COVID-19 Webinar for Case Investigation and Follow-up

Tools for LBOHs

May 15, 2020

Hillary Johnson, Infectious Disease Epidemiologist
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Bureau of Infectious Disease and Laboratory Sciences
MA Department of Public Health
MAVEN Status Map as of 5/15/2012

Massachusetts Virtual Epidemiologic Network (MAVEN) is a real-time surveillance and case management system that enables MDPH to capture and transfer appropriate public health, laboratory, and epidemiologic data securely over the Internet in real-time. The system interfaces with Laboratory Reporting (LER) efforts, has automatic 24/7/365 notification to local officials of any event requiring their attention and geographic (GIS) activities. MAVEN will replace the current paper-based method of exchanging data between MDPH, local public health, and clinicians. For more information, visit isohelp@state.ma.us or call (617) 903-5801.

This map displays 349 out of the 351 cities and towns in Massachusetts using MAVEN during the week of April 22-28. For more detailed information please zoom in on the map or visit isohelp@state.ma.us.

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MAVEN Status April 2012
- Online (349)
- Offline (2)
MAVEN Reminders
MAVEN Online Help

How to Contact the Maven help desk in ISIS.
We are available M-F (9-5 p.m.)

- ISIS Help Desk 617-983-6801
- ISIS Fax Number 617-983-6813
- isishelp@state.ma.us
  (do not email names or identifying information - use the MAVEN Event ID)
- Epi-of-the-Day and Epidemiologist on Call 617-983-6800
- Maven Change Request Document (please print, complete and out fax back to ISIS to request changes, enhancements, corrections to the MAVEN database)

MAVEN Online Help

- Expand all  Collapse all
- COVID-19 BOH
- General Information
- Frequently Asked Questions (FAQs)
- Division of Global Populations (DGP)
- ePostcards/Webinars
First Responder Report – Confirmed Cases Only

Maven Surveillance and Case Management System

Maven Reporting

- Probable
- Contacts
- Unclassified (negative)

Do not show on this report
Confirmed and Probable Line List Report

- **UPDATE to your COVID-19 Confirmed Case Line List Report**: We have updated the existing report – the revised report is now named **COVID-19 Confirmed and Probable Case line list report**.
  - You can run this on a daily basis to see events that had a negative lab then a positive lab.
  - Once you run the report look at the Create date and then Step 1 Notification Date – you may see an event with a create date of April then a Step 1 date of May 15th. This is a flag that you have had an update to the event. (Unclassified to a Confirmed Event).

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>Event ID</td>
<td>Create Date</td>
<td>Event date</td>
<td>Official City</td>
<td>Name</td>
<td>Step 1 - LBOH acknowledged</td>
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<tr>
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<td>3/9/2020</td>
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<tr>
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<td>3/18/2020</td>
<td>LOWELL</td>
<td>Name of Event</td>
<td>Yes</td>
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</tbody>
</table>
Immediate Notification workflow (COVID-19 Only)

• **UPDATE:** We have updated the COVID-19 Immediate Notification Workflow - it only retain events within the past 5 days.
  • This will allow proper notification of all new COVID-19 events for your jurisdiction. The workflow will refresh every 24 hours and remove those cases that have you have not updated **Step 1- LBOH Notification to “Yes”**.
  • You may see events with Step 1 populated to Yes. You need to review the Event Date associated labs with the event.
LBOH COVID-19: Set Assistance to No Workflow

- Newly confirmed cases within the past 24 hours
- Cases are extracted to CTC at 10 a.m. every day
- This will allow you to retain your cases that you want to follow-up on and leave blank those cases you want to forward to CTC.

