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dhfs.wisconsin.gov**Varicella Case Reporting and Follow-Up  
Frequently Asked Questions****Reporting to the Local Health Department (LHD)****1. Does the case of varicella need to be diagnosed by a physician?**

No. Parent/caregiver description of the illness and rash via telephone contact is sufficient to generate a case report. The reported illness should be compatible with this clinical description in the EpiNet Manual: "An illness with an acute onset of diffuse (generalized) maculo-papulovesicular rash without other apparent cause. In vaccinated persons who develop varicella more than 42 days after vaccination (breakthrough disease), the disease is almost always mild with fewer than 50 skin lesions and shorter duration of illness. The rash may also be atypical in appearance (maculopapular with few or no vesicles)."

Additional symptoms of chickenpox include slight fever, mild constitutional symptoms and a skin eruption that is maculopapular for a few hours, vesicular for 3-4 days and leaves a granular scab. Vesicles are unilocular, collapse on puncture and commonly occur in successive crops with several stages of maturity present at the same time. They tend to be more abundant on covered than on exposed parts of the body and may appear on the scalp, high in the axilla, on mucous membranes of the mouth and upper respiratory tract and on the conjunctivae. See #10 below for pictures of children with varicella.

HFS 145.04 (1) requires health care providers, laboratories, health care facilities, teachers, principals, nurses or any person who know or suspects that a person has a communicable disease to report the facts to the local health officer. In addition to reports from health care providers, we anticipate that LHDs will receive reports from day care providers and schools based on parents' descriptions of their child's symptoms or other information.

**2. Does the case of varicella need to be confirmed by a laboratory test?**

No. Laboratory confirmation of cases of varicella is not routinely recommended; laboratory confirmation is recommended under unusual circumstances, e.g., severe or fatal cases.

**3. Are there case definitions for varicella?**

Yes. A **confirmed** case of varicella is defined as a case that is laboratory confirmed OR that meets the clinical case definition and is epidemiologically linked to a confirmed or probable case; OR two probable cases that are epidemiologically linked. Epi-linkage is characterized by direct face-to-face contact. The incubation period for varicella is 14 – 21 days. A **probable** case is defined as a case that meets the clinical case definition, is not laboratory confirmed, and is not epidemiologically linked to another probable or confirmed case.

## Forms

### 4. Will there be a separate varicella report form?

No. For the foreseeable future, cases of varicella should be reported on the Acute and Communicable Diseases Case Report form (DPH 4151). The newly revised DPH 4151 "Acute & Communicable Disease Case Report Form" can now be downloaded from the Division of Public Health forms page in two formats:

Microsoft Word fillable form <http://dhfs.wisconsin.gov/forms/DPH/dph04151.doc>

PDF fillable form <http://dhfs.wisconsin.gov/forms/DPH/dph04151.pdf>

Fillable means that the form can be opened in Adobe Acrobat and information can be typed directly into the form and printed. Please note that information typed into a fillable PDF form CANNOT be saved on a computer. You must print the PDF form before closing it or data will be lost. The fillable Word form CAN be saved on a computer.

Triplicate hard-copy forms (White/Canary/Blue) will be available beginning late April and can be ordered by filling out the online order form at <http://dhfs.wisconsin.gov/forms/PrintFormsOnline.htm> and emailing it to [FM-DPH-PPH@dhfs.state.wi.us](mailto:FM-DPH-PPH@dhfs.state.wi.us), or by calling Cris Caputo at 608-267-9054.

### 5. What information should be included on the 4151?

- Complete the DEMOGRAPHIC DATA/PATIENT INFORMATION section.
- Report varicella immunization history in the MORBIDITY DATA section.
- Report an estimate of varicella severity in the VARICELLA section. In mild cases, there are a few scattered lesions on the body that can be counted in 30 seconds. In severe cases, lesions are clumped so closely together that it is difficult to see normal skin. Moderate cases fall between these two extremes. See #10 below for pictures of children with mild, moderate and severe varicella infections.
- Lastly, report whether this case is epidemiologically-linked to another case of varicella in the VARICELLA section, including the epi-linked case name, if known.
- It is no longer necessary to submit summary varicella case counts.

## Case Follow-Up

### 6. A single case of varicella has been reported. What should the follow-up be?

Information on vaccine history, disease severity and epi-linkage should be collected from the reporting agency, or the parent, if not already reported on the 4151. Due to the burden varicella follow-up may impose on LHDs, it is not necessary to independently verify that the named epi-linked individual is in fact a varicella case.

Public health interventions are detailed in the EpiNet manual (<http://hanplus.wisc.edu/epinet/>). The most frequent interventions are to:

- Exclude the case from day care, school, medical offices and public places until vesicles become dry (usually after five days).
- Recommend varicella vaccine for post-exposure administration to unvaccinated persons (e.g., household contacts) without other evidence of immunity.\*  
Optimally, varicella vaccine should be administered within 3 – 5 days of exposure

to prevent illness or modify disease severity, but there is no contraindication to administering the vaccine any time after exposure.

\*Evidence of immunity to varicella includes documentation of age-appropriate vaccination with varicella vaccine; laboratory evidence of immunity or laboratory confirmation of disease; birth in the United States before 1980 (except for health care providers); or diagnosis or verification of a history of varicella disease or herpes zoster by a health-care provider. For students in day care centers and schools, HFS 144 accepts parent report of history of varicella as evidence of varicella immunity.

**7. A couple of cases of varicella have been reported by a day care center or school. Is the follow-up any different from that for a single sporadic case?**

CDC recently defined an outbreak of varicella as  $\geq 5$  cases in a particular setting (e.g., school) occurring within at least one incubation period (i.e., 21 days). This definition implies that it could take up to 90 days to accumulate enough cases to term a cluster an outbreak. The minimum public health response to outbreaks in day care centers and schools should include informing parents and caregivers of the occurrence of the outbreak, providing them with information on varicella and its potential to cause severe complications, and providing information about the availability of vaccine. A sample letter to parents is provided in the EpiNet Manual.

**8. Does HFS 144 Immunization of Students require exclusion of susceptible students in the event of a school outbreak of varicella?**

No. A definition of an outbreak of varicella was not available when the rules were revised. Varicella vaccination should be encouraged for susceptible students (i.e., those without parental history of disease or 0 or 1 dose of varicella vaccine).

**9. What if I have more questions?**

Questions on varicella reporting and follow-up should be directed to a Regional Wisconsin Immunization Program Advisor or the Central Office at 608-266-2346.

**10. What does varicella disease look like?**

**Examples of Varicella Cases**

Mild



Moderate



Severe

