LONG BEACH MEASLES GUIDANCE FOR HEALTHCARE PROVIDERS
May 2019

This document, provided by the Long Beach Department of Health and Human Services (Health Department), is meant to answer some of the more frequently asked questions from acute care hospitals, medical groups, and private providers, and includes information on infection control, clinical presentation, lab collection and testing, and vaccine recommendations.

CLINICAL GUIDANCE

Clinical Presentation
Measles symptoms usually begin 8 to 12 days (up to 21 days) after exposure. Symptoms include:

- Fever, including subjective fever
- Rash that starts on the head and descends
- Usually 1 or 2 of the 3 Cs: cough, coryza and conjunctivitis

*Images of typical rash presentation are on Page 5 of this document*

Risk Factors
- In the prior 3 weeks: travel outside of North America, transit through U.S. international airports, interaction with foreign visitors, including at a U.S. tourist attraction
- In the prior 3 weeks, travel to areas of the U.S with ongoing measles transmission
- Confirmed measles cases in the community
- Never immunized with measles vaccine and born in 1957 or later

Transmission
- Measles is highly infectious and is transmitted by airborne spread of respiratory droplets. Infectious droplets remain in the air for up to 2 hours after the infected person has been in the room.
- Measles patients are typically contagious from 4 days before and 4 days after the rash onset (onset date of rash is “Day 0”).

For more detailed clinical guidance, visit www.longbeach.gov/measles.
INFECTION CONTROL

If patient calls facility before arrival and measles is suspected: *

1. If measles testing is indicated, but patient does not require urgent medical evaluation, collection of a throat swab for PCR testing may be obtained while the patient is in their car or otherwise outside of the facility (see Laboratory Guidance for more information on specimen collection).

2. If medical evaluation is necessary, try to schedule the patient at the end of the day.

3. Ask patient to alert you before entering the facility and provide a surgical mask to the patient before entry. If patient cannot wear a surgical mask, other practical means of source containment should be implemented (e.g., place a blanket loosely over the heads of infants and young children suspected to have measles as they transit through common areas).

4. Bypass the waiting area if possible, and do not allow patient to remain in the waiting area or other common areas.

5. Immediately place patient in a private room (or airborne infection isolation/negative pressure room if available) and keep the door closed.

6. Do not use the examination room for two hours after the patient has left.

7. Notify the Long Beach Health Department at 562.570.4302 or after hours at 562.500.5537.

*If patient does not call facility before arrival and measles is suspected and an airborne infection isolation (negative pressure) room is not available, mask the patient immediately with a surgical mask, and follow steps 4–7 above.

For all suspect measles cases:

- Allow only healthcare personnel with documentation of 2 doses of live measles vaccine or laboratory evidence of immunity (measles IgG positive) to enter the patient’s room, if possible.

- If patient was not immediately placed in an airborne infection isolation room, patients, visitors, and staff who were in the same air space area as the measles patient during the time the patient was in your facility and for up to two hours after the patient left the area are considered possibly exposed, even if the measles patient was masked.

- Make note of potentially exposed staff and patients. If measles is confirmed in the suspect measles patient, potentially exposed people will need to be assessed for measles immunity.

For more detailed infection control guidance, visit/search CDPH Healthcare Facility Infection Control Recommendations for Suspect Measles Patients, April 2019.
LABORATORY GUIDANCE

Specimen Collection and Testing

- The Long Beach Public Health Laboratory has the capacity to run the PCR test for measles. Tests will only be run after the provider has consulted with the Communicable Disease Control Program, and it is deemed that the patient meets criteria for testing.
- Collect throat swab and urine specimen for PCR testing. PCR is strongly recommended for measles confirmation. The optimal time for PCR testing is ≤ 7 days of rash onset.
  - Throat swabs: use a sterile synthetic swab (e.g., Dacron) and place into viral transport media.
  - Urine: Collect 30-50 ml of urine in a sterile centrifuge tube or urine specimen container.
- Collect blood for both measles IgM and IgG antibodies. The optimal time for collecting acute blood is at least 72 hours after rash onset.
- Keep specimens refrigerated and contact the Health Department at 562.570.4302 as soon as possible to arrange drop off.

