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

Tools for LBOHs

April 28, 2020

Hillary Johnson, Infectious Disease Epidemiologist
Scott Troppy, Surveillance Epidemiologist
Bureau of Infectious Disease and Laboratory Sciences
MA Department of Public Health
Updates for today, Tuesday 4/28

- COVID-19 Case Investigation Wizard now operational
- Immediate Disease Workflow for COVID-19 only cases
- CTC Variables in Admin QP for LBOH and Wizard
- Clear cache and cookies when you start the day
- Request for Contact spreadsheets with >5 contacts for your contact investigations
- Please don’t request a merge/de-duplication for your event in the Notes section. You need to email isishelp@state.ma.us with your request. Please let us know the Event ID and which one you want as the preferred Event ID.
What’s Ahead? | Roll-Out Timeline

**Rollout**
- LBOH request help from CTC during scale up
  - April 15-22
    - 200 trained CTC Staff
    - LBOH selects cases for CTC by 11:59 pm
    - DPH extracts “yes” cases by 10 am
    - Introductory info. on CTC to all LBOH
    - Webinar
  - April 23
    - 1-pager sent to all LBOH on procedures for CTC
    - CTC expands from 1:1 outreach to widespread communication of procedures

**Scale-Up**
- CTC expands to areas in high need
  - April 23-30
    - 600 trained CTC Staff
    - Established relationships and preferred communication between CTC and LBOH

**Surge**
- CTC expands to all of MA
  - May 1 onward
    - 900 trained CTC Staff
    - Goal: All cases investigated; all contacts traced
    - Active care resource coordination at local level
  - April 30
    - All “yes” and blanks will be sent to CTC
    - All “no” stay with LBOH
    - High risk cases referred back to LBOH
    - LBOH can refer cases to CTC at any time
COVID Requested Assistance as “Yes” or “No”
New Variables for CTC Events

- Concern shows when you answer COVID Assistance Requested as Yes

Notifications

Event/Status/Date/Type Notifier
- Event Status: Confirmed
- Event Date: 04/27/2020
- Event Type: Report Date

Concerns
- The local jurisdiction has requested that this event be investigated by a contact tracer. Please update Steps: 1-5 in the Administrative Question Package to move events out of the MAVEN workflows.

Case Classification
- Age at time of event: 54.91
- Age unit: Years

Edit Event Properties  Copy Event
MAVEN COVID-19 Wizard
New Variables in the Wizard

- When event is sent to CTC you will see this populated as Yes and Date first sent to CTC.
Event has been sent to CTC

- Additional Concern appears on the event main page to let you know the Event has been sent to CTC.
- Please do not initiate follow-up at this time.

This case has been sent to the MA COVID-19 Community Tracing Collaborative. Please do not initiate follow-up at this time.

The local jurisdiction has requested that this event be investigated by a contact tracer. Please update Steps: 1-5 in the Administrative Question Package to move events out of the MAVEN workflows.

Case Classification
- Age at time of event: 54.91
- Age unit: Years
Investigation Status variables
Steps 2, 3 & 4 are updated with CTC information.
New Immediate Workflow for COVID-19

**MAEDSS-12612**: Create new Work Flow: LBOH Notification for Immediate Disease (COVID only)
First Responders Report Updated

• Based on Confirmed Case Status
• Review the tip sheet in MAVEN Help
• Will be removed from report when Contact Status Monitoring is updated to “Completed” in QP#6
COVID 19 Questions

- COVID19CommunityTracingCollaborativeQuestions@mass.gov
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LBOH acknowledged</td>
</tr>
<tr>
<td>2</td>
<td>Investigation started - can be Yes/No</td>
</tr>
<tr>
<td>3</td>
<td>LBOH completes information so we know who is requesting assistance</td>
</tr>
<tr>
<td>4</td>
<td>Case Report Form Completed</td>
</tr>
<tr>
<td>5</td>
<td>LBOH final review</td>
</tr>
</tbody>
</table>

