MANAGEMENT OF CHICKENPOX (VARICELLA)/SHINGLES

Chickenpox (varicella) is a highly contagious disease caused by the varicella zoster virus (VZV). It manifests as a generalized disease with sudden onset of slight fever and development of a rash and/or blisters. The incubation period is usually 14 – 16 days (range 10 to 21 days). Infected individuals are infectious 1-2 days prior to the onset of the rash, and continue to be until the last lesion of the rash has crusted. The virus establishes latency after primary infection.

Shingles (herpes-zoster) is a reactivation of latent varicella. The rash and blisters are mainly restricted to one part of the body. However, immunocompromised persons may develop wide spread infection (disseminated zoster).

How is the virus spread?
Chickenpox: Person-to-person transmission occurs by direct contact with blister fluid or by airborne transmission from coughing, sneezing, spitting etc.
Shingles: Direct contact with zoster lesions. Wide spread shingles may be transmitted by the airborne route, because of high viral shedding. Shingles is not as infectious as chickenpox.

* Indirect contact with articles that are freshly soiled with discharges from vesicles and mucous membranes can also serve as a source of transmission. It is possible to get chickenpox from someone with shingles, but you cannot catch shingles from someone with chickenpox.

Pregnant/Immunocompromised Workers
Immunocompromised persons and pregnant women in particular, may develop severe complications. If a woman catches chickenpox shortly before or after giving birth, their newborn may develop severe infections. If a pregnant woman that has not had chickenpox believes they have been exposed to VZV, it is recommended they contact their physician as soon as possible. The physician can give the person a Varicella Zoster Immune Globulin (VarIg) injection to help prevent the person from developing a severe infection. VarIg should be given as soon as possible after exposure, preferably within 96 hours, but may be given up to 10 days after exposure. VarIg may prolong the incubation period; staff who receive VarIg must be excluded from any work in the hospital from 10 days after the first exposure until 28 days after the last exposure.

Prevention and Control Measures
Immunity and Vaccination
The immune status of all health care workers should be determined from reliable history or from vaccination. Evidence of immunity may include:
- Documentation of receipt of 2 doses varicella vaccination.
- Evidence of physician-diagnosed chickenpox or shingles.
- Laboratory evidence of immunity (IgG) or laboratory confirmation of disease.
- Diagnosis or verification of a history of typical varicella (chickenpox) by a health care provider
- Diagnosis or verification of a history of typical herpes zoster (shingles) by a health care provider

Note: Persons with a self-provided history of chickenpox or zoster should no longer be assumed to be immune.

For those with a negative history of VZV or if documentation is not available serological testing should be done. Vaccination consists of two doses of varicella vaccine administered 4-8 weeks apart.

**Only health care workers known to be immune may be assigned to care for residents with chickenpox or shingles.** Susceptible exposed individuals must be excluded from work from 10 days after the first exposure until 21 days after the last exposure if the immune status is unknown. (Immune status may be determined by history or antibody testing)

**Resident Placement**
Residents with disseminated or localized shingles that cannot be covered should be placed in a private room. A private room should also be provided for residents who contaminate the environment or those who do not (or cannot be expected to) maintain appropriate hygiene. Private rooms should be maintained until lesions have crusted over and no new lesions are forming.

**Additional Precautions to Routine Practices**
Gloves should be worn when entering the room of a resident with chickenpox or shingles. Gloves should be removed promptly after use, before touching non-contaminated items and environmental surfaces, and before coming in contact with another resident. **Wash hands immediately after removing gloves.**
Signage indicating that contact precautions are in place should be posted on the door of any room of a suspected or confirmed chickenpox/shingles resident. Gowns should be worn if direct contact with resident or environmental surfaces is likely.
Masks are not required for immune health care workers.
Health care workers who are susceptible, but who absolutely must enter the room of residents should wear a fit tested N95 mask.

**Resident-Care Equipment**
Handle used resident-care equipment in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of microorganisms to other residents and environments. Ensure that
Reusable equipment is not used for the care of another resident until it has been cleaned and reprocessed appropriately. Ensure that single-use items are discarded properly.

**Environmental Control**
Ensure that there are adequate procedures for the routine care, cleaning, and disinfection of environmental surfaces, beds, bedrails, bedside equipment, and other frequently touched surfaces. VZV is susceptible to low level disinfectants.

**Linen**
Handle, transport, and process soiled linen in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of microorganisms to other residents and environments.

**Visitors**
Susceptible visitors should be educated and discouraged from resident contact until lesions have dried and crusted over. Immune visitors should be aware of contact precautions and the importance of hand-washing. If visitor is providing care for the resident, the appropriate PPE should be used.

**Exclusion**
Health care workers with acute chickenpox or wide spread shingles must be excluded from work until lesions are dried and crusted. Health care workers with localized shingles may work in most cases if appropriate barriers are used (i.e. all lesions are covered and good hand-washing technique is used before resident care). Health care workers with shingles may not work with immunocompromised residents until lesions have dried and crusted.

**Outbreak Management**
An outbreak should be considered if more than one resident on the same unit meets the criteria for diagnosis. Facility should liaise with Peel Health if an outbreak is suspected.

**Reporting Requirements**
Suspected or confirmed cases of chickenpox must be reported to Peel Health. There are no reporting requirements for shingles.
Additional Resources:


