

The Chickenpox Vaccine:

What Parents Need to Know



Chickenpox (varicella) is a disease affecting most children in the United States before their 10th birthday. Until recently it could not be prevented, only treated. Today, parents can have their children immunized against chickenpox. Vaccinations are an important part of your child's total health care. The chickenpox vaccine can protect your child against a severe case of chickenpox and prevent the discomfort and possible serious complications the disease can cause.

What is this disease?

Chickenpox is one of the most common childhood diseases. It is usually mild and not life-threatening to healthy children. The most obvious sign of chickenpox is a skin rash that develops on your child's scalp and body, then spreads to the face, arms, and legs over a period of 3 to 4 days. The rash forms between 250 to 500 itchy blisters that dry up into scabs 2 to 4 days later. School-age children often get a mild fever for 1 or 2 days before the rash appears. Other symptoms of chickenpox are:

- coughing
- fussiness
- loss of appetite
- headaches

Chickenpox can easily be spread in any of the following ways:

- by direct contact with an infected person, usually through fluid from broken blisters
- through the air when an infected person coughs or sneezes
- through direct contact with lesions (sores) from a person with shingles (see section on shingles)

A person with chickenpox is contagious from 1 to 2 days before the rash starts and for up to 5 days after the rash appears. A child will have to stay home from child care or school until she is no longer contagious. An adult or child who has never had chickenpox is at risk of getting it and may not show symptoms for 10 to 21 days after being exposed to the virus. Within households, 80% to 90% of at-risk persons will develop chickenpox if they are exposed to a family member who has it.

Who gets chickenpox?

Before the vaccine became available, there were about 4 million cases of chickenpox in the United States each year. Anyone can get chickenpox at any age, but it occurs most frequently in children from ages 6 to 10.

Chickenpox can occur at any time of the year. Peak times are in the winter and early spring, especially in moderate climates.

What is the treatment for chickenpox?

You may remember how itchy chickenpox was when you were a child. If your child scratches the blisters before they are able to heal, they can become infected, turn into small sores, and possibly leave scars. Discourage your child from scratching and keep his fingernails trimmed short just in case.

Oatmeal baths can help relieve itching and acetaminophen may help reduce your child's fever. Acetaminophen is a substitute for aspirin. Do not give your child aspirin or salicylate (a compound found in aspirin). They have been associated with Reye's syndrome, a disease that affects the liver and brain. If your child's fever lasts longer than 4 days, rises above 102° F after the third day of having chickenpox, or your child becomes dehydrated, call your pediatrician. Also let your pediatrician know if the rash gets very red, warm, or tender. It may mean your child has an infection and needs other treatment.

The drug acyclovir can help make a case of chickenpox less severe. Acyclovir is most often used for patients who are at risk of developing severe chickenpox, such as adolescents; children with certain skin or lung diseases; and children taking other prescribed medications, such as steroids. To be effective, acyclovir must be given within the first 24 hours of the onset of the chickenpox rash. You may want to discuss the use of acyclovir with your pediatrician.

Can chickenpox cause complications?

Most healthy children who get chickenpox won't have any complications from the disease. However, each year in the United States, about 9,000 people are hospitalized for chickenpox and about 90 people die from the disease.

The most common complication from chickenpox is a bacterial infection of the skin. The next most common problems are pneumonia and encephalitis, an infection of the brain. The following groups of people are at higher risk of developing these problems:

- people who have weak immune systems or low resistance to disease
- infants under 1 year of age
- adolescents and adults
- newborns whose mothers had chickenpox around the time of delivery
- premature infants whose mothers have not had chickenpox
- children with eczema and other skin conditions
- children receiving therapy with salicylate (a compound found in aspirin)

When an adult gets chickenpox, the disease is usually more severe, often developing into pneumonia. Adults are almost 10 times more likely to be hospitalized for chickenpox than children under 14 years of age, and adults are more than 20 times more likely to die from the disease. If a pregnant woman gets chickenpox, her unborn baby may have complications.

What is "shingles"?

Once someone has had chickenpox, the virus stays in the body of the infected person permanently. Later in life, the virus can reappear and cause shingles. Shingles can occur at any age, but usually occur after a person is 50 years old. About 10% to 20% of all people who have had chickenpox develop shingles. People with shingles typically feel numbness and itching or severe pain in the skin areas where the affected nerve roots are. Within 3 to 4 days, clusters of blister-like sores develop and last for 2 to 3 weeks.

When should my child get the chickenpox vaccine?

The American Academy of Pediatrics recommends a single dose of the chickenpox vaccine for all children between 12 and 18 months of age who have not had chickenpox. Older children should be immunized at the earliest opportunity, also with a single dose. For healthy children older than 13 who have not had chickenpox and have never been immunized against the disease, two doses of the vaccine are required, 4 to 8 weeks apart.

What are the benefits of vaccinating my child against chickenpox?

Although chickenpox is usually mild, vaccinating all children at age 1 can prevent serious medical problems and reduce the costs related to the disease. Chickenpox can be expensive and inconvenient. Parents may have to miss work while their children are home from school or child care. In the average household, a child with chickenpox misses 8 or 9 days of school, and adult caretakers lose up to 2 days of work.

Immunization with the chickenpox vaccine will prevent most children from getting chickenpox. If vaccinated children do get chickenpox, they generally have a much milder form of the disease. They have fewer skin lesions (15 to 32), a lower fever, and recover more quickly. In fact, the disease may be so mild that the skin lesions look like insect bites. Even so, vaccinated children with a mild case of chickenpox can still infect others at risk of getting chickenpox.

Currently, revaccination with the chickenpox vaccine is not recommended. However, studies are underway to determine how long protection from the vaccine lasts and whether a person will need revaccination in the future.

Is the vaccine safe?

Before becoming available, a chickenpox vaccine was tested in over 9,400 healthy children and over 1,600 adults in the United States. Since the chickenpox vaccine was licensed in 1995, several million doses of vaccine have been given to children in the United States. Studies continue to show the vaccine to be safe and effective.

Side effects from the chickenpox vaccine generally are mild and include:

- redness
- stiffness
- soreness
- tiredness
- fussiness
- fever
- nausea
- swelling where the shot was given

Also, in a small percentage of people who are vaccinated, 7%–8%, a rash of several small bumps or pimples may develop at the spot where the shot was given or on other parts of the body. This can occur up to 1 month after immunization and can last for several days.

Your child can get the chickenpox vaccine at the same time he or she gets the measles-mumps-rubella (MMR) vaccine. *If your pediatrician doesn't give your child the chickenpox and MMR vaccines at the same time, your child should wait at least 1 month between each vaccine.* Otherwise, your child can get the vaccine for chickenpox at the same time or at any time before or after vaccines for diphtheria, tetanus, pertussis (DTP), polio, hepatitis B, and *Haemophilus influenzae type b*.

Who should NOT receive the vaccine?

Although the chickenpox vaccine is approved for use in healthy children, there are certain groups of people who should not receive it, such as:

- children with a weakened immune system
- children with a life-threatening allergy to gelatin or the antibiotic neomycin
- pregnant women

Talk to your pediatrician about whether your child falls into any of the high-risk categories and should not be vaccinated against chickenpox.

The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.

From your doctor

American Academy
of Pediatrics



The American Academy of Pediatrics is an organization of 57,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety, and well-being of infants, children, adolescents, and young adults.

American Academy of Pediatrics
PO Box 747
Elk Grove Village, IL 60009-0747
Web site — <http://www.aap.org>

Copyright ©1995, Updated 2/99
American Academy of Pediatrics