***As a reminder CTC is only taking confirmed cases at this time not Probable or Contact cases.
Cases That Remain with LBOH

- Congregate settings
- Clusters
- Healthcare workers
- Contact events
- Probable events
High Priority Cases Remain with LBOH

Including cases identified by CTC

- Congregate settings
- Clusters
- Healthcare workers
- Any complex case
- Any case you request to manage
- Special requests to supervisors
Employed at, admitted to, or visited a healthcare setting? **These don’t go to CTC**
How would the CTC receive an event/case

- If a case comes in at (for example):
  - **9 am Tuesday, May 12**: The LBOH can use the COVID Assistance Set to No workflow or answer the question in the Administrative Question Package/Wizard.
  - **5 pm Tuesday, May 12**: The LBOH can use the COVID Assistance Set to No workflow or answer the question in the Administrative Question Package/Wizard.
  - **11:30 pm Tuesday, May 12**: The LBOH will have until 10am on Wednesday, May 13th to say “Yes” or “No” or leave blank.
  - **12:01 am, 8 am, or any other time on Wednesday May 13**: The case will remain in the LBOH queue until Thursday morning at 10 am for “Yes” or “No” or Blank decisions.
    - If you leave the COVID Assistance Question as Blank for your Confirmed case – the case will be assigned to the CTC on the next data extract.
You may see these in MAVEN

When you see Roster Import paired with the MAVEN Concern for CTC it may mean the contact/event was created by CTC - now look in the wizard.
CTC sending cases back to MAVEN – look in your wizard for Investigation status – date will not be populated for these cases

<table>
<thead>
<tr>
<th>If Yes, this event has been sent to the MA COVID-19 Community Tracing Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Date first sent to the CTC:</td>
</tr>
<tr>
<td>mm/dd/yyyy</td>
</tr>
<tr>
<td>Investigation Status:</td>
</tr>
<tr>
<td>In progress</td>
</tr>
</tbody>
</table>
QP#8 – shows that a case was sent to MAVEN

Date first sent to CTC is populated: date is present then DPH sent the event to CTC for them to investigate and status will show In Progress until they are done.

Date first sent to CTC is blank: date is not filled in then CTC created the event in Sale Force (CTC database) and send the event back into MAVEN.

The event from CTC will either create a new MAVEN event or it will append to an existing event and the MAVEN alert/concern will show

"This case has been sent to the MA COVID-19 Community Tracing Collaborative. Please do not initiate follow-up at this time."
Steps 2, 3, & 4 are Updated with CTC Information once the CTC completes their case investigation.
Report for CTC Data Report

- COVID-19 LBOH CTC Data Report
  - This report pulls all cases that were sent to the Community Tracing Collaborative (CTC) and the data obtained at the CTC. The report will allow you to extract and see what fields were sent back to MAVEN for your events. When the CTC creates contacts on their side those events will be created in MAVEN with a flag that the CTC has the case and the CTC investigation status will show “In progress” until they have completed their investigation.

You can choose multiple classifications.
MAVEN Help Section

How to Contact the Maven help desk in ISIS.
We are available M-F (9-5p.m.)

- **ISIS Help Desk** 617-983-6801
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- isishelp@state.ma.us
  (do not email names or identifying information - use the MAVEN Event ID)
- Epi-of-the-Day and Epidemiologist on Call 617-983-6800
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MAVEN Online Help

- Expand all  
- Collapse all  

- **COVID-19 I BOH**
- General Information
- **Frequently Asked Questions (FAQs)**
- Division of Global Populations (DGP)
- ePostcards/Webinars
CTC Case Questions

**Additional COVID-19 Questions?**

- If you have a question about **MAVEN functionality**, contact the **MAVEN Help Desk**:
  - ISISHelp@state.ma.us

- If you have questions about a **case** that has gone to the CTC, call the **CTC Help Desk**
  - 857-305-2828
Follow-up for Positive COVID-19 Cases and their Close Contacts

Tools for LBOHs

May 15, 2020

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Topics Today

- Food Protection Program
- New Testing Guidance is Here!!!!
  - May 13 Guidance.
  - Discusses Testing Contacts
  - Discusses Serology Testing
- Your Questions on Serology
- Your Questions on Testing Contacts
- Your Questions
Tuesday & Friday Webinars for LBOHs

Tuesdays & Fridays @ 11am

- Isolation of Cases and Quarantine of Contacts is the goal until that strategy changes/evolves.
- MAVEN is the main reporting source and where you should document your work.
  - Send Cases to CTC for follow-up if not:
    - Hospitalized, Deceased, or linked to a Cluster Facility
- Focusing on Priority Activities
- Clusters in Facilities in your community need your help.
  - Call Epi Program to create cluster events.

