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

Tools for LBOHs

June 29, 2021

Hillary Johnson, MHS, Infectious Disease Epidemiologist
Scott Troppy, MPH, PMP, CIC, Surveillance Epidemiologist
Alexandra DeJesus, MPH, CIC, Infectious Disease Epidemiologist
Bureau of Infectious Disease and Laboratory Sciences
MA Department of Public Health
Topics Today

- Reminder to check your MAVEN workflow
- Reminders
  - MassNotify is Live
- Serology Testing
  - Don’t sign off on Suspect Cases in Admin Question Package (Step 1)
- Breakthrough Cases
  - Data in MA
- Identifying Variants in your Cases
- Repeat Positive Evaluation
MDPH Conducts Weekly COVID-19 Case Investigation Webinars

- MDPH presents weekly on Tuesdays 11:00-12:15
  - Updates in Guidance
  - Troubleshooting MAVEN
  - How to conduct case investigations and contact tracing in different settings.
  - Target Audience: Health Agents and public health nurses doing this work.

- No Sessions in July. We’ll Be Back in August.

Webinars: Tuesdays @ 11am

MAVEN Help has Guidance Documents and Previous Webinars:

MDPH Epi Program: 617-983-6800
MDPH MAVEN Help Desk: isishelp@mass.gov
MDPH ISIS Help Desk: 617-983-6801
MDPH ISIS Fax: 617-983-6813

CTC Help Desk: 857-305-2828
CTC Local Health Help ctclocalhealthhelp@covid19.pih.org
CTC Supervisor Contact List
Higher Ed Contact List
Updates for today, Tuesday, 6/29/2021

- **LBOH Immediate Workflow** – COVID-19 event only – please check your workflow **TODAY** and clear out the workflow

- **Tuesday Webinars and Friday DPH Office Hours** – cancelled for the summer
  - You need a break and We need a break – enjoy the summer and stay cool!
Immediate Notification workflow (COVID-19 Only)

- **UPDATE:** COVID-19 Immediate Notification Workflow - 128 events in this workflow this morning
  - This will allow proper notification of all new COVID-19 events for your jurisdiction. (Confirmed and Probable Cases)
  - 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 **Step 2** (Investigation Started) & **Step 3** (LBOH Investigator (name, lboh, phone number))
  - When you are done then complete **Step 4** (Case Report Form Complete)
  - You can complete **Step 5** if you want – if not then leave blank
Get the Training Basics Here:

**Introduction to COVID-19 Follow-up**
Part 1 – May 11, 2021
- Part 1 Intro Training Slides
- Part 1 Intro Training Recording

**Introduction to COVID-19 Follow-up**
Part 2 – May 18, 2021
- Part 2 Intro Training Slides
- Part 2 Intro Training Recording

**COVID-19 Cluster Events Training** –
May 25, 2021
- Cluster Training Slides
- Cluster Training Recording

- There are tools available for you to help collect information on close contacts and to calculate out their quarantine period (and potential quarantine options as applicable).

  - All tools, including the Interview Tool, are available on MAVEN Help.
    - You do NOT have to be in MAVEN or be a MAVEN user to access these tools. They are available online.

  - Close Contact Form (1 Contact Extended Calculation Tool)
  - Close Contact Form (2 Contacts)
Summary of Key Guidance & Tools

- **MA Testing Guidance: Updated June 14, 2021**
  - [https://www.mass.gov/info-details/covid-19-testing-guidance](https://www.mass.gov/info-details/covid-19-testing-guidance)

- **MA Travel Information**
  - Return to normal travel recommendations for vaccinated people.

- **Isolation & Quarantine Guidance Documents**
    - Guidance now states recently recovered (in first 90 days) and fully vaccinated people do not need to quarantine.

- **Date: March 8, 2021 – Occupational Exposure & Return to Work Guidance**
  - Now includes language about recently recovered and fully vaccinated people.

