CHICKENPOX

WHAT IS IT?
Chickenpox is a highly contagious infection caused by the varicella-zoster virus. It occurs most frequently in the late winter and early spring. The illness is typically mild and characterized by an itchy rash that develops into blisters. Serious complications are rare but are more likely to occur in infants, adults, pregnant women, and people with weakened immune systems.

WHO GETS IT?
Before the chickenpox vaccine became available in 1995, chickenpox was a common childhood illness, with 90% of cases occurring in children under 10 years of age. Since the arrival of the vaccine, cases of chickenpox have become relatively rare.

If you had chickenpox as a child, it is very unlikely for you to get chickenpox again. This is because the initial infection makes your body immune to reinfection with the varicella-zoster virus. However, since this virus remains in the body after infection, it can become reactivated years later in the form of shingles, which presents as a painful rash. Please refer to the “Shingles” fact sheet for more information.

HOW IS IT SPREAD?
The chickenpox virus is highly contagious and can be transmitted:
- By direct contact with the blisters, saliva, or mucus of an infected person. Blisters that are dry and crusted cannot spread the virus.
- Through the air by coughing and sneezing.

WHAT ARE THE SYMPTOMS?
It usually takes 10-21 days after exposure to the virus for symptoms to develop. Symptoms are typically more severe in adults than in children.
- The illness begins with flu-like symptoms, such as fever, body aches, headache, sore throat, fatigue, and loss of appetite.
- This is followed within 1-3 days by a rash that progresses in a typical fashion:
  - Little red spots first appear on the trunk (i.e., the chest, back, stomach), then spread to the face, arms, and legs.
  - The spots turn into bumps that develop into fluid-filled blisters. New blisters usually stop forming by day 4 of the rash.
  - Itchy scabs form after the blisters break open and crust over. Typically, blisters are scabbed over by day 6. Once the blisters scab, the person usually feels better and the fever resolves.
- A person with chickenpox typically has skin lesions in different stages of development scattered all over the body.
- In some cases, the rash may extend into the mouth, eyes, genitals, or other mucous membranes, causing extreme discomfort.

FOR HOW LONG AM I CONTAGIOUS?
You can infect others beginning 2 days before the rash appears and continuing until all the blisters have crusted over. People with a weakened immune system may be contagious for a longer period of time.

Complete crusting of blisters may take up to 5 days in mild cases and 10 days in more severe cases.

WHAT ARE POSSIBLE COMPLICATIONS?
Although complications are rare, adults are 5-10 times more likely than children to experience them.
- The most common complication is pneumonia, occurring in nearly 20% of adults with the disease.
- Less common complications include bacterial infections of the blisters (from scratching), encephalitis (inflammation of the brain), and Reye’s syndrome.
- Reye’s syndrome is a potentially fatal disorder that is linked to aspirin use while recovering from a viral illness. It is primarily a childhood illness but can occur at any age. Symptoms include nausea, vomiting, headache, delirium, and combativeness, which can progress to coma.

Pregnant women who are not immune to chickenpox should contact their medical provider immediately if they have symptoms of chickenpox or if they are exposed to someone with chickenpox or shingles because:
- A chickenpox infection early in pregnancy can result in severe birth defects.
- Babies infected just before or after delivery can develop a potentially fatal form of chickenpox.
HOW IS IT TREATED?

■ Antiviral Medications

- Acyclovir (Zovirax) and valacyclovir (Valtrex) are antiviral medications commonly used in the treatment of chickenpox. These medications cannot cure the infection but are effective in decreasing the severity and duration of symptoms.
  - Antiviral medications are most effective when started within 24 hours of developing the rash but may be initiated after 24 hours if skin lesions are still developing.
  - Adults should receive antiviral treatment because of their increased risk for complications.

■ Skin Care

- Apply cool compresses, diluted Burrow’s solution, or calamine lotion directly to the blisters to dry them out and improve itching and discomfort. Burrow’s solution is available by prescription at Student Health or over-the-counter in local pharmacies.
- Soak in a tub full of water in which you have dissolved Aveeno oatmeal powder or Burrow’s solution. Bathing with Aveeno oatmeal soap can also be helpful.
- An oral antihistamine can decrease itching. Non-sedating antihistamines available over-the-counter include cetirizine (Zyrtec), fexofenadine (Allegra), and loratadine (Clarin). Diphenhydramine (Benadryl) is sedating and a good option at bedtime for night-time symptoms.
- **AVOID SCRATCHING!** Scratching can cause scars and lead to secondary bacterial skin infections.

■ Other Self-Care Measures

- Use acetaminophen (Tylenol) and/or ibuprofen (Advil or Motrin) to treat fevers, body aches, and headaches. Follow the package directions for safe use. Take ibuprofen with food to avoid an stomach upset. If your fever does not improve with regular use of fever-reducers, it is important to return to clinic for further evaluation.
- **DO NOT TAKE ASPIRIN** due to the risk of developing Reye’s syndrome (see “Complications” above).
- Get good rest so that your body has the energy to fight off the virus. Sleep 8-10 hours per night, and avoid overexerting yourself physically and mentally.
- Drink plenty of fluids to prevent dehydration and reduce headaches. Try pedialyte, gatorade, juices, non-caffeinated sodas, and soups. High-calorie fluids can replace solid foods for a few days if you do not feel like eating.

■ Isolation

- Due to the high risk of infecting others, you may not attend class, work, and/or clinical rotations until all blisters are fully crusted over. The average absence is 7 days.
  - You must schedule an appointment with a medical provider to receive written authorization to return to class or work. Please coordinate your visit with our receptionist or triage nurse so that you can be escorted into clinic through an entrance other than the lobby.
- It is especially important to stay away from babies, pregnant women, the elderly, and anyone with a chronic medical condition or weakened immune system because of the increased risk of complications if infection occurs.
- Avoid public places where there are lots of people (eg. grocery stores, cafeterias, etc.).
- Eat your meals in your room.
- Wash your hands frequently and thoroughly.
- Cover your mouth and nose when you cough or sneeze.

SEE YOUR HEALTH CARE PROVIDER IMMEDIATELY IF YOU HAVE:

- Worsening symptoms, including high fever, severe headache, and/or sensitivity to light.
- Confusion, disorientation, or difficulty waking up.
- Persistent vomiting.
- Breathing problems, severe cough, and/or wheezing.
- Signs of a bacterial skin infection, such as increased tenderness, warmth, redness, swelling, and pus.

HOW CAN I PREVENT IT?

The varicella vaccine prevents chickenpox in 80-90% of patients who receive it. Full vaccination consists of 2 doses. If vaccinated individuals do get chickenpox, their illness is generally milder and shorter.

- The varicella vaccine is available at Student Health to students who have never had chickenpox or 2 doses of the vaccine. However, if you are pregnant or planning a pregnancy in the near future, it is best to wait until after the pregnancy to get vaccinated.
- If you’ve had a recent exposure to chickenpox but have never had the disease or the vaccine, you can reduce the chance of getting chickenpox by getting vaccinated within 3-5 days of the exposure.

RECOMMENDED WEBSITES: [www.cdc.gov](http://www.cdc.gov), [www.mayoclinic.org](http://www.mayoclinic.org)