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Maine Health Alert Network (HAN) System

PUBLIC HEALTH ADVISORY

To: Health Care
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Subject: **Health Care Preparedness and Response for Measles**
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Health Care Preparedness and Response for Measles

Summary
Measles activity in the United States is now the highest it has been since 2019. Between January 1 and February 29, 2024, 16 U.S. jurisdictions reported a total of 41 cases. Most of these cases were among children and adolescents who had not received a measles-containing vaccine (measles-mumps-rubella [MMR] or measles-mumps-rubella-varicella [MMRV]), even if age-eligible. Health care facilities should have plans and processes in place to rapidly identify, isolate, and inform Maine CDC of any suspected measles cases. Health care providers should be on alert for patients who have febrile rash illness **and** symptoms consistent with measles *(e.g.*, cough, coryza, or conjunctivitis) **and** have recently traveled, especially to states or countries with ongoing measles outbreaks. Infected people are contagious from four (4) days before the rash starts through four (4) days after the rash starts.

Background
Measles is a highly contagious, acute viral illness characterized by fever (as high as 105°F) and malaise, cough, coryza (inflammation of nasal mucosa), and conjunctivitis followed by a maculopapular rash. The incubation period is typically 10–14 days but can be as long as 21 days. The rash usually appears around 14 days after a person is exposed. The rash spreads from the head to the trunk to the lower extremities. Measles can cause severe health complications including pneumonia, encephalitis, and death.

Measles spreads to others when an infected person coughs or sneezes. After an infected person leaves a location, the virus can live for up to two (2) hours in an airspace or on surfaces where the infected person coughed or sneezed. Measles is so contagious that if one person has it, 90% of the people close to that person who are not immune will become infected. Infected individuals can spread measles to others from four (4) days before the rash appears through four (4) days after the rash appears.

Measles cases often originate from unvaccinated or under-vaccinated persons who travel internationally, then transmit the disease to persons who are unvaccinated against measles. The increased number of measles cases seen in recent months is reflective of a rise in global measles cases and a growing global threat from the disease. Measles cases could appear in Maine in connection with exposures during domestic travel or international travel.

The best protection against measles is vaccination. The MMR vaccine provides long-lasting protection. Providers should review immunization history of patients ensuring they are adequately immunized.

- **Children** should receive two doses of MMR or MMRV. The first dose should be given at 12 through 15 months of age and the second dose should be given at 4 through 6 years of age.
- **Adults** should have acceptable proof of immunity to measles. Acceptable evidence of immunity against measles includes at least **one** of the following:
    - written documentation of adequate vaccination,
    - laboratory evidence of immunity,
    - laboratory confirmation of measles, **or**
    - birth before 1957.

  For adults with no evidence of immunity to measles, 1 dose of MMR vaccine is recommended, unless the adult is in a high-risk group (*e.g.,* international travelers, and college students), in which case 2 doses of MMR vaccine are recommended. People who are pregnant are advised not to receive any live vaccines during pregnancy, including MMR.
- **Health care workers** employed by Designated Healthcare Facilities in the State of Maine are required to have two doses of measles-containing vaccine or laboratory evidence of immunity. In absence of evidence of two doses of measles containing vaccine and laboratory evidence of immunity, health care workers should receive 2 doses of measles-containing vaccine, 28 days apart, unless they are medically exempt.
- For people **planning international travel**, utilize vaccination guidelines for international travel to ensure adequate vaccination at least 2 weeks prior to travel. When international travel is planned, earlier or additional vaccination doses of vaccine may be appropriate.

Health Care Preparedness and Response

1. **Vaccinate**
2. **Education and Training:** Ensure staff are educated in the signs and symptoms of measles as well as how to rapidly identify, isolate, and inform. Ensure staff are fit-tested and trained in the use of N95 or higher-level respirators.
3. **Identify:** Institute a process to rapidly identify persons with signs and symptoms of measles. Post visual alerts in appropriate languages about respiratory hygiene, cough etiquette, and hand hygiene at common entrances and areas (*e.g.,* waiting areas, elevators, cafeterias). Have supplies for hand hygiene and masks readily available near the visual alerts if possible.
4. **Isolate:**
    a. Do not allow patients with suspected measles to remain in the waiting room or other common areas of the health care facility; give them a mask to don and isolate the patient(s) with suspected measles immediately, ideally in a single-patient airborne infection isolation room (AIIR). If available, place in a private room with the patient masked and a closed door until an AIIR is available.
    b. Limit transport of patients to essential purposes and have them wear a mask when transporting. Use routes and a process that includes minimal contact with persons not essential for the patient's care. Notify receiving units or other facilities of impending arrivals.
    c. Health care providers should be adequately protected against measles and should adhere to standard and airborne precautions (*e.g.,* N95 or higher-level respirator) when evaluating suspect cases regardless of their vaccination status.

5. **Inform:** Immediately notify Infection Prevention and Control department or appropriate designee and Maine CDC at 1-800-821-5821.
6. **Test:** Obtain specimens for testing and submit to HETL. Maine CDC prefers measles specimens for PCR testing to be submitted to HETL so results can be better tracked; but they can be submitted to other laboratories. Specimen collection should include:
    a. Oropharyngeal, nasopharyngeal, or nasal swab for polymerase chain reaction (PCR)
    b. Serum for IgM serology
    c. See Laboratory Submission Information Sheet: https://www.maine.gov/dhhs/mecdc/public-health-systems/health-and-environmental-testing/micro/submitting-samples.shtml
7. **Health Care Exposures:** Establish a process to identify health care workers and patients who have had exposure to a person with measles. This process should include and address any applicable presumptive isolation (patients), work restrictions (health care workers), and postexposure prophylaxis.
8. **Outbreaks/Surge Planning:** Have a process to manage outbreaks or an influx of suspected and positive patients.
9. **Full guidance from U.S. CDC is available here:** U.S. CDC Interim Prevention and Control Recommendations for Measles in Healthcare Settings (https://www.cdc.gov/infectioncontrol/guidelines/measles/index.html)

Reporting

- **All suspected cases of measles should be reported immediately by phone to 1-800-821-5821.**

For More Information

- **Attachment:** Measles Healthcare Information Sheet (PDF)
- Maine CDC Health and Environmental Testing Laboratory (HETL)
- Maine CDC Health and Environmental Testing Laboratory (HETL) LSIS
- Maine CDC: Measles
- Maine Immunization Program
- Maine Immunization Requirements for Healthcare Workers
- U.S. CDC COCA Now: *Stay Alert for Measles Cases* (January 25, 2024)
- U.S. CDC COCA Webinar: *We Must Maintain Measles Elimination in the United States: Measles Clinical Presentation, Diagnosis, and Prevention* (August 17, 2023)
- U.S. CDC: Interim Prevention and Control Recommendations for Measles in Healthcare Settings
- U.S. CDC: Measles (for health care professionals)
- U.S. CDC: Measles, Plan for Travel