

Defense Medical Epidemiology Database

(DMED) Users Guide

Version 4.1.03

Prepared by the

Armed Forces Health Surveillance Center

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Introduction

General Overview

The Defense Medical Surveillance System (DMSS) is the corporate executive information system for medical surveillance decision support in the EI/DS business area of the Military Health System (MHS). The DMSS receives and integrates standardized data from multiple individual Service and DoD sources worldwide. The "engine" of the DMSS is a continuously growing relational database of up-to-date and historical data related to medical events (e.g., hospitalizations, outpatient visits, reportable diseases, HIV results, health risk appraisals, immunizations, deaths), personal characteristics (e.g., rank, military occupation, demographic factors), and military experiences (e.g., deployments, assignments) of all Army, Navy, Air Force, and Marine service members over their entire military careers. There are currently more than 350 million rows of data regarding more than 8 million service members in the on-line DMSS database.

The Defense Medical Epidemiology Database (DMED) application provides authorized users worldwide (through the Internet) with real-time access to user-definable queries of a subset of data (non-privacy) contained within the DMSS. The DMED application can be downloaded from the Armed Forces Health Surveillance Center's (AFHSC) home page (<http://www.afhsc.mil/Home/AboutDmed>).

The purpose of the DMED is to standardize the epidemiologic methodology used to collect, integrate and analyze Tri-Service personnel and medical event data and to provide authorized users with remote access to the summarized data. Through the use of client-server technologies and database optimization, DMED users have unprecedented capabilities to access Tri-Service epidemiologic data and to submit tailored queries that are responded to in a timely (seconds) and efficient manner. DMED is available to all military and civilian researchers, policy makers and others with a need to evaluate the health of active duty service members.

Key Information

Data Sources

DMED provides remote access to a subset of data contained within the Defense Medical Surveillance System (DMSS). DMSS contains up-to-date and historical data on diseases and medical events (e.g., hospitalizations, ambulatory visits, reportable diseases, Immunizations, HIV tests, etc.) and longitudinal data relevant to personnel characteristics and deployments experience for all active duty and reserve component service members. The DMED application provides a user-friendly interface through which users may perform queries regarding disease and injury rates and relative burdens of disease in active duty populations.

DMED provides access to four types of data relevant to active duty service members: demographic data, inpatient hospitalization data, ambulatory data, and reportable events data.

Demographic data (i.e., gender, race, marital status, pay grade, etc.) are provided by the Defense Manpower Data Center (DMDC). DMDC receives updated data on a monthly basis on each Service.

Hospitalization data is provided by the Executive Information and Decision Support (EI/DS) Program Office. These data are a subset of information from the Standard Inpatient Data Record (SIDR), which records inpatient treatment data. SIDR data are collected by the Composite Health Care System (CHCS) at each DoD Medical Treatment Facility (MTF) and outsourced (non DoD hospital) in-patient healthcare provided to active duty service members. For each hospitalization of an active duty Service member in a U.S. military hospital, at the time of discharge, up to eight diagnoses are recorded (using standard diagnostic codes, International Classification of Diseases, 9th revision). The first diagnosis is generally indicative of the primary reason for admission and is the diagnosis code that is reflected in the DMED data.

Ambulatory data are provided by the Executive Information and Decision Support (EI/DS) Program Office. These data are a subset of information from the Standard Ambulatory Data Record (SADR), which records patient-level outpatient treatment data generated by the MTFs and the Composite Health Care System (CHCS) used in DoD Military Treatment Facilities worldwide and outsourced (non-DoD clinic) out-patient healthcare provided to active duty service members. For each outpatient visit of an active duty Service member up to four diagnoses are recorded (using standard diagnostic codes, International Classification of Diseases, 9th revision).

Reportable Event data contains information on 70 reportable medical events. This data is reported to the DMSS by the Services' Medical Surveillance Centers. Army reportable

event data for calendar years 1995 to present, and Navy and Air Force data from calendar years 2000 to present are available in DMSS.

Disclaimer

The Defense Medical Surveillance System (DMSS) is an executive information decision support system whose database contains up-to-date and historical data on diseases, medical events (e.g., hospitalizations, ambulatory visits, reportable diseases, HIV tests, immunizations and health risk appraisals) and longitudinal demographic data on DoD personnel. Data in DMSS originates from many different sources within the DoD. DMED provides authorized users comprehensive remote access to a subset of non-privacy data contained within the DMSS.

The overall quality of medical surveillance data depends on completeness, validity, consistency, timeliness and accuracy. With over 350 million rows of data (from more than 20 different sources) currently in DMSS, much effort is made to ensure a standardized and consistent approach to data processing and validation. However, receipt of large data inputs from multiple sources makes it impractical to correct all inaccurate or miscoded records. The following are known characteristics of the data available through DMED.

Population Statistics:

All data on DoD service members contained in DMSS is validated against DoD personnel data obtained from the Defense Manpower Data Center (DMDC). Stratum data elements (i.e., gender, age, grade, race/ethnic, and marital status) for a medical event are derived from personnel data considered to be current on the date of a medical event. Overall and stratum-specific population statistics (i.e., person-year denominators) are calculated based on longitudinal personnel data. Stratum-specific unknown (or missing) data are excluded from all calculations.

In-patient Data:

In-patient data is a combination of the Standard In-patient Data Record (SIDR) extracted from the Composite Health Care System (CHCS) used in DoD Military Treatment facilitates worldwide and outsourced (non DoD hospital) in-patient healthcare provided to active duty service members. CHCS exists primarily as an administrative medical database, but it allows tracking of frequencies, rates, and trends of disease and injury diagnoses in military populations. Each medical record is coded with up to eight diagnoses and is based on the health care provider's review and interpretation of results of tests, consults, and diagnostic and therapeutic procedures. Only those in-patient records considered complete are processed into DMSS.

Ambulatory Data:

Out-patient data is a combination of the Standard Ambulatory Data Record (SADR) extracted from the Ambulatory Data System (ADS) and the Composite Health Care System (CHCS) used in DoD Military Treatment facilitates worldwide and outsourced

(non DoD clinic) out-patient healthcare provided to active duty service members. ADS exists primarily as an administrative medical database, but it allows tracking of frequencies, rates, and trends of disease and injury diagnoses in military populations. Each medical record is coded with up to four diagnoses chosen from a list of relevant diagnoses for specific clinics. Clinic staff fill-out patient encounter information (including diagnosis) onto forms that are scanned into the ADS database. Only those out-patient records considered complete are processed into DMSS.

Reportable Event Data:

Medical events meeting DoD reporting requirements are transmitted within each Service to a central location by Service-specific reporting programs. These programs exist to compile a reportable event surveillance database used to record and track events of interest in the military. Criteria (below) were formulated by each Service to establish a consensus list of DoD reportable events. Army reportable event data for calendar years 1995 to present, and Navy and Air Force data from calendar years 2000 to present are available in DMSS.

Criteria for the Selection of Reportable Medical Events

- First, there must be a clear case definition and a single standard code (in the international Classification of Diseases, 9th revision)
- Second, an intervention must be available and/or a public health response indicated;
- Third, a sufficient, timely source of information must not already exist; and
- Fourth, the condition/event must:
 - represent an inherent, significant threat to the public's health (e.g., potential to affect large numbers of people, to be efficiently transmitted within a population, to have severe/life threatening clinical manifestations); OR
 - represent a significant military operational threat (e.g., potential to disrupt military training, deployment, or operations); OR
 - be commonly reportable by state or federal laws, regulations, or guidelines.

Privacy issues

DMED summarizes experiences of groups of individuals. It does not provide access to individual patient (Privacy Act) information. [Updates / New Releases](#)

DMED tables are periodically updated as new data is received. This may cause query results to change slightly.

Most DMED software updates are transparent to the user. If an update to an existing version of the software requires user acceptance, a message may appear when you log on to DMED. User will then have the option of updating their DMED software before

logging in or cancelling the DMED login.

Login / Password Information

Forgot password

If you have forgotten your user id or password contact the DMED administrator via email at dmedadm@amsa.army.mil. [Modify password](#)

To change your password: choose the **File** button then choose **Change password** from the drop down. When this option is selected, a panel will appear allowing you to your new password.

Performing queries with DMED

Getting Started

There are four different types of queries possible with DMED. Within each query there are multiple filters and other functions to customize each query.

Types of Queries

Disease Summary: Displays all available hospitalization, ambulatory and reportable event data on a particular condition(s) in a specified population. Not all filters and display options are available with 'Disease Summary'. However, the user can easily jump from the 'Disease Summary' query to a more detailed 'full-featured' query.

Detailed Query: Provides data separately on hospitalizations, ambulatory data and reportable events. The user can filter the request to include all occurrences of a particular condition or just the first occurrence (eliminates multiple encounters for the same condition).

Top Ten Diagnoses: Displays the ten most commonly occurring medical encounters (in-patient, out-patient or reportable event) for specified populations. For hospitalization and ambulatory data queries, a filter is available to limit the scope to one or all of the major ICD-9 diagnostic categories. As with 'Detailed Query', population filters for location and occupational groups are available to define more specifically the population of interest

Population Statistics: Provides demographic data on a specified active duty population. Allow quick filtering of location and occupational groups to more specifically define the population of interest. The results of this query are also available on the results tab of the 'Disease Summary' and 'Detailed Query'.

Data Sources

There are four main sources of data available through DMED. Refer to the 'DMED Disclaimer' for additional information on these data sources.

Population Data: All data on DoD service members contained in DMSS is validated against DoD personnel data and obtained from the Defense Manpower Data Center (DMDC) on a monthly basis. Stratum data elements (i.e., gender, age, grade, race/ethnic, and marital status) for medical events are derived from personnel data considered to be current on the date of a medical event.

In-patient Data: In-patient data is a combination of the Standard In-patient Data Record (SIDR), which is extracted from the Composite Health Care System (CHCS) used in

DoD Military Treatment Facilities worldwide and outsourced (non DoD hospital) in-patient healthcare provided to active duty service members. Each medical record is coded with up to eight diagnoses and is based on the health care provider's review and interpretation of results of tests, consults, and diagnostic and therapeutic procedures.

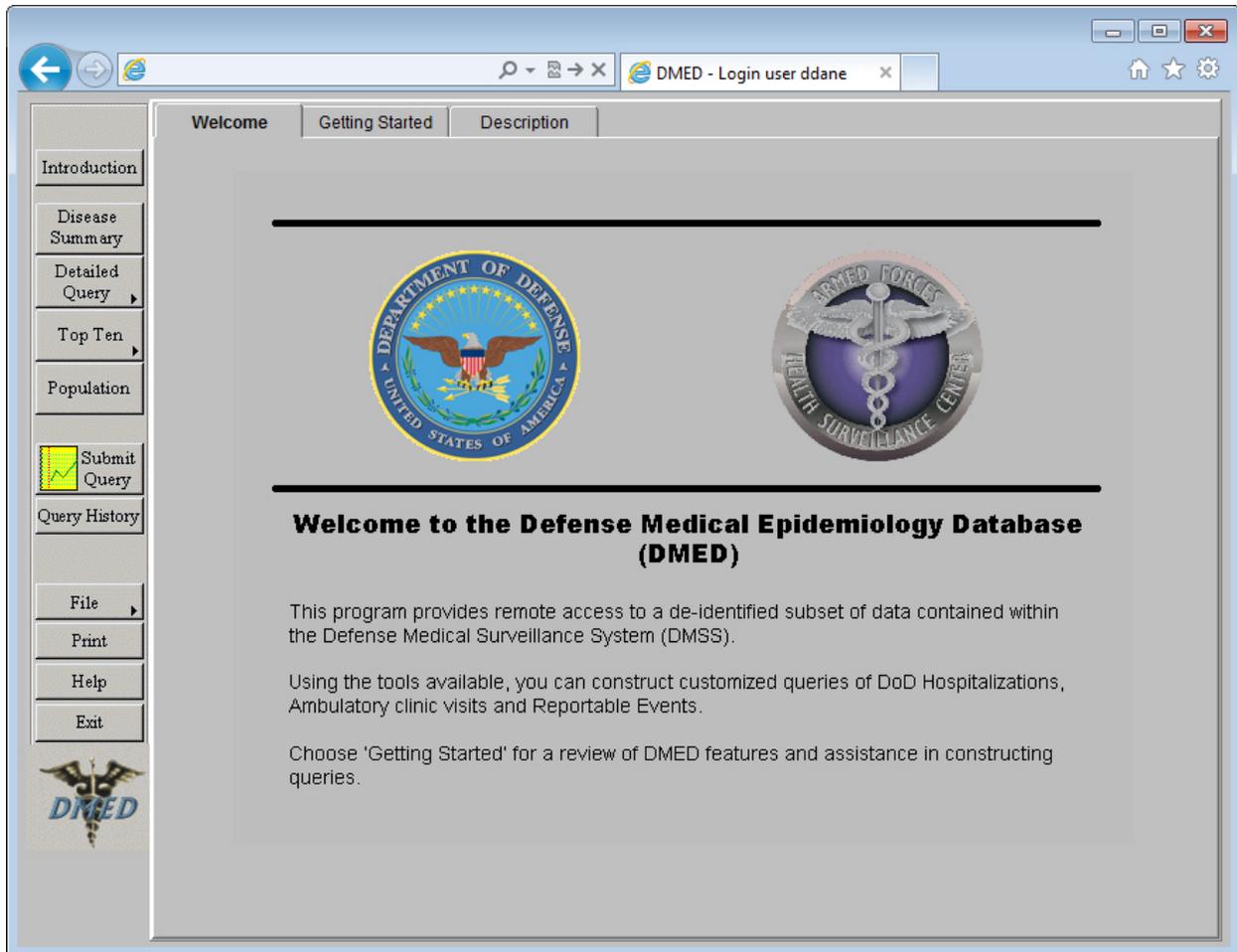
Ambulatory Data: Out-patient data is a combination of the Standard Ambulatory Data Record (SADR) which is extracted from the Ambulatory Data System (ADS) and the Composite Health Care System (CHCS) used in DoD Military Treatment Facilities worldwide and outsourced (non-DoD clinic) out-patient healthcare provided to active duty service members. Each medical record is coded with up to four diagnoses chosen from a list of relevant diagnoses for specific clinics.

