

GUIDELINES FOR POST-EXPOSURE EXCLUSION OF VARICELLA SUSCEPTIBLES IN OREGON SCHOOLS AND CHILD CARE FACILITIES

1. BACKGROUND

In September 2000, vaccination against varicella (chickenpox) was required of susceptible children in Oregon child care facilities and a similar requirement for children in grades K-12 was phased in during 2000–2006. About 5% of Oregon students are exempt from this requirement for medical or nonmedical reasons. Varicella is not reportable in Oregon at this time.

To protect the health of students and staff when communicable, vaccine-preventable diseases are identified in such facilities, local public health authorities (LPHA) are authorized by Oregon law to exclude susceptible children from schools and child care facilities. There are currently no national guidelines for such exclusions in the case of varicella exposure.

2. DEFINITIONS

2.1 Varicella absentees

Varicella absentees are defined as students, child care facility attendees, and staff (with contact with children) who are absent from school or work due to varicella whose case status has not been determined.

2.2 Varicella cases

Varicella cases are defined as varicella absentees (with or without varicella vaccination) with acute onset of maculo-papulo-vesicular rash without other apparent cause persisting longer than 24 hours and at least one of the following:

- varicella zoster virus (VZV) isolated from vesicular fluid (confirmed varicella);
- demonstration of VZV DNA by polymerase chain reaction (confirmed varicella);
- paired acute and convalescent sera demonstrating a 4-fold rise in anti-VZV IgG (confirmed varicella);
- provider-diagnosed varicella after physical examination (presumptive varicella);
- parent-reported varicella with an epidemiologic link to a confirmed or presumptive varicella case in school, in a child care facility, or at home (suspect varicella);
- parent-reported varicella only (undefined varicella)—varicella susceptibles exposed to undefined varicella cases would not be excluded from school or child care.

2.3 Varicella case contacts

Varicella case contacts are defined as housemates attending the same school or child care facility, classmates in all classrooms, child care facility mates, and school or child care staff (with contact with children) who were exposed to a confirmed, presumptive, or suspect varicella case two days before to five days after the case's rash onset date or, if the rash onset date is unknown, the last day the case attended school or child care before being absent for varicella.

2.4 Varicella susceptibles

Varicella susceptibles are defined as varicella case contacts (see §2.3) and others (schoolmates, child care facility mates, staff) who do not have:

- documentation of age-appropriate varicella vaccination;¹
- laboratory evidence of varicella immunity;
- provider-diagnosed VZV disease history;
- parent-reported VZV disease history;
- self-reported VZV disease history (staff only).

3. Procedure

If the LPHA learns of varicella absentees in a school or child care facility, the following steps should be taken.

3.1 Discuss with school or child care facility officials

The LPHA should discuss with school or child care facility officials:

- whether the absentees are likely to represent varicella; and
- the number of varicella cases identified in the facility within the most recent 42-day period.

3.2 Exclusion decision

The LPHA should decide whether exclusion is warranted to protect the health of students and staff.

3.3 Exclusion steps

If such exclusion is judged to be warranted, the following steps should be taken. Determine likely exposures.

- If <5 cases have been identified, then facility officials should review the case classroom locations, and the LPHA should help them to circumscribe the cases in time and space so as to discern which students should be considered exposed.
- If ≥5 cases have been identified, students in the entire facility should be considered exposed.

The LPHA should provide, and the reporting facility maintain and return with each new case, a Varicella Case log, on which the following information on suspected varicella **cases** should be recorded:

- name
- grade
- parent's phone number
- date of rash onset
- who made the diagnosis
- last day of school or child care attended
- varicella vaccination date (if vaccinated)

Facility officials should review the immunization records of students considered to have been exposed, determine which are susceptible, immediately notify parents of susceptible students (electronically or verbally) and advise post-exposure vaccination as soon as possible. Students vaccinated within 5 days of exposure need not be excluded.

Facility officials should forward to the LPHA the following information on **susceptible** students:

- student name
- parent name
- address
- telephone number(s)
- date of birth

The LPHA should notify, by written Exclusion Order for Disease Susceptibility, the parents of susceptible students who declined post-exposure vaccination of their exclusion from the facility during days 10–21 (or days 10– 28 for VZIG recipients), with day 0 being the date of last exposure. A template for exclusion order for disease susceptibility is available (attached).

Footnote

1. School law requirement on varicella consists on vaccination with one dose if given at 12 months–12 years of age or two doses, given at least 24 days apart, if given at ≥13 years of age.

Additional Resources

ORAR 333-019-0010 (1): "To protect the public health, persons who attend or work at schools or child care facilities or who work at health care facilities or food service facilities shall not attend or work at these facilities whilst in a communicable stage of any restrictable diseases unless authorized to do so as hereunder specified. (3) At schools, child care, and health care facilities, such restrictable diseases shall include: chickenpox [varicella]....."

ORAR 333-050-0100 (3) "When a person is diagnosed as having one of the following school or facility restrictable diseases: (a) Diphtheria, Measles, Mumps, Pertussis, Rubella, Hepatitis A, Varicella or, in children's facilities only, Polio, the local health officer (or designee) may exclude from any school or facility in his or her jurisdiction, any student or employee who is susceptible to that disease."

ORAR 333-050-0100 (4): "The administrator shall maintain a system to track and report susceptible persons. The local health department may request that the list of persons susceptible to a disease be sorted by classroom, grade, or school. The administrator will provide the list within one calendar day of the local health department's request in order to facilitate appropriate disease control measures."

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Attachment

Exclusion Order for Disease Susceptibility

Local Health Department _____

School or child care _____

Date of written exclusion order _____

Date of (electronic or verbal) notification of exclusion _____

To Parent, Guardian, or Adult responsible for: _____

At least one case of varicella (chickenpox) has occurred at the above school. Your child was last exposed to varicella on [the last day the varicella case attended school before rash onset]. Your child is susceptible to the disease as a result of incomplete varicella vaccination, or medical or nonmedical exemption from varicella vaccination.

It is hereby ordered that _____ shall be excluded from school or child care, effective [10 days after last exposure] until [21 days after last exposure].

- The student can remain in school or child care if varicella vaccine is received by [within five days after last exposure]. Varicella vaccination given within five days of exposure usually prevents varicella disease.
- The student can return to school or child care if the exclusion period has started if blood tests indicate immunity to varicella. Blood tests can be arranged with the student's medical provider.

Oregon Law authorizes local health officers (or designees) to exclude students from attending school or child care who are susceptible to diphtheria, measles, mumps, pertussis, rubella, hepatitis A, varicella (e.g. chickenpox), or polio (OAR 333-050-0100).

This order is based on the student's school records, which indicate as follows:

- missing varicella vaccine;
- medical exemption from varicella vaccination;
- nonmedical exemption from varicella vaccination;
- missing documentation of history of varicella disease.