

# SHINGLES

Shingles is caused by the Varicella zoster virus.

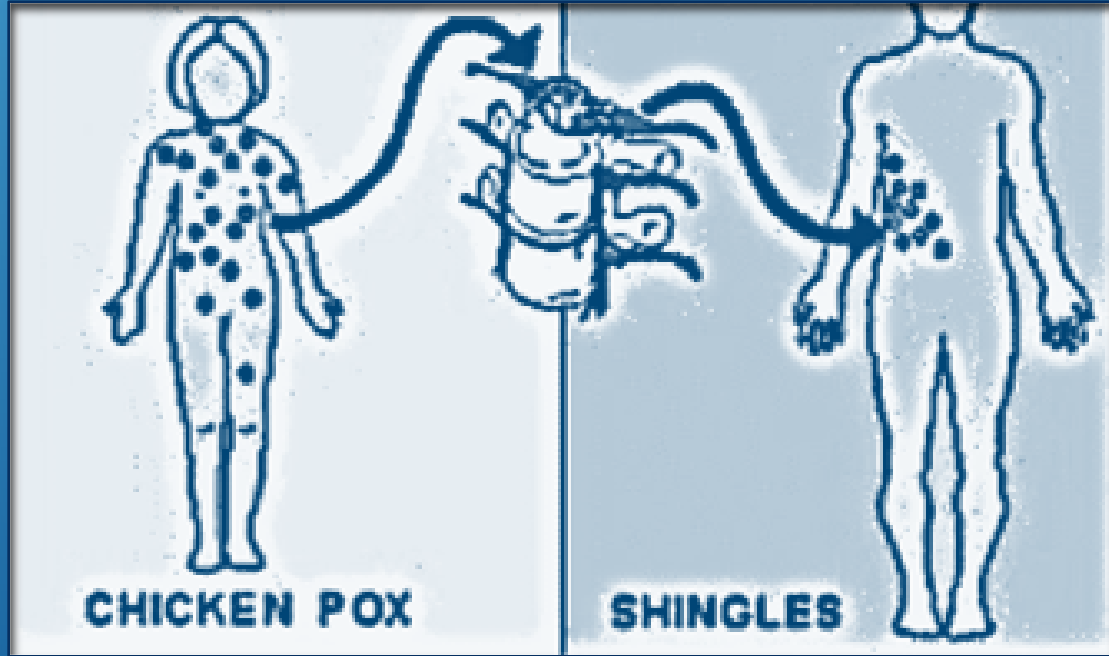
Varicella zoster virus =  
Herpes zoster virus =  
shingles.

The Varicella virus also causes chicken pox.

After having chicken pox, the virus goes into cells within the nervous system and becomes dormant.

When the virus is reactivated, it causes shingles.

# INTRODUCTION



The varicella virus becomes latent in the nerve ganglia.

It reactivates years later to cause shingles.

The area affected is called a dermatome.

# REACTIVATION

# DERMATOME:

A dermatome is an area of skin that is mainly supplied by a single nerve coming out of the spine.

