

# Positive and negative predictive value calculator for diagnostic testing

This predictive value calculator, when used in conjunction with the provided test literature and other available resources, can assist you in making informed decisions of significant importance to your shelter management strategy and to your population's health.

Diagnostic testing in shelters is a high stakes business. At minimum, time, money and anxiety could be wasted on false positive results. At worst, an animal might be euthanized needlessly due to a false positive test result or a serious disease could go undiagnosed and continue to spread based on false negative results.

Understanding the interaction between test sensitivity, specificity, disease prevalence and positive/negative predictive value helps place test results in a useful context. To help you get a sense of how these factors interact we've created this predictive value calculator. All tests should be used and interpreted in the context of the animal's signalment, history and clinical signs as well as the accuracy and limitations of the test in question. Some information about test sensitivity and specificity is available on our information sheets for specific diseases; many more details can be found from test manufacturers (of course take this with a grain of salt), a search of the scientific literature (e.g. <http://www.ncbi.nlm.nih.gov/pubmed/>), or in infectious disease texts such as [Infectious Disease Management in Animal Shelters](#)