



# **Public Use Microdata Samples**

## **Using PDQ Explore Software**

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University of Michigan Library  
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# Public Use Microdata Samples

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- **Copies of the original questionnaires with identifying information edited out**
- **Create your own cross tabulations of census data**  
(e.g. Census Bureau does not tabulate teachers by single years of age)

# Public Use Microdata Samples

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**Two files – 1% and 5% sample**

- **1% has data for the nation, states, MSAs and super-Pumas (areas of 400,000)**
- **5% has data for the nation, states, MSAs and Pumas (areas of 100,000)**

# PUMS Software Programs

- **FTP data from Census Bureau (and manipulate with SAS or SPSS)**  
<http://www.census.gov/Press-Release/www/2003/PUMS5.html>
- **Census Bureau CD-ROMS (Beyond 20/20 software)**  
<http://www.census.gov/mp/www/Tempcat/PUMS.html>
- **SDA Software (coming in Winter 2004 for California and Michigan)**  
<http://nds.umdl.umich.edu/n/nds/>
- **PDQ Explore**  
<http://www.pdq.com>



# PDQ Explore Software

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- **Easy interface to**
  - **Public Use Microdata Samples, 1 and 5%, 1980-2000**
  - **IPUMS, edited PUMS, 1850-1880, 1900-1920, 1940-1990**
  - **Current Population Survey, 1991+**
  - **Mortality Schedules**
- **Permits users to tabulate their own variables**

# Access to PDQ

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- **UMich Documents Center:  
Reference Desk and Scholar's Workstation  
(request login help from Denise or Grace)**
- **Academics and librarians may request free  
IDs and passwords from PDQ. See web site  
at:**
  - **<http://www.pdq.com>**

# Before Beginning...

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**Define the data you want in terms of a spreadsheet**

**I want the single years of age by sex for all Vietnam veterans in the United States**

**Universe = Vietnam veterans in the U.S.**

**Column=sex (not very wide)**

**Row=single years of age (could be long)**



# Before Beginning...

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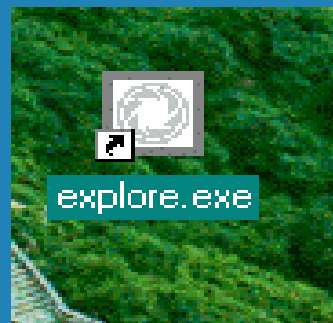
**Consult Chapter 6 of the PUMS codebook if you want to check the possibilities**

**<http://www.census.gov/prod/cen2000/doc/pums.pdf>**



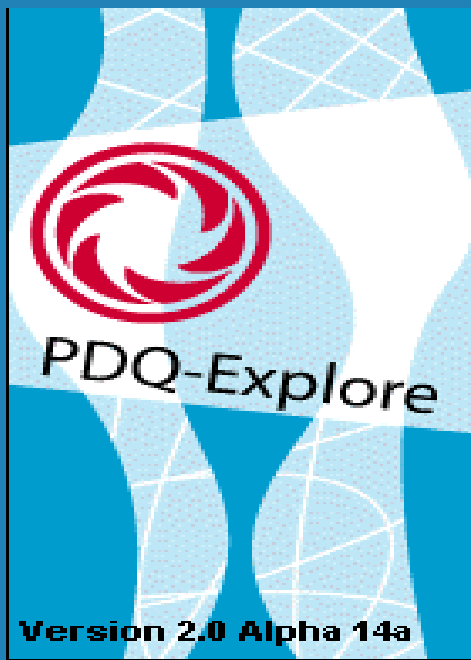
# Software

- **Download the software per instructions to your hard drive**
- **To begin searching, open the icon on your desktop**




# Logging On

Enter the **subscriber name** and **password** that you were given




Query Network Settings

**Server**

**Subscriber Name**

**Password**

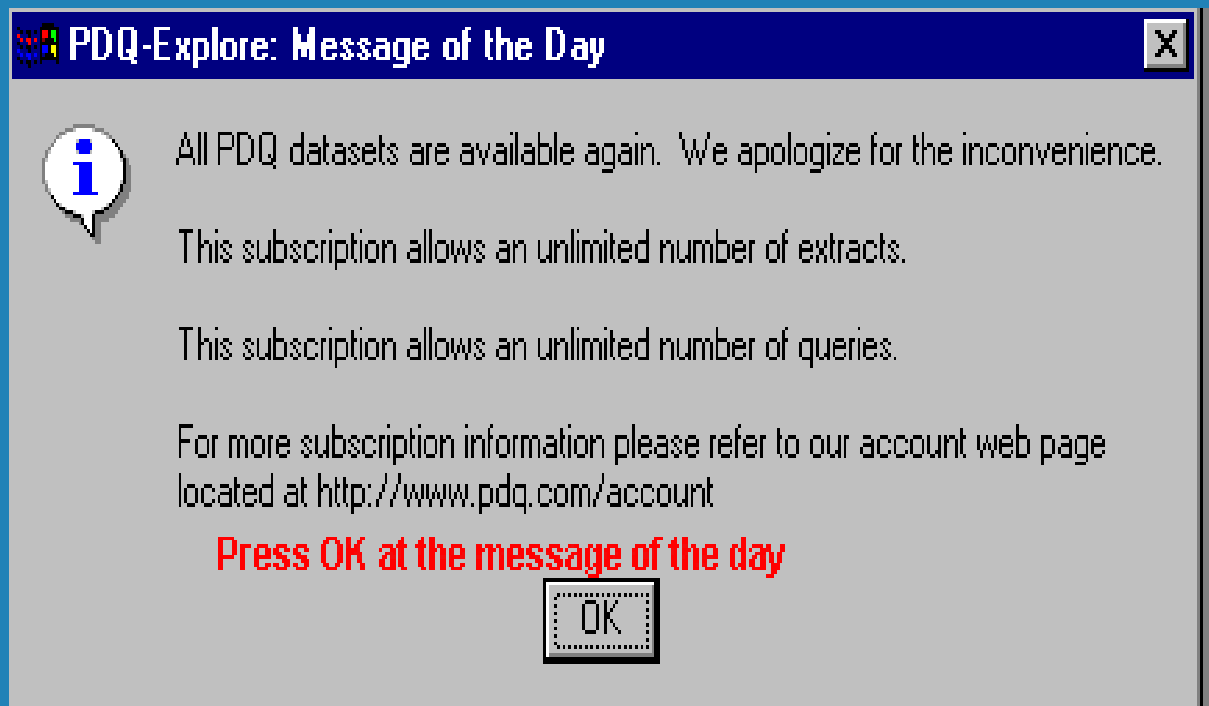
Type in subscriber name and password that PDQ gave you

