Managing Varicella (Chickenpox) Exposures in Health Care Settings

Varicella transmission
- Varicella (chickenpox) is spread by direct contact and inhalation of aerosols from vesicles or respiratory secretions.
- Standard precautions, plus airborne precautions and contact precautions, should be followed until all lesions are crusted over.
- Patients should be removed from any waiting rooms or public areas and placed in a negative airflow room as soon as varicella is suspected.
- If a negative airflow room is unavailable, place the patient in their own room, and keep the door closed. Do not use the room for an hour after the patient leaves.
- Only health care workers with documented immunity to varicella, using standard, airborne, and contact precautions, should care for patients with varicella.

Management of exposed individuals
Evaluate evidence of immunity to varicella in all of those with significant exposure to varicella. Contact the Minnesota Department of Health (MDH) at 651-201-5414 to discuss management of exposed persons.

Significant exposures in a hospital setting include those:
- In the same 2- to 4- bed room.
- In adjacent beds in a large area.
- With face to face contact.

Evidence of immunity to varicella includes:
- Documentation of age-appropriate varicella vaccination:
  - Children age 12 months to 4 years: 1 dose of varicella vaccine.
  - Children age 4 years and older, adolescents, and adults: 2 doses of varicella vaccine.
- Laboratory evidence of immunity or laboratory confirmation of disease.
- Born in the United States before 1980.
  - For health care workers, pregnant women, and immunocompromised persons, birth before 1980 should not be considered evidence of immunity.
- Health care provider diagnosis of varicella or zoster or verification of history of varicella or zoster disease. Health care providers should refer to CDC’s Assessing Immunity to Varicella (www.cdc.gov/chickenpox/hcp/index.html#assessing-immunity) guidance when verifying history of disease in patients.
Exposed individuals without evidence of immunity are recommended to receive post-exposure prophylaxis as follows:

- Healthy individuals age 12 months or older who are not up to date on varicella vaccine should be given varicella vaccine (as long as it is not contraindicated) within 5 days of exposure.
- The following individuals should receive VariZIG within 10 days of exposure (but as early as possible):
  - Immunocompromised individuals.
  - Pregnant woman.
  - Hospitalized preterm infants (28 weeks or more) whose mother lacks evidence of immunity against varicella.
  - Hospitalized preterm infants less than 28 weeks gestation or birthweight of 1000g or less, regardless of maternal immunity.
  - Newborn infants whose mother had onset of varicella within 5 days before delivery or within 48 hours of delivery (not indicated if mother has zoster).
- Post-exposure prophylaxis is not indicated for healthy infants younger than age 12 months, or healthy individuals age 12 months or older who are up to date on varicella vaccine.

Management of exposed health care workers

To prevent transmission of varicella in health care facilities, all health care workers should have evidence of immunity to varicella. This information should be documented and readily available. For more information, see Ensuring Immunity to Varicella in Health Care Workers (www.health.state.mn.us/diseases/varicella/hcp/hcswimmunity.html).

Health care workers exposed to varicella with adequate evidence of immunity to varicella:

- Monitor daily for symptoms of varicella from days 8-21 after exposure.

Health care workers exposed to varicella with one documented dose of varicella vaccine:

- Should receive a second dose of varicella vaccine.
- Monitor daily for symptoms of varicella from days 8-21 after exposure.

Health care workers exposed to zoster without any documented varicella vaccine:

- Furlough from days 8-21 after exposure or remove from patient care settings during this time. These health care workers should be offered varicella vaccine within 3-5 days after exposure if it is not otherwise contraindicated. If they are at high risk for severe disease and cannot receive varicella vaccine, it is recommended these health care workers receive VariZIG.