



What are the risks from Japanese encephalitis vaccine?

- Pain, tenderness, redness, or swelling where the shot was given are common after JE vaccine.
- Fever sometimes happens (more often in children).
- Headache or muscle aches can occur (mainly in adults).

Studies have shown that severe reactions to JE vaccine are very rare.


People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [JE-Ixiaro VIS](#).

Smallpox (Vaccinia) vaccine side effects



This medication guide replaces the Smallpox VIS. It is to be used before one receives the vaccination. [Medical Guide for vaccination with ACAM2000 \[6 pages\]](#)  (10/1/09)

Typhoid vaccine side effects



What are the risks from typhoid vaccine?

- Pain from the shot, redness, or swelling at the site of the injection, fever, and headache, and general discomfort can happen after inactivated typhoid vaccine.
- Fever, headache, abdominal pain, diarrhea, nausea, and vomiting can happen after live typhoid vaccine.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

This information is based on the [Typhoid VIS](#).

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