

According to one study, C-sections are used in 30% of US births with a 0.2% infant mortality rate. In non-C-section births, 99.1% of infants survive. Overall, what percent of newborns survive in the US?

Suppose that only 2% of individuals undergoing a particular medical test have the disease that the test is intended to identify. If an individual has the disease, the probability that the test indicates the presence of the disease is 0.98. If an individual does not have the disease, the test gives a false positive 5% of the time. If the test result for an individual is positive, what is the probability that this individual actually has the disease?