Pennsylvania
Department of Health

MEASLES: INFORMATION TO PREVENT SPREAD IN SCHOOL AND CHILD CARE SETTINGS*

WHAT IS MEASLES?

Measles is a very contagious respiratory disease caused by a virus. Before the measles vaccine became available, measles was a common childhood disease. Some people may suffer from severe complications, such as pneumonia (infection of the lungs) and encephalitis (swelling of the brain). They may need to be hospitalized and could die. Symptoms include: rash, high fever, cough, runny nose, and red, watery eyes.

HOW DO PEOPLE GET MEASLES?

Measles is easily spread from person to person. When an infected person talks, coughs or sneezes, the virus is released into the air and enters another person's body through the nose, mouth or throat. People can also become sick if they come in contact with the mucus or saliva (spit) from an infected person. The measles virus can live on contaminated surfaces and in the air for up to two hours after an infected person was present. A person infected with measles can transmit the virus to others from 4 days before through 4 days after rash onset.

ARE THERE COMPLICATIONS WITH A MEASLES VIRUS INFECTION?

Yes. Common complications include ear infections and diarrhea. Severe complications include pneumonia (infection of the lungs), encephalitis (swelling of the brain), and death. Measles may cause pregnant persons to give birth prematurely or have low-birth-weight babies.

IF A PERSON IS EXPOSED, DOES THAT MEAN THEY WILL GET SICK OR INFECTED?

An exposure occurs when a person is in the same space (e.g. room, office, waiting room, building) with someone who has measles, or occupies this space within 2 hours after the infected person has left. People are less likely to get sick with measles if they have been appropriately vaccinated. Approximately 90 percent of susceptible (non-immune) people will get measles when they are exposed to someone with the disease.

SHOULD SCHOOLS BE CLOSED DURING AN OUTBREAK OF MEASLES?

The Pennsylvania Department of Health (PA DOH) generally does not recommend school closure for outbreaks of infectious diseases. The decision to close a school is an administrative decision and one that should be made only after consultation with public health officials and the district medical personnel.

PENNSYLVANIA REGULATIONS

- Pennsylvania immunization requirements for measles are located at:
  - **§ 23.83. Immunization requirements.**
  - **School Vaccination Requirements for Attendance in Pennsylvania Schools** for PA school vaccination requirements
- Pennsylvania measles regulations are located at:
  - **§ 27.160. Special requirements for measles**
  - **§ 27.75. Exclusion of children, and staff having contact with children, during a measles outbreak.**
  - **§ 27.71. Exclusion of children, and staff having contact with children, for specified diseases and infectious conditions**
- Pennsylvania disease reporting requirements are located at:
  - **§ 27.21a. Reporting of cases by health care practitioners and health care facilities.**

*School settings pertain to youth camps, childcare centers, preschools, schools, and institutions of higher education. Throughout this document, we will refer to these generally as "schools"

WHAT CAN SCHOOLS DO NOW TO PREPARE FOR A CASE OF MEASLES?

- ✓ **Check immunization records.** Review the immunization status for all children **AND** staff members/volunteers. Proof of immunity includes:
  - Written documentation of age-appropriate measles vaccination (one or two doses)
    - Receipt of 1+ doses of a measles-containing vaccine administered on or after the first birthday for preschool-age children and adults not at high risk, and two doses of measles-containing vaccine for school-age children and adults at high risk for exposure transmission (i.e., health care personnel, international travelers, and students at post-high school educational institutions)
  - Laboratory evidence of immunity (blood test) or laboratory confirmation of measles disease
  - Birth before 1957 (adults born before 1957 are more likely to have had measles as a child and are generally, but not always, considered immune)

- ✓ **Develop a plan and implement strategies to rapidly identify staff and students susceptible to measles.**
  During measles exposures events, the ability to rapidly identify susceptible individuals is essential for appropriate public health interventions such as postexposure prophylaxis or exclusion/quarantine.

- ✓ **Communicate broadly with all parents and staff reminding them of immunization recommendations**.
  The Centers for Disease Control and Prevention recommendations for measles vaccination can be shared. Two doses of the measles, mumps, rubella (MMR) vaccine are 97% effective preventing measles, and one dose is 93% effective preventing measles. Measles vaccines are available from:
  - Many doctor's offices
  - Urgent Care Centers (call to confirm)
  - Local pharmacies (check with locations based on child's age)
  - Federally funded health centers (for under or uninsured individuals)
  - Local health department (LHD) or Pennsylvania Department of Health (PA DOH) state health center

- ✓ **Inform families of unvaccinated children and unvaccinated staff that they may need to stay home for up to 21 days each time they are near someone who has measles.**
  The following are general guidelines for exclusion. Please note that all decisions to exclude children and staff should be made in consultation with the PA DOH or your local health department (LHD).
  - Exclude children and staff who have measles until they are no longer contagious (through 4 days after rash onset).
  - Exclude exposed children and staff members who do not have proof of immunity from day 5 after the first exposure through day 21 following the last exposure.

- ✓ **Promote respiratory hygiene and cough etiquette.**

- ✓ **Encourage frequent handwashing.** If soap and water are not available, use hand sanitizer.

- ✓ **Disinfect frequently touched surfaces such as doorknobs, tables, and counters.**

- ✓ **Encourage students and staff to stay home when sick.**

- ✓ **Review the signs and symptoms of measles.** Be watchful for students who may come to school with fever and other signs and symptoms of measles.
  - Identify a private room for students suspected of having measles to wait, while their parents are coming to pick them up from school.
  - If measles is suspected, advise the family to seek care at the office of their healthcare provider, at an urgent care, or an emergency room.
    - They should notify the health care facility before they arrive that measles is suspected so that care can be taken to limit further spread

- ✓ **Reported suspected measles cases to your local health department or by calling 1-877-PA-HEALTH.**

STEPS TO TAKE IF THERE HAS BEEN A PERSON WITH MEASLES AT YOUR SCHOOL

1. **Contact your local health department or PA DOH by calling 877-PA-HEALTH (877-724-3258)** if someone with measles may have been at your school.

2. **Follow all instructions** given to you by PA DOH or your local health department staff.

3. **Review the attendance records for all students and staff** that attended your school during the time the person with measles may have been at your school and track the following information:
    - Student/staff first and last name
    - Parent/guardian first and last name (for students)
    - Address
    - Phone number
    - Date of birth
    - Classroom(s) of student/staff
    - Bus information for student
    - MMR vaccination status and dates

4. If PA DOH or your local health department has confirmed the person did have measles and they were sick while at your school, **you may need to share the information gathered during step 3 with PA DOH or your local health department** to help prevent spread of measles to others**.**
    - It is important that public health gets information as soon as possible so that it can notify families of the exposure, let families know what they should do if they were not vaccinated at the time of exposure, and let families know how they can contact PA DOH and seek care if they develop symptoms

5. **Implement the public health recommendations** for people that PA DOH or your local health department has determined may have been exposed to measles and could potentially spread measles to other people
    - Depending upon the situation, people who have not been vaccinated with **any** doses of MMR and have been near someone with measles may be asked to remain home for up to 21 days after their last exposure.

ADDITIONAL RESOURCES

Measles Fact Sheet | Pennsylvania Department of Health

Measles (Rubeola) | Measles (Rubeola) | CDC