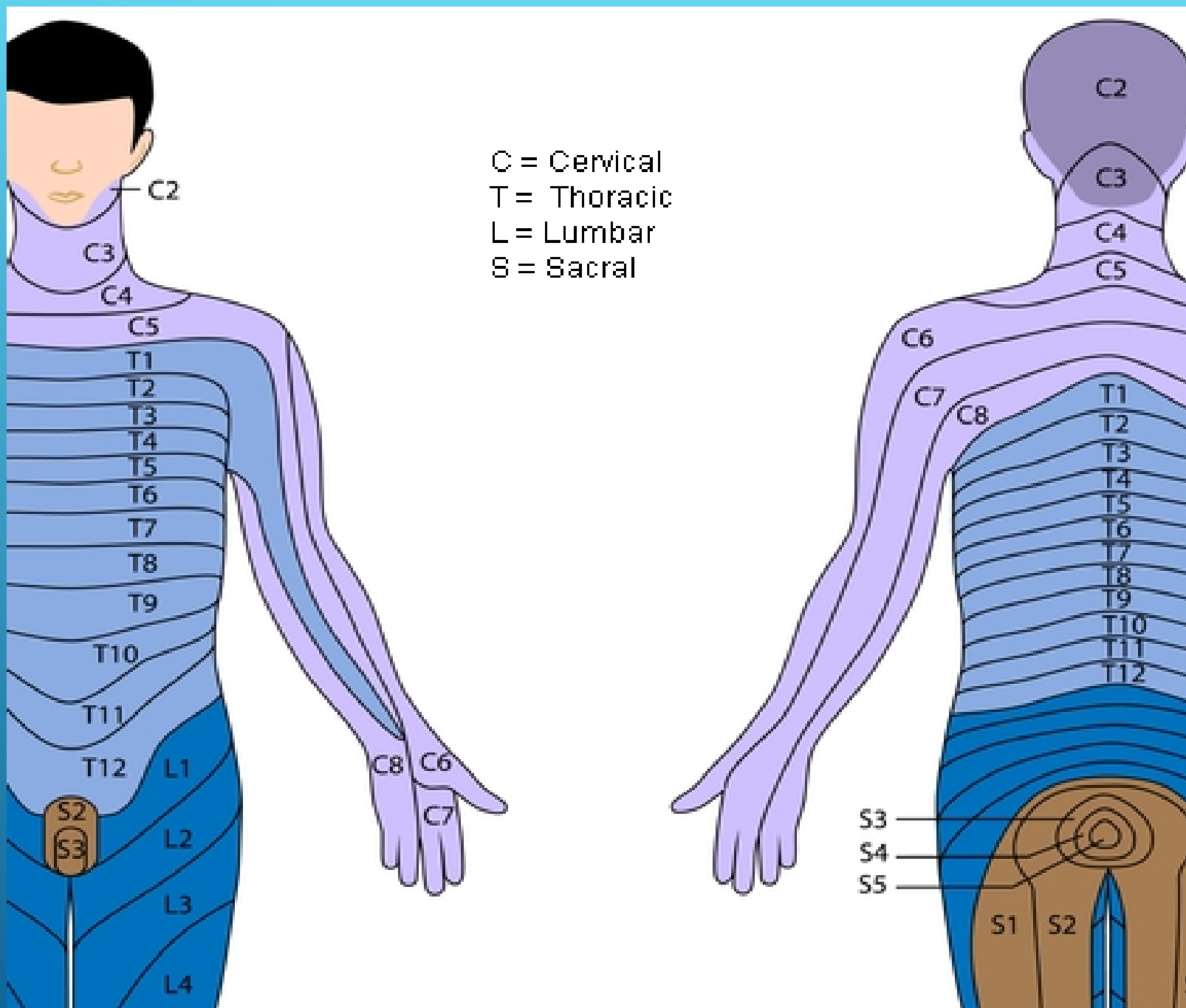
The spinal nerves are:

- 8 cervical (C1 – C8)
- 12 thoracic (T1 – T12)
- 5 lumbar (L1 – L5)
- 5 sacral (S1 – S5)

Each nerve sends sensations, such as pain, from that area of skin to the brain.

The body is split into halves because each nerve runs from one side of the spine in the back to the middle of the front of the body.

# DERMATOMES



## Risk factors for getting shingles include:

- Older age, especially after age 50
- Physical trauma
- Chronic lung or kidney disease
- Immunocompromise:
  - Cancer
  - Transplant recipients
  - HIV
  - Rheumatoid arthritis, lupus, etc.
  - Inflammatory bowel disease

**WHO GETS SHINGLES?**

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**Shingles  
begins with  
unusual skin  
sensations:**

