

# Epi Info for Epidemiologists:

## *A Step-By-Step Guide*

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## **CREATING DATA ENTRY SCREENS**

### ***Creating a new View using MakeView***

1. Click on MakeView from the Epi Info main menu.
2. Select “File” then “New” from the toolbar in order to create a new view.
3. Specify the pathname and filename for the new project (.mdb file) that will contain the new view.
4. Specify the name of the view and select “OK”.

### ***Creating a Field in the View***

1. Right-click where you want to add the new field.
2. Specify a description in the “Question or Prompt” box.
3. Specify the format options of this description by clicking on the “Font for Prompt” button.
4. Specify the Field Type.
5. Specify the Field Name.
6. Select “OK”.

### ***Creating a Grid***

1. Place the cursor where you want the grid to be and right-click the mouse (or keyboard).
2. Type in a description for the grid in the “Question or Prompt” box.
3. Click on the “Grid” button.
4. Enter in the first column name as you want it to appear in the grid.
5. Press the “SaveColumn” button in order to save the column.
6. Repeat (4) and (5) in order to create additional columns for the grid.
7. Select the “Done” button when you are finished.
8. Resize the grid so that all of the columns can be viewed by clicking once on the grid and resizing the borders.
9. You can also resize the column widths if you want by dragging the column borders with the mouse.

### ***Legal Values for Controlling Responses***

1. Right-click where you want to add the field that will contain the legal responses (drop-down field).

2. Enter a description in the “Question or Prompt” box.
3. Select the “Legal Values” button under “Code Tables” section.
4. Specify whether you want the responses sorted (the default) or unsorted (that is, exactly in the order that you enter them).
5. Specify whether you want to take the responses from a table that already exists (“Use Existing Table” button) or create a new table of responses (“CreateNew” button).
6. If you select “CreateNew”, enter in the responses for the legal field, select “OK”, then select “OK” again.
7. If you select “Use Existing Table”, select the table to use, select “OK”, then select “OK” again.

### ***Comment Legal Values***

1. Right-click where you want to add the field that will contain the comment legal responses (drop-down field).
2. Enter a description in the “Question or Prompt” box.
3. Select the “Comment Legal” button under “Code Tables” section.
4. Specify whether you want the responses sorted (the default) or unsorted (that is, exactly in the order that you enter them).
5. Specify whether you want to take the responses from a table that already exists (“Use Existing Table” button) or create a new table of responses (“CreateNew” button).
6. If you select “CreateNew”, enter in the responses for the legal field. For each response, enter in the value to be stored in the data table and the comment for that value, separating the two with a hyphen (eg, “1-Yes”, “2-No”).
7. Select “OK”, then select “OK” again.
8. If you select “Use Existing Table”, select the table to use, select “OK”, then select “OK” again.

### ***Recoding using Two Fields that are Linked***

In this example, let's say I want to create two fields: one that stores race as a text field and one that stores race as a coded field based on what gets entered in the race text field. The race text field is what gets entered in the data entry process and the coded race field gets populated with the code for whatever category gets entered in the the race text field automatically.

1. Right-click the mouse where you want to put the race text field.
2. Specify the race text field to be of type text and give it a description in the “Question or Prompt” box and select “OK”.
3. Right-click the mouse where you want to put the coded race field.

4. Specify the coded race field to be of type text and give it a description in the “Question or Prompt” box and select “OK”.
5. Double-click on the race text field and select the “Codes” button under the “Codes Table” section.
6. Select the field to link to race text (in this example, it's the coded race field).
7. If you are creating a new link, select “CreateNew” button.
8. Enter in the responses for race text (first column) and the recoded values for coded race (second column).
9. Select “OK”.

### ***Creating an Autosearch Function***

1. Decide which field on your data entry screen you want to create an autosearch function for (eg, last name, first name, identification number, social security number, etc.).
2. Hit the “Program” key in order to develop check code for the autosearch function.
3. Choose the field where the autosearch action will occur.
4. Decide whether you want the action to occur before or after data is entered into this field.
5. Click on the “Records” tab.
6. Select the “Autosearch” button.
7. Select the fields you want to display in the autosearch. In order to select multiple fields, keep the Control button pressed and select the fields you want.
8. Select “OK” and select “OK” again.