Return twice or press Validate Settings

[Subscription Defaults](#)

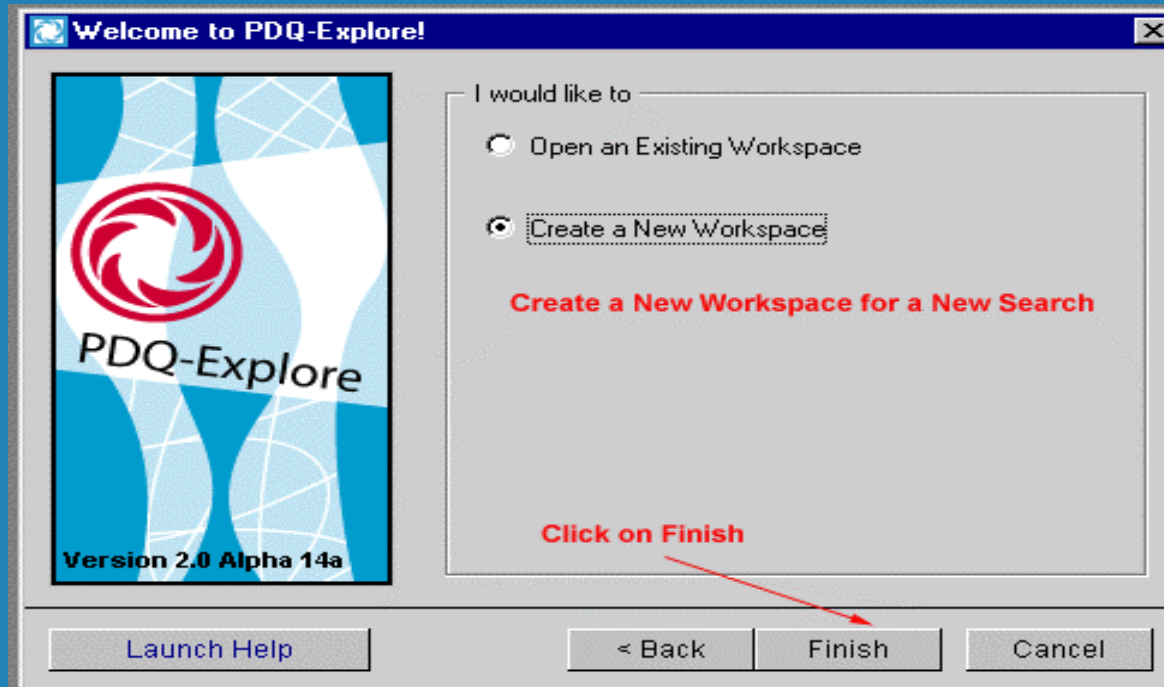
# Logging On

Press **OK** to close the message of the day



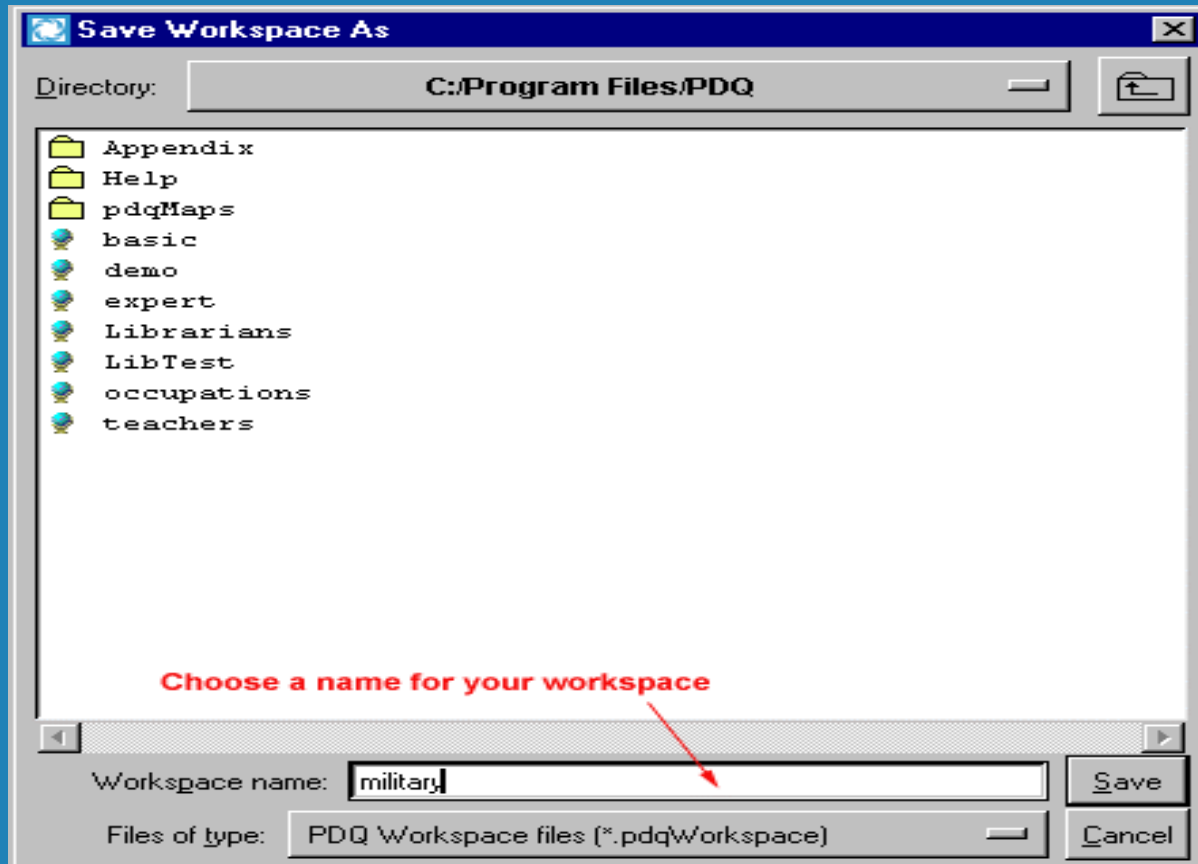
# Defining Workspace

- To conduct a new search, **create a new workspace**
- **Press Finish** or return twice



