

# “How can I use the STDEVPA function in Google Sheets to calculate the standard deviation for a population?”

Authored by  
**stats writer**

July 1, 2024

## RECOMMENDED CITATION

stats writer (2024). *“How can I use the STDEVPA function in Google Sheets to calculate the standard deviation for a population?”*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=163155>

The STDEVPA function in Google Sheets is a useful tool for calculating the standard deviation for a population. It takes a range of values as its input and returns the standard deviation for the entire population, including all data points. This function is particularly helpful when dealing with large data sets, as it provides a more accurate representation of the spread of the data. By using the STDEVPA function, users can easily and efficiently calculate the standard deviation for a population in their Google Sheets spreadsheet.

## STDEVPA

Calculates the standard deviation based on an entire population, setting text to the value `0`.

### Sample Usage

```
STDEVPA(1,2,3,4,5,6,7,8,9,10)
```

```
STDEVPA(A2:A100)
```

### Syntax

```
STDEVPA(value1, )
```

`value1` - The first value or range of the population.

`value2, ...` - Additional values or ranges to include in the population.

### Notes

Although `STDEVPA` is specified as taking a maximum of 30 arguments, Google Sheets supports an arbitrary number of arguments for this function.

If the total number of values supplied as `value` arguments is not at least two, `STDEVPA` will return the `#DIV/0!` error.

`STDEVPA` sets each text value encountered to 0 for the purpose of calculation. To return an error upon encountering text, use `STDEVP`.

`STDEVPA` calculates standard deviation for an entire population. To calculate standard deviation across a sample, use `STDEV`.

`STDEVPA` is equivalent to the square root of the variance, or `SQRT(VARPA(...))` using the same dataset.

## See Also

**VARPA:** Calculates the variance based on an entire population, setting text to the value `0`.

**VARP:** Calculates the variance based on an entire population.

**VARA:** Calculates the variance based on a sample, setting text to the value `0`.

**VAR:** Calculates the variance based on a sample.

**STDEV:** Calculates the standard deviation based on an entire population.

**STDEVA:** Calculates the standard deviation based on a sample, setting text to the value `0`.

**STDEV:** The STDEV function calculates the standard deviation based on a sample.

**DVARP:** Returns the variance of an entire population selected from a database table-like array or range using a SQL-like query.

**DVAR:** Returns the variance of a population sample selected from a database table-like array or range using a SQL-like query.

**DSTDEVP:** Returns the standard deviation of an entire population selected from a database table-like array or range using a SQL-like query.

**DSTDEV:** Returns the standard deviation of a population sample selected from a database table-like array or range using a SQL-like query.

**DEVSQ:** Calculates the sum of squares of deviations based on a sample.

**AVEDEV:** Calculates the average of the magnitudes of deviations of data from a dataset's mean.

## Examples