Follow-up for Positive COVID-19 Cases and their Close Contacts

Tools for LBOHs

July 21, 2020

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Topics Today

- MAVEN Online Status
- COVID-19 Immediate Workflow – reminder to clear out your cases
- Quick Updates
- Updated Isolation & Quarantine from CDC!
  - July 17 Refining of Isolation Data
- Daycares – Dr. Kathy Hsu
- Your Questions!
  - Probable Cases – Follow-up Review

Actually, it's only quarantine if it comes from the quarantine region of France; otherwise, it's just sparkling isolation.
Tuesdays @ 11am will continue in July

Tuesday Webinars Going Forward

- 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
COVID19CommunityTracingCollaborativeQuestions@mass.gov
MAVEN Status Map as of 7/21/2020

Massachusetts Virtual Epidemiologic Network

Massachusetts Virtual Epidemiologic Network (MAVEN) is a web-based disease surveillance and case management system that enables MDPH and local health to capture and transfer appropriate public health, laboratory, and clinical data efficiently and securely over the Internet in real-time. The system interfaces with Electronic Laboratory Reporting (ELR) efforts, has automatic Q4/7/365 notification of state and local officials of any event requiring their attention and geographic information system (GIS) activities. MAVEN will replace the current paper-based methods of data exchange between MDPH, local public health, and clinicians. For more information please contact isihelp@state.ma.us or by phone at (617)-983-6801.

This map displays 350 out of the 351 cities and towns in Massachusetts receiving disease notifications electronically through the MAVEN System as of May 27, 2020.

*Boston reporting data via BoSS MAVEN.

For more detailed information please zoom in on the map or click on town.

MAVEN Status May 2020

- Online (350)
- Offline (1)
Immediate Notification workflow (COVID-19 Only)

• **UPDATE:** COVID-19 Immediate Notification Workflow
  • This will allow proper notification of all new COVID-19 events for your jurisdiction.
  • Please review all events/cases in this workflow and complete your **Step 1- LBOH Notification to “Yes”** to clear out this workflow.
  • If you are retaining ownership then complete Steps 2 (Investigation Started) & 3 (LBOH Investigator (name, lboh, phone number))
  • When you are done then complete Steps 4 (CRF Complete) & 5 (Final Review)
MAVEN Help Section

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 LOH
- General Information
- Frequently Asked Questions (FAQs)
  - Division of Global Populations (DGP)
  - ePostcards/Webinars
Summary of Key Guidance & Tools

- **Date: July 17, 2020 – Updated CDC Guidance on Duration of Isolation & Precautions for Adults with COVID-19**
  - 10 Day Isolation Period now has more data supporting it.
  - Ignore most additional PCR tests up to 3 months after initial illness onset.
  - No need to quarantine up to 3 months after initial illness onset.

- **Date: July 3, 2020 - Testing of Persons with Suspect COVID-19**

- **Date: June 1, 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: For serology positive individuals, ask about recent symptoms. Those individuals should be isolated and their contacts quarantined. Serology positive but no recent symptoms do not require further public health follow-up at this time.

- **Date: May 11, 2020 - Recommendation for Routine Molecular Testing of People Identified as Close Contacts to COVID-19 Cases**
  - [https://www.mass.gov/doc/notification-to-test-contacts-regardless-of-symptoms-0/download](https://www.mass.gov/doc/notification-to-test-contacts-regardless-of-symptoms-0/download)

- **Date: May 7, 2020 – Occupational Exposure & Return to Work Guidance**
Updates – A quick recap.

• July 17th, CDC updated their website with new data on duration of isolation. We will talk about this today. https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html

• July 17th, the MA Department of Elementary and Secondary Education (DESE) released “Protocols for responding to COVID-19 scenarios in school, on the bus, or in community settings.” This document was sent out Sunday by Ron O’Connor and a supplement to DESE’s Initial Fall School Reopening Guidance.

