DATE: 7/28/2023
TO: Health Alert Network
FROM: Debra L. Bogen, MD, FAAP, Acting Secretary of Health
SUBJECT: Possible Measles Exposure in Southeastern Pennsylvania
DISTRIBUTION: Southeastern Pennsylvania
LOCATION: Bucks, Montgomery, Philadelphia, Delaware, Chester, Berks, Lancaster, and Schuylkill Counties
STREET ADDRESS: n/a
COUNTY: n/a
MUNICIPALITY: n/a
ZIP CODE: n/a
This transmission is a “Health Advisory” provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE; FQHCs: PLEASE DISTRIBUTE

Summary
- One confirmed case of measles was recently identified in Montgomery County.
- While this measles case was infectious, they visited several locations where potential exposure to the general public may have occurred. The locations and times when residents may have been exposed include:
  - July 20, 2023: Bryn Mawr Hospital Emergency Room, 130 S. Bryn Mawr Ave, Bryn Mawr, PA 19010 (Montgomery County) from 12:30 pm to 6:30 pm;
  - July 20, 2023: Costco, 740 Upper State Road, North Wales, PA 19454 (Montgomery County), from 5:15 pm to 8:15 pm;
  - July 21, 2023: Children's Hospital of Philadelphia, Emergency Department, 3401 Civic Center Blvd., Philadelphia, PA 19104 (City of Philadelphia) from 5:30 pm to 9:45 pm;
  - July 22, 2023: Walmart Supercenter, 1515 Bethlehem Pike, Hatfield, PA 19440 (Bucks County) from 5:00 pm to 8:00 pm;
  - July 23, 2023: Children's Hospital of Philadelphia, Middleman Family Pavilion, Emergency Department, 550 S. Goddard Blvd., King of Prussia, PA 19406 (Montgomery County) from 9:15 am to 5:45 pm.
- Bryn Mawr Hospital, Children's Hospital of Philadelphia, Philadelphia, and Children's Hospital of Philadelphia, King of Prussia are notifying and evaluating patients, visitors and staff who may have come in contact with the individual.
- Providers should have an increased suspicion for measles for patients that present with a febrile-rash illness and follow the proper recommendations for testing and infection control measures.
- PA DOH also 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).
Background
On July 26, 2023, the Montgomery County Health Department and Pennsylvania Department of Health became aware of a single confirmed case of measles. Upon investigation, it was determined that the case had visited several locations during the infectious period (i.e., time when measles could have been spread to others). Measles can remain in the air for up to two hours after the ill individual was present. The locations and times below are where there was a possible risk of measles exposure:

- July 20, 2023: Bryn Mawr Hospital Emergency Room, 130 S. Bryn Mawr Ave, Bryn Mawr, PA 19010 (Montgomery County) from 12:30 pm to 6:30 pm;
- July 20, 2023: Costco, 740 Upper State Road, North Wales, PA 19454 (Montgomery County), from 5:15 pm to 8:15 pm;
- July 21, 2023: Children's Hospital of Philadelphia, Emergency Department, 3401 Civic Center Blvd., Philadelphia, PA 19104 (City of Philadelphia) from 5:30 pm to 9:45 pm;
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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 case of 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 since 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 refused 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 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

PA 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 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.
- Should a suspected case present for care, place a mask on patient and isolate immediately.
- Arrange for exam in 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 PA 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

PA 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)

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).

PA DOH also reminds providers to immediately report suspected cases of measles to local public health authorities or to PA 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 July 28, 2023, but may be modified in the future.