

# Chickenpox FactSheet

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Chickenpox was once considered a rite of passage for most children. And for many, this common and highly contagious disease—characterized by red, itchy spots on the skin—still occurs in childhood. In fact, it's estimated that about 4 million Americans, mostly children, contract chickenpox each year. Yet adults also can become infected. Employees such as teachers of young children, child care workers, and health care workers are at a higher risk of exposure to chickenpox.

Chickenpox is caused by the varicella-zoster virus, a type of herpes virus. This virus is easily spread from person to person through the air and physical contact. Outbreaks of chickenpox are common in late winter and early spring—periods of moderate temperatures when viruses thrive.

Most people think of chickenpox as a mild disease—and, for most, it is. In otherwise healthy children, chickenpox lasts 2 weeks or less and rarely causes complications. But for adults who've never been in contact with the virus and get sick later in life, chickenpox can be serious. Complications from chickenpox can result in hospitalization and can even be life-threatening.

Until 1995—when a vaccine to prevent chickenpox became available—nearly everyone developed chickenpox in childhood. Today, children are routinely immunized against chickenpox. Vaccination against chickenpox is expected to greatly reduce the number of current and future cases.

Signs and Symptoms of Chickenpox Include:

- Red, itchy rash. The best-known sign of chickenpox is a red, itchy rash that breaks out on the face, chest, back and—to a lesser extent—the arms and the legs. The rash usually appears a little less than 2 weeks after exposure to the virus and begins as superficial spots. These spots quickly turn into small blisters that break open and crust over. New spots continue to appear 5 to 7 days after the first spots, repeating the process. Itching may be mild or intense. If the disease spreads from child to child or child to adult within a family, the intensity and extent of the rash may increase.

- Fever. A fever may begin 1 or 2 days before the rash. It's usually less than 101 F but may reach as high as 106 F—a sign to see a doctor.
- Runny nose, dry cough and irritability. All of these may precede the rash.
- Fatigue, weakness and mild headache. All of these may accompany the rash.



In otherwise healthy individuals, chickenpox usually runs its course in about 2 weeks.

## Risk Factors

Chickenpox is highly contagious to those not immune to it and spreads quickly in child-care facilities, schools, and within families. The virus is transmitted by direct contact with the rash or by droplets dispersed into the air by coughing or sneezing.

A person who has chickenpox can transmit the virus for up to 48 hours before the telltale rash appears and remains contagious until all spots crust over.

People who've been vaccinated against chickenpox are immune to the virus. Anyone who has had chickenpox is immune to future exposures. Those people at risk of contracting chickenpox include anyone who hasn't been vaccinated or who has never had the disease.

Chickenpox is normally a mild disease. But it can be serious and lead to complications in these high-risk groups:

- newborns and infants;
- teenagers;
- adults;
- pregnant women; and
- people whose immune systems are impaired by disease or suppressed by drugs.

The most common health complication from chickenpox is a bacterial infection of the skin. The next most common health problems are pneumonia and en-

cephalitis—inflammation of the brain—both of which can be very serious if not treated.

Chickenpox early on in pregnancy can result in birth defects, such as limb deformities. A great threat to the baby, though, occurs when the mother develops chickenpox a week before birth. Then it can cause a serious, life-threatening infection in the newborn. A pregnant woman who's not immune to chickenpox and has prolonged exposure to a person with the disease should consult with her physician about the risk to herself and her unborn child.

A doctor can easily diagnose chickenpox by examining the characteristic rash and by noting the presence of other symptoms. Contact a doctor if a rash develops and one or more of the following occur:

- the rash involves the eye;
- the rash gets very red, warm or tender, indicating a possible skin infection; or
- the rash is accompanied by a fever higher than 103 F, dizziness, disorientation, rapid heartbeat, shortness of breath, tremors, loss of muscle coordination, worsening cough, vomiting or stiff neck.