MAVEN Help has Guidance Documents and Previous Webinars:

MDPH Epi Program: 617-983-6800
MDPH MAVEN Help Desk: isishelp@state.ma.us
MDPH Food Protection Program: 617-983-6712
CTC Help Desk: 857-305-2828
Updated Testing Guidance (PCR & Serology) for Providers is here!

- **Date:** May 13, 2020
- **RE:** Testing of Persons with Suspect COVID-19

Guidance about appropriate use of laboratory testing for COVID-19 and expands testing recommendations for COVID-19 in commercial and clinical laboratories.

Individuals should be tested for presence of the virus using a molecular diagnostic test such as PCR:
- **Symptomatic Individuals**
- **Close Contacts**
- **Asymptomatic Individuals (as recommended)**

To access this guidance, visit: [https://www.mass.gov/doc/covid-19-testing-guidance/download](https://www.mass.gov/doc/covid-19-testing-guidance/download)
Updated Testing Guidance (PCR & Serology) for Providers is here!

https://www.mass.gov/doc/covid-19-testing-guidance/download

- **Close Contacts of COVID Cases:** All individuals in Massachusetts identified as a close contact by a Local Board of Health, the Massachusetts Department of Public Health, the Community Tracing Collaborative, or a healthcare provider should be tested.

  Yes! The updated Testing Guidance recommends Close Contacts Get Tested, regardless of current symptoms.
Updated Testing Guidance (PCR & Serology) for Providers is here!

- **Serology Testing:**
  - The majority of tests currently available have not received FDA Emergency Use Authorization (EUA).
  - Antibody tests may demonstrate whether an individual was previously infected with SARS-CoV-2 and antibody testing is important to help understand how many people in a population have been exposed to the virus. However, antibody tests are not indicated for diagnostic purposes.
  - In order to be appropriately interpreted, more data are needed on the performance characteristics of these tests, the immune response to COVID-19, the timing and duration of antibody response, and how antibodies correlate to protective immunity.
Updated Testing Guidance (PCR & Serology) for Providers is here!

• **Serology Testing:**

  • If an antibody test is performed, it is recommended that healthcare providers order a molecular diagnostic test at the same time.

  • At this time, antibody testing should not be used to guide release from isolation or for return to work purposes and are not indicated for diagnostic purposes.
Updated Testing Guidance (PCR & Serology) for Providers is here!

**May 13 Updated Testing Guidance:**

- Posted to:
  - https://www.mass.gov/info-details/covid-19-testing#should-i-be-tested?

- Direct link to PDF:
Where can I learn about serology tests & public health follow-up?

- Review the Webinars from Tuesday May 12, 2020 & Friday May 8. Big focus was on serology testing, what to do, and FAQs on how to appropriately follow-up.
Where can I learn about serology tests & public health follow-up?

- Review the Webinars from Tuesday May 12, 2020 & Friday May 8. Big focus was on serology testing, what to do, and FAQs on how to appropriately follow-up.
Serology Testing FAQs

• **Why would we isolate a patient with a positive serology?**
  
• **A.** In the absence of other testing information to help rule out current infection, Massachusetts public health must take a conservative approach to protect the public’s health.

• Per “Public Health Considerations: Serologic Testing for COVID-19 Ver 1, May 7, 2020.” (APHL & CSTE)
  
  • **A positive result indicates past and/or present infection with SARS-CoV-2.** A positive result also may be due to detection of cross-reactivity (i.e., antibodies to non-SARS-CoV-2 strains may cross-react with SARS-CoV-2 antibodies) which would be considered a false positive test result.
  
