COVID-19 Cluster Events Training

Cluster Events in MAVEN

May 25, 2021

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Topics Today

• Defining Clusters
  • What criteria is required to create a cluster?

• Naming Clusters
  • Rules for Naming Cluster Events

• Creating Epi Clusters in MAVEN
  • Step by Step Process in MAVEN

• Linking Events to Clusters
  • Step by Step Process in MAVEN

• Reviewing/Defining Key Variables in Cluster Events and linked Case Events
  • Risk QP5 Variables (individual cases)

• Notifications to MDPH & LBOHs
• Closing Clusters
• MAVEN Demo
Webinar and DPH Office Hours

Please note: DPH epidemiologists will be taking a break from the webinars and office hours around the Memorial Day Holiday and the following week and we hope you take some time to enjoy the weather and this brief hiatus.

The following days we will cancel our Tuesday and Friday webinars:

- Friday, May 28th - CANCELLED
- Tuesday, June 1st - CANCELLED
- Friday, June 4th - CANCELLED
MAVEN/MDPH Key Resources

MDPH Epi Program: 617-983-6800
MDPH MAVEN Help Desk: mavenhelp@mass.gov
   MDPH DSAI Help Desk: 617-983-6801
   MDPH DSAI Fax: 617-983-6813
CTC Help Desk: 857-305-2828
   CTC Local Health Help ctclocalhealthhelp@covid19.pih.org
   CTC Local Health Liaison List
Higher Ed Contact List

MAVEN Help has Guidance Documents and Previous Webinars:
Defining Clusters

YOU GET A CLUSTER AND YOU GET A CLUSTER

EVERYBODY GETS A CLUSTER
Clusters: OUTBREAK EVENTS

• As we track more exposures, transmission, and outbreaks in institutions of higher ed (IHEs) and elsewhere (schools, daycares, etc.), we will be talking more about clusters.

• Clusters events can be tracked in MAVEN, and much work has already been done for COVID-19 in long term care facilities (LTCFs), nursing homes, rest homes, etc. through cluster events.

• MDPH will be issuing ongoing guidance regarding the creation of cluster events in MAVEN to help track these events as we move forward in the second year of this pandemic.

• Cluster Events in MAVEN are called “OUTBREAK EVENTS.”
What constitutes a COVID “cluster?”

• In general, DPH defines a **COVID cluster** as:
  
  • *At least two confirmed cases from different households with a shared exposure where close contact is known or suspected to have taken place among a group of five or more people*
    
    • In dormitory settings, roommates are considered “household” members.

• We have a lower threshold for creating cluster events for certain settings: LTCFs and other healthcare facilities, correctional facilities, shelters and daycares.

• But for other facilities (schools, colleges, businesses, social or other events) a cluster event only needs to be created if it meets the above definition.
Examples:

• **Clusters (cluster events should be created!)**
  • 2 confirmed cases in college students who attended the same 30-person house party
  • 2 confirmed cases in colleagues who were both in the office for a meeting of 10 people on August 31 and later became cases
    • Think about a shared exposure source/setting/event that resulted in 2 or more cases after the fact.

• **NOT clusters (no cluster events need to be created)**
  • 1 confirmed case who attended a 10-person baby shower while infectious
  • 2 confirmed cases in friends who met for lunch (no one else dined with them)
  • 3 confirmed cases in family members all residing in the same household
  • 3 roommates in a triple room in a dorm
  • 2 confirmed cases in students from Elementary School X; cases’ classrooms are in different wings of the building and they did not overlap in the cafeteria or other shared spaces
    • A single confirmed case spreading to one other person does not a cluster make.
Things to think about when considering a cluster:

• Often people may start out as linked contacts to an index case.
  • **Example:** You are interviewing a case and find out he hosted a birthday party last night with 10 guests (while he was infectious).
    • We do not yet have a cluster, but you should work to create contact events for all the close contacts and link them to your index case.