Reportable Event Data: Medical events meeting DoD reporting requirements are transmitted within each Service to a central location by Service-specific reporting programs. These programs exist to compile a reportable event surveillance database used to record and track events of interest in the military. Currently, Army reportable event data for calendar years 1995 to present, and Navy and Air Force data from calendar years 2000 to present are available in DMSS.

Application overview

Program Functions: The main functions of DMED can be accessed through buttons located vertically down the left side of the screen. Select the button for the type of function you would like to perform. Buttons with drop down menus (e.g., 'Detailed Query' and 'Top Ten Query') are indicated with an arrow

1. **Customizing Queries:** To facilitate creating a query, each query screen is set up as a series of tabs (e.g., ICD-9 Explorer, Population, Filters, Display, Results). Move left to right through the tabs to select the desired information on each tab. One or more population values can be selected independently. Location and occupational group filters allow the user to specifically define the population of interest. One or more location and occupational group values can be selected (maximum of five selection for each). Choose how the rates are calculated by selecting the x-axis and by-value from the radio buttons in the display tab.



2. **Submit Query:** When you are ready to submit your query to the database, click the Submit Query button on the left side of the screen. The results of your query will appear on the Results tab. For more complex queries involving specific selections of Location(s) and/or Occupational Groups, more time may be needed to execute your query, approximately 1 - 3 minutes. At this time, you will be prompted with a dialog box with this information. You may choose to continue or cancel your query. In addition, you can choose to disable the dialog box for future queries.
3. **Displaying Results:** Results can be displayed as a table of counts of the medical events chosen, or as calculated rates. Disease rates can be displayed in either tabular or graphic format. Population statistics (person-years) are also available on the results screen. Current year results will display as counts only.

Supplemental Information

1. **Query History:** Retains the ten most recent queries you have performed during a session. Access the query history function through the Query History button on the left side of the screen. The Query History screen will display the results of the most recently run query. There will be numbered buttons across the top allowing

you to select up to ten previously performed queries. Each Query History screen has a 'Jump to Query' button, which will take you to the full query.

2. **Saving query results:** Query results can be saved to a file and reactivated in DMED at a later date. Query results can also be exported for use in spreadsheet programs such as EXCEL. Access these options through the File button on the left side of the screen.
3. **Printing query results:** Any results screen can also be printed directly from DMED by clicking the Print button. The displayed results selected will appear on the printout. Choose landscape mode to view the entire printout.
4. **Export Data:** Results from queries can be exported into a text file, which can be easily imported into Excel or other data management software.

Main Menu - Step by Step Overview

The DMED Introduction main menu consists of:

- **Main functions of DMED** - buttons located vertically down the left side of the screen, and
- **Informational tabs** - tabs located horizontally across the top.

The Main Functions of DMED include 4 different types of queries: Disease Summary, Detailed Query, Top Ten, and Population. To perform a query, simply select the button (located vertically down the left side) for the type of query you would like to perform.

The Detailed Query and Top Ten Query buttons additionally present you with a drop down menu to select the type of data you are interested in: Hospitalizations, Ambulatory Data, or Reportable Events.

After selecting the query type, DMED will display a series of selectable tabs (horizontally across the top) that apply to the particular query type you selected. DMED will automatically highlight the selectable tabs that apply for your query type across the top.

To design your query, simply move left to right through the tabs and select the desired information on each. Then, after all selections are complete, Press the **Submit** button.

DMED will then return the results, and automatically highlight the Results tab. For more detailed instructions on selecting query options and performing a query, refer to:

[How to Perform a Query](#)

[Information about query results](#)

How to perform a query

How to Perform a Query

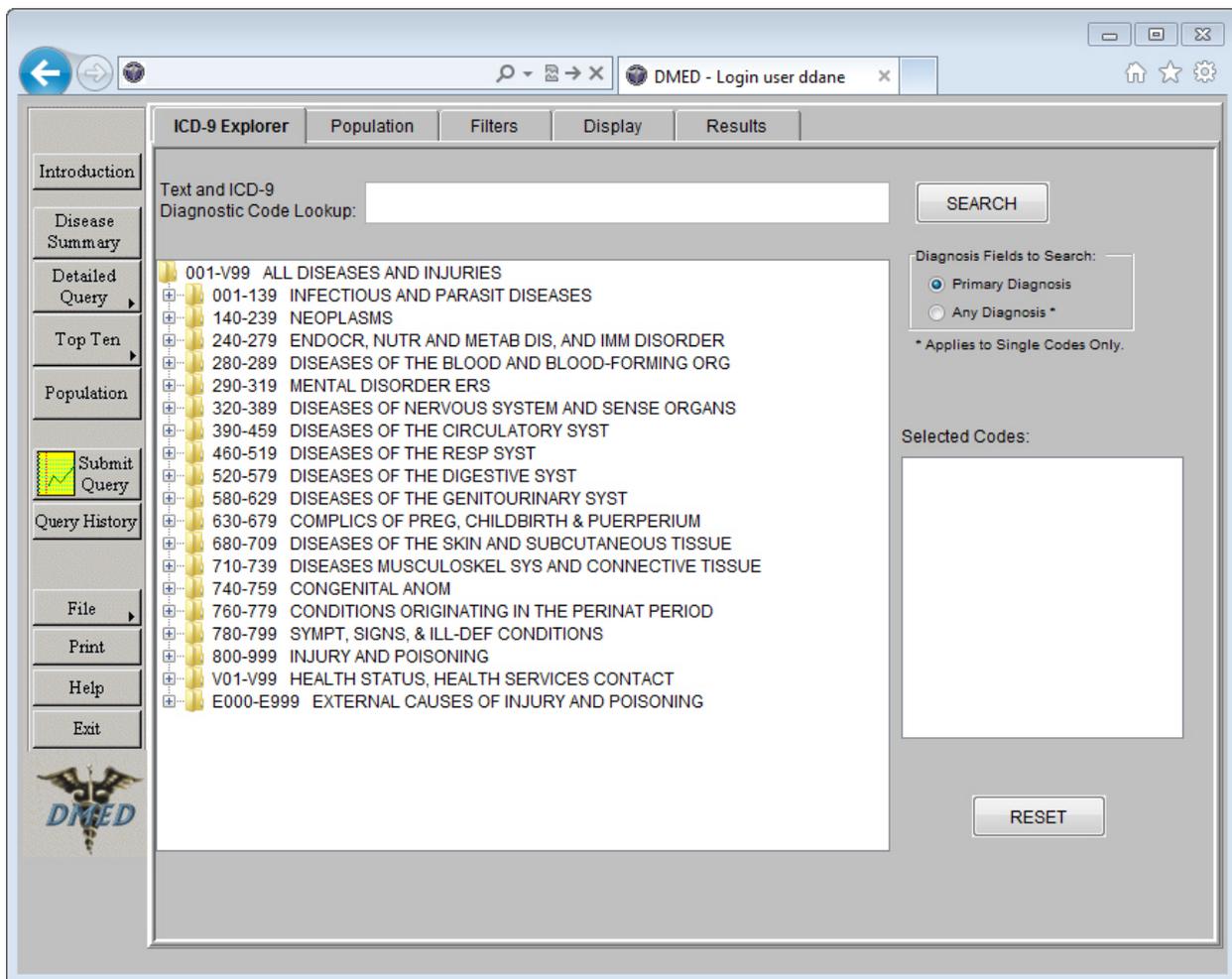
1. Select the button (located vertically down the left side) for the type of query you would like to perform (Disease Summary, Detailed Query, Top Ten, or Population). Depending on the type of query you select, the appropriate selectable tabs will appear horizontally across the top. Use these tabs, and move across left to right to design your query.
2. Select ICD-9 Codes from **ICD-9 Explorer** Tab.
 - Only one may be selected for First Hospitalization Studies or First Ambulatory Studies.
 - A maximum of fifteen codes/ranges may be selected for Hospitalization or Ambulatory studies.
 - A search box is provided to lookup ICD-9 codes by their number or by character/word search within the description.
3. Select the **Population** Tab.
 - Choose Service(s).
 - Choose Demographics of Interest.
 - Choose Time Frame of interest.
4. Select the **Filter** Tab.
 - Select the location(s) and occupation(s) of interest.
 - A maximum of five locations and five occupations may be selected.
 - Your selection(s) will appear in the selected box on the screen
5. Select the **Display** Tab.
 - Select the view of the results that you would like initially displayed.
 - Choose x-axis and secondary by-value.

- Note: The x-axis and secondary by-value must be different
- To set the strata values back to the default, click the reset button.

6. Press the **Submit** button.

The results should return within 30 seconds. For more complex queries containing multiple location and multiple occupation selections, results may take anywhere from 2 - 3 minutes.

ICD-9 Explorer Tab



Clicking on the + sign next to a displayed range expands the display to show the next level of detail. Select codes or code ranges by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected Codes** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code.

The ICD-9 Explorer also has a search function enabling you to search by code or text. Type the code or text string you desire in the **Lookup** box on the right of the screen and click on the **Search** button. The desired item will be highlighted. Click the left mouse button to select the highlighted item. To clear all selections and begin over, click on the **Reset** button.

Filter Tab

The user may select up to five Locations and five Occupations from the **Filter** tab. Both the Location and Occupation explorer are laid out in a tree structure. Clicking on the **+** sign next to a displayed range expands the display to show the next level of detail. Select location or occupation by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code.

Please note that when selecting specific **Location(s)**, the population data being used in your query is defined as the active duty population **ASSIGNED** to a particular location (or group of locations) that you select.

Therefore, for a query, the results returned show the diagnoses information for the active duty population **ASSIGNED** to the **Location(s)** you selected, along with the other demographic selections you have made.

**For clarification purposes, your results do not show the diagnoses information of the active duty population "*treated*" at the location(s) you selected.

For more information on DoD Primary Occupational Codes, please refer to:

DoD Occupational Conversion Index
enlisted/officer/civilian DoD 1312.1-1
Publication issued March 1997
Document currently maintained online by Defense Manpower Data Center
(DMDC)
<http://www.odm.asmr.com>

Results Tab

The *Results* tab is automatically displayed after a query is submitted. The *Results* tab contains five sub-tabs:

Counts - displays the count of the cases for the population substrata selected. These are the numerators of the rate calculations.

Person Years - displays the cumulative person years of experience during the calendar years of interest of all members of the population substrata selected. These are the denominators of the rate calculations. (Not available for current year data).

Rates - displays rates of occurrence of cases (rounded to 2 significant digits) for the population substrata selected.

Line Chart - graphs the rates in line chart format.

Bar Chart - graphs the rates in bar chart format.

Display Tab

The user selects the values to be used for data display by selecting the X-axis and "By Value" variables. The X-axis options include all strata for which you selected All. Your By Value options are any strata for which you selected All or multiple values. The same variable cannot be used to define the X-axis and By Values. To set the strata values back to the defaults, click on the Reset button.

A graphical representation will display how your data will be represented. Please note the sample graph is for *display purposes only*. The data that is provided in the sample graph is **not** the information you queried.

Query History

Retains the queries you have performed during a session.

Saving query results

Query results can be saved to a file and reactivated in DMED at a later date. Query results can also be exported for use in spreadsheet programs such as EXCEL.

Printing query results

Results screens can also be printed directly from DMED by clicking the **Print** button.

Information about query results

Changing rate calculations

All rates in DMED query results are calculated per thousand persons per year and rounded to two decimal places. When a rate is calculated to less than .01 per 1000, the rate is displayed as <0.01. In such instances, an exact rate can be manually calculated by viewing the results in "table" mode - and by dividing the relevant count(s) by the corresponding person-time(s). The formula is:

$$\text{Rate} = \text{counts} / \text{person-time} * 1000$$

DMED provides the ability to change the scale of the rate calculation through the drop down box at the bottom of the **Results** tab.

