

# Statistics for Epidemiology

## Solutions

Solutions are provided for each of the Chapters 2—17. These were originally written by teaching assistants for various versions of the course that motivated the book; particular thanks are due to Alan Hubbard, Katherine Masyn, and Jessica Young. The solutions are not intended to be polished answers in every case, but instead provide at least a guide to how you might approach the questions. Hopefully both questions and solutions will stimulate debate in groups studying the material. The solutions have not been painstakingly proofread, so please send information on typographical mistakes etc to the author at [jewell@stat.berkeley.edu](mailto:jewell@stat.berkeley.edu). Solutions that involve any form of data analysis have been based on analyses using STATA® (see below). Input commands are provided and raw output—sometimes edited for simplicity—is also shown.

## STATA®

As these solutions have been developed over several years, they have used various versions of the software, ranging from STATA 5.0 to, most recently, STATA 8.0. Some of the input commands have changed during these evolving releases, so that you should be conscious of which version you are using. The online help file in STATA® should be consulted if there is confusion. Amongst the manuals for STATA 8.0, there is now a single volume, *Survival Analysis and Epidemiological Tables*, which discusses all analysis commands used in these solutions.

## Data Sets

The data sets used in the text, and those needed for the problems, are provided in both Excel and STATA® formats. See above for comments if you find difficulty in reading a file with your version of STATA®. If necessary, it is exceedingly simple to read an Excel data file into STATA®. Brief definitions of the variables in the data set are provided in the Excel version. For further information about the studies that generated the data set, see the original references provided in the text. The Titanic data set can be found on the web—see <http://hesweb1.med.virginia.edu/biostat/s/data/descriptions/titanic.html>. The particular version used here is the one compiled by Thomas Cason of the University of Virginia.