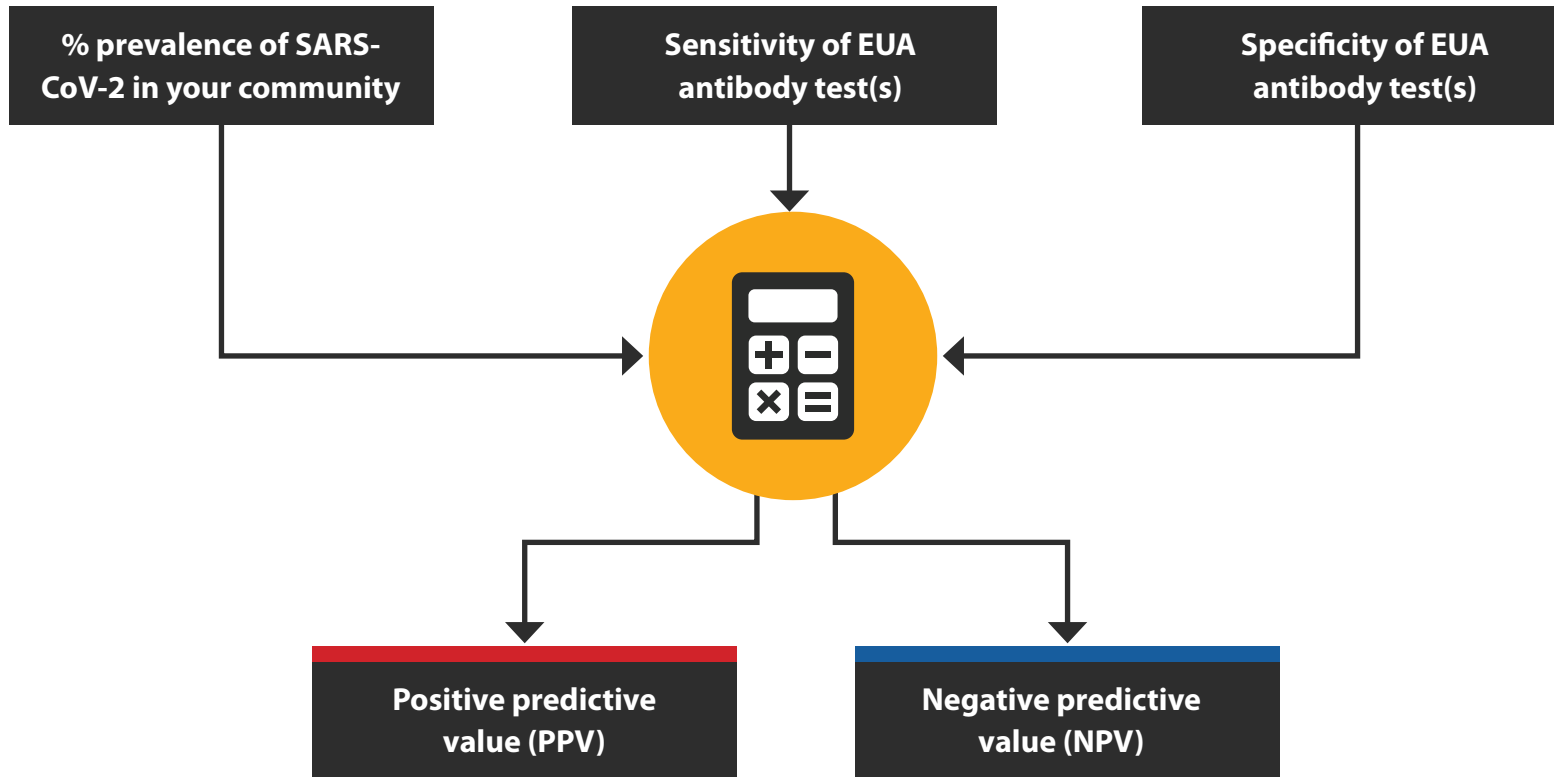


# Use the FDA Calculator to Select a COVID-19 Antibody Test for Your Community

Enter the following into the FDA Calculator to calculate the positive predictive value (PPV) and negative predictive value (NPV) for 1 antibody test or 2 independent tests.







