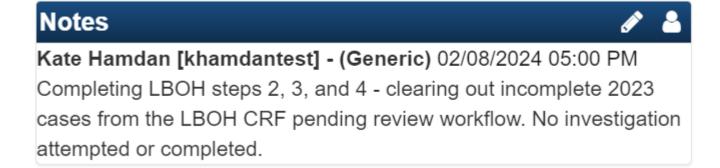
Quick MAVEN Reminders

 Reminder to check your Immediate, Routine, Pending Case Report Form Workflows!

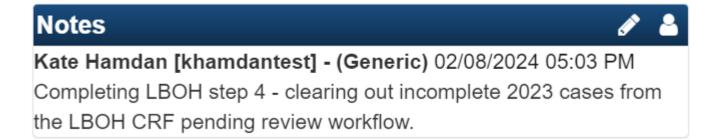
- 2023 Case Closing
 - Starting this week, DSAI staff will complete any 2023 cases that remain in the workflows by completing steps 2-4 in the Administrative Question Package. Staff will leave a note in any cases where question packages are updated.

Quick MAVEN Reminders

If no steps are filled out:



If any steps are filled out:





Massachusetts Department of Public Health

MDPH Tuesday Infectious Disease Webinar Series PivotTable Training for LBOH

February 13, 2024

Lionel White, MSIT, Senior Surveillance Research Analyst Lizzy Mello, MS, Senior Surveillance Epidemiologist Kate Hamdan, MPH, Senior Surveillance Epidemiologist Bureau of Infectious Disease and Laboratory Sciences MA Department of Public Health

Overview of MAVEN Reports

- Which reports are accessible to you?
- Why are reports useful?
- What's in a report?
 - Case information
 - Tracking information
 - Timeliness
- Best reports to use for PivotTables
- How to run a report

Which Reports can you access?

Report access will vary depending on the role and responsibilities of the user in MAVEN. For example: Local Board of Health staff who is responsible for disease case investigation and following up will only have access LBOH related reports.

Examples of Commonly ran LBOH reports.

- LBOH Basic Line List
- LBOH Events by Time Period
- LBOH Count Events Per Disease and Classification in Jurisdiction
- COVID-19 LBOH Confirmed and Probable Line List Report

Why are reports useful?

Usefulness of Reports

- Reports provide a view of all events within a jurisdiction or facility that exist in MAVEN regardless if they're recent, old, or the investigation status is pending or completed.
- Reports can be used for tracking information.
- Depending on the report type the output can be aggregate or list format.
- Timeliness of the data in reports allows for quicker response and followup.

Information in a Report

 Reports include case information, demographic information, case counts, and notes.

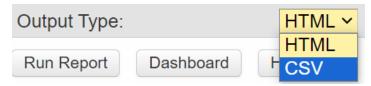
Best Reports for PivotTables

• The best type of report to use in a PivotTable is a case-level report formatted as a list.

• Microsoft Excel tables are already in list format and are good candidates for PivotTable source data.

| CaseID | Disease | Disease Classificat | Event Date | Create Date | First Name | Middle Name | Last Name | County | CRF_COMPLETE | CRF_COMPLETED_BY |
|-----------|---------|---------------------|------------|-------------|------------|-------------|-----------|------------------|--------------|------------------|
| 100002504 | MENUT | CONFIRMED | 3/7/2023 | 3/7/2023 | Tammy | T | Menutest | Middlesex County | YES | LBOH |
| 100003870 | BAB | PROBABLE | 9/1/2023 | 12/8/2023 | Frank | Α | Babtest | Middlesex County | YES | LBOH |
| 100003878 | LEG | CONFIRMED | 9/1/2023 | 12/8/2023 | Joey | I | Legtest | Middlesex County | YES | LBOH |

• Most MAVEN reports contain case-level information in list format. Reports can be download as CSV, Excel, and HTML files. The CSV file can be opened using Microsoft Excel.



How to run a report

- Step 1: Navigate to reports page Select the report that you would like to run.
- Step 2: Select parameters

Parameters allow you to customize your report output. Different reports may have different options for parameters.

Most reports will include at minimum: Event Date, Report Format, Classification, and Official City.