• Identifying a shared source of exposure for confirmed cases through your interviews can lead to identifying a cluster.
  • **Example:** 3 of the birthday attendees became cases.
    • The birthday party event now meets our definition of a cluster, and could be created as a cluster event in MAVEN.
      • (Exposure Setting Type: Social Gathering)
    • Notes and variables in the Cluster Event should include details about the party, risk behaviors, things that help inform our work.
Things to think about when considering a cluster:

• An index case can spread to many contacts, but that doesn’t necessarily constitute a cluster.
  • **Example:** Our birthday boy had a drink with a neighbor the night before the party, had a personal training session with a trainer in the morning, and had coffee with the dog walker afterwards. All three people later became cases.
    • Remember those are all individual contacts and there isn’t an associated sentinel event or shared group exposure that would make that a cluster. Birthday Boy is just a very social index case with a lot of spread because he’s clearly not observing good social distancing practices.

• Think of a cluster as shared exposure setting & suspected source of infection.
  • **Typically needs to be more than just one source and one spread.**
    • **Example:** If Birthday Boy went to band practice and infected one bandmate out of 20 musicians, that does not constitute the 2 people needed for the cluster.
      • If 2 or more musicians went to group practice on Monday and became sick and tested positive after the fact, THAT could be a cluster (2 people with a shared exposure in a setting with 5+ people.)
Things to think about when considering a cluster:

• You can always link contacts to their index case. That should be your primary action.
  • Cluster identification may come after further interviews and information gathering, as well as observing outcomes in quarantining contacts.

• If you have questions about what constitutes a cluster, please call Epi Program 617-983-6800. We are happy to discuss the scenario and provide recommendations.

• Remember, the ultimate goal is to stop the spread of COVID-19. Retrospective reviews and cluster identification can be helpful for informing trends and helping to identify risk activities and populations.
  • However we still want to focus on contact identification and appropriate isolation and quarantine implementation.
  • Don’t get caught up with whether the 2 cases you have should be a cluster event or not.
• Diagram created by CTC
• Each circle would represent a new cluster event in MAVEN, IF cluster criteria are met

These cases associated with only the construction site (not the church), should not be linked to the church cluster event.

These cases can be linked to both the church and health center cluster events.

This figure was compiled by CTC
### Criteria for when to create a MAVEN cluster event by facility/exposure type

<table>
<thead>
<tr>
<th>Facility/Exposure Type</th>
<th>Minimum criteria needed to create a cluster event</th>
</tr>
</thead>
</table>
| LTC facilities (nursing homes, rest homes) & Assisted Living Facilities | • One confirmed case in a HCP, or  
  • One facility-acquired confirmed case in a resident                                                                                |
| Adult Day Health & Assisted Living Facilities & Dialysis centers & Other outpatient medical offices | • ≥2 confirmed cases among HCP with epi-linkage or a shared exposure within the facility, or  
  • ≥2 confirmed cases among patients with a shared exposure within the facility (i.e. same unit/department, cared for by the same HCP) |
| Hospitals & Long Term Acute Care & Other inpatient healthcare facilities | • ≥2 confirmed cases among HCP with epi-linkage or a shared exposure within the facility, or  
  • ≥2 confirmed cases among patients 7 or more days after admission, for a non-COVID condition, with shared exposure (i.e. same unit, cared for by the same HCP) |
| Correctional facilities (i.e. jails/prisons) & Shelters & Inpatient behavioral health (including other DMH/DDS facilities) | • One confirmed case in an employee or inmate/client who had close contact to others at the facility while infectious |
| Daycares | • One confirmed case in an employee or attendee who was at the facility during their infectious period |
| All other facility-based clusters, including: Schools (K-12, Boarding, Colleges) & Group Homes & Businesses & All social or event-based clusters | • ≥2 confirmed cases from different households with a shared exposure where close contact is known or suspected to have taken place among a group of five or more people  
  *For higher education, “household” refers to roommates* |

Most of these scenarios will be rare for LBOH to identify a cluster in, but this chart is available for your reference.
What Are Clusters For?

- The number of clusters and associated cases and contacts are reviewed daily to track settings where transmission is taking place.

- Aggregated data are used to identify settings that may need to be further reviewed. When this is done, we look closely at the numbers as well as any notes about the cluster in the MAVEN events.
  - For example, if we observed an increase in clusters associated with restaurants, we may look further to see if the clusters are involving staff vs. patrons, if exposures are taking place indoors vs. outdoors, etc.

- Cluster data have been used to inform policy decisions. For example, a review of ice hockey cluster data in October 2020 resulted in a 2-week pause and stronger protocols to help reduce transmission.
What’s in a Cluster Event?

