

# Population Selector Module

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CARES Training Workshop  
January 28-29, 2009  
Washington DC

# Objectives

- What is the Population Selector
- How to create a subpopulation
- Where are my population files located
- How to select a population for a CARES run
- How to limit the population size for a CARES run
- Setting the random seed
- Examples
- Practice Activity

# What is the Population Selector

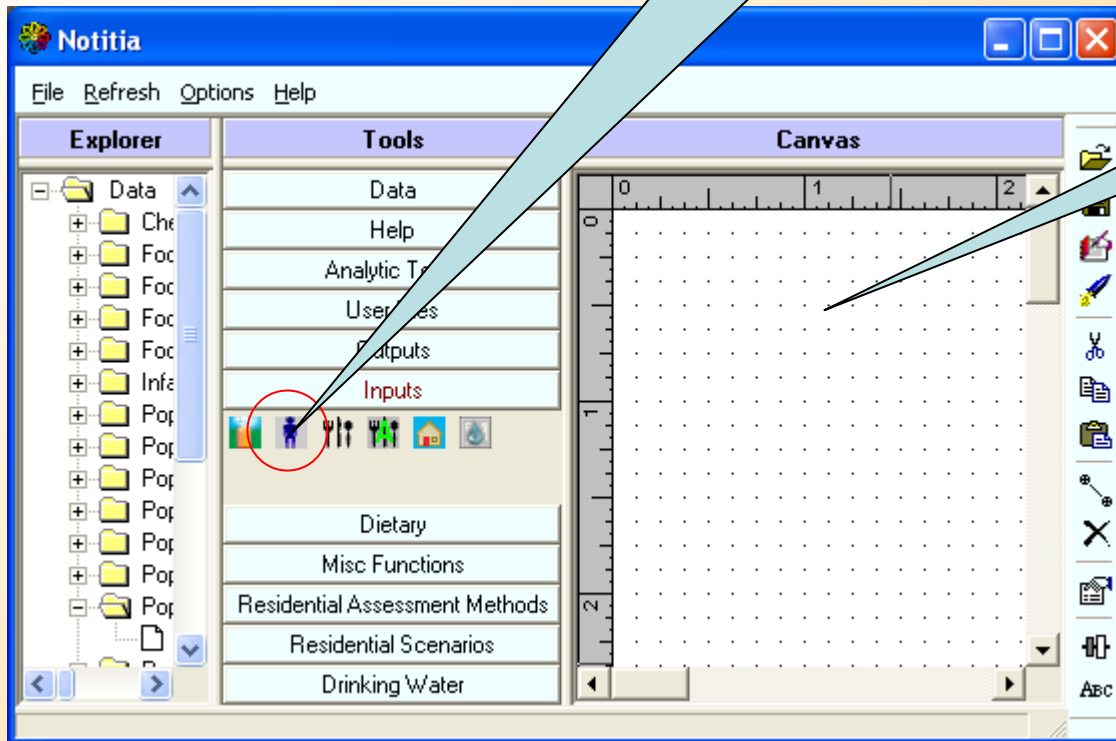
- The Population Selector is a tool that allows the user to define and select the desired subpopulation for CARES assessment.
- The user can custom-design subpopulations based on various combinations of the individuals' attributes that describe each member of the 100,000 people included in CARES Reference Population.

# Subpopulation Attributes

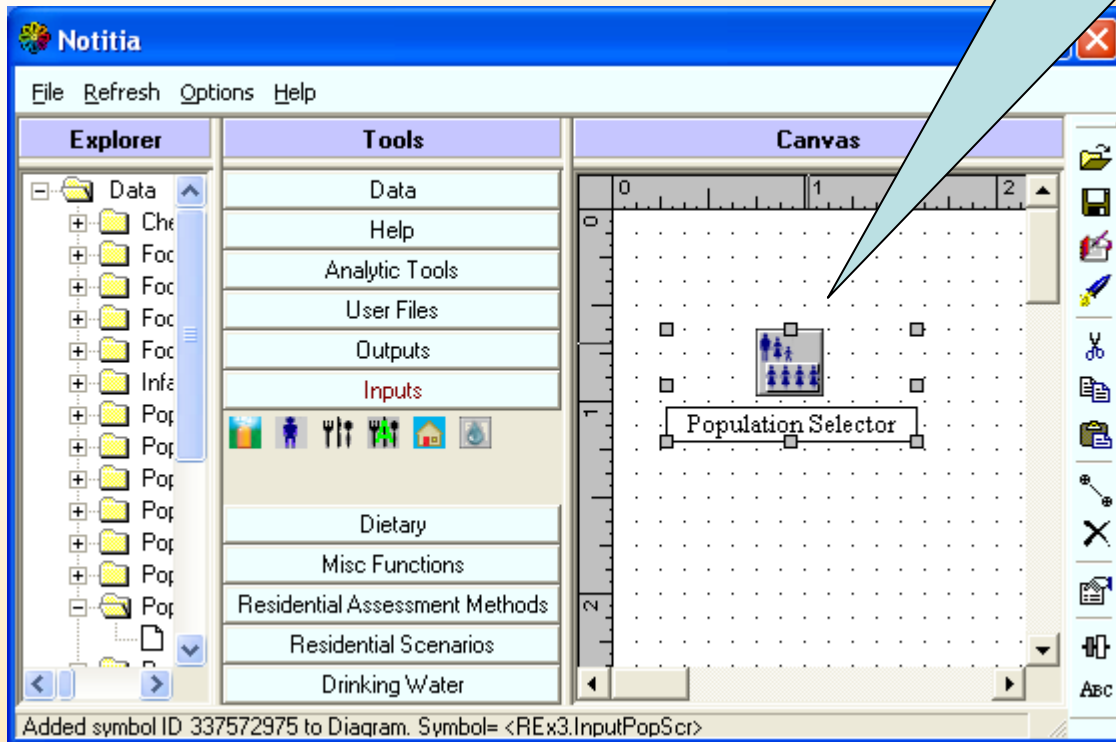
- Examples of Possible Selection Criteria: State, Age, Gender, Birth day of week, Race, Household Income, Housing Unit, Breast Feeding Status, Water Source, Weight, Height, etc.....
- Based on the 1990 US Census

1. Click on the  
“Population  
Selector” icon

2. Move Pointer  
to Canvas  
and Click



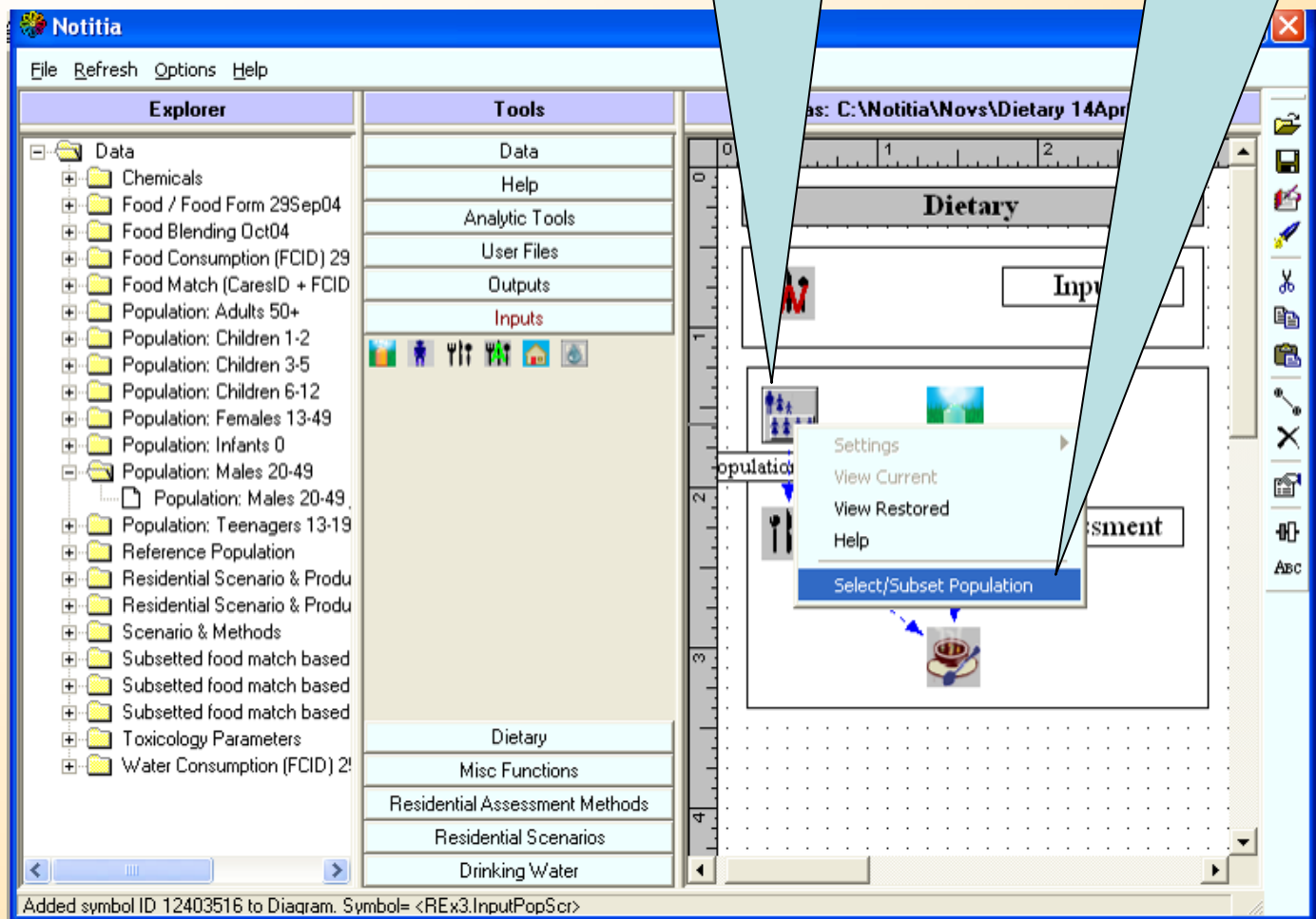
“Population Selector” Icon  
Appears on Canvas