- **Pediatric Clinical Testing Advisory**
  - 11/25/2020 Advises Pediatricians to Test for COVID-19 in all patients with symptoms compatible with COVID, regardless of age

- **Date: 10/21/2020 COVID-19 Testing Scenarios FAQ**
  - Describes different lab test results and what to do
  - Outlines discordant results and what they mean

- **05/06/2021 Updated COVID-19 Case Classification Manual**
Summary of Key Guidance & Tools

Date: 8/22/2020 - MDPH COVID-19 PCR and Antibody Testing Public Health Response Recommendations
- Table describes different Public Health Actions based upon different testing results.
- Big take home: PCR & Antigen positive patients should be treated like cases.
- Serology + cases do not require public health follow-up.

Date 8/10/2020 - MDPH Follow-up Table for Positive Antigen Test Results
- Reminder that while Antigen Tests = Probable, we still treat like a case and isolate accordingly & do contact tracing.
- A PCR obtained at the same time (w/i 2 calendar days) will trump the antigen test result.

Date: 02/13/2021 - 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.
CDC Updated Pages

• CDC Vaccines Guidance Page:
  • “Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Authorized in the United States”
    • Great resource for all your vaccine questions. Now includes info on all three vaccines!

• Immunization Action Coalition (IAC)’s Ask the Experts page
  • https://www.immunize.org/askexperts/experts_cov.asp
    • Great resource for all your vaccine questions in a Q&A format.

• CDC guidance on VACCINATED PEOPLE:
  • Interim Public Health Recommendations for Fully Vaccinated People
    • Talks about what precautions are still needed for fully vaccinated people, etc.
Updated Public Health Guidance and Directives

- **General COVID Testing Guidance:**
  - [View all COVID-19 Testing Guidance](#)

- **Congregate Care:**

- **Laboratories:**
  - [DPH Guidance, June 14, 2021: Temporary Laboratory License for CLIA-waived COVID-19 Testing and Clinical Laboratory Alternate Sites](#)

- **Adult Day Programs:**
  - [EOHHS COVID-19 Guidance for day programs](#), June 14, 2021
    - This guidance replaces [day program guidance dated March 22, 2021](#).
  - [EOHHS COVID-19 Guidance for Human Service Transportation](#), June 14, 2021
  - [EOHHS COVID-19 Human Service Transportation Checklist](#)

- **Substance Addiction Service Providers:**
  - [Waivers from Certain Regulatory Requirements](#), updated June 14, 2021

Updated Public Health Guidance and Directives

- **Healthcare Providers:**
  - DPH COVID-19 Guidance for all health care organizations and providers, June 14, 2021
  - DPH Guidance to implement the DPH Order authorizing additional individuals to vaccinate, June 14, 2021

- **Hospitals:**
  - DPH Hospital Visitation Guidance, June 14, 2021
  - DPH Guidance, June 14, 2021: Updated Guidance Regarding Implementation of Alternative Acute Care Space
  - DPH Guidance, June 14, 2021: Hospital Space for COVID-19 Testing, Treatment and Vaccine Administration

- **Clincis:**
  - DPH Guidance, June 14, 2021: Clinic Space for COVID-19 Testing, Treatment and Vaccine Administration

- **LTCF:**
  - DPH Guidance on Visitation Conditions, Communal Dining, and Congregate Activities in Long-Term Care Facilities during the COVID-19 Outbreak June 14, 2021

- **ALR:**
  - EoEA Guidance to implement the DPH Order regarding authorization for skilled nursing care and staffing updates in assisted living facilities, June 15, 2021.
  - Executive Office of Elder Affairs (EOEA) guidance, June 14, 2021: Updated Guidance for Assisted Living Residences during COVID-19
Updates – A quick recap for June 29, 2021

Last Tuesday, June 22nd:

- Reminders
  - Close Contact now applies to Indoor Exposures.
  - Breakthrough Cases
- MassNotify
- Serology Testing
- Your Questions

Always Remember you can see all previous webinar recordings and slides in MAVEN Help.