VACCINE

Table 1: MMR Recommendations for Persons at High-Risk or Increased Risk of Exposure

<table>
<thead>
<tr>
<th>Two documented MMR (if administering both, they should be at least 28 days apart) or positive IgG titer recommended (if IgG is negative, administer 2 MMR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>International travelers (children 12 months and older and adults)</td>
</tr>
<tr>
<td>All children (first dose at 12-15 months, and second dose at 4-6 years of age, unless travelling internationally, then they should receive 2nd dose prior to travel)</td>
</tr>
<tr>
<td>Health care personnel or any persons working in a hospital</td>
</tr>
<tr>
<td>Students at post-high school educational institutions, including universities</td>
</tr>
<tr>
<td>Staff at schools (pre-kindergarten through post-high school educational institutions) and daycares</td>
</tr>
<tr>
<td>Household, close personal contacts, or caregivers of immunocompromised persons</td>
</tr>
<tr>
<td>Persons with HIV infection with CD4 count ≥200 cells/μL for at least 6 months and no evidence of immunity to measles</td>
</tr>
<tr>
<td>Persons caring for infants or living in households with infants</td>
</tr>
<tr>
<td>Women of childbearing age who are not pregnant but may be planning to get pregnant in the future</td>
</tr>
</tbody>
</table>
### Table 2: MMR Recommendations for Persons at Low-Risk Groups or Low Risk of Exposure

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least one documented MMR or positive IgG titer recommended</td>
</tr>
<tr>
<td>Any adults not mentioned in Table 1</td>
</tr>
<tr>
<td>Children 12 months old (should be followed by a second dose at 4-6yrs of age)</td>
</tr>
<tr>
<td>Infants 6-11 months and are travelling internationally (does not count towards completion of the routine schedule)</td>
</tr>
<tr>
<td>Persons 18 years and older, born after 1957, and not high-risk group (see Table 1)</td>
</tr>
</tbody>
</table>

### Special Considerations

- **Most** people in the U.S. are immune to measles, either because they were infected as a child or have had at least one MMR.
- If a patient believes they have had 2 MMR, but there is no documentation, providers can either provide the 2 doses, spaced at least 28 days apart, or check IgG measles antibody titers, followed by vaccination if necessary.
- Patients born before 1957 are presumed to be immune (5% will be susceptible). If there is still concern or question of immunity, providers can check titers, follow by vaccination based on risk level, if necessary.
- Patients born between 1963 and 1968 may have received a less effective MMR vaccine. If it is not documented that they received a **live** vaccine, providers can either check antibody titers or vaccinate based on risk level.
- If you have specific questions regarding MMR, please call Communicable Disease Control Program Supervisor, Emily Holman, at 562.570.4344.

### REPORTING

In Long Beach, suspect measles cases must be immediately reported by phone to the Communicable Diseases Control Program (CDCP) at 562.570.4302 or after-hours to the Public Health Duty Officer at 562.500.5537.

### OUTREACH

The following posters can be found at [www.longbeach.gov/measles](http://www.longbeach.gov/measles).

- Measles FAQ (English, Spanish, Tagalog)
- Measles Clinical Poster (English, Spanish, Tagalog)
- Measles Travel Poster (English, Spanish, Tagalog)
TYPICAL PRESENTATION OF MEASLES RASH

Picture 1: This photograph reveals the skin rash on a patient’s abdomen 3-days after the onset of a measles infection. Source: CDC

![Picture of rash on abdomen]

Picture 2: This photograph depicts the face of a young child, who was displaying the characteristic maculopapular rash of measles. Note that the eye exhibited the conjunctivitis, or inflammation of the conjunctival membrane that covers the anterior surface of each eye, imparting the red coloration, and marked tear production. Source: CDC

![Picture of child's face showing rash and conjunctivitis]

For more information or questions regarding measles testing and diagnosis, visit www.longbeach.gov/measles, or contact the LBDHHS Communicable Disease Control Program at 562-570-4302 or LBEpi@longbeach.gov.