  • A positive result does not mean that the individual is immune to COVID-19 infection.
  
  • **A positive result does not mean that the person is no longer shedding virus or is no longer infectious.**

Helpful Reminders

- Look in the Lab Tab to see what labs are available to inform the situation.

- More information is better. In the absence of information, we need to take a conservative public health approach. Seek PCR testing to help rule in or rule out current infectiousness and the need for isolation.

- These criteria make sense for where we are in the outbreak and what we know now. There may be changes in the future and as we learn more.

- Helpful Documents:
  - Case Classification Manual (Case Definitions for COVID-19)
  - Return to Work Guidance (HCW & NonHCW)
  - Serology Interpretations for LBOHs
Antibody Testing (serology)

• Where can we tell what kind of test a patient had?
  • A. Check the Lab Tab.

Test Types You May See:
- PCR Test: 2019-nCoV Real-time RT-PCR
- Rapid PCR Test: SARS coronavirus 2 RdRp gene
- Serology IgM specific: SARS-CoV-2 IgM
- Serology IgG specific: SARS-CoV-2 IgG
- Serology IgA specific: SARS-CoV-2 IgA
- Serology Antibody Type Unspecified: SARS-CoV-2 IgG + IgM


Details fill in here for different labs highlighted in each of the rows above.
Recommendation for Routine Molecular Testing of People Identified as Close Contacts to COVID-19 Cases

• As restrictions on activities begin to loosen, it becomes increasingly critical that the healthcare and public health systems work together to identify every case.
  • Rapid identification of cases and identification of their close contacts is a priority.
• Close contacts of confirmed cases are the people most likely to become infected themselves. To facilitate identification of infections, molecular testing is recommended for all close contacts regardless of symptom status.
• MDPH issued guidance on May 11, 2020: All people identified as close contacts should be tested via PCR testing as soon as possible after being notified about their exposures.
Recommendation for Routine Molecular Testing of People Identified as Close Contacts to COVID-19 Cases

• Close contacts, regardless of symptoms associated with COVID-19, should be tested as soon as possible after they are notified of their exposure to COVID-19.

• Testing should be done by PCR or other molecular test from a nasopharyngeal, nasal, or oral swab or a sputum sample. Serologic (antibody) testing is not appropriate for this use.

• The contact is required to quarantine for the full 14 days, even following a negative test result.

• Have a low threshold for symptoms (even after the negative test) and retest if someone starts to show illness during the rest of quarantine.
 Recommendation for Routine Molecular Testing of People Identified as Close Contacts to COVID-19 Cases

How to Implement:

• Notify a CONTACT about their exposure.
  1. Outline their Quarantine Period.
  2. Recommend they get a PCR Test ASAP. (Test even if no symptoms)
     • IF the test is PCR POSITIVE:
       • They are now a confirmed case. Switch to Isolation based upon their own symptoms & testing dates.
     • If the test is PCR NEGATIVE:
       • Complete 14 day quarantine. (Neg test doesn’t get them out)
       • If symptoms start, test again immediately.
       • If CONTACT doesn’t get PCR test:
         • Still must complete 14 day quarantine.

• NOTE: Essential workers that are known contacts may continue to work as long as they are asymptomatic and do not have a positive test.
Where Can People Get Testing?

• Correct link for MA COVID-19 Testing:
  https://www.mass.gov/info-details/covid-19-testing

• Testing Sites:
  https://www.mass.gov/info-details/covid-19-testing#testing-sites

• These are not walk-in sites. An appointment is necessary. View the current list: MA COVID-19 Testing Sites (PDF) | (DOC).
Summary of New Guidance & Tools

- **Date: May 13, 2020 - Testing of Persons with Suspect COVID-19**
  - Updated Testing Guidance saying who should be tested.
    - Includes language stating we should test CONTACTS to COVID-19 right away.
    - Discourages serology testing.
    - BUT, if you ARE going to get serology testing, get a PCR at the same time.