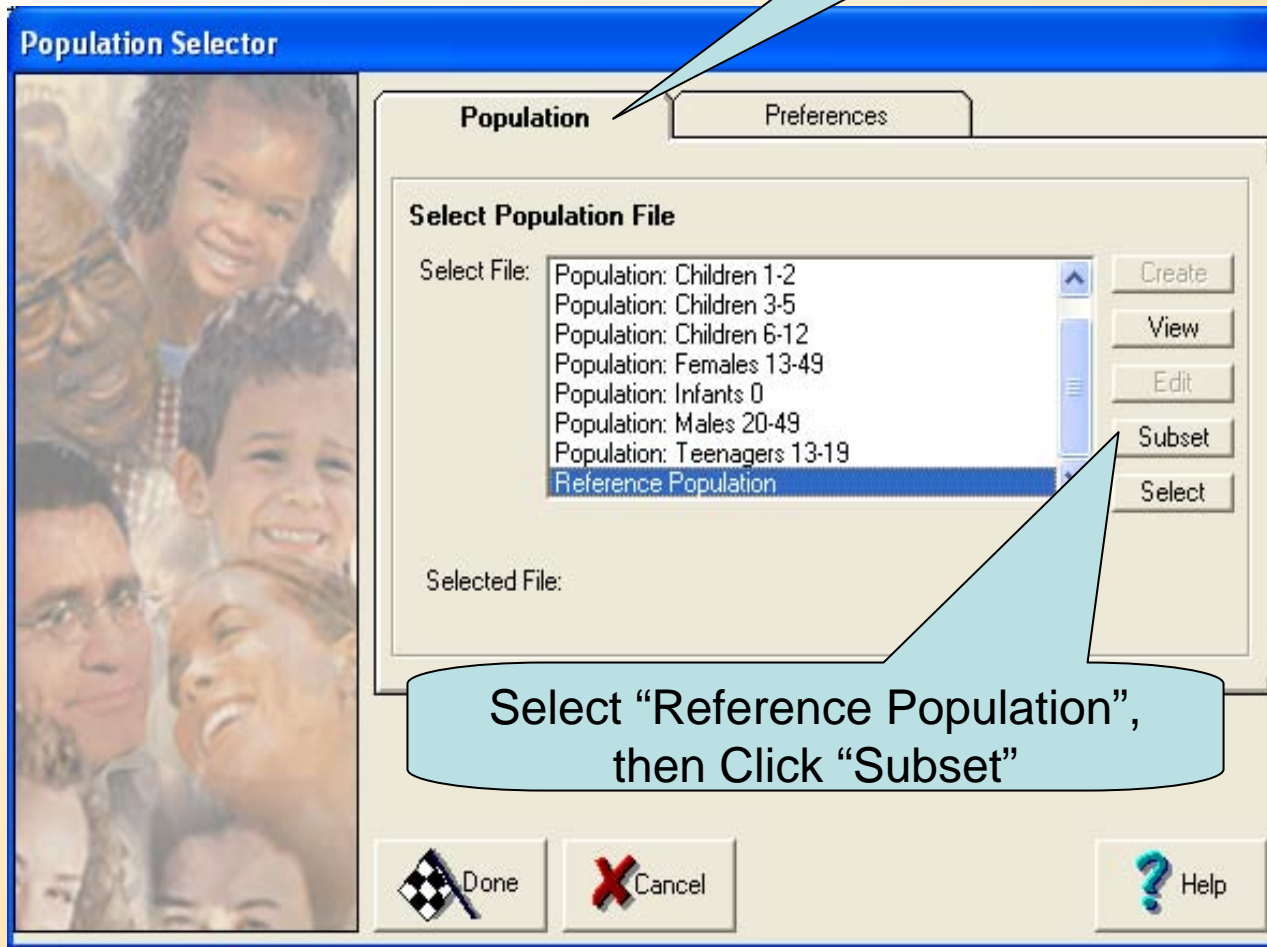




1. Right-Click Icon

2. Click "Select/Subset Population"





**Population Selector**

**Population** | Preferences

**Select Population File**

Select File:

- Population: Children 1-2
- Population: Children 3-5
- Population: Children 6-12
- Population: Females 13-49
- Population: Infants 0
- Population: Males 20-49
- Population: Teenagers 13-19
- Reference Population**

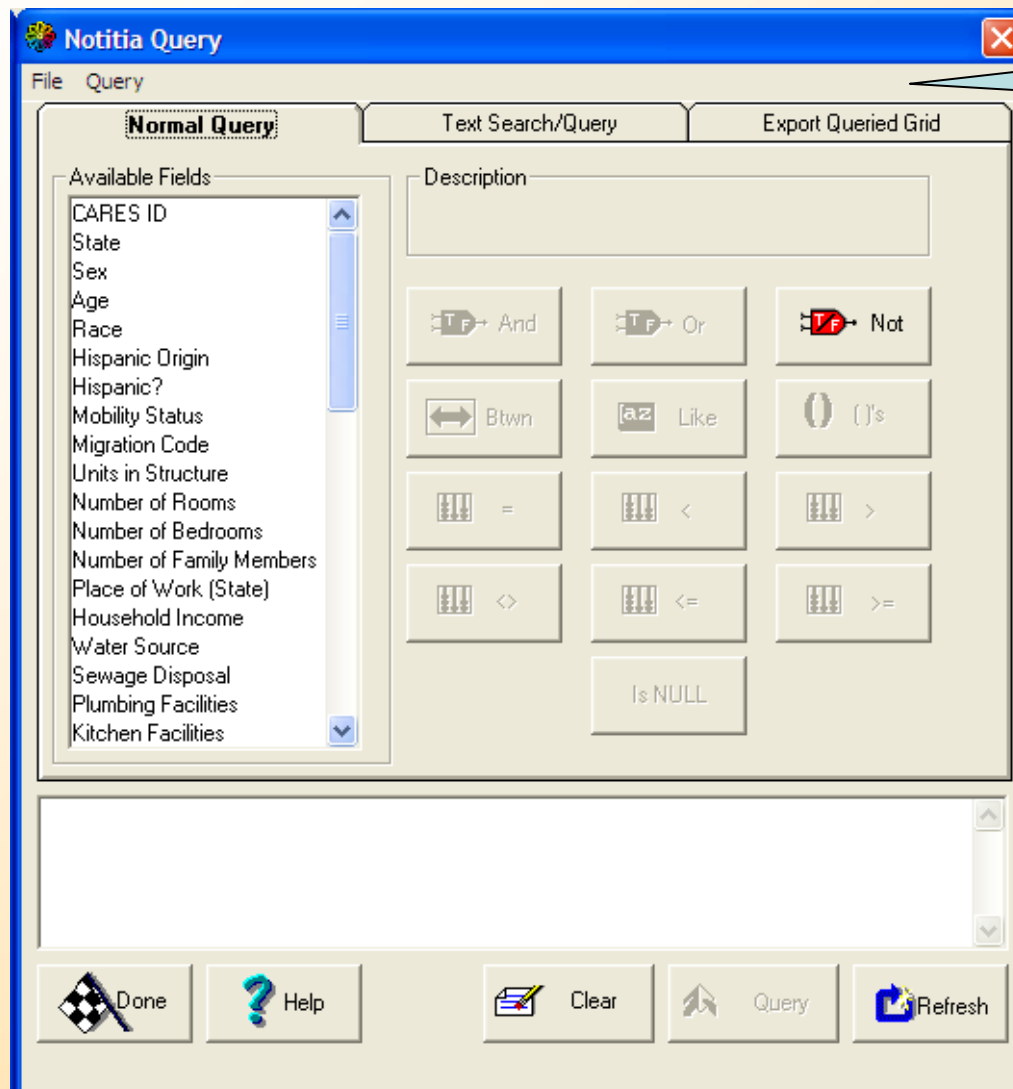
Buttons: Create, View, Edit, Subset, Select

