COVID-19 Webinar for Case Investigation and Follow-up

Tools for LBOHs

May 12, 2020

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MA Department of Public Health
MAVEN Status Map as of 5/12/2012

Massachusetts Virtual Epidemiologic Network (MAVEN) is a scalable surveillance and case management system that enables MDPH, local public health, and clinicians to capture and transfer appropriate public health, laboratory, and epidemiologic data securely over the Internet in real-time. MAVEN is designed to support Massachusetts's Enhanced Laboratory Reporting (ELR) efforts, has automatic case management and data entry, and offers a robust case management and data entry system for the entire state. MAVEN will replace the current paper-based method of sending cases from local public health to MDPH and clinicians. For more information, visit MassHealth or by phone at (617) 983-5001.

This map displays 349 out of the 351 cities and towns in Massachusetts. Disease notifications are electronically transmitted through the MAVEN System.

*Boston reporting data via RoSS MAVEN.

For more detailed information, please zoom in on the map or visit the website.

MAVEN Status April 2020

- Online (349)
- Offline (2)
# MAVEN User Requests & Training

3/1/2020 - 5/9/2020

<table>
<thead>
<tr>
<th>Status</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Users (added week of 5/10/2020)</td>
<td>36</td>
</tr>
<tr>
<td>Pending Users</td>
<td>7</td>
</tr>
<tr>
<td>Processed Users</td>
<td>869</td>
</tr>
<tr>
<td>Total New Users Trained Or In Process</td>
<td>912</td>
</tr>
<tr>
<td>Total MAVEN Users</td>
<td>1,519</td>
</tr>
</tbody>
</table>

New = Received user requests and forwarded to the VG for user account creation (2 day process)
Pending = The VG account has been created and waiting on MAVEN Training (M,W, TR from 11-12:30)
Processed = Trained internal and external staff with VG MAVEN accounts created and MAVEN accounts created by ISIS staff and then access granted appropriate access
Total MAVEN Users = Includes MDPH, LBOH, Infection Prevention and other trained staff

*these data is accurate as of 5/9/2020 at 12:30PM*
## MAVEN On-Call Events

3/1/2020 – 5/9/2020

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unassigned</td>
<td>27</td>
</tr>
<tr>
<td>Division of Global Populations</td>
<td>14</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>618</td>
</tr>
<tr>
<td>Immunization (COVID-19)</td>
<td>16,810</td>
</tr>
<tr>
<td>Informatics and Surveillance (ISIS)</td>
<td>1,584</td>
</tr>
<tr>
<td>Total On-Call MAVEN Events</td>
<td>19,053</td>
</tr>
</tbody>
</table>

*these data is accurate as of 5/9/2020 at 12:30PM*
For Reference what our call volume usually looks like....

<table>
<thead>
<tr>
<th>Year</th>
<th>Total On-Call Events Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>6,739</td>
</tr>
<tr>
<td>2016</td>
<td>12,830</td>
</tr>
<tr>
<td>2017</td>
<td>12,605</td>
</tr>
<tr>
<td>2018</td>
<td>9,296</td>
</tr>
<tr>
<td>2019</td>
<td>10,652</td>
</tr>
<tr>
<td>So far in 2020</td>
<td>20,653</td>
</tr>
</tbody>
</table>

*these data is accurate as of 5/9/2020 at 12:30PM*
MAVEN Help Desk Emails
3/15/2020 – 5/9/2020

<table>
<thead>
<tr>
<th>Month</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>2,383</td>
</tr>
<tr>
<td>April</td>
<td>7,816</td>
</tr>
<tr>
<td>May</td>
<td>2,688</td>
</tr>
<tr>
<td>Total Emails received</td>
<td>12,887</td>
</tr>
</tbody>
</table>

*These data is accurate as of 5/9/2020 at 12:30PM*
Current Workflows for LBOH

### Immediate Notifications

<table>
<thead>
<tr>
<th>Workflow Queue</th>
<th>Total Count</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBOH COVID-19: Set COVID Assistance to No</td>
<td></td>
<td>Very High</td>
</tr>
<tr>
<td>LBOH Notification for Immediate Disease</td>
<td></td>
<td>Very High</td>
</tr>
<tr>
<td>LBOH Notification for Immediate Disease (COVID only)</td>
<td></td>
<td>Very High</td>
</tr>
</tbody>
</table>