**Itching Burning Tingling**

**Sometimes  
people  
experience:**

**Fever Headache  
Malaise**

**Within 1 to 2  
days, a rash  
appears**



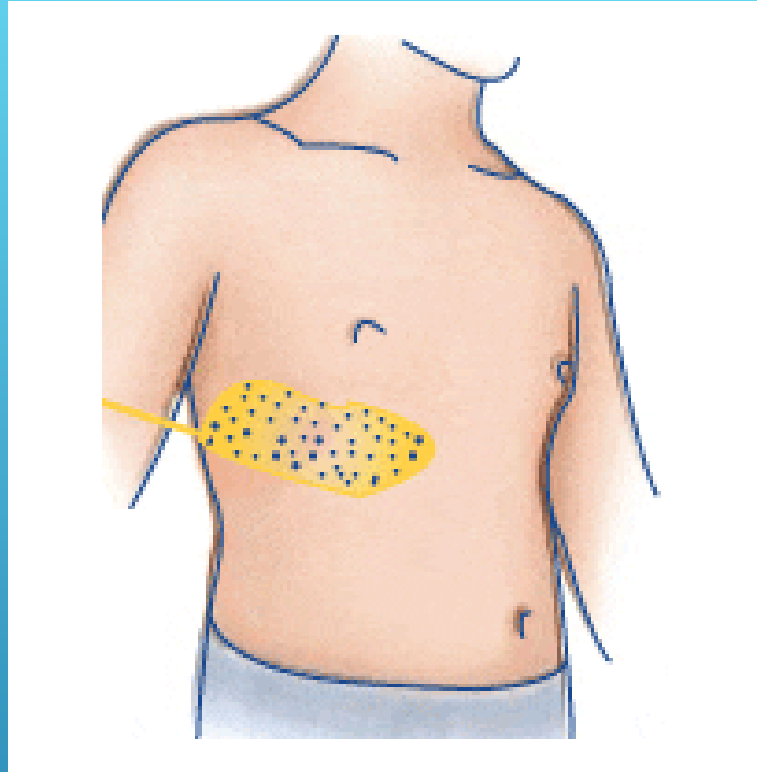
# RASH

- Band-like pattern on only one side of the body. The rash very rarely crosses slightly over the midline of the front or back.
- Starts as red spots, progresses to fluid filled blisters.
- In 7 to 10 days, blisters crust over and are no longer infectious.
- The rash generally disappears within 3 to 4 weeks.
- Scarring and changes in skin color may occur.





- The trunk (chest and upper or lower back) is the most common area.
- It can also be seen on the buttocks, legs, or head.
- If the rash is near the eye, it can cause long term issues.



**RASH –  
WHERE IS IT?**



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**SHINGLES GENERALLY CAUSES PAIN**

**It is sharp, stabbing, or burning.**

**It may be mild or severe.**

**It may begin several days  
before the rash appears.**

**It is limited to the area affected  
by the nerve (rash).**

Occur in about 12% of all individuals with shingles.

More likely to occur in older adults or those with a weakened immune system.

# COMPLICATIONS

1 Postherpetic neuralgia

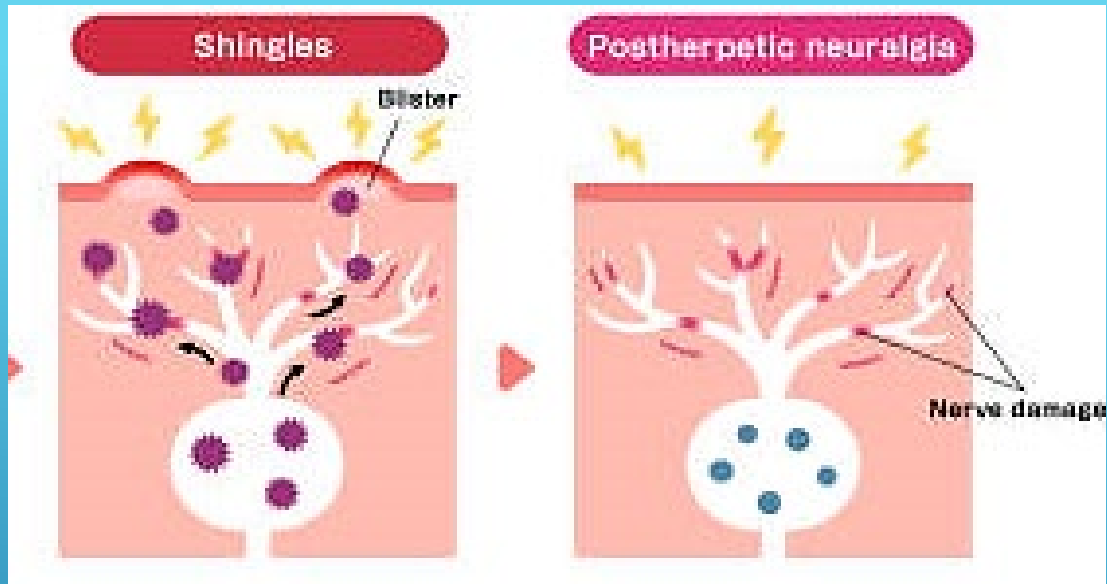
2 Skin infection

3 Eye complications

4 Ramsey Hunt Syndrome

**COMPLICATIONS  
INCLUDE:**

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# POSTHERPETIC NEURALGIA

Postherpetic neuralgia is a burning pain that remains after the rash is gone.