**General**
Facility follow-up Notes

- Link residents and staff here.
- Can attach documents/lists here.
- Tasks & Assignments
- Who Reported Cluster
- 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).
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.)

- **Event**: anything in MAVEN. (could be a contact event, a case, cluster, etc.)

- **Case Classification Status**: Every individual disease event in MAVEN must have a case classification (CONFIRMED, PROBABLE, SUSPECT, REVOKED, UNCLASSIFIED, or CONTACT.)

- **Epi Linked**: Exposure to confirmed case or specific situation. Someone may have an epidemiological link to someone. (Household contacts have an epi link to a confirmed case.)
High Priority Clusters Assigned to a State Epidemiologist

- Long Term Care Facilities (LTCFs) (nursing homes and rest homes)
- Assisted Living Facilities
- Ambulatory Surgical Centers
- Dialysis Centers
- Hospitals
- Long Term Acute Care
- Correctional facilities
- District Courts
- Shelters
- Some DMH/DDS facilities
High Priority COVID Cluster Identification and Updates: What to Do

- **If you identify a new cluster for any of the previous high priority cluster types:**
  - Create a cluster only if the ‘minimum criteria’ for the corresponding facility type is met
  - Make sure the cluster doesn’t already exist. Many already do for these facility types.

- **If you identify additional cases associated with an existing cluster**
  - Make a note in the MAVEN cluster event
    - Update relevant cluster question packages (as appropriate – most likely adding towns as needed)
    - Link the additional cases
  - If you have questions, contact the assigned MDPH Epidemiologist (look in the Tasks Tab of the cluster event and/or the Standard Question Package for the MDPH Contact).
  - If you can’t access the cluster event, you can call MDPH or the LBOH of the facility to get access to the cluster event.
Required Cluster Variables Summary

• **Required variables at time of cluster creation:**
  • exposure setting name,
  • exposure setting type,
  • investigation status (“Open”),
  • and affected town(s).
  • For higher education, complete the “Education Institution” block in addition to the exposure setting name block.

• These need to be completed at the time of cluster creation. These are essential to daily data analyses and reporting, as well as to ensure associated LBOHs and Higher Ed facilities can see the event.

**TIMELY CREATION is Key.**
You can add more linkages as you confirm them, but create the initial cluster to ensure timely reporting.
Cluster Naming

“You have a condition whose name is very hard to remember.”
Cluster Naming Convention:

- Naming Convention for Facility-based Clusters:
  - FACILITYTYPE_FACILITYNAME_TOWN

Examples:
- DAYC_HAPPYVILLAGE_SPRINGFIELD
- LTCF_CAREONE_NEWTON
- OTHR_BOSTONCALLING_BOSTON
- SCHL_BUFALLDANCE_BOSTON
# Standard Abbreviations for Facility Types

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALF</td>
<td>assisted living facility</td>
</tr>
<tr>
<td>BUS</td>
<td>any workplace, business, or company not captured in other categories</td>
</tr>
<tr>
<td>CORR</td>
<td>correctional facility (prison, jail, etc.)</td>
</tr>
<tr>
<td>DAYC</td>
<td>daycare centers</td>
</tr>
<tr>
<td>GH</td>
<td>group home</td>
</tr>
<tr>
<td>HC_OTHR</td>
<td>other healthcare facility</td>
</tr>
<tr>
<td>HOMELESS</td>
<td>Homeless encampment (homeless shelters captured as SHEL)</td>
</tr>
<tr>
<td>HOSP</td>
<td>hospital or medical center</td>
</tr>
<tr>
<td>IND</td>
<td>independent living facility</td>
</tr>
<tr>
<td>LTAC</td>
<td>long-term acute care</td>
</tr>
<tr>
<td>LTCF</td>
<td>long-term care facility</td>
</tr>
<tr>
<td>SCHL</td>
<td>school (all types, including elementary, secondary, and colleges/universities)***</td>
</tr>
<tr>
<td>SCHLU</td>
<td>special designation for COVID umbrella clusters created for colleges/universities and boarding schools</td>
</tr>
<tr>
<td>OTHR</td>
<td>other settings, such as an event (e.g., protest, food truck festival), program (e.g., adult day program, camp), or community resource (e.g., place of worship, community center)</td>
</tr>
<tr>
<td>OOS</td>
<td>Out of State</td>
</tr>
</tbody>
</table>

Detailed instructions are available in the Cluster Creation Tip Sheet on MAVEN Help. 

