

User guide

Coupon and Respondent Management Program

Version 12.2

Contact Information

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Introduction

This software is used for managing the field data collection of the studies using Respondent Driven Sampling (RDS). It helps to manage the every aspects of the fieldwork including delivery of coupons, monitoring of recruitment patterns, sample distribution and equilibrium, checking respondent duplication, and dual incentive payment. This has been used by PSI Vietnam and other PSI platforms for a number of surveys among sex workers, male injecting drug users, and men who have sex with men from 2008 to 2011.

The software can be used for any target groups with the focus on hard to reach populations. With that focus, the software is designed to serve the surveys which require the anonymity of the respondents; the software uses the Unique Identifier Code (UIC), biomarkers for respondent identity. There is a flexibility of using UIC and biomarkers. The researchers can decide on their own to use UIC or not, how many biomarkers they use, what biomarkers they use, and the magnitude of measurement errors of the biomarkers they wish.

Sincere thanks to colleagues at and outside PSI, who provided valuable comments for improving this software.

For all the comments and questions, please contact with:

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Sincere thanks!

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What are new with the version 12.2?

With version 12.2, you can:

- manage the fieldwork of multiple provinces in the same database; you can manage the fieldwork in your province and monitoring the progress of the other provinces,
- manage the recruitment of multiple respondent groups, for instance, sex workers and male injecting drug users, in one database.

Install the software

The software is an Access-based program, which can be used with Microsoft Access 2003 or later. The software performs the best with Microsoft Access 2003 (XP).

Select 1 of the 2 installation packages:

- With Access (run-time version): used for computers where Access is not available. During the installation of RDS_Info, the Access 2007 run-time version is also installed to allow users to use RDS_Info database. Users can not edit Access databases with Access run-time version
- Without Access: used for computers where ms Access 2003 or later is already available.

Run the installation file, choose TYPICAL setup.

It is recommended to use the default option of installation location which is

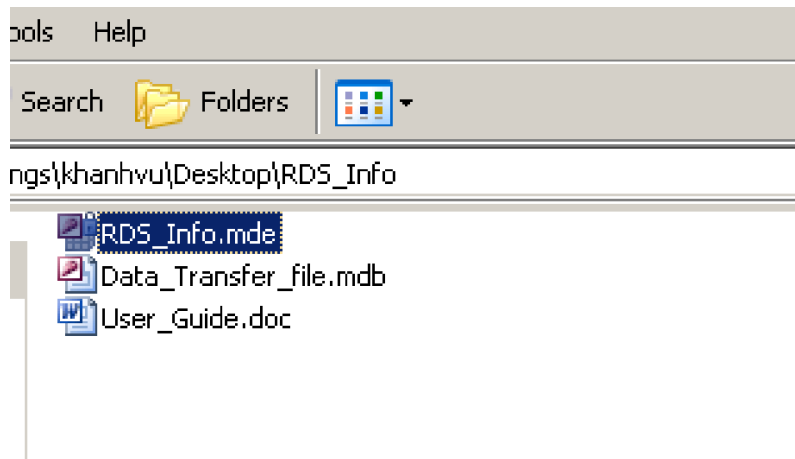
C:\Users\User\AppData\Local\. If you customize the installation to the folder that is protected (C:\Program Files can be protected in some computers), RDS_Info will be read-only and does not work correctly.

Do not change the name of any files after installation.

The files of the software

1. The main file '**RDS_Info.mde**': this is the main file of the software, containing all the functions of the software and the data you enter.
2. The file '**Data_Transfer_file.mdb**': is for transferring data between RDS_Info databases. This file helps to create a small data file which can be sent over email.
3. The file '**User_Guide.pdf**': provides detailed instruction on how to use the software.

Do not delete any files of the software.



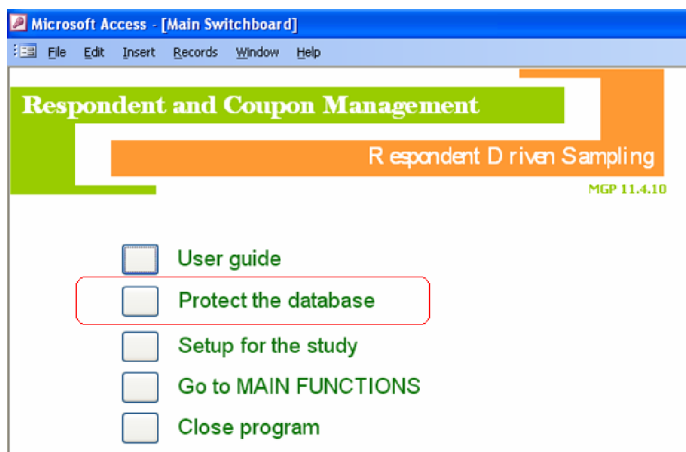
Overview: Who, When and How to use the software

When	Fieldwork activities	Software functions	Who
When you start using the software	<p>Setup for the study:</p> <ol style="list-style-type: none"> Specify what information you will use to check the respondent duplication: <ul style="list-style-type: none"> Unique Identifying Code (UIC): use or not Biomarkers: what biomarkers will be used and the measurement errors of those biomarkers Specify what respondent groups and related information such as that you will use to diversify the seeds Create the list of surveyed provinces and expected sample sizes 	Setup for the study	Study coordinators/ managers/ fieldwork team leaders
When a respondent come for the interview	<ul style="list-style-type: none"> Check the coupon Ask the screening questions including questions for building up the UIC Measure the biomarkers 		
	<ul style="list-style-type: none"> Enter the information of coupon, UIC, biomarkers into the software Check if the respondent have similar identity information as the previous interviewees 	Data Entry and Respondent Duplication Check	
After the respondent duplication check or when the interview finished	<p>Add the following information of the respondents into the software:</p> <ul style="list-style-type: none"> Interviewed or not Serial numbers of the coupons given to the respondents for recruiting others 	Review, Edit entered data	Fieldwork teams (screeners/ interviewers)
When a recruiter come to receive incentive for his/her peer recruitment	<ul style="list-style-type: none"> Check if the coupon (the part 2 for the recruiter) submitted is genuine <p>Check:</p> <ul style="list-style-type: none"> If the recruit with that serial number has been interviewed If the payment for the recruiter has been done <p>Mark that recruitment has been paid after the payment</p>	Payment for recruiters	
During the field work	<ul style="list-style-type: none"> View the chain and pattern of recruitment 	View the chain of recruitment	Fieldwork team leaders
	<ul style="list-style-type: none"> Check the progress of coupon delivery and interview 	Status of coupon	Study coordinators/

When	Fieldwork activities	Software functions	Who
	<ul style="list-style-type: none"> ○ Monitor the sample distribution in terms of geographical area, age, and other key characteristics. 	delivery and interview	managers
	<ul style="list-style-type: none"> ○ Transfer the data between RDS_Info databases 	Delete data, Transfer data between RDS_Info databases	
During the field work and after the data collection finishes.	<ul style="list-style-type: none"> ○ Create the data file for analysis with RDSAT and NetDraw, including equilibrium analysis for key characteristics. 	Make the data file for RDSAT and NetDraw	

Protect the database

To prevent people from entering the database and deleting, editing data unexpectedly, we need to apply a password to open the database. After you apply a password, each time opening the database, users will be required to enter the password.



You can also re2move, change the password whenever you want. If you do not apply password, you are reminded every time you the database is opened. You can stop that reminder by checking “Do not open this window again”.

Setup password to protect the database
(If you apply this password, people will need it to enter this database next times)

Database protection status: **Unprotected**

Enter the new password:

Re-enter the new password:

If you want to remove the password: 1) Let the new password fields BLANK
 2) Click 'Apply the new password'.

Do not open this window again

Use software for multiple provinces and respondent groups

The software is designed to manage fieldwork of multiple provinces and respondent groups in one database.

Who should manage multiple provinces in one database?

- Study managers and coordinators should manage multiple provinces in one database
- Survey team of one province should use the software for its own province only to minimize the data in the database, so that the database will perform at the highest speed. The use of software is also simpler with only one province.

If you want to use multiple provinces in one database, you must ensure the consistent setup across databases. It is strongly recommended that the setup is done in only one database and then imported into other databases.

If you want to apply the different setups for different provinces (e.g. applying different respondent duplication check or monitoring different characteristics for seed diversity for different provinces), use a separate database for each province.

Similarly, you can consider whether to use one database for multiple respondent groups.

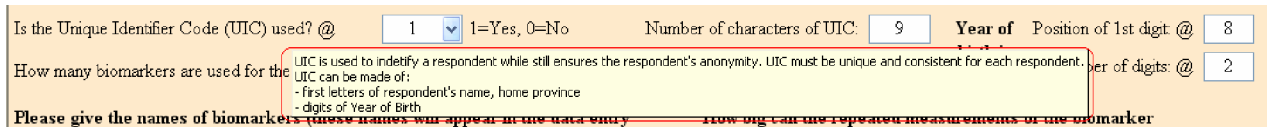
It is strongly recommended to manage multiple groups in one database in the following situations:

- the recruitments of different respondent groups in one province occur at the same time and at the same interview sites
- you need to check the respondent duplication of 2 or more groups together: e.g. you recruit sex workers and sex workers who are injecting drug users at the same time as two samples and do not to interview again the respondents who are already interviewed as a member of the other group.

Setup for the study

You can view the key instruction for the Setup by the button “Setup Instructions”.

In the Setup, you can find items marked with @ such as “Is the Unique Identifier Code (UIC) used @”. If you put the mouse over those items, the key instructions for those ones will appear.



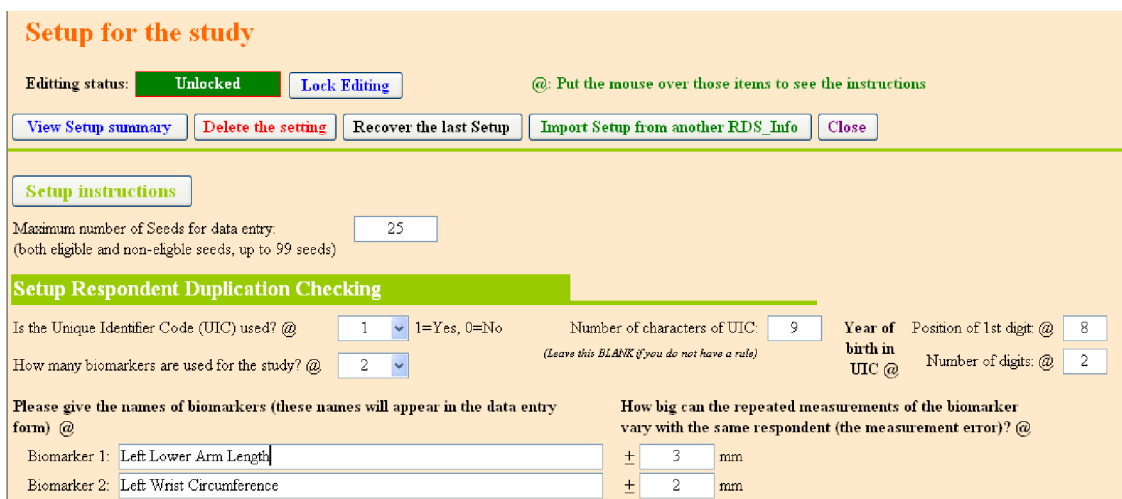
Normally you need 5-10 seeds for your survey. But to get 5-10 successful seeds, you commonly have to screen a bigger number. It is recommended to enter information of both used and unused ones that you did screening as the documentation for your survey.

With this database, you can use maximum 99 seeds (both used and unused ones) for your study for each respondent group; if you set this number = 99, in the data entry form you will have the list from *seed1*, *seed2* to *seed99* for you to select during data entry. To make the selection list shorter to ease data entry, you should set this number smaller, e.g. 25. You can change that whenever you want.

Setup for checking respondent duplication

A very important issue in RDS is to check the duplication of respondents (check if a respondent come to interview more than once). One respondent can come again for another interview to get more incentive or for other reasons.

This software can help you do that through comparing the UIC, the biomarkers of the respondents.



