COVID-19 Webinar for Case Investigation and Follow-up

Tools for LBOHs

May 22, 2020

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Pivot Table 101 Training

• Invite will go out today for next Wednesday from 11-12:15 for a report overview and how to create a pivot table and some graphs using your Confirmed COVID line list report.
MAVEN Reminders
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

- Expand all Collapse all

- COVID-19 LBOH

- General Information

- Frequently Asked Questions(FAQs)

- Division of Global Populations(DGP)

- ePostcards/Webinars
LBOH Case Report Forms are Pending Workflow

- **UPDATE** to your LBOH Case Report Forms (CRF) are pending: We have updated the workflow to only show non-COVID-19 cases that are still pending.

<table>
<thead>
<tr>
<th>Workflow Queue</th>
<th>Total Count</th>
<th>Priority</th>
<th>Last Update</th>
<th>Total Count</th>
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<tr>
<td>LBOH Notification for Routine disease</td>
<td>6</td>
<td>Very High</td>
<td>05/19/2020 08:56 AM</td>
<td>6</td>
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<td>High</td>
<td>05/19/2020 08:56 AM</td>
<td>6</td>
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<tr>
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<td>Medium</td>
<td>05/19/2020 08:56 AM</td>
<td>3</td>
</tr>
<tr>
<td>LBOH Notification but no follow-up required</td>
<td>2</td>
<td>Medium</td>
<td>05/19/2020 08:56 AM</td>
<td>2</td>
</tr>
</tbody>
</table>
Populate the question **Contact monitoring status** field as **Completed, Transferred, Lost to Follow-up and Other**.

The next time you run the report these cases will be removed. If you leave as **In Progress** or **Blank** the confirmed case will remain on the report.
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 15\textsuperscript{th}. This is a flag that you have had an update to the event. (Unclassified to a Confirmed Event).
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.
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.

This case has been sent to the MA COVID-19 Community Tracing Collaborative. Please do not initiate follow-up at this time.
CTC sending cases back to MAVEN – look in your wizard for Investigation status – date will not be populated for these cases
QP#8 – shows that a case was sent to MAVEN

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.
Event/Case questions

• If you have a question about MAVEN functionality, contact the MAVEN Help Desk: isishelp@state.ma.us

• LBOH CTC Inbound Line (857-305-2828)
  • Purpose: specific CTC questions and clarifications around procedures or case information
  • A select set of inbound line supervisors have access to MAVEN to assist with clarifying questions on specific cases/contacts with the CTC

• You can also email:
  COVID19CommunityTracingCollaborativeQuestions@mass.gov
  • Purpose: to provide MAVEN assistance with COVID or CTC questions
Follow-up for Positive COVID-19 Cases and their Close Contacts

Tools for LBOHs

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Topics Today

- Vital Records (Death Reporting)
- MAVEN Check-In
  - (process reminders)
- FAQs
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
Switching Gears: Death Reporting

• Death is tracked under OUTCOME in the Clinical Question Package.
• This is where our COVID-19 deaths are officially tallied.
• It is not an automatic process. SOMEONE needs to enter it. (Could be you.)
Vital Records Data: Death Records

• How are vital records getting into MAVEN?
  • What are the challenges with this process?
• How are vital records used to classify cases?
• What is still “to be done”? 
How are vital records getting into MAVEN?

• Sometimes from all of you (or other direct report)!
• We also get a daily cut from vital records of the death registry
  • This covers all deaths from 1/1/2020 to current date
  • Both finalized and preliminary records are included
  • Includes causes and location of death, demographics, underlying conditions
How are vital records getting into MAVEN?

• Information on all cases of COVID reported to date are pulled from MAVEN Daily

• MAVEN data and Vital records data are matched using last name, first name and date of birth
  • Matches for confirmed, probable and suspect cases that have not been reported are imported by roster every day.
  • Cases already marked as deceased are updated with any new information every other day.

• Matches to revoked, contact, unclassified cases have just recently been updated.
What are the challenges with this process?

