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

Tools for LBOHs

May 26, 2020

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Topics Today

- Clusters
  - General Guidance
  - Finding Current Clusters vs. Creating New
  - MAVEN Data Completion
  - Jurisdictions & Follow-up Guidance
  - Managing Linked People
    - Use Cluster/Outbreak Line List Report
  - Sharing Events in MAVEN
  - Your Questions

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Cats trying to find a cure so humans will go back to work
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
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?
6 Question Packages

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?

View Wizard
A New Positive Lab Comes Into MAVEN & Creates a NEW COVID-19 Event for follow-up.

**Scenario 1**

- Joe Shmoe (Average Joe) has a new CONFIRMED COVID event.
  - Decide (LBOH or CTC) & Assign for Follow-up.
  - Interview
    - Update MAVEN data & notes.
    - Establish Isolation Period
    - Create Contact Events (while in Joe’s event so they linked)
      - Household, buddies, workplace, other close contacts.
  - Average Joe’s Contacts are Linked Directly to Joe’s MAVEN Event.

**Scenario 2**

- Joe Shmoe (Retired Joe) lives in a LTCF and has a CONFIRMED COVID event.
  - Residents linked to facility clusters should be followed up by LBOH (not CTC).
    - You may recognize the address right away as a facility.
    - You may get a large new list of positives (all at the same address) due to facility-wide testing.
    - Joe’s event may already be linked to a cluster.
    - You may start follow-up and discover Joe is a resident at a cluster facility.
  - Retired Joe should be Linked to a Facility Cluster Event. (not expecting individual links to People Contact Events)
Clusters (Outbreak Events in MAVEN)

- Cluster: greater than expected proximity of cases of a disease in time and space.
- Some diseases have exact numbers and rules for defining clusters. We do not currently have such parameters for COVID events. Some generalities at this point in the pandemic for cluster follow-up:
  - 1 or more cases at a residential facility
    - Long-Term Care Facility (LTCF)
    - Assisted Living Facility (ALF)
    - Prisons/Jails
    - Colleges

- Thus far we have been focusing on these priority facilities because they are places where vulnerable people live and spend their time. We create a maven event for the facility so we can focus efforts on overall control measures and prevention activities for the setting, not just looking at an individual person.
Clusters: Some Vocabulary

• **Clusters:** Facility-based events (as opposed to an individual person event). In MAVEN they are called Outbreak Events.

• **Healthcare Associated Infections (HAI) Team:** MDPH Epi Program Team that has been working to provide guidance on control measures and prevention efforts across clusters in our priority facilities (LTCF, Dialysis Centers, ALFs, etc.)

• **Nursing Home Mobile Testing Program:** Facility-wide testing program available to facilities for testing their residents and staff. Many facilities have recently participated in this for testing (symptomatic and asymptomatic residents). You may have seen large jumps in new confirmed events in your towns as a result.
  • Additional funding through an emergency Nursing Homes Incentives Program was also recently made available for sites meeting a 90% tested baseline by May 25th.

• **National Guard:** The National Guard has been pulled in to assist with testing at facilities throughout MA.
Clusters – General Guidance

• If you identify that a case lives in a facility, a cluster (outbreak event) should be created and the case should be linked to the facility.
  • Call 617-983-6800 & Epi will create the cluster on the phone with you.

Why do we want a Cluster Event Created?

• Once a Cluster Event is created for a Facility, LBOH can track facility-based notes in the Cluster Event.
  • Notes on Infection Control Activities
  • Check-ins with the Facility
  • Notes on numbers tested/positives among HCWs and residents.

• New positives among residents or staff should create new MAVEN events. LBOH should link those new events to the appropriate facility cluster as they come in.

• You can additionally link residents who test negative (unclassified events). This is a lower priority, but if testing continues, they may become positive later, so it doesn’t hurt to link them when they are identified.
  • Sometimes MDPH may bulk link if all addresses match and we identify them during our data cleaning processes.
Clusters – How to find one that already exists

• A facility or location based event that you then link individual patient events to for tracking purposes.
  • LTCF, Rest Homes, Nursing Homes, Group Homes, etc.
• Finding one in MAVEN
• Link individual people events to the cluster

If you cannot find a Cluster or wish to create a new facility cluster, call the Epi Program at 617-983-6800.
We will create the cluster on the phone with you to ensure it is done correctly (and isn’t a duplicate).
Clusters – How to find one that already exists

Searching for a Cluster Event (Outbreak Event)
1. Change Type to “Outbreak”
2. Event (Dropdown select Novel Coronavirus)

Not Required, but you can do a text search:
1. Town is typically in the NAME (so you could do a text search by a part of the event name if you use the *asterisks*. (Put search word in the *stars*. Example: *Lawrence* or *LTCF* or *ALF* if you know the name.)
Clusters – How to find one that already exists

Cluster Naming Convention:
FACILITYTYPE_TOWN_CREATIONDATE

Facility type examples: LTCF, ALF, OTHR, SCHL, etc.

