
Applied Epidemiology I: Spring 2021

Lab session using Stata

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Lecture 1: Data management & Data clearance (1) 13:30-15:00 (Thu.) 28 Jan, 2021

- Aims
- Good folder structure, documents, Readme.txt, habits on coding
- Other do's and don'ts
- Set up working directory
- Import and save data
 - File types: .xls, .txt, .csv, .dta, .xpt
 - `save`, `replace`
- Manage datasets:
`merge`, `append`
- Exercise 1

15:15-16:45 (Thu.) 28 Jan, 2021

Q & A session

12:45-13:30 (Mon.) 1 Feb, 2021

Lecture 2: Data clearance (2) & Summary statistics 13:30-15:00 (Mon.) 1 Feb, 2021

- Get to know the data:
`summarize`, `describe`, `codebook`, `list`
- Manage variables:
 - Variable types: `numeric`, `string`, `keep`, `drop`
 - Action: `label`, `rename`, `recode`, `generate`, `replace`
 - Condition: `sort`, `by`, `if`, `in` and other operators
- Summary statistics
 - Measures of central tendency: mean, median, mode
 - Measures of dispersion: range, IQR, variance, standard deviation
- Exercise 2

15:15-16:45 (Mon.) 1 Feb, 2021

Q & A session

12:45-13:30 (Thu.) 4 Feb, 2021

Lecture 3: Graphs

13:30-15:00 (Thu.) 4 Feb, 2021

- Graphs
 - Bad examples, learning from errors
 - Basics of making graphs
 - Study map
 - Histogram, bar chart, scatter plot, box plot, line graph
 - Customisation: stratification, combine two graphs, export
- Exercise 3

15:15-16:45 (Thu.) 4 Feb, 2021

Q & A session

12:45-13:30 (Mon.) 8 Feb, 2021

Lecture 4: Tables and interpreting results

13:30-15:00 (Mon.) 8 Feb, 2021

- Tables
 - Bad example
 - Basics of making tables
 - One-way tables, two-by-two tables
 - Stata tool for Epidemiology
- Basic Epidemiology terms
 - Rate vs. proportion
 - Risk, risk difference, risk ratio
 - Odds, odds ratio
- Interpreting results

- Principles
 - Ratio $>$ or $<$ 1, more examples
- Calculate ratios using Stata
 - Risk ratio, odds ratio, incidence rate ratio
- Exercise 4

15:15-16:45 (Mon.) 8 Feb, 2021

Q & A session

12:45-13:30 (Thu.) 11 Feb, 2021

Q & A session

12:45-13:30 (Mon.) 15 Feb, 2021

Q & A session

12:45-13:30 (Thu.) 18 Feb, 2021