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

Tools for LBOHs

May 29, 2020

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Topics Today

• MAVEN Status Map Update
• Pediatric Multisystem Inflammatory Syndrome (PMIS)
• Contacts
  • Entering Contacts – Required Variables
  • Quarantine Period for Household Contacts
• HCWs & Other Staff in Cluster Facilities: Best Practices for MAVEN Data Entry
• Your Questions & Updates
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.


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
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 automated (24/7/365) 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 isishelp@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)
Pediatric Multi-System Inflammatory Syndrome (PMIS)

- On May 14th, added as an Immediately Reportable Disease, pursuant to 105 CMR 300

Case Definition and Reporting

- Healthcare providers must immediately report cases of pediatric multi-system inflammatory syndrome, possibly associated with COVID-19, in patients who are under 21 years of age to DPH. For reporting purposes, the criteria which define a case are:
  - An individual aged < 21 years presenting with fever (>38.0°C for ≥24 hours), laboratory evidence of inflammation, and evidence of clinically severe hospitalized illness such as single or multi-organ dysfunction (shock, cardiac, renal, hematologic, gastrointestinal or neurological disorder); AND
  - No evidence of alternative plausible diagnoses; AND
  - SARS-CoV-2 PCR, serology, or antigen positive OR PCR negative with COVID-19 exposure in the past 4 weeks prior to onset of symptoms.

- Laboratory evidence of inflammation may include but is not limited to: neutrophilia, elevated CRP, lymphopenia, CRP, ESR, fibrinogen, procalcitonin, D-dimer, ferritin, LDH, IL-6, hypoalbuminemia. Additional recommended diagnostic testing includes a respiratory viral panel and blood culture. Isolated respiratory disease does not meet criteria.

- Please contact Katherine Hsu, MD, MPH at katherine.hsu@state.ma.us for further questions or to report a case.
Pediatric Multi-System Inflammatory Syndrome (PMIS)

• Suspect cases of PMIS as of 5/29/2020:

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<tr>
<th>Number of suspect PMIS cases</th>
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<td>Average age at onset, years (range)</td>
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Total confirmed cases of COVID-19 in Massachusetts as of 5/28/2020: 94,895
Total confirmed cases of COVID-19 in Massachusetts in <20 year olds as of 5/28/2020: 4,453
Pediatric Multi-System Inflammatory Syndrome (PMIS)

- Hospitals are reporting cases directly to MDPH
  - Cases are received and reviewed by MDPH clinical staff
  - MAVEN events are created by MDPH and linked to cluster event
  - Hospital records are attached to MAVEN event as soon as received by MDPH

- Local Board of Health Responsibilities
  - Only Contact Tracing is needed
  - Please write a note/acknowledge the case in Admin Question Package so we know you have seen the case
Resources

For Clinicians:


• CDC COCA: https://emergency.cdc.gov/coca/
  • COCA Call: May 19, 2020 – Multisystem Inflammatory Syndrome in Children (MIS-C) Associated with Coronavirus Disease 2019 (COVID-19)

For Parents:

AAP HealthyChildren.org's website

• https://www.healthychildren.org/English/health-issues/conditions/chest-lungs/Pages/2019-Novel-Coronavirus.aspx
• https://www.healthychildren.org/English/health-issues/conditions/chest-lungs/Pages/covid_inflammatory_condition.aspx
Summary Time – Clusters (Tues 5/26)

• Identify if 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 for cluster) 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.
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.

**MAVEN Online Help**

- Expand all
- Collapse all

- COVID-19 LBOH
  - Case Follow-Up Tools
  - Community Tracing Collaborative (CTC)
  - Trainings & Webinars
  - Memos and Orders
  - Guidance Documents & Resources
  - MAVEN Tipsheets & General Instructions
    - LBOH COVID-19 Report Tip Sheet_ver2.0_May9
    - LBOH COVID-19 LBOH COVID-19 Assistance to No_var1.0_May9
    - LBOH COVID-19 Cluster Outbreak Line List Report Tip Sheet_ver1.0_May3
    - LBOH Line List for Emergency Responders_ver3.0_May22

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.
MAVEN Confirmed Cases that DO NOT Go to 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
    - **MAVEN Linked to a Cluster Event**
  - 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.
What’s in a Cluster Event?

