

Stat 2630: Homework 9

A random sample of 172 women were given the flu vaccine while pregnant, and a control sample of 168 women were not given the vaccine.

1. 8.4% of the control group gave birth before 37 weeks of gestation.
 - (a) Calculate a standard error for this estimate.
 - (b) Calculate a 95% confidence interval for the true population percentage.
2. The average birthweight for the vaccine group was 3.13 kg with a standard deviation of .53 kg. The average birthweight for the control group was 3.02 kg with a standard deviation of .45 kg.
 - (a) Estimate the mean difference in birthweight $\mu_1 - \mu_2$ for the two population groups.
 - (b) Calculate a standard error for your estimate in (a).
 - (c) Calculate a 95% confidence interval for the true mean difference.