• Spelling errors, hyphenated last names, and missing/wrong dates of birth!
  • Computer programs don’t see Hillary and Hilary as the same thing
  • We’ve seen lots of date of birth errors (7 as 9, 0 as 8, month and day swapped)
  • There are still lots of duplicates in MAVEN
    • When cases are deduplicated spelling may change
    • Some records are missing dates of birth

• When there are differences between the records, we may need to look at each case by hand to determine if they are a match
  • There are 3 people working on this data, and this takes time!
  • As you know, addresses are not always what we would expect. This slows things down further.
Classifying Cases

• The goal of classifying cases is to make sure all states are counting cases the same way

• For cases with no laboratory testing:
  • Probable Cases: Death certificate lists COVID-19 disease or SARS-CoV-2 as a cause of death or a significant condition contributing to death (also acceptable: COVID, novel coronavirus, or coronavirus 2019)
  • Qualifier on the cause of death such as, but not limited to, “suspected”, or “possible” are not considered to meet vital records criteria, would be considered as suspect cases.
  • Coronavirus, without an indication of which coronavirus, is not considered to meet vital records criteria.

• Recent laboratory results count over what is listed on the death cert.
Administrative Question Package

- You can see in the Administrative Question Package (top of the screen) that the Reporting Source is a Death Certificate.
Still to be done

- To cut down on duplication, importing cases with vitals indication of death but no matching case in MAVEN is a slow process. These cases have just been entered this week.
- We are capturing ‘all cause mortality’ on people who have tested positive for COVID-19
  - We are not excluding deaths due to other causes
  - We are planning to look more closely at timing.
  - BUT, looking at confirmed cases where death happened >30 days after the event date, only 8/198 did not have some indication of COVID as a cause of death
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.

  https://www.mass.gov/doc/notification-to-test-contacts-regardless-of-symptoms-0/download

• 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)

LBOH follow-up:

Cases come into MAVEN from electronic lab reporting.
- Cases can be followed up at the local level by LBOH staff, AND
- Some Confirmed cases can be sent to the CTC for follow-up.
  - This process will happen automatically for Confirmed cases the following calendar day if not marked “NO” for Follow-up Assistance Requested.
  - CTC will then do interviews and contact notification for their contacts. Data will eventually come back into MAVEN for these cases and contacts.

1. Run daily list of confirmed and probable cases.
   1. Who runs this?

2. Decide if any CONFIRMED cases will be kept at LBOH for follow-Up.
   1. Who decides this? Who marks cases to keep or send?

3. Assign remaining cases to LBOH staff for follow-up.
   1. Who assigns cases?
   2. How are cases assigned?
LBOH Follow-Up

- Using MAVEN
  - Questions live in different question packages, but correspond to the Interview Tool.
  - The WIZARD pulls most of the critical questions into one screen so you don’t have to go in and out of various QPs.
    - Cannot do general front dashboard notes.
    - Cannot change address in wizard.
    - Cannot link to other people/clusters in wizard.
    - Do not see the CTC returning data in Wizard (need to check QP8. ECR Information).

Who has used the WIZARD?

- 6 Question Packages
- 1 Wizard
What’s linked? Go here to see/link to contacts or a cluster event.

Confirmed/Probable/Suspect/Contact

Lab Tab to see lab tests

Patient Person Details (address, phone)

Electronic Trail for this event. Who has entered data? Where did this case come from?

6 Question Packages

View Wizard
Your Questions:

• Why is a positive antibody serology considered a probable positive and not an old exposure?
  • A. It could be either. Remember, someone CAN develop antibodies while they are still potentially infectious to others, as some people develop antibodies quite early.
  • As a result, if we don’t have any other testing information, the cautious approach is to treat a new positive test result as a potential new case. The patient can obtain a PCR test to help inform their current status, but without that, how does public health truly know if they are a current or old infection?
  • It is better to err on the side of protecting the public at this point in time.
Your Questions:

• When someone dies, do we still do follow up on their contacts until their quarantine period is over?
  • A. Yes. We know that this is a delicate and painful time for the contacts of anyone who has passed away. It is important to show that public health acknowledges what they are going through and we want to help them protect themselves and their families. Supporting them through their quarantine is part of that.
Your Questions:

• What are the guidelines if Serology results are positive and the follow-up PCR/NP swab returns positive?
  • **A.** If they have a new positive PCR, they are now a CONFIRMED case, and you continue with isolation of the case and quarantine of the contacts.
    • Determine their isolation period based upon recent symptom onset (if known) or by date of their first positive test (if no recent symptoms).

• What if a serology positive patient refuses obtaining a PCR test?
  • **A.** Their positive result is then all we have to go on. The should isolate and we would do contact notification for their contacts. (IF they really feel they are not a current case, we have no laboratory evidence to say that unless they obtain a PCR. Encourage them to still consider getting one and that may change our isolation guidance, but in the interim, we have to act out of an abundance of caution as public health.)
Serology & PCR Testing Talking Points:

• We are receiving pushback regarding serology and PCR testing. Can you give us some talking points?

