EPIB 613
October 21, 2011
Exercise #9 (chapter 18 of Juul & Frydenbyrg)

Answer the following questions using the dataset lbw1.dta from the course website:

1. Generate two local macros that store the 5th and 95th percentiles of the variable lwt (weight at last menstrual period). Determine the mean age of mothers whose lwt values fall between the 5th and 95th percentile. Now obtain an odds ratio and 95% CI for the association between low birth weight and mother's smoking status for babies born to mothers whose lwt falls between the 5th and 95th percentile.

2. Execute the following commands within a foreach loop for the continuous variables age, lwt, and bwt: 1) summarize each variable 2) generate new variables named age_c, lwt_c, bwt_c that contain centered values for each variable (i.e., each individual's value minus the overall mean) 3) summarize each of the centered variables.

3. Execute a forvalues loop to summarize birthweight over values of ftv (number of physician visits). Before each summarize output display the number of physician visits.

4. Generate a new variable named *visits* that categorized the number of physician visits into categories 0, 1, 2, 3+ visits. Using *statsby*, create a dataset that contains the mean birthweight and lower and upper values of the 95% confidence interval for each category of *visits*. Plot the mean and 95% CI using twoway graph types *scatter* for the mean and *rcap* for the CIs (see page 293 of the Juul & Frydenbyrg for more details). Appropriately label the legend and axes.