

Measles

Definition: Measles is an extremely contagious viral respiratory disease that is also known as Rubeola. Measles is a rare infection in the United States, but recent United States cases highlight the importance of continued vaccination.

Signs and Symptoms: Symptoms of measles typically arise within 7-14 days after a person is exposed. They include: fever, coughing, runny nose, conjunctivitis, fatigue and a red “blotchy” rash. Some cases may also show Koplik spots which are tiny white spots with bluish-white centers inside of the individual’s mouth.

Transmission: This disease is highly contagious and is spread from person to person through breathing, coughing, and sneezing. The virus can live on surfaces for up to 2 hours on surfaces, further contributing to transmission. Federal CDC estimates that if one person is infected, around 90% of people close to that person will also get infected unless they are immune.

Diagnosis:

- Specimens are collected for testing from blood, nasopharyngeal and throat swabs. Measles virus is more likely to be isolated when the specimens are collected within 3 days of rash onset. The most definitive test of measles infection is isolation of the virus in culture or RT-PCR.

Role of the School Nurse:

- **Prevention:** Measles can be prevented through the MMR vaccine (measles, mumps, rubella); children should be immunized at 12-15 months and again at 4-5 years old. Vaccination records should be reviewed annually.
- **Treatment recommendations:** Treatment is supportive. Infected individuals may also need treatment of secondary infections.
- **Exclusions:** Children should not be allowed in school until 4 days after rash onset (end of transmission stage). Children without proof of immunity will be excluded 15 days from the onset of symptoms of the last identified case.
- Ensure immune compromised and pregnant students/staff are notified of the potential exposure to measles.

Reporting Requirements: Measles must be reported immediately at first suspicion of the disease. Report cases to ME CDC at 1-800-821-5821.

Resources:

- Federal CDC link: <http://www.cdc.gov/vaccines/vpd-vac/measles/default.htm>
- Maine Immunization Program website
<http://www.maine.gov/dhhs/boh/ddc/immunization/>
- Maine Infectious Disease link: <http://www.maine.gov/dhhs/mecdc/infectious-disease/epi/vaccine/measles.shtml>