



# Massachusetts Department of Public Health

## LBOH Tools for Infectious Disease Webinar

### Tools for Local Health Webinars

**August 8<sup>th</sup>, 2023**

Hillary Johnson, MHS, Senior Advisor to Local Health  
Petra Schubert, MPH, Emerging Infections Coordinator  
Scott Troppy, MPH, PMP, CIC, Senior Surveillance Epidemiologist  
Kate Hamdan, MPH, Surveillance Epidemiologist  
Bureau of Infectious Disease and Laboratory Sciences  
MA Department of Public Health

# Agenda August 8, 2023

- **Maven Updates & Reminders**

- **H Release updates and MAVEN reminders**
- **Sexual Orientation and Gender Identity (SOGI) Updates**
  - Ryan Burke, MPH
- **Sequencing Question Package #9 Review**
  - Carolyn Casiello, MPH and Meagan Burns, MPH
- **Occupational Health: Updates for Industry and Occupation**
  - Angela Laramie, MPH

- **Food and Waterborne Infections Team Updates**

- **Cyclospora Season 2023 Update**
- **Foodborne & Waterborne Outbreak Needs Assessment [Survey](#) – Your Feedback is Needed!**
  - Geena Chiumento, MPH

- **Guest Presentation:**

- **Introduction to Hepatitis A Case Investigations**
  - Lindsay Bouton, MSc, Hepatitis A and B Surveillance Coordinator A

every summer  
me: \*slightly opens window\*  
every fly and bug outside:



# Reminder to Check LBOH Workflows

- **Reminder to check your LBOH Workflows**
  - **LBOH Notification for Immediate Diseases (8 cases)**
  - **LBOH Notification for Routine disease (138 cases)**
    - Cases in these workflows range from January 6 2023 – August 7
  - **LBOH Case Report Forms (CRF) are pending (761 cases)**
    - Cases in these workflows range from January 3 2023 – August 7
  - **LBOH Notification but no follow-up required (2,874 cases in this workflow as of today)**

# H Release Overview

## Overview:

- H release included **67 total updates/revisions to the software.**
- **Changes from program areas including:** Global changes, General Epidemiology, COVID, Healthcare Acquired Infections, COVID, Foodborne/Waterborne, Immunization, Viral Hepatitis, STD, HIV, Tuberculosis, DGP.

# H Release Overview

## Highlights:

- COVID no longer an immediate
  - Two COVID workflows remain but you will no longer receive an email for COVID cases
- SOGI updates
- Occupation and Industry updates
- Sequencing updates

Please email [mavenhelp@mass.gov](mailto:mavenhelp@mass.gov) with any questions

# SOGI Data Collected in MAVEN

## **MAVEN Wizards for LBOH with SOGI variables**

- TB Initial Clinical Evaluation Form
- LTBI Reporting Form
- TB Nursing Form
- TB Case Report Form
- TB History Form
- COVID-19 Case Investigation Wizard
- COVID-19 Contact Notification Wizard
- Enteric CRF Review
- IP Wizard
- Mumps CRF Review Wizard
- Pertussis CRF Review

# SOGI Data Collected in MAVEN

Recorded Sex or Gender

Male	▼
Male	
Female	
Transgender	
Unknown	

- The way the data are collected may not be uniform across all hospitals, labs, health clinics, etc.
- We often do not know if the question being asked is for gender or sex.
- The wording for this variable helps reflect that uncertainty.

# SOGI Data Collected in MAVEN

What is your current gender identity? Check all that apply regardless of sex assigned at birth.