• Answers to frequently asked questions about MassNotify, a new service developed with Google and Apple’s automated exposure notification technology to help slow the spread of COVID-19.

• MassNotify works through smartphones, with a focus on privacy, to alert users who may have been exposed to COVID-19.

• Enable MassNotify on your smartphone: https://www.mass.gov/info-details/enable-massnotify-on-your-smartphone#how-to-enable-massnotify-on-your-phone-
MassNotify on Phones

MassNotify is completely voluntary—users need to opt-in to benefit from exposure notifications technology by enabling MassNotify on their phones.

**iPhone Users**
Available in iOS settings

**Android Users**
App in the Google Play store
MAVEN Exposure Notification – Question Package #9/Wizard

Maven Surveillance and Case Management System

9. Exposure Notification (ENX) Information - Novel Coronavirus (SARS, MERS, etc)

Do you have MassNotify enabled on your phone?

Have you shared your results with MassNotify?

Question is for Confirmed/Probable Cases only

Did you receive an exposure notification from MassNotify in the past 14 days?

Did you receive a call from a contact tracer/LBOH informing you that you were a contact in the past 14 days?

By which method were you FIRST identified as a contact?

Save  Save & Stay  Cancel  Help
COVID-19 Serology Tests

Per FDA: Interpreting Serology Testing

At this time, do not interpret the results of qualitative, semi-quantitative, or quantitative SARS-CoV-2 antibody tests as an indication of a specific level of immunity or protection from SARS-CoV-2 infection after the person has received a COVID-19 vaccination.

• While a positive antibody test can indicate an immune response has occurred (seroconversion), and failure to detect such a response may suggest a lack of immune response, more research is needed.
• Currently authorized SARS-CoV-2 antibody tests are not validated to evaluate specific immunity or protection from SARS-CoV-2 infection.

• Antibody Testing Is Not Currently Recommended to Assess Immunity After COVID-19 Vaccination: FDA Safety Communication – FDA May 19, 2021
COVID-19 Serology Tests

Q: What does a positive antibody test mean?

• **A:** If you have a positive test result on a SARS-CoV-2 antibody test, it is possible that you have recently or previously had COVID-19. There is also a chance that the positive result is wrong, known as a false positive. False positive tests may occur:
  
  • Because antibody tests may detect coronaviruses other than SARS-CoV-2, such as those that cause the common cold.
  
  • When testing is done in a population without many cases of COVID-19 infections. These types of tests work best in populations with higher rates of infection.

Source: [FDA & Serology Testing](https://www.fda.gov)
## Molecular (PCR), Antigen, and Antibody (Serology) Testing

<table>
<thead>
<tr>
<th>Molecular Test (PCR)</th>
<th>Antigen Test - Newer (always rapid)</th>
<th>Antibody (Serology Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed in Lab Tab as follows:</td>
<td>Listed in Lab Tab as follows:</td>
<td>Listed in Lab Tab as follows:</td>
</tr>
<tr>
<td>• 2019-nCoV Real-time RT-PCR (PCR)</td>
<td>• SARS-CoV-2 Ag (Antigen Test)</td>
<td>• SARS-CoV-2 IgM (Serology IgM specific)</td>
</tr>
<tr>
<td>• SARS coronavirus 2 RdRp gene (PCR RAPID)</td>
<td></td>
<td>• SARS-CoV-2 IgG (Serology IgG specific)</td>
</tr>
<tr>
<td><strong>Panel Tests that Include COVID-19:</strong></td>
<td></td>
<td>• SARS-CoV-2 IgA (Serology IgA specific)</td>
</tr>
<tr>
<td>• 2019-nCOV RNA PNL XXX NAA+PROBE</td>
<td></td>
<td>• SARS-CoV-2 IgG + IgM (Serology Antibody Type Unspecified)</td>
</tr>
<tr>
<td>• Flu A/Flu B/SARS COVID-2/SARS-related coronavirus RNA panel</td>
<td></td>
<td>• SARS-CoV-2 TCRB Bld Ql Seq (T-cell receptor beta (TCRB) gene)</td>
</tr>
<tr>
<td>• Resp virus Pnl XXX PCR</td>
<td></td>
<td>• SARS coronavirus 2 spike protein RBD Ab.neut : PrThr : Pt : Ser/Plas:Ord:IA (Serology for antibodies against spike protein)</td>
</tr>
</tbody>
</table>