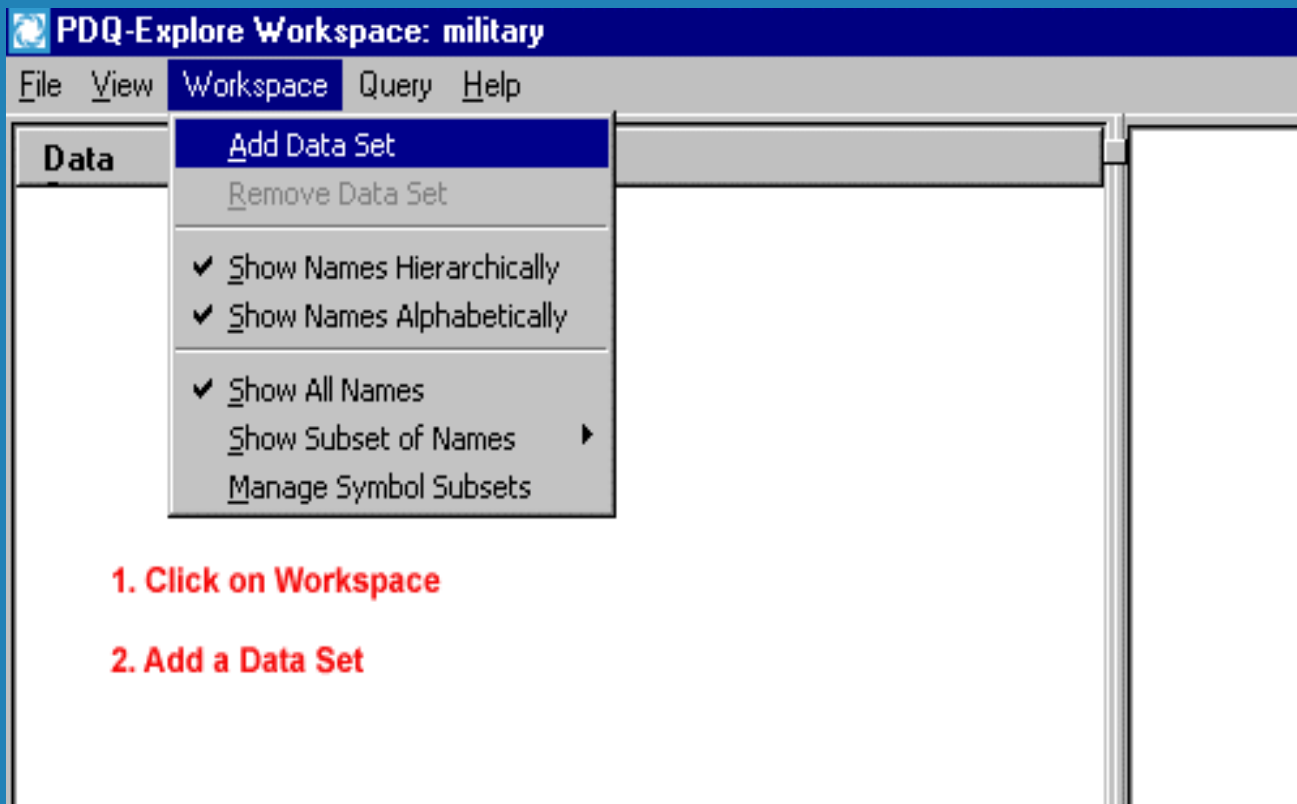
# Defining Workspace

Name your file on the hard disk and save.



# Defining Workspace

At the next screen, use the top menu to choose **Workspace**; then **Add a Data Set**



# Defining Workspace

Browse data sets; **highlight** ipums, pums, cps, or mortality file; **Open**

PDQ-Explore Workspace: military

File View Workspace Query Help

Open

Look in: Pdq

mortality_co_tox_1990.pdqCodebook	pums_1990_5pct.pdqCodebook
mortality_coocc_1990.pdqCodebook	pums_2000_1pct.pdqCodebook
mortality_cores_1990.pdqCodebook	<b>pums_2000_5pct.pdqCodebook</b>
pums_1980_1pct.pdqCodebook	pums_c2ss.pdqCodebook
pums_1980_5pct.pdqCodebook	wls_1998.pdqCodebook
pums_1990_1pct.pdqCodebook	wls_2001.pdqCodebook

File name: pums\_2000\_5pct

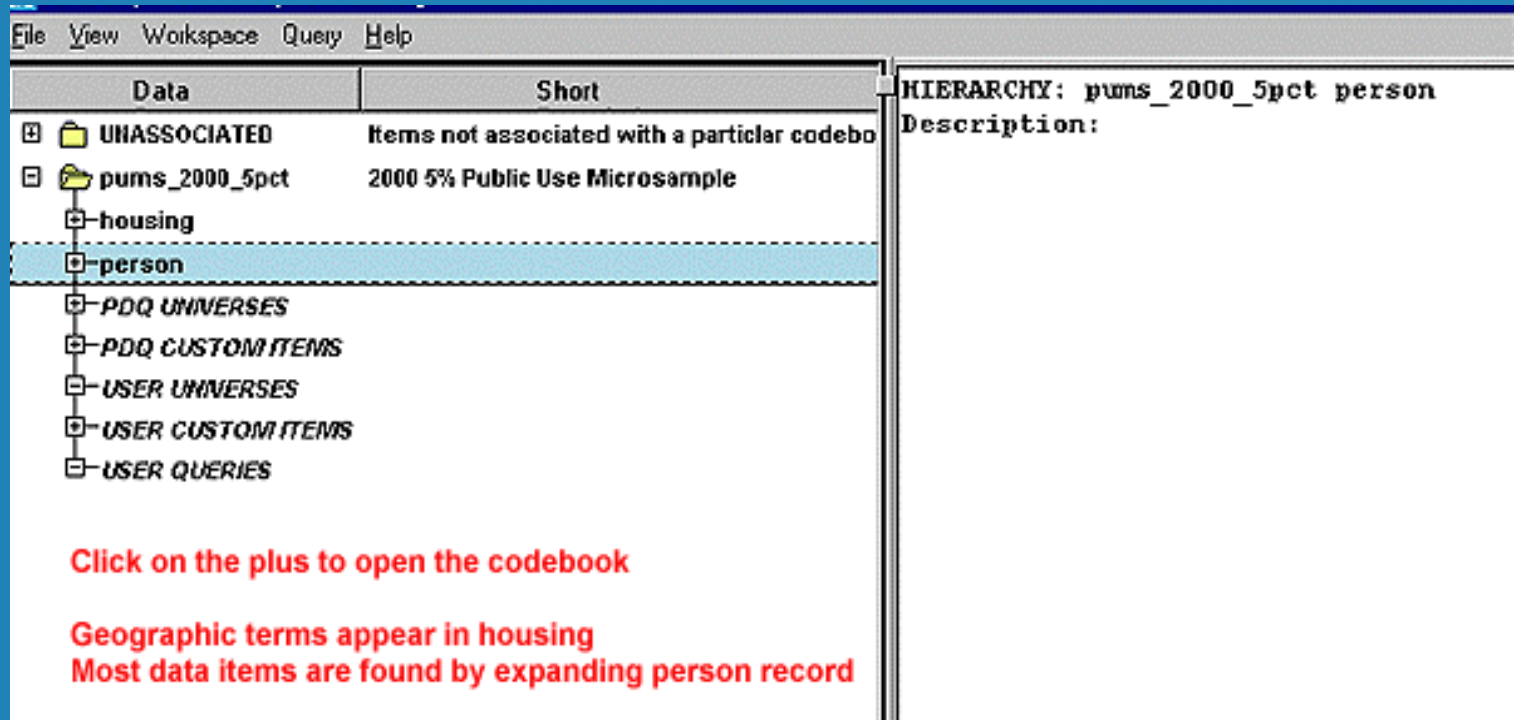
Files of type: Codebook files (\*.pdqcodebook)