**Helpful tools for case investigation follow-up**

- **Step 3 - LBOH/Agency Investigator:**
  - MDPH Staff Requesting Assistance Name
  - LBOH/Agency: Brookline
  - LBOH/Agency Investigator phone: (617) 555-1234

**Completed by:**

- Local Board of Health (LBOH) - Ready for MDPH Review

**Step 5 removes from Final Review WF**
Race and Ethnicity

Is Case Hispanic?
Select Official Address hyperlink to update the event Official City

<table>
<thead>
<tr>
<th>Address Information (Address information below conforms to address when first reported)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Street address:</strong> 123 Macheester United Way #2</td>
</tr>
<tr>
<td><strong>Official City:</strong> LAWRENCE</td>
</tr>
<tr>
<td><strong>City:</strong> Lawrence</td>
</tr>
<tr>
<td><strong>County:</strong> Essex County</td>
</tr>
<tr>
<td><strong>State:</strong> NA</td>
</tr>
<tr>
<td><strong>Country:</strong> USA</td>
</tr>
<tr>
<td><strong>Zip code:</strong> 01841</td>
</tr>
</tbody>
</table>

Old address is displayed

Select Official Address
<table>
<thead>
<tr>
<th></th>
<th>Event ID</th>
<th>Create Date</th>
<th>Event date</th>
<th>Disease classification status</th>
<th>Official City</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row Labels</td>
<td>Count of Gender</td>
<td>Count of Create Date</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-----------------</td>
<td>----------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>765</td>
<td>765</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>714</td>
<td>714</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(blank)</td>
<td></td>
<td>81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>1479</td>
<td>1510</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

drag Create Date down to see (Blank) or empty field counts
Blank means empty in your spreadsheet

<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Count of Gender</th>
<th>Count of Create Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>765</td>
<td>765</td>
</tr>
<tr>
<td>Male</td>
<td>714</td>
<td>714</td>
</tr>
<tr>
<td>blank)</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1479</td>
<td>1510</td>
</tr>
</tbody>
</table>
Copy and Paste into another worksheet to allow for editing
Copy and Paste and choose Values so the numbers come over and not the formula from your Pivot table
Now you can edit the column headers and format as needed

<table>
<thead>
<tr>
<th></th>
<th>Row Labels</th>
<th>Count of Gender</th>
<th>Count of Create Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Row Labels</td>
<td>Count of Gender</td>
<td>Count of Create Date</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>765</td>
<td>765</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>714</td>
<td>714</td>
</tr>
<tr>
<td>4</td>
<td>(blank)</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>5</td>
<td>Grand Total</td>
<td>1479</td>
<td>1510</td>
</tr>
</tbody>
</table>
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
Topics Today

• MAVEN Help
  • You don’t have to be a MAVEN User to access materials
• Antibody Testing: What Do They Mean?
  • PROBABLE events
• CTC Key Reminders
• Clusters (Outbreak Events)- FAQs
• Your Questions

Wildlife finally returning to Thames. Nature is healing 🌸
Tuesday & Friday Webinars for LBOHs

Now Tuesdays AND Fridays at 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.

- Focusing on Priority Activities

- Clusters in Facilities in your community need your help.
  - Call Epi Program 617-983-6800 to create cluster events.
MAVEN Online Help

- Expand all
- Collapse all

- COVID-19 LBOH
  - Case Follow-Up Tools
  - Trainings & Webinars
  - Memos and Orders
  - Guidance Documents & Resources

- MAVEN Tipsheets & General Instructions
  - LBOH Line List for Emergency Responders_ver2.0_April26 UPDATED
  - LBOH COVID-19 Report Tip Sheet_ver1.0_April5 NEW

- Line List for Confirmed Cases
- Line List for Contact Events
- Line List for Which cases have been sent to CTC.
Antibody Testing (serology)