Umbrella clusters

• Umbrella clusters have been created for all 106 colleges and universities in Massachusetts
• A listing with MAVEN ids is available on MAVEN Help
• Umbrella clusters will be searchable under the following general naming convention:
  • SCHLU_[School Name]_[City/Town]

A full excel document of the official list of IHE Umbrella Clusters is located in MAVEN Help:
Umbrella Cluster Reference List -Institutions of Higher Education_ver1.0_Sept1
Example: Clusters at Williams College and Smith College

Note that only epi clusters (not cases) are linked to umbrella clusters.

**Williams College**
- Williams soccer team cluster
  - Stephen Robinson
  - Chip Bublé
  - Eleanor Alvarez
- Williams dorm cluster (Agard House)
  - MJ Edwards

**Smith College**
- Smith on-campus party cluster (Parsons House)
  - Ayana Washington
  - Sally Tucker
  - Evelyn Pham
- Smith journalism club cluster
  - Jessica Rodriguez
  - Abby Smith

*Chip is linked to both clusters as he is on the soccer team and lives in Agard House.*

*MJ is a Williams student who attended the Parsons party while visiting a friend at Smith.*

*Other Williams student cases are not known to be part of any epi clusters and are therefore not linked.*
Creating Epi Clusters in MAVEN

Creating a Cluster Event in MAVEN

In general, it is only recommended that cluster events be created when two or more cases of disease are associated with a common exposure. Please refer to available disease-specific guidance for what defines a cluster.

1) Click on "Create Cluster/Outbreak/Aggregate Event" from the left hand menu of the MAVEN dashboard.
2) Use the cluster naming conventions that follow to enter a "Name," and select the disease type from the "Event" drop-down menu.

3) Complete the Standard Question Package (SQP)

The Standard SQP is common among all cluster types and should be completed with details of the shared exposure among cases (i.e., why you are creating the cluster event).

At a minimum, the following fields should be completed at the time of cluster creation, across disease types:

- Exposure Setting Name: The full name of the affected facility or description of the shared event.
- Exposure Setting Type: Select the setting of the exposure, using the available options drop-down.
- Affected Event(s): This field assigns jurisdiction to the cluster event so that impacted persons have access to the event.

4) Complete additional fields, as required by available disease-specific guidance

The remaining variables in the Standard SQP are helpful to track the location of the cluster event, point of contact at the affected setting, and to ensure appropriate regulatory agencies have been notified.

Please refer to available disease-specific guidance for additional required fields in the Standard SQP, as well as other disease-specific question packages that populate based on the cluster type (Respiratory Illnesses, GI Illness, etc.).

IT'S ALMOST TOO EASY

We Have A Tip Sheet!

Clusters – How to find one that already exists

- Cluster: A facility or location-based event - Outbreak Event in MAVEN
  - Schools, LTCF, Rest Homes, Nursing Homes, Group Homes, etc.
- Find one in MAVEN
- Then Link individual people events to cluster

Update Type to “Outbreak” (from Normal)

If you cannot find a Cluster or are not sure if one already exists, you can also call the Epi Program at 617-983-6800.

Try not to create duplicates.
Searching for an existing Cluster

1. Select the “Search Event” icon on the left-hand menu of the MAVEN dashboard.

2. To search for a cluster event, change “Event” from “Normal” to “Outbreak”.

3. The “Name” field searches on the cluster name that is defined upon creating the cluster event, as defined above (i.e., FACILITYTYPE_FACILITYNAME_TOWN). The search functionality is not sensitive to capitalization.

- Use the wildcard function (*) to search for components of a cluster name.
  - Example: all clusters associated with daycares will be populated by searching for “DAYC*”.
- You can search for a key word in the middle of a cluster’s name by using the wildcard before and after your search term.
  - Example: all clusters that have “party” anywhere in the name can be found by searching for “*PARTY*”
- Use the From and To Dates to narrow the range of your search. These dates search on the date the cluster event was created.
Creating a New Cluster

• Click on “Create Cluster/Outbreak/Aggregate Event” from the left-hand menu of the MAVEN dashboard.
• Use the cluster naming conventions that follow to enter a “Name”, and select the disease type from the “Event” drop-down menu.
Creating a Cluster

Complete the Admin & Standard Question Packages (QP)
The Standard QP is common among all cluster types and should be completed with details of the shared exposure among cases (i.e., why you are creating the cluster event) in variable form.