Depends on each study, you can decide:

- To use UIC or not: it is strongly recommended that you use UIC since it will increase the power of the respondent duplication checking. UIC must be unique or have very low duplication rate (<5%) and consistent for each respondent. UIC can be produced by combining the first letters of respondent's name or respondent parent names, first letters of their home province, and the digits of Year of Birth. UIC commonly have low duplication rate --> the specificity is high, but respondent can report falsely or inconsistently.
- How many biomarkers will be used: maximum 4 biomarkers can be used with this software. More biomarkers used, more reliable the respondent duplication checking is. However, we should consider the feasibility and time spent for that measurement.
- What biomarkers will be used: in some studies, the left lower arm length and left wrist circumference were used, as the measurement is simple and helpful in differentiating people.
- How big is the measurement error for each biomarker: it means if different researchers measure one biomarker of the same person for several times, how the measurement can vary. The software uses this measurement error to decide if the 2 respondent have similar biomarkers. If you set the high measurement errors, you will increase the sensitivity and reduce the specificity and vice versa. You can yourself set these measurement errors basing on your experience or you can do some quick test to get that.

For instance, the measurement error with left lower arm length is ± 5 mm, and it is ± 3 mm for left wrist circumference. The 1st respondent has the left lower arm length = 250 mm and the left wrist circumference = 170 mm. The 2nd respondent has the left lower arm length = 255 mm and the left wrist circumference = 173 mm. These 2 respondents will be considered to have similar biomarkers because their biomarkers are very close to each other, both differences are within the measurement errors (the arm length difference is $255 - 250 = 5$ mm, the wrist circumference difference is $173 - 170 = 3$ mm). And these 2 respondents can be the same person who comes again for the interview the second time.

As UIC is at low duplication rate but can be told lie or inconsistently, while biomarkers are objective but can be duplicated across people, you should you both UIC and biomarkers to make your duplication check more powerful. This software also allows you to note the special identification features (scars, tattoos, etc.) of the respondents to further help you to confirm the respondent duplication.

This setup will shape the data entry form for respondent duplication checking and respondent duplication classification (will be discussed next).

You can optionally set the rule to help data entry of UIC correct, for instance UIC consists of 9 characters. Later when you enter data for UIC, if the information is not correct, it will not be accepted.

As UIC may be partly made of Year of Birth of respondents, you can use that to calculate the respondents' Age and monitor the age distribution of your sample, which is very critical in

some situation (e.g. elder sex workers are often over-recruited). To do this, you need to specify where the Year of Birth stands in the UIC. For instance, UIC is “AABBCCC84” with 84 is the year of birth, “the position of first digit” is 8 (this digit stands 8th in the UIC chain), “the number of digit” is 2 (8 and 4). This setup is optional also. Upon you set that, when you enter UIC, the database automatically finds the Year of Birth in the UIC and calculates the Age of the respondent.

Instead of UIC and biomarkers, you can use other information that can help to identify respondent duplication, a text-formatted information item (e.g. nickname) can be used instead of UIC, and a number-formatted information item (e.g. year of birth) can be used instead of biomarkers.

You can choose not to use UIC and biomarkers or similar information for respondent duplication checking, the software then still can serve to track recruitment pattern, the distribution of key characteristics of the sample such as geographic distribution, age distribution, the payment of incentive for respondents, etc.

Setup Respondent Groups for monitoring Seed diversity and Sample distribution and Equilibrium

You can manage 1 or more groups in the same database, e.g. sex workers and injecting drug users. To do that, you need to setup the unduplicated information for those groups, group names, and group initials.

Setup Respondent Groups				
	Group Name (Injecting Drug Users, Sex Workers, etc.)	Group Initial (i, s, 1, 2, etc.) @	Check respondent duplication together @	Setup Status
Group 1:	Sex Workers	1	1	Yes Setup Group 1
Group 2:	Sex Worker who are Injecting Drug Users	2	1	Yes Setup Group 2
Group 3:	Men who have Sex with Men	3		No Setup Group 3
Group 4:		1		Setup Group 4
Group 5:				Setup Group 5

Select Group to Delete: Delete

Group names must be different from each other

Group Initial:

- You MUST use Group Initial; even there is only 1 group.
- Group Initial is the 1st character of all the coupon serial numbers of that group.
- Each respondent group must have an UNIQUE Group Initial. Group Initial consists of only 1 character, which can be a LETTER or a NUMBER (number is recommended).
- The software bases on the Group Initial (the 1st character of coupon serial numbers) to identify which group a coupon belongs to and do all related analysis.
- In the example (picture above), Sex Worker group has Group Initial = 1, which means serial numbers of all coupons of that group start with 1 (1seed1, 1seed2, 1001, 1002, ..., 1673,

...), MSM group has all coupon serial numbers start with 3 (3seed1, 3seed2, 3001, 3002, ..., 3854, ...).

Check respondent duplication together:

- There can be the case that a person can be recruited for 2 or more groups of the survey but you want to recruit he/she for only 1 group, for instance a sex worker (SW) who are an injecting drug user (IDU) can be recruited for SW group and also for IDU group. In this situation, you may want to check respondent duplication of those 2 groups together to identify that duplication.
- Enter the same character (1 letter or 1 number) for all the groups that you want to check duplication together.
- For the groups that duplication checking is independent, just let this field BLANK
- Example: If you set SW = 1, WM = 1, Men = 2, IDU = 2, MSM = blank:
 - SW and WM groups will be checked for duplication together,
 - Men and IDU groups will be checked for duplication together
 - MSM group is checked independently just within that group.

Your sample will reach the Equilibrium more quickly if you have seeds with diversity of the characteristics, such as age, income, marital status, injecting experience, sex work experience, working venue, etc. This software allows you to use maximally 7 features to diversify your seeds. You have to setup the features you want to use.

Click “Setup Group 1”, “Setup Group 2: and so on to open the Setup for monitoring the seed diversity.

Setup for Checking Seed Diversity and Respondent Characteristics

Editing status: **Unlocked** [Lock Editing](#) [Close](#)

Group: Group Initial: Checking respondent duplication together:

To diversify the seeds, you can recruit the seeds with different features (e.g. age, education, marital status, etc.)
Please define the features that will be used. If you do not use this, put 0 for the number of features.

How many features will be used to diversify seeds? (maximum = 7)

Track these features of normal respondents as well (for tracking sample distribution and equilibrium)

Please label the features (e.g. age, education, occupation, etc.)

Feature 1: <input type="text" value="Age"/>	Create/edit answering options
Feature 2: <input type="text" value="Self-identity"/>	Create/edit answering options
Feature 3: <input type="text" value="Marital status"/>	Create/edit answering options

You can choose to monitor this information of seeds only or for all respondents:

- If you want to monitor seeds only, do not check “Track these features of normal respondents”. These fields will be included in the data entry form when you enter data for seeds, but not for normal respondents. In this case, you can only monitor the diversity of seeds.

- If you want to monitor all respondents, check “Track these features of normal respondents”. These fields will be included in the data entry form for all respondents. In this case, you can monitor the diversity of seeds and the distribution and the equilibrium of characteristics of the sample as well. The software does not perform equilibrium analysis itself, but it can export data to Excel files ready for equilibrium analysis in RDSAT. This will help you to monitor the equilibrium of the key characteristics of the sample during the fieldwork.

You should consider the need of tracking the distribution and equilibrium of the sample during the fieldwork, since this will create more work for survey team and add more data into the database that makes database run slower. It is recommended if 1) you believe that certain sub-groups are likely to be under-recruited that needs close monitoring and timely solutions, or 2) the sample size is small and the equilibrium may not be reached.

You can also setup the answering options for each seed feature in case it is a categorical variable. For instance, for marital status of seeds, you want your seeds include single, married/cohabiting, and separated/divorced/widowed people. So that you need create answering options “single”, “married/cohabiting”, and “separated/divorced/widowed”. Use the buttons “Create/edit answering options” next to the features to do setup for each feature. This setup can also be done in the data entry form ([see picture](#)).

In case you want to enter data for the features as continuous variables (e.g. age, income), you do not need to setup the answering options.

Create/Edit the list of answering options for
Sex Workers_S15_Venue to meet male clients Feature number 2

To delete a row, mouse click on that one and click 'Delete an answering category' button.

Answering categories

Street

Karaoker bars

Massage parlors

Restaurants

Hotels/Guesthouses

Setup Provinces and Sample Sizes

You can manage the data collection of 1 or more provinces in the same database. This is useful in case you have a survey in many provinces; you will need only one database for all, you can also conduct the field work in 1 province and still manage the data and track the progresses in other provinces in one database.

You can setup the list of districts or areas of each province to make your data entry easier and consistent.

You MUST setup the sample size expected for each respondent group at each province. This will help you to track the progress toward the expected sample sizes. If you do not set up sample size for a group, you will not be able to enter data for that group.

Setup the list of survey provinces

Province
▶ An Giang
Can_Tho
Ha Noi
Hai_Phong
HCMC
Nghe_An
QuangNinh
*

Setup the Sample Size and the list of Districts/Areas for Provinces

Province:

Group	SampleSize	Province	Group Initial
Sex Workers	245	Hai_Phong	1
▶ Sex Worker who are Injecting Drug Users	152	Hai_Phong	2
*			

District	Province
▶ AnDuong	Hai_Phong
HongBang	Hai_Phong
KienAn	Hai_Phong
LeChan	Hai_Phong
NgocQuyen	Hai_Phong
*	Hai_Phong

Delete provinces, groups, or districts: select the items to delete by clicking the selection squares at beginning of those items, and hit “delete” button of the keyboard. In the below picture, 2 provinces “Hanoi” and “Hai_Phong” are selected and will be deleted if you hit “Delete” in the keyboard.

Setup the list of survey provinces

Province
An Giang
Can_Tho
▶ Ha Noi
▶ Hai_Phong
HCMC
Nghe_An
QuangNinh
*

Delete, Recover, and Import Setup information

There are buttons for you to view Setup summary, delete, recover, or import Setup information from other RDS_Info databases.

Setup for the study

Editing status: Unlocked @: Put the mouse over those items to see the instructions

Delete the setting: this will delete all setup information for you to do a new setup. When you delete, the last setup information will be backed up for recovering later.

Recover the last setup information: click the “Recover the last Setup” button. You can not recover the setup information previous the last one.

Import Setup information: you can import Setup from other RDS_Info databases directly or through a small data transfer file (see data transfer between RDS_Info databases). With this, you can do the Setup in 1 database and send to other databases in other computers for other researchers.

If you already did some setup and recover the last setup or import setup, the recovered or imported Setup will overwrite the current one. There will be warning messages for you to make decision.

In the setup summary report, all the setup information about UIC, biomarkers, seed features, answering options will be included.

Summary of Setup information

FOR CHECKING RESPONDENT DUPLICATION

Use of UIC: Yes

Number of biomarkers used: 2

Biomarkers	Measurement error (mm)
biomarker 1 Left Lower Arm Length	± 3
biomarker 2 Left Wrist Circumference	± 2
biomarker 3	\pm
biomarker 4	\pm

RESPONDENT GROUPS

Group	Initial	Check duplication together
Sex Workers	1	1
Sex Worker who are Injecting Drug Users	2	1
Men who have Sex with Men	3	

FOR DIVERSIFYING SEEDS

Group: Sex Workers Group_in: 1

Features	Answering categories
Feature 1 S9_Age	<22 years old 22-25 years old > 25 years old
Feature 2 S15_Venue to meet male clients	Street Karaoke bars Massage parlors

SAMPLE SIZE

An Giang	Sex Workers	200
Can_Tho	Sex Worker who are In	100
	Sex Workers	165

When to do Setup

The setup must be done before you start enter respondent information into the database. Since the data entry form is built from the setup information, you can not open the data entry form until the setup is complete.

If you use the software in several computers for 1 survey, at the beginning of the field data collection, you should complete the setup in one computer, and then copy the software with the complete setup to other computers or send Setup information to them for importing, to ensure the same setup in all computers, to avoid the data inconsistency.

Edit the Setup when you already entered data into the database

You should not edit the setup when you already entered data into the database, since it may cause data inconsistencies or errors.

However, in some case you may want to adjust your setup to manage your field work better. For instance, at the beginning, you set the measurement error for the lower arm length is ± 5 mm and later on during the field work you find this error is too large that results in long lists of respondents who have similar arm lengths when you check the respondent duplication while they are different people actually. In this case, adjusting the measurement error for the lower arm length down to ± 2 mm may produce better duplication checking result.