### Online LBOH Notifications

<table>
<thead>
<tr>
<th>Workflow Queue</th>
<th>Total Count</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBOH Case Report Forms (CRF) are pending</td>
<td></td>
<td>Medium</td>
</tr>
</tbody>
</table>

Removing COVID-19 in the next MAVEN release - once completed this workflow will be operational.
• 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.
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
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
Steps 2, 3, & 4 are updated with CTC information once the CTC completes their case investigation.
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
Changes over the weekend
Current Workflows for LBOH

<table>
<thead>
<tr>
<th>Workflow Queues</th>
<th>Total Count</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Notifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LBOH COVID-19: Set COVID Assistance to No</td>
<td></td>
<td>Very High</td>
</tr>
<tr>
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<th>Workflow Queues</th>
<th>Total Count</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online LBOH Notifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LBOH Case Report Forms (CRF) are pending</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Removing COVID-19 in the next MAVEN release - once completed this workflow will be operational.
MAVEN Changes over the weekend

- **New Workflow: 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.***
COVID Requested Assistance as "Yes" or "No"
"No" responses stay with LBOH (complete Steps 1-3)
Blank responses will go to the CTC
Investigation Status
Variables
MAVEN Changes over the weekend

• NEW 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.
MAVEN Changes over the weekend

- **UPDATE:** Ethnicity has been removed from the COVID-19 Follow-Up wizard.
  - It was also removed from the Demographic Question Package but will be enabled shortly.
MAVEN Changes over the weekend

• UPDATE: We have updated the COVID-19 Immediate Notification Workflow as of today 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”. 
MAVEN Changes over the weekend

• **UPDATE**: We turned off the COVID-19 Contact workflow as it was not working with the volume of events.

• **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**.
  • The report will now display an option for you to choose which classification you want to run the report for: confirmed and/or probable events.
MAVEN Changes over the weekend

- **UPDATE on a non-COVID-19 related:** Our foodborne Epi Team wanted to update you all that Vibrio species is now an Immediate disease from May 1st - October 31st.

- Locals will now receive email notifications for new Vibrio events and any new cases will flow into the Immediate Disease Notification for your jurisdiction.

- This happens every year as you know and if you need additional information you can revisit our webinar on case investigation for *Vibrio parahaemolyticus* events.
How to Contact the Maven help desk in ISIS. We are available M-F (9-5p.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

- COVID-19 I BOH
- General Information
- Frequently Asked Questions (FAQs)
- Division of Global Populations (DGP)
- ePostcards/Webinars
Follow-up for Positive COVID-19 Cases and their Close Contacts

Tools for LBOHs

May 12, 2020

Hillary Johnson, Infectious Disease Epidemiologist
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MA Department of Public Health
Topics Today

• New Guidance for Testing Close Contacts
  • May 11 recommendation to test all contacts with PCR.
• Updated Ending Isolation Guidance for HCWs and non-HCW
  • Quick Review
  • Some FAQs
• Updated Guidance for Serologies
  • Background
  • Guidance Table
  • FAQs
• 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 617-983-6800 to create cluster events.

MAVEN Help has Guidance Documents and Previous Webinars:
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.

HOT OFF THE PRESSES
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.
Updated Discontinuation of Isolation Guidance!

• **Summary of Guidance Updates:**
  - Minimum of 10 days for Period of Isolation. (update from 7 Days)
  - HCW and non-HCW guidance consistency
  - Test-based strategy is no longer a preferred strategy for anyone.

• **Updated the Names of the Different Strategies**
  - **Symptom-based Strategy** (formerly non-test based strategy)
    - Symptom onset & resolution
  - **Time-based Strategy** (for asymptomatic lab confirmed cases)
    - Time since test date
  - **Test-based Strategy** (removed previous language stating preference)
    - 2 negative PCR tests > 24 hours apart

There have been reports of prolonged detection of RNA without direct correlation to viral culture.
Detecting viral RNA via PCR does not necessarily mean that infectious virus is present.

MDPH Guidance Updated May 7, 2020
Updated Discontinuation of Isolation Guidance!

If Patient Ever Had Symptoms:

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.

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 PCR results from at least 2 specimens collected >24 hours apart

OR

Symptoms need to have resolved before starting testing

Use Symptom Onset Date
Updated Discontinuation of Isolation Guidance!

