Measuring Progress

Healthy People 2020

It is important to be able to show whether your programs are effective in achieving your target. Follow these basic formulas to calculate baseline, target, and achieved rates for the selected health outcome.

Annual Percentage Change

This measure can be used to track whether progress is on course and determine whether the Healthy People 2020 objectives will be reached. It provides the amount of decline each year that is needed to reach the target.

Formula

$$\{(\text{Target rate} \div \text{Baseline rate})^{[1/(\text{Target year} - \text{Baseline year})]} - 1\} \times 100 = \text{Annual Percent Change}$$

**Example Data Showing Percentage Change
Needed to Reach Healthy People Goal**

	Year	Rate
Target	2020	7/1,000
Baseline	2010	10/1,000

Calculations

$(\text{Target rate} \div \text{Baseline rate}) = 7/1{,}000 \div 10/1{,}000 = 0.700$

$[1/(\text{Target year} - \text{Baseline year})] = 1/(2010 - 2000) = 1/10 = 0.100$

$(\text{Target rate} \div \text{Baseline rate})^{[1/(\text{Target year} - \text{Baseline year})]} = 0.70^{0.10} = 0.965$

$\{(\text{Target rate} \div \text{Baseline rate})^{[1/(\text{Target year} - \text{Baseline year})]} - 1\} = 0.965 - 1 = -0.035$

$\{(\text{Target rate} \div \text{Baseline rate})^{[1/(\text{Target year} - \text{Baseline year})]} - 1\} \times 100 = 0.035 \times 100 = -3.5\%$

A decline of 3.5 percent per year between year 2010 and 2020 is needed to reach the target.

Measuring Progress

This equation is used in measuring progress for each objective:

$$\frac{(\text{Current Status} - \text{Baseline})}{(\text{Year 2020 Target} - \text{Baseline})} \times 100 = \text{Percentage of Target Achieved}$$

Source

Adapted from *Healthy People 2010 Toolkit: A Field Guide to Health Planning.* Developed by the Public Health Foundation, under contract with the Office of Disease Prevention and Health Promotion, Office of Public Health and Science, U.S. Department of Health and Human Services (p. 97).