The screenshot shows the DMED web application interface. The main content area displays a table titled "Hospitalizations - Cases of Selected Diagnoses*". The table is filtered by "Primary Diagnosis" and "Occurrence: All". The data is presented in a table format with columns for years (2004-2013) and a Total column. The rates are calculated per 1,000 persons per year.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Army	1.42	1.20	1.35	1.21	1.13	1.18	1.15	1.27	1.15	1.08	1.21
Navy	0.80	0.74	0.71	0.89	0.76	0.73	0.91	0.81	0.84	0.76	0.80
Air Force	0.76	0.67	0.74	0.76	0.72	0.75	0.86	0.86	0.89	0.81	0.78
Marines	0.82	0.79	0.75	0.89	0.84	0.84	1.00	1.13	1.12	1.02	0.93
Total	1.01	0.89	0.96	0.98	0.91	0.93	1.01	1.05	1.01	0.93	0.97

Note: Rates are calculated per 1,000 persons per year. Data with unknown values excluded.

*Selected Diagnoses:
1. 001-139 INFECTIOUS AND PARASIT DISEASES

Source: DMSS 11/4/14 11:51 AM

Unknown / missing data

Unknown values are included in calculations for strata where **All** is selected. However, unknown values are not included in calculations for strata where multiple discrete values are selected.

Small cell counts

DMED summarizes experiences of groups of individuals. It does not provide access to individual patient (Privacy Act) information. Because of this, DMED requires a minimum of 10 person years per table cell in order to calculate results. If less than 10 person years of data are available, results are not totaled and ** is displayed in the appropriate cell in the table.

The screenshot shows the DMED web application interface. The browser window title is "DMED - Login user ddane". The application has a navigation menu on the left with options like "Introduction", "Disease Summary", "Detailed Query", "Top Ten", "Population", "Submit Query", and "Query History". The main content area is titled "Hospitalizations - Cases of Selected Diagnoses*" and displays the following filters: Data Source: Hospitalizations, Condition: Primary Diagnosis, Occurrence: All, Gender: All, Grade: All, Age: All, Marital Status: All, Race: All, Service: All, Calendar Years: 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, Location: AK00 = ALASKA, and Occupation: All.

Below the filters, there are tabs for "Counts", "Person-Year", "Rate", "Line Chart", and "Bar Chart". The "Counts" tab is selected, showing a table with columns for years 2004 through 2013 and a "Total" column. The rows represent different military branches: Army, Navy, Air Force, and Marines.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Army	35	40	92	94	112	132	199	155	163	118	1,140
Navy	0	0	0	0	1	1	0	0	0	0	2
Air Force	35	34	36	38	35	29	25	41	33	27	333
Marines	--	--	--	--	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--	--	--	--	--

At the bottom of the interface, there is a note: "Note: Rates are calculated per 1,000 1000 persons per year. Data with unknown values excluded. ** < 10 Person-Years." Below this, it lists the selected diagnoses: "1. 300-316 NEUROTIC, PERSONALITY, OTH NONPSYCHOTIC DISORDER" and the source information: "Source: DMSS 11/4/14 11:56 AM".

Disease Summary

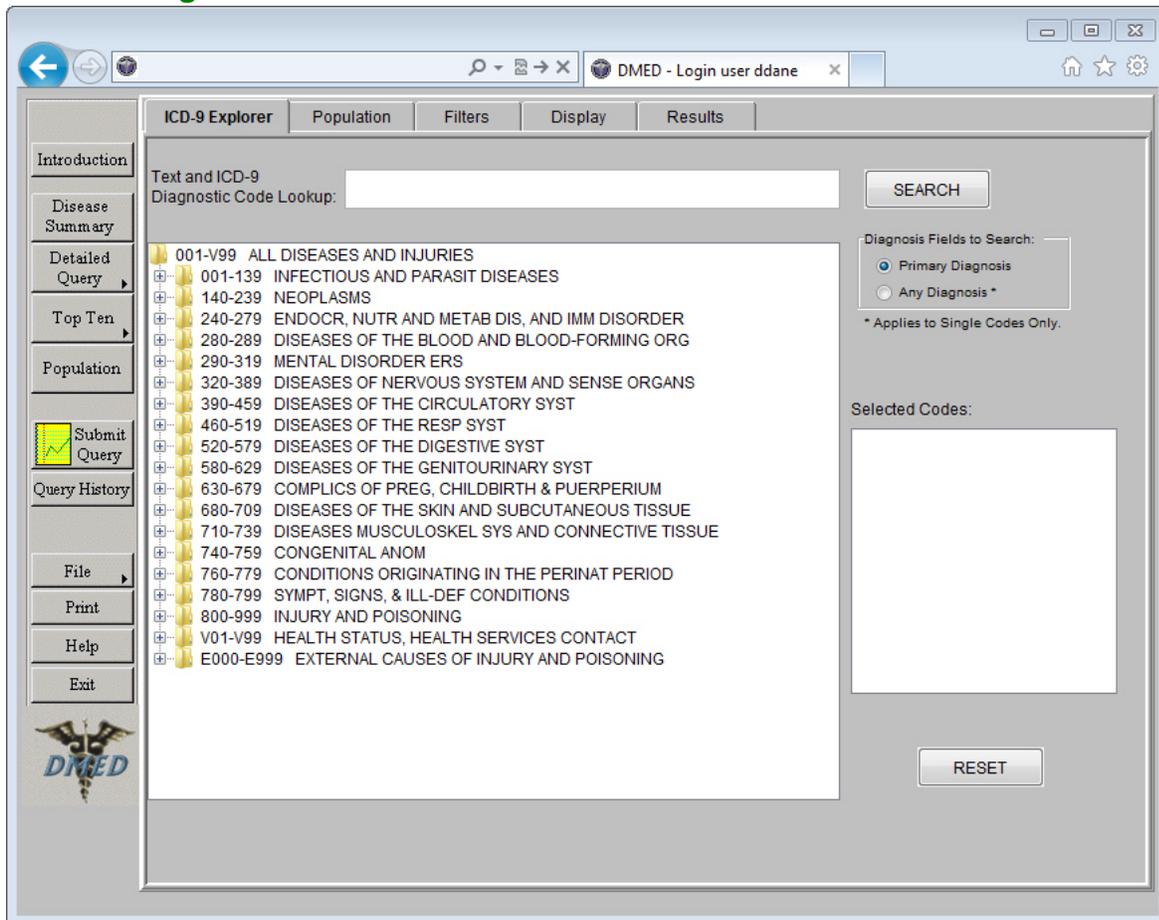
Disease Summary

Overview

The Disease Summary feature gives the user the opportunity to view all surveillance data (hospitalization, ambulatory, reportable events) available for a particular condition.

- Choose the **Disease Summary** button
- Selectable query design tabs are: ICD-9 Explorer, Population, and Results

Choose diagnosis of interest



The user may select up to 15 ICD-9 code(s) or ranges of codes from the **ICD-9 Explorer** tab. The ICD-9 Explorer is a tree structure of ICD-9 codes.

Clicking on the + sign next to a displayed range expands the display to show the next level of detail. Select codes or code ranges by clicking on them with the left mouse

button. Your selection(s) will be highlighted and appear in the **Selected Codes** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code. Alternatively, hold down the **Shift** key to select a range of codes.

The ICD-9 Explorer also has a search function enabling you to search by code or text. Type the code or text string you desire in the **Lookup** box on the right of the screen and click on the **Search** button. The desired item will be highlighted. Click the left mouse button to select the highlighted item. To clear all selections and begin over, click on the **Reset** button.

Choose population of interest

First, select the **Population** tab. The Population tab allows you to perform selections in 3 basic areas: **Service**, **Demographics**, and **Timeframe**.

Selections for Service(s) include: All Services only.

Selectable strata for Demographics include: Gender, Age, Race, Grade, and Marital Status.

Selections for Timeframe include: Last 10 Years only.

Second, you can select additional population filters by selecting the **Filters** tab. Additional filters for Location and Occupational groups are available to define more specifically the population.

Submit Query

Click the **Submit Query** button.

For more complex queries involving specific selections of Location(s) and/or Occupational Groups, more time may be needed to execute your query, approximately 1 - 3 minutes. At this time, you will be prompted with a dialog box with this information. You may choose to continue or cancel your query. In addition, you can choose to disable the dialog box for future queries.

Results Screen options

The screenshot shows the DMED web application interface. The top navigation bar includes tabs for ICD-9 Explorer, Population, Filters, Display, and Results. The Results tab is active, displaying the following information:

Ambulatory Data - Cases of Selected Diagnoses*

DataSource: Ambulatory Data Condition: Primary Diagnosis Occurrence: All

Gender: All Grade: All
 Age: All Marital Status: All
 Race: All Service: All
 Calendar Years: 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013
 Location: All
 Occupation: All

Below the filters, there are options for Counts, Person-Year, Rate, Line Chart, and Bar Chart. The Counts option is selected, displaying the following table:

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Army	0	0	0	0	3	0	0	0	0	0	3
Navy	0	0	0	0	0	0	0	0	0	0	0
Air Force	1	0	1	0	0	0	0	0	0	0	2
Marines	1	0	0	0	0	0	0	0	0	0	1
Total	2	0	1	0	3	0	0	0	0	0	6

At the bottom of the screen, there is a note: "Note: Rates are calculated per 1,000 persons per year. Data with unknown values excluded." and the source information: "Source: DMSS 10/22/14 5:14 PM".

The **Results** tab is automatically displayed after a query is submitted.

Three main **Result** tabs will appear - one for each type of data: Hospitalization, Ambulatory Data and Reportable Events).

Within each of the **Result** tabs there are six additional tabs:

Counts - displays the count of the hospitalizations for the population substrata selected. These are the numerators of the rate calculations.

Person Years – displays the cumulative person years of experience during the calendar years of interest of all members of the population substrata selected. These are the denominators of the rate calculations.

Rates - displays rates of occurrence of hospitalizations (rounded to 2 significant digits) for the population substrata selected.

Line Chart - graphs the rates in line chart format.

Bar Chart - graphs the rates in bar chart format.

Results will not display on the Reportable tab if the condition chosen is not one of the required reportable events.

Each Results tab has a **Jump To Detail** button, which will bring the user to the appropriate Detailed Query.

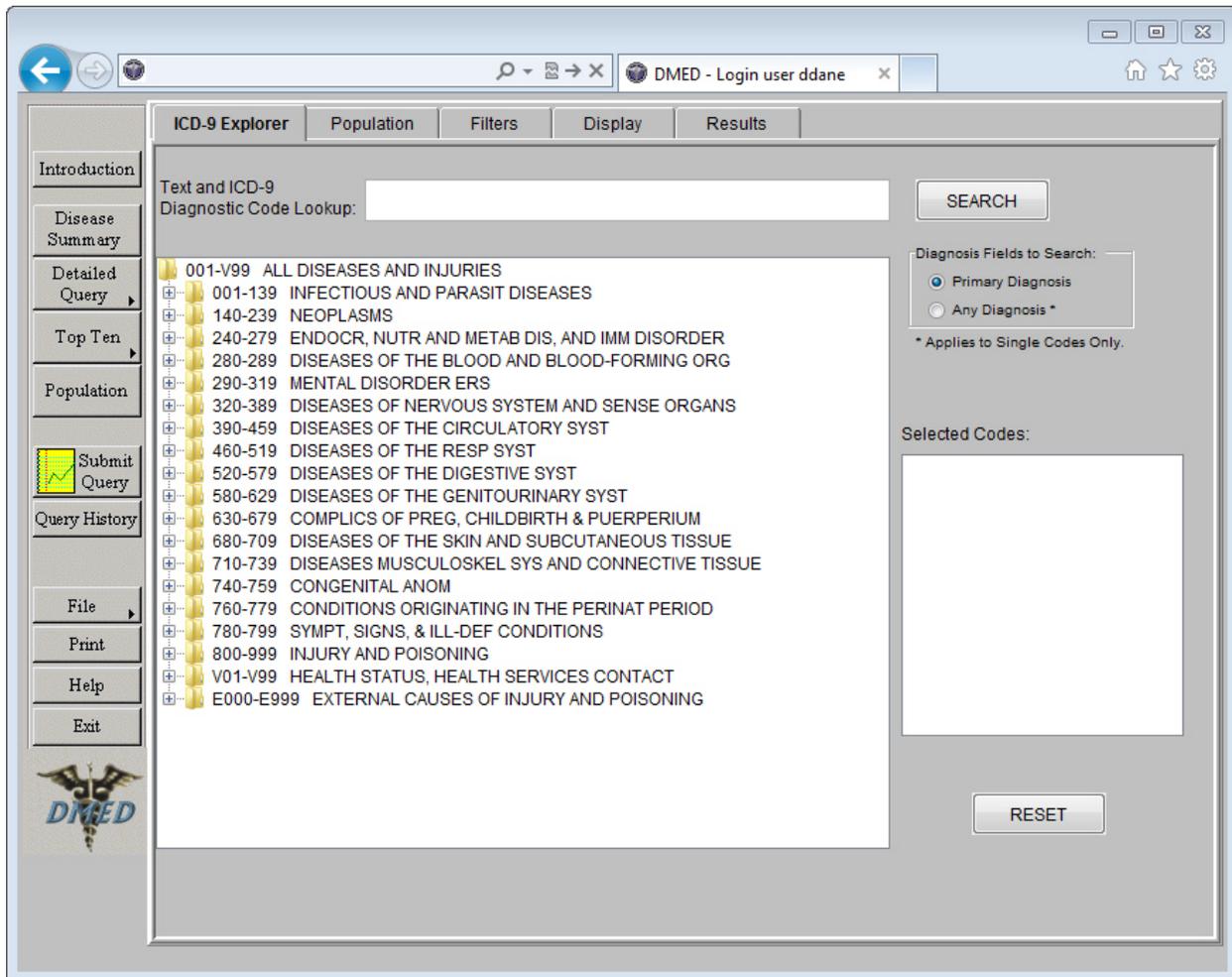
Detailed Query

Hospitalization Queries - Step by Step

Rates are calculated based on all hospitalizations for the ICD-9 code(s) specified by the user in the defined population experience. The calculation of the rate includes all admissions for the specified diagnosis, including multiple admissions of individuals. The following steps are necessary to perform a hospitalization rate query.