Selected File:

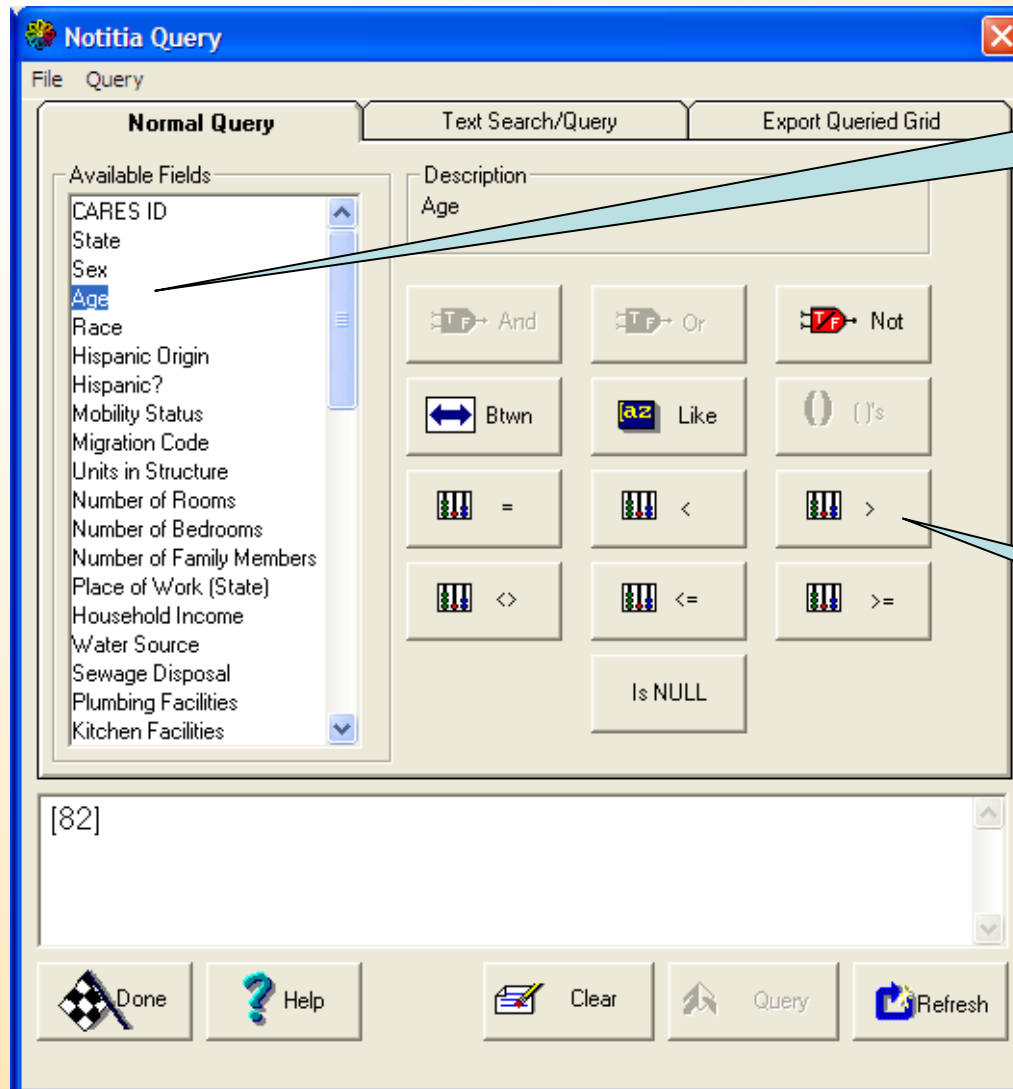
Buttons: Done, Cancel, Help

List of Existing Subpopulations

Select "Reference Population", then Click "Subset"