Open Cancel

**Data Sets include 1980-2000 Census PUMS**  
**Many of the IPUMS**  
**Mortality**

# Defining Variables

- Once you choose a data set, its **codebook** will open up
- Click on the plus button to get a **list of variables**, their **alphabetic symbols**, and **any numeric values**



The screenshot shows a software interface with a menu bar (File, View, Workspace, Query, Help) and a main window. The main window is divided into two panes. The left pane has a tree view with columns 'Data' and 'Short'. The right pane shows a 'Description:' field with the text 'HIERARCHY: pums\_2000\_5pct person'.

Data	Short
UNASSOCIATED	Items not associated with a particular codebook
pums_2000_5pct	2000 5% Public Use Microsample
housing	
person	
PDQ UNIVERSES	
PDQ CUSTOM ITEMS	
USER UNIVERSES	
USER CUSTOM ITEMS	
USER QUERIES	

HIERARCHY: pums\_2000\_5pct person  
Description:

**Click on the plus to open the codebook**

**Geographic terms appear in housing**  
**Most data items are found by expanding person record**



# Defining Variables

With the PUMS files, geographic names (state, metropolitan area puma, etc. appear in housing file)

The screenshot shows a software interface with a menu bar (File, View, Workspace, Query, Help) and a main window. The main window is divided into two panes. The left pane has a tree view with columns 'Data' and 'Short'. The right pane shows a 'Description' field with the text 'HIERARCHY: pums\_2000\_5pct person'.

Data	Short
UNASSOCIATED	Items not associated with a particular codebook
pums_2000_5pct	2000 5% Public Use Microsample
housing	
person	
PDQ UNIVERSES	
PDQ CUSTOM ITEMS	
USER UNIVERSES	
USER CUSTOM ITEMS	
USER QUERIES	

HIERARCHY: pums\_2000\_5pct person  
Description:

**Click on the plus to open the codebook**

**Geographic terms appear in housing**  
**Most data items are found by expanding person record**

# Defining Variables

- Determine the **first alphanumeric variable** you want (e.g. Vietnam veteran: yes is VPS5=1)
- Use Top Menu to Choose **Query/Setup New Expert Query**

The screenshot shows the PDQ-Explore software interface with the 'Query' menu open. The menu options are: Setup New Basic Query, Setup New Expert Query (highlighted), Setup New Extract Query, Setup New Scripted Query, Setup New Extract Query (old), Setup New Extract Query (2), New Query Result Analyzer, Construct Custom Item / Records, and Construct Universe/Selection. The 'Data' pane on the left lists variables, with 'VPS5' selected. The 'Query' pane on the right shows the query definition: 'CATEGORY: pums\_2000\_5pct person VPS5 {Served in this period}'.

**1. Expand variables until you find the alphabetic code; then determine proper numeric code. Veterans who served in Vietnam reads: VPS5=1**

**2. Query - Set Up New Expert Query**

**(Also obtain codes for race and sex)**

# Expert Query Form

1. Make sure you have the **correct data set**
2. Determine if you want a **tabulation (counts or numbers)**
3. **Name your file**

PDQ-Explore Expert Query: vietvet

File Edit View Options Help

Setup Details Results **7. Click on results**

Data Set **1. Correct data set?** pums\_2000\_5pct

Query Type **2. Tabulation=numbers** Tabulation

Query Name **3. Name resulting file** vietvet

Universe / Selection vps5=1 **4. vps5=1 is code for all Vietnam veterans Will only count this group for entire U.S.**

Query Dimension

Dimension	Dimension Expression	Size
1 [Row]	age <b>5. age is code for single years of age</b>	96
2 [Col]	sex <b>6. sex is male or female</b>	4
3 [For]		0
4		0
Total number of cells in result		384
Query Hierarchy		person

Weight (pums\_2000\_5pct.person: default = PWEIGHT)

<Default>

Automatically set a default weight

# Expert Query Form

Enter the code for **UNIVERSE** (what you're counting)  
in the Universe box (e.g. vps5=1 are Vietnam veterans  
for the entire U.S.)

PDQ-Explore Expert Query: vietvet

File Edit View Options Help

Setup Details Results 7. Click on results

Data Set 1. Correct data set? pums\_2000\_5pct

Query Type 2. Tabulation=numbers Tabulation

Query Name 3. Name resulting file vietvet

Universe / Selection vps5=1 4. vps5=1 is code for all Vietnam veterans Will only count this group for entire U.S.