• Thus far, all confirmed cases have had PCR testing (NP swabs).
• Lots of serology tests are being developed which will look for antibodies. Some are being reported to MDPH and MAVEN. Questions remain:
  • What do the different antibody test results mean?
    • Evidence of old infection?
    • Evidence of immunity?
    • Evidence of acute infection?
• MA will be reviewing the literature and looking at different studies to help determine what role serology testing should play in COVID-19 surveillance. There may be more data as time goes on. Guidance may change.
• Interview Cases. Why were they tested? Did they have symptoms? Get onset dates.
  • Treat like a case if it sounds like a recent case.

Look in the Lab Tab of a MAVEN event.
Call MDPH if you have questions.
# New Case Definition – “Probable”

<table>
<thead>
<tr>
<th>CONFIRMED</th>
<th>Meets confirmatory laboratory evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Probable</strong></td>
<td>Meets clinical criteria AND epidemiologic linkage with no confirmatory laboratory testing performed for COVID-19 OR; Meets presumptive laboratory evidence AND clinical criteria OR Epidemiologic linkage. OR; Meets vital records criteria with no confirmatory laboratory testing performed for COVID19.</td>
</tr>
</tbody>
</table>

**Clinical Criteria:**
- **At least two of the following symptoms:** fever (measured or subjective), chills, rigors, myalgia, headache, sore throat, new olfactory and taste disorder(s); OR
- **At least one of the following symptoms:** cough, shortness of breath, or difficulty breathing; OR
- **Severe respiratory illness with at least one of the following:** clinical or radiographic evidence of pneumonia or acute respiratory distress syndrome (ARDS) AND no alternative more likely diagnosis.

**Presumptive laboratory evidence:**
- Detection of specific antigen in a clinical specimen
- Detection of specific antibody in serum, plasma, or whole blood indicative of a new or recent infection*

*serologic methods for diagnosis are currently being defined (blood tests)
New Case Definition – What does this mean?

• CONFIRMED and PROBABLE COVID-19 MAVEN Events should be interviewed.
  • Data Collection & Contact Notification

• Prioritize CONFIRMED cases (PCR+)
  • Symptomatic & Asymptomatic Cases should be isolated & interviewed.

• Probable Cases – symptomatic cases should still be isolated and we look at symptoms to establish all the timeframes for Isolation (case) and Quarantine (contacts).
  • Asymptomatic Cases with serology tests – more to come.
  • Currently, use the Date of Test (treat like an asymptomatic positive)
Contact Tracing Assistance

1. Run your reports at least daily (recommend beginning & end of day) to make sure you can select Yes or No for “COVID Assistance Requested” in the Admin Question Package.
   • May 1 going forward, any cases left blank by end of day will be sent to the CTC for follow-up.
   • Cases transfer over End of Day cutoff. (You could switch to No if it is still same day.)

2. All events sent to the CTC will be completed by the CTC unless the following is determined:
   • Hospitalized
   • Resident in a Congregate setting (LTCF, ALF, DDS, etc.)
   • Died

3. Once event is sent to the CTC, complete Steps 1-5 in Admin Question Package to move out of your workflows.
Contact Tracing Assistance

- You should have a point person at LBOH for CTC communication. They will give you a contact as well.
  - This is how you will provide updates and pass things back and forth if needed.
- CTC does NOT have access to MAVEN. They will be working in an external database (Salesforce).
- Data will eventually come back into MAVEN when case is complete. (Goal for more real time data updates.) Details are still being worked out.
- Remember to send all comments, concerns, or questions to the supplied email address.
  - Submit Questions: COVID19CommunityTracingCollaborativeQuestions@mass.gov
Contact Tracing Assistance

• Can you just send Contacts to the CTC for notification?
  • A. Yes. Make sure to mark the index case as COVID Assistance Requested: NO. Then mark YES for the contacts you want followed up by the CTC.
    • Remember to have all required information needed to successfully notify a contact.
      • Name, contact information (phone# at minimum), Exposure date, etc.

