

Project Mercury (Hg) - Tableau Viz: Instructions for use

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Main dashboard

1. Navigate to the Project (Hg) Mercury Tableau Public Viz (may need to copy the following link into a web search bar):
<https://public.tableau.com/profile/fomes#!/vizhome/ProjectHg/Main?publish=yes>
 - a. You will be brought to the Main dashboard, containing:
 - i. Navigation pane on the upper left
 - ii. Brief summary of Project (Hg) Mercury
 - iii. Interactive Map displaying active Project (Hg) Mercury sites
 1. Clicking on a state brings you to “Data Table” and filters the view by the selected state
 2. Multiple states can be selected using the Rectangle, Radio, and Lasso options
 - a. Other map options: *Zoom* (Scroll wheel), *Pan* (Shift + Drag), *Zoom Area* (Ctrl + Shift + Drag).

i.

Main | Data Table | Graphs | Maps | Keene Mapping

ii.

Project (Hg) Mercury

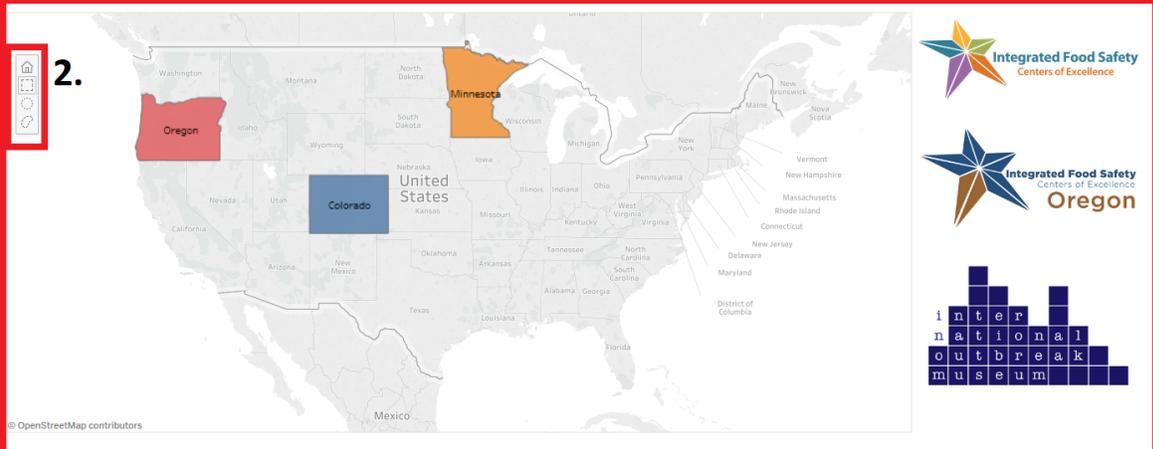


Project (Hg) Mercury is a multi-site collaboration led by the Oregon Food Safety Center of Excellence (FOMES). This project utilizes existing Salmonella and STEC case exposure data to create aggregates of background consumption estimates for use in binomial probability calculations during outbreak investigations. Comparing aggregated background rates from multiple regions will also help provide valuable context during outbreak investigations. Other sites collecting these types of data are encouraged to participate in this project.

Current sites reporting (3): CO, MN, OR
Current sites collecting data (12): AL, CA, FL, KS, NH, NY, NYC, SD, TN, UT, WA, WY.

iii.

2.



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Data Table dashboard

2. Navigate to the “Data Table” dashboard by pressing the “Data Table” tab on the navigation pane **OR** by selecting the desired state(s) on the “Main” dashboard
 - a. The “Data Table” dashboard, and following dashboards will contain the relevant objects:
 - i. Title displaying the current Keene ID and State filter.
 - ii. Filter pane on the right
 - iii. Undo, redo, reset, download, and full-screen buttons on the bottom right