- **Date: May 11, 2020 - Recommendation for Routine Molecular Testing of People Identified as Close Contacts to COVID-19 Cases**
  - Recommendation to Test Contacts identified through contact tracing – regardless of symptoms.
    - They still need to isolate a full quarantine period, even if their test comes back negative early in quarantine.

- **Date: May 8, 2020 - COVID-19 PCR and Antibody Testing Public Health Response Recommendations**
  - Table describes different Public Health Actions based upon different testing results.
    - Big take home: Encourage PCR testing to help alleviate unanswered questions. But in the absence of PCR testing information, we take a conservative approach and require serology positive individuals to isolate.

- **Date: May 7, 2020 – Occupational Exposure & Return to Work Guidance**
  - HCW & Non-HCW discontinuation of Isolation Guidance.
    - Describes strategies for ending isolation for cases.
    - Also outlines requirements for quarantine for contacts
    - (While there are two documents (HCW & non-HCW), the key table on the front page is identical and tells key information)
Serology Testing FAQs

• If my case has a positive serology, but also had a previous negative PCR test, do they need a new PCR test?
  • A. We are asking locals and epis to some judgment based on the particular scenario. The term in the guidance is "recent" and there is room for judgment. Two weeks ago would be too long. A couple days ago is more reasonable, but compare that with additional information to inform your judgement.
Your Questions:

• Should we count probable cases as a positive case for the town reporting?
  • The current Data Dashboard (official State Daily Report) only reports CONFIRMED cases.
  • Towns can chose to report additional data however you see fit.
Your Questions:

• **How many days after a close contact has exposure is recommended for testing as part of the new recommendations?**
  
  • **A.** The guidance for testing contacts states that contacts should be tested right away upon contact notification. They should then remain in quarantine for the rest of their 14 day quarantine period. Retesting is recommended only if they develop any (even mild) symptoms after that.

  • It is important to convey to the contact that a negative test at any point during quarantine is just a snapshot of that moment and does not mean they can discontinue quarantine or that they won’t develop illness at a later point. They must complete their full quarantine before returning to normal activities.
Your Questions:

• If a person tested positive out of state, has completed their isolation period and returns to MA, do they need to quarantine?
  • A. If they completed their isolation period and are no longer symptomatic, they would not need to quarantine. Make sure to confirm their previous diagnosis.
Contact Testing Guidelines: Your Questions

• For Essential Workers: does the testing of contacts guidance apply to them for getting a PCR test after exposure?
  • A. Yes. The recommendation is for any contacts (regardless of their essential worker status) to obtain PCR testing.
  • Remember: The only thing that makes essential workers different is that they may continue to work during their Quarantine Period following exposure – Provided they are not symptomatic and/or do not test positive for COVID-19.
  • If an Essential Worker tests positive for COVID-19, they are required to isolate per normal Isolation & Return to work Guidelines.

Being an essential worker means you can still work during quarantine, but it DOES NOT mean you can still work if you become a case yourself.
Essential Workers – Who and What to Do?

- Can grocery store and construction workers really work during quarantine?
  - A. The Governor sets who is considered an “essential worker” during COVID-19.
    - Allows Essential Workers to keep working during Quarantine Period (following exposure) IF they remain asymptomatic and do not test positive/become a case themselves.
Your Questions:

- A case chose to PCR Retest before the 10 day isolation period concluded and results again +. What is now isolation period?
  - A. This doesn't necessarily extend their isolation period. You can still use a symptom based strategy and look to when their symptoms resolve and they meet that criteria.

- Can Probable Cases in MAVEN (antibody positive) be sent to the CTC?
  - A. Not at this time. Probable cases are not sent from MAVEN to CTC.
    - IF they obtain a PCR test and it is POSITIVE, they become CONFIRMED, which CAN be sent to CTC. If they obtain a PCR test and it is NEGATIVE, they can cease isolation and you don't have to quarantine their contacts.

