TESTING STATISTICS

4 KEY STATISTICS

Sensitivity - proportion of diseased people who are given a positive results

Specificity - proportion of well people who are given a negative result

Positive Predictive Value - How likely one is to have the disease given a positive result

Negative Predictive Value - How likely one is to not have the disease given a negative result

$$s = \frac{TP}{TP + FN} \quad t = \frac{TN}{TN + FP} \quad PPV = \frac{ps}{ps + (1-p)(1-s)} \quad NPV = \frac{t(1-p)}{t(1-p) + p(1-s)}$$

PREVALENCE MATTERS

IF 50% PREVALENCE, WITH 90% SENSITIVITY AND 90% SPECIFICITY