The following change will be OK:

- Adjustment of measurement errors of biomarkers
- Rephrasing the labels of biomarkers and seed features

The changes will cause data inconsistency or errors:

- Change the number of biomarkers used for the study
- Change the number of features used for diversifying seeds (not severe)
- Change the meaning of biomarkers, seed features

After editing the setup, you should inform your survey team about that by sending them the summary of setup information in Word format ([see setup summary](#)). The changes should be agreed within the survey team and done in all the survey databases.

Complete and Lock the setup

To ensure that the setup is complete, when you close the Setup page or go to other pages, there will be a warning message if the setup is incomplete and the blank fields will be highlighted in orange color for you to complete.

The screenshot shows a setup form with the following elements:

- A dropdown menu for "Is the Unique Identifier Code (UIC) used?" set to "1".
- A dropdown menu for "How many biomarkers will be used for the study?" set to "2".
- A section titled "Please give the names of biomarkers (these names will appear in the data entry form):" containing two input fields:
 - "Biomarker 1:" with the text "arm length" entered.
 - "Biomarker 2:" with a blank field highlighted in orange.
- A section titled "How big can the repeated measurements of the biomarker vary with the same respondent (the measurement error)?" containing two input fields:
 - "arm length: ± 2 mm" (with "2" in a dropdown menu).
 - A second field with a blank dropdown menu highlighted in orange.

After completing the setup, you should lock the setup (using the button 'Lock Editing') to avoid the setup is accidentally changed. When the setup page is locked, the fields will be blurred and can not be edited until it is unlocked (using the button 'Unlock Editing'). When you close the Setup page, or go to other pages, the setup will be automatically locked.

Board of Main Functions

All the key functions of the software are put in this window, including data entry, respondent duplication checking, seed diversity checking, data editing, coupon delivery and recruitment progress and pattern checking, dual incentive monitoring, transfer data between databases, make data for RDSAT and NetDraw, etc.

You need to enter Province and Group for many functions that process data by province and group. There will be warning messages for that.

Data entry and respondent duplication checking

When a respondent comes and get screened, the screening information must be entered the software for checking the respondent duplication

Data entry

Click the “Data entry and Respondent duplication check” button

MAIN FUNCTIONS

Province: Respondent group:

Data Review and Edit

- Enter Screening data and Check respondent duplication
- Find, Review, and Edit data
- Check records deleted in the middle of the recruitment chain
- ALL data in this database - Summary, Edit, and Delete

The blank data entry form will be opened. All the records of the respondents which have been entered previously will be hidden to avoid being edited accidentally.

Data Entry for Respondent Duplication Check and Coupon Management Use these buttons to create/edit the answer options

Coupon serial number: S9_Age:

Date of interview (MM/dd/yyyy): S15_Venue to meet male clients:

Province: Group: Group initial: S16_Sex work experience:

District or area in the province (the respondent is living or working): S17_Exposed to PSI outreach activity:

Network Size:

Unique Identifier Code (UIC):

Left Lower Arm Length (mm):

Left Wrist Circumference (mm):

Outstanding features of the respondent (tattoo, scar, mole, etc. (position, description)):

Duplicated

Does the respondent meet criteria? Is the respondent interviewed? Is the respondent given coupons?

Serial numbers of the coupons given to this respondent to recruit others: Notes:

For the field “Coupon serial number”, you can enter data by choosing from the drop-down list of the combo box. Only the serial numbers of the coupons which have been delivered and entered the database will appear in the list for you to choose. If you enter a serial number which has not been entered the database, there will be an error message.

DATA ENTRY FORM (right after the respondent is screened)

Coupon serial number:

Date of interview (MM/dd/yyyy):

District or area in the province (the respondent is living or working):

Unique Identifier Code (UIC):

When you enter the coupon serial number, the software automatically create [Province] = Province selected in the Main Functions, [Group], and [Group Initial] basing on the Setup (e.g. you entered 1seed1 as serial coupon number → [Group] = ‘Sex Workers’, [Group Initial] = 1).

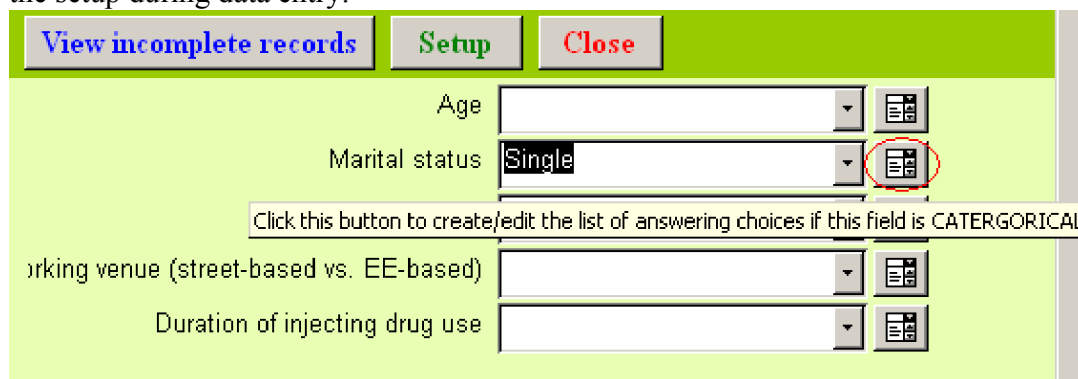
To make the data entry faster, the Date will be automatically filled with the current date (please ensure the correct date of your computer). But it is editable.

District or area in the province where the respondent is living or working:

- this information is optional but strongly recommended
- if this information is collected, you can track how many and % of respondents from each district (area) in the province you get. In some cases, you may want to do adjustments (recruit more seeds, deliver more coupons, pay for far traveling, set up another recruitment site, etc.) for districts where you get very few respondents

Number of successful interviews by Area (including seeds)	
Area	Number of Interview
Ba Dinh district	3
Hoan Kiem district	2
Tay Ho district	2
Total	7

When you enter data for seeds, the seed features will appear in the form. You can setup the answering options for those fields to make your data entry more precisely and faster by using the buttons next to the seed feature fields. This action has the same effect as the answering-category-setup in the Setup page, just to make it more convenient in case you want to do or edit the setup during data entry.



Check the respondent duplication

Based on the Setup, the UIC and biomarkers will appear accordingly in the data entry form (see picture below). If during setup, you choose not to use UIC as well as biomarkers for duplication respondent checking, this button will not appear in the data entry form and you will not be able to perform this function.

After entering the serial number, UIC, biomarkers, click the button “Check the respondent duplication” in the data entry form.

The image shows a data entry form with a light green background. It contains four input fields: 'Unique Identifier Code (UIC)', 'Left lower arm length (mm)', and 'Left wrist circumference (mm)', each with a white text box. Below these is a larger text area for 'Outstanding features of the respondent: tattoo, scar, mole, etc. (position, description)'. At the bottom, there is a button labeled 'Check the respondent duplication' which is circled in red.

The above information of the current respondent will be compared to all the other respondents in the database.

There will be a warning message that tells you about the level of respondent duplication risk.

There will be also a detailed duplication checking report ([see picture](#)) for you to further justify the respondent duplication.

4 levels of respondent duplication risk – Using UIC and Biomarkers

If you use UIC, the respondent duplication checking will be classified into 4 levels, based on UIC, biomarkers, and the relation between the respondents and their recruiters.

It is strongly recommended to use UIC for checking.

- **Level 1/4**
 - The biomarkers of the current respondent are similar to at least 1 other respondent.

Since these biomarkers may similar in different people, this is a low level of warning.

The 2 respondents are considered as having similar biomarkers when ALL the differences of their biomarkers are within the measurement errors (you set that with Setup function).

For instance, both of the following criteria are met:

- *left lower arm length difference $\leq 5\text{mm}$ (the measurement error = $\pm 5\text{mm}$)*
- *left wrist circumference difference $\leq 3\text{mm}$ (the measurement error = $\pm 3\text{mm}$)*

- **Level 2/4**
 - The UIC of the current respondent are similar to at least 1 other respondent.

Since the UIC duplication between different people is generally not high (<5%), this is a higher level of warning.

The UIC difference can result from the fact that the respondent report inconsistently or tell lie.

- **Level 3/4:** this is quite high level of warning, the risk of respondent duplication is very high.

There are 3 situations associated with this warning level:

Situation 1:

- Similar biomarkers, AND
- Same UIC

Situation 2:

- The biomarkers of the current respondent similar to his/her recruiters.

Since the respondent need a coupon to be interviewed. Where can he/she get a coupon? The easiest way is using the coupon which he/she should give to another. Therefore, if the recruiter and the recruit have the similar biomarkers, it can be the case.

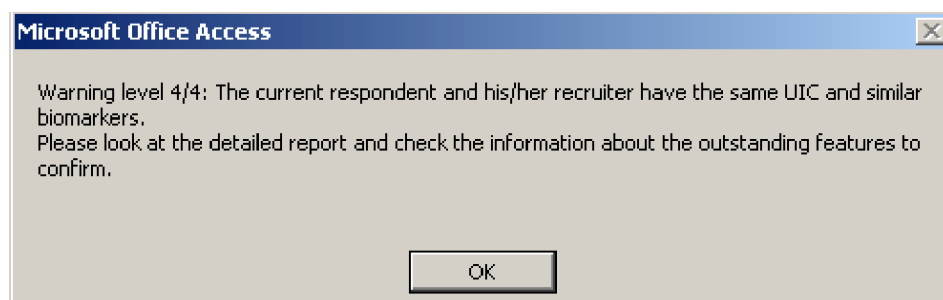
Situation 3:

- The UIC of the current respondent similar to his/her recruiters.

▪ **Level 4/4:**

- The UIC of the current respondent similar to his/her recruiters.
- The biomarkers of the current respondent similar to his/her recruiters.

This is very high warning level. Almost surely that the recruiter and the current respondent (the recruit) are the same person.



With all the levels of warning, please check the information about Tattoo, Scar, etc to confirm the duplication.

Caution: You may see the Tattoo and Scar this time and not see it next time if the respondent wears different clothes each time (for instance, long sleeve and short sleeve shirt will hide or unhide tattoos or scars in the respondent arms).

2 levels of respondent duplication risk - Using Biomarkers only

If you do NOT use UIC, the respondent duplication checking will be classified into 2 levels, based on biomarkers and the relation between the respondents and their recruiters. This is not as powerful as using UIC in addition.

- **Level 1/2**
 - The biomarkers of the current respondent are similar to at least 1 other respondent.

Since these biomarkers may similar in different people, this is a low level of warning.

- **Level 2/2:**
 - The biomarkers of the current respondent similar to his/her recruiters.

2 levels of respondent duplication risk - Using UIC only

If you do NOT use biomarkers, the respondent duplication checking will be classified into 2 levels, based on UIC and the relation between the respondents and their recruiters. This is not as powerful as using biomarkers in addition.

- **Level 1/2**
 - The UIC of the current respondent are the same as at least 1 other respondent.

Since the UIC is rarely duplicated between different people, this is a high level of warning.

- **Level 2/2:**
 - The UIC of the current respondent is the same as his/her recruiters.

Detailed report of the respondent duplication checking

After the warning message, a detailed report of the duplication checking will be opened in which you can find the information of the current respondent, his/her recruiter, and other respondents who have the same UIC and/or similar biomarkers. You can also find the special identity features of these respondents to confirm the duplication.

If you do setup to check the respondent duplication for sex worker group and sex worker who are injecting drug user together, the current SW or SW-IDU will be compared to all other SW and SW-IDU, and all duplicated SW and SW-IDU will be showed in this report.

**Check the respondent duplication
The detailed report**

THE CURRENT RESPONDENT:

<i>Coupon serial No.</i>	<i>UIC</i>	<i>Left lower arm length (mm)</i>	<i>Left wrist circumference (mm)</i>	<i>Outstanding features</i>
1accb	aabbcc75	253	172	tattoo (a rose) in the neck

THE RECRUITER:

<i>Coupon serial No.</i>	<i>UIC</i>	<i>Left lower arm length (mm)</i>	<i>Left wrist circumference (mm)</i>	<i>Outstanding features</i>
1acc	aabbcc75	250	170	tattoo of a rose in the neck

ALL THE REPOSNDENTS WITH THE SAME UIC AS THE CURRENT RESPONDENT:

<i>Coupon serial No.</i>	<i>UIC</i>	<i>Left lower arm length (mm)</i>	<i>Left wrist circumference (mm)</i>	<i>Outstanding features</i>
--------------------------	------------	-----------------------------------	--------------------------------------	-----------------------------

Enter the ineligible respondents

There may be respondents who come but are not interviewed. The reasons may be:

- They do not meet the criteria of the study
- They come again for multiple interviews (duplication)
- They do not complete the interview

In any case, you must enter all of them into the database with “NO” for the field “Is the respondent interviewed?”. This entry will ensure the correct calculation in the summary report of coupon delivery and recruitment.