- ☒ Male
- ☒ Female
- ☒ Nonbinary or Genderqueer or not exclusively male or female
- ☒ I am questioning/not sure of my gender identity
- ☒ I don't understand what this question is asking
- ☒ I prefer not to answer

## Transgender Experience

▼

Yes

No

I am not sure

I don't understand what this question is asking

Prefer not to answer

## Assigned Sex at Birth

▼

Male

Female

Intersex

Refused

Did not ask

## Sexual orientation

▼

Bisexual and/or Pansexual

Lesbian, gay, or homosexual

Straight or heterosexual

Something else/Other not listed above (e.g. queer, asexual)

Don't know



# SOGI Data Collected in MAVEN

## Participant Tab

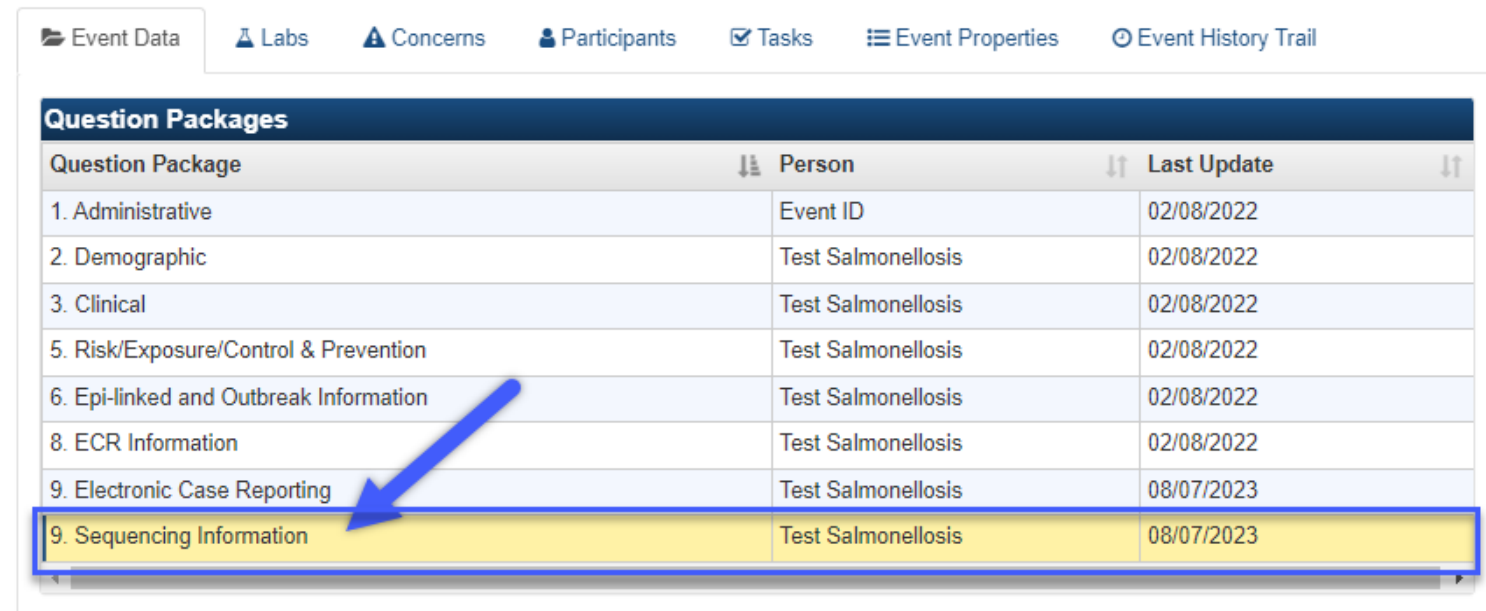
- **Recorded Sex or Gender**
  - This tends to be what is electronically reported to MAVEN
  - Previously labeled “Gender”

## In Demographics Package

- **Sex Assigned at Birth**, sometimes this will be shortened to just “Sex”
- **Transgender Experience**
- **Current Gender**
- **Sexual Orientation**
- These variables are typically collected through efforts of LBOH staff, field and state epidemiologists

# Overview of H Release changes for Sequencing Results

- Creation of **Sequencing Information Question Package** across all disease product codes.
- **Whole genome sequencing (WGS)** is a laboratory procedure that determines the order of nucleotide bases in an organism's genetic code (genome) and provides a unique DNA fingerprint that can help link cases to one another.
- Data in the Sequencing Information Question Package will be limited at first and mostly available for pathogens that cause outbreaks of GI illnesses (enteric diseases). The use of this question package is expected to increase over time.



