Nauru NCD STEPS Survey
Data Entry Protocol

The data for each questionnaire must be entered twice to allow for validation of data entry to ensure that the values in the database reflect those in the questionnaire. This process is accomplished through the use of two different software applications: EpiData 2.1b and EpiInfo 6.04d. Both of these programs use exactly the same data file.

- EpiData 2.1b is to be used for the <u>first</u> data entry from the questionnaire.
- EpiInfo 6.04d is to be used for the <u>second</u> data entry from the questionnaire.

Completed questionnaires will be collected after each day on which STEPS 2 & 3 are conducted and placed into separate envelopes for each of these days. Data entry will be done in batches with the envelope for each STEP 2 & 3 day comprising a single batch and totalling approximately 40 to 50 completed questionnaires.

Data entry will be conducted on two different computers each of which will have both EpiData 2.1b and EpiInfo 6.04d. Data entry for any given batch will be done on <u>only one</u> of the computers with double data entry conducted through the two software applications on the same computer.

Following double data entry of all the questionnaires, the data files (one for each computer) will be merged to create a single file containing all validated records.

<u>General guidelines for data entry</u>:

1. Do not interpret what the interviewers have recorded. Your job is to enter the data as written on the forms.

2. Always ensure that "***CAPS Lock***" is turned on before performing data entry.

3. DK = Don't know/Don't remember

4. When prompted with the message,

    "No value entered. Please check and re-enter."

    And if you have checked the questionnaire and it is blank, leave the field blank and move onto the next field by clicking on the next field with your mouse.

5. With the MS Excel spreadsheet (***"Nauru Data Correction Log"***) open at the same time you are verifying the data, record any issues, which you could not resolve. There are three columns in the Excel spreadsheet: ID number, Question item number and Comment. Please fill in all information accordingly.

The procedure for conducting double data entry for each batch is as follows:

<u>First round of data entry using EpiData 2.1b</u>

1) Open the EpiData data entry template by double-clicking the icon called "***STEPS Data Entry***" on the desktop. This will take you directly into the EpiData data entry template.

2) Remove the batch of completed questionnaires from the envelope. Take the first questionnaire in the batch and check to be sure that the ***"Yes"*** box **<u>has not</u>** already been

checked in the row at the top of Page 1 noted as *"EpiData data entry"*. Below are situations that may be encountered and the action to be taken respectively.

No	Situation	Action to take….
1	"Yes" box has **not** been checked for "EpiData data entry"	Begin data entry for this questionnaire beginning with the *"Respondent Identification Number"* at the top of the page
2	"Yes" box **has** been checked	Do *NOT* re-enter the data again in EpiData 2.1b…. put it down and go to the next questionnaire in the batch

3) Once data entry for this questionnaire has been completed using EpiData 2.1b, turn to Page 1 of the questionnaire and check the *"Yes"* box in the row at the top of the page noted as *"EpiData data entry"*. If there were any problems with data entry also check the *"Yes"* box in the row noted as *"Data entry irregularities"* and ensure that the problems encountered have been noted down in the Excel spreadsheet ("*Nauru Data Collection log*"). If there were no problems with data entry check the *"No"* box in the row noted as *"Data entry irregularities"*.

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Check if the following are completed (to be checked by:)		Yes	No
Fasting status	(Step 2&3 Registration Station)	☐	☐
Checkout	(Step 2&3 Check-out Station)	☐	☐
EpiData data entry	(Data entry personnel)	☐	☐
EpiInfo data entry	(Data entry personnel)	☐	☐
Data entry irregularities	(Data entry personnel)	☐	☐

Check box to tick after completing data entry for one questionnaire in EpiData 2.1b

Check boxes for data entry irregularities

4) Continue data entry using EpiData 2.1b until all questionnaires in the batch have been entered for the first time using EpiData 2.1b (i.e. all of the questionnaires in the batch should have the *"Yes"* box checked in the row at the top of Page 1 noted as *"EpiData data entry"*.

5) Close the EpiData 2.1b program by choosing *"Exit"* under the *"File"* pull-down menu.

Second round of data entry and verification using EpiInfo 6.04d

6) After ensuring that all of the questionnaires in the batch have been entered for a first time using EpiData 2.1b, open the EpiInfo 6.04d program by double-clicking the icon on the desktop.