How to run a report (cont.)

• Step 3: Run Report

When you have your parameters set, hit 'Run Report'.

If you ran the report in CSV format, a file will appear in your downloads folder or the folder where your file downloads usually default.

*Note: Depending on the size of your report, the export may take a few minutes to complete. Please, be patient and do not navigate away from the screen while the report is running.

If you ran the report in HTML format, a new screen will appear in your web browser with your report.

Please make sure to delete the file from your downloads or default folder once you have moved or stored it appropriately.

Overview of PivotTables

- What are PivotTables and why are they useful?
- How to set up a PivotTable
 - Navigating Excel
 - Set up your data
 - Inserting a Pivot Table
- Summarizing data with a PivotTable
- Tips and tricks
 - Updating a PivotTable
 - Saving your results
 - Adding charts
 - More resources

Why use a PivotTable?

| F | G | Н | I |
|----------------|--------|-------------------|------------------------|
| Age (in years) | Gender | Is case Hispanic? | Race |
| 60.0219 | Female | No | White |
| 85.1116 | Male | No | White |
| 70.3655 | Female | No | White |
| 53.3142 | Male | No | White |
| 79.4552 | Male | Unknown | White |
| 67.9398 | Male | No | White |
| 55.1321 | Female | No | White |
| 83.3922 | Female | Unknown | White |
| 55.4771 | Male | Yes | White |
| 58.6502 | Female | Unknown | White,Other |
| 28.898 | Male | No | White,Other |
| 32.9062 | Female | No | White, American Indian |
| 30.8583 | Female | No | White |
| 31.8905 | Female | Unknown | White |
| 21.2375 | Female | No | White |
| 49.41 | Male | No | White |
| 32.7912 | Male | No | White |
| 40 2075 | r1- | NI- | 1 A IL : 4 L |

- Looking at a data set like this one, how would you answer the following questions:
 - How many cases have their gender listed as "female"?
 - What percent of cases identify as Hispanic?
 - What's the age distribution of cases?

What are PivotTables?

- A **pivot table** is a table of aggregated, grouped values
- A **PivotTable** is Microsoft's function to create pivot tables
 - Made as a part of Microsoft Excel
 - Other spreadsheet software may have similar functions under a different name
 - Easily aggregates (adds, finds the average of etc.) another table or a set of data by one or more categories
 - For example, a PivotTable could count a list of cases by year and town
- Aggregation can include sums, averages, or other statistics
- Groups can be nearly anything included in the data set
- Can make graphs/charts too
- Useful because it's a fast way to look at data

Example PivotTable

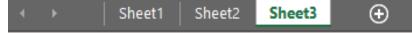
| À | A | В | C | D | E | F | G | Н | 1 | J | K | L | М | N |
|---|---------------------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------------|
| 1 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | |
| 3 | Count of Event Date | Column Labels 🔻 | | | | | | | | | | | | |
| 4 | Row Labels | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Grand Total |
| 5 | ⊞ 2020 | | 1 | 99 | 652 | 99 | 18 | 6 | 10 | 8 | 27 | 46 | 129 | 1095 |
| 6 | ⊕ 2021 | 116 | 44 | 22 | 17 | 10 | 4 | 6 | 18 | 26 | 17 | 28 | 99 | 407 |
| 7 | ⊕ 2022 | 154 | 21 | | | | | | | | | | | 175 |
| 8 | Grand Total | 270 | 66 | 121 | 669 | 109 | 22 | 12 | 28 | 34 | 44 | 74 | 228 | 1677 |
| 0 | | | | | | | | | | | | | | |

Navigating Excel

- Excel is a part of the Microsoft Office software
- For this webinar we are using Microsoft Excel for Microsoft 365 v. 2312 on Windows
 - If you have an older version, you should still have PivotTables (PivotTables were added to Excel in 1994!)
 - Web version of Excel also has PivotTables
- Basic steps for PivotTables will be the same
 - Some parts might have slightly different names, colors, buttons, depending on your version of Excel