Use the field “Notes”

You can use this field to enter any information you want.

There are some information recommended for this field:

- The reason for not interviewing the respondent (not meet study criteria/ duplication/ not complete the interview)
- The replacement of a seed. This note will appear in the summary report of the seeds and helpful for you to track the seed recruitment.

Example: the additional seed 5 is recruited to replace for poor-growing seed 2, you can note in the record of seed 5 as “replacement for poor-growing seed 2”.

Is the respondent interviewed? 1=Yes, 0=No
 Is the respondent given coupons? 1=Yes, 0=No

Serial numbers of the coupons given to this respondent to recruit others

Notes: This respondent does not meet the study criteria (< 18 years old)

-----THE END-----

Labels and values in the data entry form do not appear

In computers that use Window Vista or Window 7, some labels (e.g. labels of biomarker fields) sometimes do not appear right away when we open the data entry form, you just click over the areas of those label to make them appear.

Picture 1. The labels and date do not appear

Data Entry for Respondent Duplication Check and Coupon Management

Save Delete current record Add new record Find, Edit records View incomplete records Setup Close

Coupon serial number: 1093
 Date of interview (MM/dd/yyyy): 02-Oct-11
 Province: Ha Noi Group: MSM Group Initia: 1
 District or area in the province (the respondent is living or working): Thanh Xuan
 Network Size: [empty]
 Unique Identifier Code (UIC): nghuhn191
 [270]
 [158]
 Outstanding features of the respondent: tattoo, scar, mole, etc. (position, description): not ruoi canh mui phai
 Check the respondent duplication [] Duplicated
 Does the respondent meet criteria? 1 Is the respondent interviewed? 1 Is the respondent given coupons? 1

Picture 2. The labels and date appear when we click on their areas

Data Entry for Respondent Duplication Check and Coupon Management

Save Delete current record Add new record Find, Edit records View incomplete records Setup Close

Coupon serial number: 1093
 Date of interview (MM/dd/yyyy): 02-Oct-11
 Province: Ha Noi Group: MSM Group Initia: 1
 District or area in the province (the respondent is living or working): Thanh Xuan
 Network Size: [empty]
 Unique Identifier Code (UIC): nghuhn191
 Left lower arm length (mm): 270
 Left wrist circumference (mm): 158
 Outstanding features of the respondent: tattoo, scar, mole, etc. (position, description): not ruoi canh mui phai
 Check the respondent duplication [] Duplicated
 Does the respondent meet criteria? 1 Is the respondent interviewed? 1 Is the respondent given coupons? 1

Enter information about interview participation and coupons given

After checking the duplication or after the interview, you need to add following information of the respondent:

- Being eligible for study or not
- Being interviewed or not
- Serial numbers of the coupons given to the respondent for recruiting others. The number of coupons given to each respondent is unlimited.

Check the respondent duplication

Is the respondent interviewed? 1=Yes, 0=No

Serial numbers of the coupons given to this respondent to recruit others	
▶	1aa
	1ab
	1ac
	1ad
	1ae
	1az
*	

Record: 1 of 6

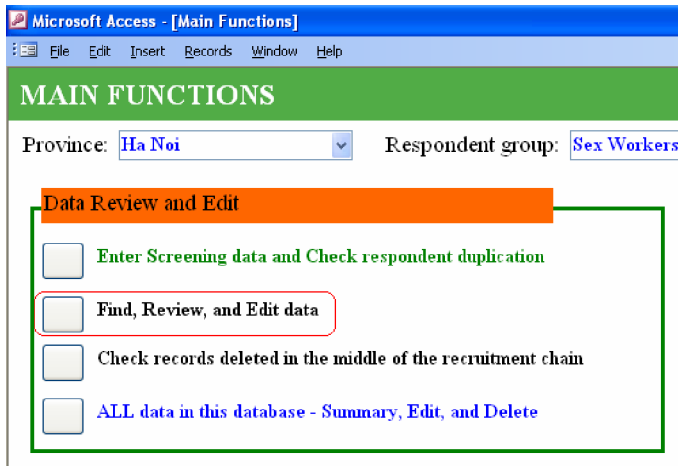
This information serves for tracking the number of coupons delivered, the number of interview conducted, and for analyzing the chain and pattern of recruitment, etc.

A respondent will only be given coupons to recruit others if he/she is eligible and complete the interview. Therefore, you only can enter the coupons if the respondent is eligible and interviewed, i.e. the interview status of the respondent is Yes.

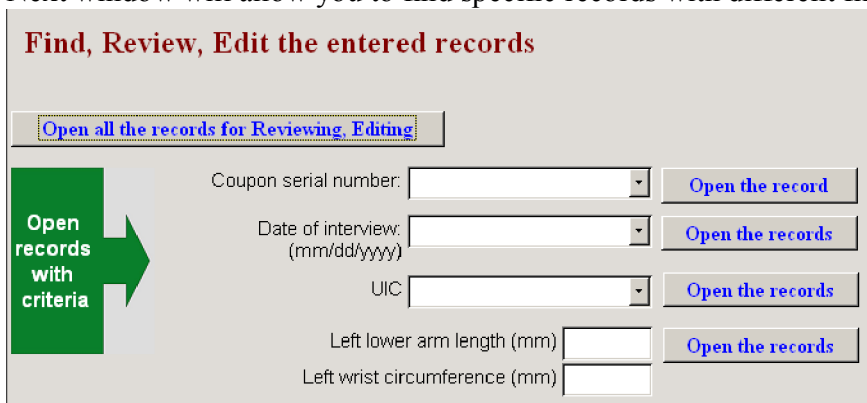
When you enter the coupons given out, those coupon serial numbers will appear in the dropdown list of the field “Coupon serial number” for you to select when you enter data for the next respondent. Therefore, if you do not enter all the coupons given out, you may have trouble to enter the coupon serial number for the next respondents.

With all the above reasons, it is very important to enter the information about the interview status and delivered coupons for all the respondents to ensure the precise calculation and correct functioning of the database.

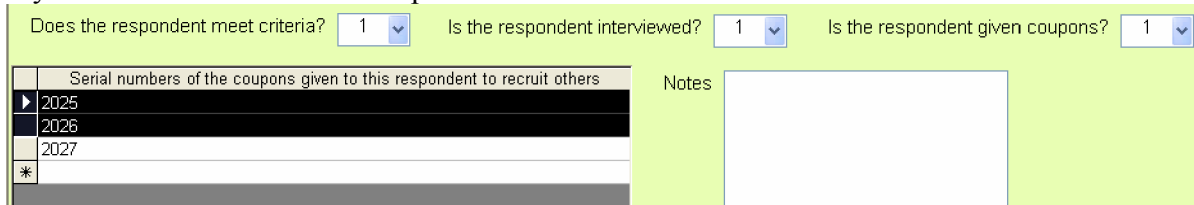
Click the button “Find, Review, Edit the entered records”



Next window will allow you to find specific records with different filter criteria:



The selected records will be opened in the data entry form for editing, adding information. To delete coupons, select the coupons by clicking the square at the beginning of the records and hit “delete” button on the keyboard. In the below example coupons 2005 and 2006 are selected, if you hit “delete” two those coupons will be deleted.



As the 1st character of coupon serial numbers (Group Initial) of respondents within a group must be the same as each other, if you enter a coupon serial number that have the 1st character different from the recruiter, there will be a warning message and the coupon will not be accepted. This will ensure the data consistency and the precision of data analysis and aggregation.

Data Entry for Respondent Duplication Check and Coupon Management

Save Delete Add new record Find, Edit records View incomplete records

Coupon serial number: 2002
 Date of interview (MM/dd/yyyy): 18-Mar-11
 Province: Hai_Phong Group: Sex Worker who are IDU Group Initial: 2

Check the respondent duplication Duplicated

Does the respondent meet criteria? 1 Is the respondent interviewed? 1

Serial numbers of the coupons given to this respondent to recruit others	Notes
2025	
2026	
2027	
1000	
*	

Microsoft Office Access
This coupon serial number has a different Group Initial.
OK

In some case, the coupon serial number is let blank, it is unacceptable for the database, there will be a warning message (below), and you can not do anything else unless you enter a eligible coupon serial number.

Check the respondent duplication Duplicated

Does the respondent meet criteria? 1 Is the respondent interviewed? 1 Is the respondent given coupons? 1

Serial numbers of the coupons given to this respondent to recruit others	Notes
2026	
2027	
*	

Microsoft Office Access
The coupon serial number has not yet entered. It is obligatory
OK

If you do not want to enter a coupon serial number into that, close the form with **X** button in the right upper corner. The form will be closed and the blank coupon serial number will be deleted. You may also enter an eligible coupon serial number and then delete it totally by selecting it and hit “delete” button in the key board.

To ensure the interview status of all the respondents and all coupons gives out are entered into the database, there are warning messages to remind you about that when appropriate.

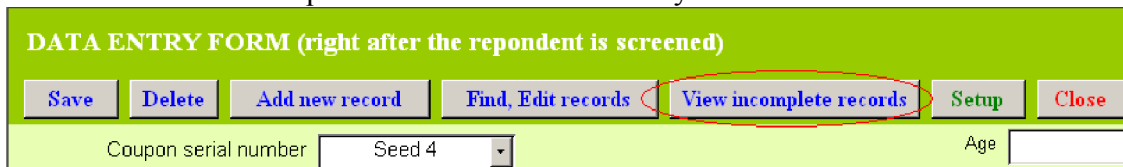
Microsoft Office Access
You have not entered the information that if this repondent was interviewed.
OK

Microsoft Office Access
The serial numbers of the coupons given to this respondent for further recruitment have not entered. Do you want to enter that information now?
Yes No



You can escape and complete that information later. But it is strongly recommended to complete that information as soon as possible.

You can easily find and complete all the records that contain unconfirmed interview status by the button “View incomplete records” in the data entry form.



Respondents with unconfirmed information

These respondents have been screened and their information have been entered the database. However, the information if they have been interviewed and given coupons is NOT yet entered. You need to complete this information ASAP.

Coupon serial number	Interviewed	Given coupons	Serial number of coupons
69	Not Confirmed		
59	Yes	Not Confirmed	
20	Yes	Yes	Not Entered

If you click the button “Complete the unconfirmed information”, all the incomplete records will be opened for you to add the interview status and/or given coupon information.

Review and Edit respondent information

Find/Edit data at provincial level

[See the part above.](#)

Find and Recover deleted records in the middle of recruitment chain

If you delete a record of a respondent who is in the middle of recruitment chain i.e. he/she already recruited others, in the report that show recruitment chain (see more about this later), all the records recruited from that respondent will not appear in the report, since the deleted respondent who play as a link in the recruitment chain is deleted.

The whole Chain of Recruitment

(Only including people who came for interview)

Province: **Can_Tho**

Group: **Sex Workers**

Colored: Came but was not interviewed (e.g not eligible)

Seed	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Wave
1Seed1	11501								
1Seed2	11503	11527							
	11504	11530	11554						
			11555						
		11531	11560	11587					
			11561						
			11562	11581					

In the example above, if we delete the record of coupon number 11531, the link will be broken there and all the coupons from 11531 i.e. coupons numbered 11560, 11561,..., 11581, 11587 will not appear in the report, even they still exist in the database.

You can find those deleted respondents and recovered with the button “Check records deleted in the middle of recruitment chain” in the Main Functions board, at “Data Entry, Review and Edit” section.

The list of coupons that were deleted, which causes discontinuation of recruitment chain

Coupons were deleted that discontinue the recruitment chain	The next coupon in the recruitment chain (not deleted)	Select Coupon to recover: <input style="width: 80%;" type="text" value="11531"/>	<input type="button" value="Recover"/>
11531	11560		
11531	11561		
11531	11562		

In the example above, to recover the coupon 11531, enter that serial number and click “Recover” button, the link will be recovered and the respondents after that link will appear again in the recruitment chain report.

View the Summary of all data in the database and Edit

You can view the summary of all data in the database using from the section Data Entry, Review and Edit in the Main Functions board.