7) Press "*Alt-Enter*" to enlarge the Epi6 screen.

8) Using the arrows and the *"Enter"* key on the keyboard, select *"STEPS Double data entry"* from the *"Programs"* pull-down menu. This will take you directly into the Epi6 data entry template for double data entry and verification.

9) Remove the batch of completed questionnaires from the envelope. Take the first questionnaire in the batch and check to be sure that the *"Yes"* box **has** already been checked in the row at the top of Page 1 noted as *"EpiData data entry"* and the *"Yes"* box **has not** been checked in the row at the top of Page 1 noted as *"EpiInfo data entry.* Below are situations that may be encountered and the action to be taken respectively.

No	Situation	Action to take….
1	"Yes" box **has** already been checked for "EpiData data entry" but **has not** been checked for "EpiInfo data entry"	Begin data entry for this questionnaire beginning with the *"Respondent Identification Number"* at the top of the page
2	"Yes" box **has** already been checked for **both** "EpiData data entry" and "EpiInfo data entry"	Do **NOT** re-enter the data again in EpiInfo 6.04d…. put it down and go to the next questionnaire in the batch
3	"Yes" box **has not** been checked for **both** "EpiData data entry" and "EpiInfo data entry"	Do not enter the data into EpiInfo and put the questionnaire into a pile that needs to be entered into EpiData. *Note: Data entry has to be performed in EpiData first before data entry and verification can be done in EpiInfo.*
4	"Yes" box **has** already been checked for "EpiInfo data entry" but **has not** been checked for "EpiData data entry"	There must be an error in the checking of boxes. Data has to be entered into EpiData before it can be entered into EpiInfo. EpiInfo does not allow data entry and verification if the data has not been entered into EpiData first. To check whether the data has been entered: 1) Enter the *"Respondent Identification Number"* at the top of the page. 2) If the following message appears: *"Record Not Found. Record does not exist. Press <Esc> to continue"* Press *<Esc>* as instructed, uncheck the *"Yes"* box for *"EpiInfo data entry"* and place questionnaire in the pile of records that need to be entered into EpiData. If no warning message appears and you are able to entry data then, check the *"Yes"* box for *"EpiData data entry"* and enter the data. In this case data entry has been done in EpiData but the EpiInfo check box was checked instead of the EpiData check box.

10) If the following message appears when the *"Respondent Identification Number"* is entered:

   "Record Verified. Note: This record already verified. Press <Esc> to continue"

       i.   Press "*<Esc>"* as instructed

       ii.   Check the *"Yes"* box for *"EpiInfo data entry"*

       iii.   Put the questionnaire in the pile of records where data entry for both EpiData and EpiInfo has been completed.

       iv.   Press "*CTRL-N"* to move to perform data entry and verification for another questionnaire.

11) When a field entry *matches* the data in the file, the cursor blinks and allows one to move to the next field. However, when an entry *does not match*, a window appears, offering a choice between re-entering *<Esc>* or seeing the old and new values *<F9>*. Pressing the *<F9>* key displays a help window with the old and new entries. A choice then can be made between them by pressing *<F1>* or *<F2>* and the chosen correct value appears in the field.

12) When the last entry in the record (questionnaire) has been entered, the statement, *"Write Data to Disk? (Y/N)?"* appears. Press *"Y"* to write the record to file (i.e. save the changes that were made if any). However, if the following message is displayed…

   <u>*Field mis-match*</u>

   "Review the non-matching field(s). Press <Esc> when done. If permitted, you can edit the field value. (Non-matching fields where editing is not permitted require you to abandon this record by answering "N" to the "Write data to disk?" prompt). Press a key to continue…."