- If the confirmed case is a parent, do we recommend having the children tested as close contacts, per the new testing guidance?
  - A. Yes. The updated guidance to test all contacts would also pertain to children. There is no distinction based upon age.
Serology Testing Questions

- How can we get the word out that providers should be requesting a PCR at the same time as a serology?
  - A. The updated testing guidance for MA was just published May 13, 2020. Help us by sharing with your providers.
**Your Questions – HCWs Continuing to Work.**

- **When can asymptomatic healthcare workers be at work? We are confused.**

  - **A.** HCWs (and other essential workers) are allowed to continue working after an exposure – so during a normal 2 week quarantine period IF they are asymptomatic and/or do not get diagnosed (test positive) for COVID-19.

  - HCWs (and other essential workers) CANNOT work if they are COVID-19 positive CASES, even if they have no symptoms. Once a HCW tests positive for COVID-19, they are a case. They must isolate and complete their isolation period like everyone else.
Your Questions- Ending Isolation

• Can you clarify when someone can come back to work via the Symptom Based Strategy?

  • A. If using a Symptom Based Strategy to determine ending isolation, they must meet ALL of the following criteria:

    - At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and
    - Improvement in respiratory symptoms (e.g., cough, shortness of breath); and,
    - At least 10 days have passed since symptoms first appeared.

• So at a MINIMUM, a patient would be isolated for 10 days from their symptom onset date. But it could be more.
Where is the Official Discontinuation of Isolation Guidance?

<table>
<thead>
<tr>
<th>Worker Type</th>
<th>Quarantine for 14 days when...</th>
<th>Isolate when...</th>
<th>End Isolation and Return to work when...</th>
</tr>
</thead>
</table>
| **Health Care Workers** | As of May 4, 2020, the CDC is not recommending that these workers self-quarantine after an exposure if they are not experiencing COVID-19 symptoms. All workers should wear appropriate PPE, and self-monitor for symptoms. | You have tested positive for COVID-19 OR you have symptoms of COVID-19 | **Symptomatic**
1. **Symptom-based strategy**
   - At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and
   - Improvement in respiratory symptoms (e.g., cough, shortness of breath); and,
   - At least 10 days have passed since symptoms first appeared.
2. **Test-based strategy**:
   - Resolution of fever without the use of fever-reducing medications and
   - Improvement in respiratory symptoms (e.g., cough, shortness of breath), and
   - Negative results of two consecutive respiratory specimens collected ≥24 hours apart.
| **First Responders** |                                |                | **Asymptomatic**
1. **Time-based strategy**: At least 10 days have passed since the date of their first positive COVID-19 diagnostic test assuming they have not subsequently developed symptoms since their positive test.
2. **Test-based strategy**: Negative results of two consecutive respiratory specimens collected ≥24 hours apart

*A positive test does not necessarily correlate with the person’s ability to transmit the disease.

**Essential Workers**

**All Other Workers**

You have been exposed to someone with COVID-19 BUT you don’t have symptoms

Revised May 7, 2020
Where is the Official Discontinuation of Isolation Guidance?

MAVEN Online Help

- COVID-19 LBOH
  - Case Follow-Up Tools
  - Trainings & Webinars
  - Memos and Orders

- Guidance Documents & Resources
  - Updated Infectious Period Guidance for Confirmed COVID-19 Cases Ver1
  - COVID-19 Quarantine Guidance for Contacts Ver1.0 March 11
  - COVID-19 Isolation Guidance for Cases Ver1.0 March 11
  - Healthcare-Associated COVID-19 LBOH Guidance ver1_March 24
  - Healthcare-Personnel-Return-to-Work-Guidance-ver1.0_May7
  - Non-Healthcare-Workers-Return-to-Work-Guidance-ver1.0_May7
  - Translated Isolation and Quarantine Guidance for Contacts
  - MAVEN Tipsheets & General Instructions
Your Questions?

I MUSTACHE YOU

A QUESTION