Detailed notes about the cluster and associated exposures identified should go here.
Required Fields when Creating a Cluster Event: Administrative Question Package

- **Reporting Source**

  - How did you hear about a cluster you are creating? Examples could be through your investigation (Patient Interview) or the CTC.
Required Fields when Creating a Cluster Event: Standard Question Package

- **Investigation Status**
  - When creating a cluster event, this should be answered as “Open”
  - This needs to be completed in order for a LBOH cluster report to display the cluster event

- **Non-MDPH Contact**
  - Document the name and phone number of LBOH (or CTC) investigator
  - This needs to be completed so that MDPH and LBOH staff can identify a point person for questions and clarifications and to discuss follow-up activities.
Who is owning this cluster for primary follow-up?

If CTC is covering a school, this should be CTC.
Required Fields when Creating a Cluster Event:
Standard Question Package

- **Exposure Setting Name**
  - Enter facility name or description of shared exposure among cluster-associated cases
  - Avoid putting personally identifying information (family name or a private address)
  - If exposure happened out of state, note that in Exposure Setting Name
    - There needs to be ≥2 confirmed MA residents with a shared exposure that took place out of state

- **Exposure Setting Type**
  - Try to select options in the drop-down menu, if possible
  - “Private Residence” should NOT be used for COVID, as cases from the same household do not meet the definition of a cluster. **Social gatherings, parties, etc. that take place at an individual’s residence should be captured as “Social Gathering.”**
Required Fields when Creating a Cluster Event: Standard Question Package

- **Exposure Setting Name**
  - **Workplaces**: Further define workplaces, if possible, by including in the Exposure Setting Name the type of workplace setting: Office, Retail, Industrial, Manufacturing, or Construction.
  - **Sports**:
    - **If a team**: Include league (if applicable), name of sport, name of team.
    - **If a sporting event (game, tournament)**: Include name of league (if applicable), name of event, name of sport.
    - **MAKE SURE NAME OF SPORT** is included in name.
    - Game, Practice, Team Social Event, etc., should be clarified in the notes if not immediately clear from the exposure setting name.
    - Indicate where the sport activity occurred (indoors, outdoors, or both) in the notes.
Required Fields when Creating a Cluster Event: Standard Question Package

**Affected town(s)**
- This needs to be completed in order for LBOH users to see the cluster event

**Add New:**
- Add new towns for each new individual linked event associated with a new town.
- This is how Cluster Events are “shared” with different LBOHs.

- A LBOH should also be included in this list if they have a resident (Case or Contact) that is linked to the cluster event.
- So if 5 different towns have linked events from their residents, all 5 towns should be added to the Affected town(s).
When creating an epi cluster event for a higher ed institution:

- Complete Education Institution block related to the epi exposure at the college/university
- ALSO complete the exposure setting name block
  - Given the epi exposure (i.e., dorm, party, sports team) is captured under the Education Institution block, recommend using “School (College/University)” as the setting type

- **Affected Town and Education Institution variables** are associated with jurisdiction (whether LBOH or Higher Ed investigator can see event)
- Standard Question Package Variables in the Cluster are VERY Important to fill out as completely as possible.
Notes Field

- **Notes**: Enter a summary of information known at time of cluster creation, including who reported it/how it was identified. When new cases are identified and linked, status updates should be added to this field. Notes will appear in chronological order – most recent on top. The notes field should include summary updates, and also case management actions taken by CTC or at the local level. Anyone viewing the event should be able to read the notes field to understand a summary of the cluster activity and follow-up investigations.
Cluster Creation Summary- Use the Tip Sheet

- Look for existing events.
  - Tip: Remember to change Event Type from ‘Normal’ to ‘Outbreak’ to view clusters in a search.
- Naming Convention: FACILITYTYPE_FACILITYNAME_TOWN
- Fill in Standard Question Package Variables and the Notes.
  - (Respiratory Illness question package does not apply to COVID-19 Clusters)
- Remember to add notes and thorough descriptions for these clusters.
- Link relevant events.
  - Are you creating new events or linking to existing events? Make sure to look for existing events first.
Linking Individual Events (Cases) to Cluster Events

I SEE LINKS EVERYWHERE

This View of a COVID event looks the same for cases and contacts. They all have the same Question Packages Available.