- Choose the **Detailed Query** button.
- Choose **Hospitalizations** from the drop down menu.
- Selectable query design tabs are: ICD-9 Explorer, Population, Filters, Display and Results.

Choose diagnosis of interest



The user may select up to 15 ICD-9 code(s) or ranges of codes from the **ICD-9 Explorer** tab. The ICD-9 Explorer is a tree structure of ICD-9 codes.

Clicking on the **+** sign next to a displayed range expands the display to show the next level of detail. Select codes or code ranges by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected Codes** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code. Alternatively, hold down the **Shift** key to select a range of codes.

Decide which fields to search

The ICD-9 Explorer also has a search function enabling you to search by code or text. Type the code or text string you desire in the **Lookup** box on the right of the screen and click on the **Search** button. The desired item will be highlighted. Click the left mouse button to select the highlighted item. To clear all selections and begin over, click on the **Reset** button.

Select the Diagnosis Fields to be Searched. 'Any of Top Three' and 'Any Diagnosis' can only be selected with a single ICD-9 code (i.e. a lowest level code that has no subcodes beneath it).

Choose population of interest

The screenshot shows the DMED web application interface. The browser window title is "DMED - Login user ddane". The application has a navigation menu on the left with options: Introduction, Disease Summary, Detailed Query, Top Ten, Population, Submit Query, Query History, File, Print, Help, and Exit. The main content area is titled "ICD-9 Explorer" and has tabs for "Population", "Filters", "Display", and "Results". The "Population" tab is active and contains three sections:

- 1. Choose Service(s):** Service Army Navy Air Force Marines All
- 2. Choose Demographics:**

Gender	Age	Race	Grade	Marital Status
<input type="checkbox"/> Male	<input type="checkbox"/> <20	<input type="checkbox"/> White	<input type="checkbox"/> E1-E4	<input type="checkbox"/> Single
<input type="checkbox"/> Female	<input type="checkbox"/> 20-24	<input type="checkbox"/> Black	<input type="checkbox"/> E5-E9	<input type="checkbox"/> Married
<input checked="" type="checkbox"/> All	<input type="checkbox"/> 25-29	<input type="checkbox"/> Other	<input type="checkbox"/> O1-O3(W1-W3)	<input type="checkbox"/> Other
	<input type="checkbox"/> 30-34	<input checked="" type="checkbox"/> All	<input type="checkbox"/> O4-O9(W4-W5)	<input checked="" type="checkbox"/> All
	<input type="checkbox"/> 35-39		<input checked="" type="checkbox"/> All	
	<input type="checkbox"/> >=40			
	<input checked="" type="checkbox"/> All			
- 3. Choose TimeFrame:**

Time	Calendar Year
<input type="radio"/> 1997-2003	<input type="checkbox"/> 2004 <input type="checkbox"/> 2005 <input type="checkbox"/> 2006 <input type="checkbox"/> 2007 <input type="checkbox"/> 2008 <input type="checkbox"/> 2009 <input type="checkbox"/> 2010
<input checked="" type="radio"/> Last 10 Years	<input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input checked="" type="checkbox"/> All
<input type="radio"/> Year 2014 (counts only)	

A "RESET" button is located at the bottom right of the form.

First, select the **Population** tab. The Population tab allows you to perform selections in 3 basic areas: **Service**, **Demographics**, and **Timeframe**.

Selections for Service(s) include: Army, Navy, Air Force, Marines, and All.

Selectable strata for Demographics include: Gender, Age, Race, Grade, and Marital Status.

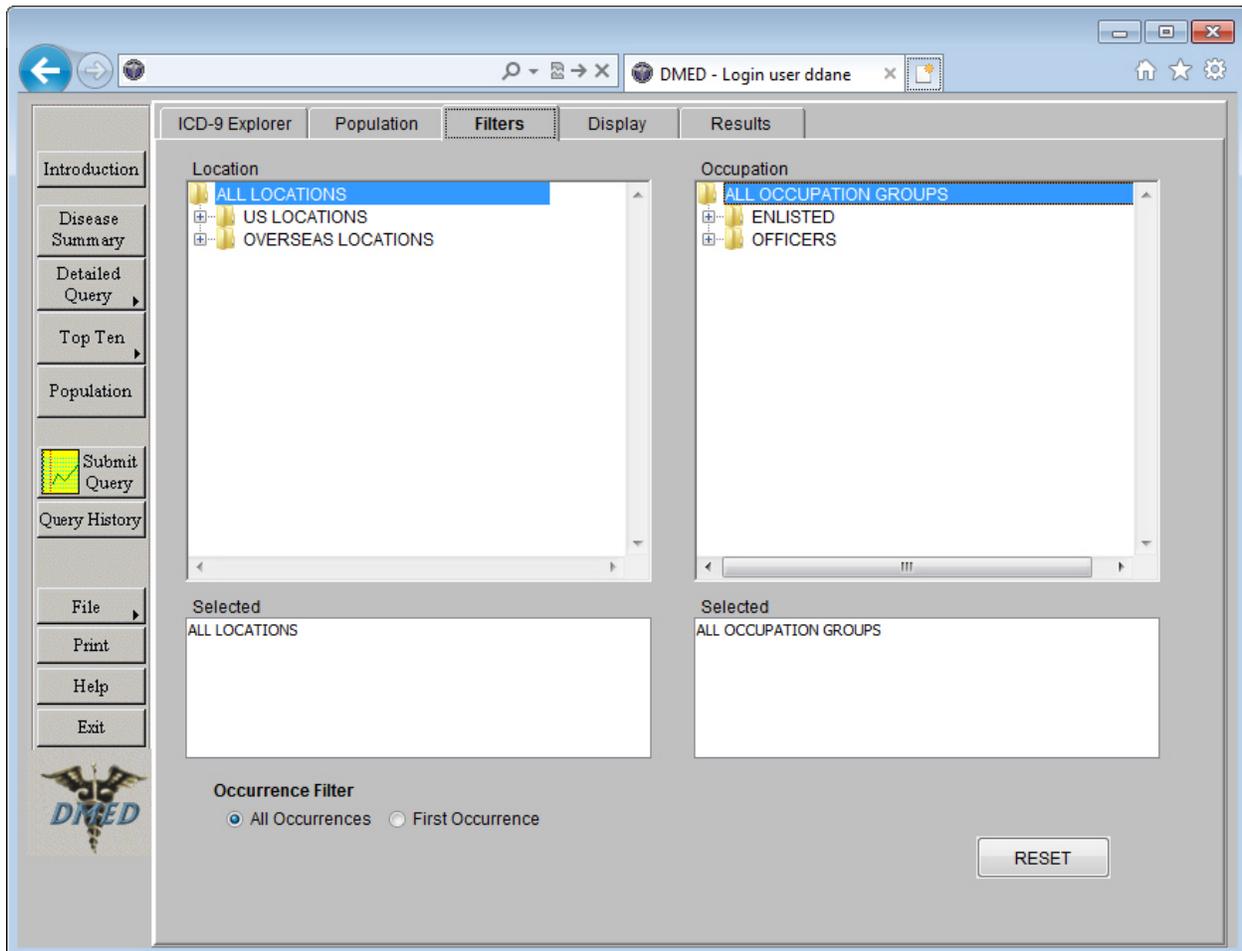
Selections for Timeframe include:

- 1990 - 1999
- Last 10 Years
- Year 2014 (counts only)

Second, you can select additional population filters by selecting the **Filters** tab. Additional filters for Location and Occupational groups are available to define more specifically the population.

Note: Service and Timeframe selections, along with Location and Occupational Group filters are not selectable for Disease Summary queries. Within a stratum, you may select one, all or any combination of values by clicking the check box next to each desired item. At least one stratum must be set to **All** and one other must be set to **All** or multiple values.

Select filters



First, select the **Filter** tab. The user may select up to five locations and five occupations from the **Filter** tab. Both the location and occupation explorer are laid out in a tree structure. Clicking on the + sign next to a displayed range expands the display to show the next level of detail. Select locations or occupation by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code. Alternatively, hold down the **Shift** key to select a range of codes.

Please note that when selecting specific **Location(s)**, the population data being used in your query is defined as the active duty population **ASSIGNED** to a particular location (or group of locations) that you select.

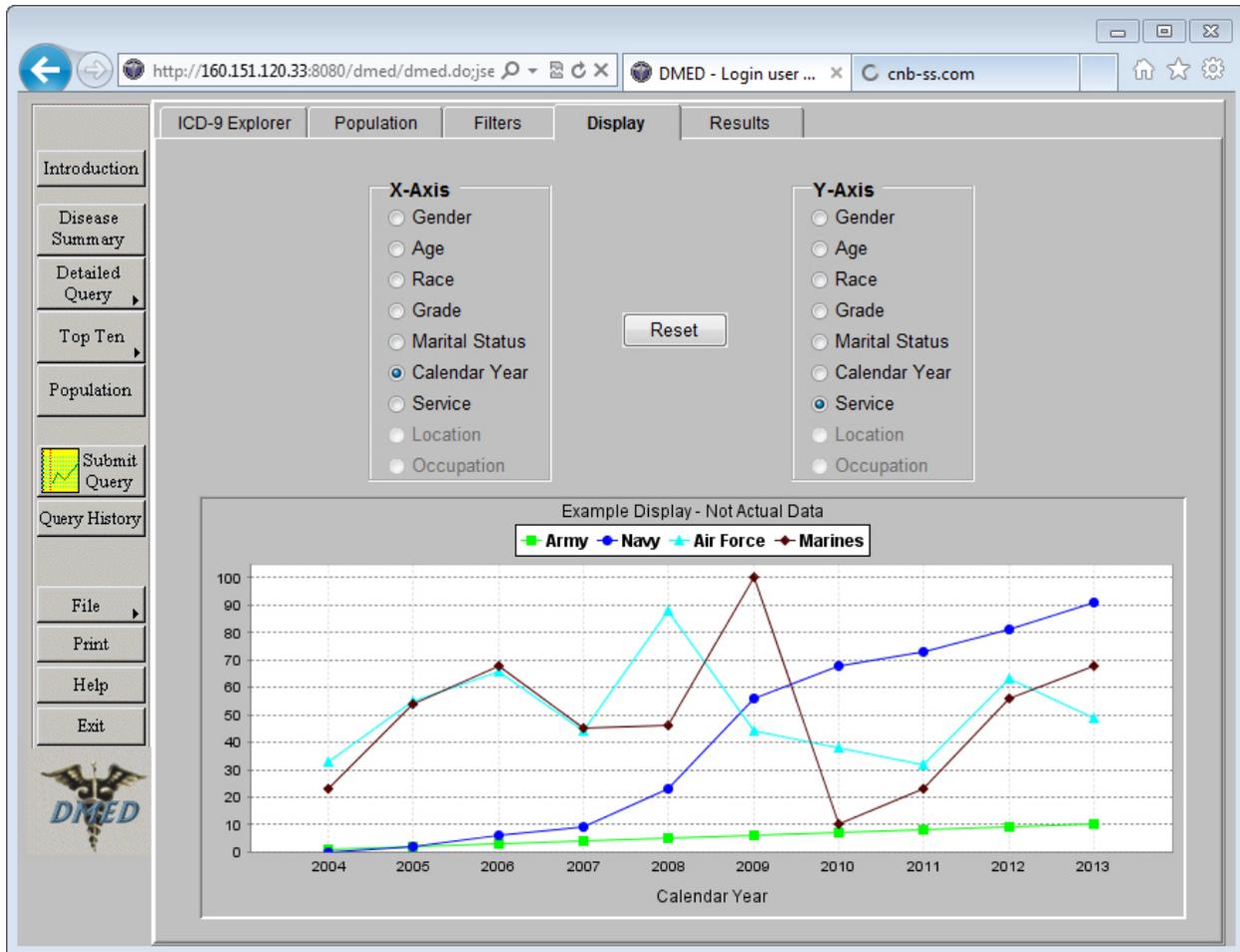
Therefore, for a query, the results returned show the diagnoses information for the active duty population **ASSIGNED** to the **Location(s)** you selected, along with the other demographic selections you have made.

**For clarification purposes, your results do not show the diagnoses information of the active duty population "treated" at the location(s) you selected.

Decide first vs. all occurrences

Select 'All Occurrences' or 'First Occurrence'. First Occurrence Rates are calculated using only the first documented hospitalizations for specific conditions of interest (since 1990). Thus, if an individual were hospitalized for the same condition more than once (since 1990), only the first occurrence would be counted. To optimize response times, 'First Occurrence' queries are restricted to single three, four or five digit ICD-9 codes. Thus, ranges of codes and multiple code selections are not allowed.

