MDPH Tuesday Infectious Disease Webinar Series

Tools for Local Boards of Health

2-28-23

Live Office Hours!

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Live Office Hours – 4th Tuesday of Month
11:00-12:00

• Office hours sessions will occur once per month and will be an open forum to ask questions about case investigation and follow-up and MAVEN functionality. We will provide a brief overview of the previous week’s discussion and then provide time for questions and discussion.

• Be sure to submit questions in the registration to help guide our preparation for this session.

• Live – submit questions in the Question Panel on the Right.

• If no further questions, we can wrap up!
Office Hours Agenda Today

• Quick Summary of last webinar.

• Review of some webinar questions.

• Your submitted registration questions.

• Your live typed questions. *PRIORITY as they come in.*
2023 Updated Infectious Disease Tools for LBOH Webinar Schedule!

New 2023 Schedule!

<table>
<thead>
<tr>
<th>All Registrations:</th>
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| 2\text{nd} Tues 2/14/23 | Introduction to Measles Case Investigation  
| 4\text{th} Tues 2/28/23 | 4\text{th} Tuesday Office Hours  
| 2\text{nd} Tues 3/14/23 | Introduction to Invasive Meningococcal Disease  
| 4\text{th} Tues 3/28/23 | 4\text{th} Tuesday Office Hours  
| 2\text{nd} Tues 4/11/23 | Tuberculosis  
| 4\text{th} Tues 4/25/23 | 4\text{th} Tuesday Office Hours  

• You help us identify topics/needs/content!

• Be sure to send ideas, requests, and questions to Hillary and Scott!

MAVEN Help has Guidance Documents and Previous Webinars:


Next Office Hours: Tuesday, March 28, 2023
How do I keep up to date on COVID-19 in Long-term Care Facilities in my jurisdiction?

HINT: There are better data sources than MAVEN.
LTCF COVID-19 Reporting: Get your Timely Site-Specific Numbers Here

- CMS requires weekly reporting to **NHSN**, including cases, deaths and vaccination status of staff and residents [COVID-19 Nursing Home Data - Centers for Medicare & Medicaid Services Data (cms.gov)](https://www.cms.gov)

- The MA State Legislature requires reporting of all cases among residents and staff (and hospitalizations and deaths) to be reported in **REDCap (Chapter 93 of the acts of 2020)** [Archive of Chapter 93 COVID-19 Data | Mass.gov](https://www.mass.gov)

- **Epidemiology** only asks facilities to report new cases if they have gone 28 days without COVID-19 case activity, thus indicating a new “cluster” the new BRF can be used and should **ONLY BE COMPLETED ONCE** for each reported cluster: [EDSS CRF Covid Outbreak (casetivity.com)](https://www.casetivity.com)
How Can LBOHs Help LTCFs?

- Supporting facilities with vaccines and PPE if needed
- Many LBOHs with excess home test kits have offered to provide to facilities for visitor and family use
- Please don’t request case line lists from facilities but instead consider periodic check-ins to see how facilities are doing.
- Become familiar with available published data sources if more information is desired.

- At this stage of the pandemic, facilities are aware of existing guidance when responding to cases and clusters.
  - Facilities can call 617-983-6800 at any time if they have questions or need support.
Today’s Tip: Remember to Hit **SAVE** Often

- For security purposes, MAVEN will time out after a certain period of time. To prevent losing your work mid-data entry, be sure to SAVE routinely, particularly when entering notes (or filling in question packages).

In the Question Packages, **SAVE** is at the bottom of the page.
Case Report Forms (CRFs)

- CRFs were originally paper-based forms where local health collected case investigation information and then sent the forms to MDPH for reporting purposes.
  - These forms have evolved over time. Our case investigation needs have outgrown the limitations of paper-based forms.
  - MAVEN Events are now considered the digital equivalent of a Case Report Form.
    - This is why you sign off “CRF Complete” in the Admin Question Package once you have wrapped up an investigation and entered all the data.

