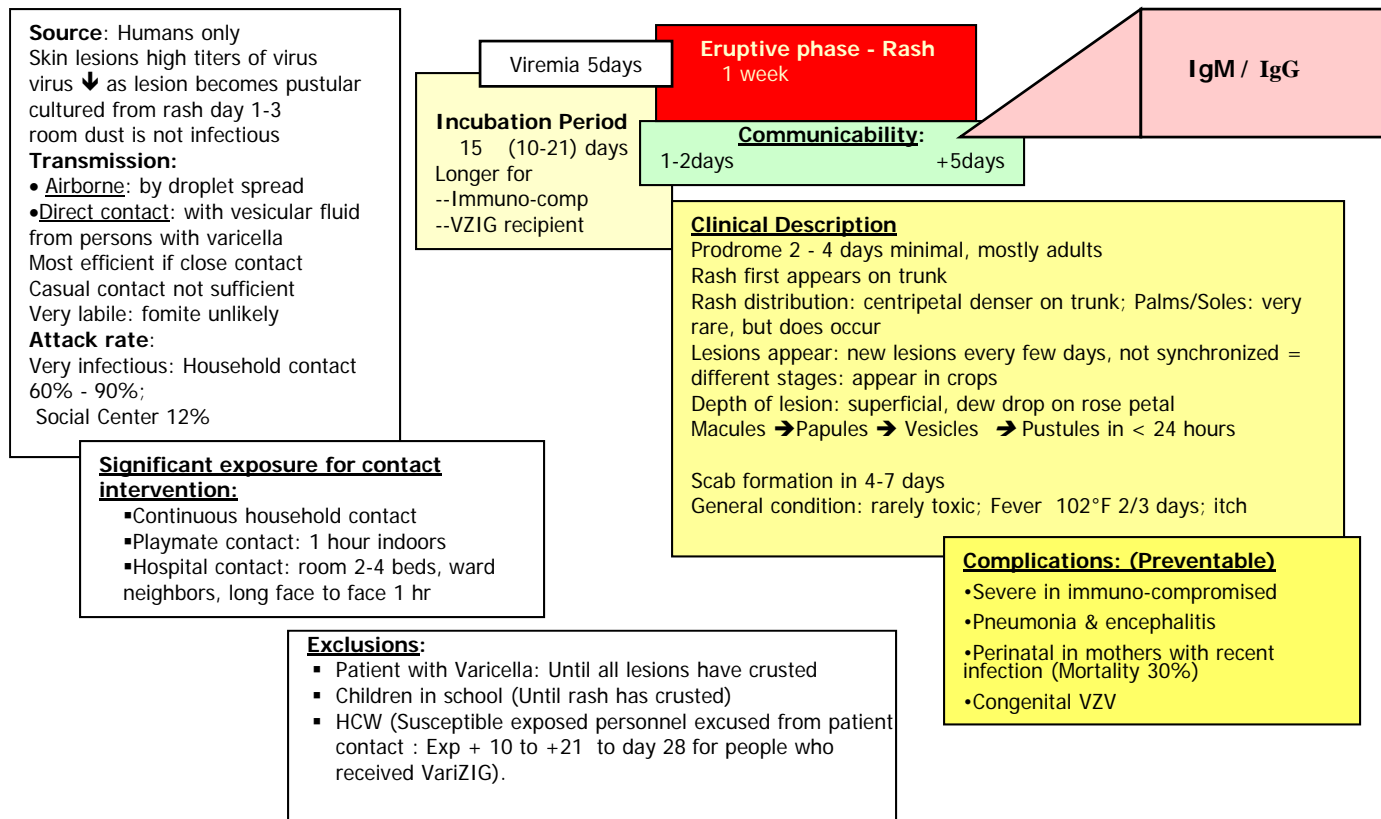


# VARICELLA

## TRANSMISSION



## CASE DEFINITION / LAB DIAGNOSIS

### Clinical Case Definition

An illness with acute onset of diffuse (generalized) maculo-papulovesicular rash without other apparent cause.