Query Dimension

Dimension	Dimension Expression	Size
1 [Row]	age 5. age is code for single years of age	96
2 [Col]	sex 6. sex is male or female	4
3 [For]		0
4		0
Total number of cells in result		384
Query Hierarchy		person

Weight (pums\_2000\_5pct.person: default = PWEIGHT) <Default>

Automatically set a default weight

# Expert Query Form

- Enter the code for the variables in the **ROW** box (age = single years of age) and the code for the variables in the **COLUMN** box (e.g. sex)
- Press **RESULTS** to run the query

The screenshot shows the PDQ-Explore Expert Query form with the following configuration:

- Data Set:** pums\_2000\_5pct
- Query Type:** Tabulation
- Query Name:** vietvet
- Universe / Selection:** vps5=1
- Query Dimension:**

Dimension	Dimension Expression	Size
1 [Row]	age	96
2 [Col]	sex	4
3 [For]		0
4		0
Total number of cells in result		384
Query Hierarchy		person
- Weight:** <Default>
- Automatically set a default weight

Red annotations on the form include: "7. Click on results" above the Results tab; "1. Correct data set?" above the Data Set field; "2. Tabulation=numbers" above the Query Type field; "3. Name resulting file" above the Query Name field; "4. vps5=1 is code for all Vietnam veterans Will only count this group for entire U.S." above the Universe / Selection field; "5. age is code for single years of age" above the age dimension; and "6. sex is male or female" above the sex dimension.

# Search Results

Search results appear in spreadsheet format

The screenshot shows the PDQ-Explore Expert Query interface. The window title is "PDQ-Explore Expert Query: 20031211\_140434". The menu bar includes "File", "Edit", "View", "Options", and "Help". There are three tabs: "Setup", "Details", and "Results", with "Results" selected. The main area displays the following information:

- Data Set: pums\_2000\_5pct
- Query Type: Tabulation
- Universe / Selection: vps5=1
- Axis 1: age
- Axis 2: sex
- Weight: <Default>

Below this information, there is a section titled "Resulting spreadsheet". It contains a table with the following structure:

Dimension	Swap Dimension	
Axis-01: "age"	<<ROW>>	
Axis-02: "sex"	<<COLUMN>>	
	Male	Female
40	8,911	1,354
41	11,580	1,544
42	42,716	2,785
43	113,913	9,118
44	188,244	15,630
45	224,971	17,586
46	254,508	17,700
47	340,517	18,276
48	366,080	17,739
49	455,514	18,165
50	590,217	18,988
51	679,992	17,166
52	771,716	17,512
53	806,469	16,192
54	558,619	12,210
55	509,139	10,451
56	442,878	8,294
57	370,971	7,466
58	260,766	5,141
59	198,597	3,775
60	150,104	2,525
61	105,495	1,913

# Saving Results

- Click on **File/Export Query Results**
- You can save as CSV , tab delimited and several other formats
- **CSV recommended for use with Excel**

Click on File/EXPORT to save the query

**Export Query Results**

Directory: C:\Program Files\PDQ

You can choose various formats

Export name:

Files of type: Simple ASCII (\*.txt)

- Simple ASCII (\*.txt)
- Comma Separated Values (enumerated) (\*.csv)
- Comma Separated Values (WYSIWYG) (\*.csv)
- Tab Separated (enumerated) (\*.txt)
- Tab Separated (1 axis) (\*.txt)
- HTML document (\*.html)
- SPLUS document (\*.dget)
- Maplitude Data (\*.doc)

Dimension	Axis-01: "age"	Axis-02: "sex"
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53	806,469	16,192
54	558,619	12,210
55	509,139	10,451
56	442,878	8,294
57	370,971	7,466
58	260,766	5,141
59	198,597	3,775
60	150,104	2,626
61	105,495	1,913

# Narrowing the Universe

Narrow the universe by using **& newcode** (e.g. **vps5=1 & state=26**)

The screenshot shows the PDQ-Explore Expert Query interface for query 20031211\_140434. The 'Setup' tab is active. The 'Data Set' is 'pums\_2000\_5pct', 'Query Type' is 'Tabulation', and 'Query Name' is '20031211\_140434'. The 'Universe / Selection' field contains 'vps5=1 & state=26', with red annotations explaining that 'state=26' is derived from a housing codebook and that the ampersand is used to narrow the universe. The 'Query Dimension' table shows dimensions for 'age' (96 cells), 'sex' (4 cells), and a total of 384 cells in the result. The 'Weight' is set to '<Default>' with the option 'Automatically set a default weight' checked.

PDQ-Explore Expert Query: 20031211\_140434

File Edit View Options Help

Setup Details Results

Data Set: pums\_2000\_5pct Query Type: Tabulation Query Name: 20031211\_140434

Universe / Selection: vps5=1 & state=26

Use housing codebook to establish term for state and code for Michigan (e.g. state=26)

You add this to the universe using an ampersand

Dimension	Dimension Expression	Size
1 [Row]	age	96
2 [Col]	sex	4
3 [For]		0
4		0
Total number of cells in result		384
Query Hierarchy		person

Weight (pums\_2000\_5pct.person: default = PWEIGHT): <Default>

Automatically set a default weight



# Altering the Spreadsheet Tabulations

Once you have a spreadsheet, click on **Options** to create totals or percentages for tables or columns

PDQ-Explore Expert Query: 20031211\_140434

File Edit View Options Help

Setup Det

Category value display options

- ✓ Suppress Above/Below
- ✓ Suppress Zeros
- ✓ Show Commas
- Percent Options
  - ✓ Raw Frequency Count
  - Percent by row
  - Percent by column
  - Percent by table total
- Show Percent Cumulative Totals
- Total Options

One you run the result  
Choose Options/Percent  
You can obtain percentages by row or column

Dimension Swap Dimension

Axis-01: "age" <<ROW>>

Axis-02: "sex" <<COLUMN>>

	Male	Female
40	245	54
41	474	80
42	1,430	82
43	4,532	275
44	6,161	308
45	7,496	337
46	8,461	408
47	12,610	536
48	13,438	322
49	16,935	595
50	24,253	254
51	26,012	557
52	28,895	456
53	30,622	445
54	20,847	631
55	18,942	326
56	16,035	130
57	12,750	198
58	8,959	139
59	5,793	33
60	4,029	88
61	2,443	8

# Adding More Parameters

Expand the table detail by repeating the row and column data for another parameter (e.g. race) as shown in **Dimension 3**

The screenshot shows the PDQ-Explore Expert Query interface. The title bar reads "PDQ-Explore Expert Query: 20031211\_140434". The menu bar includes "File", "Edit", "View", "Options", and "Help". There are three tabs: "Setup", "Details", and "Results".