• Is EVERYTHING going to the CTC after April 30th?
  • A. No. Anything marked as COVID Assistance Requested: NO before the daily cutoff will stay for you to follow-up locally.
    • Additionally, anything marked as: Hospitalized, Resident in a LTCF, Died
      • Stays at LBOH for follow-up.
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.
- 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.
- No Need to create contact events for all the individual residents.
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.
Your Questions You Sent In:

YOU HAVE A QUESTION

I HAVE AN ANSWER.
What Must be Complete in MAVEN to Remove an Event from the Workflows?

**Administrative Question Package**
- Steps 1-5 move your case through the workflows.
- **COVID Assistance Requested & Steps 1-3** are your first actions.
  - Determines if LBOH is keeping case.
  - Acknowledges case and names investigator.
- **Conduct Follow-up & complete question Packages with all the information.**
- Step 4 – Says investigator is done.
- Step 5 – Opportunity for local supervisor review & sign off.
Questions on Contacts

• Do contacts of Asymptomatic Confirmed COVID cases have to quarantine for 14 days? What is the quarantine period?
  • A. YES. Contacts to confirmed and probable cases must quarantine for 14 days from their last exposure to the case. (Exposure Day = Day Zero. Quarantine is Day 1 – Day 14, returning to activities on Day 15.)

• Can we just talk to the confirmed case about their household contacts?
  • A. The best scenario is to obtain the names, DOBs, and addresses of the household contacts so that you can create MAVEN contact events and track their status. Ideally you speak to the household contacts, give them correct information about quarantine period and expectations.
    • Other adults may have follow-up questions the case cannot answer.
    • If you are not able to speak with the household contacts, make sure the case as quarantine information and your contact info to pass on.
Troubleshooting with Cases

• **MISSING CONTACT INFORMATION:** The data in the event is only as good as what the lab reported electronically. You may need more information in order to contact the case.
  - Call ordering facility
    - Get Emergency Contact Info
  - Check MIIS
  - Check other Town Information Sources
  - Mail letter to address if no phone.

• **CANNOT CONTACT PATIENT:**
  - Try at least 3 calls.
  - Try texting.
  - Snail Mail to address a fact sheet w/ your contact information (Isolation & Quarantine Documents)
  - If you cannot contact the patient, they are Lost to Follow-up.
    - Complete as many variables in the event as you can.
    - **Step 4 - Case Report Form Completed:** NO
    - **Primary Reason:** Lost to Follow-up
HCWs Returning to Work

• There is specific guidance on HCWs returning to work, but remember there is a distinction between:
  • HCWs that are CONFIRMED COVID-19 CASES
  • HCWs that are Exposed Contacts (not cases)

• HCWs who have been EXPOSED to COVID-19 w/o proper PPE should be in quarantine for 14 days following exposure.
  • Could also apply to non-workplace exposures (like household).
  • Best case scenario, they stay out for the FULL QUARANTINE.
    • BUT, some facilities run into staffing issues, so MAY have an ASYMPTOMATIC exposed HCW return to work with LOTS of precautions before the quarantine period is complete.
Returning to Work for Healthcare Workers after COVID-19 Diagnosis

Use one of the below strategies to determine when HCP may return to work in healthcare settings

- **Test-based strategy.** Exclude from work until
  - Resolution of fever without the use of fever-reducing medications and
  - Improvement in respiratory symptoms (e.g., cough, shortness of breath), and
  - Negative results of an FDA Emergency Use Authorized molecular assay for COVID-19 from at least two consecutive nasopharyngeal swab specimens collected ≥24 hours apart (total of two negative specimens)[1]. See [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for 2019 Novel Coronavirus (2019-nCoV)].