What’s linked? Go here to see/link to contacts or a cluster event.

Confirmed/Probable/Suspect/Contact

Lab Tab to see lab tests

Patient Person Details (address, phone)

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

6 Question Packages

View Wizard
- Link all associated cases to the Epi Cluster
  - Ensure completion of the Higher Ed variables in the Risk QP of linked cases
- Link the Epi Cluster to the Umbrella Cluster for the higher ed institution
  - Do not link individual cases to the Umbrella cluster
Linking to Clusters

- Use the tip sheet.
- You can be in either event and link to the other via the Linked Events (View).
  - Keep track of what event you are “in” and what event you are “looking” for.

- Most often, you will be linking to an “existing” event when linking people to clusters.
  - As opposed to often creating and linking to a “new” contact event when linking a contact to an index case.
Cluster Events – how to manage the linked people.

Oh my goodness, so many people are linked to this cluster!
Every Event has a Linked Events Page

**Link Type should always be Primary when linking events to a cluster event.**

- **PRIMARY Link Type:** Use for all links (residents and staff) to clusters
- **SECONDARY Link Type:** Please do not use at this time for linking people to Clusters.
- There are more options for link types when linking contacts to each other. You can use the best link type in that situation (household contact, daycare contact, etc.)
Cluster Events – how to manage the linked people.

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.
Data Completion for Linked Events

• Data Completion within Individual Linked Events (Cases and Contacts) is Required
  • For any clusters identified by CTC or a LBOH, completion of variables in individual linked events that tie them back to the cluster (ex: employer information in the Demographic QP, facility association in the Risk QP, education institution information, etc.) is required.
Linking Events Summary

- **Linked events should include any known cases with shared exposure related to the cluster facility or event.**
  - Linked events should include first generation cases associated with the shared exposure, and not second-generation cases that occur due to future exposure from a subsequent case.
  - Contact events can be linked as well if they share the same cluster exposure, however individual contacts should also be linked directly to their index case.

- **Example:** If a worksite training occurred that 10 employees attended, and 5 employees tested positive the following week.
  - **Yes,** link the 5 confirmed cases to the Cluster Event.
  - **No,** do not link the household contacts of the confirmed employees, even if those family members test positive and one of the employees is the source. These household contacts did not attend the workplace training (the shared exposure among cases of the cluster event) so should be linked to their index case directly.
Reviewing Key Variables for Cluster Events and Individual Cases

There are two types of people in this world:

Those who can extrapolate from incomplete data
Question Package 5. Risk/Exposure/Control & Prevention has updated variables to capture Risk (and higher Ed information).

Make sure to thoroughly fill out Question Packages 2 & 5 for all your linked confirmed cases & contacts.
Completing the COVID Risk QP

Ensure Data Completion

- This Risk Question Package is where you track an individual’s association with a school, daycare, university, or group care setting (like a long-term care facility (LTCF)).
- Complete these variables and thoroughly as possible.
Notifications to MDPH & LBOHs
Expectations for Notification

• Any cluster created in a town requires notification to the relevant LBOH.
  • All required variables and updated notes should be completed.
  • The Affected Town(s) variable must be completed to allow a LBOH viewing access to the cluster.

• SHARE individual events with relevant LBOHs as well, as appropriate
  • For individual MAVEN cases, only the LBOH of the case’s Official City will be able to access the event. It will need to be shared if the Cluster took place or is located in another town. For example, if a worksite is in Town A, but the confirmed case lives in Town B, the following must be completed:
    • **Cluster Event: Add** Affected Town(s) Town A & Town B to the Cluster Event Standard Question Package. This ensures both LBOH A and LBOH B can access the Cluster Event.
    • **Person’s Covid Event: Share** Case B’s individual MAVEN event with Town A. This ensures the LBOH in Town A (where the cluster is) can see the case’s event even though the case lives in another town.

• Notify associated LBOHs, as needed
  • Use MAVEN Communication Events for cities and towns to call or email PHN(s) with the MAVEN ID of the cluster event (it does not flow into any LBOH workflows).
Notify MDPH for Newsworthy or High Priority Situations

• MDPH will identify new clusters daily for reporting purposes through data cleaning and analysis, however newsworthy or emergent situations should be reported to MDPH immediately upon cluster creation if a cluster is identified that meets any of the criteria below.

