

Guidelines for Students Developing a Rash Following Varicella (Chickenpox) Vaccination

**Colorado Department of Public Health and Environment
Communicable Disease Epidemiology Program**

Rash within 7 Days of Varicella Vaccination

Students developing a vesicular rash within 7 days of varicella vaccination should be excluded from school and treated as having chickenpox, unrelated to vaccination.

Rash 7 – 42 Days after Varicella Vaccination

A small proportion of children (less than 10%) receiving varicella (chickenpox) vaccine may develop a rash from 7 – 42 days following vaccination caused by the vaccine strain of the virus. The rash may be vesicular or maculopapular, and may be localized at the injection site or generalized (multiple parts of body). Typically, injection site rashes are due to the vaccine-type virus. Generalized rashes occurring in the first 3 weeks (1-21 days) following vaccination are usually caused by wild-type virus, whereas, generalized rashes occurring 3 to 6 weeks (21-42 days) after vaccination are most likely caused by vaccine-type virus. However, a mild case of chickenpox (wild-type virus) cannot clinically be distinguished from a rash caused by the vaccine (vaccine-type virus) without specialized laboratory testing. The following are recommendations for students developing certain types of rashes 7 – 42 days after varicella vaccination.

Rash at Injection Site Only

- **Small to moderate number of lesions at the injection site** (vesicular, maculopapular or other type), student may attend school or childcare if the rash is covered with clothing and a bandage.

Generalized (multiple parts of body) Rash

- **Vesicular** (small, fluid-filled blisters): student should be excluded from school or childcare until all lesions crust over. Photos of vesicular chickenpox rashes are available at www.cdphe.state.co.us/dc/Epidemiology/Varicella .
- **Maculopapular** (non-vesicular; small, flat spots and raised bumps, typically reddish): student should be excluded from school or childcare until rash is gone OR healthcare provider determines student is non-infectious.

Rash > 42 Days after Varicella Vaccination

A varicella-like rash occurring more than 42 days after vaccination is probably **breakthrough chickenpox**, caused by wild-type virus. Breakthrough chickenpox is usually a mild illness with fewer than 50 lesions; the rash may be maculopapular rather than vesicular. Students with breakthrough chickenpox should be excluded from school until the lesions crust over or the rash is gone.