

DATE:	January 5, 2024
TO:	Health Alert Network
FROM:	Debra L. Bogen, MD, FAAP, Acting Secretary of Health
SUBJECT:	Measles in Pennsylvania
DISTRIBUTION:	Statewide
LOCATION:	Statewide
STREET ADDRESS:	n/a
COUNTY:	n/a
MUNICIPALITY:	n/a
ZIP CODE:	n/a

This transmission is a “Health Advisory” which provides important information for a specific incident or situation and may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; **EMS COUNCILS:** PLEASE DISTRIBUTE AS APPROPRIATE; **FQHCs:** PLEASE DISTRIBUTE AS APPROPRIATE **LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; **LONG-TERM CARE FACILITIES:** PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

Summary

- As of January 5, 2024, there have been seven cases of [measles](#) diagnosed in Pennsylvania since December 6, 2023. Six of these cases were epidemiologically linked and from southeastern Pennsylvania. One case was in northcentral Pennsylvania and not epidemiologically linked to the other cases.
- The index case in the southeastern Pennsylvania outbreak acquired measles while traveling abroad and the remaining cases were exposed via healthcare or childcare settings. The northcentral Pennsylvania case was unrelated, and the illness was acquired while living abroad. All these cases were in unvaccinated individuals.
- Providers should have an increased suspicion for measles in patients who are not immune and present with a febrile rash illness and follow the proper recommendations for testing and infection control measures.
- The Pennsylvania Department of Health (DOH) reminds providers to **immediately report suspected cases of measles** to local public health authorities or to the DOH at 877-PA-HEALTH (877-724-3258).
- DOH continues to encourage all Pennsylvanians to remain up to date with their recommended vaccines including the Measles, Mumps and Rubella (MMR) vaccine.
- If you have any question, please call DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

Background

As of January 5, 2024, there have been seven people diagnosed with measles in Pennsylvania since December 6, 2023. Six people were in southeastern Pennsylvania and one was in northcentral Pennsylvania. The index person in the southeastern Pennsylvania outbreak acquired measles while traveling abroad and then the virus was transmitted in healthcare and childcare settings. The northcentral Pennsylvania person was unrelated, and the illness was acquired while living abroad. The identified people with measles were unvaccinated.

[Measles](#) is a highly contagious, acute viral illness that is transmitted by direct contact with infectious droplets or by airborne spread when an infected person breathes, coughs, or sneezes. The virus can remain infectious in the air and on surfaces for up to two hours after an infected person leaves the area. Measles can cause health complications, including hospitalization and death. Historically, January through May is the peak time for importation of measles infections to the United States. The best way to prevent measles is through routine vaccination with the MMR vaccine.

When to suspect measles

Consider measles as a diagnosis in anyone with a [febrile rash](#) illness lasting three days or more, a temperature of 101°F (38.3°C) or higher, and clinically compatible symptoms (cough, coryza and/or conjunctivitis), particularly if the patient was potentially exposed to a person with measles or has recently traveled to an area with an [on-going measles outbreak](#).

Immunocompromised patients may not exhibit rash or may exhibit an atypical rash. The incubation period for measles from exposure to rash onset is usually 14 days (range, seven to 21 days).

While most people are not at risk because they have been immunized or have had measles, the following groups of individuals are susceptible to becoming infected with measles:

- Anyone born after 1957 who has not received two doses of live measles-containing vaccine (MMR), which would include infants too young to have been immunized; persons who were vaccinated with an inactivated vaccine, which was used from 1963 through 1967, and have not been re-vaccinated; and those who declined vaccination.
- Persons whose immune systems are compromised due to disease or medication.

Measles clinical manifestations & transmission

Measles is an acute viral disease that is spread through airborne transmission of the virus or by contact with items contaminated by throat or nasal secretions. Measles disease is characterized by:

- Fever, cough, runny nose (coryza) and red, watery eyes (conjunctivitis);
- [Koplik's spots](#), which may appear on the buccal mucosa within two or three days;
- A characteristic [red, blotchy rash](#) that appears on the face and then spreads body-wide in days three through seven after symptoms onset.
- Other symptoms may include anorexia, lymphadenopathy, and diarrhea (especially in infants)
- Possible complications of measles include otitis media, pneumonia, febrile seizures, and encephalitis.