• Clusters that should be forwarded for evaluation include the following:
  • Complicated cross-jurisdictional events, in-state or out-of-state;
  • Evidence of transmission in the workplace and a large number of positives;
  • Media or elected official involvement (use judgement);
  • Large-scale testing or inappropriate testing is taking place;
  • Situations requiring significant control recommendations; or,
  • Possible unsafe food-handling practices in food processing facilities or warehouses due to staff absenteeism.

• Call 617-983-6800 with the MAVEN ID number and a very brief summary indicating the cluster situation.
Closing Clusters

IT'S THE FINAL

COUNT DOWN
Closing Clusters

• A cluster investigation is closed once:
  • 28 days have passed since the cluster event was created in MAVEN, and
  • 28 days have passed since the last positive lab among cluster-linked cases

• Clusters are closed on a weekly basis by the Epi Program
  • An analysis is done to identify clusters that meet the definition for closure

• Clusters are documented as being closed by:
  • Completing the Investigation Status in the Standard Question Package
  • Closing out the cluster event (disables notes and fields in question packages)

• If a cluster is closed & new cases have been identified with that setting, a new cluster should be created (if cluster criteria are met)

CTC/LBOH staff should not close clusters in MAVEN. MDPH will perform this function.
OK, let’s summarize from today…. 

FELL ASLEEP DURING A LECTURE

WOKE UP IN TIME FOR SUMMARY

quickmeme.com
Reviewing Today

• Defining Clusters
  • At least two confirmed cases from different households with a shared exposure where close contact is known or suspected to have taken place among a group of five or more people
    • In dormitory settings, roommates are considered “household” members.

• Naming Clusters
  • FACILITYTYPE_FACILITYNAME_TOWN - Use Tip Sheet

• Creating Epi Clusters in MAVEN
  • Step by Step Process in MAVEN – Use Tip Sheet

• Linking Events to Clusters
  • Step by Step Process in MAVEN – Use Tip Sheet

• Reviewing/Defining Key Variables in Cluster Events and linked Case Events
  • Demographic QP 2 & Risk QP5 Variables (individual cases) – Required for all individual cases, but particularly relevant for higher ed and people who work or attend congregate settings (schools, daycares, jails, etc.).
CLUSTER REMINDERS

• **Avoid Creating Duplicate Clusters**
  • All LTCF clusters already exist so you should not be creating any – most common issue we see.

• **Do not open a closed cluster**
  • Clusters are closed after 28 days of inactivity by MDPH.
  • If there has been continuous activity in those 28 days but it was not documented in the cluster and hence the cluster should have remained open, then call Epi Program at 617-983-6800.

• **For Families/Roommates:** Do NOT make clusters with the Exposure Setting Type of “Private Residence/Household” – these should be linked as household contacts and are not a cluster.

• **For House Parties/Get Togethers/Social Gatherings:** Do NOT make clusters with the Exposure Setting Type “Private Residence/Household”
  • If an event occurred at a private residence and resulted in multiple cases from different households (party, backyard wedding, etc.) then it should be an Exposure Setting Type = “social gathering” cluster.
CLUSTER REMINDERS, Cont.

- **Please link all known cases** so DPH has an accurate understanding of the size of the cluster.

- **If you don’t have access to a case outside your jurisdiction, then work with the other town or DPH to share the event and link it.**
  - Individual Events need to be “SHARED” for access if it isn’t in your official town.
  - Cluster Events need to have a town added to the “Affected Town” list to grant access to another town.

- **Do Not Link people that were not at the setting.**
  - Example: A classroom cluster and the index case’s family is linked but they obviously weren’t in the class. They are just contacts to the index case and should be linked directly to that person, not a classroom cluster.
Cluster Tips & Tools

• Creating a Cluster Event in MAVEN
  • Step-by-step instructions on how to create a cluster event in MAVEN
  • NEW standard naming conventions that will help users when searching for a cluster event
  • How to search for clusters in MAVEN

Cluster Tips & Tools

• MAVEN Tip Sheet: How do I link two existing cases in MAVEN?
• Step-by-step instructions on how to link two existing events in MAVEN

Let’s go into the training site to practice