Keene ID: All | State: All **i.**

a3 LocalExpDescrip	a6 Keene ID and Description	a1 State	Yes	<1	1_5	6_17	18_65	66+	Spring	Summer	Fall	Winter	AI_AN	Asian	Black
Any animals with recent diarrhea	2254 - contact with pet that had diarrhea	Colorado	4.7%	8.5%	2.6%	2.7%	5.2%	5.8%	5.9%	3.8%	4.2%	5.1%	0.0%	0.0%	0.0%
Any dairy product	Null	Colorado	70.0%	23.6%	78.7%	78.5%	70.2%	70.8%	70.6%	70.1%	70.3%	66.9%	57.1%	58.6%	60.3%
Any ground beef	2442 - ground beef (home or away)	Colorado	53.7%	10.4%	50.6%	63.3%	56.6%	50.8%	54.1%	53.8%	55.2%	48.5%	37.5%	18.5%	54.7%
Anyone in household handle raw beef	2354 - raw ground beef prepared in home	Colorado	44.4%	33.3%	51.5%	61.0%	38.0%	45.8%	40.0%	43.6%	48.1%	42.9%	33.3%	25.0%	
Anyone in household handle raw fish or s...	Null	Colorado	16.0%	11.1%	13.2%	13.3%	15.8%	24.1%	17.5%	13.2%	18.2%	14.3%	14.3%	0.0%	
Anyone in household handle raw poultry	Null	Colorado	41.0%	33.3%	51.6%	42.6%	39.8%	34.4%	38.7%	42.4%	43.6%	30.8%	50.0%	66.7%	
Apples	404 - apples	Minnesota	39.7%	40.0%	60.3%	52.0%	34.4%	33.8%	34.0%	41.0%	46.5%	31.7%	40.0%	37.5%	37.1%
Asparagus	343 - asparagus	Minnesota	7.2%	4.0%	3.4%	2.0%	8.1%	11.9%	11.1%	7.2%	4.8%	6.3%	10.0%	3.2%	0.0%
Avocado	401 - avocado	Minnesota	18.5%	32.0%	14.0%	12.5%	22.4%	7.5%	21.0%	22.5%	12.9%	15.9%	10.0%	9.7%	6.1%
Bananas	425 - bananas	Minnesota	55.9%	56.0%	67.2%	53.1%	53.5%	57.4%	60.0%	52.9%	56.7%	55.6%	40.0%	56.3%	67.6%
Beef eaten out (restaurant, deli, et..	Null	Colorado	33.1%	2.1%	24.3%	28.6%	41.0%	27.3%	31.4%	35.4%	35.6%	25.5%	28.6%	18.5%	30.8%
Beef or foods with beef in them	Null	Colorado	64.1%	13.8%	59.5%	71.3%	68.5%	63.5%	61.3%	65.2%	66.9%	58.3%	57.1%	41.4%	62.1%
Bison or buffalo meat	724 - bison (buffalo) meat	Colorado	1.9%	0.0%	4.4%	0.0%	1.8%	1.6%	1.9%	1.9%	1.5%	0.0%	0.0%	0.0%	
Block cheese	289 - cheese sold as or cut from solid blocks	Minnesota	19.0%	8.0%	25.9%	8.2%	19.8%	22.1%	12.0%	22.5%	16.7%	25.4%	10.0%	0.0%	8.3%
Broccoli	334 - broccoli	Minnesota	28.9%	16.0%	34.5%	30.6%	28.7%	28.4%	28.0%	30.4%	25.4%	33.3%	20.0%	25.8%	29.4%

ii.

Pathogen
 Salmonella
 STEC

State
 (All)
 Colorado
 Minnesota
 Oregon

Keene ID and Description
 ((All))

iii.

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The data above only appear if the State and Keene ID and Description are checked to “(All)”, and if the Pathogen Salmonella is selected.

Data Extraction (from Data Table)

3. Although data can be extracted from all dashboards, “Data Table” is where data extraction will occur. The other dashboards are primarily for visualization.
 - a. The “Data Table” dashboard is similar to the Data Spec excel worksheet used to input site-specific aggregate data
 - b. The column headers are:
 1. Local exposure description
 - a. Site-specific local question language
 2. Keene ID and Description (Keene Code)
 - a. Unique exposure identifier and description, assigned centrally.
 3. State
 4. Aggregate measures

1.	2.	3.	4.
a3_LocalExpDescrip	a6_Keene ID and Description	a1_State	Yes <1 1_5 6_17 16_65 66+

- c. Filter by a single Pathogen (Salmonella) and State (Colorado)
 - i. Uncheck “(All)” under Pathogen and State in the filter Pane
 1. Check “Salmonella” and “Colorado” respectively

AND filter the Keene ID by all milk exposures.