**General Facility follow-up Notes**

1. Link residents and staff here.
3. If MDPH Epi is assigned.
4. 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).
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.

**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
Best Practices for Noting Residents and Staff in your Clusters

Many are asking for how to help distinguish the staff from the residents in a long list of linked events in MAVEN.

**Utilize the Link Type**

- **Link Type**: Can be helpful to link these residents and staff to your cluster with different link types to help you distinguish them in the listings of linked events.
  - **PRIMARY Link Type**: Residents
  - **SECONDARY Link Type**: Staff

This is a suggestion. No need to go back on old cases at this time.
Best Practices for Noting Residents and Staff in your Clusters

- Make sure to note the profession in the drop down for Occupation.
  - Use OTHER if you don't see a match.
  - Could use ‘Retired' for residents if applicable.
Best Practices for Noting Residents and Staff in your LTCF Clusters

QP5: Make sure to note the facility, location, and type for all residents & staff.

• Is Case a Healthcare Worker?
  • YES: for all staff (even housekeeping, kitchen staff, admin, etc.)

• Direct Patient Care Responsibilities?
  • This can be “No” for facility staff not performing clinical roles.

• Worker Type:
  • You can select “other” for facility staff that do not perform one of the clinical roles listed

Because all facility staff are counted and reported on, note them here as HCWs and make distinctions below for worker type.
Determining Quarantine Period – for Contact

- You must identify an exposure date to determine a quarantine period.
  - Exposure Date = Day Zero.
  - Quarantine Period is Day 1 through the end of Day 14, returning to activities on Day 15.
- Example:
  - Exposed on March 29th. (DAY 0)
  - Quarantine Period (Day 1 - Day 14): March 30 – April 12.
  - Quarantine is Over (Day 15): April 13th.

- Notes:
  - Have a calendar handy. Count the days out loud.
  - Use full days, not times of day.
  - Contact will already be in Quarantine Period when you contact them. Make sure they start quarantine immediately.

Remember, quarantine periods are determined by when the contact was exposed, not by the symptom onset of the case.

Exposure

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Quarantine Starts

Last Day Quarantine
Determining Quarantine Period – for Household Contact

• For determining ANY quarantine period, you must determine the contact’s last exposure to the infectious person. That is Day Zero.

• For Household Members who cannot completely separate, (children, spouse, roommates, etc.), they are “in quarantine” while continuously exposed to the case.
  • However, their FINAL 14 Day Countdown of Quarantine does not begin until they are no longer being continuously exposed.
  • In other words, their 14 day Quarantine begins after their LAST/Final exposure to someone infectious. If the CONTACT cannot separate from the CASE, then the Case must stop being infectious (be released from isolation). That will determine the contact’s has a final exposure date.
  • Index case’s last day in Isolation = Day 0 for counting out the quarantine.

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Contact follow-up:

• Contacts are created in MAVEN by LBOHs and DPH. Contacts are created when:
  • A close contact of a confirmed/probable case is identified during a case or cluster investigation
  • Another state notifies DPH about a MA resident identified as a close contact to a confirmed/probable case in their jurisdiction
  • CDC notifies DPH about a MA resident potentially exposed to a confirmed/probable case on a flight

1. Run your COVID-19 LBOH Contact line list Report
2. Acknowledge event, reach out to contact to notify them of their exposure, establish quarantine period, and monitoring plan
3. Complete appropriate variables in MAVEN
4. When follow up is done, complete appropriate variables in Administrative Question Package & Contact Monitoring Status
Contact follow-up:

- Variables to complete:
  - In Participants Tab: First Name, Last Name, Street, City, State, Phone Number, Gender
  - Demographics: Race/(Non-)Hispanic

- Click to edit demographic information

- In Demographic Question Package: Go to ‘Select Official Address’ and select correct address
- In Contact Monitoring Question Package: Last potential exposure date

Make sure you have enough information for you or the receiving town to follow up.
Out of state contacts you create:

- **DPH is notifying other states about all contacts with out of state addresses**
  - Contact monitoring for out of state residents should be done by their home state
    - If you know they are out of state when you create the CONTACT event, just enter the correct state information as best you can, and MDPH will transfer to the other state for contact notification.
    - If you call the CONTACT and THEN find out they are living out of state, you can give them the relevant information, but let them know their state health department will follow up with them further and will ultimately be in charge of monitoring them for their quarantine period.
    - Then update the address information (OFFICIAL ADDRESS) to the correct out of state address. We will see the updated address and notify the other state.
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.
Close Contacts & Testing Questions

What if a close contact tests negative but develops symptoms at a later date? Should they test again?