If Patient NEVER Had Symptoms:

<table>
<thead>
<tr>
<th>Time-Based Strategy</th>
<th>Test -Based Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 10 days have passed</td>
<td>Negative PCR results from at</td>
</tr>
<tr>
<td>since the date of their first</td>
<td>least 2 specimens collected &gt;24</td>
</tr>
<tr>
<td>positive COVID-19 diagnostic test.</td>
<td>hours apart</td>
</tr>
<tr>
<td>Assumes no symptoms ever developed.</td>
<td>Assumes no symptoms ever developed.</td>
</tr>
</tbody>
</table>

Note, because symptoms cannot be used to gauge where these individuals are in the course of their illness, it is possible that the duration of viral shedding could be longer or shorter than 10 days after their first positive test.
Where is the Official Discontinuation of Isolation Guidance?
Where is the Official Discontinuation of Isolation Guidance?

Revised May 7, 2020

<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
| Essential Workers    | You have been exposed to someone with COVID-19 BUT you don’t have symptoms |                                      | **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
| All Other Workers    |                                |                                      | **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.
Updated Discontinuation of Isolation Guidance!

• How many days should a positive COVID case be isolated?
  • A. New guidance is a minimum of 10 days since symptom onset (if patient had symptoms) or date of test (if patient never had symptoms). (Old guidance said minimum 7 days, but all updates now say minimum 10 days).

• What is the difference between HCWs and non-HCWs for discontinuing Isolation?
  • A. The minimum 10 day isolation and the different strategies for ending isolation are the same (Symptom-based Strategy, Time-based Strategy or Test-based Strategy).
  • The big difference is that HCWs also have some Return To Work Practices and Work Restrictions listed in their guidance once they return to work.
How long does someone quarantine or isolate?

**Isolation** is for individuals who have either tested positive for COVID-19 or who are exhibiting symptoms of COVID-19 and have been told by a provider that they have, or probably have, COVID-19, even in the absence of a test.

- Isolation is for CASES (Confirmed and Probable).
- Isolation is a MINIMUM of 10 days, but depends on how fast their symptoms resolve (or if they ever had any symptoms at all).
  - Isolation time differs per case. It is based upon the individual themselves.

**Quarantine** is for individuals who may have been exposed to someone who is COVID-19 positive but are not exhibiting any symptoms positive and have not tested positive. Individuals who are in quarantine should stay in place for 14 days.

- Quarantine is for CONTACTS and is always 14 days from last exposure.
- This does not change (unless they become a case themselves).
Isolation FAQ

• What symptoms need to resolve before they can be released from isolation?
  • A. Ultimately, the Symptom-based Strategy refers to fever and respiratory symptoms (so cough and shortness of breath). Technically someone does not need to resolve loss of taste or smell or fatigue etc. to exit isolation.

• Are there more simple and updated isolation and quarantine guidelines we can give out to residents?
  • A. Not currently. Please consider creating your own on your own letterhead. You do not have to use the documents created by MDPH. You can use your own.
Antibody Testing (serology)

In order to determine the best public health response to COVID-19 serology testing, here are some basic principals:

• You can potentially have positive antibodies and be in your infectious period.

• Lots of people may recall being sick this winter, that doesn’t mean it was COVID-19. (Remember, it was a very robust flu season)

• The recommended public health response is conservative and continues to focus on the importance of identifying people during their infectious period so they can be isolated and their contacts quarantined.
  • In the absence of more information, this is the default.
  • In the absence of more information, get more information (PCR test).

• MDPH always recommends a PCR test if there is not a relevant PCR result to help inform the situation.

• This guidance is evolving as we learn more.
Antibody Testing (serology)

- Preliminary guidance on appropriate public health response for different test results has been developed.
- Looks at Serology Results, combined with PCR results (when available) to help interpret situation.
- Important to note this is an evolving guidance.
  - This will change as we learn more.
- No previous data exists to guide this discussion.
- Public Health Response is developed with a conservative approach:
  - Recognizing the current importance of identifying people during their infectious period so that they can be isolated and their contacts quarantined to reduce transmission.