 - ii. Click on the Keene ID dropdown on the filter pane.
 - iii. Uncheck “(All)”
 - iv. Type “milk” in the search bar
 - v. Check the following exposures:
 1. **269 – raw (unpasteurized) milk**
 2. **270 – pasteurized (regular) milk**
 3. **932 – any dairy product made from raw milk**

<input checked="" type="checkbox"/> 269 - raw (unpasteurized) milk
<input checked="" type="checkbox"/> 270 - pasteurized (regular) milk
<input checked="" type="checkbox"/> 932 - any dairy product made from raw milk

milk

(None) ▾

d. Your dashboard should look like this:

a3 LocalExpDescrip ²	a6 Keene ID and Description	a1 State	Yes	<1	1_5	6_17	18_65	66+	Spring	Summer	Fall
Nonpasteurized (raw) milk	269 - raw (unpasteurized) milk	Colorado	0.6%	0.9%	1.1%	0.7%	0.4%	1.1%	0.7%	0.6%	0.9%
Other products made from raw milk (Kief..	932 - any dairy product made from raw milk	Colorado	1.9%	0.0%	2.3%	2.0%	2.0%	2.2%	1.4%	2.2%	2.1%
Pasteurized cow's or goat's milk	270 - pasteurized (regular) milk	Colorado	60.6%	10.5%	73.1%	80.0%	55.0%	61.9%	61.3%	60.8%	60.3%

Your percentages (%) may be different than above, as data is updated regularly.

e. Generating a ***Crosstab*** is the cleanest way to extract table data. To do so:

- i. Press “Download” on the bottom right (note: it is a very small icon and you might have to scroll down the viz)
- ii. Click on Crosstab (3rd option)

1. Press Download after the crosstab is generated

Keene ID: 269 - raw (unpasteurized) milk, 270 - pasteurized (regular) milk, 932 - any dairy product made from raw milk | State: Colorado

a3 LocalExpDescrip ²	a6 Keene ID and Description	a1 State	Yes	<1	1_5	6_17	18_65	66+	Spring	Summer	Fall	Winter	AL_AN	Asian	Black Pe
Nonpasteurized (raw) milk	269 - raw (unpasteurized) milk	Colorado	0.6%	0.9%	1.1%	0.7%	0.4%	1.1%	0.7%	0.6%	0.9%	0.3%	0.0%	0.0%	1.7%
Other products made from raw milk (Kief..	932 - any dairy product made from raw milk	Colorado	1.9%	0.0%	2.3%	2.0%	2.0%	2.2%	1.4%	2.2%	2.1%	1.6%	0.0%	0.0%	1.8%
Pasteurized cow's or goat's milk	270 - pasteurized (regular) milk	Colorado	60.6%	10.5%	73.1%	80.0%	55.0%	61.9%	61.3%	60.8%	60.3%	63.3%	42.9%	40.0%	

Pathogen
 Salmonella
 STEC

State
 (All)
 Colorado
 Minnesota
 Oregon

Keene ID and Descrip
 (Multiple values)



Crosstab and other download options may be grayed out if you don't have the current dashboard window selected. Select the dashboard window by clicking on any of the row headers: **a3_LocalExpDescrip**, **a6_Keene ID and Description**, **a1_State**.

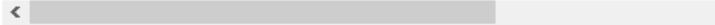
Furthermore, you can pick which variables you want extracted by clicking a column header, then choosing to either only keep that variable or exclude it.

a3_LocalExpDescrip	a6_Keene ID and Description	a1_State	Yes	<1	1_5	6_17	16_65	66+	Spring
Pasteurized cow's or goat's milk	270 - pasteurized (regular) milk	Oregon	35.7%						13.5%
Nonpasteurized (raw) milk	269 - raw (unpasteurized) milk	Oregon	0.5%						0.0%
Other products made from raw mil..	932 - any dairy product made from raw milk	Oregon	1.9%	0.7%	0.0%	0.3%	3.7%	0.8%	0.0%

