

**Measles Overview for School Nurses**

***If a student or staff member is diagnosed with or suspected of having measles, the school should immediately report the student/staff to the local health department at 800-705-8868.***

## **I. Clinical Presentation**

Measles (rubeola) is a highly contagious acute viral respiratory illness. It is characterized by a prodrome of fever (as high as 105°F) and malaise, cough, coryza, and conjunctivitis – the three “C”s, Koplik spots followed by a maculopapular rash. The rash usually appears about 14 days after a person is exposed, however, the incubation ranges from 7 – 21 days. The rash characteristically spreads from the head to the trunk to the lower extremities. Patients are considered to be contagious from 4 days before to 4 days after the rash appears. Please note that immunocompromised patients may not develop the rash. Complications can include otitis media, diarrhea, bronchitis, pneumonia, encephalitis, seizures and death.

While it is rare that vaccinated individuals develop measles, it does happen. Vaccinated individuals may have an atypical clinical presentation—typically shorter rash duration or atypical rash presentation, and possible lack of fever, cough, coryza or conjunctivitis.

People at high risk for severe illness and complications from measles include: infants and children <5 years, adults aged >20 years, pregnant women, and those with compromised immune systems.

## **II. 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 child should be isolated from the rest of the school population immediately. If a child 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, the person cannot return to school until four days after rash onset. 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. The local or state health department will assist with determining and carrying out appropriate follow up, but it may include:

- Identifying anyone exposed
- Reviewing the vaccination records for all students
- Requesting staff vaccination records
- Notifying parents and staff about the exposure
- Identifying sick children/staff

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- Excluding children/staff from school

Because 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).
- 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 such as a cafeteria, will likely need to consider all students/staff exposed due to the possibility of exposure in the hallways.

### III. Disease Reporting and Exclusion Requirements/Statute

Several Texas laws ([Health & Safety Code, Chapters 81, 84, and 87](#)) require specific information regarding notifiable conditions be provided to the Department of State Health Services (DSHS). Health care providers, hospitals, laboratories, schools, childcare facilities and others are required to *immediately* report patients who are *suspected* of having measles ([Chapter 97, Title 25, Texas Administrative Code](#)). Reporting should not wait for confirmation. The Texas Administrative Code (Rule 97.7) requires exclusion of students with measles or suspected measles for 4 days after rash onset.

People suspected of having measles should be told to stay home from work, school, daycare, and any public outings (e.g., church, grocery store, shopping centers) until four days after rash onset have passed. Susceptible or unvaccinated persons that have been exposed to measles and did not receive post-exposure prophylaxis (PEP) should be advised to stay home from day 5-21 after exposure.

### IV. Vaccination Requirements for Texas Schools and Child-Care Facilities

For the 2014-2015 year, children enrolled in child-care facilities are required to have 1 MMR by 16 months of age (given on or after the 1<sup>st</sup> birthday). Students enrolled in grades K-5 are required to have 2 doses of MMR vaccine on or after the first birthday. Students enrolled in grades 6-12 are required to have 2 doses of a measles-containing vaccine ([Texas Administrative Code, Title 25, Chapter 97, Rule §97.63](#)). Serologic confirmation of immunity to measles is acceptable in place of vaccine for children enrolled in grades K - 12.

Schools with questions regarding measles can call 800-252-9152 or visit [www.ImmunizeTexas.org](http://www.ImmunizeTexas.org).

*For additional information, please contact Monica Gamez, Infectious Disease Control Unit Director, at 1-800-252-9152.*