The screenshot shows a web application interface with a navigation bar at the top containing links: Event Data, Labs, Concerns, Participants, Tasks, Event Properties, and Event History Trail. Below the navigation bar is a table titled 'Question Packages'. The table has three columns: 'Question Package', 'Person', and 'Last Update'. The rows are numbered 1 through 9. The row for '9. Sequencing Information' is highlighted in yellow, and a blue arrow points to it from the left.

Question Package	Person	Last Update
1. Administrative	Event ID	02/08/2022
2. Demographic	Test Salmonellosis	02/08/2022
3. Clinical	Test Salmonellosis	02/08/2022
5. Risk/Exposure/Control & Prevention	Test Salmonellosis	02/08/2022
6. Epi-linked and Outbreak Information	Test Salmonellosis	02/08/2022
8. ECR Information	Test Salmonellosis	02/08/2022
9. Electronic Case Reporting	Test Salmonellosis	08/07/2023
9. Sequencing Information	Test Salmonellosis	08/07/2023

# Overview of H Release changes for Sequencing Results

## **Will LBOH be expected to enter information in the new question package?**

No. This question package will only be editable at the state level.

LBOH can view the question package and all related data fields.

LBOH can also export any available data in event information extract reports.

## **Why was the new question package added?**

Integrate sequencing data with other epidemiological data in one place, primarily focused on enteric diseases for now.

Streamline identification of cases in an enteric disease WGS cluster.

Build our capacity to accept sequencing data for more pathogens from MA State Public Health Laboratory (SPHL) and other laboratories.

Provide a space that we can continue to build out as data needs expand.

Improve workflow and communication between MDPH Epidemiologists and Lab staff.

Make data more accessible to LBOH.

# Overview of H Release changes for Sequencing Results

## **When will the LBOH see data for their jurisdiction?**

There are no data coming in right now. We will be piloting entry of enteric data into this question package in the coming months.

## **Has the location of sequencing data for COVID-19 and Mpox changed?**

No. These data will continue to be captured in the Lab Tab. This may change in a future update.

# Overview of Whole Genome Sequencing (WGS) Cluster Investigations of Enteric Diseases

- Bacterial isolates submitted to MA SPHL per [105 CMR 300](#): *Campylobacter*, *Listeria*, *Salmonella*, Shiga-toxin producing *E. coli* (STEC), *Shigella*, *Vibrio*, *Yersinia*.
- WGS is routinely performed by MA SPHL for *Listeria*, *Salmonella*, STEC, *Shigella*, *Vibrio*.
- Isolate sequences are analyzed and compared to others from cases residing in MA to detect a local WGS cluster.
- WGS cluster investigations are led by an MDPH epidemiologist and warrant immediate investigation.
- Sequences are shared with CDC by upload into a national database, PulseNet.
- CDC compares sequences to national isolates to determine if a multi-state WGS cluster is detected.
- ~70 WGS clusters investigated by MDPH annually, with over half *Salmonella*.

## Additional information:

- Enteric (Gastrointestinal Illness) Disease Investigations: 2023 Season Refresher (June 2023) [Slides](#), [Recording](#)
- PulseNet: <https://www.cdc.gov/pulsenet/index.html>

# Overview of H Release changes for Sequencing Results

## What data will be captured in the new question package?

- Specimen Number
- Sequencing ID
- Sequencing Repository Type – PulseNet, GISAIID, GenBank, Tuberculosis Genotyping Information Management System (TB GIMS)
- Local Cluster ID – this is the MAVEN cluster
- National Cluster ID
- Date Last Modified
- Sequencing Needs Review (Yes/No) – this is for review by MDPH