Keep Only
 Exclude

3 items selected · SUM of Measure Values: **0.3812**

Yes

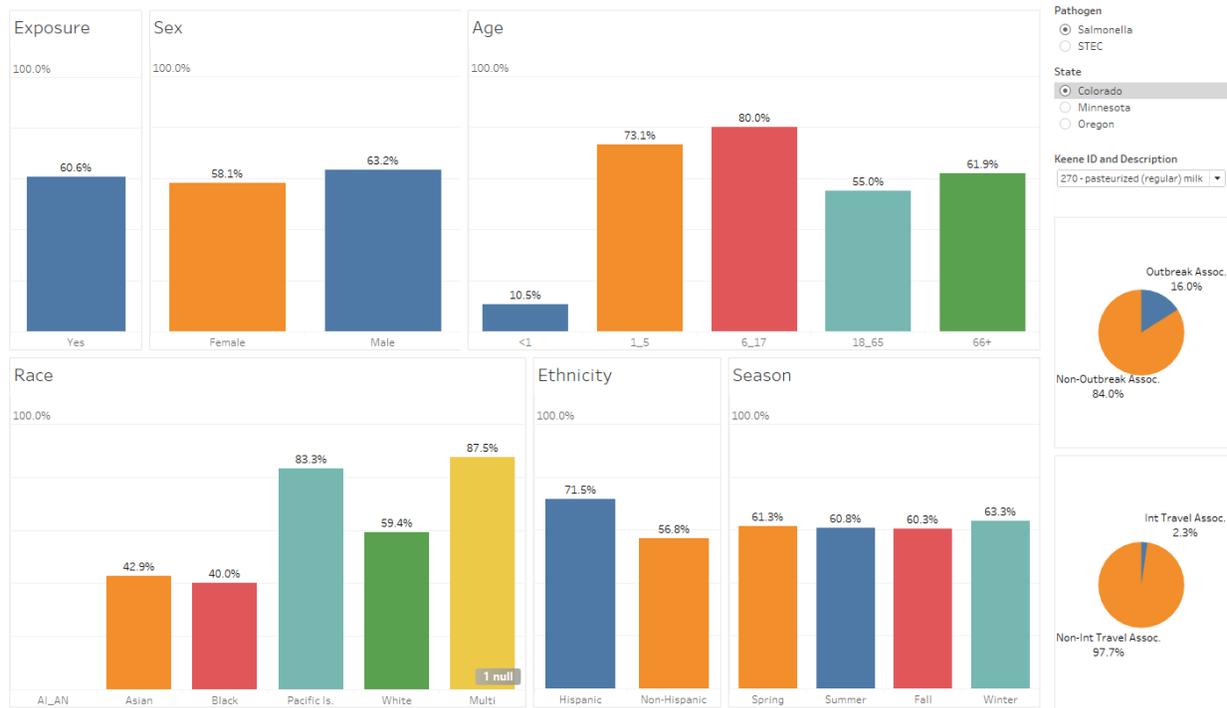


The other dashboards, Graphs, Maps, and Keene mapping are useful for visualizing data and exposure mapping.

Graphs Dashboard

4. Navigate to the Graphs dashboard on the navigation pane
 - a. This dashboard compares aggregate values, and helps visualize the Data Table dashboard.