• Last week we talked about Daycare settings and COVID-19 case investigation and follow-up. Today we will be continuing the conversation with Dr. Kathy Hsu. (She will join us at about 11:30am)

• I’ve received several questions on appropriate follow-up for antibody positive probable cases. Remember we updated this follow-up June 1, so I want to review that today as well.
School Settings:

- Document sent out by Office of Local and Regional Health over the weekend: “Protocols for responding to COVID-19 scenarios in school, on the bus, or in community settings.”
  - What should a district do if there is a symptomatic individual – at home, on the bus, or at school?
  - What should a district do if someone in the school community tests positive for COVID-19 – be it a student, teacher, staff, or bus driver, or one of their household members or close contacts?
  - Who should get tested for COVID-19 and when?
  - In what circumstances would someone need to quarantine (when they have been exposed but are not sick) or isolate (when they are sick)?
  - What should school districts do to monitor COVID-19 spread in their communities?
School Settings:

• Several of you immediately pointed out there are some differences in the guidance regarding recommendations for exposed contacts and what MDPH has been saying in similar situations.
  • The document says an exposed student can return to school following a negative test (prior to completing a full 14 day quarantine).

• Thank you for making us aware of this issue.
  • Luckily, we still have almost 2 months prior to fall when classes will begin to iron out any kinks in recommendations.
  • In the interim, please make sure you also send your comments or questions to the MA Department of Elementary and Secondary Education (DESE). They are writing the guidance, so we want to make sure they are aware of your questions as well.
School Settings

• We are looking into getting you answers to your questions and also determining the best format for answering school-related questions.

• We will have more to come on this as we determine the best contacts with DESE.

• We will put this on the agenda for a future Webinar (hopefully with some additional representatives on the call).
  • As we have seen with all these guidances, they evolve and change quite quickly.
Updated Isolation & Quarantine Guidance

• CDC has updated Duration of Isolation and Precautions for Adults with COVID-19.
  • July 17 Update Here: https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html
  • Additional pages with corresponding guidance are being updated at approved by CDC. More to follow.

• More data and studies have been published, increasing the body of knowledge around:
  • How long cases are infectious after symptom onset?
    • Summary: 10 day isolation now has more science backing it. Some tweaks to the details, but 10 day isolation still makes sense.
  • How long cases likely have at least temporary immunity?
    • Summary: Extended the cutoff from 6 weeks to 90 days after initial illness onset.
    • This extends the period where previous cases would not need to be tested or quarantined to 3 months out.
Updated Isolation & Quarantine Guidance

• What does the data now tell us about PCR testing?
  • COVID-19 RNA in respiratory specimens declines after onset of symptoms.
    • PCR testing is what detects this RNA.
    • RNA is not the same as replication-competent virus (infectious virus).
  • Patients can continue to test positive via PCR for UP TO 12 WEEKS!

• The Update:
  • Previously PCR+ confirmed cases that have recovered:
    • Testing is not recommended within 3 months after symptom onset date.
    • Quarantine is not recommended within 3 months after symptom onset date.

CHANGE:
Previously we were saying ignore additional testing up to 6-8 weeks after recovery. Now it is 12 weeks after onset.
Updated Isolation & Quarantine Guidance

What does the data now tell us about how long cases are infectious?

- COVID-19 replication-competent virus (infectious virus) also declines after onset of symptoms.
- Key Findings:
  - In patients with mild-moderate COVID-19, replication-competent virus has not been recovered after 10 days following symptom onset.
  - In some persons with severe COVID-19 & complicated by immunocompromised states, replication-competent virus was found 10-20 days after onset. (However, 88% & 95% of specimens no longer yielded replication-competent virus after 10 & 15 days, respectively).
  - Large contact tracing study showed high risk household and hospital contacts did not develop infection if their exposure to a case started ≥6 after case’s illness onset.
What does the data now tell us about how long cases are infectious?

• COVID-19 replication-competent virus (infectious virus) also declines after onset of symptoms.

• Key Findings (Cont.):
  • Large study of 285 “persistent PCR+ persons,” including 126 with recurrent symptoms, found no secondary infections among 790 contacts.
  • Specimens from recovered patients who later developed new symptoms and retested PCR+ did not have replication-competent virus detected.
  • Based upon data from another betacoronavirus, risk of reinfection may be lower in the first 3 months after initial infection.
  • Currently 6 months after the emergence of SARS-CoV-2, there have been no confirmed cases of SARS-CoV-2 reinfection. (Although the perfect settings to study this with sustained infection pressure remain limited.)
Updated Isolation & Quarantine Guidance

• What do all these studies mean?
• This data overall supports the 10 day symptom-based criteria for discontinuation of isolation (or the 10 day time-based criteria if no symptoms develop).
  • Some caveats:
    • This data is derived from adults. Data from children & infants is not presently available.
    • There are always outliers.
    • Serologic or other correlates of immunity have not yet been established.
Updated Isolation & Quarantine Guidance

• Available data indicate that persons with mild to moderate COVID-19 remain infectious no longer than 10 days after symptom onset.
  • Persons with more severe to critical illness or severe immunocompromise likely remain infectious no longer than 20 days after symptom onset.