Additional fields are available for pathogens that cause outbreaks of enteric diseases:

- Allele Code – this code helps identify how related various isolates are to one another
- Serotype – group within a species that share distinctive surface structures
- REP Code – CDC naming convention for reoccurring, emerging, and persisting strains

# Example of Sequencing Information Question Package for Enteric Disease

9. Sequencing Information - Test Salmonellosis - Salmonellosis

Actions

Sequencing Information

Specimen Number:

223EN4101

Add New

Sequencing ID:

PNUSAS00001

Sequencing Repository Type:

Pulsenet

Local Cluster ID:

123456789

National Cluster ID:

20000MAJIP-1

Allele Code:

SALM1.0 - 121.46.71.1.1

Serotype:

Alabama

REP Code:

REPJLL02

Date last modified:

08/04/2023

Sequencing Needs Review:

Yes

Save

Save & Stay

Cancel

Help

# LBOH Reports

- Sequencing data will appear in certain LBOH reports when the Sequencing Information question package is selected: LBOH Event Information Extract by Disease and DGP – Event Information Extract by Disease (for Tuberculosis).
- Reminder: there will not be any data in these reports at first.

**Maven Reporting**

Category: Custom Reports

Select Report: LBOH Event Information Extract by Disease (Excel, CSV)

Description: LBOH Event Information Extract by Disease (Excel, CSV) - a report that allows users to extract there event data by event dates, disease(s), question package(s), report format (excel, comma separated values), disease status/classification and by town(s). Please run this report

Event Date Start\*: 07/01/2023

Event Date End\*: 07/31/2023

Disease\*: Salmonellosis

Select the relevant Question Packages that pertain to the chosen disease\*: 8. Hepatitis B (Pregnant women), 9. Electronic Case Reporting, 9. Influenza Sentinel Data, 9. Rabies Information, 9. Sequencing Information

Select sequencing question package to view data



# Contact Information

Carolyn Casiello: [carolyn.e.casiello@mass.gov](mailto:carolyn.e.casiello@mass.gov)

Meagan Burns: [meagan.burns@mass.gov](mailto:meagan.burns@mass.gov)



