

SHINGLES OVERVIEW

Herpes zoster (shingles) is a painful rash caused by the same virus that causes chickenpox. After an episode of chickenpox, the virus resides in cells of the nervous system. The term "shingles" comes from a Latin word, "cingulum", which means belt or girdle; the rash of herpes zoster usually appears in a band or beltlike pattern.

Shingles can affect people of all ages. It is particularly common in adults over age 50 years. It is also more common in individuals of all ages with conditions that weaken the immune system.

SHINGLES CAUSE

Shingles is caused by the varicella-zoster virus, the same virus that causes chickenpox. After an episode of chickenpox, the virus retreats to cells of the nervous system, where it can reside quietly for decades. However, later in life, the varicella-zoster virus can become active again. When it reactivates, it causes shingles.

The virus belongs to a group of viruses called herpesviruses, which also includes the herpes simplex virus (HSV); HSV-1 causes cold sores and HSV-2 causes genital herpes.

RISK OF SHINGLES

Up to 20 percent of people will develop shingles during their lifetime. The condition only occurs in people who have had chickenpox, although occasionally, chickenpox is mild enough that you may not be aware that you were infected in the past.

Age — Shingles can occur in individuals of all ages, but it is much more common in adults aged 50 years and older.

Immune status — Shingles can occur in healthy adults. However, some people are at a higher risk of developing shingles because of a weakened immune system. The immune system may be weakened by:

- Certain cancers or other diseases that interfere with a normal immune response
- Immune-suppressing medications used to treat certain conditions (eg, rheumatoid arthritis) or to prevent rejection after organ transplantation
- Chemotherapy for cancer
- Infection with the human immunodeficiency virus (HIV), the virus that causes AIDS

SHINGLES SIGNS AND SYMPTOMS

Shingles usually begins with unusual sensations, called parasthesias, such as itching, burning, or tingling in an area of skin on one side of the body. Some people develop a fever, a generalized feeling of being unwell, or a headache. Within one to two days, a rash of blisters appears on one side of the body in a bandlike pattern.

The trunk (chest, upper, or lower back) is usually affected by the shingles rash. The rash can also occur on the face; a rash appearing near the eye can permanently affect vision.

The pain of shingles can be mild or severe, and usually has a sharp, stabbing, or burning quality. Pain may begin several days before the rash. Pain is limited to the skin affected by the rash, but it can be severe enough to interfere with daily activities and sleep. Pain is often worse in older adults compared to younger individuals.

Within three to four days, the shingles blisters can become open sores or "ulcers". These ulcers can sometimes become infected with bacteria. In individuals with a healthy immune system, the sores crust over and are no longer infectious by



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day 7 to 10, and the rash generally disappears within three to four weeks. Scarring and changes in skin color may persist long after shingles has resolved.

In most individuals, shingles runs its course without any lasting health problems. However, the condition can be associated with complications.

Is shingles contagious? — It is not possible to catch shingles from another person. However, some people can become infected with the varicella-zoster virus itself:

- If you have **never had** chickenpox or the chickenpox vaccine, you can develop chickenpox after direct (skin to skin) contact with a shingles blister or by inhaling the varicella-zoster virus in the air. You should take precautions if you are near anyone with shingles.
- If you have had chickenpox or the chickenpox vaccine, being near a person with shingles will not cause you to develop shingles.

SHINGLES COMPLICATIONS

Complications of shingles can occur in anyone with the condition, but are more likely in older adults and in those with a weakened immune system. Overall, complications occur in about 12 percent of all individuals with shingles.

Pain — Postherpetic neuralgia (PHN) is the most common complication of shingles. It causes mild to severe pain or unpleasant sensations and is often described as "burning". PHN affects 10 to 15 percent of patients, with about half of these cases in individuals older than 60 years.

In most patients, the pain of postherpetic neuralgia gradually improves over time. Some patients continue to experience pain for months to years after the rash resolves. This pain can be so severe that it causes difficulty sleeping, weight loss, depression, and interferes with normal daily activities. Several treatments are available to both prevent and treat PHN.

Skin infection — The sores of shingles can become infected with bacteria, and this can delay healing. This complication occurs in about 2 percent of individuals.

Eye complications — Eye complications occur in about 2 percent of individuals. Eye complications are much more likely to occur when the shingles rash occurs around the eye. These complications are serious and can lead to vision loss.

Eye inflammation — Eye inflammation (called herpes zoster ophthalmicus) typically begins with fever, headache, decreased vision, a droopy eyelid, and a generalized feeling of being unwell. These symptoms are accompanied by pain or extreme sensitivity of the eye, forehead, and top of the head.

Early diagnosis and treatment are important in preventing worsening eye inflammation and vision loss. People who have zoster lesions near an eye should be evaluated immediately by an eye specialist. Treatment usually includes oral acyclovir, valacyclovir, or famciclovir plus steroid eye drops to reduce inflammation.

Retinal inflammation — Herpes zoster of the eye can cause inflammation and damage of the retina (called acute retinal necrosis). The retina is in the back of the eye, and is the part of the eye that senses light and enables vision. Retinal inflammation can progress rapidly in individuals with HIV infection.

Retinal inflammation usually begins with blurry vision and pain in one eye. In up to 50 percent of individuals, it later affects the other eye. It is treated with intravenous acyclovir, which improves symptoms within 48 to 72 hours.

Ear inflammation — Herpes zoster can cause inflammation of the ear (called herpes zoster oticus or Ramsay Hunt syndrome). Symptoms include weakness of the facial muscles on the affected side.



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Complications due to immune suppression — People with a weakened immune system, including people infected with HIV and transplant recipients, are at substantial risk for severe varicella zoster virus related complications.

RETURN TO WORK

If you have shingles, you may wonder when it is safe to return to work. The answer depends upon where you work and where your blisters are located.

- If the blisters are on your face, do not return to work until the area has crusted over, which generally takes seven to 10 days.
- If the blisters are in an area that you can cover (eg, with a gauze bandage or clothing), you may return to work when you feel well.
- If you work in a healthcare facility (hospital, medical office, nursing home), consult your healthcare provider about when it is safe to return to work.

PREVENTION OF SHINGLES

Vaccination — A vaccine is now available to reduce the chance of developing shingles. If you do develop shingles after receiving the vaccine, your infection may be less severe and you are less likely to develop postherpetic neuralgia [2].

The vaccine is approved for adults over 50 years. You should get the vaccine even if you are not sure if you had chicken pox or shingles previously. The vaccine is not recommended for people with a weakened immune system, pregnant women, or those with a history of a severe allergic reaction to gelatin or neomycin.

Natural boost of immunity — If you have had chickenpox previously, you have developed immunity to the virus that causes shingles. However, this immunity declines over time. But, if you are later exposed to a child or adult with chickenpox, your immunity to the virus is "boosted". This boost may help to reduce your risk of developing shingles