1. People can fairly rapidly produce antibodies and it is very possible to test positive via serology while you are still infectious to others.
   • The only way to know for sure that you are not currently infectious is to obtain a PCR test.
Serology & PCR Testing Talking Points:

2. It may be true that a serology positive individual had symptoms a while ago, but because COVID symptoms can match a lot of other normally circulating illnesses (particularly during cold and flu season), we ultimately do not know for sure and cannot guarantee that it was COVID-19 if they never got tested.

   • Getting a PCR test now is a win/win.
     • If they are negative, they can cease isolation and their contacts can cease quarantine.
     • If they are positive, then we are catching them at the right moment and isolation and contact notification is the correct response for preventing the spread of this illness to others.

Knowing is power.
Serology & PCR Testing Talking Points:

3. The success of opening back up the economy depends on the cooperation from our citizens in helping us to be sure we aren't putting more people at risk. At present, all we have is a positive test for an individual (serology) which doesn't give us a lot of direction, and that individual has the power to help us give the best guidance possible by getting a PCR test as well.

• Without that additional test giving us more evidence of a person's actual state of health, we have to act out of an abundance of caution, and we must err on the side of asking them to isolate unless they are able to help us rule them out.
Serology & PCR Testing Talking Points:

4. We are still in the very early phases of this new disease. The serology tests vary widely in their reliability and validity.

   • A year from now we might say something different - when the serology tests have been improved and validated and give us more information, and COVID-19 has been circulating for a longer time.

   • But right now, COVID has only been around less than 3 months, so we cannot say with confidence that all positive antibodies clearly mean someone had the illness a long time ago.

   • Right now a new positive test with no other testing information while in the beginning of a pandemic is all we have to go on, and we have to act out of an abundance of caution, otherwise we aren't doing our public health jobs.

   • We ask people to help us out by getting a PCR test so we don't miss an opportunity for stopping the spread of this illness.
Serology & PCR Testing Talking Points:

5. If needed, you also have enforcement options at your disposal. But hopefully people can see the importance of getting a PCR test and helping direct the right course of action for everyone.

Your Questions:

Please review Testing strategy again. Is there an option for only one retest and if it is negative is that ok? Or do they still recommend 2 negative tests?

A. The test-based strategy (Negative PCR results from at least 2 specimens collected >24 hours apart) is no longer a preferred strategy (and basically not a recommended strategy but still outlined as an option).

If you are looking to use this strategy, it is 2 tests. However, it is probably more practical to switch to a symptom-based strategy.
Your Questions:

Local docs are saying some testing sites refuse asymptomatic people - where do contacts go then?

- **A.** It may take some time for this new guidance to trickle down to providers.
- **Updated MA Testing Guidance** (includes recommendation to test contacts, regardless of symptoms) [Link](http://www.maventrainingsite.com/maven-help/pdf/MDPH%20Revised%20Testing%20Criteria_May13.pdf)
- **Recommendation for Routine Molecular Testing of People Identified as Close Contacts to COVID-19 Cases** [Link](https://www.mass.gov/doc/notification-to-test-contacts-regardless-of-symptoms-0/download)

- **MA COVID-19 Testing:** [Link](https://www.mass.gov/info-details/covid-19-testing)
- **Testing Sites:** [Link](https://www.mass.gov/info-details/covid-19-testing#testing-sites)
Your Questions:

How many days should a contact wait to test?

• **A.** According to the new recommendation to test contacts, a contact should seek testing right away upon finding out they have been exposed.

• The contact is required to quarantine for the full 14 days, even following a negative test result.
• If they never develop symptoms through the rest of their 14 day quarantine period, they don’t have to get tested again and they can return to normal activities at the end of quarantine.
• They only need to be tested again during quarantine if they develop symptoms.

• The goal of having contacts seek testing right away is to identify possible new cases as soon as possible, even prior to symptom onset or even if they are not going to develop any symptoms.
If patient decides to be tested after being cleared and tests positive, are they back in isolation for 10 days?

- **A.** Subsequently positive PCR test results following an initial positive PCR test result **DO NOT** mean an individual needs to restart their isolation.

  - Individuals who have completed their minimum 10 day isolation period and are able to exit isolation based upon a symptom or time-based strategy may do so at that time, regardless of subsequent PCR testing results.