Proper Naming Convention is not that user friendly (admittedly), which is one of the reasons why we recommend calling Epi Program to have us create a new cluster.

You MUST change Type from Normal to Outbreak.

There are other disease clusters so note COVID if you want to make your search easier.
What’s in a Cluster Event?

- **Link residents and staff here.**
- **Can attach documents/lists here**
- **If MDPH Epi is assigned**
- **Summary Variables**
- **Key Contact Information (and towns affected (who can view this cluster). Add new towns if this cluster is shared (so LBOH of staff can read it).**

**General Facility follow-up Notes**
Clusters – General Guide

• LTCF, Assisted Living Facilities, DIAL (dialysis), hospitals, prisons/jails or shelters will get an assigned MDPH EPI.

• For other types of clusters (group homes, workplaces, etc.) Epi program can help you create the clusters and will provide some initial guidance on follow-up, but you do not need to send frequent updates and there won’t be a State Epi assigned in these smaller scenarios.
  • Any questions, definitely call Epi Program at 617-983-6800 for assistance.

Now with the assistance of the CTC for routine COVID follow-up, LBOHs can focus more on priority Clusters & cases going forward.
What do you do with a cluster event?

• Provide advice on Control Measures, Staffing, PPE, Cohorting, etc.
  • MDPH Epi Program can help consult. (Many priority clusters have an MDPH Epi assigned)
  • Lots of Resources online and in MAVEN Help regarding control measures in LTCFs.

• Link individual confirmed Events to the cluster.

• Don’t create lots of MAVEN suspect events for residents prior to being confirmed. (Positive labs will auto create MAVEN events. Then you just have to link them.)
  • Keep general notes or updates in MAVEN until new confirmed events come in.
What should LBOH do for individual person events linked to Cluster Facility?

For Positive RESIDENTS:
• Because visitors and outside close contacts should not be relevant for most residents at LTCFs, you do NOT need to individually interview residents and do contact tracing.
• LBOH should work with facility staff to obtain clinical information on positive residents and complete priority MAVEN variables.
  • LBOH can advise on isolation, but that is mostly handled by facility.

For Positive STAFF:
• Staff should be interviewed and have contact tracing completed because they likely have outside close contacts (households, friends, other places of employment) that should be notified.
• LBOH should take an active role in releasing staff from isolation (as you would your other residents).
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.
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
Clusters: Tips and Tricks

• **What if residents have other addresses listed that differ from the Cluster Facility?**
  • This has been happening. We want to update the address to where they are currently living.
  • You may not be able to see their MAVEN event if they were initially reported with a different town.
  • Call Epi program and we can find the MAVEN event (if it isn’t your town but you know the name/DOB) and we can change the official address to your town. Then you will see it.
    • The same if you find a case is actually living in a facility NOT in your town. You can update the address or call Epi program and we will help change the patient & link event to cluster.
Clusters: Tips and Tricks

• What if a staff member doesn’t live in my town?
  • This will be very common. If a staff member doesn’t live in your jurisdiction, you won’t initially be able to see their MAVEN event. The staff member’s event needs to be shared with you, and can be shared by calling MDPH or by the LBOH who owns the event.
    • This process involves sharing events and working together.
    • Let’s all share information with each other to help work out these scenarios.

• Ideal Scenario: A staff member living in Town A and working in Town B. Cluster is Town B facility.
  • Cluster is shared with both Town A & Town B
    • HOW TO: Question Package: Standard Questions. Update Town Affected to include both towns and both towns can then see the cluster.
  • Staff Member MAVEN event is shared with both Town A & Town B.
    • HOW TO: Town A or MDPH can share with Town B. (If town B LBOH has name of HCW, can call to request. If Town A interviews staff member and identifies place of work, can share with Town B.)
    • Anyone with access to the staff member’s event and cluster can link the two together.
Clusters: Who is responsible for follow-up and counting the case (or a death)?