**Setup Tab:**

- Data Set: pums\_2000\_5pct
- Query Type: Tabulation
- Query Name: 20031211\_140434
- Universe / Selection: vps5=1 & state=26
- Query Dimension table:

Dimension	Dimension Expression	Size
1 [Row]	age	96
2 [Col]	sex	4
3 [For]	race1	11
4		0
Total number of cells in result		4224
Query Hierarchy		person

**Weight:** (pums\_2000\_5pct.person: default = PWEIGHT) <Default>

Automatically set a default weight

**Annotations:**

- Red text: "Same codes (Vietnam vets in Michigan by age and race)"
- Red arrow pointing to the "race1" dimension expression.
- Red text: "Race1 will repeat the data for each race"

# Altering Spreadsheet Appearance

- The default shows separate tables for each of the values in the third dimension (e.g. separate spreadsheets for white and black)
- Change Axis3 tab to **FOREACH** everything on same spreadsheet

The screenshot shows the PDQ-Explore Expert Query interface. The title bar reads "PDQ-Explore Expert Query: 20031211\_140434". The menu bar includes "File", "Edit", "View", "Options", and "Help". There are three tabs: "Setup", "Details", and "Results".

The "Setup" tab is active, showing the following configuration:

- Data Set: pums\_2000\_5pct
- Query Type: Tabulation
- Universe / Selection: vps5=1 & state=26
- Axis 1: age
- Axis 2: sex
- Axis 3: race1
- Weight: <Default> **All races on same spreadsheet**

Below the configuration, there is a table with two columns: "Dimension" and "Swap Dimension".

Dimension	Swap Dimension
Axis-01: "age"	<<ROW>>
Axis-02: "sex"	<<COLUMN>>
Axis-03: "race1"	<<FOREACH>>

The main data area shows a table with columns for age, sex, and race1. The rows are grouped by race1. The first group is "White" (rows 81-89) and the second group is "Black or African American alone" (rows 40-46). The "Male" column is highlighted in purple.

Age	Sex	Weight
81		48
82		58
83		37
84		107
85		7
86		30
87	White	26
89		7
Axis-03: "race1"="Black or African American alone"		
		Male
40		68
41	Black	86
42		125
43		562
44		675
45		890
46		1,082

# Calculating Means or Averages

- Calculate averages by changing the **query type** to **summary statistics** at the top
- Fill in the new **Describe Expression** box at the bottom with a **variable code** (e.g. age, income)

The screenshot shows the PDQ-Explore Expert Query interface for query 20031211\_140434. The 'Setup' tab is active, and the 'Change Tabulation to Summary Statistics' button is highlighted. The 'Data Set' is 'pums\_2000\_5pct', the 'Query Type' is 'Summary Statistics', and the 'Query Name' is '20031211\_140434'. The 'Universe / Selection' is 'vps5=1 & state=26'. The 'Query Dimension' table is as follows:

Dimension	Dimension Expression	Size
1 [Row]	age	96
2 [Col]	sex	4
3 [For]	race1	11
4		0
Total number of cells in result		4224
Query Hierarchy		person

The 'Weight' is set to '<Default>' with the option 'Automatically set a default weight' checked. The 'Describe Expression' box contains 'incws' with a red note: 'Add the code for Income: incws'.

# Complex Table

## Mean income of white male Vietnam veterans in Michigan by age

Setup Details Results

Data Set: pums\_2000\_5pct  
Query Type: Summary Statistics  
Universe / Selection: vps5=1 & state=26  
Axis 1: age  
Axis 2: sex  
Axis 3: race1  
Weight: <Default>

**Mean income of white male Vietnam vets in Michigan by single year of age**

Dimension	Swap Dimension
Axis-01: "age"	<<ROW>>
Axis-02: "sex"	Male
Axis-03: "race1"	White alone

