

Microsoft Access Tips & Hints

- Investigate what versions of Access members of the project team will be using **PRIOR** to database construction. While database conversion can be done, it's not always easy to upgrade a database from A97 to A2K or vice versa.
- Plan ahead! Decide on the number of tables and forms you want in the Access database. Think about validation rules. If someone else will be entering the data or analyzing the data, get their input before you begin.
- Know what you are collecting, why you are collecting it, and what you will use it for. While you should be careful to include everything on the front-end that you might need, consider that the more you variables you have, the more data entry to be done.
- Take advantage of the relationship nature of databases! Consider number of data tables to have in database...may be better to have more than one.
- There is a limit of 255 fields in a data table. If have more than that, think how you might be able to logically split the fields into more than one table.
- Maximum database size: A97 – 1 gigabyte. A2K – 2 gigabytes. If you think your database will need more file size, may need to consider other software options or create multiple Access databases.
- Don't forget to assign the primary key(s) in the database.
- Always finalize the data table before creating a form.
- See the ICER Biostatistics portion of the webpage for current listing of standard data collection instruments whose tables/forms are data banked. Saves on work! 😊
- Scoring programs for several standard data collection instruments have already been written in Visual Basic (i.e. SF-36, SF-12, REALM, etc.). Contact the ICER Biostatistics Unit to see if your scoring program has been written.
- Test your database by entering dummy data...deliberately try to enter “wrong” data to test validation rules, etc. If possible, have someone not involved in the database creation do the testing. (Also, make sure to delete the dummy data records prior to entering “real” data! 😊)

- When you import date/time variables using the SAS Version 8 import wizard, these variables will include both the date and the time. You may need to separate the date from the time for calculations. To extract the date (time) from this variable, you can use the DATEPART (TIMEPART) SAS functions.

Example:

```

data newprocs;
set procs;

prcdate1=DATEPART(prcdate);
format prcdate1 mmddyy8.;

run;

proc print data=newprocs;
var id prcdate1 prcdate;

```

Obs	ID	prcdate1	PrcDate
1	149	11/05/00	05NOV2000:00:00:00
2	279	08/10/00	10AUG2000:00:00:00
3	323	12/14/00	14DEC2000:00:00:00
4	323	12/21/00	21DEC2000:00:00:00
5	447	04/14/00	14APR2000:00:00:00

- If unsure about the affect a query may have on your data, or if the changes that you are making to a table/form are good, make a copy of the table/form first.
- Microsoft Access databases appear to grow exponentially in size at times. For more efficiency and good database health, compact frequently (although be careful of this if you are on a network drive.) On the main toolbar, select Tools → Database Utilities → Compact Database

Note: in A2K, you can select the option “Compact on Close” to have Access automatically compact the database on closing. On the main toolbar, select Tools → Options → General tab. Check the box “Compact on close”. However, if your database can be accessed by multiple users at the same time (i.e. your database is on a network), beware of using this option. If the database compacts while multiple users are accessing the database, the database could become corrupted.

- Avoid using spaces in naming tables; also, keep the table names descriptive, but short!
- Avoid renaming tables, etc. as much as possible. If you had a table named “MyTable” and then renamed it to “MyData”, every time you used the table name “MyTable” would have to be updated by hand.

Note: A2K has some “Name AutoCorrect” options that can be selected...see A2K Help files or Knowledgebase for additional information. This is a new feature which automatically “propagates name changes for tables, forms, reports, and fields throughout the database.”

- Phone Surveys that will be directly entered into Access...utilize additional features such as toggle options and page breaks.
- The advantage of using combo boxes over list boxes is that they take up less space on a form than a list box.
- Set a database password (check the SOP!). A database password can easily be set by the following: On the main toolbar, select Tools → Security → Set Database Password. Note that the database must be in “exclusive” mode before doing so. (When opening the database, select that option.) Also note that while this password won’t keep everyone out, it will keep the honest people honest.
- Setting up tracking databases...get examples from others.
- As always, make sure you backup regularly!
- More Information? Books, Microsoft Knowledgebase, archives of Access newsgroups, web pages (including ours – hsrd.durham.med.va.gov/Biostat/)

Additional Tips Regarding A2K

- In Access 97 in order to force an entry we simply had to exclude "or is null" from the validation rule, and did not have to change the "Required" field to YES. However, in Access 2000 contrary to documentation it appears that you do have to change the "Required" field to YES to force an entry in that field (not including the phrase "Is null" DOES NOT appear to be sufficient).
- If you directly enter data into an A2K table, be aware of a new “autofill” feature. This is a new feature in A2K and at this time cannot be disabled. According to Microsoft Office Knowledgebase on their tech support website....

“When you use the TAB key to move through empty fields or use the DOWN ARROW key to move down to new records in an Access 2000 table, Microsoft Access may automatically populate the next field or record with a value.”

Note that this can only occur in a limited number of “multiples” and when supporting field types are contiguous.

Stacked – Transposed Data Records Example

Throughout our Access PowerPoint presentation, we referred to longitudinal data or data in a ‘stacked’ format. Here is an example of longitudinal data before and after we transpose the data.

Stacked Format

ID	YEAR	WEIGHT
1	1	110
1	2	115
1	3	116
2	1	130
2	2	129
2	3	133

Transposed to One-Record per Subject Format

ID	WEIGHT1	WEIGHT2	WEIGHT3
1	110	115	116
2	130	129	133