

EPIB 613

November 1, 2012

Exercise #5

Copy the datasets smoke.dta and lowbwt.dta from the course website

Using the dataset smoke.dta:

1. Generate a new variable called bmi for body mass index:
($BMI = \text{mass}(\text{kg}) / (\text{height}(\text{m}))^2$). How many women have a BMI greater than 30?
2. Generate a new variable called bmi_high that equals 1 if bmi equals 25 or greater and 0 if less than 25. What is the mean height for female never or former smokers with high BMI?
3. Replace the values of bmi_high so that men are considered as having a high BMI only if their value is greater than 28.
4. List the ages, smoking status, and bmi for men now considered to have high bmi. Remove all dividers and separators from the results output.

Using the dataset lowbwt.dta:

5. Create a new variable named agegrp3, which contains quintiles of the variable age. Label the variable and the categories appropriately.

BONUS. Generate a risk score that classifies a women's risk of giving birth to a low birthweight baby based on known risk factors. The risk score is a combination of the following variables: smoking, hypertension, age, and weight. The following number of points are allocated to the risk score for each variable:

Smoking: yes=1 points, no=0 points
Hypertension: yes=1 point, no=0 points
Age: <20 or 40+ =2 points, 35-39=1 point, 20-34=0 points
Weight: >=175lbs=2 points, <175lbs=0 points

Create a new variable called riskcat that groups the risk score so that 0 points=low risk, 1-2 points=moderate risk, 3+points=high risk. What proportion of white women are in the high-risk category?