• Recovered persons can continue to shed detectable SARS-CoV-2 RNA in upper respiratory specimens for up to 3 months after illness onset, albeit at concentrations considerably lower than during illness, in ranges where replication-competent virus has not been reliably recovered and infectiousness is unlikely.
  • The etiology of this persistently detectable SARS-CoV-2 RNA has yet to be determined.

So even though people can stay PCR positive for up to 3 months, they are not producing infectious virus.
Studies have not found evidence that clinically recovered persons with persistence of viral RNA have transmitted SARS-CoV-2 to others.

These findings strengthen the justification for relying on a symptom based, rather than test-based strategy for ending isolation of these patients. We don’t want people who are no longer infectious (current evidence) kept unnecessarily isolated and excluded from work or other responsibilities.

Test-based strategy is no longer recommended for most people (unless the goal is to discontinue isolation prior to the 10 day criteria).
Updated Isolation & Quarantine Guidance

1. Duration of isolation and precautions

• For most persons with COVID-19 illness, isolation and precautions can generally be discontinued 10 days after symptom onset and resolution of fever for at least 24 hours, without the use of fever-reducing medications, and with improvement of other symptoms.
  • A limited number of persons with severe illness may produce replication-competent virus beyond 10 days that may warrant extending duration of isolation and precautions for up to 20 days after symptom onset; consider consultation with infection control experts.

• For persons who never develop symptoms, isolation and other precautions can be discontinued 10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA.
  • [1] Symptom onset is defined as the date on which symptoms first began, including non-respiratory symptoms.

Big update: No longer requiring 3 days of recovery. Now just 24 hours.
Updated Isolation & Quarantine Guidance

2. Role of PCR testing to discontinue isolation or precautions

- For persons who are severely immunocompromised, a test-based strategy could be considered in consultation with infectious diseases experts.

- For all others, a test-based strategy is no longer recommended except to discontinue isolation or precautions earlier than would occur under the strategy outlined in Part 1, above.

[2] PCR testing is defined as the use of an RT-PCR assay to detect the presence of SARS-CoV-2 RNA.
3. Role of PCR testing\textsuperscript{2} after discontinuation of isolation or precautions

- If case recovers and remains asymptomatic:
  - No testing or quarantine needed for next 3 months after onset date (or test date if was asymptomatic).

- For persons who develop new symptoms consistent with COVID-19 during the 3 months after the date of initial symptom onset, if an alternative etiology cannot be identified by a provider, then the person may warrant retesting; consultation with infectious disease or infection control experts is recommended.
  - Quarantine/isolation may be considered during this evaluation based on consultation with an infection control expert, especially in the event symptoms develop within 14 days after close contact with an infected person.

\[\textit{PCR testing}\textsuperscript{2}\text{ is defined as the use of an RT-PCR assay to detect the presence of SARS-CoV-2 RNA.}\]
4. Role of serologic testing

- Serologic testing should not be used to establish the presence or absence of SARS-CoV-2 infection or reinfection.
Summary of July 17 CDC Updates: (Testing & Isolation)

- Confirmed PCR+ Recovered cases can continue to test PCR+ for 12 weeks after symptom onset, thus:
  - No action needed on any tests up to 3 months after original onset or test date.
  - No quarantine needed if exposed up to 3 months after original onset or test date.
  - Recommend no longer using test-based strategy (because they will test PCR+ for a long time and it doesn’t have anything to do with infectious replication-competent virus).
    - Use Symptom Based or Time-Based strategy.