- ▶ Lower sensitivity and specificity = lower PPV and NPV
- ▶ Lower disease prevalence = more false positive results and fewer false negative results
- ▶ Higher disease prevalence = fewer false positive results and more false negative results

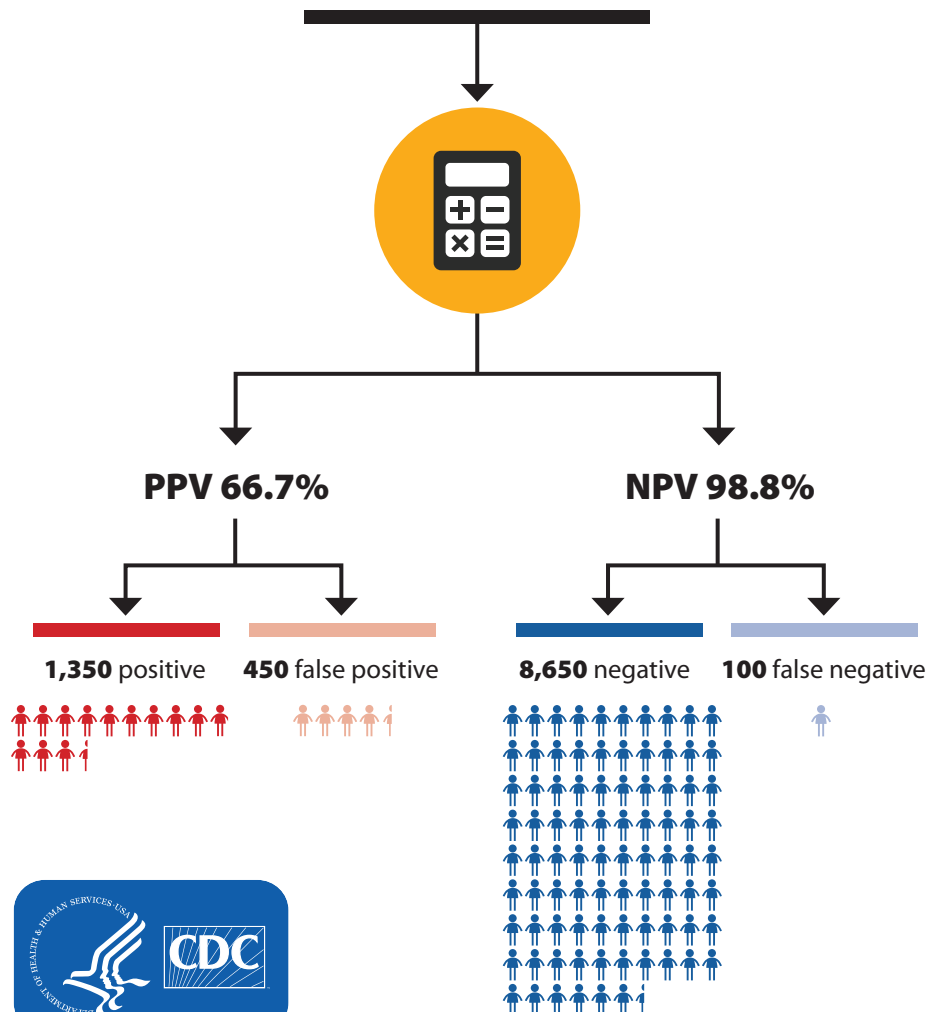


# Example 1: Comparisons of Disease Prevalence Rates & Testing Outcomes for Test with 95% Specificity

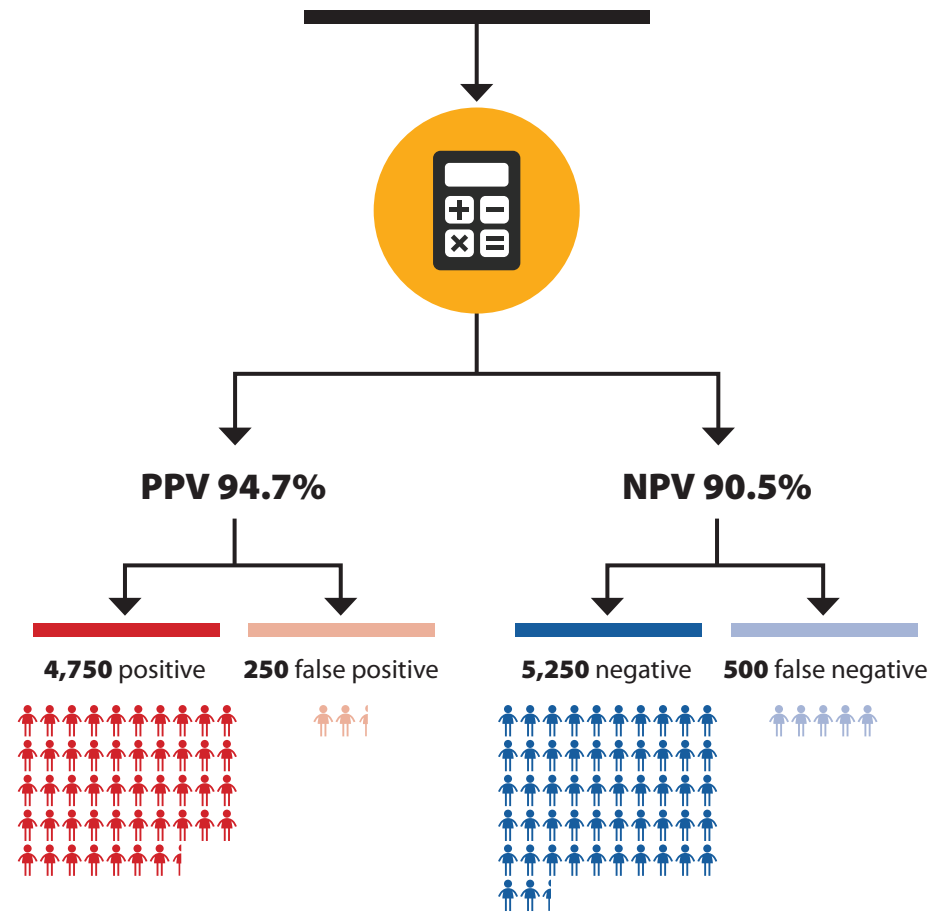
Population: 10,000

KEY:  100 positive results  100 false positive results  100 negative results  100 false negative results