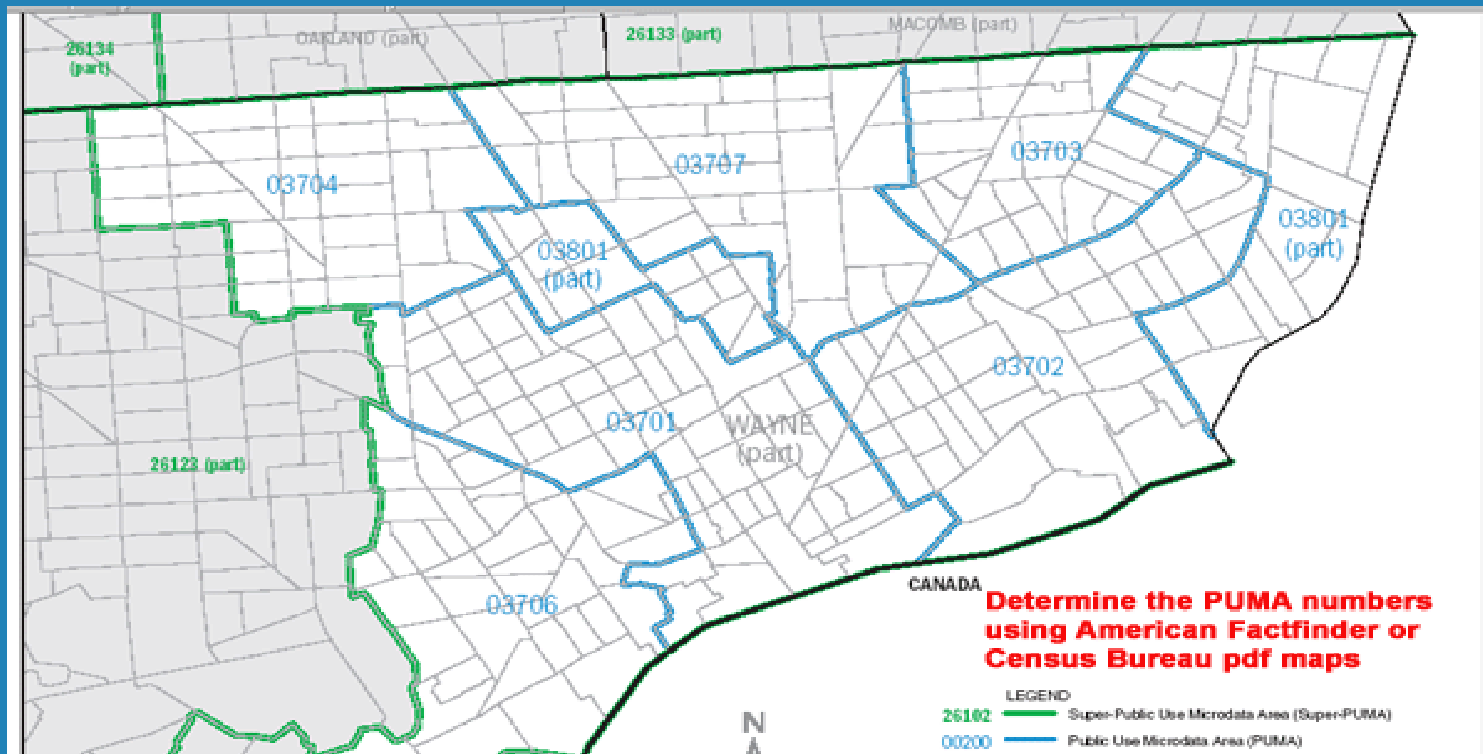
age	Frequency	Mean	Std. Dev.	Low	High
40	154	31,161.04	23,294.31	0	100,000
41	325	47,887.38	54,263.79	0	316,000
42	1,269	41,740.26	37,080.38	0	316,000
43	3,784	40,493.53	33,529.92	0	316,000
44	5,307	35,432.27	32,354.54	0	316,000
45	6,330	36,691.42	26,275.84	0	108,000
46	7,076	43,821.46	41,562.97	0	316,000
47	11,010	44,216.63	44,644.74	0	316,000
48	11,794	45,650.45	37,056.92	0	316,000
49	14,467	49,157.72	51,423.00	0	316,000
50	21,180	43,434.30	33,137.83	0	316,000
51	23,082	47,201.78	45,242.20	0	316,000
52	25,684	50,317.90	49,733.44	0	316,000
53	27,434	48,112.29	47,735.66	0	316,000
54	18,108	52,032.12	57,261.70	0	316,000
55	16,837	46,741.23	46,387.48	0	316,000
56	14,213	47,184.23	51,122.07	0	316,000
57	11,313	47,211.51	57,738.53	0	316,000
58	7,610	47,834.01	66,150.78	0	316,000
59	4,901	45,236.24	57,505.73	0	316,000
60	3,424	50,184.67	72,812.94	0	316,000

# Small Area Geography

- **Data from the PUMS 5% file is available for states, metropolitan areas, and Public Use Microdata Areas (PUMAS) of 100,000**
- **You can identify a PUMA or group of PUMAs using**
  - **Maps in American Factfinder**  
(<http://factfinder.census.gov/>)
  - **PDF maps on the Census Bureau web site**  
(<http://www.census.gov/geo/www/maps/puma5pct.htm>)
  - **Mable/Geocorr Search Engine**  
(<http://mcdc2.missouri.edu/websas/geocorr2k.html>)

# Small Area Geography

This map shows Detroit and its closest suburbs as PUMA 3701-3801



# Codebook and PUMAS

The Explore Codebook shows PUMA5 as term for 5% PUMA boundaries

<input type="checkbox"/> -MRT2AMTA	Second Mortgage Payment (monthly amo
<input type="checkbox"/> -MSACMSA1	Metropolitan Area: MSA/CMSA for SuperP
<input type="checkbox"/> -MSACMSA5	Metropolitan Area: MSA/CMSA for PUMA
<input type="checkbox"/> -MSAPMSA1	Metropolitan Area: MSA/PMSA for SuperP
<input type="checkbox"/> -MSAPMSA5	Metropolitan Area: MSA/PMSA for PUMA
<input type="checkbox"/> -HOC	Number of own children under 18 years in
<input type="checkbox"/> -HIF	Number of people in family
<input type="checkbox"/> -HRC	Number of related children under 18 years
<input type="checkbox"/> -OIL	Cost of Oil, Kerosene, or Wood (annual)
<input type="checkbox"/> -OILA	Cost of Oil, Kerosene, or Wood (annual) Al
<input type="checkbox"/> -P18	Number of people under 18 years in hous
<input type="checkbox"/> -P65	Number of people 65 years and over in ho
<input type="checkbox"/> -PAOC	Presence and Age of Own Children under
<input type="checkbox"/> -PARC	Presence and Age of Related Children un
<input type="checkbox"/> -PERSONS	Number of person records following this
<input type="checkbox"/> -PHONE	Telephone Availability
<input type="checkbox"/> -PHONEA	Telephone Availability Allocation Flag
<input type="checkbox"/> -PSF	Presence of Subfamily in Household
<input type="checkbox"/> -PUMA1	Super Public Use Microdata Area Code (Su
<input type="checkbox"/> -PUMA5	Public Use Microdata Area Code (PUMA)
<input type="checkbox"/> -PSUB	Public Use Microdata Area Code (PSUB)

**Determine the geographic code for pumas in the housing unit record (pumas are "puma5")**



# Small Area Geography and Ranges

When creating data sets for PUMAS, be sure to include the correct state as the universe (e.g. state=26)

The screenshot shows the PDQ-Explore Expert Query interface for query 20031212\_115502. The 'Setup' tab is active, showing the following configuration:

- Data Set:** pums\_2000\_5pct
- Query Type:** Tabulation
- Query Name:** 20031212\_115502
- Universe / Selection:** state=26. A red note below the field reads: "Be sure to set the universe as the state".
- Query Dimension:** A table with 4 dimensions and a total of 102691 cells in result.
- Weight:** <Default>. A checkbox for "Automatically set a default weight" is checked.