- **Non-test-based strategy.** Exclude from work until
  - At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath); and,
  - At least 7 days have passed since symptoms first appeared

- If HCP were never tested for COVID-19 but have an alternate diagnosis (e.g., tested positive for influenza), criteria for return to work should be based on that diagnosis.
Returning to Work for Healthcare Workers after COVID-19 Diagnosis

What if a HCW has discontinued isolation based on the non-test strategy (symptoms have resolved), but then they have another positive test?

• Pick a strategy and then stick to it.
  • Non-Test based strategy is most practical. However, some providers or workplaces may request the test-based strategy.

• What if someone was released based upon the Non-Test strategy and then had a positive test?
  • They need to isolate for 7 days after the last positive test. If no additional symptoms, they can exit isolation.
HCWs Returning to Work – an update

- When can a Health Care Worker return to work after being diagnosed with COVID-19?

- **Symptomatic COVID-19 Positive HCW**: use test or non-test based strategy.

- **Asymptomatic HCWs**: UPDATE on return to work policy.
  - Asymptomatic COVID-19 HCWs are excluded from work for **10 DAYS after Specimen Collection**.
    - (Update from 7 days for asymptomatic COVID+ HCWs)
    - **Official wording of this guidance is in the works.**
If someone has recovered but then has another positive test, do they need to isolate again?

• Yes. Even if someone’s symptoms have resolved, if they have another positive test, they need to isolate again.
  • Typically isolate for 7 days from date of test.
Discontinuation of Isolation Guidance is so complicated for Cases!!!!!

- Agreed.
  - You want to look at who the case is (HCW, Hospitalized, general citizen (non-HCW), etc.)
  - You want to look at if they EVER had symptoms (Different process for those who did have symptoms vs. those who never had symptoms).
  - You have different guidance based upon which strategy you are applying (non-test (so symptoms) vs. Test-based (getting negative tests to clear the person)).
    - More complicated if people mix the strategies – you have multiple steps and outcomes.

**CDC is anticipating a simplified guidance for all these different groups, so stay tuned!!!!!!**
How do you Find Duplicate Cases in MAVEN?

- Events in MAVEN are created by people (LBOHs or State Epis) or automatically through electronic lab reporting for COVID-19.
- Preventing duplication is only as good as the user doing a search before creating a new event, or if the computer auto checks and finds an exact match to an already existing event.
  - Try searching a couple different ways (partial name, DOB, etc.) to ensure someone isn’t already in the system if you are going to create a new event.
    - Do an extra check if you think there is a likelihood a name may have been misspelled at some point (extra long names, multiple last names, hyphenated names, non-standard spelling, etc.)
    - Try DOB & partial name, etc.

- If you find multiple events for the same person (maybe a lab made a new event but didn’t append to your case, for example), email the MAVEN IDs to isishelp@state.ma.us and they can merge the multiple events.
  - If one event has the correct spelling or address, etc. make sure to indicate that.
So Many Emails...

Is email the best way to keep track of new cases?

• **A. No.** Emails are auto sent at the creation of an event, so if the town is added/updated AFTER the event is created, no additional email is sent.

• The best way to keep track of new cases is to run your reports to create line lists (at least daily if not beginning and end of each day)
  • COVID-19 LBOH Confirmed Case line list Report (gives a list of confirmed cases)
  • COVID-19 LBOH Contact line list Report (gives a list of CONTACT events)

• Reports are how you would catch if a contact was now a lab-confirmed event.
• Reports would also catch new contacts that have been created for your town.
• The **confirmed Line List** will show any hospitalized cases or events marked as Died.
  • But this data needs to be entered by SOMEONE in order to be there.
MAVEN Wizard – How does it work?

• All the variables live in the different question packages in MAVEN.
• The Wizard is just a “cheat sheet” pulling the key questions from the different question packages into one screen to make it easier.
  • You can data enter directly into the Wizard or the individual question packages (or Both!)
  • You can also use the Wizard to review what you have entered to see if you are missing any key variables in the question packages.
  • You don’t HAVE to use the wizard. It is just a tool.