Disease prevalence is 10%  
Sensitivity is 90% | Specificity is 95%







Disease prevalence is 50%  
Sensitivity is 90% | Specificity is 95%

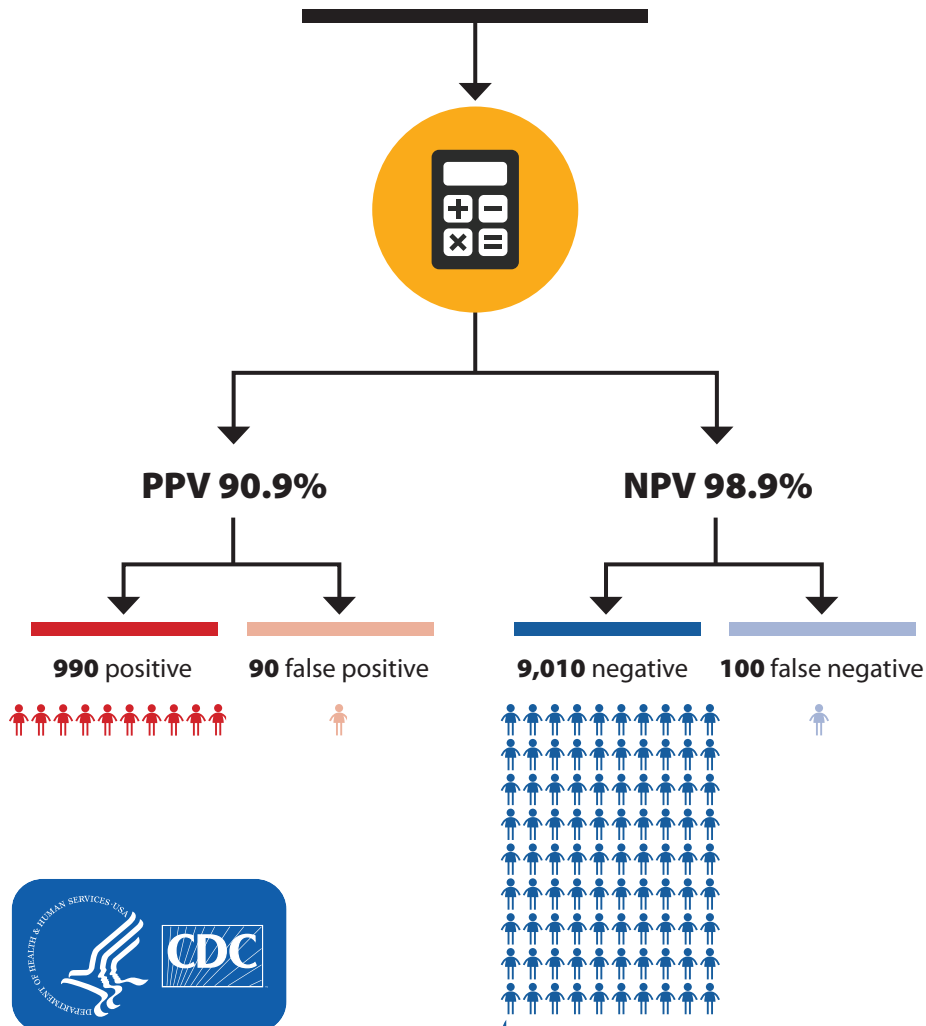


# Example 2: Comparisons of Disease Prevalence Rates & Testing Outcomes for Test with 99% Specificity

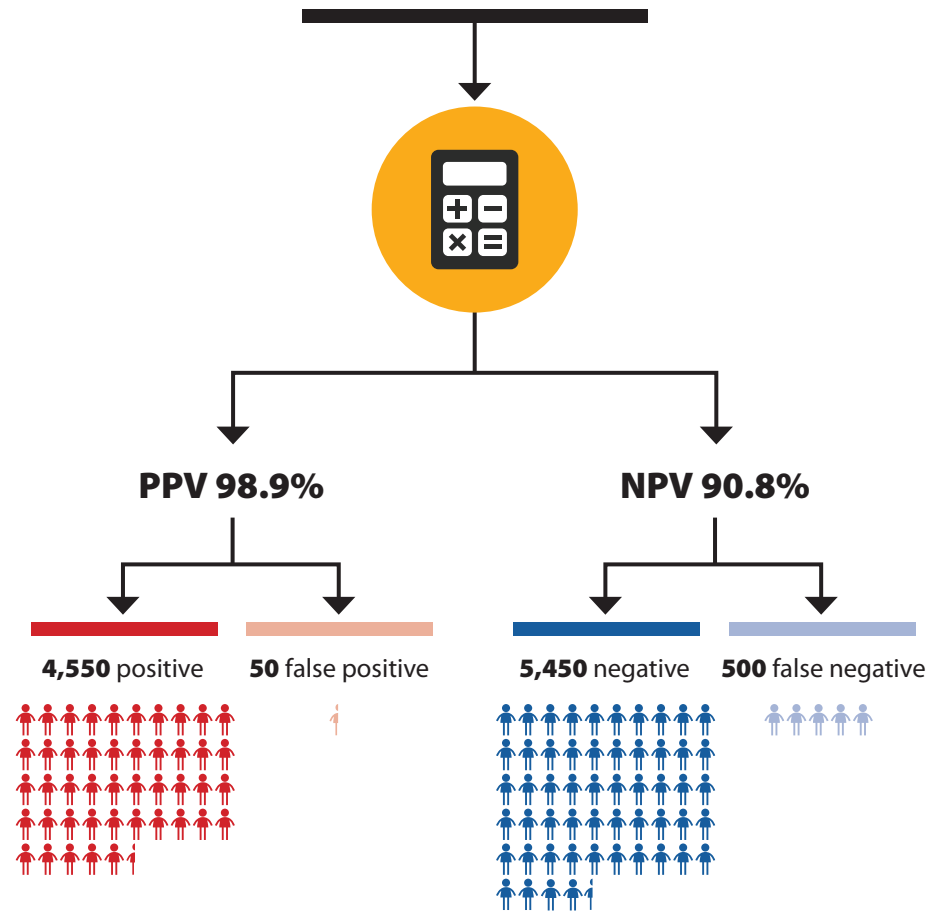
Population: 10,000

KEY:  100 positive results  100 false positive results  100 negative results  100 false negative results

Disease prevalence is 10%  
Sensitivity is 90% | Specificity is 99%



Disease prevalence is 50%  
Sensitivity is 90% | Specificity is 99%



# Use the FDA Calculator to Select a COVID-19 Antibody Test for Your Community

## Glossary

- ▶ **Positive Predictive Value (PPV):** Probability that people who test positive are truly positive.
- ▶ **Negative Predictive Value (NPV):** Probability that people who test negative are truly negative.
- ▶ **Sensitivity:** Ability of the test to correctly identify those with the disease (true positive rate).
- ▶ **Specificity:** Ability of the test to correctly identify those without the disease (true negative rate).