ALL data in this database - Summary, Edit, and Delete [Click to View the data summary \(Word-format\)](#)

Reset for a new selection Reset for a new selection

The Current Province name: Quang Ninh The New Province name (in Setup): QuangNinh Edit

The Current Group name: The New Group name (in Setup): Undo Edit

The Current Group Initial: The New Group Initial (in Setup): (Blank = NOT to be changed)

(Blank = select ALL)

Review Detailed Records Delete Undo Delete

[Click to Review the SETUP information](#) [Click to Edit the SETUP information](#) The number of coupon given to respondent: View record(s)

Province	Group	Group Initial	Consistent between Setup and data	Starting Date	Latest Date of Data	No. of fieldwork days	Maximum no. of coupons given to each respondent	No. of records	No. of Successful Respondent	Sample Size	Need to recruit further
Hai_Phong	Sex Worker who are IDU	2	Yes	15-Mar-11	26-Mar-11	12	4	95	85	152	67
Hai_Phong	Sex Workers	1	Yes	14-Mar-11	26-Mar-11	13	4	268	241	245	4
HCMC	Sex Worker who are IDU	2	No	19-Mar-11	31-Mar-11	13	4	188	176		
HCMC	Sex Workers	1	Yes	18-Mar-11	30-Mar-11	13	3	334	304	300	-4
Nghe_An	Sex Workers	1	Yes	30-Mar-11	04-Apr-11	6	3	202	178	220	42
Quang Ninh	Sex Worker who are IDU	2	No	07-Apr-11	07-Apr-11	1	4	2	2		
Quang Ninh	Sex Workers	1	No	07-Apr-11	07-Apr-11	1	3	32	32		

In the summary, items in RED colors indicate that those items are not consistent with Setup and need to be changed to eliminate that inconsistency. The inconsistency commonly comes from the inconsistent Setup information across the databases used by different researchers, i.e. the data that you import from other database with different Setup information will be not consistent with your own Setup. To avoid this, you should Setup in 1 database and then import that Setup information into other databases and do the same when you change the Setup information in 1 database.

In the above example:

- “Quang Ninh” is not in the Setup province list. The solution should be change the Province Name from “Quang Ninh” to “QuangNinh” as in the Setup, the difference here is only the space between “Quang” and “Ninh”.
- In province “HCMC” the group “Sex Worker who are IDU” is not in the Setup, so that there is no group with Group Initial = 2 with HCMC. The solution may be you go to Setup and create the group “Sex Worker who are IDU” and its expected sample size for province HCMC, and groups “Sex Worker who are IDU” and “Sex Workers” for QuangNinh province.

Change Province, Group, Group Initial: the current names were taken from current data in the database, the new name are the names registered in the Setup. Therefore, after changing, the new names will be consistent with Setup.

For current name, if you select a province and/or a group, only records of that province and/or that group will be changed. If you let a criterion (e.g. Province) blank, the records of all provinces will be changed. That way of selecting records is used for Editing, Deleting, and Reviewing data.

For instance, if you enter “Quang Ninh” for province, “Sex Workers” for group and hit “Delete” button, all the records of group “Sex Workers” of “Quang Ninh” province will be deleted, if you only enter “Quang Ninh” for province, all the records of Quang Ninh including both SW group and SW-IDU group will be deleted. If you do not enter anything for Province, Group, and Group Initial and hit “Delete”, all data in the database will be deleted.

For the new Province Name, new Group, and new Group Initial, if you enter a name, the new records will be changed with those new names, if you let them Blank, the names will not be changed. For instance, you enter “Hanoi” for province and let Group and Group Initial blank, the province of selected records will be changed to “Hanoi” and Group and Group Initial will be unchanged.

ALL data in this database - Summary, Edit, and Delete [Click to View the data summary \(Word-format\)](#)

<p style="text-align: center;">Reset for a new selection</p> <p>The Current Province name: <input type="text" value="Quang Ninh"/></p> <p>The Current Group name: <input type="text"/></p> <p>The Current Group Initial: <input type="text"/></p> <p style="text-align: center;">(Blank = select ALL)</p>	<p style="text-align: center;">Reset for a new selection</p> <p>The New Province name (in Setup): <input type="text" value="An Giang"/></p> <p>The New Group name (in Setup): <input type="text" value="Sex Workers"/></p> <p>The New Group Initial (in Setup): <input type="text"/></p> <p style="text-align: center;">(Blank = NOT to be changed)</p>
<input type="button" value="Edit"/>	
<input type="button" value="Undo Edit"/>	

In the above example, all the records of “Quang Ninh” province will be changed to new province name as “An Giang”, new group as “Sex Workers”, and the Group Initial will remain unchanged.

CAUTION: when you change Group Initial of records, the 1st character of those records will be changed accordingly to ensure the consistency. This change, if not appropriate, will cause the data problems.

To ensure you do not edit, delete data accidentally, there always be warning messages to help you make the right decision. You can also undo the last deleting and undo the last editing. You can not undo the editing, deleting before that.

In the data summary, the latest date of data updating for each province will be highlighted in Red if it was ≥ 2 days ago and the sample sizes were not reached. You can find those provinces to ask for researchers to send you the more update data.

Maximum number of coupons given to each respondent: commonly each respondent is given 3 coupons for recruiting their friends. If this number is more than 3, it will be highlighted in Red to draw your attention.

A common error observed with the fieldwork is that researchers enter the incorrect information about coupons given to a respondent. For instance, a researcher entered 3 coupons 001, 002, 003 for the seed 1 and sent you data, you imported that into your database. The next day, the researcher found that they entered the wrong coupons for the seed 1, he/she changed to the actual coupons 004, 005, 006 and sent data to you again. If you imported that data without doing any editing, the 3 new coupons 004, 005, 006 will be added to the seed 1 that makes the total number of coupons for the seed 1 become 6. This unusual number will be displayed in the summary, and you can easily find that unusual records (see below).

		Click to Review the SETUP information		Click to Edit the SETUP information		The number of coupon given to respondent: <input type="text" value="6"/>		<input type="button" value="View record(s)"/>			
Province	Group	Group Initial	Consistent between Setup and data	Starting Date	Latest Date of Data	No. of fieldwork days	Maximum no. of coupons given to each respondent	No. of records	No. of Successful Respondent	Sample Size	Need to recruit further
QuangNinh		1	No	30-Mar-11	06-Apr-11	8	3	175	160		
QuangNinh		2	No	30-Mar-11	06-Apr-11	8	6	27	26		

In the below example, it reveals the respondent with coupon number 2750 was given 6 coupons 2773 – 2778 (this is an actual mistake described above).

	Province	Coupon Serial Number	Coupons given for recruiting others
▶	QuangNinh	2750	2773
	QuangNinh	2750	2774
	QuangNinh	2750	2775
	QuangNinh	2750	2776
	QuangNinh	2750	2777
	QuangNinh	2750	2778

In the summary, you can also see that you need to setup the expected sample sizes for provinces to be able to monitor the progress toward those expected sample sizes.

Check the diversity of the seeds

In MAIN FUNCTIONS board, use the button of the section “Check recruitment and diversity of the seeds” to open the summary report for the seeds recruited and screened but not recruited for the study. It is optional but recommended to enter the ones who are screened for seeds but not recruited, at least for documentation purpose that can tell you about the fieldwork process and helpful for the next studies.

Check recruitment and diversity of the SEEDs

All the Seeds (recruited and non-recruited) *

Recruited Seeds only *

In the report, all seeds are showed with their characteristics which help us to know about the diversity and can make the decision on recruitment of the next seeds.

The characteristics of seeds recruited

Seed	Date of recruitment	Area (living or working)	Age	Marital status	Education	Working venue (Street vs. EE-based)	Duration of injecting drug use	Notes
Seed 1	8/17/2009	Ba Dinh district	25	Married	High school	Street-based	1-10 years	recruited by PS peer educators
Seed 2	8/18/2009	Hoan Kiem district	18	Single	Secondary	EE-based	Less than 1 year	recruited by peer educators of the Lifegap project
Seed 4	8/18/2009	Tay Ho district	30	Separate/Divorced/Widowed	High school	Street-based	1-10 years	recruited at a hot spot

View the chain of recruitment

Chain of Coupon delivery and recruitment

The function “View the chain of recruitment” will show:

- the whole chain of recruitment

- the seeds with short chain of recruitment <= 2 waves (it is recommended to replace by new seeds if the chain stops after several day waiting)
- the whole chain of coupon delivery
- the relation in the chain of recruitment of a specific coupon

This function is to help developing the chart of recruitment chain

The whole Chain of coupon delivery

NOTE: (Y): Interviewed
 (N): Came but was NOT interviewed
 No note: not yet come

Seed	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Wave 9	Wave 10	Wave 11	Wave 12
Seed 1	1a (Y)	1aa										
		1ab (Y)	1aca (N)	1acaa								
				1acab								
				1acac								
				1acb								
				1acc								
		1ac										
		1ad										
		1ae										
		1az										
	1b											

Recruitment summary by Seed

This function summarize the recruitment of each seed:

- how many successful respondents recruited by that seed,
- how many waves of recruitment from that seed
- the number of successful respondents for each wave
- latest date that coupons given out and respondents came for interview

Summary of the whole recruitment chain

Province: Hai_Phong

Group: Sex Workers

Seed	Date Recruited	Network size	Area	No. of successful respondents	Date of latest coupon given out	Date of latest respondent came	No. of waves	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8	Wave 9	Wave 10	Wave 11	Wave 12
1Seed1	3/14/2011	20	NgoQuyen	52	3/26/2011	3/26/2011	7	3	9	10	13	10	6	1					
1Seed2	3/14/2011	6	LeChan	0	3/14/2011	3/14/2011	0												
1Seed3	3/14/2011	20	HaiAn	27	3/23/2011	3/23/2011	5	3	6	8	6	4							
1Seed6	3/15/2011	35	LeChan	95	3/23/2011	3/24/2011	7	3	6	13	21	25	19	8					
1Seed8	3/16/2011	30	AnDuong	44	3/21/2011	3/26/2011	8	2	5	6	5	7	6	6	7				
1Seed12	3/25/2011	30	NgoQuyen	15	3/26/2011	3/26/2011	6	3	3	3	3	2	1						

NOTES:

- No. of successful respondents: number of respondents that the seed successfully recruited for the study, NOT including the seeds themselves.
- No. of waves: Number of waves that the seed successfully recruited (not counted if the respondents came but were not recruited).
- Wave 1, Wave 2 and so on: The number of successful respondents of those waves. The Sum of Wave 1 to Wave 12 will be smaller than the No. of successful respondents if the chain is more than 12 waves (the software only shows 12 first waves).

In the example above, we can see most of seeds recruiting very well and reach wave 5 or more (the equilibrium is likely reached for most of indicators); only the seed ‘1seed2’ from LeChan district, with network size of 6, could not recruit anyone after many days. You can also see another seed ‘1seed6’ also in LeChan district with network size of 35 was able to recruit 95 peers and reached the wave 7. If we want to recruit more respondent with similar characteristics with the seed ‘1seed2’, we should replace it by a seed with similar characteristics but have more ability of recruiting others (has a bigger network size).

Cross-area recruitment by Seed

This function will reveal the recruitment pattern across areas in the surveyed province. This provides the information about the network of respondents. Together with information about network size, we will understand better the density and connections of the respondent network, which is very important to design and implement a RDS survey. With this, we can also make decision where we should recruit seeds for the study. This also helps us to identify that respondents form a single network or multiple separate networks. This has implication in the RDSAT analysis later on, as data analysis must be done separately for independent networks.

List_of_Seed	Area, where the Seed is from	AnDuong district	DuongKinh district	HaiAn district	HongBang district	Kien Thuy district
1Seed1	NgoQuyen district	14	3	12		5
1Seed3	HaiAn district	1		10		6
1Seed6	LeChan district	6		16		4
1Seed8	AnDuong district	12	1	2		25
1Seed12	NgoQuyen district			6		

The example above shows that the respondents generally recruit their peers in the same district and in other districts as well, which means there are connections between respondents in different districts that is necessary for RDS to work effectively.

View the status of coupon delivery and interview

This function will provide the summary and the detailed list of coupon delivered and interview conducted by Province and Group.