- It is the most common complication of shingles.
- It can be mild or severe.
- It may improve over time but can last for months to years.



The shingles rash may develop a bacterial infection, especially if not cared for properly.

- The area will show spreading redness and swelling.
- There may be a purulent drainage.
- A fever will usually develop.
- The rash will last longer than 10 days.
- Very rarely, shingles can lead to pneumonia.



# SKIN INFECTION



- If the rash affects the skin near the eye, the herpes virus can cause inflammation of the eye. This results in pain, redness, swelling, sensitivity to light and blurry vision.
- If it gets worse, it can lead to damage to the retina and vision loss.

# EYE COMPLICATIONS

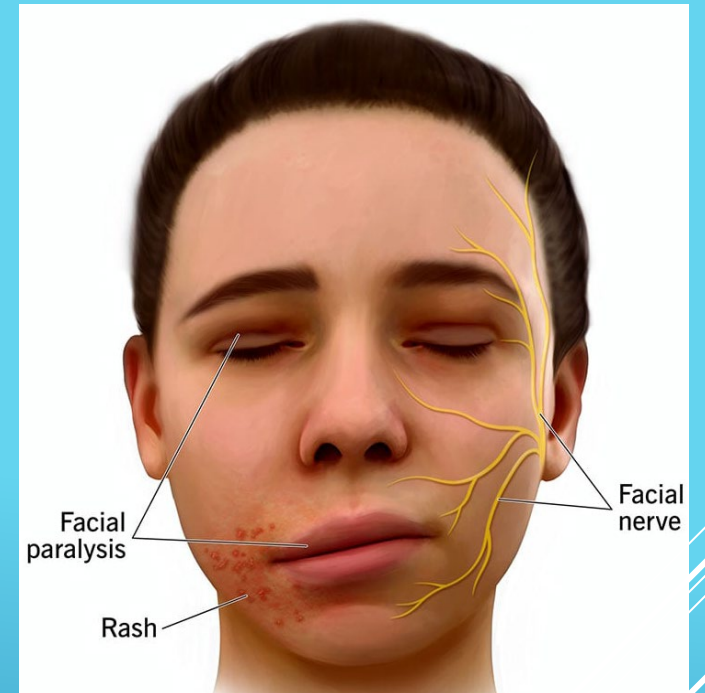


Second most common cause of facial nerve paralysis.

It affects the nerves on only one side of the face.


Symptoms include:

- Painful rash on the eardrum, ear canal, and earlobe.
- Fluid filled blisters in the ear canal and outer ear.
- Rash on tongue, throat, roof of mouth.
- Ringing in the ear and hearing loss.
- Dry eyes and mouth.
- Loss of taste.
- Vertigo.




# RAMSEY HUNT SYNDROME



- 
- You cannot catch **SHINGLES** from someone else.
  - You can develop **CHICKENPOX** from someone with shingles.
  - Anyone who has never had chickenpox (or the vaccine) can develop chickenpox after direct (skin to skin) contact with a shingles blister or rarely, by inhaling the virus in the air near someone with shingles.

**CONTAGIOUS?**



**Keep the shingles rash clean and covered:** this can help prevent other people from coming into contact with your blisters.

**Wash your hands often:** try not to touch the blisters.

**Avoid being around pregnant people:** the virus can cause serious health risks for both pregnant women and their babies.

**Avoid other at-risk people:** including babies, children who haven't had chickenpox or the vaccine, and people with a weakened immune system.

# HOW TO AVOID SPREAD

Vaccination is the main preventative strategy to reduce the chance of getting shingles.

- Shingrix is the vaccine currently available.
- Vaccination is typically recommended for adults over 50 years of age.
- In some cases, vaccination might also be recommended for younger adults if their immune system is weaker than normal.
- You can still develop shingles even after receiving the vaccine but if you do, the infection should be less severe, and there is a reduced risk for developing postherpetic neuralgia



**PREVENTION**



**Antiviral medications:** Acyclovir, Famciclovir, Valacyclovir

**Other treatments:**

- Keep rash clean and dry.
- If possible, cover the rash to prevent the virus from spreading.
- Avoid putting cream or other products on the rash as those can increase the chance for developing an infection.
- Avoid scratching the rash to prevent infection and scarring.
- Wear loose clothing.
- Cool compresses may ease soreness.

**TREATMENT**