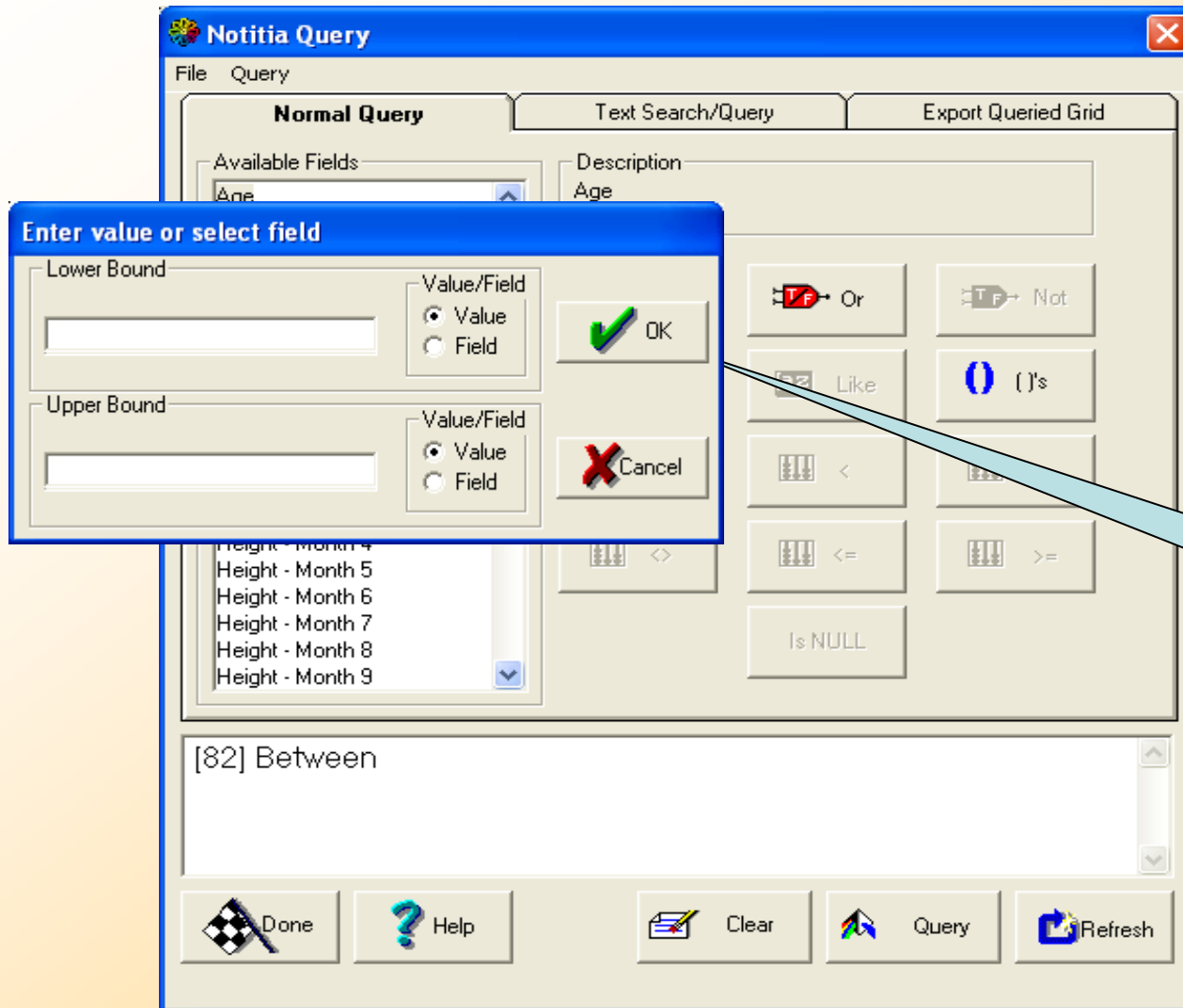


Notitia  
Query  
Page

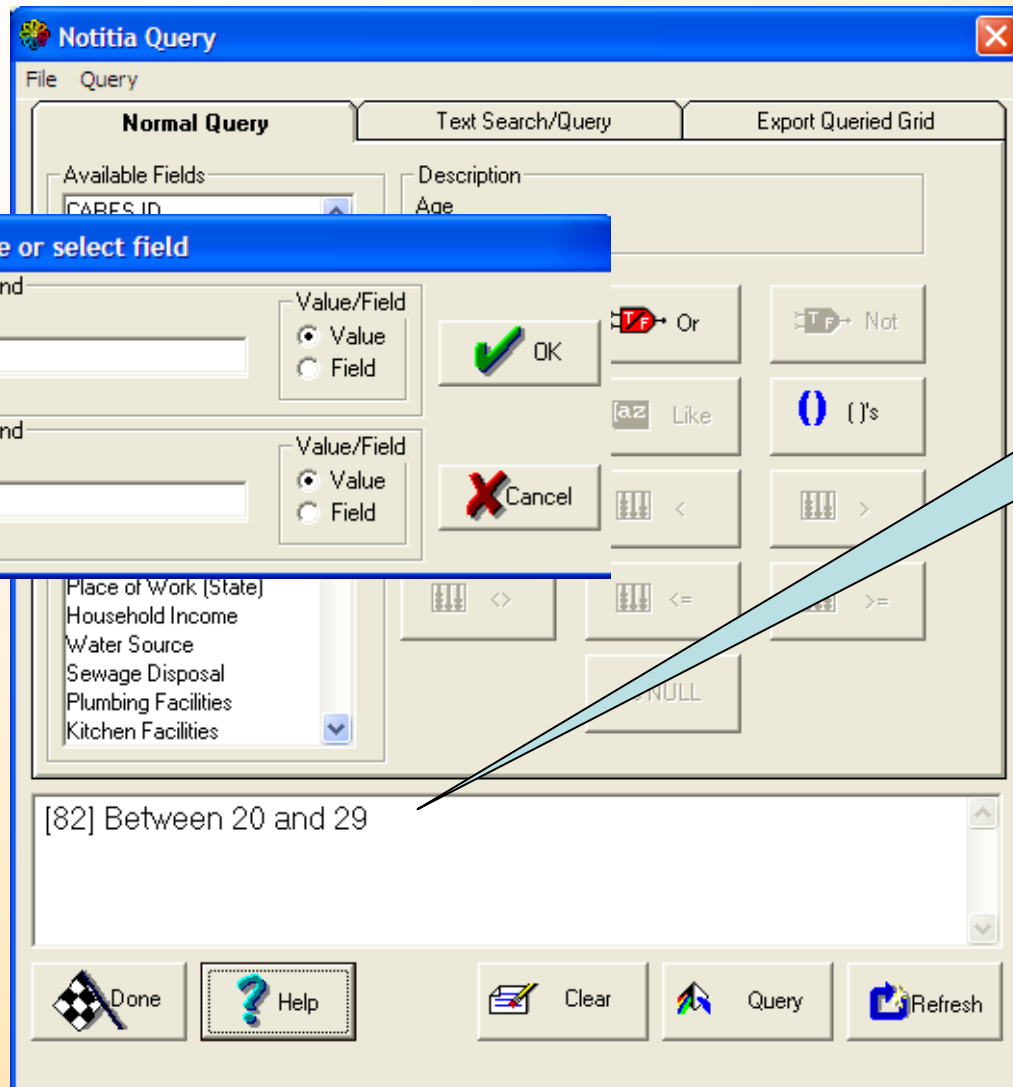


Double-Click a Field

Available Modifiers are Highlighted



Select the Modifier  
"Between"



Enter value or select field

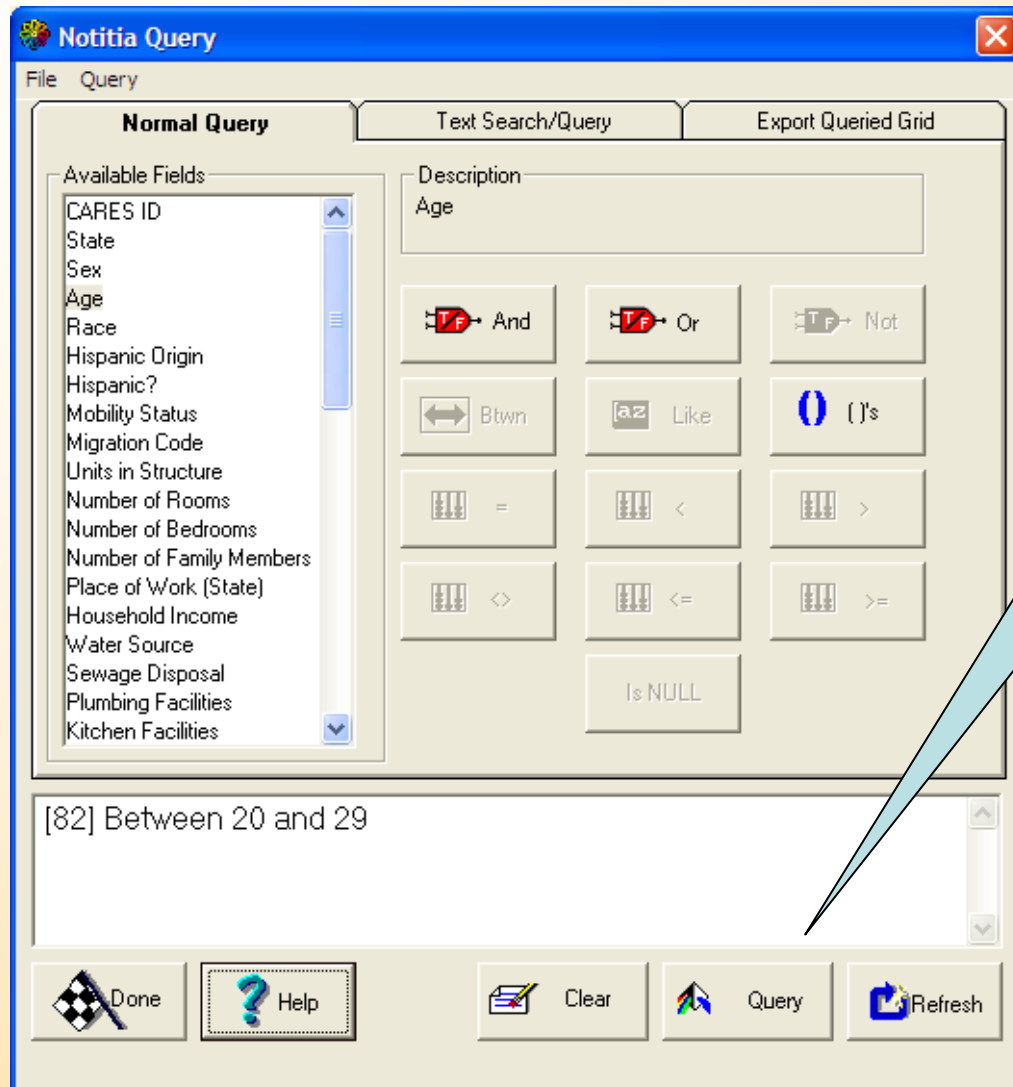
Lower Bound  
20

Upper Bound  
29

Value/Field  
 Value  
 Field

Value/Field  
 Value  
 Field

Enter Age Between 20 and 29 and Click "OK"



Select the Query Button

Reference Population

File Data Statistics Graph Options Help

Notitia Query

File Query

Normal Query

Text Search/Query

Export Queried Grid

Available Fields

- CARES ID
- State
- Sex
- Age
- Race
- Hispanic Origin
- Hispanic?
- Mobility Status
- Migration Code
- Units in Structure
- Number of Rooms
- Number of Bedrooms
- Number of Family Members
- Type of Work (State)
- Household Income
- Water Source
- Waste Disposal
- Swimming Facilities
- Kitchen Facilities

Description

And Or Not

Btwn Like ()'s

= < >

<> <= >=

Is NULL

Done Help Clear Query Refresh

Hispanic?	Mobility Status	Migration Code	
1	0	0	2
1	0	0	2
2	1	0	2
1	0	0	2
1	0	0	1
2	1	1	1
1	0	0	2
2	1	1	1
1	0	0	1
2	1	1	2
2	1	1	2
2	1	1	1
2	1	1	1
2	1	1	2
2	1	1	1
2	1	1	2
1	0	0	1
1	0	0	2
1	0	0	2
2	1	1	1
1	0	0	1
2	1	1	1
2	1	1	2
2	1	1	1
1	0	0	2
2	48	0	3
2	1	1	1
1	0	0	1
2	1	1	1

