Sources of Data

- Written or electronic logs
- Surveys
  - Telephone
  - Personal interview
  - Self-completion
  - Mail
- Existing data files

Data Entry Concepts

- Problems
  - Out-of-range values
  - Transposed characters
  - Incorrect values
  - Exceptions
    - Missing values
    - Inconsistent values
    - Ambiguous responses

Error Checks

- Up-front checking
- Backend checking
- Verification
  - Re-entry of given field
  - Double entry of all fields
    - By the same operator
    - By two operators

Some techniques to avoid problems

- Scanning
- Table look-up
- Branching
- Auto-entry
  - Default values
  - Repeated values
Data Entry Software

- Statistical packages
  - SAS
  - SPSS
- Microsoft Products
  - MS Excel Spreadsheet
  - MS Access Database
- Public-Domain (from CDC/WHO)
  - EpiInfo
- Many more!

Simple Data Entry using MS Excel

- Enter variable names in the first row.
- Enter values in subsequent rows.
  - TAB to move from column to column.
  - ENTER to move to beginning of next row.
- Use Validation to perform upfront error checks.
- Use the LOOKUP function for table look-up.
- Use other functions for calculated fields.

Simple Data Entry with Access

- Demos:
  - Data Entry Using Access.mdb
    found in Sample Programs on the class website
  - AortaStudy.mdb
    found in Sample Programs on the class website
    http://www.aortastudy.vcu.edu

Simple Data Entry with EpiInfo 2002

- Demo
- Database:
  - Class and Class Grades - via Epilinfo.mdb
    found in sample programs on the class website.

Data Entry with EpiInfo 2002

- Create a project
- Create a data entry screen (Make View)
  - Use menus to create upfront error checks
  - Use menus to perform table lookups
  - Create branching
  - Calculated variables
- Enter Data
Data Entry Example

- Healthy Living Survey – Part of the Smoking as a Vital Sign project in Family Practice, VCU. Steve Rothemich, MD, is the principal investigator.
- HealthyLivingSurvey.pdf found in sample programs on the class website.