- The paper-based CRFs for each disease have (mostly) not been updated in several years.
  - The best and most accurate information needed for a case will be in the actual MAVEN event question packages (and key variables are highlighted in Wizards if available).
  - In the near future, the paper-based CRFs will be removed from MAVEN Help to eliminate confusion.
Introduction to Measles Case Investigation and Follow-Up for LBOHs

February 14, 2023

Hillary Johnson, MHS
Joyce Cohen, MPH

Division of Epidemiology and Immunization
Massachusetts Department of Public Health
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Jamaica Plain, MA 02130-3597
Learning Objectives

• General Understanding of Measles Infection and Prevention (AKA VACCINES!!!)
  • You should know what measles is, how we prevent it, and a few common facts about the MMR Vaccine (our greatest tool for prevention!)

• Know what to do for a LOW Suspect Measles Event in MAVEN
  • Most Common Scenario. There are a few follow-up tasks for this scenario as we await test results that will most likely rule out measles.

• Know What to do for a HIGH Suspect Measles Event in MAVEN
  • Cliff’s Notes: You don’t have to memorize everything today. In summary, there is a lot of follow-up for high-suspect situations, but MDPH Epis will partner with you and guide you through the process. If there is a confirmed case of measles, it will be ALL HANDS ON DECK.
Agenda

• The Measles Virus
  • Symptoms,
  • Transmission,
  • Vaccination,
  • Testing
• Preventing Measles
  • Control Measures
  • Measles MAVEN Events & Investigations
  • Low and High Suspect Case Studies
• Discussion & Resources
Measles Testing: Notes for LBOH

- **Measles is an Immediate Disease.** All suspected measles cases should be reported to MDPH by the provider wishing to test to ensure the proper specimens are collected and public health is ready to implement appropriate control measures and follow-up as soon as possible.

- **Most MAVEN Events for Measles** will be created by an MDPH Epi as Suspect Events while the test results are pending. Test results are typically available within 24-48 hours, but follow-up activities may be initiated sooner in highly suspect situations.

- **Partner with MDPH.** Be sure to be in communication with the assigned epi to receive the results and to ensure appropriate and timely local response as needed.
Isolate All Suspect Cases

• **Infectious Period:** 4 days before rash through 4 days after rash onset.

• Isolate case through 4 days after rash onset.
  • Onset of Rash= Day 0
  • If in a health care facility, the patient should be kept on airborne precautions.
    • Remember, shared air space up to 2 hours after a case was present can lead to exposure.

![Measles Control: Isolation](image-url)
Quarantine Contacts

- Exclude susceptible close contacts unable to be vaccinated, or not vaccinated quickly enough, from **day 5 through day 21 after exposure**

- In most low-risk settings, susceptible close contacts may be readmitted immediately after they receive a dose of MMR, even when given >5 days post exposure. (local discretion)

- Susceptible close contacts who receive IG (instead of vaccine) should be quarantined.

### Measles Quarantine

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**Exposure**

Day 0

**Quarantine**

Day 5-21
Measles Investigations for LBOH
Measles Events (Low or High Suspect?)

• Due to high vaccination rates in MA and the US at large, measles is still relatively rare.

• SUSPECT measles cases reported to MDPH will be assessed as Low or High Suspect based upon:
  
  • clinical presentation, vaccination status of the patient, and additional known risk factors (typically travel or known exposures).

<table>
<thead>
<tr>
<th>High Suspect Measles</th>
<th>Low Suspect Measles</th>
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<tr>
<td>• International traveler</td>
<td>• US born</td>
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<tr>
<td>• Recent travel to an area with known confirmed cases</td>
<td>• No known risk (no travel, no sick contacts)</td>
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<tr>
<td>• Sick contacts</td>
<td>• Fully vaccinated in the US</td>
</tr>
<tr>
<td>• Unvaccinated or vaccinated abroad</td>
<td>• Alternative diagnosis in differential</td>
</tr>
<tr>
<td>• Classic symptom presentation</td>
<td>• Doesn’t meet clinical case definition</td>
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• **Public Health Actions** while awaiting test results will be based upon how high the likelihood is the test results will be positive.
“Low” Suspect Measles Events

• Always review the MAVEN event for specific notes or guidance from MDPH Epis on next steps.