The summary will provide information about the recruitment progress:

- How many seeds was used
- Number of coupon delivered
- Number, % of interview conducted
- Number of coupons given out but not yet come for interview
- Number of recruitment have been paid/not paid
- Number of recruitment by day
- Distribution of respondents in term of geographical areas
- Distribution of respondents in term of Age

This information will help the data collection team know if the needed sample size has been reached, how many coupons have been given out, if we should continue to deliver more coupons, etc.

Summary of the coupon delivery and interview status

Province: **Hai_Phong** Group: **Sex Worker who are IDU**

Incomplete data

Number of respondents whose information need to be completed: 0
(Interview status and Coupons received)

Progress

Number of seeds used:	6		
Number of coupons delivered:	220		
Number of respondents interviewed (including seeds):	92	Sample size: 152	Need to recruit more: 60
% Interview / Coupon delivered:	42%		
No. of pepole came but was not interviewed (including seeds)*: <i>(Only precise if all these cases are entered the database)</i>	10 9%	No. of duplicated respondents:	1 1%

No. of coupons given out but not yet come for interview: <i>(Only precise if all *cases are entered the database)</i>	124
were delivered within 1 day:	2
was delivered 2 days ago:	15
was delivered 3 days ago:	15
was delivered >= 4 days ago:	92

Continue to give coupons or not?

When you come close to the expected sample size, a practical question is if we continue to give coupons or stop and wait the coupon given out come. If you give out too many coupons, you may exceed the sample size unexpectedly. If you stop giving out coupons, but the respondents with coupons given out can not recruit others, you will not get enough sample size and may have to recruit other seeds and restart the recruitment that waste your time and resources.

In the example above, you need to recruit 60 more respondents, 124 coupons have been given out but not yet came for interview, should we continue to give coupons? Looking further on the 124 coupons given out but respondents not came, we found only 32 (2+15+15) coupons were delivered within the 3 past days, and field experience shows that respondent often recruit others within the past 3 days (as the picture below), few among 92 coupons given out 4 days ago or more will come, so that we should continue to give coupons to respondents.

The duration from coupons given out to respondents came for interviews	
within 1 day	55%
2 days	14%
3 days	6%
>= 4 days	18%
missing and/or incorrect information	7%

The summary above shows the duration from coupons given to recruiters until the recruits come for interviews. The example above shows 75% respondents come within 3 days after the coupons are delivered, which is commonly observed in RDS surveys. In the example above, we found 7% missing and/or incorrect information. Incorrect information normally is that the interview dates are not entered as the required format MM/DD/YYYY or the dates entered are later than the dates of data entry (e.g. today is February 2, but the date entered is February 3, which means 1 day after the current date). This can also happen when the date of the computer is not correctly set up.

Recruitment by day

Below is an example of recruitment by day in a survey, the first day is very slow as only few seeds and respondents recruit others. The next day are more crowded, typically 10 respondents per day. With this, you can predict the number of respondents next days and allocate your personnel appropriately.

Number of successful interviews by Day (including seeds)	
Date (mm/dd/yy)	Number of Interview
15-Mar-11	5
16-Mar-11	1
17-Mar-11	2
18-Mar-11	2
19-Mar-11	4
20-Mar-11	10
21-Mar-11	10
22-Mar-11	13
23-Mar-11	7
24-Mar-11	9
25-Mar-11	7
26-Mar-11	15
27-Mar-11	7
Total	92

Sample distribution by Geographical area

Number of successful interviews by Area (including seeds)		
Area	Number of Interview	%
NgoQuyen	21	23%
AnDuong	18	20%
HaiAn	18	20%
HongBang	16	17%
LeChan	15	16%
ThuyNguyen	4	4%
KienAn	0	0%
Total	92	100%

The above example shows a quite balanced recruitment across districts in the surveyed province. ThuyNguyen and KienAn are 2 districts where very few respondents are recruited and you may want to accelerate the recruitment there, by setting recruitment sites, recruiting more seeds, giving more coupons, pay extra travelling cost for respondents there, etc.

Sample distribution by Age

If you use UIC that is made up partly by respondent year of birth and do setup correctly, the age of respondent will be calculated, and the age distribution will be summarized.

Number of successful respondents by Age (including seeds)

Age	No. of respondents	%
<= 25 years old:	25	27%
26 - 30 years old:	26	28%
31 - 35 years old:	18	20%
36 - 40 years old:	23	25%
> 40 years old:	0	0%

In the example above, the age distribution is quite balanced from 18 to 40 years old (the inclusion criteria of that study). In many RDS study, age distribution is not good, for instance, young sex workers normally have higher income and are not very interested in incentive to come. In that case, you may want to accelerate the recruitment of young SW by giving other type of incentive that more attractive to them, give more coupons to them, recruit more young seed, etc.

Sample distribution by other key characteristics

If you monitor key characteristics of all respondents as with seeds by setup and enter data for that, the analysis of the distribution of those characteristics will be done in the summary report as well.

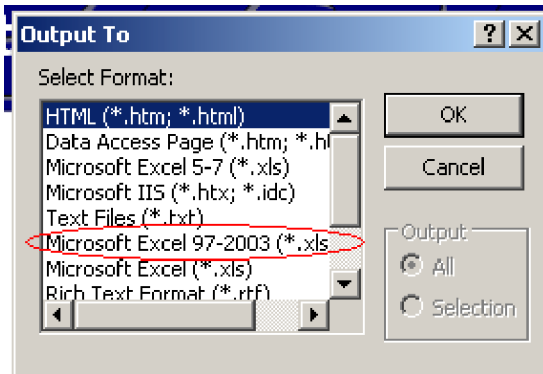
Characteristics of the sample			
Sexual preference	%	Valid %	N
Like men only	29%	33%	7
Prefer men to women	14%	17%	
Like both	14%	17%	
Prefer women to men	14%	17%	
Like women only	14%	17%	
Missing	14%		
Total	100%	100%	
Marital status	%	Valid %	N
Married	43%	60%	7
Not married	29%	40%	
Missing	29%		
Total	100%	100%	
Income	%	Valid %	N
Up to 200 USD/month	43%	50%	7
201 - 500 USD/month	14%	17%	
> 500 USD/month	29%	33%	

This analysis may help us identify the under-recruited sub-groups by comparison with literature or previous studies. We can have solutions such as recruiting more seeds, giving more coupons, etc for those sub-groups to have a more balanced sample.

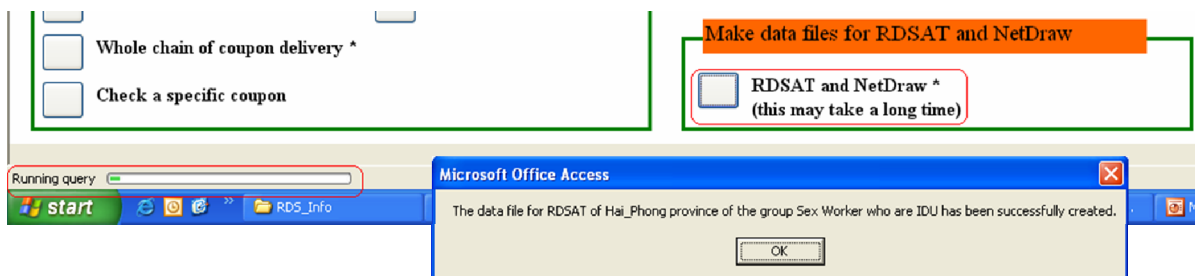
Make data file for RDSAT and NetDraw

If you want to do analysis with RDSAT software or draw the recruitment chain with NetDraw, you need the data on what coupons each respondent gave to others as a part of the dataset for analysis.

Choose EXCEL format for the output file (as requirement of RDSAT)



When there is a big amount of data, especially when you give many coupons (>4) to each respondents, this process will be long, may up to 1 minutes or more. In that case, you need to wait for the process of running query to finish and the finishing message appears (see below).



The output Excel file has similar format to a RDSAT file and ready for use (coupon 1, coupon 2, and so on are arranged horizontally).

	A	B	C	D	E	F	G	H	I
1	Province	Network_Size	Own Coupon	Coupon 1	Coupon 2	Coupon 3	Coupon 4	Area	Age
2	Hai_Phong	29	2002	2025	2026	2027		HongBang	30
3	Hai_Phong	60	2003	2028	2029	2030		LeChan	24
4	Hai_Phong	84	2004	2010	2011	2012		HaiAn	34
5	Hai_Phong	17	2005	2013	2014	2015		HaiAn	34
6	Hai_Phong	85	2006	2007	2008	2009		HaiAn	31
7	Hai_Phong	32	2016	2022	2023	2024		NgoQuyem	39
8	Hai_Phong	27	2017	2019	2020	2021		NgoQuyem	40
9	Hai_Phong	95	2019	2034	2035	2036		HongBang	37
10	Hai_Phong	93	2021	2031	2032	2033		AnDuong	27

The file will be customized basing on the maximum number of coupons given to each respondent. If that number is more than 6, the process will be quite long; the coupon 1, coupon 2, and so on will be in the vertical format instead of horizontal format like above. You can easily to change that format in Excel later.

Respondent Driven Sampling

	A	B	C	D	E	F
1	Province	Network Size	Own Coupon	Coupons To Recruit Others	Area	Age
2	Hai_Phong		2002	2025	HongBang	30
3	Hai_Phong		2002	2026	HongBang	30
4	Hai_Phong		2002	2027	HongBang	30
5	Hai_Phong		2002	2444	HongBang	30
6	Hai_Phong		2002	2555	HongBang	30
7	Hai_Phong		2002	2666	HongBang	30
8	Hai_Phong		2002	2777	HongBang	30
9	Hai_Phong		2003	2028	LeChan	24
10	Hai_Phong		2003	2029	LeChan	24
11	Hai_Phong		2003	2030	LeChan	24

If you monitor the network size and key characteristics of all respondents, that information is also exported in the Excel file for you to conduct equilibrium analysis with RDSAT. The exported Excel file has format that is almost ready for use with RDSAT.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Province	Network Size	Own Coupon	Coupon 1	Coupon 2	Coupon 3	Area	Age	Feature_1	Feature_2	Feature_3	Feature_4	Feature_5
1	MSM								Sexual preference	Marital status	Income	Visting MSM venues	Injecting drug use
2													
3	An Giang	30	11	111	112	113	LongXuyen		Prefer men to women	Married	201 - 500 USD/month	Sometimes	No
4	An Giang		111										
5	An Giang	14	112	1121	1122	1123	ChauDoc		Like men only		> 500 USD/month		Yes
6	An Giang	12	113				ChauDoc		Like both	Not married	Up to 200 USD/month	Never	
7	An Giang	32	12	121	122	123	LongXuyen		Prefer women to men	Not married	> 500 USD/month	Sometimes	No
8	An Giang	21	13				LongXuyen		Like women only	Married	Up to 200 USD/month	Regularly	Yes
9	An Giang	20	1Seed1	11	12	13	ChauDoc		Like men only	Married	Up to 200 USD/month	Never	Yes

Manage the incentive payment for recruiters

When a recruiter comes and submit the coupon (part 2) to get the incentive for the recruitment, this function will help us to check if his/her recruit has been interviewed, if the payment has been done

Click the button “Payment for recruiters”

In the opened form, enter the serial number submitted and click “Check” button

A window will be opened to inform you:

- if the recruit has been interviewed
- if the incentive payment has been done for the recruiter

If the respondent with that coupon has been interviewed (came and eligible) for the study, you should pay the recruiter and enter 1 into ‘Payment status’. If you do so, the respondent can not come and ask for incentive again as you can easily find out that you already paid for that successful coupon, even you forget getting back that coupon when paying incentive.

If that coupon was not interviewed or the respondent came but not eligible, the status will be highlighted in Red for you to identify. In that case, you should not pay incentive and can not enter 1 into ‘Payment status’.

You can also check the UIC and biomarkers of the person claiming for incentive to see if he/she really is the recruiter. In some surveys, powerful people such as pimps, powerful IDUs rob the coupons from respondents and use those coupons to recruit a large amount of respondents. When they come and claim incentive, if we check their UIC and biomarkers, we will find their information different from the real recruiters. In other cases, recruiters may ask their friends to come and collect the incentive for them. We should limit this to avoid the aforementioned problem. By asking recruiters come themselves to collect incentive and randomly checking their UIC again and tell them about that in advance, we can also reduce the fact that respondents report their UIC falsely or inconsistently.