### Laboratory Criteria for Diagnosis

- Isolation of varicella virus from a clinical specimen; OR
- Direct fluorescent antibody (DFA); OR
- PCR polymerase chain reaction (PCR); OR
- Significant rise in serum varicella immunoglobulin (IgG) antibody level by any standard serologic assay. IgM poor S&S

Antibodies are not good diagnostic tools among immunized persons  
IgG are expected in a patient who has been immunized  
IgM may last after immunization

### Other Lab:

Single IgG titer (ELISA, FAMA, Latex) to determine immunity.  
FAMA=Fluorescent Antibody Membrane Antigen; gold standard

## TREATMENT, PROPHYLAXIS

### Treatment:

- Oral acyclovir for otherwise healthy people at increased risk of moderate to severe varicella.
- Intravenous antiviral therapy recommended for immuno-compromised patients, including those on chronic corticosteroids.

### Immunization/Vaccine:

Routine: For children 12 mos to 18 mos: 1 dose of 0.5mL live attenuated vaccine;  
Anyone <13 yrs not yet immunized  
For persons 13 yrs and older: 2 doses of 0.5mL live attenuated vaccine separated by at least 4 - 8 weeks. Anytime after 8 wks still OK  
Prophylaxis: within 5 days of exposure to prevent illness in susceptible. Cost effective to screen (90% adults are immune)  
Newborns exposed to mother with active disease:  
**LIVE attenuated vaccine;** subcutaneous; OK with MMR at different site; no testing necessary after 2 doses in adults  
Store frozen at -15°C

**Prophylaxis indicated for:**

- **Household:** residing in same household
- **Playmate:** face to face indoor play
- **Hospital:**
  - **Varicella:** In same 2 to 4 bed room or adjacent beds in a large ward, face to face contact with an infected staff member or patient or visit by person deemed contagious.
  - **Zoster:** Intimate contact (touching, hugging) with a person deemed contagious
- **Newborn infant:** onset of varicella in the mother 5 days or less before delivery or within 48 hours after delivery; VariZIG or IGIV not indicated if the mother has zoster.

**HCF (Hospital) employees primary prevention**

- Must be immune to varicella
- Definite Hx of varicella or Lab screening (cost effective)
- 2 doses; no testing after 2<sup>nd</sup> dose

**Postexposure immunization for exposed individuals**

Administration of varicella vaccine to people without evidence of immunity 12 months of age or older, including adults, as soon as possible within 72 hours and possibly up to 120 hours (5 days) after varicella exposure may prevent or modify disease and should be considered in these circumstances if there are no contraindications to vaccine use

**Hospital Exposure (HCW):** If an inadvertent exposure in the hospital to an infected patient, health care professional or visitor occurs, the following control measure are recommended:

- Identify exposed, susceptible personnel
- Administer VariZIG to appropriate candidates. If not available, IGIV is recommended.
- All susceptible, exposed people should be furloughed or excused from patient contact from day 10 to day 21 after exposure.
- Serologic testing for immunity for people who have been immunized is not recommended.
- Immunized health care workers who develop breakthrough infection should be considered infectious.
- Varicella immunization is recommended for susceptible personnel if there are no contraindications to vaccine use.

**Hospital Exposure (Patients):** If an inadvertent exposure in the hospital to an infected patient, the following control measure are recommended:

- Identify exposed, susceptible patients.
- Administer VariZIG to appropriate candidates. If not available, IGIV is recommended.
- All exposed, susceptible patients should be discharged as soon as possible.
- For those that cannot be discharged, they should be placed in isolation from day 10 to day 21 after exposure to the index patient.
- For people who received Vari ZIG, isolation should continue until day 28.
- Serologic testing for immunity for people who have been immunized is not recommended.
- Varicella immunization is recommended for susceptible patients if there are no contraindications to vaccine use.

**Varicella in NICU**

Significant exposure within 96 hours (4 days) AND

- Immuno-deficient
- Early premature < 28wks
- Premature >28wks of susceptible mother
- Newborn of infected mother @ delivery

➔ VZIG or acyclovir

➔ Airborne isolation for 21 days

**Preventing complications**

Significant exposure within 96 hours (4 days) AND

- Immuno-deficient
- Early premature < 28wks
- Premature >28wks of susceptible mother
- Newborn of infected mother @ delivery
- Susceptible adult >15 yrs

➔ VZIG or acyclovir