Guidelines for Varicella (Chickenpox) Outbreaks

West Virginia Department of HEALTH
BUREAU FOR PUBLIC HEALTH

Case definition: Cases can be classified as confirmed or probable. Both should be included in the outbreak investigation.

Confirmed	Probable
An acute illness with a generalized rash **AND** ● Laboratory confirmation by any of the following: ○ Isolation of varicella virus from a clinical specimen, **OR** ○ Varicella antigen detected by direct fluorescent antibody test, **OR** ○ Varicella-specific nucleic acid detected by polymerase chain reaction (PCR), **OR** ○ Significant rise in serum anti-varicella immunoglobulin G (IgG) antibody level by any standard serologic assay. **OR** An acute illness with a generalized rash with vesicles AND confirmatory epidemiological linkage evidence.	In the absence of a more likely alternative diagnosis: • An acute illness with a generalized rash with vesicles **OR** • An acute illness with a generalized rash without vesicles **AND** ○ epidemiologic linkage evidence **OR** ○ supportive laboratory evidence **OR** • Physician diagnosed **AND** ○ Epidemiologic linkage evidence **OR** ○ Confirmatory or supportive laboratory evidence

Outbreak definition: Three or more (≥3) cases within 21 days of each other that are epidemiologically linked. A single varicella case is a potential source for an outbreak, and the case should be excluded or isolated from the setting (e.g., school, daycare, camp) immediately.

Incubation period: 10-21 days, most commonly 14-16 days

Communicability: 1–2 days before the onset of rash and ends when all lesions are crusted, typically 4–7 days after onset of rash.

Transmission: Airborne, droplet, and direct contact

When you have an outbreak:

1. Immediately report all outbreaks of varicella in any setting to your local health department by phone.
2. Initiate rapid case and contact identification to prevent the spread of disease, especially among susceptible persons at high risk for serious complications of varicella (neonates, immunocompromised and pregnant women).
3. Confirm the outbreak with the assistance of the Office of Epidemiology and Prevention Services (OEPS). Atypical varicella is difficult to diagnose and may require laboratory confirmation. In these circumstances, collect specimens for testing using the polyester swab method. A specimen collection form and instructions can be found at https://oeps.wv.gov/toolkits/Pages/toolkits_varicella.aspx
4. Issue a healthcare provider alert and parent/guardian notification letter in settings where exposed persons may seek post exposure prophylaxis.
5. Isolate individuals with varicella from group or school setting until all their blisters have formed scabs or crusts (usually 5 days after rash onset).
6. Exclude exposed susceptible individuals (unvaccinated and without other evidence of immunity) from 8 to 21 days after exposure. Once these contacts are vaccinated, they can return to the setting (exception, healthcare workers).
7. Verify the vaccination status of individuals in the outbreak setting (e.g., school, camp, daycare). Recommend 2nd dose of varicella vaccine for those with a single dose.
8. Administer varicella vaccine to individuals without evidence of immunity who have been exposed to varicella.
9. Offer Immune Globulin Intravenous (IGIV) as soon as possible within 96 hours of varicella exposure (but up to 10 days post-exposure) to individuals for whom varicella vaccine is contraindicated or are immunocompromised.
10. Refer susceptible pregnant individuals to their OB/GYN or other healthcare provider.
11. Start a line list for confirmed/probable cases. Line list templates can be found at https://oeps.wv.gov/toolkits/Pages/toolkits_varicella.aspx
12. For more information about varicella outbreak response, see https://www.cdc.gov/chickenpox/php/outbreak-control/

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