# Massachusetts Department of Public Health

## Collection of Occupation and Industry Data in MAVEN

August 2023

# Collecting Occupation and Industry

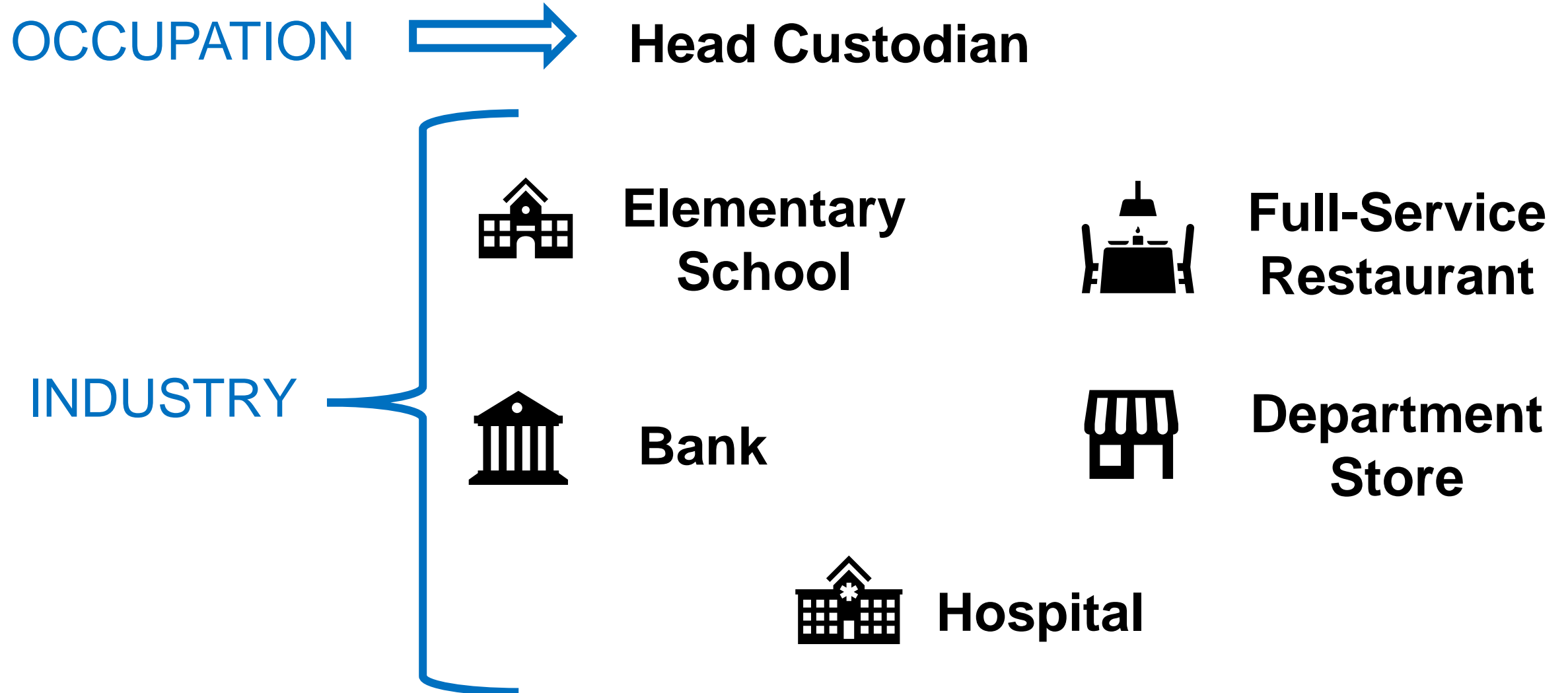
## Occupation (job title)

- Ask “What is your **current** job title?”
- Examples: sales person, personal care attendant, custodian, civil engineer

## Industry (type of business)

- Ask “What kind of **business** do you work in?”
- Examples: department store, home health care, elementary school, construction

# Collect BOTH Occupation and Industry



# Tips for Data Collection

1. An individual's **primary** occupation is the one where they work the **most** hours  
Collect the **current** occupation and industry information

2. Be **specific**

Occupation: Registered nurse, doctor, registration clerk

Industry: hospital, nursing home, clinic

3. **Ask follow-up** questions about the kind of work they do

Instead of “Works from home” and “Self-employed” provide details about the kind of work they do

