

## UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

**SHINGLES (HERPES ZOSTER)****WHAT IS IT?**

Shingles, or “herpes zoster”, is a viral infection that results in painful blisters on the skin. It is caused by the varicella-zoster virus, which is the same virus that causes chickenpox. You can develop shingles only if you have had chickenpox in the past.

When the body first becomes infected by the varicella-zoster virus, symptoms of chickenpox will develop. Some people may have very mild symptoms and do not know that they have been infected. After the body recovers, the varicella-zoster virus retreats to the nerve roots in the spine, where the immune system keeps the virus under control. Certain conditions, such as illness, trauma, or stress, can trigger reactivation of the virus, which then escapes the nerve cells, travels along the nerve back to the skin, and causes a painful rash.

One in three people with chickenpox will develop shingles at some time later in life. Most people recover easily and fully from shingles. 1 to 4% of people with shingles will have a recurrence.

**WHO IS AT RISK?**

Anyone can develop shingles, but it is more common in adults over age 50. Healthy individuals can also get shingles, but the risk is higher in people with weakened immune systems (eg. HIV, cancer, certain medications, etc.).

**WHAT ARE THE SYMPTOMS?**

- ❖ Pain at the skin site that begins 1-2 days before the rash appears is a hallmark of shingles, occurring in 75% of infected individuals.
  - The pain is often described as a burning, itching, or tingling sensation in a well-defined area of skin on one side of the body, known as a dermatome. This band of skin is innervated by a specific nerve root which only goes to one side of the body.
  - Zoster typically involves a nerve root of the trunk or face, but any part of the body may be affected.
- ❖ Painful red blisters or bumps usually develop in the affected dermatome over 3-5 days. After the blisters open into sores, they typically crust over by day 7-10, although the rash can be present for up to 2-4 weeks. The pain of shingles can be mild or severe, but tends to be worse in older adults.
- ❖ Flu-like symptoms occur in about 20% of people with shingles. Examples include fever, chills, headache, body aches, and stomach upset.

**HOW IS IT SPREAD?**

The varicella-zoster virus is spread by direct contact with the fluid inside a shingles blister or by inhaling the virus in the air (eg. from an infected person’s cough or sneeze). Blisters are considered contagious until they have crusted over (usually 7-10 days into the illness).

- ❖ Exposure to the varicella-zoster virus does not cause shingles but can lead to chickenpox in someone who has never had chickenpox or the chickenpox vaccine.
- ❖ If you have shingles, it is important to stay away from babies younger than 12 months and pregnant women who have never had chickenpox or the chickenpox vaccine. A chickenpox infection can be very dangerous to a developing infant.

**WHAT ARE POSSIBLE COMPLICATIONS?**

Complications occur in about 12% of people with shingles. Older individuals and those with weakened immune systems are at higher risk.

- ❖ **Postherpetic Neuralgia (PHN)** is the most common complication of shingles. PHN occurs when the pain from shingles persists long after the blisters have healed (typically defined as pain lasting longer than 4 months). PHN is more common in older adults, occurring in 20% of those over age 60.
- ❖ **Herpes Zoster Ophthalmicus (HZO)** refers to shingles in or around the eye. Seek care immediately if you develop blisters near your eyes or on your nose! HZO requires urgent evaluation by an eye specialist because the infection can lead to scarring and permanent visual impairment. Other symptoms can include fever, headache, a painful red eye, and blurry vision.
- ❖ **Herpes Zoster Oticus (or Ramsay Hunt Syndrome)** involves the cranial nerve that innervates the ear. The classic triad of symptoms includes blisters in or on the ear, ear pain, and weakness of the facial muscles on the affected side.

## **HOW IS IT DIAGNOSED?**

Shingles is usually diagnosed by the classic appearance of painful blisters in a well-defined area of skin on one side of the body. If the diagnosis is unclear, lab tests may be ordered.

## **HOW IS IT TREATED?**

### **❖ MEDICATIONS**

- Antiviral medications are recommended for everyone with shingles. These medications do not cure shingles but are effective in reducing the severity and length of the illness. Antiviral medications may also reduce the risk of developing PHN.
  - Three antiviral drugs are used to treat shingles: Zovirax (acyclovir), Famvir (famciclovir), and Valtrex (valacyclovir).
  - Antiviral medications are most effective when started within 72 hours of symptom onset. Treatment started after 72 hours may be helpful if new lesions are still appearing.
- Over-the-counter pain medications can be effective ways to treat pain and fever from shingles. Examples include acetaminophen (Tylenol), ibuprofen (Advil or Motrin), and naproxen (Aleve). It is important to take ibuprofen or naproxen with food to avoid an upset stomach. Sometimes stronger prescription pain medication may be required.
- An oral antihistamine can be used to decrease itching if needed.
  - Non-sedating antihistamines available over-the-counter include Zyrtec (cetirizine), Claritin (loratadine), and Allegra (fexofenadine).
  - Benadryl (diphenhydramine) works well but is sedating and requires dosing every 6 hours.

### **❖ SKIN CARE**

- To treat itching and discomfort, consider the following skin care measures:
  - Use cool compresses to dry out the blisters.
  - Bathe with Aveeno oatmeal soap.
  - Soak in a tub of water mixed with Aveeno oatmeal powder or Burrow's (Domeboro) powder. Burrow's powder is available over-the-counter or by prescription.
  - Use calamine or other drying lotions.
- To decrease the spread of infection to others:
  - Wash your hands thoroughly and frequently.
  - AVOID TOUCHING OR SCRATCHING THE LESIONS! Scratching also increases the risk of developing a secondary infection from bacteria.
  - KEEP THE BLISTERS COVERED until they have crusted over.

### **❖ RETURNING TO CLASS OR WORK**

- If the blisters are on your face, you may return after the area has crusted over, which usually takes 7-10 days.
- If the blisters are in an area that can be covered (with a bandage or clothing), you may return to class or work as soon as you are feeling better.

## **HOW CAN I PREVENT IT?**

- ❖ The varicella vaccine (Varivax) routinely given during childhood is the most effective way to prevent chickenpox and shingles. Vaccination has been shown to prevent 70-90% of all varicella infections.
  - In people 13 years of age and older who have never had chickenpox or the chickenpox vaccine, 2 doses of the Varivax vaccine should be given 4 to 8 weeks apart.
  - The varicella vaccine is available at Student Health to students who are not pregnant or planning a pregnancy in the near future. It cannot be given to immunocompromised patients.
- ❖ Two vaccines are available to prevent shingles in adults over age 50: Shingrix and Zostavax. If shingles occurs after vaccination, these vaccines can still decrease symptom severity and the incidence of postherpetic neuralgia.

## **SEE YOUR HEALTHCARE PROVIDER IMMEDIATELY IF YOU HAVE:**

- Worsening symptoms, including fever, headache, and extension of the blisters.
- Any involvement of the skin near the eye or on the nose.
- Confusion or disorientation.
- Loss of muscle coordination.
- Signs and symptoms of a bacterial skin infection, such as increased tenderness, warmth, redness, swelling, and pus.

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