

Measles Overview for Schools Nurses

Clinical Presentation

Measles (rubeola) is a highly contagious acute viral respiratory illness. It is characterized by a prodrome of fever (more than 104°F) and malaise, cough, coryza, and conjunctivitis—the three "C"s, Koplik spots followed by a maculopapular rash. The rash is red and blotchy and appears on the third to the seventh day after the onset of initial symptoms; the rash begins on the face (hairline) proceeding downward and outward, reaching the hands and feet. Patients are considered to be contagious from 4 days before to 4 days after the rash appears. Count rash onset as day zero. Complications can include diarrhea, otitis media, pneumonia, encephalitis and death.

Infection Control

Measles is one of the most contagious of all infectious diseases, infecting 9 out of 10 susceptible persons with close contact to a case. It is transmitted by direct contact with infectious droplets or by airborne spread. It can remain infectious on surfaces and in the air for up to two hours after an infected person has left an area.

If a student or staff presents with symptoms that are consistent with measles, the person should be isolated from the rest of the school population immediately. If a student or staff with suspected measles needs medical attention, the medical facility (and EMS if necessary) should be notified ahead of time about the suspected diagnosis so appropriate control measures can be put in place.

If a student or staff is diagnosed with measles, they may return only on a date specified by public health authorities, 4 days after rash onset and with resolution of symptom-based exclusion criteria. Count rash onset as day zero.

If a person is suspected of having measles, the person should be kept out of school until four days after rash onset or until a medical provider has ruled out measles as a possible diagnosis.

If a person at school is diagnosed with measles, extensive follow up will most likely be needed. Public health officials, including Iowa HHS, will assist with determining and carrying out appropriate follow-up, but it may include:

- Identifying anyone exposed
- Reviewing the vaccination records for all students
- Notifying parents and staff about the exposure
- Identifying sick children/staff
- Excluding exposed, unvaccinated children/staff from school

Since measles is so infectious, the following individuals should be considered exposed:

- Anyone that was in the same room as the ill individual during the infectious period (four days before rash onset until four days after rash onset). Count rash onset as day zero, with return to school on day five.

- Anyone that was in the room up to two hours after the ill individual left the room during the infectious period.
- Schools where students change classrooms, or share common areas like a cafeteria, will likely need to consider all students/staff exposed due to the possibility of exposure in the hallways.

Disease Reporting

Iowa Administrative Code 641-1.3(139A, 141A), Appendix A, and 641-1.4(1)(a)(2), [ARC 8070C - Iowa Administrative Rules](#) stipulates infectious disease reporting requirements. These provisions identify measles as immediately reportable and require school nurses to report suspected cases among the children they supervise.

Identify students and staff with medical or religious exemptions anywhere in the school. These individuals must be quarantined until 21 days after the last case of measles was in the school during their infectious period. Students and staff who received one dose of MMR and are exposed to a confirmed measles case should receive a second dose of MMR as soon as possible. Student and staff exclusions will be determined on a case-by-case basis in consultation with Iowa HHS.

Vaccine Requirements for Iowa Schools and Licensed Child Care Centers

Iowa Code, Chapter 139A.8(6) and Iowa Administrative Code, 641-7.7(139) outline immunization requirements to attend licensed child care, elementary or secondary school.

Iowa Code 139A.8 states that Certificate of Immunization Exemptions—Religious and Certificate of Immunization Exemption—Medical, do not apply in times of an emergency or epidemic as determined and declared by the Director of Iowa Health and Human Services.

For the 2026-2027 school year, children enrolled in child care facilities or pre-school are required to have one dose of MMR or measles-containing vaccine by 19 months of age (given on or after the 1st birthday). Students enrolled in kindergarten through twelfth grade are required to have two doses of MMR or measles-containing vaccine or a positive antibody test for measles from a U.S. laboratory.

Documentation of a valid Certificate of Immunization Exemption (Religious or Medical) or Provisional Certificate of Immunization may be submitted in lieu of a Certificate of Immunization. Requirements for valid exemptions may be found in Iowa Code 139A.8 and Iowa Administrative Code 641—7.

References

- Iowa HHS Center for Acute Disease Epidemiology (CADE), Epidemiological Manual: Measles. [Measles | Health & Human Services](#)
- Iowa Department of Health and Human Services (Iowa HHS). Bureau of Immunization and Tuberculosis. School & Child Care Audits. Des Moines: Iowa HHS, 2026. Web. <https://hhs.iowa.gov/about/data-reports/health-disease/immunization/school-child-care-audits>



If measles is suspected, individuals should promptly seek evaluation from a healthcare provider, call ahead before arriving to prevent further exposure. Ensure any suspected measles cases are reported to the local public health agency.