Terms

- Excel
 - Refers to Microsoft Excel, a software program sold by Microsoft that creates spreadsheets
- Workbook
 - An Excel file. The file can contain multiple spreadsheets within it.
- Sheet
 - An individual spreadsheet within the workbook
 - Some people call them "tabs" because they look like this at the bottom:



- Ribbon
 - Menu at the top of all Microsoft programs
- Tab
 - Sections within the Ribbon

Terms

CSV

- Stands for "comma separated values"
- Is a file type that works with Excel and other programs
- Is a simpler format and does not have all the functions
 - For example, you cannot save multiple sheets in one CSV file

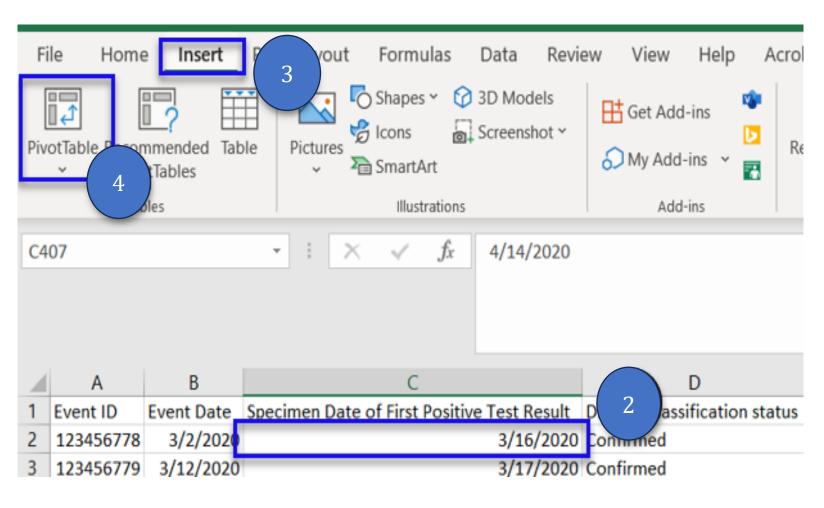
• XLSX

- The newer format type for Excel
- Has all the functionality that Excel has to offer
- Upgrade of the XLS format

Set up your data

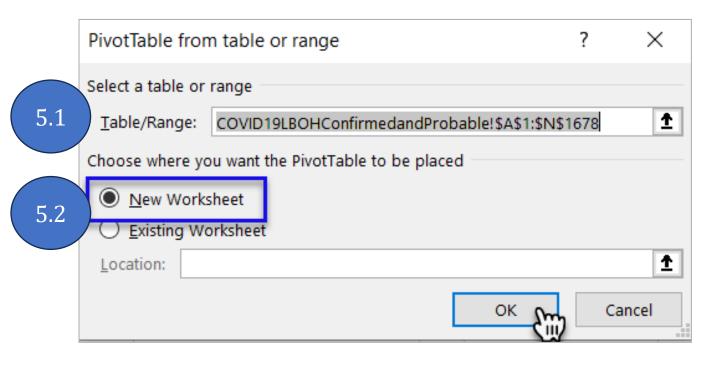
- PivotTables are only as good as the data within them
- Considering deleting or not selecting columns you won't use
 - Do the same for titles, footnotes, or other "extras"
- Seeing a lot of missing or incorrect values? Make sure your cases in MAVEN are filled out completely

How to create a PivotTable



- 1. Open your Workbook and go to the Sheet with your data
- 2. Place cursor in one of the fields in the spreadsheet
- 3. Go to the Ribbon and click on Insert tab
- 4. Click on PivotTable button

