UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

CHICKENPOX

WHAT IS IT?

Chickenpox is a highly contagious infection caused by the varicella-zoster virus. 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 be reactivated years later in the form of shingles, which presents as a localized painful blistering rash. Please refer to our "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?

Chickenpox is usually a benign self-limited illness in healthy children. Symptoms can be more severe in adults. It usually takes 14-16 days after exposure for symptoms to develop, although this interval can range from 10-21 days.

- The illness begins with flu-like symptoms, such as fever, body aches, headache, sore throat, fatigue, and loss of appetite.
- Within 1-3 days, an itchy rash progresses rapidly in the following fashion:
  - Clusters of little red spots first appear on the chest, back, and stomach, then spread over the entire body. Typically, the rash is most concentrated on the chest and back.
  - The spots turn into bumps, then develop into fluid-filled blisters. New blisters usually stop forming by day 4 of the rash.
  - Scabs form after the blisters break open and crust over, typically by day 6. Once the blisters scab over, the person usually feels better. Scabs usually take 1-2 weeks to fall off; they may leave some marks on the skin that will eventually fade away.
- 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 and cause 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 weakened immune systems 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, they have the potential to be life-threatening.

- Patients at increased risk of complications include infants, adults, pregnant women, and immunocompromised individuals.
- Complications may include pneumonia, bacterial skin infections (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. Cases have virtually disappeared since advising against giving aspirin to children and adolescents who have a virus or fever.
- 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.
  - Infants infected just before or after delivery can develop a potentially fatal form of chickenpox.

HOW IS IT DIAGNOSED?

Chickenpox is usually diagnosed based upon the classic appearance of the rash. In some cases, additional lab tests may be used to confirm the diagnosis. For example, the rash may have an atypical presentation in patients who develop symptoms after being partially vaccinated against chickenpox (ie. only completing 1 out of 2 vaccine doses).

If you think you have chickenpox, please call the clinic first for advice. Special arrangements will be made for you to enter clinic through a different entrance to decrease the risk of infecting others.

HOW IS IT TREATED?

❖ **Antiviral Medications**

- Antiviral medications cannot cure chickenpox but are effective in decreasing the severity and duration of symptoms, as well as reducing the risk of complications.
- Antiviral treatment is recommended in individuals at high risk for complications, including unvaccinated adolescents, adults, pregnant women, and immunocompromised individuals.
- Acyclovir (Zovirax) and valacyclovir (Valtrex) are common antivirals used in the treatment of chickenpox. They 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.

❖ **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 over-the-counter options include cetirizine (Zyrtec), fexofenadine (Allegra), and loratadine (Claritin), which are preferred for daytime use. 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.

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HOW IS IT TREATED? (continued)

- **Other Self-Care Measures**
  - Use acetaminophen (Tylenol) and/or ibuprofen (Advil or Motrin) to treat fevers, body aches, and headaches. Follow package directions for safe use. Take ibuprofen with food to avoid an upset stomach. If your fever does not improve with regular use of fever-reducers, it is important to notify your medical provider.
  - DO NOT TAKE ASPIRIN due to the risk of developing Reye's syndrome (see "What Are Possible Complications?" on the previous page).
  - 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, sports drinks, juices, non-caffeinated sodas (Ginger Ale), 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 a follow-up appointment with a medical provider to receive written authorization to return to class or work. Please coordinate your visit with our front desk staff and 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, separate from others.
  - Wash your hands frequently and thoroughly.
  - Cover your mouth and nose when you cough or sneeze.

SEE YOUR HEALTHCARE 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 CHICKENPOX?

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 (eg. no or low fever; fewer lesions; spots/bumps that do not develop into blisters).

- 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 5 days of the exposure.

RECOMMENDED WEBSITES: www.cdc.gov, www.mayoclinic.org

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