VARICELLA DISEASES / CHICKEN POX

What Is It?

Varicella, also known as chickenpox, is caused by the varicella zoster virus. The same virus, when it recurs, causes Herpes Zoster, also known as shingles. Shingles remains very common, occurring in almost 1 in 3 US residents. Risk increases with age.

How can you get it?

Varicella is highly contagious and spreads from person-to-person through respiratory droplets from coughs or sneezes, by direct contact, and when virus from skin lesions becomes airborne. A person with chickenpox is contagious 1-2 days before the rash appears and until all blisters have formed scabs.

What are the symptoms?

Chickenpox symptoms begin 10-21 days after exposure to the virus and include:

- Fever
- Rash consisting of reddish fluid-filled blisters; the rash is usually itchy.

Complications: Bacterial infection of the skin due to open blisters, pneumonia, and, rarely, infection of the brain. Adolescents and adults are more at risk for severe disease.

Herpes zoster presents with blisters in the distribution of a sensory nerve so it is usually on one side only. It can be very painful; pain can persist after the rash is resolved.

How do you prevent it?

Varicella is prevented through vaccination. Currently two doses of the vaccine are recommended. Fire fighters and emergency medical personnel should be vaccinated for varicella unless they have:

- Blood tests of immunity or laboratory confirmation of prior disease
- Diagnosis of chickenpox or herpes zoster (shingles) by a healthcare provider
- Medical contraindication to the vaccine (immunosupression; delay if pregnant or recent blood transfusion)

Workers do not need to be excluded from work in the days immediately following vaccination unless they develop a rash.
A Herpes zoster vaccine is also available for persons age 60 and older. However, this is a different vaccine from the one needed for health care personnel and has no role in the postexposure management of either chickenpox or zoster.

In addition to vaccination, you can help prevent the spread of varicella by:
- Ventilation since the virus spreads by the airborne route
- Preventing contamination and performing decontamination of surfaces
- Using Universal Precautions
  - Assume patients with respiratory symptoms are contagious and provide masks for symptomatic patients
  - Limit the number of crew members having direct patient contact
  - Hand hygiene (wash with soap and water or using an alcohol based hand rub)
  - Personal protective equipment (PPE) (gloves, gowns, and respiratory protection). IAFF recommends P100 respirators for all patients with respiratory symptoms such as cough.

**What should you do if you believe you have been exposed?**

If you are not immune, you should receive the vaccination as soon as possible within 120 hours after exposure and be placed off work beginning 8 days after first exposure until 21 days after last exposure, regardless of post-exposure vaccination.

If you are not immune, have a medical contraindication to vaccination and are at high risk for severe disease and complications (immunocompromised patients or pregnant women) you should receive varicella zoster immune globulin as soon as possible within 96 hours. You then need to be placed off work beginning 8 days after the first exposure until 28 days after last exposure.

If you have been previously vaccinated, you should report any fever, headache, skin lesions, and systemic symptoms from day 10 to day 21 after exposure. You should be placed on off duty if symptoms occur.

In a varicella outbreak, CDC recommends providing an additional dose of the vaccine to healthcare personnel who have had only one dose.
For More Information and Frequently Asked Questions (FAQs), Check Out:

✓ Centers for Disease Control and Prevention (CDC), Chickenpox: http://www.cdc.gov/chickenpox/
  - CDC, Vaccine Guidelines: http://www.cdc.gov/chickenpox/vaccination.html
  - CDC, Epidemiology and Prevention of Varicella: http://www.cdc.gov/vaccines/pubs/pinkbook/varicella.html
  - CDC, Shingles: http://www.cdc.gov/shingles/index.html