PubHlth 497D: Intro to Statistical Computing in R

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Course structure

Moodle and DataCamp

Introductions

Please answer the following questions on your notecards:

- 1. What is your name?
- 2. Were you able to install R and RStudio on your laptop?
- 3. Do you have or have you ever had a pet?
- 4. How many times did you visit a body of water (ocean, pond, lake, river, swimming pool) this summer?
- 5. Who is your favorite musical artist or band right now?
- 6. Describe your programming skill in one of these categories
 - 6.1 Never programmed before
 - 6.2 No R experience, beginner in another language
 - 6.3 Beginner in R, no experience in other languages
 - 6.4 Advanced in another language, no/little experience in R

Introductions

- Get into groups of 4 and write your group name on the note card
- ► Each person will introduce themself and present a summary statistic about their group for one of the last four questions
 - ► Non-identifiable please
 - ▶ Important for public health data
 - e.g. "Steve went to the beach the most times"

My introduction

My introduction

100% of the members of my group own a dog:



My introduction

- ► The average number of trips to a body of water for members of my group was 8
- ► The longest-named band in my group was "Lake Street Dive"
- ▶ None of our members fit into the categories provided for R Skill
 - ▶ I have been using R for 5 years for my research

R is...

- 1. Free
- 2. Open source
- 3. Has a large online community

Despite not being the fastest or most powerful programming language, R is widely used in academia and is being quickly adopted in industry.

R is...

able to do some pretty neat stuff:

- shiny.rstudio.com/gallery/
- One of my apps

Let's explore RStudio!

- ► Console: is what you see in R
- ► Source: a place to save your code
- Environment: see what you have run so far
- ► Files, Plots, Packages, Help!: very useful features
- ▶ Projects: saves settings for a particular assignment