You can also view the overall status of paying incentive for recruitment to plan for that, e.g. at the end of the study, your team will leave the field but you should have at least 1 staff to stay at recruitment site to pay the incentive for respondents who have not come to collect their incentive.

Summary of recruitment status and payment

Province: **Hai_Phong**

Group	Group Initial	Number of seeds used	Maximum n.o. of coupons given to each respondent	Sample size	Successfully recruited (including seeds)	Need to recruit more	Number of coupons interviewed but NOT YET PAID for peer recruitment
Sex Workers	1	6	4	245	243	2	33
Sex Worker who are IDU	2	6	4	152	92	60	26

Transfer data between RDS_Info databases

You may want to transfer data between RDS_Info databases in the following cases:

- o In each province, you have several interview sites, each site uses 1 RDS_Info database. One respondent can go to many sites to be interviewed more than once to get incentive. So that, you need to regularly update data from other sites to check that respondent duplication.
- o You want to update data from other provinces to track the recruitment progress there.

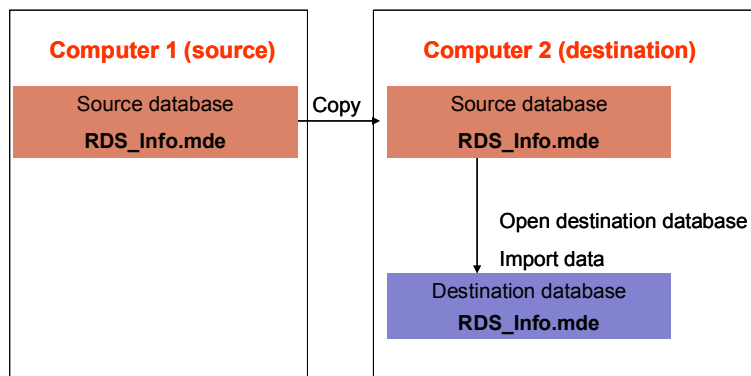
There are 2 ways of transferring data between databases:

1. Transfer data directly from one RDS_Info database (file RDS_Info.mde) to another
2. Transfer through a small data file.

Transfer data directly

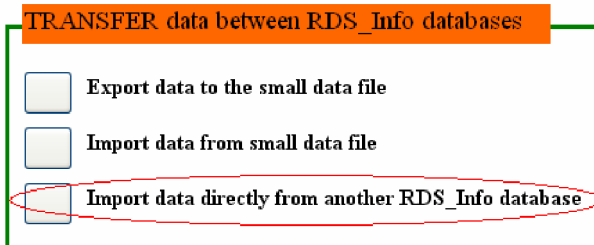
This way is simple but sometimes it is difficult to send the big file ‘RDS_Info.mde’ over email or floppy disk.

DIRECT data transfer

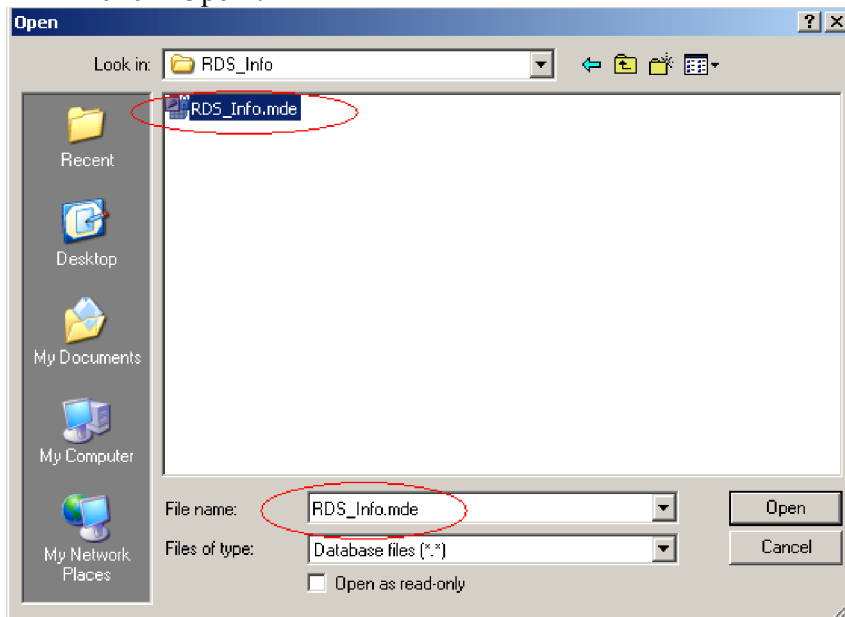


Steps:

1. Copy the source database (file RDS_Info.mde) that contain the data into your computer or USB data storage devices
2. Open your destination database, use the function ‘**Import data directly from another RDS_Info database**’



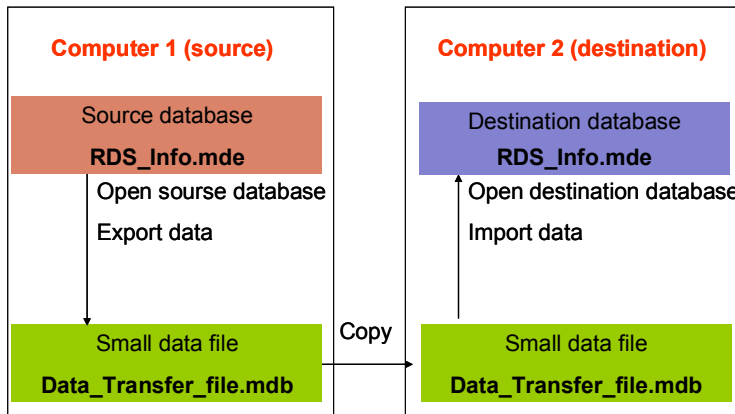
3. The Browse window will be opened, find the source database (file RDS_Info.mde), and click ‘Open’.



Transfer data by a small data file

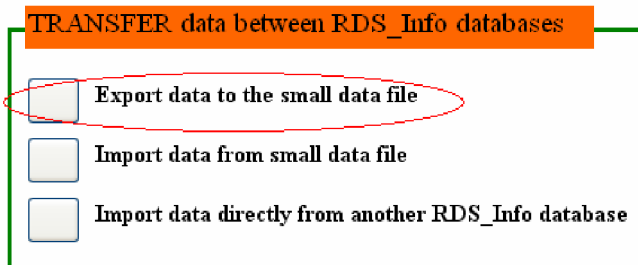
This way is a bit more complicated but helpful when you want to send a small data file through email or small data storage devices (e.g. floppy disk). The process is similar to the direct transfer, with one additional step is creating a small mediate data file.

INDIRECT data transfer

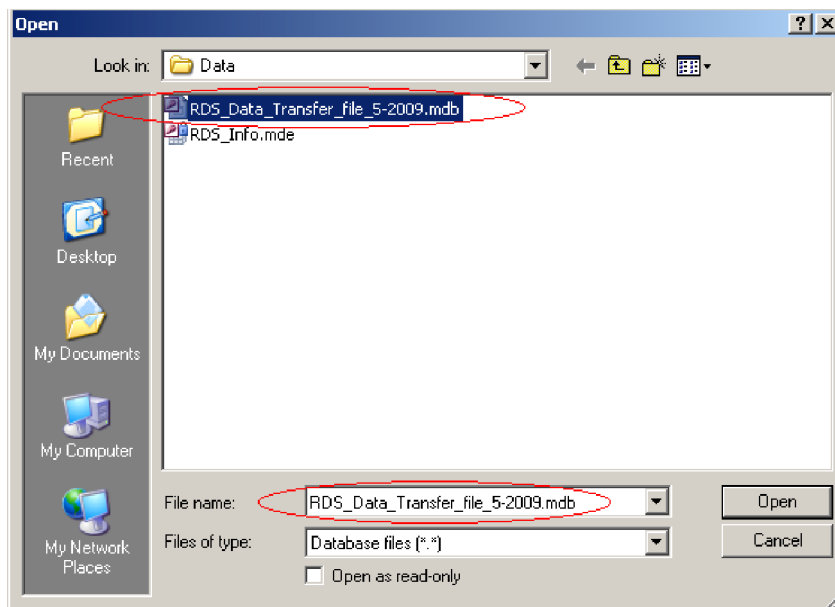


Steps:

1. Create the small data file: Open the source database (file RDS_Info.mde), use function ‘Export data to small data file for transferring to another RDS_Info’



2. Send the created small data file (the default name is ‘RDS_Data_Transfer_file.mdb’) over email or storage devices
3. Copy the small data file into the destination computer
4. Open the destination RDS_Info database, use the function ‘Import data from small data file’. In the Browse window, find the small data file, and import data from it



Check content of data file, Edit and Finish importing

After you select the source data file and do data importing, the data of the source file will be loaded into a temporary place in the database, and a form that show the data content will appear for you to check. With that form, you can also edit data if you want and finish importing.

STEP 1: Review data in the Source Data File [Click to Review the SETUP information](#) [Click to Edit the SETUP information](#)

NOTE:
 - RED color of 'Province', 'Group', and 'Group Initial' indicates those items are not in the SETUP. You can either edit those records (with Step 2) or edit the SETUP (not recommended) to ensure the consistency.
 - RED color of 'Latest Date' indicates the data was last updated 2 or more days ago.

Province	Group	Group Initial	Starting Date	Latest Date	No. of records	No. of New Records (to be imported)
AN GIANG	Sex Workers	1	29-Mar-11	03-Apr-11	144	
Hai_Phong	IDU	2	01-Apr-11	01-Apr-11	2	2
Hai_Phong	Sex Workers	1	01-Apr-11	03-Apr-11	88	88

STEP 2: Edit data in the Source Data File before Importing (if there are data errors or inconsistency with Setup)

The Current Province name:
 The New Province name (in Setup):

The Current Group name:
 The New Group name (in Setup):

The Current Group Initial:
 The New Group Initial (in Setup):

(Blank = select ALL)
 (Blank = NOT to be changed)

STEP 3: Finish Importing
 CANCEL Data Import
 FINISH Data Import

In the example above, when we import data from the file of An Giang province, we found some mistakes and inconsistency:

- The province name is incorrect with some records, which are 'Hai_Phong' instead of 'An Giang'. As the province name is automatically created with the selected name in Main Functions board, the researchers in An Giang did not realize that mistake.
- The Group 'IDU' actually is "Sex Workers who are IDU". This mistake happen since the researcher there has setup the name of that group as 'IDU', which caused the inconsistency with your database setup.

In this case, you must change the province name of all record to ‘An Giang’. Otherwise, the data of ‘An Giang’ will be merged to ‘Hai_Phong’ province if you continue to import, and cause incorrect data aggregation and analysis. You should also change ‘IDU’ to “Sex Workers who are IDU’ to make data consistent across provinces and with Setup information.

The way to delete, edit data in the source data file is similar to the way of deleting and editing data in the section “Review and Edit respondent information” ([View all data summary and Edit](#)).

When you completing data editing with source data file, you can finish importing with Step 3 as the picture below. There will be a message informing you the importing result.