- Occasionally there are questions on who does the follow-up. In general, it makes the most sense for residents at a facility to be followed up in bulk by that facility and LBOH.

- Remember to link a patient event to the associated facility where they are staying at present, even if their official case might not be counted in that town. Linking has more to do with control measures and current follow-up.

- HCWs should most likely be followed up by their own town or residence, however this is a partnership so please share and work with the town doing follow-up on their place of employment.
  - Many HCWs at LTCFs work in several sites, so remember to ask about multiple sites of work and share and link accordingly.
Clusters: Who is responsible for follow-up and counting the case (or a death)?

- MDPH generally uses this document. This should cover most scenarios.
  - Revised Guidelines for Determining Residency for Disease Notification Purposes

**Summary Bullets:**

- A general acute care stay (and possible death) should be counted by the official residence where they normally live.
- If they are a long term stay at a LTCF, or have MOVED to the LTCF indefinitely, even if they just recently moved there, count the case (and possible death) there.
- Staff, even if they are bunking on site, should be counted in their normal official town of residence as cases (and possible deaths).
Clusters: Who is responsible for follow-up and counting the case (or a death)?

- **Q.** Resident was in the LTCF for a year or two but still has another official home address for billing purposes, etc.

- **A.** We do not chase these situations, but if identified, would be a LTCF case (and death) and LBOH should update the official address in MAVEN to reflect the LTCF.

- More specific questions about official addresses or counting deaths should be sent to isishelp@state.ma.us
Summary Time - Clusters

• If you identify a person that lives in a facility (like LTCF, ALF, etc.), the facility should have a cluster event and all residents and staff events should be linked to the facility cluster event.
  • Is there already a cluster (outbreak event) in MAVEN?
  • If not, a new one should be created (recommend call MDPH 617-983-6800) and we will create one on the phone with you.

• Use the Cluster Facility Event to track notes on overall facility follow-up, control measures, etc.

• LBOHs help identify which patient events should be linked to facility clusters and fill out the appropriate MAVEN variables for residents and staff.
  • There may need to be some event sharing if addresses of staff or residents are reported as other towns.
  • General Rule: Residents don’t need contact tracing but Staff do.
Clusters and the CTC

- Confirmed COVID events in residents and staff from LTCFs should not go to the CTC for investigation, however, some may go automatically if not identified in time.
  - 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

- If you identify a confirmed event that already went to the CTC before you determined it belonged to one of your clusters, contact your CTC Team Lead and discuss transferring it back.
  - In the interim, you can still enter data into the MAVEN event and link the case. It will not mess up the data coming back from the CTC because their data goes into QP8.
Cluster Events – how to manage the linked people.

Oh my goodness, how many people are linked to this cluster!
Cluster Events – how to manage the linked people.

There are pages of linked people. But you cannot tell much about them from this list of linked events. (Confirmed? Unclassified?) Is the data filled in for these people? Who do you still need to complete the MAVEN events for?

This is a great way to check if an individual is linked or to link a new person from this screen. You can sort by name or any of the columns.
Cluster Events – how to manage the linked people.

- Instead of looking at the long list of linked events, you can run a MAVEN report called BOH COVID-19 Cluster/Outbreak Linelist Report.

This report will pull all the linked events from a cluster into an excel document and you can sort and see what events still need you to enter data.
Cluster Events – how to manage the linked people.

LBOH COVID-19 Cluster/Outbreak Linelist Report

To run a MAVEN Report

Step 1: Locate a cluster/outbreak event in MAVEN.

Step 2: Navigate to the MAVEN Dashboard and click on Reports from the Menu options.

Step 3: Select Cluster/Outbreak Linelist report.

Step 4: Make sure that the Case ID is populated with your Cluster ID.

Step 5: Choose Novel Coronavirus in the Disease box.

Step 6: Enter Start date and End date for your report.

Step 7: Choose output type: HTML, CSV and Excel.

Step 8: Run Report
Cluster Events – how to manage the linked people.

- Use the Cluster ID.
- Follow the MAVEN instructions.
- Run the report (set dates to cover earliest possible linked event and most recent).
- Select Excel for ability to sort the data in an excel worksheet.
Cluster Events – how to manage the linked people.

• You end up with a report (1 line per person).
• The columns are the MAVEN Variables so you can see who is missing information.
• You can sort (pull your confirmed cases and work on updating those events).