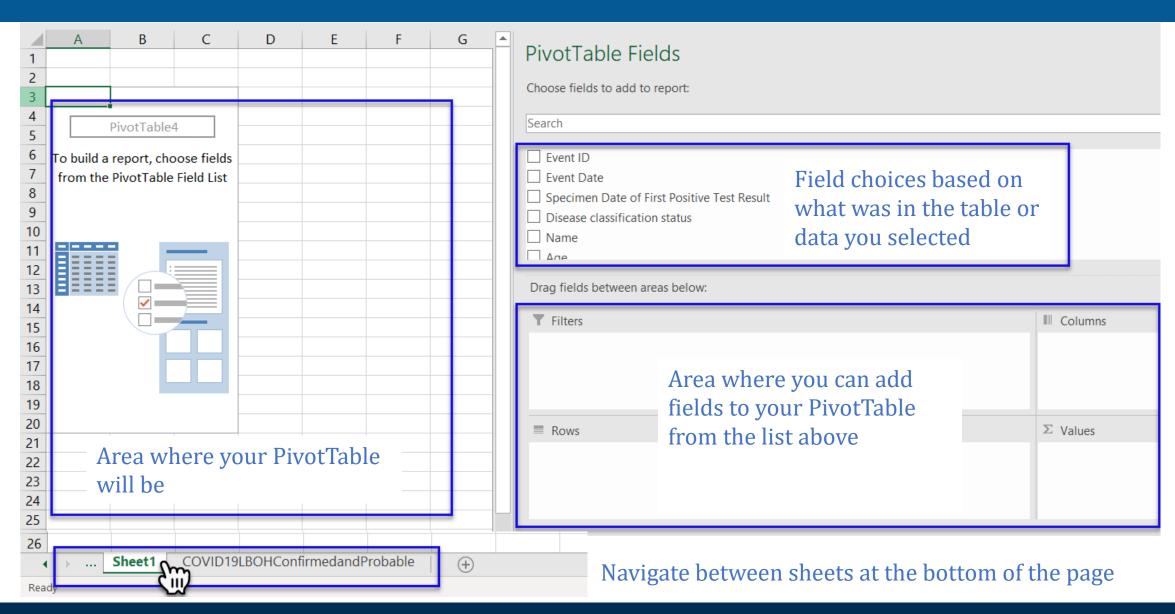
How to create a PivotTable



A new window will open

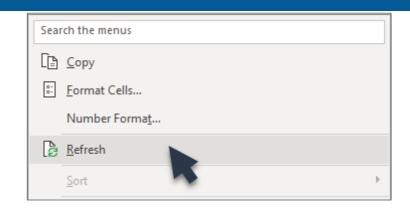
- 5. Confirm PivotTable settings
 - 1. Table/ Range includes all your data
 - 2. Select where you want the new PivotTable to be placed (we recommend a new sheet)

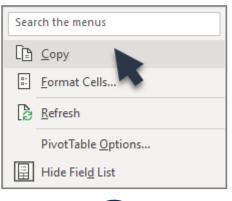
New PivotTable

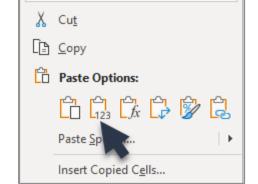


Tips and Tricks

- Refresh the data in your PivotTable
 - If you correct or update data in your data table, you want it to show on the PivotTable
 - Right-click on the PivotTable and choose Refresh
 - Remember! Making corrections and updates in MAVEN is the only way to make sure that the data are correct every time you run your reports
- Save your results
 - If you don't want your table to be changed or want to change the formatting, consider saving your PivotTable as a separate table
 - Select the whole table, copy it, go to a new place in your workbook, and paste it, choosing "Values" in the Paste Options







Search the menus

1

Tips and Tricks

- Add charts with PivotCharts
 - Once you have mastered PivotTables, you can move on to PivotCharts
 - Same format, windows, and basic functions as PivotTables
 - Fast way to make a chart

Pivot Table Resources

- Previous MAVEN Webinars
 - <u>Beginner level introduction</u> (7 minutes)
 - <u>Intermediate session</u> (1 hour and 5 minutes)
- StoryMap
- YouTube tutorials
 - Beginner level PivotTable tutorial (13 minutes)
- Microsoft documentation
 - Overview of PivotTables and PivotCharts
 - Create a PivotTable to analyze worksheet data
 - More advanced:
 - Create a PivotChart
 - Calculate values in a PivotTable
- This recording will be available on MAVEN Help soon.
- Use YouTube and Google to search for other tutorials and resources!

Pivot Table Demonstration

- Practice scenario start to finish
 - Run a report
 - Opening Excel
 - Adding a PivotTable
 - Finding answers with the PivotTable
 - Saving results