Choose display options



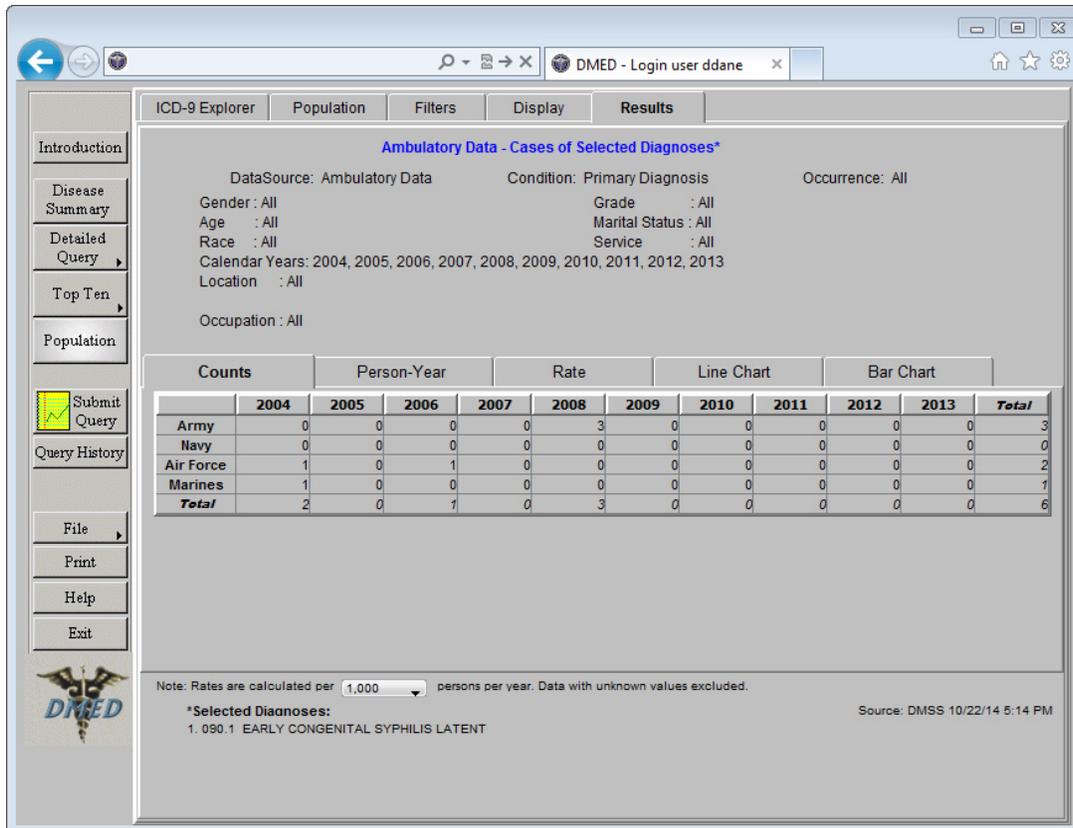
First, select the **Display** tab. Next, select the X-axis and "By Value" variables. The X-axis options include all strata for which you selected **All**. Your *By Value* options are any strata for which you selected **All** or multiple values. The same variable cannot be used to define the X-axis and By Values. To set the strata values back to the defaults, click on the **Reset** button.

Submit Query

Click the **Submit Query** button.

For more complex queries involving specific selections of Location(s) and/or Occupational Groups, more time may be needed to execute your query, approximately 1 - 3 minutes. At this time, you will be prompted with a dialog box with this information. You may choose to continue or cancel your query. In addition, you can choose to disable the dialog box for future queries.

Detail Results Screen Option



The **Results** tab is automatically displayed after a query is submitted.

The **Results** tab contains six sub-tabs:

Counts - displays the count of the hospitalizations for the population substrata selected. These are the numerators of the rate calculations.

Person Years - displays the cumulative person years of experience during the calendar years of interest of all members of the population substrata selected. These are the denominators of the rate calculations.

Rates - displays rates of occurrence of hospitalizations (rounded to 2 significant digits) for the population substrata selected.

Line Chart - graphs the rates in line chart format.

Bar Chart - graphs the rates in bar chart format.

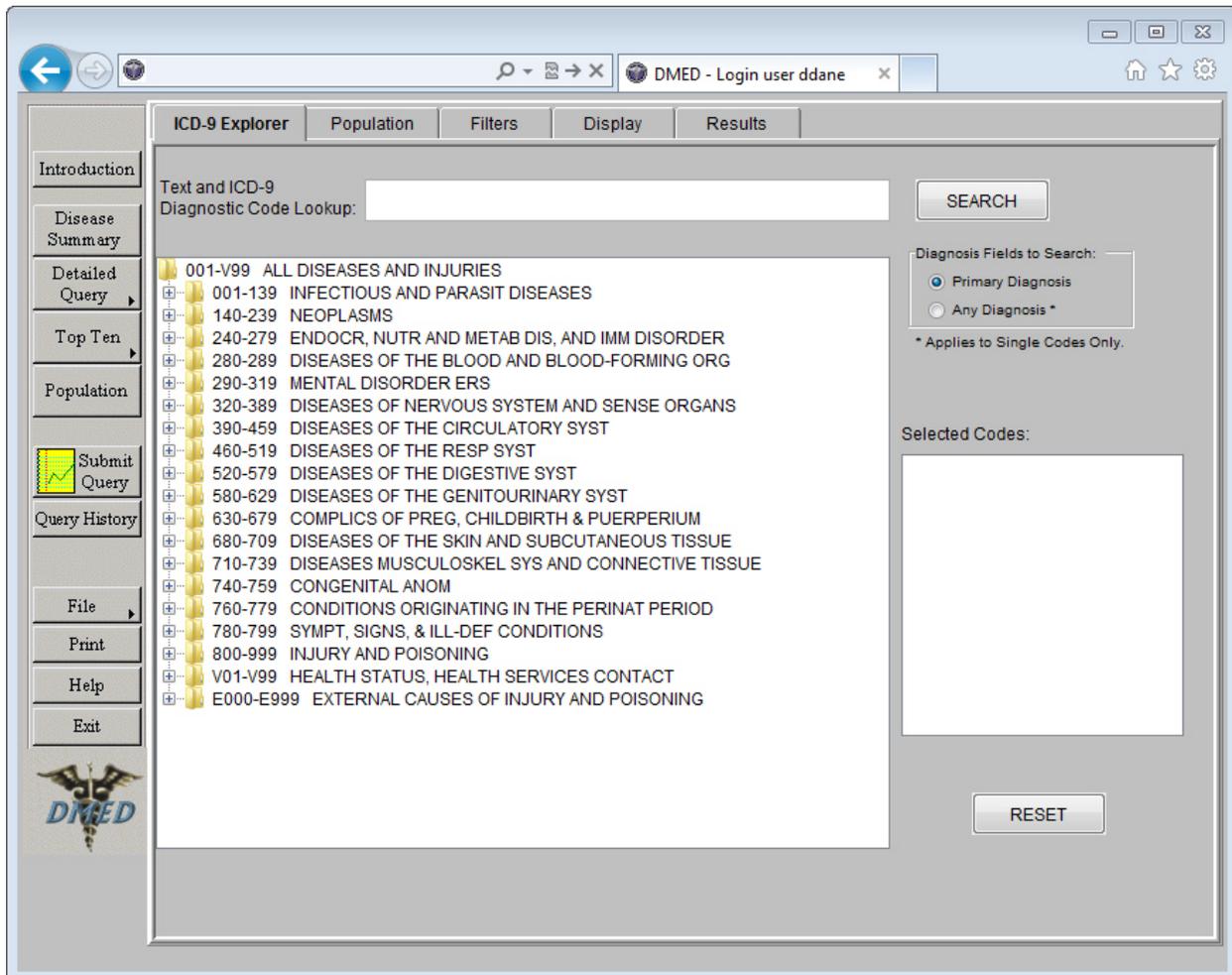
Ambulatory Queries - Step by Step

Rates are calculated based on all ambulatory (outpatient) visits for the ICD-9 code(s) specified by the user in the defined population experience. The calculation of the rate includes all ambulatory visits for the specified diagnosis, including multiple visits of individuals. The following steps are necessary to perform an ambulatory data query.

- Choose the **Detailed Query** button.
- Choose **Ambulatory Data** from the drop down menu.

- Selectable query design tabs are: ICD-9 Explorer, Population, Filters, Display and Results.

Choose diagnosis of interest



The user may select up to 15 ICD-9 code(s) or ranges of codes from the **ICD-9 Explorer** tab. The ICD-9 Explorer is a tree structure of ICD-9 codes.

Clicking on the **+** sign next to a displayed range expands the display to show the next level of detail. Select codes or code ranges by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected Codes** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code. Alternatively, hold down the **Shift** key to select a range of codes.

Decide which fields to search

The ICD-9 Explorer also has a search function enabling you to search by code or text. Type the code or text string you desire in the **Lookup** box on the right of the screen and click on the **Search** button. The desired item will be highlighted. Click the left mouse button to select the highlighted item. To clear all selections and begin over, click on the **Reset** button.

You can also select the Diagnosis Fields to be searched. 'Any Diagnosis' can only be selected with a single ICD-9 code (i.e. a lowest level code that has no subcodes beneath it).

Choose population of interest

The screenshot shows the 'Population' tab in the ICD-9 Explorer application. The interface is organized into three main sections for selection:

- 1. Choose Service(s):** Includes checkboxes for Army, Navy, Air Force, Marines, and All (checked).
- 2. Choose Demographics:** Includes checkboxes for Gender (Male, Female, All checked), Age (<20, 20-24, 25-29, 30-34, 35-39, >=40, All checked), Race (White, Black, Other, All checked), Grade (E1-E4, E5-E9, O1-O3(W1-W3), O4-O9(W4-W5), All checked), and Marital Status (Single, Married, Other, All checked).
- 3. Choose Timeframe:** Includes radio buttons for Time (1997-2003, Last 10 Years selected, Year 2014 (counts only)) and Calendar Year (2004-2013, All checked).

A 'RESET' button is located at the bottom right of the form.

First, select the **Population** tab. The Population tab allows you to perform selections in 3 basic areas: **Service**, **Demographics**, and **Timeframe**.

Selections for Service(s) include: Army, Navy, Air Force, Marines, and All.

Selectable strata for Demographics include: Gender, Age, Race, Grade, and Marital Status.

Selections for Timeframe include:

- 1990 - 1999
- Last 10 Years
- Year 2014 (counts only)

Second, you can select additional population filters by selecting the **Filters** tab. Additional filters for Location and Occupational groups are available to define more specifically the population.

Note: Service and Timeframe selections, along with Location and Occupational Group filters are not selectable for Disease Summary queries. Within a stratum, you may select one, all or any combination of values by clicking the check box next to each desired item. At least one stratum must be set to **All** and one other must be set to **All** or multiple values.

Select filters

First, select the **Filter** tab. The user may select up to five locations and five occupations from the **Filter** tab. Both the location and occupation explorer are laid out in a tree structure. Clicking on the + sign next to a displayed range expands the display to show the next level of detail. Select locations or occupation by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code. Alternatively, hold down the **Shift** key to select a range of codes.

Please note that when selecting specific **Location(s)**, the population data being used in your query is defined as the active duty population **ASSIGNED** to a particular location (or group of locations) that you select.