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>These recommendations are based on what is known currently about the diagnostic utility of PCR (molecular) testing and the large amount of uncertainty about the quality of any individual serology test type and the unknown timing of COVID antibody development or duration. They represent a conservative approach recognizing the current importance of identifying people during their infectious period so that they can be isolated and their contacts quarantined to reduce transmission. This guidance will change as we learn more about antibody responses to COVID.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interpretive</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SARS-CoV-2 PCR</strong></td>
<td><strong>antibody</strong></td>
<td><strong>positive</strong></td>
<td><strong>negative</strong></td>
<td><strong>positive</strong></td>
<td><strong>negative</strong></td>
</tr>
<tr>
<td><strong>For patients with nasal swab and blood draw done at the same time</strong></td>
<td><strong>X</strong></td>
<td><strong>negative antibody results</strong></td>
<td><strong>Uninfected, susceptible or recovering infection</strong></td>
<td><strong>No follow-up necessary</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>X</strong></td>
<td><strong>Regardless of antibody results</strong></td>
<td><strong>Confirmed early infection</strong></td>
<td><strong>Follow-up per current protocols for confirmed cases</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>positive</strong></td>
<td><strong>or unknown</strong></td>
<td><strong>Probable recent infection</strong></td>
<td><strong>Inquire whether test reflects recent or remote infection</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>positive</strong></td>
<td><strong>positive</strong></td>
<td><strong>Probable recent or resolving infection</strong></td>
<td><strong>Follow-up per current protocols for confirmed cases</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>or unknown</strong></td>
<td><strong>negative</strong></td>
<td><strong>Probable resolving or resolved infection</strong></td>
<td><strong>Inquire whether test reflects remote infection</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>infection at some undetermined point</strong></td>
<td><strong>negative</strong></td>
<td><strong>Probable infection at some undetermined point</strong></td>
<td><strong>Inquire whether test reflects remote infection</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>positive</strong></td>
<td><strong>+</strong></td>
<td><strong>Confirmed infection at time indicated by PCR result</strong></td>
<td><strong>No additional follow-up needed assuming appropriate follow-up done associated with original PCR positive</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Appropriate symptomatic is defined as: either cough or shortness of breath, or at least two of the following symptoms: fever, chills, shaking chills, headache, myalgia, sore throat and new loss of taste or smell
Antibody Testing (serology)

- PCR Results Trump Serology
  -Currently positive PCR is confirmed.

- If you have a positive serology result, getting a PCR test will better inform the current picture.
  - Newly PCR+ is a confirmed case.
  - Currently PCR- is not a current case. (Although would be probable previous case)

  NO CORRESPONDING PCR RESULT: we have to assume is a new case and respond accordingly.
Antibody Testing (serology)

Follow-up Protocol With Positive Serology:

- Interview. Obtain symptom information and hospitalization status
- Refer individual for NP, nasal or oral swab, or sputum based PCR test, individual isolates pending test result
  - if recently appropriately* symptomatic and PCR positive, base isolation period off of symptom onset
    - (min 10 days since onset (at least 3 days fever free and with improvement in respiratory symptoms))
  - if asymptomatic and PCR positive, base isolation period off of positive test date
    - (10 days from specimen collection)
  - if PCR negative, isolation period not indicated
- Identify contacts with exposure to case through end of isolation period and institute 14-day quarantine as appropriate

*Appropriately symptomatic is defined as: either cough or shortness of breath, OR at least two of the following symptoms – fever, chills, shaking chills, headache, myalgia, sore throat and new loss of taste or smell.
Antibody Testing (serology)

• While an IgG may indicate old infection, in the absence of other testing information, we treat the new positive lab result like a case. Isolate Case and Quarantine Contacts.
  • Get a PCR test. This will help inform the situation.
    • If PCR Negative: Isolation can stop. Contacts do not need to quarantine.
      • Still a ‘Probable’ Case per case definition. Interview and complete the data variables in MAVEN event.
    • If PCR Positive: Case is Confirmed. Isolate case and quarantine contacts. Use symptom based criteria if symptoms or time-since test based criteria if no symptoms.
  • If patient doesn’t obtain a PCR test, we treat them like a case. Use their serology specimen collection date and proceed as appropriate.

Current PCR test result TRUMPS current Serology Test Result. In the absence of a PCR test result, MDPH always recommends getting a PCR test.
Antibody Testing (serology)

- An updated Guidance for Testing Recommendations is in the final approval process with the Command Center. This will help to update providers with the following:
  - Serology testing should not be used for diagnostic purposes.
  - PCR testing is recommended for anyone being tested.