   The above message indicates that an error has been made in major skips in the first round of data entry (in EpiData). Do the following….

       i.   Press *<Esc>*. This will take you back to the record.

       ii.   Note down the *record number*, which is located at the *bottom right hand corner* of the screen (See diagram below) and the Respondent ID.
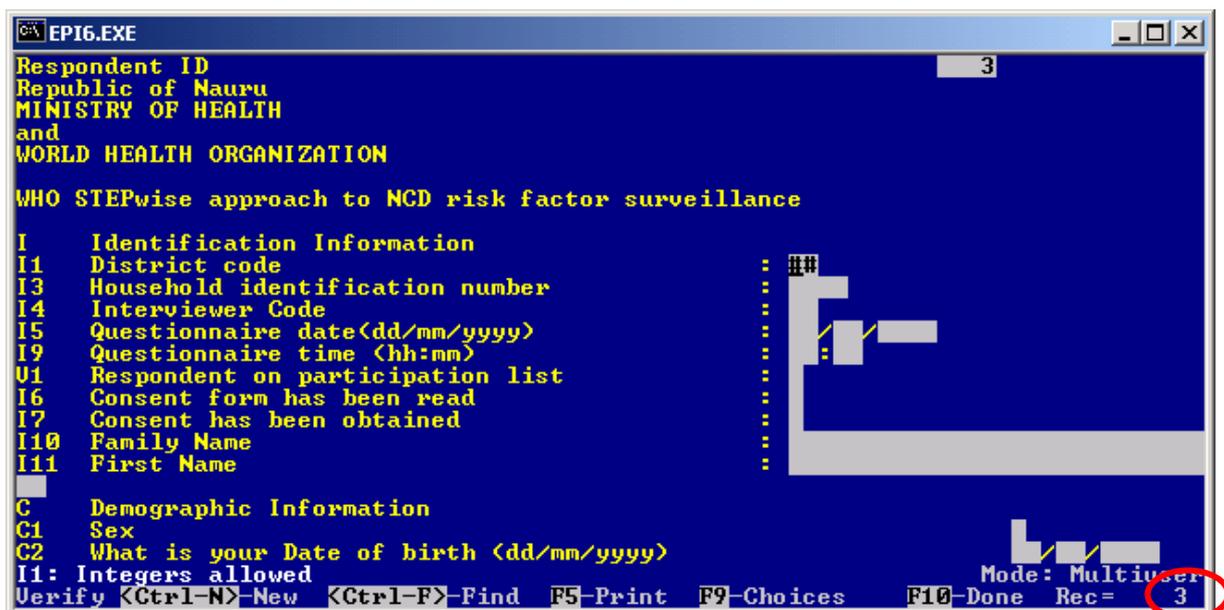
iii. Press **<F10>** to exit. When prompted with the message *"Write Data to Disk? (Y/N)?"*. Press *"N"* and then **<F10>**. Correction has to be made to the data in EpiData before data entry and verification can proceed in Epi6.

iv. On the desktop, double click on the "**STEPS Data Entry**" icon.

v. Press "**Control-G**". The following window will appear…

vi. Enter the record number that you noted down from Epi6 in step *ii* above and click on "**OK**".

vii. The record will be displayed. Check to see that the Respondent ID and other identification information match the questionnaire.

viii. Manually, go through and check the data that has been entered against the questionnaire and make corrections accordingly (if any) before proceeding to double data entry in Epi6. The questions where major skip errors may occur are as follows:

S1a   S1b   A1a   A1b   D1a   D2a   P1 P2 P4

P7   P9   P10   P12 H2 H7 E1 M5 B17

13) Once data entry for this questionnaire has been completed using EpiInfo 6.04d, turn to Page 1 of the questionnaire and check the **"Yes"** box in the row at the top of the page noted as **"EpiInfo data entry"**. If there were any problems with data entry, check to see that the **"Yes"** box in the row noted as **"Data entry irregularities"** is ticked and the problems have been noted down in the Excel spreadsheet ("**Nauru Data Correction Log**").

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Checkout	(Step 2&3 Check-out Station)	☐	☐
EpiData data entry	(Data entry personnel)	☐	☐
EpiInfo data entry	(Data entry personnel)	☐	☐
Data entry irregularities	(Data entry personnel)	☐	☐

Check box to tick after completing data entry for one questionnaire in EpiInfo 6.04d

Check boxes for data entry irregularities

14) Continue data entry using EpiInfo 6.04d until all questionnaires in the batch have been entered for the first time using EpiInfo 6.04d (i.e. all of the questionnaires in the batch should have the **"Yes"** box checked in the row at the top of Page 2 noted as **"EpiInfo data entry"**.

15) Close the EpiInfo 6.04d program by pressing **F10**.