Health Science Pathway

Data and Statistic Module, worked example 3 – probability

Question.

Consider 1000 pregnant women who are 40 years of age. Determine the rate of true positive, true negative, false positive and false negative test results

Answer:

Of 1000 pregnant women who are 40 years old, 10 are likely to have children with Down syndrome. If all 1000 women were tested, 9 of the women who had babies with Down syndrome would have tested positive for the condition and 1 would have tested negative. Of the 990 women whose babies do not have Down syndrome, 594 women would have tested negative and 396 would have tested positive.