

## Herpes Zoster (Shingles)

Herpes zoster, commonly known as shingles, is caused by the reactivation of the **varicella-zoster virus (VZV)** within the body of someone who previously had chickenpox. This virus, like all other viruses in the Herpesviridae family, remains inactive in the body of someone after their first infection. Shingles disease is preventable by **vaccination** with the shingles vaccine, which is routinely recommended for people ages **50 or older**.

## Transmission

People who have shingles are contagious and spreading the varicella-zoster virus from their active lesions. Lesions are considered infectious until they have dried, scabbed, and a new layer of skin has formed. If exposed to people who have no immunity to VZV, these people may contract the virus as chickenpox. (Please see Chickenpox Fact Sheet for more information.) People do not catch shingles disease from another person with shingles and exposure to someone with shingles will not cause activation of shingles.

Risk factors for shingles include:

- **Age:** most cases occur in people ages 50 and older. Older people are more likely to suffer serious complications from shingles.
- **Immune status:** shingles activation is often affected by a suppressed immune status. Severe shingles may occur in people with immune-suppressing conditions, such as HIV.

## Symptoms

Shingles causes **itchy, painful blisters** and **red bumps**, usually in a narrow area on half of the body. Because it infects the nervous system, shingles infection follows a path on the body called a [dermatome](#). These will often appear or be most noticeable along the rib cage or torso. The rash may also occur on one side of the face. Shingles on the face can affect the eye and cause vision loss. In rare cases (usually in people with weakened immune systems), the rash may be more widespread on the body and look like a chickenpox rash.

A common complication of shingles is nerve damage which can cause long-term pain, called **postherpetic neuralgia (PHN)**. PHN can last for months or years after the rash goes away. The pain from PHN can be so severe and debilitating that it interferes with daily life. About 10 to 18% of people who get shingles will experience PHN. The risk of this complication increases with age; people younger than 40 rarely experience PHN. **Shingles vaccination lessens the chance for experiencing disease and reduces the likelihood of complications like PHN.**

## Diagnosis

Shingles may be diagnosed clinically by a health care provider, but a laboratory test to confirm VZV is recommended to rule out other causes of skin lesions. A health care provider will swab a lesion to collect viral DNA.

## Treatment

Shingles can be treated with antivirals designed to treat herpesvirus infections, such as valacyclovir and acyclovir. Other treatments may include topical creams and/or medications to help manage pain and itch experienced with shingles.

## Prevention

- **Everyone ages 50 and older are recommended to be vaccinated against shingles.**
- If you have shingles, avoid touching the rash and make sure that the rash is covered.
- Good hand washing is an effective way to prevent the spread of VZV.
- People who have not previously had chickenpox or who have not been vaccinated against chickenpox should contact their health care provider to be vaccinated. Vaccination against chickenpox within three to five days after exposure to shingles may prevent chickenpox.
- Pregnant women or people with weakened immune systems who have not previously had chickenpox or who have not been vaccinated and who are exposed to shingles should notify their healthcare provider immediately.

## Exclusion Guidance

Individual with shingles only need to be excluded from activities if their rash cannot be covered while infectious. People who are excluded may return after the rash has dried and new skin has formed. Those with shingles may need to avoid activities such as school and work if symptoms are severe. If shingles occurs in a healthcare setting, including long-term care facilities, please follow infection control recommendations from the Centers for Disease Control and Prevention. Recommendations are available at <https://www.cdc.gov/shingles/hcp/hc-settings.html>.

For additional information about shingles, contact the North Dakota Department of Health and Human Services' Public Health Division at 800.427.2180.

**Cases and clusters should be reported to the North Dakota Department of Health and Human Services.**

### Resources:

1. Centers for Disease Control and Prevention. (2023, May 10). *CDC Shingles (Herpes Zoster)*. Centers for Disease Control and Prevention. Retrieved June 26, 2023, <https://www.cdc.gov/shingles/hcp/clinical-overview.html>.
2. Kimberlin, D. W., Barnett, E. D., Lynfield, R., Sawyer, M. H. (2021) Red Book: 2021-2024 Report of the Committee on Infectious Diseases. 32<sup>nd</sup> ed. American Academy of Pediatrics. [Management and Prevention of Infectious Diseases; Chickenpox] [pages 831-843].