## **DATA ENTRY AND VALIDATION**

### ***Using DataCompare***

1. From the main menu, select “Utilities” then “Data Compare”.
2. If this is a new comparison, select “File” then “New Script” in order to create a new script file for running this same comparison in the future. If you would like to use an existing script file, select “File” then “Open Script” and select the script file.
3. Select whether you want to compare Epi Info views or standard tables.
4. Select the project file from which the first table to be compared comes from (the .mdb file).
5. Select the table within this first project file.
6. Select the project file from which the second table to be compared comes from (the .mdb file). NOTE: the program can compare two tables within the **same** project if this

is what is desired.

7. Select the table within this second project file.
8. Select “Next”.
9. The program will then tell you whether the two tables have identical structure, a necessary requirement to complete the comparison. If the two tables to be compared do not have identical structure, you can display their differences. Select “Next”.
10. Choose the match fields to get records and select “Next”.
11. Choose the table fields to compare and select “Next”.
12. Select whether or not you want to create a HTML report of the comparison and select “Next”.
13. Decide whether you want to save settings as a Script file and select “Compare”. Any differences will then be displayed.

## **DATA ANALYSIS**

### ***Read in Data***

1. Select the “Analyze Data” button from the main menu.
2. Select “Read (Import)” under the “Data” folder in “Analysis Commands”.
3. Specify the Data Format for the file to be read.
4. Specify the Data Source (pathname and filename).
5. Specify whether you want to import views or all data tables.
6. Select the table or view to be read into Epi Info.
7. Select “OK”.

NOTE: Be careful what project you are currently in by looking at the file and pathname listed in the “Current Project” box. If the file you are reading in is different from your current project, Epi Info will attempt to link the two files to one another which you may not want to do.

### ***Display Variables***

After you have read in a dataset, you can display the fields in the dataset by doing the following:

1. Select “Display” under the “Variables” folder (under “Analysis Commands”).
2. Select “Variables” button and select “OK”.

### ***Display Views or Tables***

After you have read in a dataset, you can display the tables in the dataset by doing the

following:

1. Select “Display” under the “Variables” folder (under “Analysis Commands”).
2. Select “Views” button (for views) or “Tables” button (for tables) and select “OK”.

### ***Display Missings***

1. In order to display missing values, type in the following command:

SET IGNORE=ON

2. In order to drop missing values and not display them, type in the following command:

SET IGNORE=OFF

Alternative to this, you could also use the SET command:

1. Select the “Set” command under the “Options” folder in the Analyze Data program.
2. Either check the box next to “Include Missing” in order to display the missing values. Leave the box unchecked to drop missing values from the results.

### ***Frequencies***

1. Under the “Statistics” folder, select the “Frequencies” command.
2. Under the “Frequency of” box, select the variable(s) you would like to create frequencies for.
3. If you want to stratify the frequencies across levels of another variable, select that variable in the “Stratify by” box.
4. Select “OK”.

### ***Tables***

1. Under the “Statistics” folder, select the “Tables” command.
2. Select the “Exposure Variable” (appears on the left hand side of the table).
3. Select the “Outcome Variable” (appears at the top of the table).
4. If you want to stratify the table by levels of another variable, select that variable in the “Stratify by” box.
5. Select “OK”.

### ***Line Listing***

In order to produce a line listing of your data, do the following:

1. Select “List” under “Statistics”.
2. Select the fields you want to display in the drop-down menu under “Variables”.
3. Decide whether you want to display the output as HTML, a grid, or allow updates

(edits) to the data.

### ***Univariate Statistics***

1. Select “Means” under “Statistics”.
2. Select the field to summarize under the “Means of” box.
3. If you want to cross-tabulate the results with another field, select this field in the “Cross-tabulate by Value of” box.
4. If you want to stratify the results by the values of another field, select this field in the “Stratify by” box.
5. Select “OK”.

### ***Creating Graphs***

1. Select “Graph” under “Statistics”.
2. Select the Graph Type.
3. Type in the Page Title (if necessary).
4. Select the Main Variable for the X-Axis.
5. Select what you want to display on the Y-Axis under the “Show Value of” box. You can choose from the following: count, sum, average, minimum, maximum, count %, sum %.
6. Select “OK”.