  - Additionally, close contacts should be identified based on the case’s symptom onset or initial PCR positive test date and do not need to re-quarantine based on positives obtained after the case’s isolation period ends.
Your Questions:

- **How is a positive lab uploaded, and by whom?**
  - A. Most all positive labs come in through electronic lab reporting (processing labs have mapped their results to report to MDPH electronically).
    - Some sites are still faxing results to MDPH and they would be entered by ISIS staff.
  - New labs create new MAVEN events when there isn’t a person match to an already existing MAVEN COVID-19 event. OR they append to an existing patient COVID-19 event when they match on all the key demographics (name spelling, DOB, address, etc.)
With everything opening back up, is there any distinction between Essential Workers and Non-Essential Workers going forward?

- **A.** As of this moment, the main distinction for essential workers designation has to do with exposures and quarantine requirements.
  - Essential Workers can theoretically continue to work during their quarantine period following a COVID-19 exposure (provided they are not symptomatic and do not test positive as a case themselves).
    - This exception is for working essential services. They should still observe quarantine for outside of work hours.
    - An essential service may decide they have adequate coverage and not have an employee work during a quarantine.
  - Non-essential workers must abide by normal quarantine requirements following exposures.
  - **NO ONE MAY WORK IF THEY ARE A CONFIRMED CASE OF COVID-19. THEY MUST COMPLETE THEIR ISOLATION PERIOD.**
Your Questions:

What is the quarantine period for a household contact that was not able to completely separate away from the confirmed COVID-19 case?

- **A.** If you were able to completely separate from the patient while they were infectious, this would be 14 days from the last day you were exposed.
- If you were not able to completely separate to avoid close contact, continue quarantine for 14 days from the day the patient completes home isolation. (Last infectious day would be Day ZERO. Contact quarantines Day 1-14) Return to normal activities when you have completed quarantine.
What Should LBOH Complete in MAVEN for Cases that live in LTCFs (linked to clusters)

Data Entry in MAVEN

- **Participants Tab (edit Person button)**
  - Gender
  - Address (confirm address is correct for facility residents. Confirm address is correct for HCWs that live elsewhere (not at facility)).

- **QP2 - Demographic**
  - Race
  - Is case Hispanic?
  - Employer Name & Occupation (for HCP or “retired” for residents, etc.)

- **QP3 – Clinical**
  - Symptom variables (onset date & symptoms)
  - Underlying illness
  - Clinical complications
  - Was case hospitalized?
    - Hospital Name
  - Outcome:
    - Died/Recovered. This is where deaths are captured.

- **Question Package 5: Risk/Exposure/Control & Prevention**
  - “ Employed at, admitted to, or visited a healthcare Setting?”
  - Yes/No/Unk
  - Where is the facility located? (facility name & town OR facility name & full address?)
  - “Is case a healthcare worker?”
    - “Does the case have direct patient care responsibilities?” & “Worker type?”

- **Contact Monitoring Status in QP6 needs to be completed.**
  - This can be done at the end of the resident or staff’s isolation. It is up to the facility to decide when a resident is out of isolation and when a staff member can return to work.
  - However the maven variable will need to be updated to Contact monitoring status: “completed” by LBOH once patient is no longer in isolation and no longer under Transmission Based Precautions.

You don’t need to interview facility residents (most of the clinical information you can get from the facility staff).

You DO need to interview positive staff.
Reopening Massachusetts

- [https://www.mass.gov/info-details/reopening-massachusetts](https://www.mass.gov/info-details/reopening-massachusetts)

- Most questions on phased reopening of businesses and activities:
  - LBOH & Office of Local And Regional Health Calls (Tuesday Afternoons)
    - **Tuesdays at 3:00 p.m.**
      - Dial in number 888-390-5007
      - Participant code 6137873

- Cases will still be cases and need to Isolate. Contacts will still be contacts at risk of developing disease and need to quarantine.
  - Not a lot of immediate changes or updates to COVID-19 investigation and follow-up.
Reopening Massachusetts

Things to think about from Case Investigation and Contact Tracing perspective:

- Make sure your town COMMUNICATION event is up to date with how to best contact you.
  - Each MAVEN User will need to update their own profile information.
  - MAVEN PRO TIP: To see the LBOH contact info for another town, Search Event Type= Communication, Town= town of interest.

- Be mindful of your colleagues and be sure to give the best information/notes when a case or contact involves multiple towns.
  - Generating contacts that live in other towns.
  - When index cases live in one town but might have a place of work in another.
  - Don’t forget to “SHARE” events when it is helpful.

Let’s all work hard to partner with each other and keep each other up to date with the most information possible.
KEEP CALM AND HAVE A GOOD WEEKEND