Positive Molecular Test: Case Classification = CONFIRMED

Positive Antigen Test: Case Classification = PROBABLE

Positive Antibody Test: Case Classification = SUSPECT

Serology + Suspect Cases

Background: Positive serologies will create SUSPECT events in MAVEN.

- There is NOT an expectation that LBOH follow up on Serology Positive cases at this time.
  
  - However, if you choose to follow up, guidance for LBOH is here: LBOH Lab Result Follow-up Guidance
    
    - Summary, ask patient if they had symptoms in last 14 days.
      
      - If Yes, recommend PCR test and follow-up accordingly.
      
      - If No recent symptoms, no further follow-up recommended at this time.
  
- Clarification on Suspect (serology positive) cases in MAVEN: LBOH should NOT sign off in the Admin Question Packages at this time.

  - IF you acknowledge Step 1, it doesn’t move a suspect out of any workflows currently so will only hinder notifications later if the case becomes Probable or Confirmed (you wouldn't see it in your Confirmed/Probable Workflows or possibly your reports if it has already been acknowledged previously).

  - So there is no need to sign off on a SUSPECT case, and we would not recommend that you do it at all.
When Are You Fully Vaccinated?

Individuals are considered fully vaccinated for COVID-19 ≥2 weeks after they have received the second dose in a 2-dose series (Pfizer-BioNTech or Moderna), or ≥2 weeks after they have received a single-dose vaccine (Johnson and Johnson (J&J)/Janssen):

- This guidance is limited to FDA & WHO-approved vaccines (so also includes other WHO-approved vaccines like AstraZeneca & Covishield at this time).
- Does not apply to non-WHO approved international vaccines at this time.

Breakthrough Disease is any positive test obtained Day 14 or later following the final dose in a vaccine series. Person was not previously positive in last 45 days.

Any exposure here (<13 days) still requires full quarantine.

Fully Vaccinated Day 14

Quarantine Exemption
LBOH & Breakthrough Cases – what to do?

• Ensure you ask about and/or confirm vaccination status for all your interviews.
  • Enter Vaccine information into the Vaccine Question Package
    • You can confirm dates/formulations in MIIS.
    • If vaccine data has already been populated, be sure to confirm that info with the case to make sure it is correct.
    • If the patient has NOT been vaccinated, be sure to note that as well.

• Complete data in MAVEN is the #1 action to help track breakthrough disease.
  • Vaccine info, symptoms, demographics

• We want to sequence these specimens, and are working to identify lists in bulk and request specimens in bulk directly from MDPH to the corresponding labs.

• You do not need to call MDPH with every breakthrough case. Make sure the data is correctly entered and we will identify it on our end.
Breakthrough – what to expect

- **Vaccine breakthrough cases are expected.** COVID-19 vaccines are effective and are a critical tool to bring the pandemic under control. However, no vaccines are 100% effective at preventing illness in vaccinated people. There will be a small percentage of fully vaccinated people who still get sick, are hospitalized, or die from COVID-19.

- **More than 150 million** people in the United States have been fully vaccinated as of June 21, 2021. Like with other vaccines, vaccine breakthrough cases will occur, even though the vaccines are working as expected. Asymptomatic infections among vaccinated people will also occur.

- There is some evidence that vaccination may make illness less severe for those who are vaccinated and still get sick.

