

Creating Effective Visualizations

With an effective visualization, the results of your analysis can be communicated in a clear and concise manner.

A poor visualization can confuse your audience. Or your audience might misinterpret your intended message.

In future videos, we discuss the importance of knowing your audience and designing visualizations that deliver your intended message to your target audience.

First, you learn what it means to have an "effective visualization."

We define a visualization as "a graphical representation of your data." A visualization might consist of one chart or graph, or it might be more complex. For example, you might have a visualization that includes many small graphs. For the sake of this lesson, we use the terms "visualization," "chart," and "graph" interchangeably.

In an earlier practice, you were introduced to the Measles scenario. The data, which are in the file Measles.jmp, are from the 2010 US Census.

This heat map shows the reported cases of measles for each state in the United States per 100,000 residents since 1928. The color scale for the heat map is shown. Darker colors indicate a higher incidence of reported cases.

The measles vaccine program was introduced in 1963. Before 1963, an estimated 3 to 4 million people per year got measles in the US.

What do you learn from this graph? Has the measles vaccine program been successful in preventing measles?

Here's a more important question, at least for this lesson: Is this an effective visualization?

To answer this question, you need to consider the purpose of the visualization, and then determine whether the graph does a good job of communicating the intended message.