

Measles

(Rubeola)



Clinical Description:

Measles is an extremely contagious viral respiratory illness. Prodromal (early) symptoms include cough, runny nose, conjunctivitis, fatigue and fever prior to the development of Koplik's spots, which resemble grains of salt, in the mouth. A maculopapular rash beginning at the hairline spreads downward over the entire body 3-7 days after infection. Measles may cause serious complications, including ear infection, pneumonia, and encephalitis. In some cases, measles may be fatal.

Incubation Period:

The incubation period is usually about 14 days, varying from 7 - 21 days.

Mode of Transmission:

Measles is transmitted by direct contact with infectious droplets or, less commonly, by airborne spread. These droplets can remain infective up to two hours in the air.

Period of Communicability:

A person can spread measles four days prior to the appearance of the rash up to four days following the appearance of the rash.

Exclusion/Reporting:

Whenever measles is strongly suspected or confirmed, contact the local health department should be notified immediately. Infected persons are excluded from school and contact with other people outside the household for four days after appearance of the rash (with day of rash onset counted as day 0). According to the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3), students who have not presented proof of immunity against measles are excluded until acceptable proof of immunity is presented, or in the case of medical or religious exemptions, until 14 days after the onset of the last reported measles case. Previously unvaccinated children who are vaccinated more than 72 hours of exposure are excluded until 14 days after vaccination. However, these recommendations are outdated and will be updated in the next revision of the Communicable Disease Rule (2015). The current CDC recommendations are that susceptible students AND STAFF are excluded until acceptable proof of immunity is presented, or in the case of medical or religious exemptions, until 21 days after the onset of the last reported measles case. Also, the recommendation for unvaccinated children who are vaccinated after exposure is outdated as well. The updated recommendations are in the Outbreak section below. For information on laws and rules regarding measles, see the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3-83) at [http://www.in.gov/isdh/files/comm_dis_rule\(1\).pdf](http://www.in.gov/isdh/files/comm_dis_rule(1).pdf).

Prevention/Care:

- Vaccinate with measles-mumps-rubella (MMR) vaccine at 12 - 15 months of age and again at 4 - 6 years of age. School immunization requirements can be found at <http://bit.ly/1rFzDxD>.

- Check immunization records for all students and staff to assure they have received two doses of a measles containing vaccine. To prevent transmission identify non immune students (medical or religious exemptions) for possible exclusion.
- Inform high risk staff and students when a case of measles has been identified. Exposed pregnant women should be tested for measles immunity, if unknown, and should consult their healthcare provider.

Outbreaks:

According to the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3), an outbreak is defined as the number of cases of disease occurring in a community, region, or particular population that exceeds what is normally expected. If an outbreak is suspected, contact your local health department. For measles, one case constitutes an outbreak. Any case or suspected case is to be immediately reported to the local health department and/or the ISDH. In a school with a measles outbreak, all students and their siblings and all school personnel born in or after 1957 who cannot provide documentation that they have received two doses of measles-containing vaccine on or after their first birthday or cannot provide other evidence of measles immunity (such as serologic testing) should be vaccinated. Persons who cannot readily provide documentation of measles immunity should be vaccinated or excluded from the school or other institution. Persons receiving second doses, as well as previously unvaccinated persons receiving their first dose as part of the outbreak control program, may be immediately readmitted to school provided all persons without documentation of immunity have been excluded. Persons who are exempt from or who refuse measles vaccination should be excluded from the school, childcare, or other institution until 21 days after the onset of rash in the last case of measles. For additional information and recommendations regarding the preparation for, and the management of an outbreak situation in a school setting, see Appendix A, "Managing an Infectious Disease Outbreak In a School Setting."

Other Resources:

Centers for Disease Control and Prevention (CDC):

<http://www.cdc.gov/measles/index.html>

<http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/meas.pdf>

Indiana State Department of Health Quick Facts Page (found on disease/condition page):

<http://bit.ly/12lJLfD>