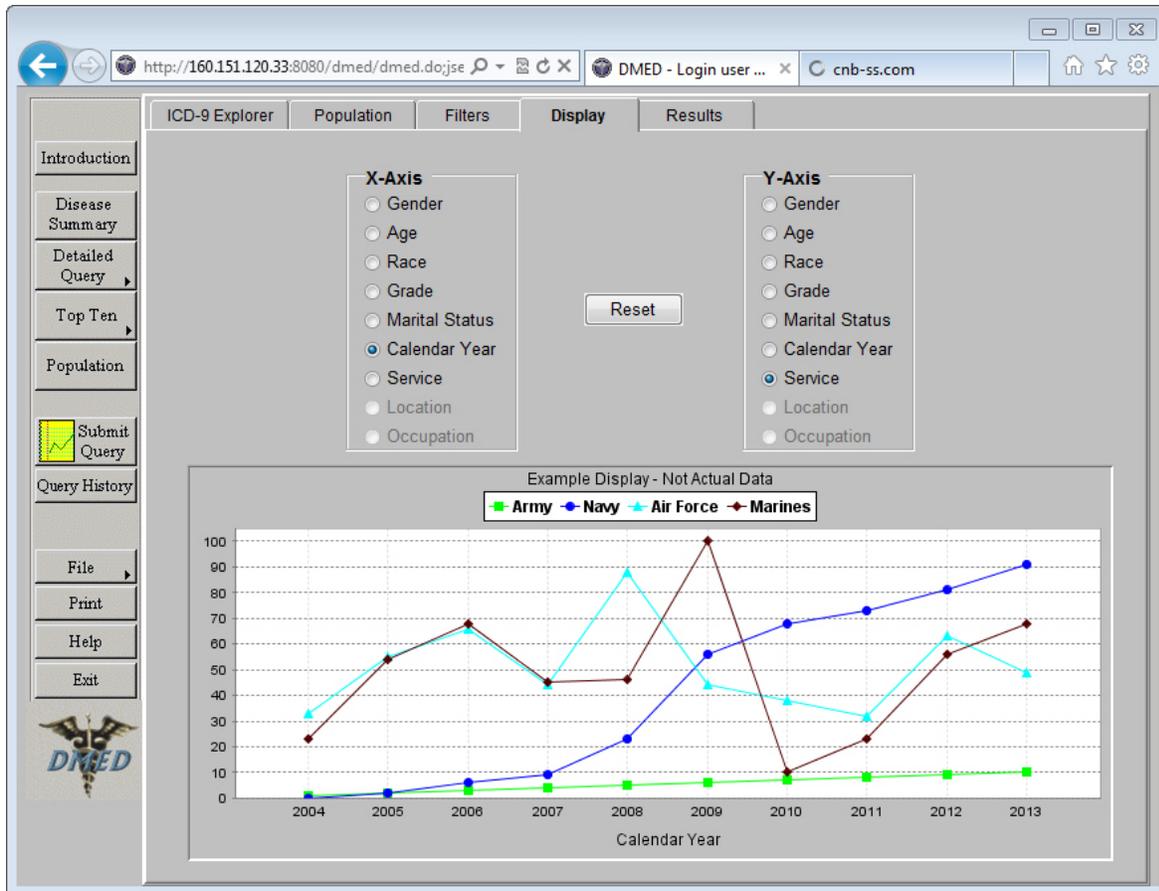
Therefore, for a query, the results returned show the diagnoses information for the active duty population **ASSIGNED** to the **Location(s)** you selected, along with the other demographic selections you have made.

**For clarification purposes, your results do not show the diagnoses information of the active duty population "treated" at the location(s) you selected.

Decide first vs. all occurrences

Select 'All Occurrences' or 'First Occurrence'. First Occurrence Rates are calculated using only the first documented ambulatory visits for specific conditions of interest (since 1997). Thus, if an individual was hospitalized for the same condition more than once (since 1997), only the first occurrence would be counted. To optimize response times, 'First Occurrence' queries are restricted to single three, four or five digit ICD-9 codes. Thus, ranges of codes and multiple code selections are not allowed.

Choose display options



First, select the **Display** tab. Next, select the X-axis and "By Value" variables. The X-axis options include all strata for which you selected **All**. Your *By Value* options are any strata for which you selected **All** or multiple values. The same variable cannot be used to define the X-axis and By Values. To set the strata values back to the defaults, click on the **Reset** button.

Submit Query

Click the **Submit Query** button.

For more complex queries involving specific selections of Location(s) and/or Occupational Groups, more time may be needed to execute your query, approximately 1 - 3 minutes. At this time, you will be prompted with a dialog box with this information. You may choose to continue or cancel your query. In addition, you can choose to disable the dialog box for future queries.

Detail Results Screen Option

The screenshot shows the DMED web application interface. The browser window title is "DMED - Login user ddane". The application has a navigation menu on the left with options: Introduction, Disease Summary, Detailed Query, Top Ten, Population, Submit Query, Query History, File, Print, Help, and Exit. The main content area is titled "Ambulatory Data - Cases of Selected Diagnoses*" and shows filters for Data Source (Ambulatory Data), Condition (Primary Diagnosis), and Occurrence (All). Other filters include Gender, Age, Race, Calendar Years (2004-2013), Location, Grade, Marital Status, Service, and Occupation, all set to "All". Below the filters are tabs for Counts, Person-Year, Rate, Line Chart, and Bar Chart. The "Counts" tab is active, displaying a table with columns for years 2004-2013 and a Total column. The table data is as follows:

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Army	0	0	0	0	3	0	0	0	0	0	3
Navy	0	0	0	0	0	0	0	0	0	0	0
Air Force	1	0	1	0	0	0	0	0	0	0	2
Marines	1	0	0	0	0	0	0	0	0	0	1
Total	2	0	1	0	3	0	0	0	0	0	6

At the bottom of the results area, there is a note: "Note: Rates are calculated per 1,000 persons per year. Data with unknown values excluded." Below this, it lists "*Selected Diagnoses: 1. 090.1 EARLY CONGENITAL SYPHILIS LATENT" and the source information "Source: DMSS 10/22/14 5:14 PM".

The **Results** tab is automatically displayed after a query is submitted.

The **Results** tab contains five sub-tabs:

Counts - displays the count of the ambulatory visits for the population substrata selected. These are the numerators of the rate calculations.

Person Years – displays the cumulative person years of experience during the calendar years of interest of all members of the population substrata selected. These are the denominators of the rate calculations.

Rates - displays rates of occurrence of ambulatory visits (rounded to 2 significant digits) for the population substrata selected.

Line Chart - graphs the rates in line chart format.

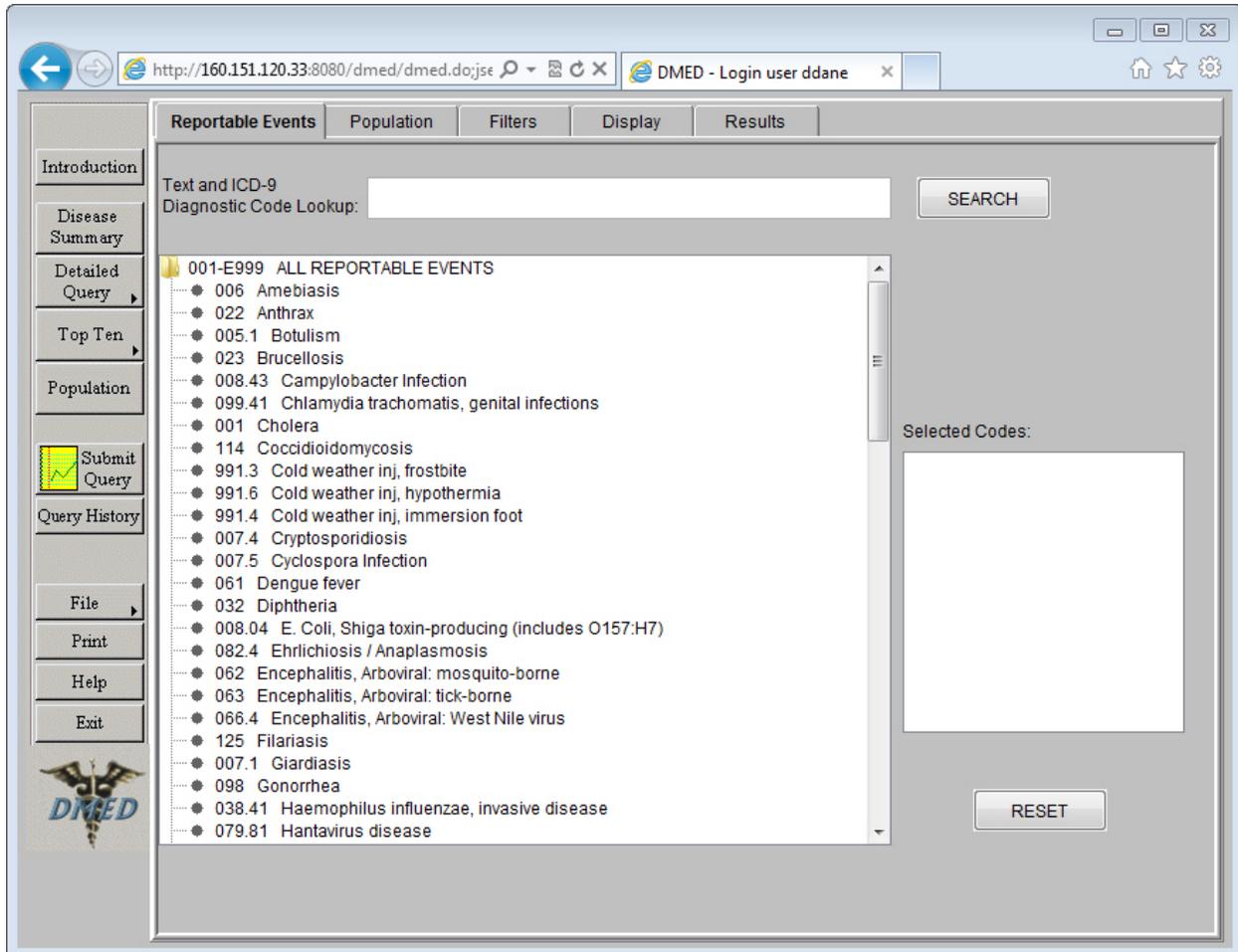
Bar Chart - graphs the rates in bar chart format.

Reportable Events Queries - Step by Step

Reportable Events data contains information on 70 reportable medical events. This data is reported to the DMSS by the Services' Medical Surveillance Centers. Current data exists for the Army for calendar years 1995-1999. All Services are contributing data for calendar years 2000 to present.

- Choose the **Detailed Query** button.

- Choose **Reportable Events** from the drop down menu.
- Selectable query design tabs are: ICD-9 Explorer, Population, Filters, Display and Results.



Choose Reportable Events

The user may select up to 15 Reportable Events or ranges of events from the **Reportable Events** tab. The Reportable Events Explorer is a tree structure of Reportable Events.

Select codes or code ranges by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected Codes** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code. Alternatively, hold down the **Shift** key to select a range of codes.

Decide which fields to search

The Reportable Events Explorer also has a search function enabling you to search by code or text. Type the reportable events or text string you desire in the **Lookup** box on the right of the screen and click on the **Search** button. The desired item will be highlighted. Click the left mouse button to select the highlighted item. To clear all selections and begin over, click on the **Reset** button.

Select the Diagnosis Fields to be Searched. 'Any of Top Three' and 'Any Diagnosis' can only be selected with a single ICD-9 code (i.e. a lowest level code that has no subcodes beneath it).

Choose population of interest

The screenshot shows the 'Population' tab in the ICD-9 Explorer application. The interface includes a sidebar with navigation options like 'Introduction', 'Disease Summary', 'Detailed Query', 'Top Ten', 'Population', 'Submit Query', and 'Query History'. The main content area is titled '1. Choose Service(s):' and contains a table of service options: Army, Navy, Air Force, Marines, and All (checked). Below this is '2. Choose Demographics:', which includes five columns: Gender (Male, Female, All checked), Age (<20, 20-24, 25-29, 30-34, 35-39, >=40, All checked), Race (White, Black, Other, All checked), Grade (E1-E4, E5-E9, O1-O3(W1-W3), O4-O9(W4-W5), All checked), and Marital Status (Single, Married, Other, All checked). The third section is '3. Choose TimeFrame:', with a 'Time' group containing radio buttons for '1997-2003', 'Last 10 Years' (selected), and 'Year 2014 (counts only)'. The 'Calendar Year' group contains checkboxes for years 2004 through 2013, and 'All' (checked). A 'RESET' button is at the bottom right.

First, select the **Population** tab. The Population tab allows you to perform selections in 3 basic areas: **Service**, **Demographics**, and **Timeframe**.

Selections for Service(s) include: Army, Navy, Air Force, Marines, and All.

Selectable strata for Demographics include: Gender, Age, Race, Grade, and Marital Status.

