

Guidelines for Varicella (Chickenpox) Outbreaks

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

Confirmed	Probable
<p>An acute illness with diffuse (generalized) maculo-papulovesicular rash, AND</p> <ul style="list-style-type: none"> • Epidemiologic linkage to another probable or confirmed case, OR • Laboratory confirmation by any of the following: <ul style="list-style-type: none"> ○ 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. 	<p>An acute illness with diffuse (generalized) maculo-papulovesicular rash, AND</p> <ul style="list-style-type: none"> • Lack of laboratory confirmation, AND • Lack of epidemiologic linkage to another probable or confirmed case.

Outbreak definition: Three or more (≥ 3) cases that are related in place and 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 day

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 DIDE Outbreak Team. 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://oepe.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) and exposed susceptible individuals for the duration of the period of communicability (8 to 21 days after exposure).
6. 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.
7. Administer varicella vaccine to individuals without evidence of immunity who have been exposed to varicella.
8. Offer Immune Globulin Intravenous (IGIV) as soon as possible within 96 hours of varicella exposure to individuals for whom varicella vaccine is contraindicated, no history of Varicella is unknown, or those who have negative serologic test results.
9. Refer susceptible pregnant individuals to their OB/GYN or other healthcare provider.
10. Document the outbreak line listing form and fax the completed line listing form to DIDE at 304-558-8736. Line list can be found at https://oepe.wv.gov/toolkits/Pages/toolkits_varicella.aspx
11. For more information about varicella outbreak response, see <https://www.cdc.gov/chickenpox/php/outbreak-control/>