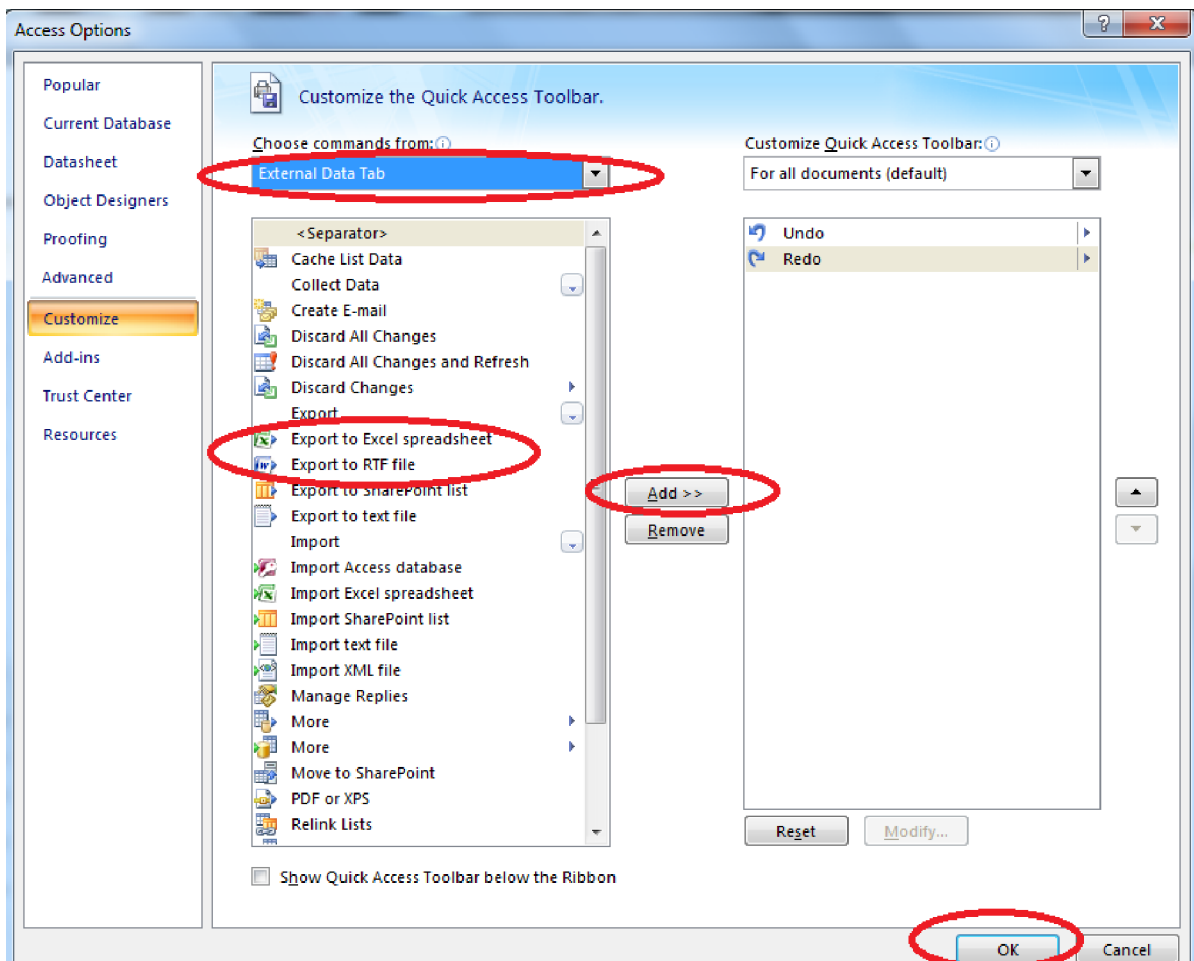
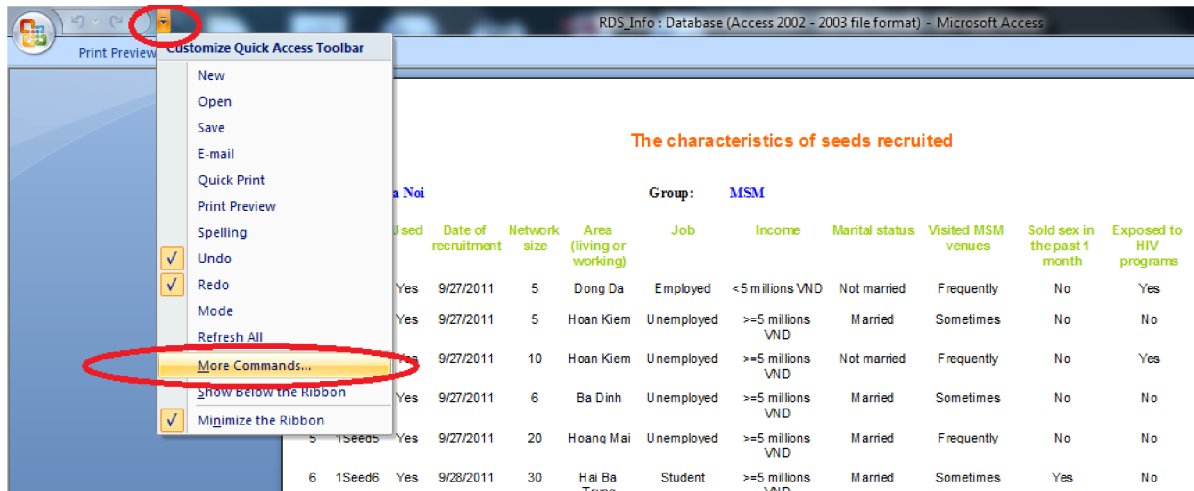
Only new reports will be imported, so that you do not need to worry about duplicated data. One record will be identified by its unique province name, coupon serial number, and coupon serial numbers given to that respondent. If database find that records with that identifying information currently exist in the database, it will skip importing those records. So that, in case your colleagues edit information items such as UIC, biomarkers, etc, those changes will not be updated into your database. In this case, you need to delete those records and import them again.

Example: In your data base the records with serial number 001 of HaiPhong province already exist. Your colleague edit some information such as UIC, biomarkers, area, etc of that records (but still keep its province name as HaiPhong and serial number as 001, i.e. the identifying information of that record is unchanged). If you import data, the database will skip that record and the edited information will not be updated. If you delete that record and import, the record 001 of Hai Phong will become a new record and will be imported and edited information will be updated.

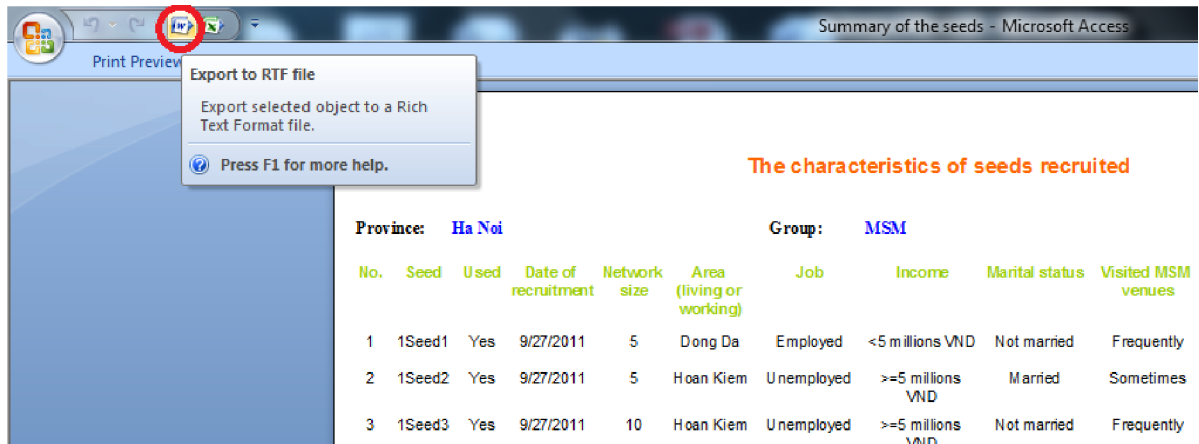
Export reports to Word

Open reports needed to export to Word --> follow the below steps to show the button for exporting the report to Word and then export the report to a *.rtf file.

Respondent Driven Sampling



Respondent Driven Sampling



Summary of the seeds - Microsoft Access

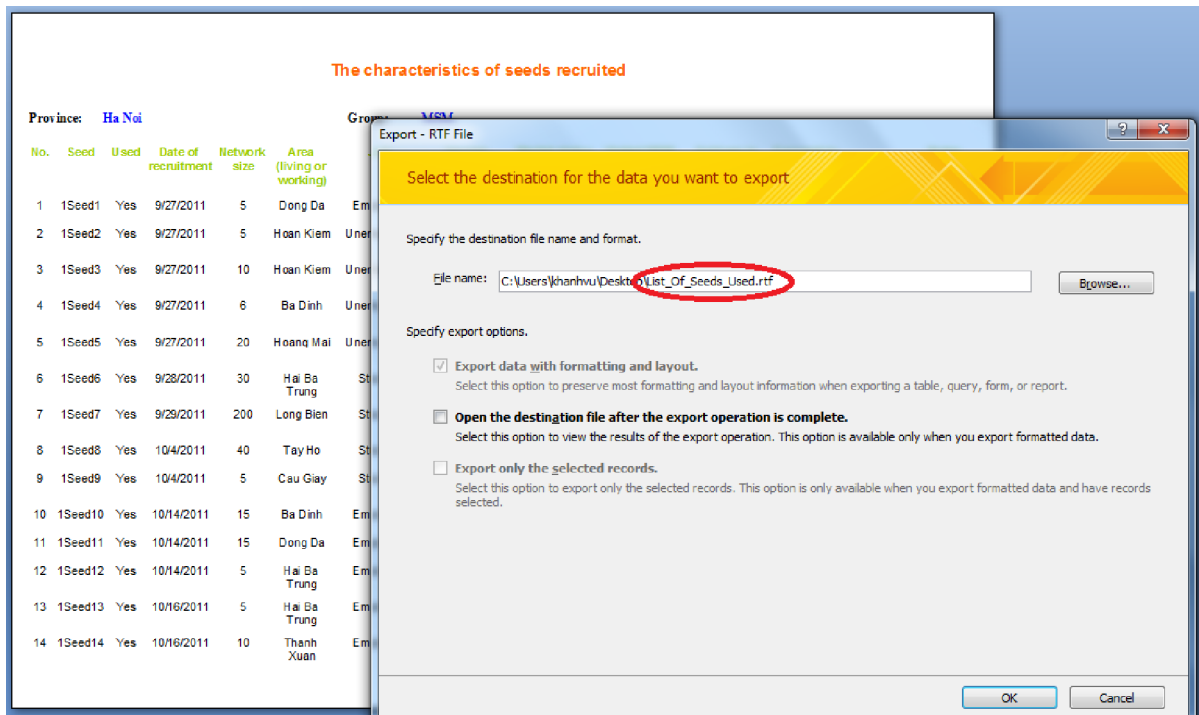
Print Preview

Export to RTF file
Export selected object to a Rich Text Format file.
Press F1 for more help.

The characteristics of seeds recruited

Province: **Ha Noi** Group: **MSM**

No.	Seed	Used	Date of recruitment	Network size	Area (living or working)	Job	Income	Marital status	Visited MSM venues
1	1Seed1	Yes	9/27/2011	5	Dong Da	Employed	<5 millions VND	Not married	Frequently
2	1Seed2	Yes	9/27/2011	5	Hoan Kiem	Unemployed	>=5 millions VND	Married	Sometimes
3	1Seed3	Yes	9/27/2011	10	Hoan Kiem	Unemployed	>=5 millions VND	Not married	Frequently



The characteristics of seeds recruited

Province: **Ha Noi** Group: **MSM**

No.	Seed	Used	Date of recruitment	Network size	Area (living or working)	Job	Income	Marital status	Visited MSM venues
1	1Seed1	Yes	9/27/2011	5	Dong Da	Em			
2	1Seed2	Yes	9/27/2011	5	Hoan Kiem	Unem			
3	1Seed3	Yes	9/27/2011	10	Hoan Kiem	Unem			
4	1Seed4	Yes	9/27/2011	6	Ba Dinh	Unem			
5	1Seed5	Yes	9/27/2011	20	Hoang Mai	Unem			
6	1Seed6	Yes	9/28/2011	30	Hai Ba Trung	St			
7	1Seed7	Yes	9/29/2011	200	Long Bien	St			
8	1Seed8	Yes	10/4/2011	40	Tay Ho	St			
9	1Seed9	Yes	10/4/2011	5	Cau Giay	St			
10	1Seed10	Yes	10/14/2011	15	Ba Dinh	Em			
11	1Seed11	Yes	10/14/2011	15	Dong Da	Em			
12	1Seed12	Yes	10/14/2011	5	Hai Ba Trung	Em			
13	1Seed13	Yes	10/16/2011	5	Hai Ba Trung	Em			
14	1Seed14	Yes	10/16/2011	10	Thanh Xuan	Em			

Export - RTF File

Select the destination for the data you want to export

Specify the destination file name and format.

File name: C:\Users\khanhvu\Desktop\List_Of_Seeds_Used.rtf

Specify export options.

Export data with formatting and layout.
Select this option to preserve most formatting and layout information when exporting a table, query, form, or report.

Open the destination file after the export operation is complete.
Select this option to view the results of the export operation. This option is available only when you export formatted data.

Export only the selected records.
Select this option to export only the selected records. This option is only available when you export formatted data and have records selected.

OK Cancel

References

PSI toolkit "Sampling for Hard to reach groups"
CDC 2008 training manual
Heckthorn website
RDSAT user manual
NetDraw guidance