

EPIB 613

November 15, 2012

Exercise #7

Using the dataset `esoph.dta`, which is from a case control study of esophageal cancer:

1. Find a crude OR and 98% CI comparing an alcohol consumption of 120+ g/day to 0-39g/day.
2. What is the OR comparing an alcohol consumption of 120+g/day to 40-79g/day, adjusted for age group?

The dataset `hip.dta` (available on the course website) contains data from a study that was performed to quantify the benefit of a new inflatable device to protect elderly persons from hip fractures resulting from falls. The time to hip fracture or censoring was recorded in months.

3. Using the `ir` command, determine the incidence rate (IR) of fractures among individuals who wear a protective device both in units of fractures per person-month and fractures per person-year.
4. Determine the incidence rate ratio (IRR) and 99% CI comparing individuals who wear protective devices to those who do not.
5. Create a new variable for age categorized into the following groups: 60-67, 68-74, 75+. Is there evidence of a different association between wearing a protective device and fracture by age group?
6. `Stset` your data and find an incidence rate ratio (IRR) and 99% CI comparing individuals who wear protective devices to those who do not using `-stir-`. Compare to your answer in q4.
7. Find a crude hazard ratio for the association between wearing a protective device and the risk of fracture.