- In the absence of additional laboratory information, a positive serology triggers public health follow-up.
  - Until we get additional information, we have to treat a newly positive patient (via serology) like a case, per guidance by the State Epidemiologist, Dr. Katie Brown.
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

Antibody Testing (serology) - FAQs

• The patient has a positive serology test (IgG) and recalls being ill back in February following travel. They don’t have any symptoms now. Do they have to isolate and their contacts quarantine?
  • A. Yes. Is this an old infection? Maybe. But this person has no other laboratory evidence telling us that. In the absence of other information, all we have is a new test result that is positive.
  • Isolate Patient. Recommend they seek a PCR test. In the interim, we must do our public health duty and follow-up on contacts. If the PCR test comes back, that result will trump the serology and we will conclude isolation accordingly.
Antibody Testing (serology) - FAQs

- The patient has a positive serology test (IgG), what do we do while we are waiting for them to get a PCR test?
  - A. Isolate Patient. In the interim, we must do our public health duty and follow-up on contacts. If the PCR test comes back, that result will trump the serology and we will conclude isolation accordingly.
  - It is better to cease an isolation or a quarantine period once you determine it is no longer necessary than to miss an opportunity for preventing spread because we waited for someone to get additional testing done and get results back (which could take a while) and we didn’t let their contacts know about the exposure in time.
Antibody Testing (serology) - FAQs

• The patient has a positive serology test (IgG) and no symptoms. They don’t recall any recent illness. What do we do?
  • A. In the absence of other information, all we have is a new test result that is positive.
    • Isolate Patient. Use the Time-based Strategy for establishing isolation period
      • Time-based Strategy: Isolate 10 days following date of test. Test Collection = Day 0.
    • Recommend they seek a PCR test. In the interim, we must do our public health duty and follow-up on contacts. If the PCR test comes back, that result will trump the serology and we will conclude isolation accordingly.
Antibody Testing (serology) - FAQs

- My Case had a positive PCR last month and completed their isolation period. Now they have a positive Serology. What do we do?
  - A. Great! The PCR helps inform the situation. They are not a new case. No public health action needed. They were a CONFIRMED case at the time of their first positive PCR. Any subsequent lab results should just append (attach) to the old COVID-19 MAVEN event.
Antibody Testing (serology) - FAQs

• My Case had a positive serology and negative PCR on the same day. Do they have to isolate?
  • A. Great! The PCR helps inform the situation. They are a “Probable” case (based off the serology result) but not currently infectious (based off the negative PCR). Make sure you interview them and complete the questions in their MAVEN event accordingly. Their contacts do not need to be identified.
    • You can wrap up the MAVEN event and sign off right after you data enter the interview.
Antibody Testing (serology) - FAQs

• My Case had a positive IgG test. They followed my recommendation and also obtained a PCR test 3 days later which was positive. They are asymptomatic. What is their isolation period?
  • A. They are a new confirmed case. Because they are asymptomatic, use the Time-based Strategy: Isolate 10 days following date of test. Test Collection = Day 0.
  • Use the date of their first positive test to begin counting. (In this case, the date of the serology collection.)
  • Contact Notification: Consider contacts exposed beginning 2 days prior to first positive test collection date.
Antibody Testing (serology) - FAQs

• My Case had a positive serology test. They followed my recommendation and also obtained a PCR test, which came back **PCR negative**. What do I do?
  
  • **A.** They do not need to isolate further. They are a “Probable” case (based off the serology result) but not currently infectious (based off the negative PCR). Make sure you interview them and complete the questions in their MAVEN event accordingly. Their contacts do not need to be identified.
Antibody Testing (serology) - FAQs

- **My Case was a contact to their confirmed spouse last month. They developed some symptoms but were never tested. They now have a positive serology. Do they need to isolate?**

  - **A.** In the absence of other laboratory information, all we have is a new test result that is positive.
    - Isolate Patient. Use the Time-based Strategy for establishing isolation period
      - Time-based Strategy: Isolate 10 days following date of test. Test Collection = Day 0.
    - Recommend they seek a PCR test. In the interim, we must do our public health duty and follow-up on contacts. If the PCR test comes back, that result will trump the serology and we will conclude isolation accordingly.
Antibody Testing (serology) - FAQs

