# What are the seven signs of potentially misleading statistics?

Learn how to identify data used to advance a view while concealing the full picture.

### 1. Just the numbers

A single number alone doesn't provide context. What is the size of the data set? How has that changed over time? How does it compare to related data?

## 2. Cherry-picked data

Statisticians rely on three basic figures – mean (average), median (center of the data) and mode (the number that appears most often) – to provide context. If someone offers just one it's hard to see the whole picture.

### 3. Half-truth statistic

Something may be true for a small subset of the population but not all.

### 4. Anecdote

Relying on individual stories and experiences without demonstrating how those compare to the population as a whole.

### 5. Watch the scale

Statistics and trends can seem larger or smaller than they really are by manipulating the scale on a chart. Always check the fine print.

### 6. Coincidence

Correlation is not causation. Things often happen randomly at the same time – it doesn't mean they are linked or that one necessarily causes the other.

# 7. Meaningless statistic

Numbers don't always tell us why or how something is happening and may lead us to believe something is important because it's associated with a large number.