

Calculating Averages

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Averages of indicator results are properly weighted when you aggregate data by activity, time period, disaggregation, or geographic place.

Let's look at an example. Say we're looking at the indicator "% people who passed the training test" at two locations in Haiti.

- If 1 out of 2 people in Location A passed the training test, that's 50% in Location A
- and 99 out of 100 people in Location B passed the training test, that's 99% in Location B.

If you took an average of these, it would be $(50\% + 99\%) / 2 = 74.5\%$. This would be incorrect. It is NOT true that 74.5% of people passed the training test in Haiti.

The correct calculation would show that in Haiti, 100 people out of 102 total people passed the test, or $100 / 102 = \sim 98.04\%$.

So, to weight averages of percentages properly:

- Report the numerator and denominator as separate indicators.
- Compute the percentage as a formula indicator.

For direct entry indicators that are handled as averages, equal weight is given to each data point that is entered directly.

DevResults uses two methods to calculate the aggregates of averages:

1. **Direct entry indicators:** Any aggregate result shown is an average of each number that was entered directly (within your aggregating criteria). For example, if you look at an aggregated average for Activity A, 2016, females in Haiti, the value you'd see in the report would be an *average of every data point* entered for Activity A, 2016, females in Haiti. There could be hundreds of data points if you've reported this indicator at many locations, for multiple reporting periods in 2016, and for several age groups. Whether or not you view all of the data points in a report, they would all be averaged together to show the aggregate average for Activity A, 2016, females in Haiti.
2. **Formula indicators (like a calculation of numerator/denominator):** Any aggregate result shown is [a sum of every relevant numerator value] divided by a [sum of every relevant denominator value] for the component indicators.

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