• Can I change something I entered in the wizard?
  • Yes! You can update or change any missing or incorrect variables at any time (in the wizard or in the question packages directly).
When Should You Link Cases in MAVEN?

- If you interview a Confirmed/Probable Case and they name close contacts that were exposed while infectious, those close contacts should be linked to the person who named them.
  - Household contacts should be linked to their confirmed/probable household member.
  - Friends or colleagues should be linked to the confirmed/probable case that named them.
  - Generally, if a confirmed/probable case had close face to face contact with someone (such that the contact should be notified), then they should be linked in MAVEN.

- Facility Cluster Events: Link the associated cases in residents & workers to the facility.
Questions from Recovering Patients

• **What do we know about immunity?**
  • There is likely some short term immunity, but we do not yet know how to measure for it and how long it could potentially last.
  • SO for example, a recovered patient does not need to quarantine while their immediate household contact is a case. HOWEVER, if a recovered patient is exposed again in 6 months or a year, we do not yet have guidance on potential quarantine recommendations.
  • MORE TO COME.

• **What do we know about antibody testing?**
  • Lots of tests are being developed. The body of evidence and research to help guide their use is still in progress.

• **How can a recovered patient help?**
  • Interested in finding out more about a study (MGH, BWH, Harvard Med School) **Clinical Assessment and Sampling of Individuals with or at risk for Coronavirus Disease 2019 (COVID-19)**
    • 857-268-7257 or email ragonclinicalresearch@mgh.harvard.edu
Why do my cases still say “open” when I am done?

This is not an indicator of investigation status. Don’t worry about this variable.
Why do my cases still say “open” when I am done?

- MAVEN does not use the term “closing a case.”
- When investigation is complete, you should sign off via the 5 steps.
  - Step 4: Case Report Form is Complete (signing off that all data has been entered)
  - Step 5 - LBOH final review: (LBOH final review of the case – often a supervisor).
- There are additional data review steps at the State level (where State Epis also sign off in the other variables in the Admin Question Package above LBOH 5 steps).
- MAVEN events are not technically “closed” until they are archived and frozen so no new data entry can happen. This is a state-level action and doesn’t typically happen until the next year or so (generally speaking).
  - **Summary:** LBOH shouldn’t worry about the term “open.” Focus on completing and signing off on your Case Report Form to show you completed your investigation.
Shared Events

- **Who ‘closes out’ a shared event?**
  - (remember, nothing is officially closed out.) The main town of residence signs off on the case (which will move it out of the workflows). But discuss with the other jurisdiction to make sure you both have completed what needs to be done.
Symptom Updates