1. New Subpopulation appears in GREEN in back

2. Click Done

**Reference Population**

File Data Statistics Graph Options Help

**Notitia Query**

File Query

**Normal Query** | Text Search/Query | Export Queried Grid

Available Fields:

- CARES ID
- State
- Sex
- Age
- Race
- Hispanic Origin
- Hispanic?
- Mobility Status
- Migration Code
- Units in Structure
- Number of Rooms
- Number of Bedrooms
- Number of Family Members
- Place of Work (State)
- Household Income
- Water Source
- Sewage Disposal
- Plumbing Facilities
- Kitchen Facilities

Enter Description

Enter Description

Population 20-29

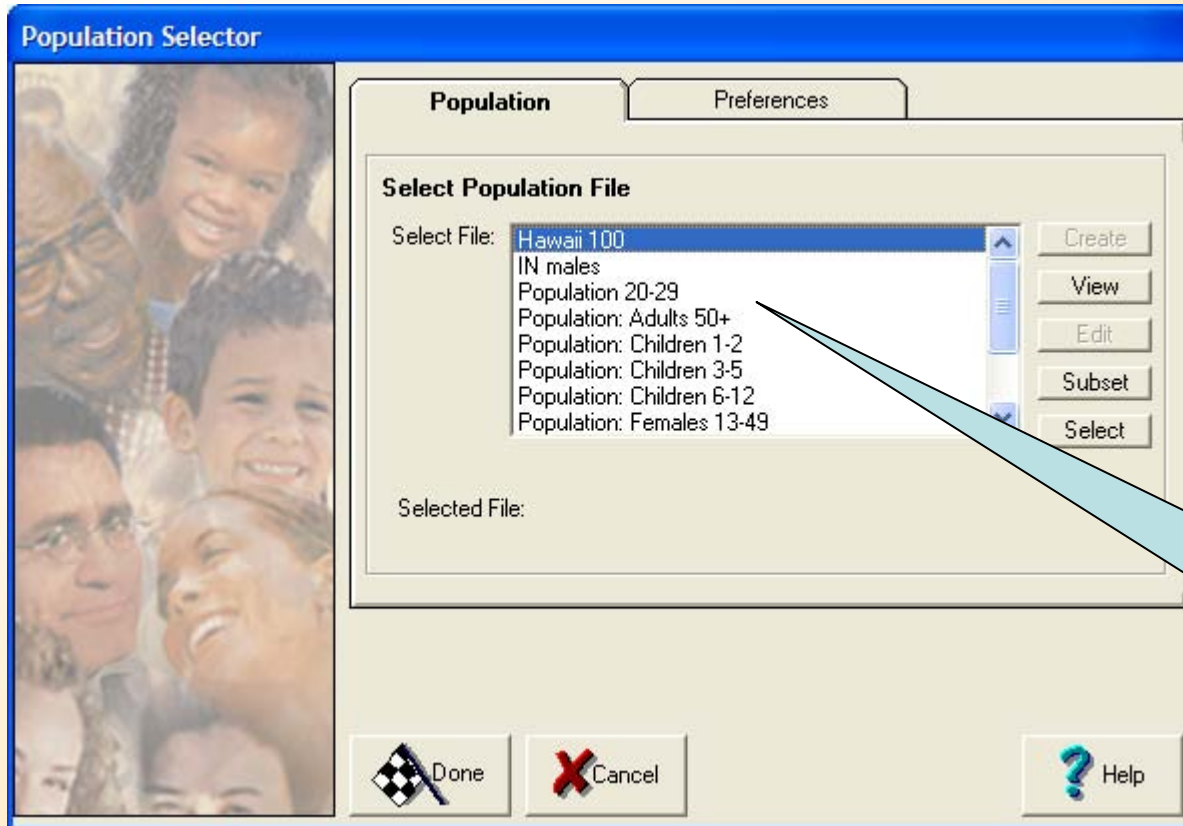
OK Cancel

Hispanic?

1		
1		
2	1	
	0	
	0	
2	1	
1	0	
2	1	
1	0	
2	1	
2	1	
2	1	
2	1	
1	0	
1	0	
2	1	
1	0	
2	1	
1	0	
2	1	
2	1	
2	1	
1	0	
2	1	
2	1	
2	1	
1	0	
2	48	
2	1	
1	0	
2	1	