- Symptom-based strategy for discontinuation of isolation: (slightly tweaked) to 10 days & 24 hours fever free and symptoms resolved.
  - Isolation and precautions can generally be discontinued 10 days after symptom onset and resolution of fever for at least 24 hours, without the use of fever-reducing medications, and with improvement of other symptoms.
Summary of July 17 CDC Updates: (Quarantine)

- For previously recovered cases that are newly exposed to a confirmed case of COVID-19, Quarantine applies as follows:
  - Prior to 90 days after onset/test date, a recovered case does not need to quarantine
    - (unless symptomatic and they have a clearly identified new exposure and no alternative diagnosis).
  - > 90 days after onset/test date, a recovered case would need to quarantine if exposed
    - (whether symptomatic or not).
Daycare Discussion with Dr. Kathy Hsu
Your Questions

Q. For possible second infections, do we write over all of the information from the first investigation? Or will there be a new ID#?

A. Great Question! As of today, we do not have a system for a new MAVEN event. Resultingly, you should enter new information in the Notes. Do not overwrite any details except your Admin QP Steps 1-5 (so you can track the event again in MAVEN) and the Contact Monitoring Status in QP6.

For LBOHs who identify previously confirmed cases with new +PCRs >12 weeks after their initial recovery:

We want to know:
- Why was this person tested again?
- Did they have new symptoms? (What are they? When was the new onset?)
- Did they have any new known exposures?
- What types of activities do they engage in that could have led to an unknown exposure?
- How well do they adhere to mask wearing and social distancing?
- Put all relevant new clinical information in notes for now.
Your Questions

Q. Following IgG testing (antibody/serology), is a swab (PCR) test needed to confirm findings?

• A. The updated State Testing Guidance from July 3 still asks that providers order a PCR test when they are ordering a serology test, but there isn’t a requirement for this action.

• Resultingly, you may receive a “Probable” event with no PCR lab information.
  • Remember to consult the June 1 Public Health Response Guidance Table to determine appropriate follow-up for serology tests when no PCR is available.
    • Interview patient. (Were there symptoms in the last 14 days? Yes or no to that question determines if isolation is necessary)

• Ultimately, a PCR test is required to make an event “Confirmed.” If only a serology is available, the case is classified as “Probable.”
Your Questions:

Q. Can you go over guidelines again on probable cases and appropriate follow-up? Do antibody positive cases still need to isolate until a pending PCR is obtained?

• **A.** Serology positive patients (Classified as Probable) do not NEED a PCR per our updated June 1 Public Health Response Guidance Table.
  • We would love it if they had a concurrent PCR, but it is not “required.”
  • Work with the information you have to make an appropriate call on isolation.
Positive Serology (with no current PCR result)

Follow-up protocol: Interview a New Probable

• Obtain symptom information and hospitalization status

• If never symptomatic OR asymptomatic for the last 14 days:
  • no additional testing or follow-up needed

• If recently (within 14 days) appropriately* symptomatic:
  • initiate isolation period based on symptom onset (10 days with at least 24 hours fever free and improvement in respiratory symptoms)
    o can consider pursuing PCR testing, if negative can discontinue isolation

• Identify contacts with exposure to case through end of isolation period and institute 14-day quarantine as appropriate
Positive Serology (with no current PCR result)

• How is this follow-up guidance (June) different than initial follow-up guidance?
  • A. Initially, all positive serology by default required isolation of cases and quarantine of contacts (only a PCR result could change that). Updated guidance now says if you have recent symptoms, you should isolate and contacts quarantine, but if you do not have recent symptoms, LBOH can interview case and be done.

• PCRs still trump serology testing. A positive PCR means a confirmed case. A negative PCR means not currently infectious and no isolation needed (but still Probable based upon positive serology).
• However, if the patient is currently symptomatic and is suspected to have COVID-19, they should isolate regardless of test results.
Your Questions: Serology (Antibody Test)

• **Q.** Please clarify once again a positive serology with no symptoms, historical symptoms occurred months ago, & no PCR. Do they have to isolate?
  
  • **A.** No.

  • This would be a probable case that you would call to interview (because you have a positive serology lab).

  • Ask them if they have had symptoms in the last 14 days.
    
    • If NO, then you complete the interview. No Isolation. No Contact Tracing. (One and done!)
    
    • If YES, then you determine an infectious period & isolation based upon recent symptom onset date.
      
      • Symptoms in last 14 days = Yes isolation & Yes Contact Notification (based upon symptom onsets)
BRACE YOURSELF

QUESTIONS ARE COMING