- Current data suggest that COVID-19 vaccines authorized for use in the United States offer protection against most SARS-CoV-2 variants currently circulating in the United States. However, variants will cause some vaccine breakthrough cases.

[https://www.cdc.gov/vaccines/covid-19/health-departments/breakthrough-cases.html](https://www.cdc.gov/vaccines/covid-19/health-departments/breakthrough-cases.html)
Breakthrough Disease in MA

Data as of June 26, 2021:

• There have been 4,034 cases of COVID among 4,036,826 vaccinated individuals;
  • 0.1% of vaccinated individuals have been diagnosed with COVID-19.

• Of these cases, 284 of them have been hospitalized
  • (7.0% of vaccine breakthrough cases and 0.007% of vaccinated individuals) and
  • 75 have died
    • (1.9% of vaccine breakthrough cases and 0.002% of vaccinated individuals).

• This is consistent with published national data which indicates a 10% hospitalization rate among vaccinated individuals with COVID-19 and a 2% death rate.
  
  https://www.cdc.gov/mmwr/volumes/70/wr/mm7021e3.htm
Breakthrough & Variants

• Due to changes in the way variants of concern are reported to jurisdictions, we cannot provide specific numbers of Massachusetts vaccine breakthrough cases which are associated with different variants of concern (VOCs).

• However, although there are laboratory data showing some reduction in virus neutralization by convalescent/post-vaccine sera for several of the VOCs, real world data continue to show that the vaccines approved for emergency use in the US are highly effective against all of the known variants of concern.

• **Summary: Get Vaccinated! That is the best way to prevent the spread of new variants.**

• For the latest on what we know about different variants and their attributes (which includes any evidence regarding vaccine efficacy), please see this CDC webpage:
  
  • [SARS-CoV-2 Variant Classifications and Definitions](#)
  
  • Remember, there are:
    
    • Variant of Interest
    • Variant of Concern
    • Variant of High Consequence  (None yet in the US)
Report Tip Sheet has been Updated in MAVEN Help

- COVID-19 Materials/Training
- Case Follow-Up Tools
- Community Tracing Collaborative (CTC)
- Clusters/Outbreaks
- Daycare/Childcare/K-12 School Resources/Sports
- Guidance Documents & Resources
- Higher Education/Boarding Schools
- MAVEN Tipsheets & General Instructions
  - Bulk Action Process Instructions for Workflows_COVID Assistance to YES_Dec22
  - MAVEN Higher Ed Boarding School Cluster Tip Sheet_ver1.0_Sep04
  - Creating Cluster Events in MAVEN Tip Sheet_ver1.0_Sep14
  - How to Link two existing cases in MAVEN?
  - Contact Event Data Cleaning_ver1.0_June5
  - LBOH Line List for Emergency Responders_ver3.0_May22
  - LBOH COVID-19 Report Tip Sheet_ver4.0_Apr2021
  - LBOH COVID-19 LBOH COVID-19 Assistance to No_ver1.0_May2
  - LBOH COVID-19 Cluster Outbreak Line List Report Tip Sheet_ver1.0_May5
COVID Variant of Concern Extract/Report

• **COVID Variants of Concern Extract** - report will display events with sequencing results indicative of a variant of concern or high consequence.

• Report is based on specimen date of the sequenced specimen.

• Please limit your date parameters to 30 days.
COVID Variant of Concern Extract/Report

• **COVID Variants of Concern Extract** - report will display events with sequencing results indicative of a variant of concern or high consequence.

• Report is based on specimen date of the sequenced specimen.