Done Help Clear Query Refresh

Name the Subpopulation and then click OK

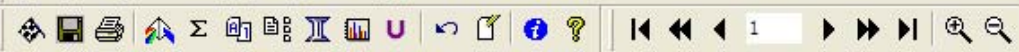


The new Population appears on population list

# Click on the Population Name and select View:

Population 20-29

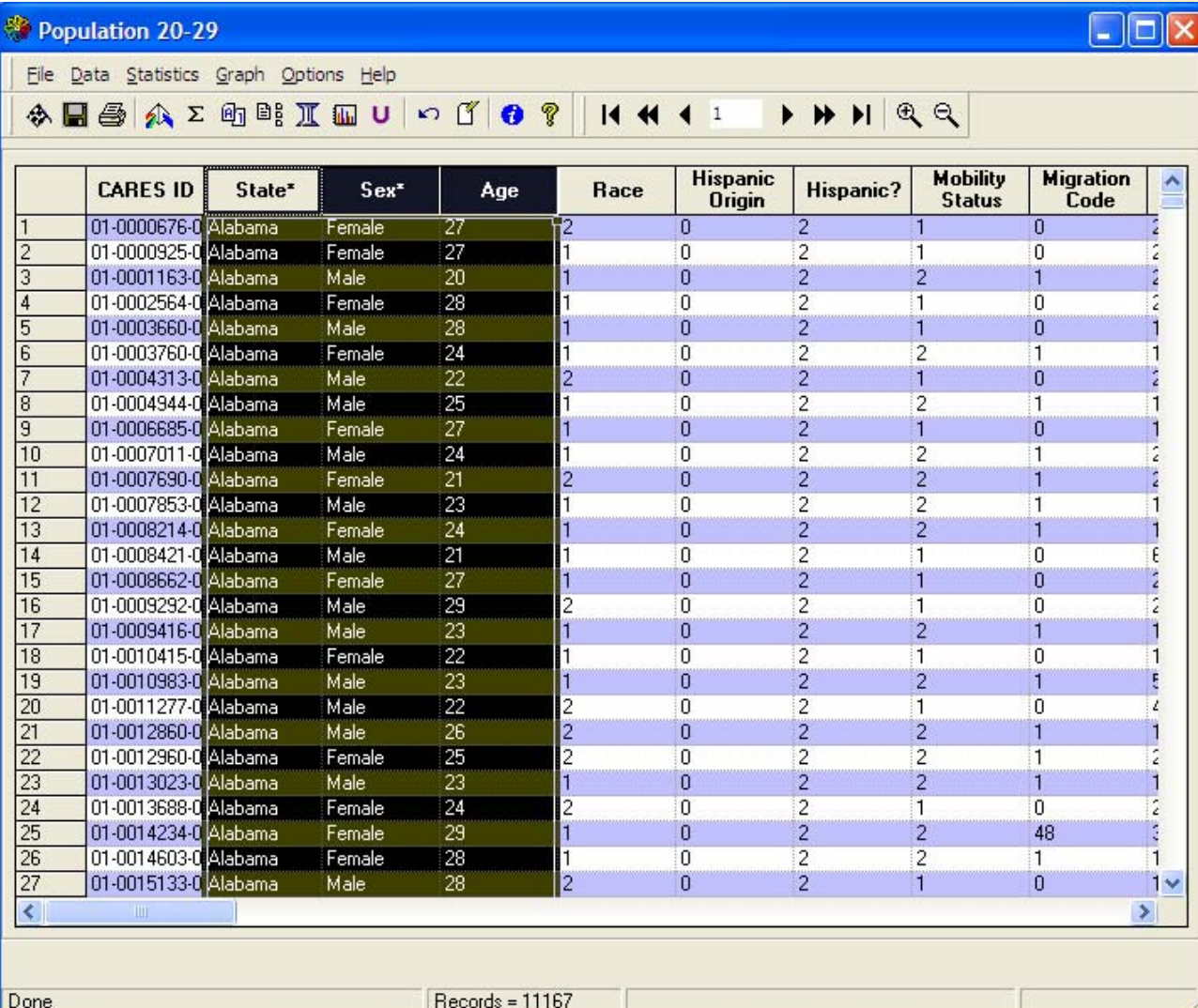
File Data Statistics Graph Options Help



	CARES ID	State	Sex	Age	Race	Hispanic Origin	Hispanic?	Mobility Status	Migration Code
1	01-0000676-0	1	1	27	2	0	2	1	0
2	01-0000925-0	1	1	27	1	0	2	1	0
3	01-0001163-0	1	0	20	1	0	2	2	1
4	01-0002564-0	1	1	28	1	0	2	1	0
5	01-0003660-0	1	0	28	1	0	2	1	0
6	01-0003760-0	1	1	24	1	0	2	2	1
7	01-0004313-0	1	0	22	2	0	2	1	0
8	01-0004944-0	1	0	25	1	0	2	2	1
9	01-0006685-0	1	1	27	1	0	2	1	0
10	01-0007011-0	1	0	24	1	0	2	2	1
11	01-0007690-0	1	1	21	2	0	2	2	1
12	01-0007853-0	1	0	23	1	0	2	2	1
13	01-0008214-0	1	1	24	1	0	2	2	1
14	01-0008421-0	1	0	21	1	0	2	1	0
15	01-0008662-0	1	1	27	1	0	2	1	0
16	01-0009292-0	1	0	29	2	0	2	1	0
17	01-0009416-0	1	0	23	1	0	2	2	1
18	01-0010415-0	1	1	22	1	0	2	1	0
19	01-0010983-0	1	0	23	1	0	2	2	1
20	01-0011277-0	1	0	22	2	0	2	1	0
21	01-0012860-0	1	0	26	2	0	2	2	1
22	01-0012960-0	1	1	25	2	0	2	2	1
23	01-0013023-0	1	0	23	1	0	2	2	1
24	01-0013688-0	1	1	24	2	0	2	1	0
25	01-0014234-0	1	1	29	1	0	2	2	48
26	01-0014603-0	1	1	28	1	0	2	2	1
27	01-0015133-0	1	0	28	2	0	2	1	0

Loaded Population 20-29      Records = 11167

# Click on Column(s) and select Decode Button “A1”



	CARES ID	State*	Sex*	Age	Race	Hispanic Origin	Hispanic?	Mobility Status	Migration Code
1	01-0000676-0	Alabama	Female	27	2	0	2	1	0
2	01-0000925-0	Alabama	Female	27	1	0	2	1	0
3	01-0001163-0	Alabama	Male	20	1	0	2	2	1
4	01-0002564-0	Alabama	Female	28	1	0	2	1	0
5	01-0003660-0	Alabama	Male	28	1	0	2	1	0
6	01-0003760-0	Alabama	Female	24	1	0	2	2	1
7	01-0004313-0	Alabama	Male	22	2	0	2	1	0
8	01-0004944-0	Alabama	Male	25	1	0	2	2	1
9	01-0006685-0	Alabama	Female	27	1	0	2	1	0
10	01-0007011-0	Alabama	Male	24	1	0	2	2	1
11	01-0007690-0	Alabama	Female	21	2	0	2	2	1
12	01-0007853-0	Alabama	Male	23	1	0	2	2	1
13	01-0008214-0	Alabama	Female	24	1	0	2	2	1
14	01-0008421-0	Alabama	Male	21	1	0	2	1	0
15	01-0008662-0	Alabama	Female	27	1	0	2	1	0
16	01-0009292-0	Alabama	Male	29	2	0	2	1	0
17	01-0009416-0	Alabama	Male	23	1	0	2	2	1
18	01-0010415-0	Alabama	Female	22	1	0	2	1	0
19	01-0010983-0	Alabama	Male	23	1	0	2	2	1
20	01-0011277-0	Alabama	Male	22	2	0	2	1	0
21	01-0012860-0	Alabama	Male	26	2	0	2	2	1
22	01-0012960-0	Alabama	Female	25	2	0	2	2	1
23	01-0013023-0	Alabama	Male	23	1	0	2	2	1
24	01-0013688-0	Alabama	Female	24	2	0	2	1	0
25	01-0014234-0	Alabama	Female	29	1	0	2	2	48
26	01-0014603-0	Alabama	Female	28	1	0	2	2	1
27	01-0015133-0	Alabama	Male	28	2	0	2	1	0

Done      Records = 11167

(Or right-click column header for Decode Dictionary)

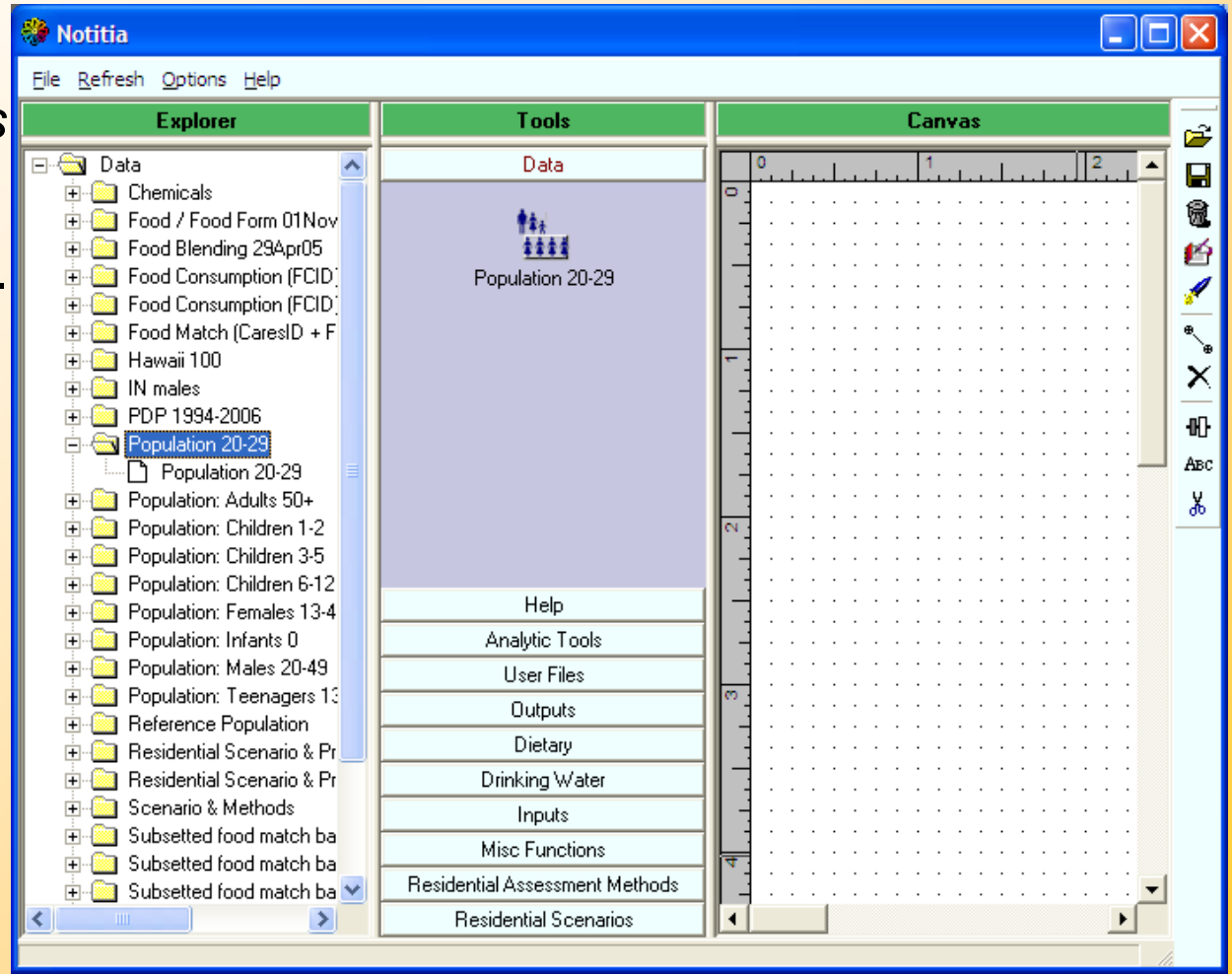
# Where Is My Subpopulation File?

