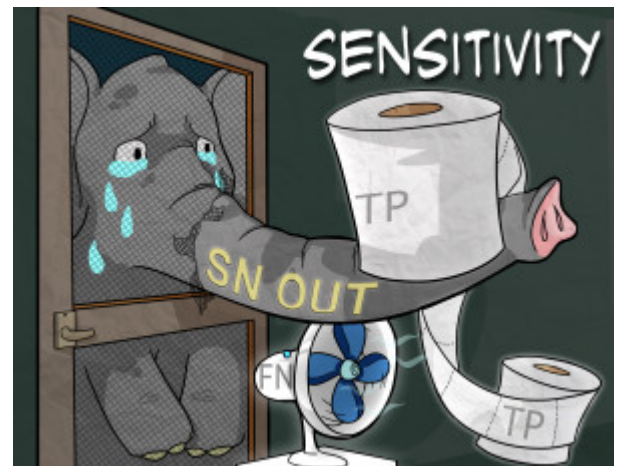# Sensitivity

Sensitivity and specificity are statistical measures that indicate how well a test can measure the presence of a specific disease. Ideally, a perfect test or predictor would be 100% sensitive and 100% specific, meaning that the test would predict all people from the sick group as sick and exclude anyone from the healthy group as sick. However, for any test, there is usually a trade-off between these measures. Sensitivity relates to the test's ability to identify positive results. It is the proportion of people that are known to have the disease that test positive for it. The formula for identifying sensitivity equals the number of true positives divided by the (number of true positives + the number of false negatives). A test with high sensitivity is often a reliable indicator of ruling out a disease because a negative result can reliably be assumed to be true. An easy way to remember this is remembering the word "SN OUT," meaning sensitivity is used to "rule OUT" disease. Because a test with high sensitivity rarely misses true positives among those who are actually positive, it is often used as a screening test to ensure that all people with disease are identified. However, tests with high sensitivity can create false positives, meaning patients that do not have disease may have a positive test result.

PLAY PICMONIC

Characteristics

Rules Out
SNOUT for (sensitivity) SN rules OUT

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Screening Test
Screen

Because a test with high sensitivity rarely misses true positives among those who are actually positive, it is often used as a screening test to ensure that all people with disease are identified. However, tests with high sensitivity can create false positives, meaning patients that do not have disease may have a positive test result.

Formula

TP / (FN+TP)
Toilet-paper on the Top and Fan and Toilet-paper on the Bottom

The formula for identifying sensitivity equals the number of true positives divided by the (number of true positives + the number of false negatives).