

Measure of Variability (MOV)

As it appears on CHARTS

What is Measure of Variability (MOV)?

The probable range of values resulting from random fluctuations in the number of events.

- If the county rate is higher or lower than the statewide rate and the county's MOV range of variability does not include the statewide rate, then the difference between the county rate and the statewide rate is statistically significant.
- If the county's MOV range of variability does include the statewide rate, then even if the county's rate is higher or lower than the statewide rate, the rates are not considered to be statistically significant.

Why Use MOV?

MOV is useful for comparing county rates to statewide rates. In other words, MOV addresses this question: Is the difference between a county's health statistic and the statewide statistic within the range of random variation?

Technical Note:
MOV is not calculated when the numerator is below 5 or the denominator is below 20. The MOV is calculated using the normal approximation to the binomial distribution, 2-tailed test at the 95% confidence level.

MOV Tables in FLHealthCHARTS

To see MOV in data tables, select "Crude" from the Rate Type dropdown menu on an indicator page.

Rate Type

Crude

In data tables that include MOV, an asterisk (*) indicates rates that are statistically significantly different from the state rate.

Deaths From Cancer, Rate Per 100,000 Population, 2023

MOV



County	Count	Denom	Rate	MOV
Florida	47,088	22,685,583	207.6	1.9
Alachua	493	291,459	169.1*	14.9

Example: The crude death rate for Alachua County is 169.1 and the MOV is 14.9. Therefore, the probable range of values is 154.2-184.0 cancer deaths per 100,000 population.

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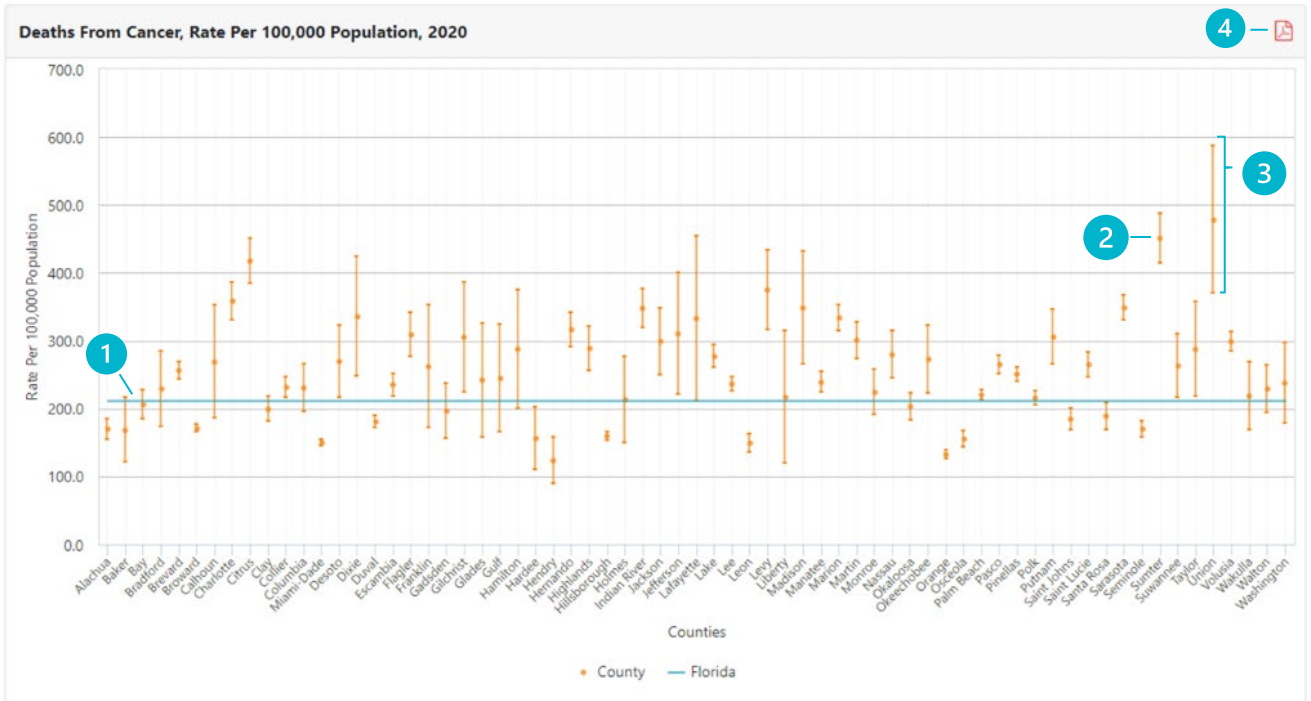
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MOV Graphs in FLHealthCHARTS

To see the MOV graph, click the blue “MOV” icon at the top of the data table (located at the bottom right of the indicator page).



- 1** The state rate is represented by a horizontal blue line.
- 2** County rates are represented by orange dots.
- 3** The MOV is represented by the vertical orange end bars.
- 4** MOV graphs can be exported to PDF to print or save.



Interpreting MOV Graphs Example: Brevard, Charlotte, Citrus, and Collier counties’ rates are statistically significantly higher than the state rate because they are both above the state rate and do not overlap the state rate line.

Meanwhile, Baker, Bay, Bradford, Calhoun, and Clay counties’ rates are not statistically significantly different because they overlap the state rate line.