“C:\Notitia\Data\UserFiles\Population (mmddyyy hhmmss).usr”

Where:

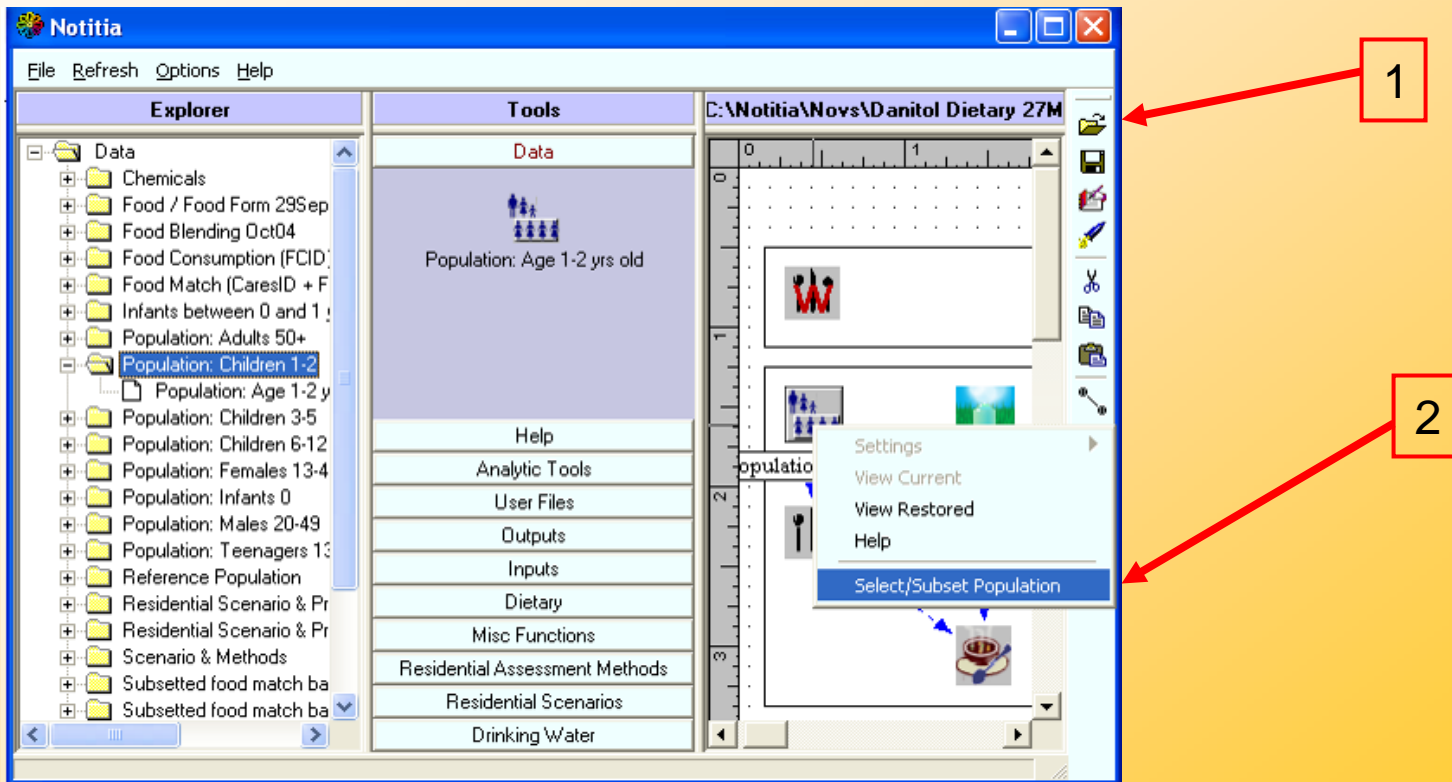
*mmddyyy hhmmss*  
is the date and time  
the file was created.

*(Refresh or re-open  
CARES to see  
new files.)*



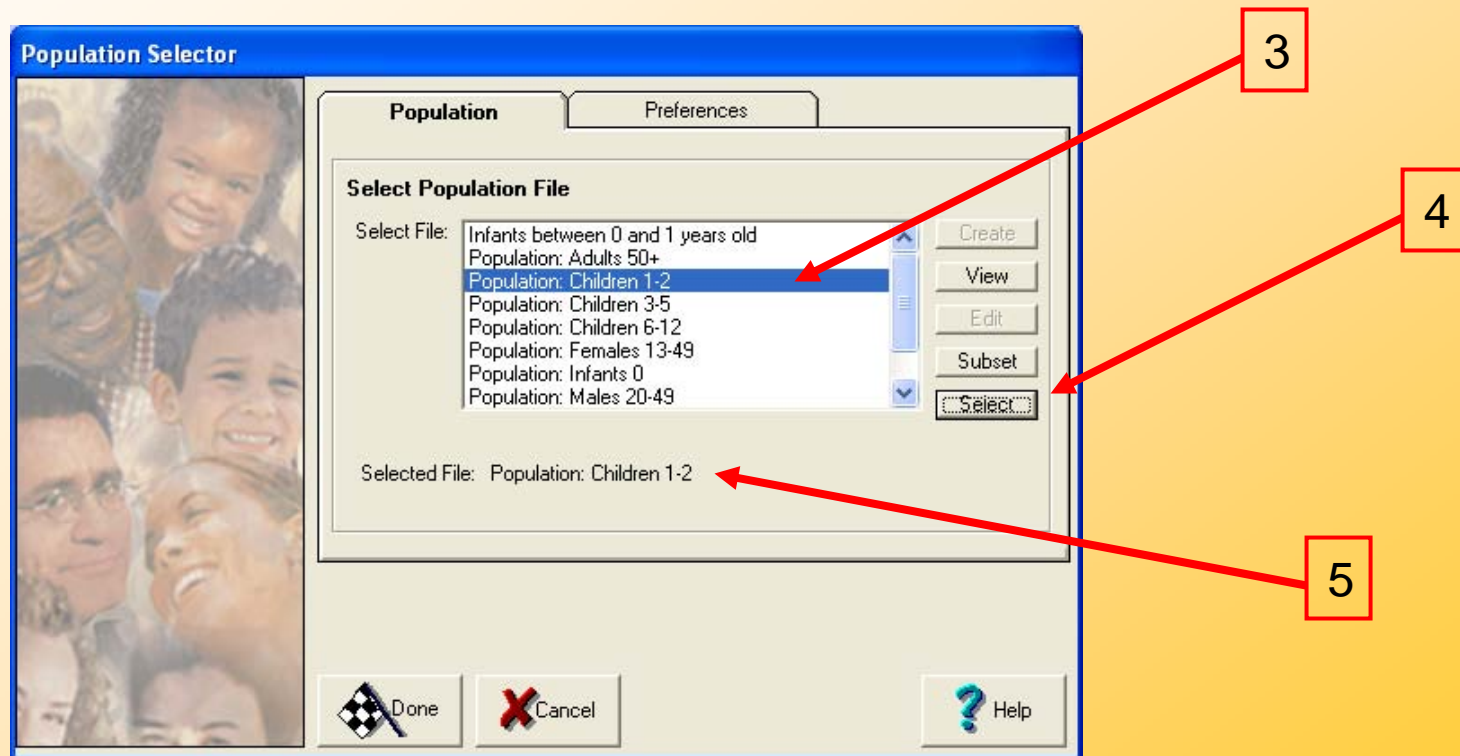
# How to Select a Population for CARES Run

1. Open .nov file with top right icon on Notitia window
2. Right-Click “Population Selector”, click “Select/Subset Population”