Selections for Timeframe include:

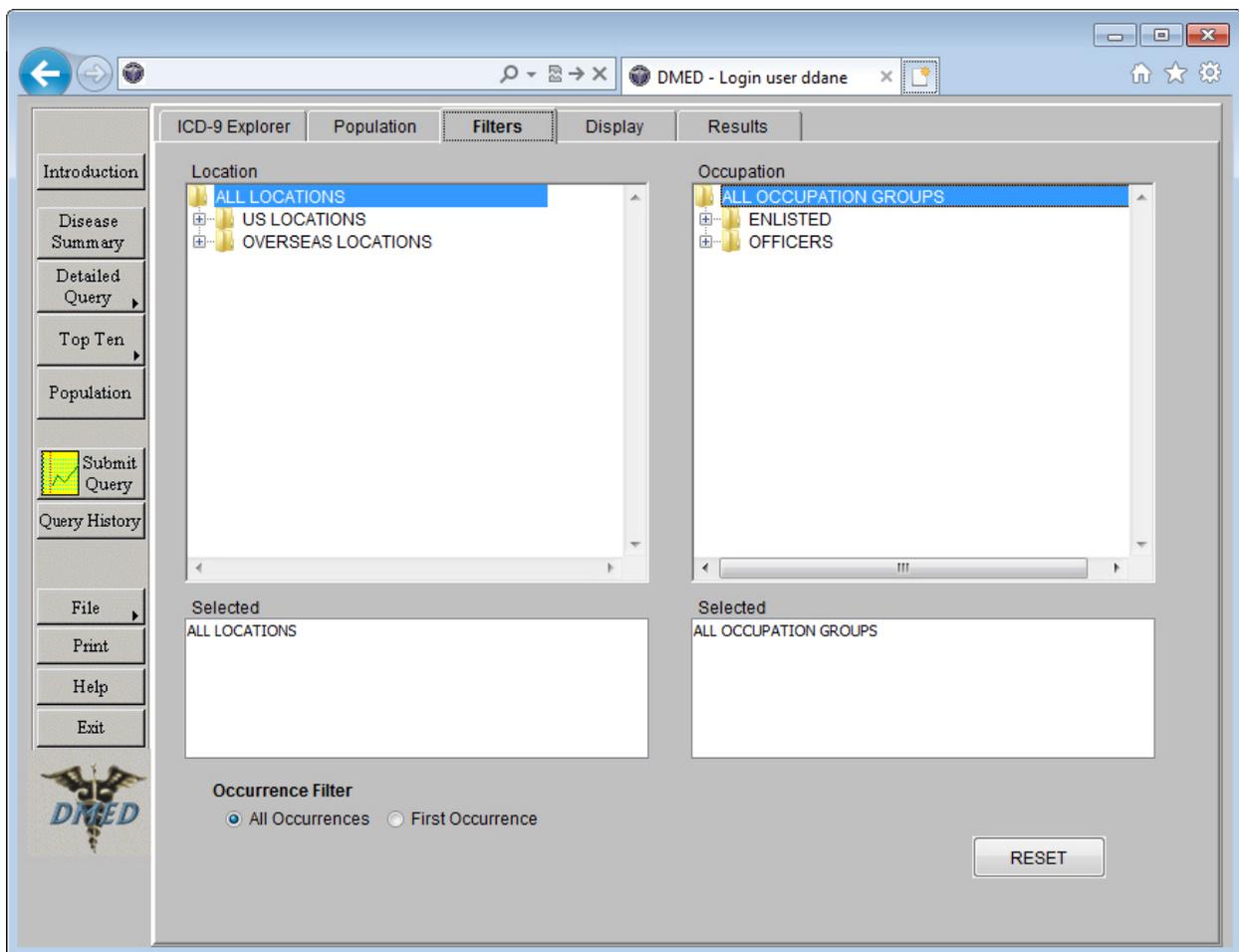
- Last 10 Years

- Year 2014 (counts only)

Second, you can select additional population filters by selecting the **Filters** tab. Additional filters for Location and Occupational groups are available to define more specifically the population.

Note: Service and Timeframe selections, along with Location and Occupational Group filters are not selectable for Disease Summary queries. Within a stratum, you may select one, all or any combination of values by clicking the check box next to each desired item. At least one stratum must be set to **All** and one other must be set to **All** or multiple values.

Select filters



First, select the **Filter** tab. The user may select up to five locations and five occupations from the **Filter** tab. Both the location and occupation explorer are laid out in a tree structure. Clicking on the + sign next to a displayed range expands the display to show the next level of detail. Select locations or occupation by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected** box on

the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code.

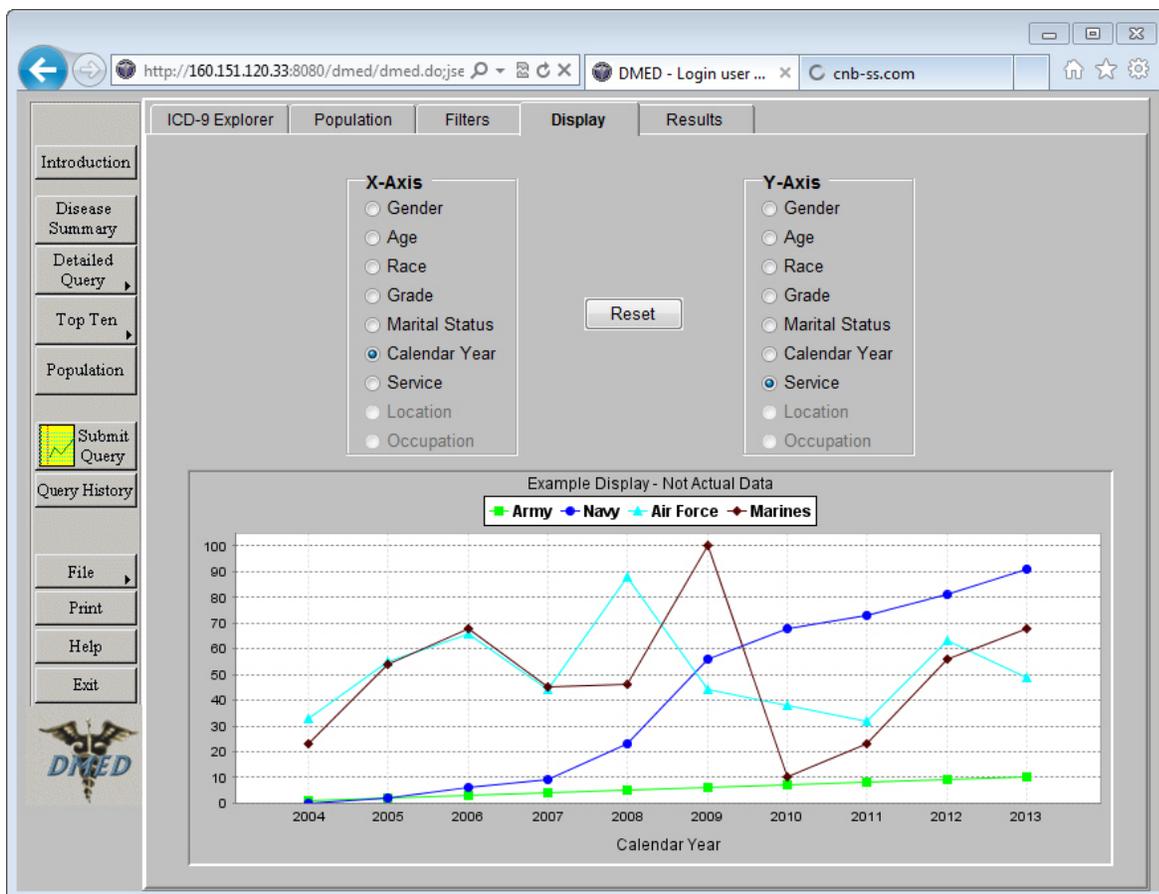
Please note that when selecting specific **Location(s)**, the population data being used in your query is defined as the active duty population **ASSIGNED** to a particular location (or group of locations) that you select.

Therefore, for a query, the results returned show the diagnoses information for the active duty population **ASSIGNED** to the **Location(s)** you selected, along with the other demographic selections you have made.

**For clarification purposes, your results do not show the diagnoses information of the active duty population "treated" at the location(s) you selected.

NOTE: For reportable events queries, there is no selection for 'First Occurrence'. All reportable events queries show all occurrences only.

Choose display options



First, select the **Display** tab. Next, select the X-axis and "By Value" variables. The X-axis options include all strata for which you selected **All**. Your *By Value* options are any

strata for which you selected **All** or multiple values. The same variable cannot be used to define the X-axis and By Values. To set the strata values back to the defaults, click on the **Reset** button.

Submit Query

Click the **Submit Query** button.

For more complex queries involving specific selections of Location(s) and/or Occupational Groups, more time may be needed to execute your query, approximately 1 - 3 minutes. At this time, you will be prompted with a dialog box with this information. You may choose to continue or cancel your query. In addition, you can choose to disable the dialog box for future queries.

Detail Results Screen Option

The screenshot shows the DMED software interface. The main window title is "DMED - Login user ddane". The interface is divided into several sections:

- Navigation Menu (Left):** Includes buttons for Introduction, Disease Summary, Detailed Query, Top Ten, Population, Submit Query (highlighted), Query History, File, Print, Help, and Exit.
- ICD-9 Explorer (Top):** Tabs for Population, Filters, Display, and Results (selected).
- Main Content Area:**
 - Title:** Ambulatory Data - Cases of Selected Diagnoses*
 - Filters:** DataSource: Ambulatory Data, Condition: Primary Diagnosis, Occurrence: All, Gender: All, Grade: All, Age: All, Marital Status: All, Race: All, Service: All, Calendar Years: 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, Location: All, Occupation: All.
 - Display Options:** Counts, Person-Year, Rate, Line Chart, Bar Chart.
 - Data Table:**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Army	0	0	0	0	3	0	0	0	0	0	3
Navy	0	0	0	0	0	0	0	0	0	0	0
Air Force	1	0	1	0	0	0	0	0	0	0	2
Marines	1	0	0	0	0	0	0	0	0	0	1
Total	2	0	1	0	3	0	0	0	0	0	6
- Footer:**
 - Note: Rates are calculated per 1,000 persons per year. Data with unknown values excluded.
 - *Selected Diagnoses: 1. 090.1 EARLY CONGENITAL SYPHILIS LATENT
 - Source: DMSS 10/22/14 5:14 PM

The **Results** tab is automatically displayed after a query is submitted.

The **Results** tab contains five sub-tabs:

Counts - displays the count of the reportable events cases for the population substrata selected. These are the numerators of the rate calculations.

Person Years – displays the cumulative person years of experience during the calendar years of interest of all members of the population substrata selected. These are the denominators of the rate calculations.

Rates - displays rates of occurrence of reportable events cases (rounded to 2 significant digits) for the population substrata selected.

Line Chart - graphs the rates in line chart format.

Bar Chart - graphs the rates in bar chart format.

Top Ten Query

Top Ten Overview

The top ten diagnoses query displays the ten most commonly occurring conditions for specified populations. ICD-9 codes for this query are specified at the 3-digit ICD-9 level only. Since the user does not select specific diagnoses, the ICD-9 and Reportable Events Explorer Tabs are not available for this kind of query. The following steps are necessary to perform a Top Ten Diagnoses query.

- Choose the **Top Ten** button.
- Choose the data of interest: Hospitalizations, Ambulatory Data, or Reportable Events.
- Selectable query design tabs are: Population and Filters.
- Select Service(s), Demographics, and Timeframe (Previous years only) within **Population** tab
- Select Location(s), Occupational Group(s), and Major ICD-9 category from **Filters** tab.

Top Ten Hospitalization Data Query

Choose population of interest

ICD-9 Explorer | **Population** | Filters | Display | Results

1. Choose Service(s):

Service Army Navy Air Force Marines All

2. Choose Demographics:

Gender	Age	Race	Grade	Marital Status
<input type="checkbox"/> Male	<input type="checkbox"/> <20	<input type="checkbox"/> White	<input type="checkbox"/> E1-E4	<input type="checkbox"/> Single
<input type="checkbox"/> Female	<input type="checkbox"/> 20-24	<input type="checkbox"/> Black	<input type="checkbox"/> E5-E9	<input type="checkbox"/> Married
<input checked="" type="checkbox"/> All	<input type="checkbox"/> 25-29	<input type="checkbox"/> Other	<input type="checkbox"/> O1-O3(W1-W3)	<input type="checkbox"/> Other
	<input type="checkbox"/> 30-34	<input checked="" type="checkbox"/> All	<input type="checkbox"/> O4-O9(W4-W5)	<input checked="" type="checkbox"/> All
	<input type="checkbox"/> 35-39		<input checked="" type="checkbox"/> All	
	<input type="checkbox"/> >=40			
	<input checked="" type="checkbox"/> All			

3. Choose TimeFrame:

Time	Calendar Year
<input type="radio"/> 1997-2003	<input type="checkbox"/> 2004 <input type="checkbox"/> 2005 <input type="checkbox"/> 2006 <input type="checkbox"/> 2007 <input type="checkbox"/> 2008 <input type="checkbox"/> 2009 <input type="checkbox"/> 2010
<input checked="" type="radio"/> Last 10 Years	<input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input checked="" type="checkbox"/> All
<input type="radio"/> Year 2014 (counts only)	

RESET

First, select the **Population** tab. The Population tab allows you to perform selections in 3 basic areas: **Service, Demographics, and Timeframe.**

Selections for Service(s) include: Army, Navy, Air Force, Marines, and All.

Selectable strata for Demographics include: Gender, Age, Race, Grade, and Marital Status.