Infants, teenagers and adults who aren't immune to chickenpox should see a doctor if they're exposed to or develop chickenpox because of possible complications that can accompany the illness.

No one with chickenpox - child or adult - should receive any medicine containing aspirin, because this combination has been associated with a disease called Reye's syndrome.

## Complications

Anyone who has had chickenpox as a child is at risk for a latent complication called shingles. After an infection, some of the varicella-zoster virus may remain and hide in nerve cells. Many years later, the virus can reactivate and resurface as shingles - a painful band of short-lived blisters. About one in five adults who've had chickenpox experience shingles, usually after age 50. Children can develop shingles, but do so less often than adults do. Rarely can a person with shingles pass along the chickenpox virus to others who aren't immune.

Shingles can lead to its own complication - a condition in which the pain of shingles persists long after the blisters disappear. This complication, called postherpetic neuralgia, isn't contagious.

## Chickenpox Vaccine

The use of the varicella virus vaccine (Varivax) is the best way to prevent chickenpox. The vaccine has been available for use in the United States since 1995. According to the Centers for Disease Control and Prevention (CDC), the vaccine protects 90 to 100 percent of people who receive it.

Those advised by the CDC to receive the chickenpox vaccine include:

- infants - the ideal time is between 12 and 18 months of age, as part of a routine immunization schedule
- children; and
- teenagers and adults who've never had chickenpox or been vaccinated.

If you don't remember whether you've had chickenpox, a blood test can determine your immunity.

The vaccine is given in one dose to children 1 to 13 years of age. Those who are older are given two doses, 4 to 8 weeks apart. Protection is believed to last at least 10 to 20 years and perhaps longer, but it's unclear whether a booster shot may be necessary later in life. Many vaccines require booster doses. Time and study of the vaccine will tell if Varivax is one of them.

The vaccine isn't approved for use in pregnant women, people with weakened immunity or people who are allergic to gelatin or the antibiotic neomycin. Consult your doctor for more information about the varicella vaccine. Women who are planning on becoming pregnant should be up-to-date on their vaccinations before conceiving a child.

Studies continue to show the vaccine to be safe and effective. Side effects are generally mild and include redness, soreness, fatigue, nausea and, rarely, small bumps at the site of the shot.

If you've had chickenpox, you don't need the vaccine. You're immune to future exposures for life. However, it may be possible that if you had a very mild infection as a child that your body may not have built up an adequate amount of antibodies to prevent a second infection. Or you may assume that you had chickenpox as a child when you actually didn't, putting you at risk of infection later in life.

## Self-Care

To help ease the symptoms of uncomplicated chickenpox, follow these simple self-care measures:

- Don't scratch. Scratching can slow healing of the sores, cause scarring and increase the risk that the

sores will become infected. If itching is particularly severe or irritating, you may want to talk to your doctor about using an over-the-counter antihistamine for relief.

- Take baths. Cool baths every 3 to 4 hours also can help relieve itching. Sprinkle uncooked oatmeal or baking soda in the bath water for added relief.
- Apply lotion. Applying calamine lotion to the spots may help relieve the itching.
- Rest and eat a bland diet, if necessary. Getting plenty of rest is helpful in getting over any infection. If chickenpox sores develop in the mouth, switch to a diet of soft, bland foods. Spicy, acidic or hard and crunchy foods can be irritating to mouth sores.

- Treat a fever. Fever can be reduced with acetaminophen (Tylenol, others). But medications such as acetaminophen and ibuprofen (Advil, Motrin, others) are not antiviral. Don't give aspirin to anyone with chickenpox because it can lead to a serious disease called Reye's syndrome. Lukewarm - not cold - baths also can help bring down a fever.

We recommend consulting with your primary health care provider if you have questions or need medical assistance. This fact sheet was produced with information from the National Institute of Allergy and Infectious Diseases, the Centers for Disease Control, Mayo Clinic, and the Texas Department of Insurance, Division of Workers' Compensation.

Remember to practice safety. Don't learn it by accident.