Infection control considerations for suspected cases of measles

[DOH](#) requests that all health care providers maintain a high index of suspicion for measles in persons with a febrile rash illness. Because measles is highly infectious and the virus can remain airborne for up to two hours, providers should take precautions to minimize exposure if one of their patients is suspected of being infected:

- Advise patients who call about a febrile rash illness to minimize exposure to others by staying home, avoiding non-immune individuals if possible, and if not, masking when in the presence of nonimmune individuals.
- Should a person suspected of having measles present for care, place a mask on the patient and isolate them immediately; health workers caring for these patients should also mask regardless of immune status.

- Arrange for exam in an isolated area. The exam room should not be used for at least 2 hours after the measles suspect leaves.
- Consider review of vaccine records or titer reports for your staff now, to ensure that only those with evidence of immunity provide care to a suspected case of measles.

If measles is suspected, the illness should be immediately reported to DOH at 877-724-3258 or your local health department for consultation and to assist with diagnosis (including specimen testing through the Pennsylvania Department of Health), tracking of contacts, and initiation of control measures.

Measles testing

[DOH](#) urges providers to obtain the following specimens from patients who are suspected of having measles and provide the onset date of patient's symptoms:

- Throat or nasopharyngeal swab for rRT-PCR testing
 - Send specimen in viral or universal transport media (VTM/UTM)
 - Ship on cold packs
- Urine for rRT-PCR testing
 - Collect minimum of 50 mL in sterile container
 - Ship on cold packs in leak-proof container
- Serum for measles IgM and IgG testing
 - Acute phase serum as soon as possible and convalescent serum 2-3 weeks later
 - Collect minimum of 5 mL of blood in a red-top or serum-separator tube (SST)

For expedited testing through the [DOH labs](#) providers should contact the DOH at 877-724-3258 or their local health department.

Presumptive Evidence of Immunity

People presumed to be immune to measles are those with:

- Written documentation of adequate vaccination:
 - One or more doses of a measles-containing vaccine administered on or after the first birthday for preschool-age children and adults not at high risk
 - Two doses of measles-containing vaccine for school-age children and adults at high risk, including college students, healthcare personnel, and international travelers
- Laboratory evidence of immunity
- Laboratory confirmation of measles
- A birthdate before 1957*

*Healthcare workers need to meet one of the first three bullets to be considered immune.

Who Should Be Vaccinated?

- All children over one year of age who have not yet been vaccinated
 - Children over 13 months of age who received a first dose of Measles, Mumps, and Rubella (MMR) vaccine at least 4 weeks ago who are at risk of measles exposure may receive a second dose.
- Children between 6 months and 1 year of age who will be traveling internationally or visiting a community with an [on-going measles outbreak](#) (This dose will not count toward the primary

series and two additional doses after one year of age will still be required.)

- Adults who have not yet been vaccinated
- Adults who will be traveling internationally or visiting a community with an on-going measles outbreak who have not previously received two doses of MMR vaccine

Post Exposure Prophylaxis for People with Known Exposure to a Measles Case

- MMR vaccine given to nonimmune individuals within 72 hours of exposure can prevent measles disease:
 - For adults and children without contraindications who have not previously received two doses of MMR if at least one month has elapsed since the most recent dose.
 - For infants between 6 and 11 months of age, a dose of MMR vaccine can be given but will not count as part of the primary series.
- Immune globulin (0.50 mL/kg, max 15 mL) given within 6 days of exposure for [high risk](#) and /or nonimmune exposed individuals can reduce the likelihood of measles disease and complications.

For questions, please call your local health department or DOH at 1-877-PA-HEALTH (877-724-3258).

DOH reminds providers to immediately report suspected cases of measles to local public health authorities or to DOH at 877-PA-HEALTH (877-724-3258).

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of January 5, 2024, but may be modified in the future.