- Diarrhea – We are seeing this, however discontinuation of isolation should be based upon resolution of fever and respiratory symptoms (cough, shortness of breath, etc.)
Your Questions:
What the heck is a Pivot Table in Excel
<table>
<thead>
<tr>
<th>Event date</th>
<th>Disease classification status</th>
<th>Name</th>
<th>Age (in years)</th>
<th>Gender</th>
<th>Street address</th>
<th>Home Phone</th>
<th>Mobile Phone</th>
<th>Work Phone</th>
<th>Official City</th>
<th>Is case Hispanic?</th>
<th>Race</th>
<th>What is your ethnic</th>
<th>Please specify</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/18/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>60.0219 Female</td>
<td>Street Name</td>
<td>(555)555-5557</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>85.1116 Male</td>
<td>Street Name</td>
<td>(555)555-5509</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>70.3655 Female</td>
<td>Street Name</td>
<td>(555)555-5911</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>53.3142 Male</td>
<td>Street Name</td>
<td>(555)555-5934</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>79.4552 Female</td>
<td>Street Name</td>
<td>(555)555-5982</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>67.3939 Male</td>
<td>Street Name</td>
<td>(555)555-5958</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>55.1321 Female</td>
<td>Street Name</td>
<td>(555)555-5965</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/14/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>83.3922 Female</td>
<td>Street Name</td>
<td>(555)555-6811</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/14/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>55.4771 Female</td>
<td>Street Name</td>
<td>(555)555-5863</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Yes</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/12/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>58.6502 Female</td>
<td>Street Name</td>
<td>(555)555-6193</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Unknown</td>
<td>White,Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/16/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>28.4548 Female</td>
<td>Street Name</td>
<td>(555)555-6453</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White,Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/9/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>52.9602 Female</td>
<td>Street Name</td>
<td>(555)555-5555</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White,American Indian / Alaskan Native</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>3/12/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>30.8583 Female</td>
<td>Street Name</td>
<td>(555)555-5556</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/12/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>31.8095 Female</td>
<td>Street Name</td>
<td>(555)555-5555</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Unknown</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/12/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>21.2375 Female</td>
<td>Street Name</td>
<td>(555)555-5560</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/19/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>49.4141 Female</td>
<td>Street Name</td>
<td>(555)555-5561</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/22/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>32.7912 Male</td>
<td>Street Name</td>
<td>(555)555-5562</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/18/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>48.2875 Female</td>
<td>Street Name</td>
<td>(555)555-5563</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/18/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>17.1691 Female</td>
<td>Street Name</td>
<td>(555)555-5570</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Yes</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/23/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>17.1691 Female</td>
<td>Street Name</td>
<td>(555)555-5570</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Yes</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/23/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>42.1109 Female</td>
<td>Street Name</td>
<td>(555)555-5574</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Yes</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/29/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>12.0329 Female</td>
<td>Street Name</td>
<td>(555)555-5575</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Yes</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/13/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>34.7817 Female</td>
<td>Street Name</td>
<td>(555)555-5576</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Yes</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/19/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>25.5524 Female</td>
<td>Street Name</td>
<td>(555)555-5578</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Yes</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/18/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>72.6242 Male</td>
<td>Street Name</td>
<td>(555)555-5582</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/24/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>33.8042 Female</td>
<td>Street Name</td>
<td>(555)555-5587</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/16/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>46.2724 Male</td>
<td>Street Name</td>
<td>(555)555-5588</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/24/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>75.0527 Female</td>
<td>Street Name</td>
<td>(555)555-5589</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/24/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>38.8036 Female</td>
<td>Street Name</td>
<td>(555)555-5590</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>Unknown</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/25/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>72.6196 Female</td>
<td>Street Name</td>
<td>(555)555-5599</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/21/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>55.0335 Female</td>
<td>Street Name</td>
<td>(555)555-5600</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3/25/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>34.9103 Female</td>
<td>Street Name</td>
<td>(555)555-5601</td>
<td></td>
<td></td>
<td></td>
<td>TOWN</td>
<td>No</td>
<td>White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Event date</td>
<td>Disease classification status</td>
<td>Name</td>
<td>Age (in years)</td>
<td>Gender</td>
<td>Street address</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------</td>
<td>------</td>
<td>---------------</td>
<td>--------</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>60.0219</td>
<td>Female</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>85.1116</td>
<td>Male</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/6/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>70.3655</td>
<td>Female</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>53.3142</td>
<td>Male</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/6/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>79.4552</td>
<td>Male</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>67.9398</td>
<td>Male</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/8/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>55.1321</td>
<td>Female</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/14/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>83.3922</td>
<td>Female</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/7/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>55.4771</td>
<td>Male</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/12/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>58.6502</td>
<td>Female</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/16/2020</td>
<td>Confirmed</td>
<td>Name</td>
<td>28.888</td>
<td>Male</td>
<td>Street Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Insert your Pivot table into a new worksheet.
Variables from spreadsheet appear for you to choose and count.
Select variable and then drag down into Row and Values
Housekeeping to manage your data - rename your worksheet as you create them....
Save your CSV to Excel format
Any interest in having a training webinar for Pivot tables?