

#### R Code for Examples in the book

"Statistics: The Art and Science of Learning from Data" by Agresti, Franklin and Klingenberg, 5<sup>th</sup> edition

# Chapter 11

Example 5: Headache from Flu Vaccine

— Testing Homogeneity

### **Reading in data**

```
headaches <-
read.csv(file='https://raw.githubusercontent.com/artofstat/data/master/Chapte
r11/headache_raw.csv)
attach(headaches) # so we can refer to variable names
```

#### To make a table from the raw data

```
mytable <- table(drug, outcome)
mytable # viewing the table

## outcome
## drug mild moderate severe
## active 486 113 16
## placebo 355 80 5</pre>
```

## To perform a chi-squared test for homogeneity

```
chisq.test(mytable)
##
## Pearson's Chi-squared test
##
## data: mytable
## X-squared = 2.8601, df = 2, p-value = 0.2393
```