4. If someone doesn't want to answer, write “**refused**” rather than “unknown”

5. **Avoid abbreviations** or acronyms

Vet could be misinterpreted as a veteran or a veterinarian

# Guidance?

Guidance Document for Industry & Occupation: <https://arcg.is/euKSe>

# Questions?

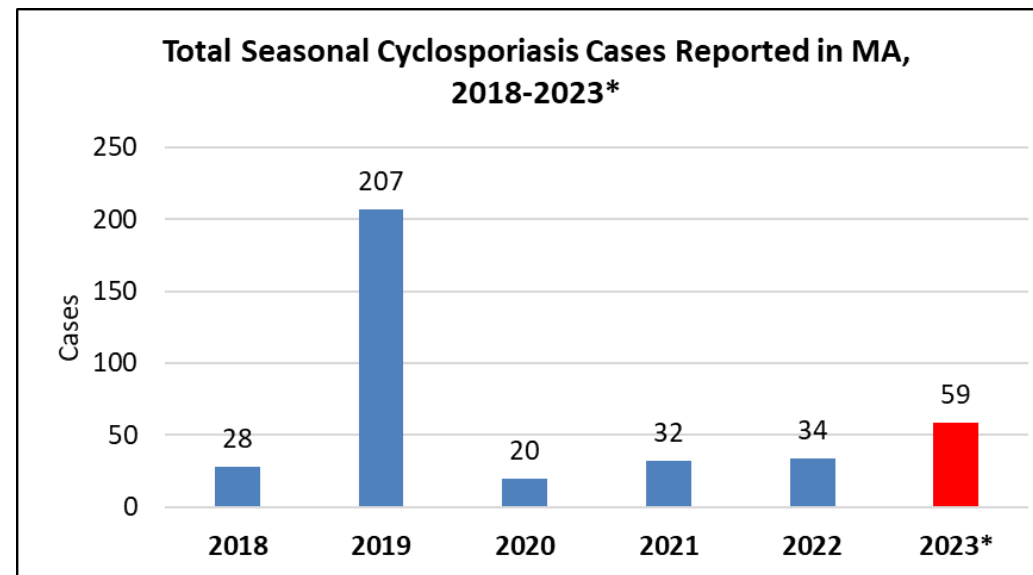
Angela Laramie ([angela.laramie@mass.gov](mailto:angela.laramie@mass.gov))

Occupational Health Surveillance Program

Massachusetts Department of Public Health

# Update on the 2023 *Cyclospora* Season

- Cyclosporiasis, commonly associated with eating contaminated fresh produce, is an **immediate reportable disease from May 1 to August 31**.
- MDPH has noticed an **increase in Cyclo cases** over the last month
  - Most cases appear to be domestically-acquired, requiring collection of detailed food history



\*Case counts for 2023 are through 7/31/23.

These data include both internationally and domestically-acquired cyclosporiasis cases from May 1 to August 31.

Massachusetts Department of Public Health, Bureau of Infectious Disease and Laboratory Sciences. Data are current as of 7/31/2023 and may be subject to change.

# Reminder: Collection of Food History

- Detailed food history should be collected for **all cases who spent all or part of their 14-day incubation period in the US**
  - CNHGGQ 2023 Food History Dynamic Question Package
- When prompted in MAVEN, please obtain additional details for certain high-risk produce items
  - **IF EATEN AT HOME:**
    - **STORE NAME AND LOCATION OF PURCHASE**
    - **DATE OF PURCHASE**
    - **BRAND**
    - **TYPE OF PACKAGING** (prepackaged bag vs. clam shell vs. loose)
  - **IF EATEN OUTSIDE OF HOME:**
    - **ESTABLISHMENT NAME AND LOCATION**
    - **DATE OF CONSUMPTION**
    - **DESCRIPTION OF MEAL**

Did you (your child) eat fresh red raspberries?

Yes

What was the brand(s) and where was it purchased (name(s), location(s)) if eaten at home?

Brand A from Grocery Store B in in Town C. Plastic container. Purchased 7/5/23.

List the name(s) of the establishment(s) and location(s) if eaten outside the home:

Restaurant D in Town E. On cheesecake. Ate on 7/3/23.

[2022 Cyclospora Case Investigations for LBOH Webinar](#) is available on MAVEN Help!



# Foodborne & Waterborne Outbreak Needs Assessment Survey

- MDPH is requesting participation in a survey to identify the needs of our local partners who conduct foodborne and waterborne enteric disease and outbreak investigations.
- This survey is intended for Epidemiologists, Public Health Nurses, Health Agents, Inspectors, and/or other roles that involve investigating foodborne and waterborne disease.
  - Feel free to forward to other co-workers.
- We need your help as responses will directly inform our future trainings and resources we provide.
- Survey sent out on Wednesday 7/26 and feedback is requested by 8/28.
- Please contact Sarah Scotland, Epidemiologist, at [Sarah.scotland@mass.gov](mailto:Sarah.scotland@mass.gov) with any questions or issues accessing the survey link.
  - [Foodborne & Waterborne Outbreak Needs Assessment Survey](#)

# Connect with DPH



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Massachusetts Department of Public Health



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