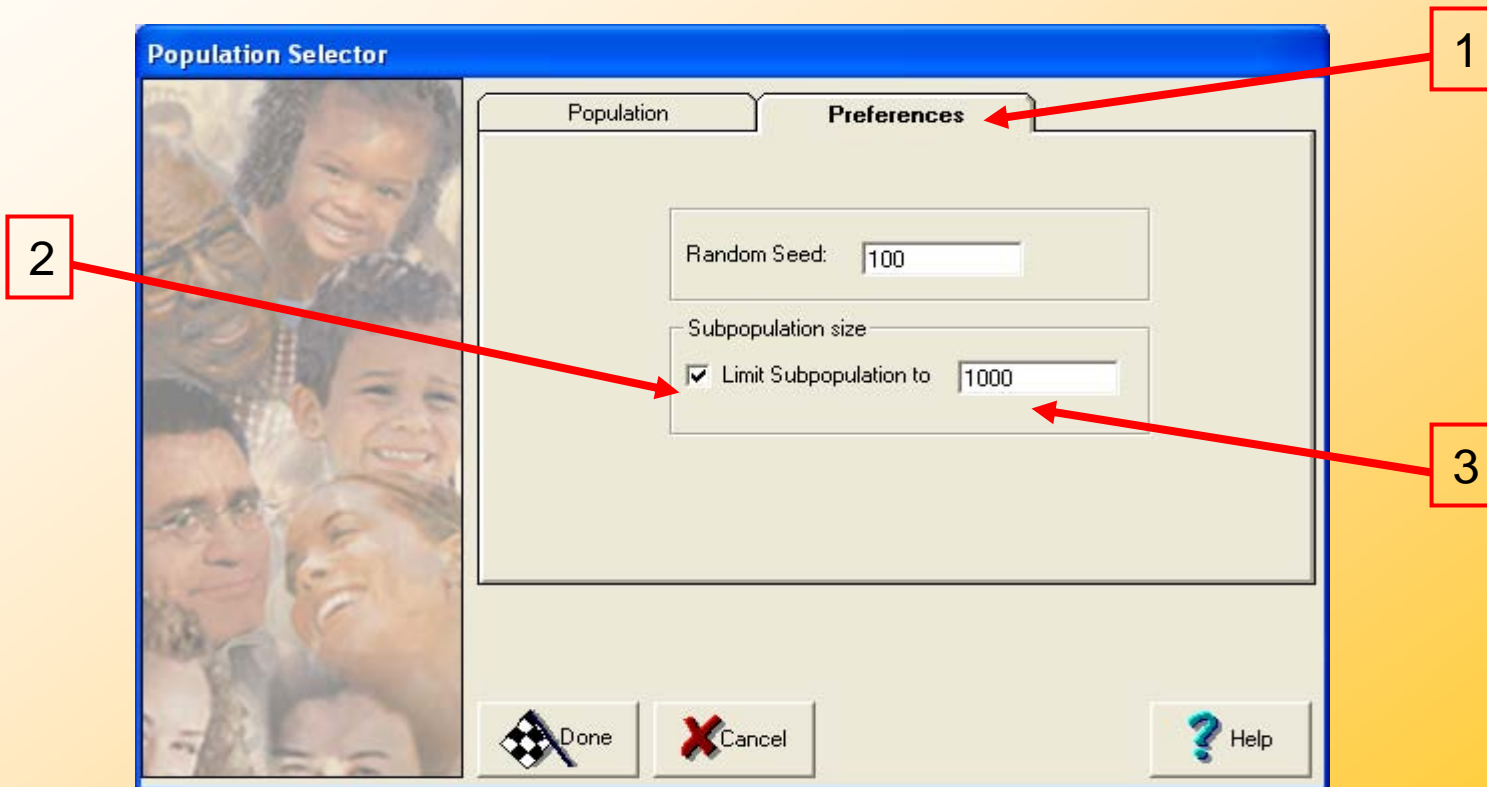
# How to Select a Population for CARES Run

3. Select desired subpopulation (Children 1-2) from list
4. Click the “Select” button
5. The selected subpopulation name appears below



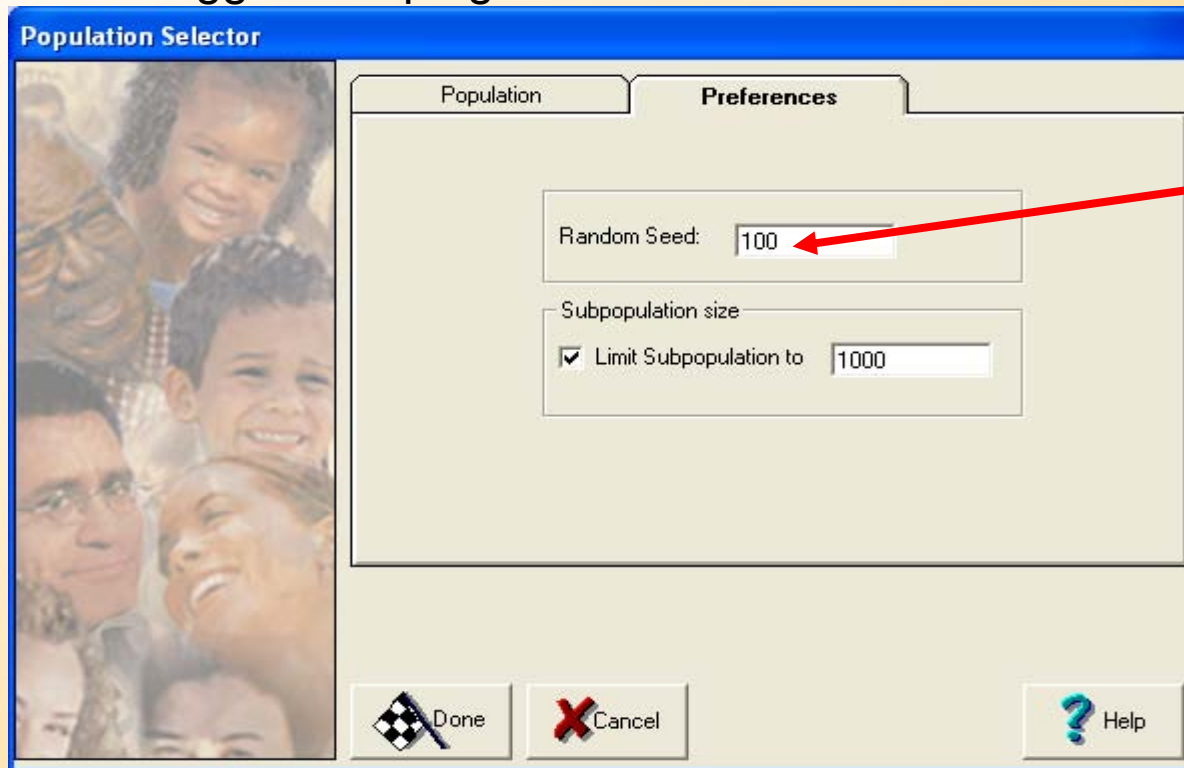
# How to Limit the Population Size for CARES Run

1. Select the “Preferences” tab
2. Check the “Limit Subpopulation to”
3. Type in the number (must be smaller than the subpopulation)



# Setting the Random Seed

The “random seed” is used to set the “Internal State” parameter for the Random Generator. Using the same random seed between runs insures the reproducibility of results (i.e. uses the same CARES IDs). If you want a different set of CARES IDs, then change the random seed. CARES default is a “100” and we suggest keeping it.



Random Seed

# Example #1

Create a subpopulation of “children 1-2 years old who live in California and from the white race”.

1. Move the population selector from the “Input” tab and paste it onto the canvas. Open population generator using the right click, then click “Select/Subset Population”
2. Select “Reference Population” and click the “Subset” button
3. Select “Age” from the “Field Column” and double click
4. Select the modifier “Between” then enter values 1 and for lower and upper bounds
5. Select the modifier “And”, then double click on “State” from the “Fields Column”
6. Select the modifier “=”
7. From the “Select Coded Value” menu, select “California” and click “OK”
8. Select the Modifier “And”
9. From the “Field Column” menu double click “Race” and select the modifier “=”
10. From the “Select Coded Value” menu, select “White” from the drop down list, then click “OK”. You should see “[82] Between 1 and 2 And [7] = 6 And [8] = 1”
11. Push the “Query” button. A green/white colored table with 247 individuals appears
12. Click “Done” and you will be prompted to name the created subpopulation
13. Name the subpopulation “California white children 1-2 years old” and click “OK”

# Example #2

Create a subpopulation of “Hawaii individuals with families of 2 members”

1. Move the population selector from the “Input” tab and paste it onto the canvas. Open population generator using the right click, then click “Select/Subset Population”
2. Select “Reference Population” and click the “Subset” button
3. Select “State” from the “Field Column” and double click
4. Select the modifier “=”
5. From the “Select Coded Value” menu, select “Hawaii” from the drop down list and click “OK”
6. Select the Modifier “And”
7. From the “Field Column” menu double click “Number of Family Members” and select the modifier “=”
8. On the “Enter Value or Field” prompt screen, enter “2”, then click “OK”. You should see the following Syntax “[7] = 15 And [72] = 2”
9. Push the “Query” button. A green/white colored table with “100” individuals appears
10. Click “Done” and you will be prompted to name the created subpopulation
11. Name the subpopulation “Hawaii subpopulation with 2 family members” and click “OK”

# Practice Exercise #1

Create a Subpopulation of “Hawaii individuals 1-2 Years Old”

1. Move the population selector from the “Input” tab and paste it onto the canvas. Open population generator using the right click, then click “Select/Subset Population”
2. Select “Reference Population” and click the “Subset” button
3. Select “State” from the “Field Column” and double click
4. Select the modifier “=”
5. From the “Select Coded Value” menu, select “Hawaii” from the drop down list and click “OK”
6. Select the modifier “AND”
7. From the “Field Column” menu double click “Age” and select the modifier “Between”
8. On the “Enter Value or Field” prompt screen, enter “1” for the Lower Bound and “2” for the Upper Bound, then click “OK”. You should see the following Syntax  
“[7] = 15 And [82] = Between 1 and 2”
9. Push the “Query” button. A green/white colored table with “18” individuals appears
10. Click “Done” and you will be prompted to name the created subpopulation
11. Name the subpopulation “Hawaii Children 1-2” and click “OK”

# Questions?