

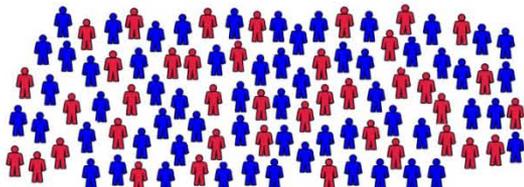
Understanding Test Results for Infectious Diseases

Consider the likelihood of disease *before* performing laboratory testing

The likelihood that a patient has a disease depends on many factors:

- Has the patient been in an area where the disease is found?
- Does the patient have signs and symptoms typical of the disease?
- Does the patient have risk factors for contracting or developing the disease?

DISEASE IS COMMON*

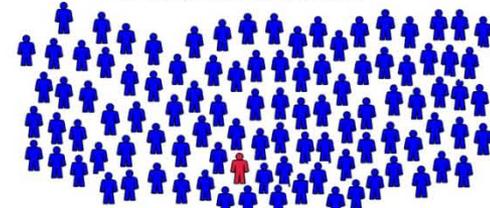


100 people tested for the disease ‡

KEY

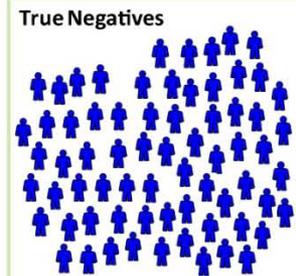
- people with disease
- people without disease

DISEASE IS RARE†



100 people tested for the disease ‡

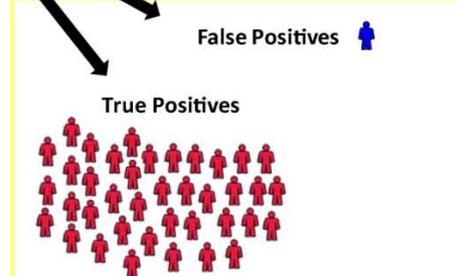
NEGATIVE TESTS



1% FALSE NEGATIVE

1 of 60 people who tests negative has the disease

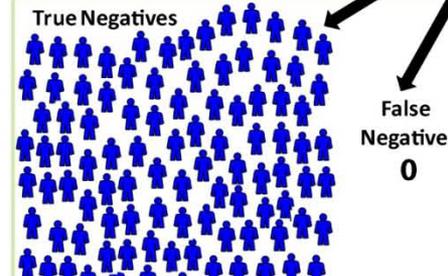
POSITIVE TESTS



3% FALSE POSITIVE

1 of 40 people who tests positive does not have the disease

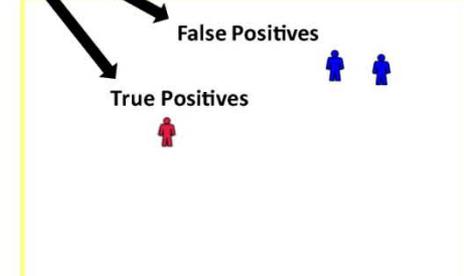
NEGATIVE TESTS



0% FALSE NEGATIVE

None of the 97 people who tests negative has the disease

POSITIVE TESTS



67% FALSE POSITIVE

2 of 3 people who test positive do not have the disease

* 40 out of 100 patients in this area have the disease
† 1 out of 100 patients in this area have the disease

‡ Test specificity = 98% (high) and test sensitivity = 98% (high)

National Center for Emerging and Zoonotic Infectious Diseases

Division of Vector Borne Diseases | Bacterial Diseases Branch