- **A.** Yes, the contact should seek additional testing if and when they later develop symptoms, even if they initially obtained testing and were negative shortly after being identified as a contact but before symptoms developed.

- Contacts only need to be tested once if they never develop symptoms through the rest of their quarantine. But if they end up developing symptoms, the recommendation is to be tested again.
Close Contacts & Testing Questions

We have had a few children identified as contacts that couldn’t get tested because of their age. What should we do?

• **A.** The guidance to test contacts does not have an age component, so it is still recommended even for children. That being said, we are also hearing it is difficult for children to obtain testing.

  • Ultimately, if they have no symptoms develop and they complete their quarantine period, they could return to normal activities, even if we didn’t get them tested in the interim.
  • So do what you can do. The most important part is maintaining the appropriate quarantine and having a low threshold for identifying symptoms should they develop.
When Contacts Become Cases:

How do you sign off on a case who was a contact two week earlier (follow-up complete) before becoming positive.

- Their new lab likely attached to their previous CONTACT event. Make sure their case classification status has been updated (call Epi Program 617-983-6800 if it hasn’t).
- You can update the Admin Steps 1-5 with new dates & update the notes with your new follow-up.

- NOTE: MDPH may determine a different protocol for COVID MAVEN Events at a future date, but at this time, most lab results are appending to an existing event and you may need to update notes and data fields accordingly.
Cases & Contacts

• If a case names a contact, but that contact is already linked to my case, do I need to do anything?
  • Just update the notes as applicable. You do not have to create multiple links or events for the same people.
    • Example:
      • Husband is a case. Names Wife as a contact. You create a linked Contact event for wife & child.
      • Wife eventually tests positive and her lab is added to her Event. (Her Contact Event should be changed to a CONFIRMED event status. Call Epi Program if this didn’t happen automatically.)
      • When you interview the wife and she names her husband, you don’t have to create any additional events for the husband or link them again. They are already linked.
        • For her child, you don’t have to create a SECOND contact event, just link her to the child contact event already in there. Remember to update the child’s quarantine period, as the child has been re-exposed to another confirmed case at a later date.

• At this time, you can update exposure dates, admin Steps, etc. and reuse a contact event.
Your Questions:

• Is there guidance for patients who met isolation requirements to wait another 14 days before having a doctor/urgent care visit?
  • A. No. If a case has exited isolation/met requirements to cease transmission based precautions, they do not need to delay seeking other medical procedures.

• Is it true that asymptomatic positive cases do not spread the virus? A few nurses have heard this theory.
  • A. While we know patients are MOST infectious while symptomatic, transmission while asymptomatic is still possible. A number of studies are coming out showing that transmission from people who are pre-symptomatic and asymptomatic is happening and possible.
Your Questions

• Case was dx at end of March, off quarantine 4/18 and is still showing positive even after 40 days.
  • A. Yes, this is possible. People can continue to test positive via PCR for a while. CDC states that testing PCR positive is not the same as viral culture (live virus).
Can an employer require someone to test negative before returning to work now that businesses are starting back up again?

• A. The best we have is this statement: **Employers should not require a COVID-19 test result or a healthcare provider’s note for employees who are sick to validate their illness, qualify for sick leave, or to return to work.**

Requested Updates

- **Updates on Serology Testing?**
  - Updated guidance is in the works. The State Epidemiologist, our medical director, and the command center are reviewing and we do anticipate updates, just not today.

- **What plans/guidelines are in place for schools opening this fall?**
  - Here is CDC’s website as we wait for Massachusetts Guidance.
I LOVE QUESTIONS

QUESTIONS ARE MY FAVORITE