

# ChickenPox

## Diagnosis:

Chickenpox is a highly contagious illness that is common particularly in children. Chickenpox causes a red, itchy rash on the skin that usually appears first on the abdomen, back or face and then spreads to almost everywhere else in the body, including the scalp, mouth, nose, ears and genitals. The diagnosis is made by observing the symptoms and the typical appearance of the rash. Symptoms usually go away, but due to the infection being very contagious, the patient should stay at home and rest until the symptoms are gone and until the blisters are fully dried.

## Disease causing organism:

Chickenpox is caused by the varicella zoster virus (VZV). Children can be protected from VZV by getting the chickenpox vaccine, which significantly lowers a child's chances of getting chickenpox. A person usually has only one episode of chickenpox, but the varicella zoster virus can lie dormant within the body and cause a different type of skin eruption later in life called shingles.

## Symptoms:

Chickenpox causes an itchy rash of spots that look like blisters to appear all over the body and may be accompanied by flu-like symptoms. The rash begins as multiple small, red bumps that look like pimples or insect bites. They soon develop into thin-walled blisters filled with clear fluid, which becomes cloudy. The blister wall breaks, leaving open sores, which finally crust over to become dry, brown scabs. The number of blisters differs greatly from one person to another. The rash may be more extensive or severe in children who have skin disorders such as eczema. Before the rash appears children may have fever, abdominal pains, sore throat, headache, or may feel quite sick. These symptoms may last for a few days continuing through out the illness. Younger children often have milder symptoms and fewer blisters than older children or adults. Typically, chickenpox is a mild illness but can affect people with weak immune systems more severely. Some people can develop serious bacterial infections involving the skin, lungs, bones, joints, and the brain (encephalitis). Even children with normal immune systems can occasionally develop complications, most commonly a skin infection near the blisters. These symptoms are mild in young children. Chickenpox lasts 7 to 10 days in children and longer in adults. Adults can feel very ill and take longer to recover. They are also more likely than children to suffer complications.

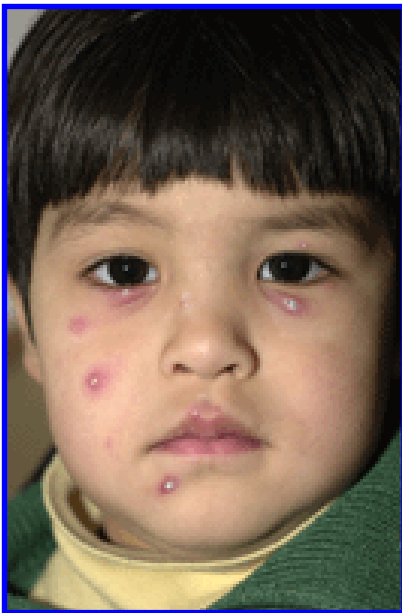


### Type of transmission:

Chickenpox is a highly contagious disease and is spread in fine droplets of moisture, which contain the virus. The droplets are produced when the infected person coughs or sneezes, when another person then inhales these droplets they may become infected. The viral infection can also be transferred from one person to another through direct contact with the broken chickenpox blisters. The incubation period between being infected with chickenpox until the disease breaks out and symptoms appear is 10 to 20 days. If you have chickenpox you should avoid contact with newborn babies, people with a low and weak immune system (e.g. those with cancer or advanced H.I.V.) and pregnant women who have not had chickenpox before (babies could be born with birth defects) as these people can't fight infection as well as those with a healthy immune system. To help keep the virus from spreading, people must wash their hands frequently, particularly before eating and after using the bathroom. Also a child with chickenpox should be kept away from unvaccinated siblings as much as possible.

### Treatment:

The treatment of this viral disease mostly consists of easing the symptoms. An infected person will be contagious until new blisters have stopped appearing and until all the blisters have scabs



therefore they should stay at home while they are infectious. You must ensure that the nails are cut short or make the patient wear gloves to avoid scratching the blisters because of the risk of infection. Antibiotics may then be required if the sores become infected by bacteria, this is quite common among children because they often scratch and pick at the blisters. In addition keeping the patient in cold surroundings reduces heat and sweat as this may make the itching worse. Applying Calamine lotion will also help to relieve the itching. In attacks of chickenpox where the itching is very serious that the persons sleep is totally disturbed, antihistamine medicines with a heavily sedative effect (for allergic reactions) can be used. Furthermore in serious cases of chickenpox the doctor may prescribe antiviral medicine such as acyclovir for people with a weak immune system and who are at

risk of complications during the disease. The drug can make the infection less severe and must be given within the first 24 hours after the rash appears. Acyclovir can have significant side effects, so it is only given when necessary. Overall, paying attention to personal hygiene also helps to avoid any secondary infection such as disposing materials which have come in contact with the patient's infected blisters.

### Prevention:

Those who are exposed to the varicella zoster virus and at risk of catching the disease can be given an injection of varicella-zoster-immunoglobulin to boost their immunity. Doctors recommend that children receive the chickenpox vaccine when they are 12 to 18 months old. A common side

effect of this vaccine is redness, swelling or pain at the place where the needle went into the arm or leg. The chickenpox vaccine significantly lowers a child's chances of getting chickenpox, but they may still develop shingles later. The vaccine is about 70% to 85% effective at preventing mild infection, and more than 95% effective in preventing moderate to severe forms of the infection. Although the vaccine works fairly well, some children who are immunized will still get chickenpox, however they will have much milder symptoms than those who haven't had the vaccine before. Healthy children who have had chickenpox do not need the vaccine they usually have lifelong protection against the illness.

### Prognosis:

Most people manage to overcome and be cured of this viral disease. Nonetheless, in very rare cases, chickenpox can result in complications such as meningitis, encephalitis, inflammation of the heart or Reye's syndrome. Once a person has had chickenpox, they will have immunity to the disease for the rest of their life as their white blood cells will recognize the pathogen the next time it enters your body and then produce the right amount of antibodies very quickly to kill the pathogen before it can affect you. Occasionally scars may remain at the site of the blisters. After the chickenpox infection, the varicella zoster virus can remain inactive in nerve cells near the spinal cord and reactivate later as shingles, which can cause tingling, itching, or pain followed by a rash with red bumps and blisters. Shingles is sometimes treated with antiviral drugs, steroids and pain medications.



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