<table>
<thead>
<tr>
<th>Event ID</th>
<th>Cluster ID</th>
<th>Official City</th>
<th>County</th>
<th>Event Date</th>
<th>Disease classification status</th>
<th>First Name</th>
<th>Middle Name</th>
<th>Last Name</th>
<th>Gender</th>
<th>Age (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100767776</td>
<td>BROOKLINE</td>
<td>Norfolk County</td>
<td>03/22/2020</td>
<td>Confirmed</td>
<td>Test</td>
<td>Covid19Six</td>
<td>Male</td>
<td>Male</td>
<td>05/05/1995</td>
<td>24.8816</td>
</tr>
<tr>
<td>100768048</td>
<td>BROOKLINE</td>
<td>Norfolk County</td>
<td>05/05/2020</td>
<td>Confirmed</td>
<td>Test</td>
<td>Covid19_Two</td>
<td>Male</td>
<td>Male</td>
<td>05/30/1965</td>
<td>54.9322</td>
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<tr>
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<td>BROOKLINE</td>
<td>Norfolk County</td>
<td>05/05/2020</td>
<td>Confirmed</td>
<td>Test</td>
<td>Covid19_Three</td>
<td>Female</td>
<td>Female</td>
<td>06/01/1955</td>
<td>64.9281</td>
</tr>
<tr>
<td>100768050</td>
<td>BROOKLINE</td>
<td>Norfolk County</td>
<td>05/05/2020</td>
<td>Contact</td>
<td>Test</td>
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<td>Male</td>
<td>03/25/1988</td>
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<tr>
<td>100768051</td>
<td>BROOKLINE</td>
<td>Norfolk County</td>
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<td>Test</td>
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<td>Male</td>
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</tr>
</tbody>
</table>
Summary Time - Clusters

- Identify someone belongs to a facility cluster. Find or create the cluster as needed and link the person event to the cluster.

- Use the Cluster Facility Event to track notes on overall facility follow-up, control measures, etc.

- Update/complete the MAVEN variables for each linked person (residents and staff).
  - Run the Cluster/Outbreak Line List Report for a Cluster (use MAVEN ID) to see all the linked people and who still needs their MAVEN data entered.
    - Report Instructions live on MAVEN Help.
    - You will only see the linked people you have access to, so if they live in another town, they still need to be shared.
How do you Share an Event?

- Full Instructions on Sharing in MAVEN Help.
Sharing Cases

• If my case works in another town, what should I do?
  • SHARE the MAVEN event with the appropriate jurisdiction so you both can communicate on the follow-up.

• Who should I Share with?
  • Share with the full LBOH TOWN MAVEN users. It is easier than picking individual users.
  • Make sure your contact information is in the ADMIN QP so any other LBOHs can talk to you if needed.
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.
Questions on Clusters (Outbreak Events)

• What is expected if a Case I’m working lives in a facility? (LTCF, ALF, Nursing Home, Group Home, etc.)
  • Make sure to link them to the correct cluster facility event.
    • Call Epi Program if you cannot find a cluster or think one needs to be made.
  • You (most likely) don’t have to interview the patient for contact tracing, HOWEVER:
    • Even confirmed events for residents at clusters – need you to do admin question package 5 steps to move them through workflows & sign off.
    • You should try to fill out as much of their clinical symptoms/risk/race/ethnicity as possible. Usually the nurse manager or the medical director at the facility can answer these questions.

• Healthcare Workers DO need to be interviewed.
  • Remember they have household contacts, other activities. They will need direction on quarantine, etc.
  • Link HCWs to the Facility Cluster where they work.
    • If they are not in your town, you may need to call Epi program with their name and we can help share & link. - this would be a great scenario where sharing events across towns is ideal.
Questions on Clusters (Outbreak Events)

• How do I find a cluster event in MAVEN?
  • Remember to change “Type” from Normal to Outbreak in the Search Screen.

• How do I create a cluster in MAVEN
  • Recommend that you call 617-983-6800 and an Epi will do it with you on the phone.
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.
Your Questions

• **What if we are getting a few cases out of a business? What is our responsibility?**
  • If you have interviewed a few cases and they have mentioned their place of employment (likely source?), it may be worth an outreach to the business.
    • Are there things they could do to better control exposure and spread?
    • Are there more potential staff that should be identified for quarantine?
  • Questions, call Epi Program. We can help you problem solve.
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)
  
Your Questions?

I MUSTACHE YOU

A QUESTION