

## Objectives for Module 9.2 – Crude and Age-Adjusted Incidence Rate Ratio for CHD

1. Calculate the crude incidence ratio of CHD for smokers compared to nonsmokers in Stata
  2. Calculate the age-adjusted incidence ratio of CHD for smokers compared to nonsmokers in Stata
- I. Calculate the crude risk ratio of CHD for smokers compared to nonsmokers in Stata
- a. Dropdowns:
    - i. Statistics → Epidemiology and related → Tables for epidemiologists → Incidence rate-ratio
    - ii. Under “Case variable” select “anychd”; under “exposed variable” select “cursmoke1”; under “person-time variable” select “timechd”
  - b. Command window type: `ir anychd cursmoke1 timechd`
- II. Calculate the age-adjusted risk ratio of death for smokers compared to nonsmokers in Stata.

First, create 4 categories for age using the following code:

```
gen age4cat=.
replace age4cat=0 if (age1<=40)
replace age4cat=1 if (age1>40 & age1 <= 50)
replace age4cat=2 if (age1>50 & age1 <= 60)
replace age4cat=3 if (age1>60 & age1<.)
```

- a. Dropdown
  - i. Statistics → Epidemiology and related → Tables for epidemiologists → Incidence rate-ratio
  - ii. Under “Case variable” select “anychd”; under “exposed variable” select “cursmoke1”; under “person-time variable” select “timechd”
  - iii. Go to the “Options” tab; click the box next to “stratify on variables”; use the dropdown menu to select “age4cat”  
Note: Under “Within-stratum weights” the button next to “Use Mantel-Haenszel” should be automatically selected
- b. Command window type: `ir anychd cursmoke1 timechd, by(age4cat)`