• **Typically, for LOW Suspect Situations:**
  
  • If a low suspect case is NOT yet lab confirmed, there are **no** formal control measures for contacts from public health, **however:**
    
    • **Patient:** LBOH can touch base with the patient/family and collect any missing case information (Often symptom onset hx, risk hx, and vaccination status of case can be reviewed for potentially missed information reported by provider.)
    
    • **Household:** LBOH can inquire about vaccination status of household and immediate contacts.
      
      • It is always a good time to get Up-to-Date with MMR Vaccine if needed!
      • Patients should remain in isolation until measles is ruled out.

**LBOH:** You may want to discuss the potential infectious period timeline and get an idea on possible exposures for follow-up should results come back positive.
“High” Suspect Measles Events

• Always review the MAVEN event for specific notes or guidance from MDPH Epis on next steps.

• Typically, for High Suspect Situations:

  • If the likelihood of positive lab results is high, identifying a timeline of activities during the infectious period is the place to start.

    • This will help outline the work ahead (and help determine how many staff will be needed for follow-up).

    • MDPH Epis will provide detailed guidance and assistance in these situations, as confirmed measles is an ALL HANDS ON DECK Situation.

    • Follow-up for different exposure settings will be split across local and state public health.
Measles/Rubella/Rubeola/Roseola – Keeping It All Straight!

• The **MMR Vaccine** prevents both **measles** and **rubella**, which both present with rashes but are importantly not the same.
  
  • **Measles** is caused by a virus that specifically infects the respiratory system.
    • More severe and can be life threatening
  
  • **Rubella** is caused by a virus that invades the lymph nodes, eyes and skin.
    • Generally milder infections than measles, but can **cause severe birth defects** if infection occurs during pregnancy.

<table>
<thead>
<tr>
<th>MEASLES</th>
<th>RUBELLA</th>
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<tr>
<td>It is highly contagious</td>
<td>It is not as contagious as measles</td>
</tr>
<tr>
<td>It is also known as <strong>Rubeola</strong></td>
<td>It is also known as <strong>German measles</strong></td>
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• **Another common viral infection:**
  
  • **Roseola**: A common viral infection in young children that may cause high fever and a rash. Generally, a self-resolving mild illness that can be caused by two strains of the herpes virus.
Measles Q&A

• What is considered an exposure to measles?

  • **Answer:** Being in a shared air space. This could be one room, or it could also be a full facility based upon airflow.
    • We have at times consulted with building HVAC, structural engineers, etc. to answer this question.
    • Sometimes there may be a judgement call. A general notice about “possible exposure” may be appropriate at times to cover your bases.
    • There is no time “minimum” in shared air space to be considered exposed.

• How does masking affect exposure?

  • **Answer:** Masking is great! The better the mask, the lower the risk of exposure. But mask wearing does not eliminate risk completely, and we would still want to notify relevant contacts to ensure they know about a potential exposure.
Evidence of Immunity for Measles

1. **VACCINE RECORD:** Documentation of 2 appropriately timed doses of measles containing vaccine; or

2. **LAB TEST:** Serologic evidence of immunity or laboratory evidence of disease; or

3. **AGE:** Birth in the US before 1957 (unless a healthcare worker)
   - Past history of disease is NOT acceptable evidence of immunity without a lab test.
   - Foreign-born individuals (including those born before 1957) should have documentation of immunization or serologic evidence of immunity. Those who are born before 1957 can be assigned a lower priority for follow up.

Not sure if someone was previously vaccinated? There is no harm in giving MMR vaccine to a person who may already be immune to one or more of the vaccine viruses.

Quarantine for Susceptible Contacts: Day 5 through Day 21 Following Exposure. (Exposure = Day 0)