• Please limit your date parameters to 30 days.
COVID-19 Variant of Concern

- Added variable to capture if specimens were sequenced and a new variant was identified (Variant of Concern) in SARS events [MAEDSS-13037]
  - Added question to the Clinical Question Package and COVID Wizard
    - Not editable by local users
  - If question is answered as Yes users will need to review lab data to see which variant has been sequenced
  - Information will be updated on an ongoing basis in the question package
  - Added to the LBOH Confirmed and Probable Report
<table>
<thead>
<tr>
<th>Completed by</th>
<th>Step 5 - LBOH final review</th>
<th>Were any specimens sequenced for this individual indicative of a variant of concern?</th>
<th>Was case hospitalized?</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA COVID-19 Community Tracing Collaborative</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MA COVID-19 Community Tracing Collaborative</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MA COVID-19 Community Tracing Collaborative</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Local Board of Health (LBOH) - Ready for MDPH review</td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Repeat Positive Evaluation Project

• MDPH is conducting an evaluation of repeat positives with lab results > 90 days since the original positive.
  • This is a random sampling and we will contact these cases to discuss differences between their initial diagnosis and current lab results.

• LBOHs will receive an email with the MAVEN IDs of cases in their jurisdiction as well as see a MAVEN Note in the cases
  • MAVEN Note: This case has been selected as part of an evaluation being conducted by MDPH to obtain additional information on selected COVID-19 cases with repeat positive tests 90 or more days apart. Additional information will be collected by MDPH staff and entered into the “Repeat Positive Evaluation” question package. Any details collected about the initial positive test that is not already documented in the Demographic, Clinical, and Risk QPs will be added; previously documented information will not be overwritten. Please reach out with any questions.

• This will mostly be retrospective, but if we identify someone with current contacts that should be in quarantine, we will let you know.
Time for Some Data Cleaning

MAVEN Online Help

- Expand all
- Collapse all
- COVID-19 Materials/Training
- Case Follow-Up Tools
- Community Tracing Collaborative (CTC)
- Clusters/Outbreaks
- Daycare/Childcare/K-12 School Resources/Sports
- Guidance Documents & Resources
- Higher Education/Boarding Schools
- MAVEN TipSheets & General Instructions
  - Ball Action Process Instructions for Workflows_COVID Assistance to YES_Dec22
  - MAVEN Higher Ed Boarding School Cluster Tip Sheet_ver1.0_Sep04
  - Creating Cluster Events in MAVEN Tip Sheet_ver1.0_Sept4
  - How to link two existing cases in MAVEN?
  - Contact Event Data Cleaning_ver1.0_June5
  - LBOH Line List for Emergency Responders_ver3.0_May22
  - LBOH COVID-19 Report Tip Sheet_ver4.0_April2021
  - LBOH COVID-19 LBOH COVID-19 Assistance to No_ver1.0_May9
  - LBOH COVID-19 Cluster Outbreak Line List Report Tip Sheet_ver1.0_May5

COVID-19 Cleaning Up Old Contact Events

June 5, 2020 Ver 1.0

Goal: Cleaning up workflows, wrapping up contact events, and making sure we didn’t miss any contacts that became cases. (Oh, and entering any data into the question packages, too.)

2. Contact Monitoring Status – Make Complete if past 2 week quarantine period.
3. Make sure no possible labs have been added but missed.
   a. Most new positives will be caught and triggered a change in Case Classification Status from CONTACT to PROLAB or CARDINAL (NOW).
   b. If you see a positive lab for a CONTACT, call Epi Program or email isk@help@status Demo for an update to the Case Classification Status.

STEP 1: To See your Contact Events, Run the COVID-19 LBOH Contact Line List Report.

TIPS:
- Run from 01/01/2020 to Tomorrow’s Data (to capture today)
- Remember to put City in all CAPS
- Do not select an option for Step 4. Leave it blank (as you get all Contact Events in your line list).
  - If you select Yes or No, you won’t get any cases where Step 4 hasn’t been completed yet (which is really what you are getting for in this data cleaning).
- Output Type is the format you want the report. Select HTML for quick look at the data, then you can run it again and do an excel (or CSV) file that will be a document you can sort, etc.
- If that time range is too long, just start with Jan 1 – Feb 1, then do Feb 1 – Mar 1, etc. until you have tackled these contacts one month at a time.
QUESTION

DOES ANYONE HAVE QUESTIONS?