• **How do I determine the isolation period for my serology positive case?**

  • **A.** If the patient has a recent onset of appropriate symptoms, use that symptom onset date. If there are no recent symptoms, use a date of test to establish a time-based strategy for isolation.
    • Isolate Patient.
      • Symptom- Based Strategy: Isolate minimum 10 days following date of onset. Onset Date = Day 0.
        • 10 days plus at least 3 days fever free and improvement in respiratory symptoms
        • Time-based Strategy: Isolate 10 days following date of test. Test Collection = Day 0.
  • *Appropriately symptomatic is defined as: either cough or shortness of breath, OR at least two of the following symptoms – fever, chills, shaking chills, headache, myalgia, sore throat and new loss of taste or smell.*
Antibody Testing (serology) - FAQs

• The oldest sister in a family is serology positive but was never symptomatic. Parents were symptomatic over 4 weeks ago. Do we need to quarantine rest of siblings?
  • A. Yes. It looks like we only have one positive lab test (and it is new) for this family – the oldest daughter. Everyone in the household is a contact at this time.
    • The parents “may” have been previous cases, but if they never got tested, how do we know for sure? Daughter could be a new case now regardless of the parents possible history.
    • Recommend a PCR test for the oldest daughter.
    • The rest of the household should also quarantine.
      • If daughter becomes PCR positive, then household should also seek PCR testing.

• So should contacts of serology positive patients also seek PCR testing or just quarantine?
  • A. Further guidance on this scenario is pending. At a minimum contacts should quarantine while serology positive index case seeks PCR test themselves.
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
Your Questions

• If someone thinks they had Covid-19 in Dec/Jan. should they get antibody testing for tracking purposes?
  • A. At this time, that would not be MDPH’s recommendation. However, if they seek serology testing, MDPH would recommend obtaining a PCR test at the same time to clarify appropriate follow-up when results are received.

• If LBOH marks “Assistance Requested = No” in the Admin Question Package to keep a COVID event for follow-up, but later decides to send the case to the CTC, can we switch to Yes at a later date?
  • A. Yes, you can switch to Yes at a later date and the case will be sent to the CTC for follow-up. Some reminders:
    • CTC does not get your notes in the case transfer.
    • Be conscious of timing. Let’s all work together to eliminate delays in follow-up as much as possible.
Your Questions

• Can LBOH request assistance from CTC for probable and/or suspect cases?
  • A. At this time, only CONFIRMED cases are being sent to CTC.
  • Serology positive cases are PROBABLE in the absence of a positive PCR test. If they obtain a PCR, they would be changed to CONFIRMED.

• Are all the key required variables in the COVID-19 Wizard view?
  • A. Yes. We have tried to make the Wizard contain all the critical questions for a COVID event. If you have completed the Wizard, you are probably good to go.
Your Questions

• **Which cases go to the CTC?**
  • Any case you do not request in Admin Question Package – “COVID Assistance Requested: No”
    • Starting Tomorrow CTC becomes an “Opt-Out” Program.
    • Cases not touched will automatically go to CTC next day.
  • Cases that will NOT be sent include (or would be returned if CTC determines this info):
    • **Hospitalized**
      • Clinical Question Package: Was case hospitalized? = Yes
    • **Resident in a Congregate setting (LTCF, ALF, DDS, etc.)**
      • Risk Question Package: Employed at, admitted to, or visited a healthcare setting? = Yes
    • **Deaths**
      • Clinical Question Package: Outcome=Died

• **CONFIRMED cases go to the CTC.** **New CONTACT events do not go directly to the CTC.** *(CORRECTION FROM LAST PRESENTATION)*
Your Questions

• Is CTC taking any clusters? It appears they have taken SOME of our cluster events but not all. How should this be handled?
  
  • Events are (most often) created in MAVEN based upon new lab reports, but the data indicating where someone lives (in a LTCF), where they work, if they were hospitalized, or if they have died needs to be obtained and entered in the question packages.
  
  • If key variables are completed first, a case may not be sent to CTC if it should be handled by a LBOH, but if those variables are not yet marked, the case may end up being sent. These cases should be referred back to LBOH once the CTC determines they fit into those categories.
  
  • If you determine a case belongs to one of your clusters or fits the categories for being handled at the local level:
    • Go ahead and enter the data in the event. It won't be overwritten.
    • Call your CTC contact to coordinate discontinuing the CTC investigation.
Your Questions: