What is measles and how is it transmitted?

Measles is a very contagious respiratory disease caused by a virus. Symptoms include high fever, cough, runny nose, and red, watery eyes, followed by a rash that usually starts of the face and lasts for at least 3 days. 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. Measles may be transmitted 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 women to give birth prematurely or have low-birth-weight babies.

How can a school prevent and control measles?

- Encourage students and staff to get vaccinated. One dose of measles vaccine is about 93% effective at preventing measles and two doses are about 97% effective. Review the immunization status for all children AND staff members.
- Keep children and staff out of school when they have a fever.
- Encourage frequent hand washing. If soap and water are not available, use an alcohol-based hand rub that contains at least 60% alcohol.

How should cases be reported?

All suspect and confirmed cases of measles must be immediately reported to the Allegheny County Health Department (ACHD) at 412-687-2243.

What is proof of immunity?

Proof of immunity (protection against measles) includes at least one of the following:

- Written documentation of age-appropriate measles vaccination (one or two doses)
- 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 considered immune).

If a person is exposed, does that mean they will get sick or infected with measles?

An exposure occurs when a person is in the same space with someone who has measles, or occupies this space for up to 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 people will get measles if they are exposed to someone with the disease.

When should children and staff be excluded from school?

The following are general guidelines for exclusion. Please consult ACHD for recommendations about exclusion.

• Exclude children and staff who have measles until they are no longer contagious (can return on the 5th day after rash onset).
• Children and staff members who do not have proof of immunity and are exposed to measles should be excluded from day 5 after the first exposure through day 21 after the last exposure, unless they receive an MMR vaccine within 72 hours of the first exposure.
• If there are ≥3 cases at the school, all nonimmune children and staff at the school should be excluded until 21 days after the onset of rash in the last case, regardless of known exposures.

Should schools be closed during an outbreak of measles?

ACHD 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.

Where can I get more information?

CDC’s Measles Outbreak Toolkit for Healthcare Providers:
https://www.cdc.gov/measles/toolkit/healthcare-providers.html

PA Dept. of Health fact sheet:

Note: This document was adapted from the New Jersey Department of Health’s “Prevention Information for Schools”
This information is not a substitute for medical advice.