Dimension	Dimension Expression	Size
1 [Row]	lang5 <b>This row will get all languages</b>	997
2 [Col]	puma5: 3701..3801	103
3 [For]	<b>puma5: 3701..3801</b>	0
4	<b>lists data individually for each puma</b>	0
Total number of cells in result		102691
Query Hierarchy		person

# Small Area Geography and Ranges

- Puma5: 3701..3801 will list the data for each individual area

The screenshot shows the PDQ-Explore Expert Query interface for a query named '20031212\_115502'. The 'Setup' tab is active, showing the following configuration:

- Data Set:** pums\_2000\_Spct
- Query Type:** Tabulation
- Query Name:** 20031212\_115502
- Universe / Selection:** state=26 (Note: **Be sure to set the universe as the state**)
- Query Dimension:**

Dimension	Dimension Expression	Size
1 [Row]	lang5 <b>This row will get all languages</b>	997
2 [Col]	puma5: 3701..3801	103
3 [For]	<b>puma5: 3701..3801</b>	0
4	<b>lists data individually for each puma</b>	0
Total number of cells in result		102691
Query Hierarchy		person

**Weight (pums\_2000\_Spct.person: default = PWEIGHT):** <Default>

Automatically set a default weight

# Small Area Geography and Ranges

## Search result for each individual PUMA

PDQ-Explore Expert Query: 20031212\_115502

File Edit View Options Help

Setup Details Results

Data Set: pums\_2000\_5pct  
 Query Type: Tabulation  
 Universe / Selection: state=26  
 Axis 1: lang5  
 Axis 2: puma5: 3701..3801  
 Weight: <Default>

**Result for individual PUMAS**

Dimension	Swap Dimension			
Axis-01: "lang5"	<<ROW>>			
Axis-02: "puma5: 3701..3801"	<<COLUMN>>			
	3701	3702	3703	3704
Not applicable (Under 3 years or	124,541	105,478	104,919	121,282
Jamaican Creole	0	0	0	143
German (Includes 613)	360	222	283	243
Pennsylvania Dutch	0	0	0	0
Yiddish	22	0	25	0
Dutch	0	40	0	0
Afrikaans	0	0	0	22
Swedish	22	29	0	0
Danish	0	0	0	0
Norwegian	0	0	0	0
Icelandic	0	0	0	0
Italian	74	26	48	0
French (Includes 621)	446	469	506	681
Patois	15	36	0	0
French Creole	27	0	0	0
Cajun	0	0	0	0
Spanish (Includes 627-628)	2,289	2,050	1,329	2,363
Portuguese (Includes 630)	0	0	0	0
Romanian	18	0	0	0
Irish Gaelic	0	0	0	0
Greek	35	74	0	33

# Small Area Geography for Ranges

To get the total for the area, list it in the universe as  
**puma5 >3700 & puma5 >3802 & state=26**

PDQ-Explore Expert Query: language

File Edit View Help

Setup Details Results **Coding for language spoken in the entire PUMA area by seniors 65-85**

Data Set: pums\_2000\_Spct Query Type: Tabulation Query Name: language

Universe / Selection: state=26 & puma5 >3700 & puma5 <3802  
**puma5 more than 3700 and less than 3802 = total of puma5: 3701..3801**

Query Dimension

Dimension	Dimension Expression	Size
1 [Row]	lang5	997
2 [Col]	age: 65..85	23
3 [For]	<b>single years but only 65-85</b>	0
4		0
Total number of cells in result		22931
Query Hierarchy		person

Weight (pums\_2000\_Spct.person: default = PWEIGHT): <Default>

Automatically set a default weight

# Small Area Geography for Ranges

To get a listing of single years of age between 65 and 85, list column as age: 65..85

The screenshot shows the PDQ-Explore Expert Query: language interface. The title bar reads "PDQ-Explore Expert Query: language". The menu bar includes "File", "Edit", "View", and "Help". There are three tabs: "Setup", "Details", and "Results". The "Results" tab is active, displaying the following information:

**Coding for language spoken in the entire PUMA area by seniors 65-85**

Data Set: pums\_2000\_Spct  
Query Type: Tabulation  
Query Name: language

Universe / Selection: state=26 & puma5 >3700 & puma5 <3802  
**puma5 more than 3700 and less than 3802 = total of puma5: 3701..3801**

Query Dimension:

Dimension	Dimension Expression	Size
1 [Row]	lang5	997
2 [Col]	age: 65..85	23
3 [For]	<b>single years but only 65-85</b>	0
4		0
Total number of cells in result		22931
Query Hierarchy		person

Weight (pums\_2000\_Spct.person: default = PWEIGHT): <Default>

Automatically set a default weight

# Calculating Totals

- To calculate the most spoken languages by 65-85 year olds as a group
- Click on **Options/Total Options/Row**

The screenshot shows the PDQ-Explore software interface. The title bar reads "PDQ-Explore Expert Query: language". The menu bar includes "File", "Edit", "View", "Options", and "Help". A red text overlay at the top says "Search result by single years of age for the entire area".

The "Options" menu is open, showing the following options:

- Category value display options
  - Suppress Above/Below
  - Suppress Zeros
  - Show Commas
  - Percent Options
    - Show Percent Cumulative Totals
  - Total Options
    - None
    - Row**
    - Column
    - Both

Below the menu, a red text overlay says "Use Options/Totals/Rows for the most popular languages of the 65-85 age group".

The main window displays a table with the following data:

	65	66	67	68
Not applicable (Under 3 years or	5,284	5,071	5,397	5,547
Jamaican Creole	0	0	0	0
German (Includes 613)	19	19	90	0
Yiddish	0	0	0	0
Dutch	0	11	0	0
Afrikaans	0	0	0	0
Swedish	0	0	0	0
Italian	0	73	18	58

# Complex Result

Polish and Spanish are two most popular languages spoken by seniors 65-85 in Detroit

PDQ-Explore Expert Query: language

File Edit View Options Help

Setup Details Results

Data Set: pums\_2000\_5pct  
Query Type: Tabulation  
Universe / Selection: state=26 & puma5 >3700 & puma5 <3802  
Axis 1: lang5 **Search results show Polish and Spanish**  
Axis 2: age: 65..85 **Other interesting results**  
Weight: <Default>

Dimension	Swap Dimension		
Axis-01: "lang5"	<<ROW>>		
Axis-02: "age: 65..85"	<<COLUMN>>		
	84	85	Total
Patois	0	0	51
French Creole	0	0	18
Spanish (Includes 627-628)	63	36	2,120
Portuguese (Includes 638)	0	0	0
Romanian	0	0	100
Greek	0	0	396
Albanian	0	0	26
Russian	0	0	71
Ukrainian	0	18	257
Czech	0	0	15
Polish	81	95	2,421
Slovak	0	0	56
Bulgarian	0	0	0
Macedonian	0	0	41
Serbo-croatian	0	0	37
Croatian	0	0	14
Serbian	0	0	30
Lithuanian	0	0	0
Armenian	0	0	0
Persian	0	0	16