### ***Creating a New Field***

1. Define the new field by clicking on “Define” and giving the new field a name then select “OK”.
2. Assign the new variable by selecting “Assign”.
3. Under the “Assign Variable” box, select the new field you just created.
4. Type in some expression on how you want to create this new variable/field.
5. Select “OK” when you are finished.

### ***Exporting Data from Epi Info***

1. Read in the data you want to export.
2. Select “Write (Export)” under the “Data” folder.
3. Select the variables (fields) you want to export.
4. Choose whether you will be appending this data to an existing table or replacing an existing table.
5. Choose the Output Format for the new data.

6. Choose the filename for the new file.
7. If you chose another mdb file, you can save the exported data as a table in the mdb file by specifying the table name under “Data Table”.
8. Select “OK”.

## **Working With Dates**

### ***Extracting the Day from a Date Field: DAY()***

In order to extract the day from a date field (for example, a date field called “datedx”) and save it as a new field (called “daydx”), do the following:

1. First, define the new field by clicking “Define” and giving the new field a name (“daydx”) then select “OK”.
2. Assign the new variable by selecting “Assign”.
3. Under the “Assign Variable” box, select the new field you just created.
4. Type in the following: DAY(datedx). NOTE: the DAY() command extracts the day from a valid date field.
5. Select “OK” when you are finished. You will now have the day from the date field called “datedx” stored in a new field called “daydx”.

### ***Extracting the Month from a Date Field: MONTH()***

In order to extract the month from a date field (for example, a date field called “datedx”) and save it as a new field (called “monthdx”), do the following:

6. First, define the new field by clicking “Define” and giving the new field a name (“monthdx”) then select “OK”.
7. Assign the new variable by selecting “Assign”.
8. Under the “Assign Variable” box, select the new field you just created.
9. Type in the following: MONTH(datedx). NOTE: the MONTH() command extracts the month from a valid date field.
10. Select “OK” when you are finished. You will now have the month from the date field called “datedx” stored in a new field called “monthdx”.

### ***Extracting the Year from a Date Field: YEAR()***

In order to extract the year from a date field (for example, a date field called “datedx”) and save it as a new field (called “yeardx”), do the following:

1. First, define the new field by clicking “Define” and giving the new field a name (“yeardx”) then select “OK”.

2. Assign the new variable by selecting “Assign”.
3. Under the “Assign Variable” box, select the new field you just created.
4. Type in the following: YEAR(datedx). NOTE: the YEAR() command extracts the month from a valid date field.
5. Select “OK” when you are finished. You will now have the year from the date field called “datedx” stored in a new field called “yeardx”.

### ***Calculating the Number of Days Between Two Dates: DAYS()***

In order to calculate the number of days between two valid date fields (eg, date of birth and interview date) and saving the calculation in a new field called “agedays”, one can do the following:

1. First, define the new field by clicking “Define” and giving the new field a name (“agedays”) then select “OK”.
2. Assign the new variable by selecting “Assign”.
3. Under the “Assign Variable” box, select the new field you just created.
4. Type in the following: DAYS(birth, interview).
5. Select “OK” when you are finished. You will now have the number of days from the date fields called “birth” and “interview” stored in a new field called “agedays”.

### ***Calculating the Number of Months Between Two Dates: MONTHS()***

In order to calculate the number of months between two valid date fields (eg, date of birth and interview date) and saving the calculation in a new field called “agemos”, one can do the following:

1. First, define the new field by clicking “Define” and giving the new field a name (“agemos”) then select “OK”.
2. Assign the new variable by selecting “Assign”.
3. Under the “Assign Variable” box, select the new field you just created.
4. Type in the following: MONTHS(birth, interview).
5. Select “OK” when you are finished. You will now have the number of months from the date fields called “birth” and “interview” stored in a new field called “agemos”.

### ***Calculating the Number of Years Between Two Dates: YEARS()***

In order to calculate the number of years between two valid date fields (eg, date of birth and interview date) and saving the calculation in a new field called “ageyrs”, one can do the following:

1. First, define the new field by clicking “Define” and giving the new field a name (“ageyrs”) then select “OK”.

2. Assign the new variable by selecting “Assign”.
3. Under the “Assign Variable” box, select the new field you just created.
4. Type in the following: YEARS(birth, interview).
5. Select “OK” when you are finished. You will now have the number of years from the date fields called “birth” and “interview” stored in a new field called “ageyrs”.