Keene ID: 270 - pasteurized (regular) milk | State: Colorado



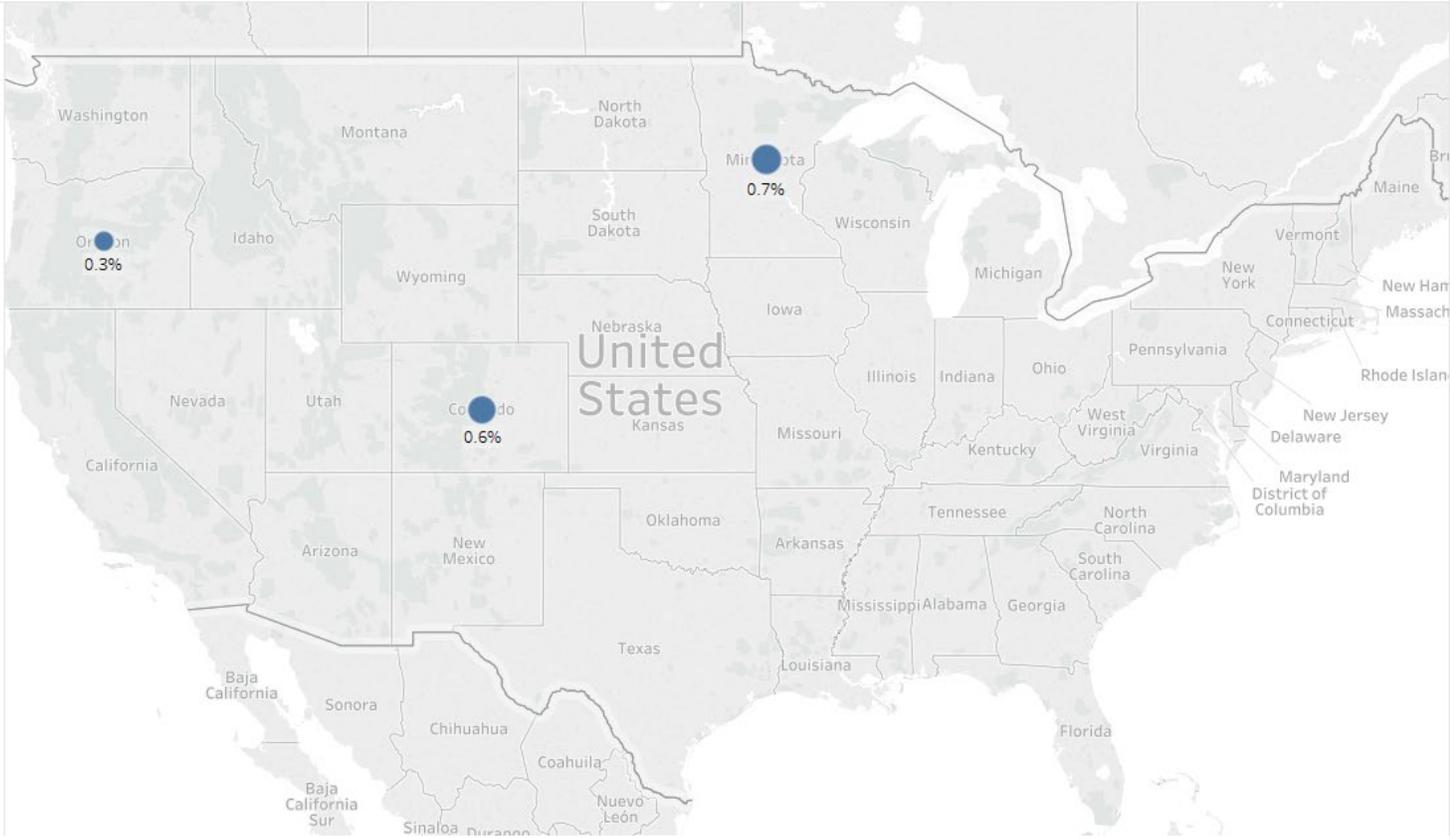
Filters on all dashboards are shared, but the filters on the Graphs dashboard are independent. More than one State or Keene ID will make the graphs clunky.

Maps Dashboard

- 5. Navigate to the Maps dashboard on the navigation pane
 - a. This dashboard compares Keene code(s) across selected states, as a dot density.

a6 Keene ID and Description

269 - raw (unpasteurized) milk



Keene Mapping dashboard

6. Navigate to the Keene Mapping dashboard on the navigation pane
 - a. This dashboard illustrates how Keene Codes are mapped to state specific exposures.

a6 Keene ID and Description	a3 LocalExpDescrip	a1 State	a8 questionType
2373 - any other beer (excluding ground..	Null	Oregon	Parent Question / Stand A..
2376 - Chinese water dragon	Null	Oregon	Structured Prompted
2379 - exposure to baby poultry	Null	Oregon	Parent Question / Stand A..
2380 - exposure to ducklings	Null	Oregon	structured prompted
2381 - exposure to goslings	Null	Oregon	structured prompted
2410 - cheese curds	Cheese curds	Minnesota	Parent Question / Stand A..
2420 - any fresh tomatoes	Tomatoes (e.g. vine-on, heirloom, roma, beefste..	Minnesota	Parent Question / Stand A..
	Uncooked, fresh tomatoes	Colorado	Parent Question / Stand A..
2421 - any mushrooms (fresh or dried)	Mushrooms (white, portabella, crimini)	Minnesota	Parent Question / Stand A..
2424 - any sausage	Sausage	Minnesota	Parent Question / Stand A..
2426 - municipal or city water	Municipal or city water	Minnesota	Parent Question / Stand A..
2427 - well water	Drink water from a private well	Colorado	Parent Question / Stand A..
	Well water	Minnesota	Parent Question / Stand A..
2428 - Other drinking water (excluding ..	Other drinking water (excluding municipal, well, ..	Minnesota	Parent Question / Stand A..
2429 - lived on, worked on, or visited a farm	lived on, worked on, or visited a farm	Minnesota	Instructed Prompted
	Visit, work, or live on a farm	Colorado	Parent Question / Stand A..
2431 - visit a farm	visited farm	Minnesota	Parent Question / Stand A..
2432 - Cow (present)	Cow (present)	Minnesota	Instructed Prompted