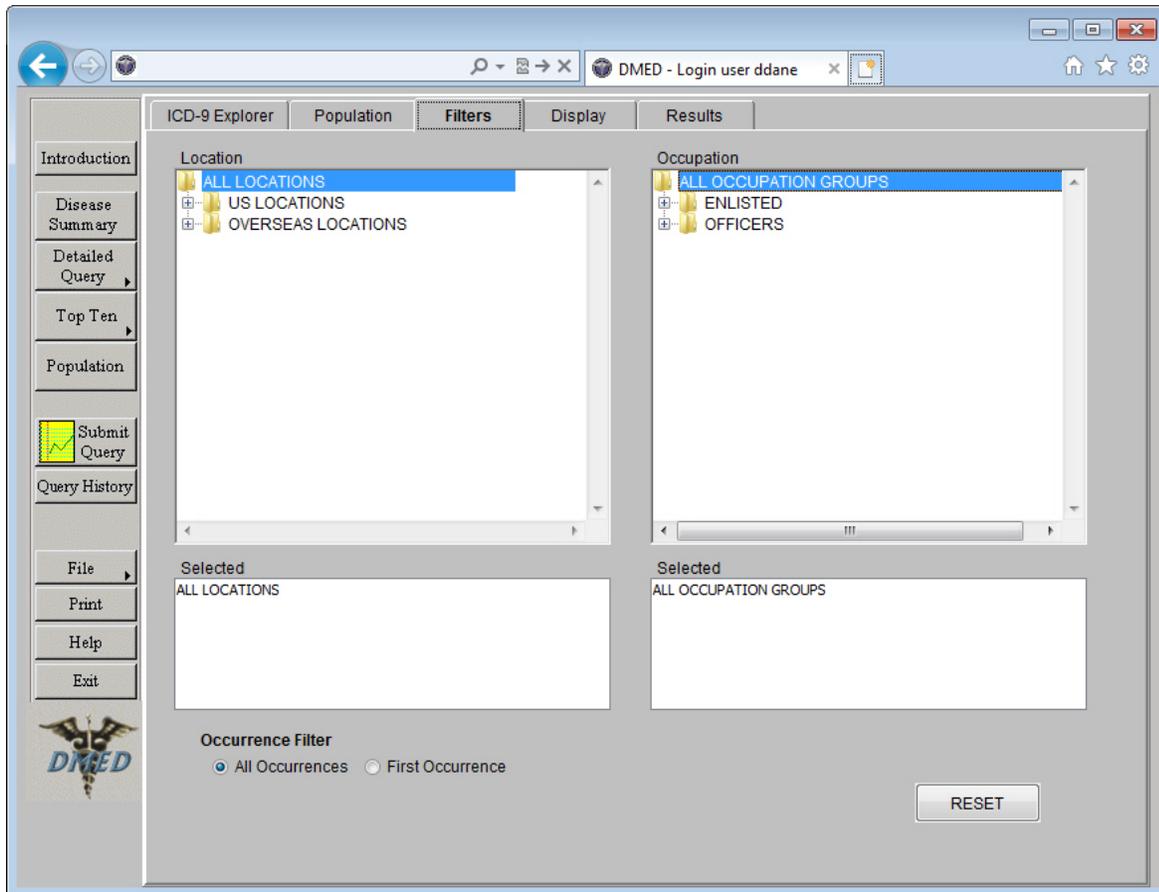
Selections for Timeframe include: 1990-1999 or Last 10 Years.

Second, you can select additional population filters by selecting the **Filters** tab. Additional filters for Location and Occupational groups are available to define more specifically the population.

Note: Service and Timeframe selections, along with Location and Occupational Group filters are not selectable for Disease Summary queries. Within a stratum, you may select one, all or any combination of values by clicking the check box next to each

desired item. At least one stratum must be set to **All** and one other must be set to **All** or multiple values.

Select filters



First, select the **Filter** tab. The user may select up to five locations, five occupations, and one Major ICD-9 category from the **Filter** tab. Both the location and occupation explorer are laid out in a tree structure. Clicking on the + sign next to a displayed range expands the display to show the next level of detail. Select locations or occupation by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code. Alternatively, hold down the **Shift** key to select a range of codes.

Please note that when selecting specific **Location(s)**, the population data being used in your query is defined as the active duty population **ASSIGNED** to a particular location (or group of locations) that you select.

Therefore, for a query, the results returned show the diagnoses information for the active duty population **ASSIGNED** to the **Location(s)** you selected, along with the other demographic selections you have made.

**For clarification purposes, your results do not show the diagnoses information of the active duty population "treated" at the location(s) you selected.

Submit Query

Click the **Submit Query** button.

For more complex queries involving specific selections of Location(s) and/or Occupational Groups, more time may be needed to execute your query, approximately 1 - 3 minutes. At this time, you will be prompted with a dialog box with this information. You may choose to continue or cancel your query. In addition, you can choose to disable the dialog box for future queries.

Results Screen

Top Ten Query results are displayed in tabular format only.

Top Ten Ambulatory Data Query

Choose population of interest

The screenshot shows the DMED web application interface. The browser window title is "DMED - Login user ddane". The application has a navigation menu on the left with options: Introduction, Disease Summary, Detailed Query, Top Ten, Population, Submit Query, Query History, File, Print, Help, and Exit. The main content area is titled "ICD-9 Explorer" and has tabs for "Population", "Filters", "Display", and "Results".

1. Choose Service(s):

Service	Army	Navy	Air Force	Marines	All
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2. Choose Demographics:

Gender	Age	Race	Grade	Marital Status
<input type="checkbox"/> Male	<input type="checkbox"/> <20	<input type="checkbox"/> White	<input type="checkbox"/> E1-E4	<input type="checkbox"/> Single
<input type="checkbox"/> Female	<input type="checkbox"/> 20-24	<input type="checkbox"/> Black	<input type="checkbox"/> E5-E9	<input type="checkbox"/> Married
<input checked="" type="checkbox"/> All	<input type="checkbox"/> 25-29	<input type="checkbox"/> Other	<input type="checkbox"/> O1-O3(W1-W3)	<input type="checkbox"/> Other
	<input type="checkbox"/> 30-34	<input checked="" type="checkbox"/> All	<input type="checkbox"/> O4-O9(W4-W5)	<input checked="" type="checkbox"/> All
	<input type="checkbox"/> 35-39		<input checked="" type="checkbox"/> All	
	<input type="checkbox"/> >=40			
	<input checked="" type="checkbox"/> All			

3. Choose TimeFrame:

Time	Calendar Year
<input type="radio"/> 1997-2003	<input type="checkbox"/> 2004 <input type="checkbox"/> 2005 <input type="checkbox"/> 2006 <input type="checkbox"/> 2007 <input type="checkbox"/> 2008 <input type="checkbox"/> 2009 <input type="checkbox"/> 2010
<input checked="" type="radio"/> Last 10 Years	<input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input checked="" type="checkbox"/> All
<input type="radio"/> Year 2014 (counts only)	

A "RESET" button is located at the bottom right of the form.

First, select the **Population** tab. The Population tab allows you to perform selections in 3 basic areas: **Service, Demographics, and Timeframe.**

Selections for Service(s) include: Army, Navy, Air Force, Marines, and All.

Selectable strata for Demographics include: Gender, Age, Race, Grade, and Marital Status.

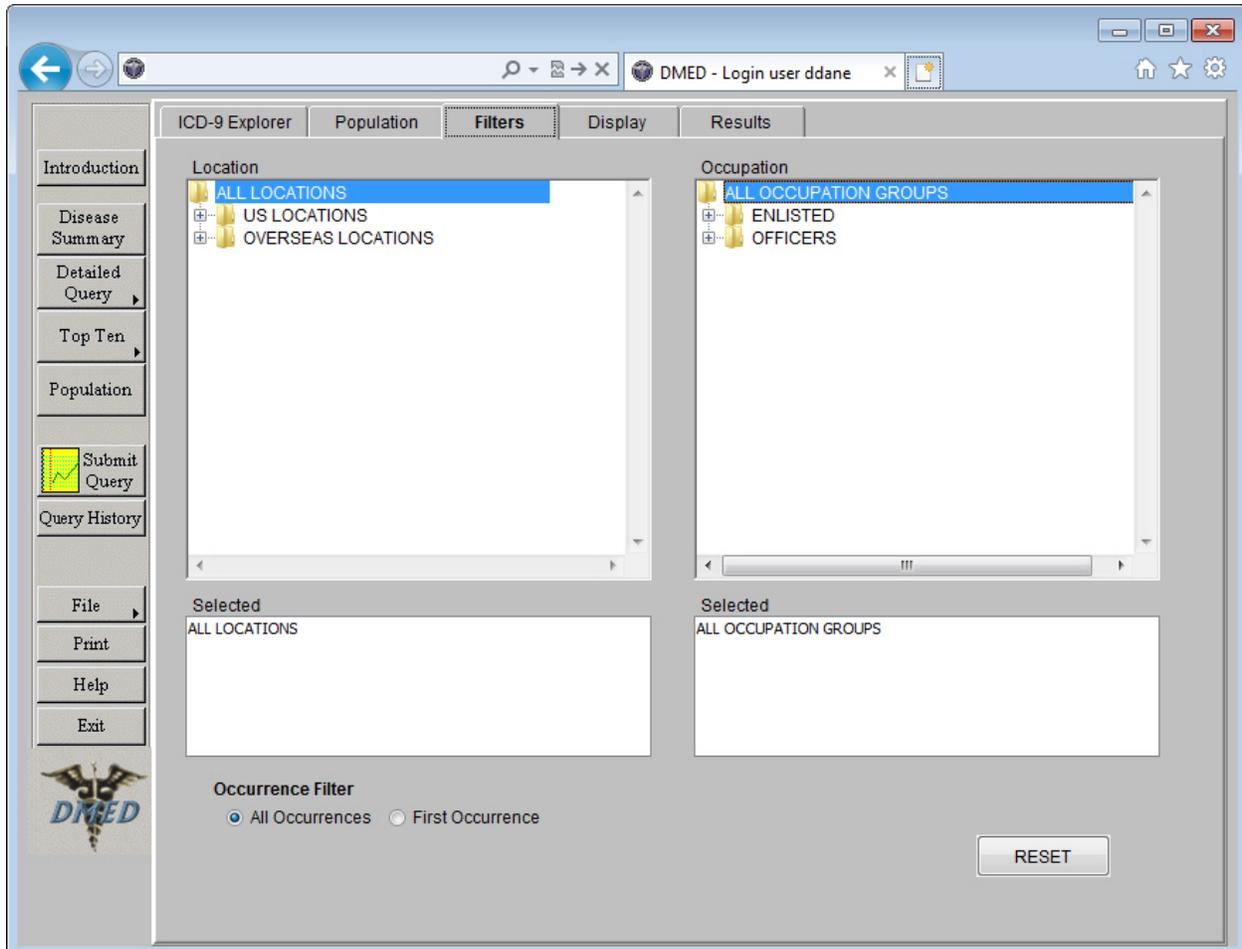
Selections for Timeframe include: Last 10 Years only.

Second, you can select additional population filters by selecting the **Filters** tab. Additional filters for Location and Occupational groups are available to define more specifically the population.

Note: Service and Timeframe selections, along with Location and Occupational Group filters are not selectable for Disease Summary queries. Within a stratum, you may select one, all or any combination of values by clicking the check box next to each

desired item. At least one stratum must be set to **All** and one other must be set to **All** or multiple values.

Select filters



First, select the **Filter** tab. The user may select up to five locations, five occupations, and one Major ICD-9 category from the **Filter** tab. Both the location and occupation explorer are laid out in a tree structure. Clicking on the + sign next to a displayed range expands the display to show the next level of detail. Select locations or occupation by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code. Alternatively, hold down the **Shift** key to select a range of codes.

Please note that when selecting specific **Location(s)**, the population data being used in your query is defined as the active duty population **ASSIGNED** to a particular location (or group of locations) that you select.

Therefore, for a query, the results returned show the diagnoses information for the active duty population **ASSIGNED** to the **Location(s)** you selected, along with the other demographic selections you have made.

**For clarification purposes, your results do not show the diagnoses information of the active duty population "treated" at the location(s) you selected.

Submit Query

Click the **Submit Query** button.

For more complex queries involving specific selections of Location(s) and/or Occupational Groups, more time may be needed to execute your query, approximately 1 - 3 minutes. At this time, you will be prompted with a dialog box with this information. You may choose to continue or cancel your query. In addition, you can choose to disable the dialog box for future queries.

Results Screen

Top Ten Query results are displayed in tabular format only.

Top Ten Reportable Events Query

Choose population of interest

ICD-9 Explorer | **Population** | Filters | Display | Results

1. Choose Service(s):

Service Army Navy Air Force Marines All

2. Choose Demographics:

Gender	Age	Race	Grade	Marital Status
<input type="checkbox"/> Male	<input type="checkbox"/> <20	<input type="checkbox"/> White	<input type="checkbox"/> E1-E4	<input type="checkbox"/> Single
<input type="checkbox"/> Female	<input type="checkbox"/> 20-24	<input type="checkbox"/> Black	<input type="checkbox"/> E5-E9	<input type="checkbox"/> Married
<input checked="" type="checkbox"/> All	<input type="checkbox"/> 25-29	<input type="checkbox"/> Other	<input type="checkbox"/> O1-O3(W1-W3)	<input type="checkbox"/> Other
	<input type="checkbox"/> 30-34	<input checked="" type="checkbox"/> All	<input type="checkbox"/> O4-O9(W4-W5)	<input checked="" type="checkbox"/> All
	<input type="checkbox"/> 35-39		<input checked="" type="checkbox"/> All	
	<input type="checkbox"/> >=40			
	<input checked="" type="checkbox"/> All			

3. Choose TimeFrame:

Time	Calendar Year
<input type="radio"/> 1997-2003	<input type="checkbox"/> 2004 <input type="checkbox"/> 2005 <input type="checkbox"/> 2006 <input type="checkbox"/> 2007 <input type="checkbox"/> 2008 <input type="checkbox"/> 2009 <input type="checkbox"/> 2010
<input checked="" type="radio"/> Last 10 Years	<input type="checkbox"/> 2011 <input type="checkbox"/> 2012 <input type="checkbox"/> 2013 <input checked="" type="checkbox"/> All
<input type="radio"/> Year 2014 (counts only)	

RESET

First, select the **Population** tab. The Population tab allows you to perform selections in 3 basic areas: Service, Demographics, and Timeframe.

Selections for Service(s) include: Army, Navy, Air Force, Marines, and All.

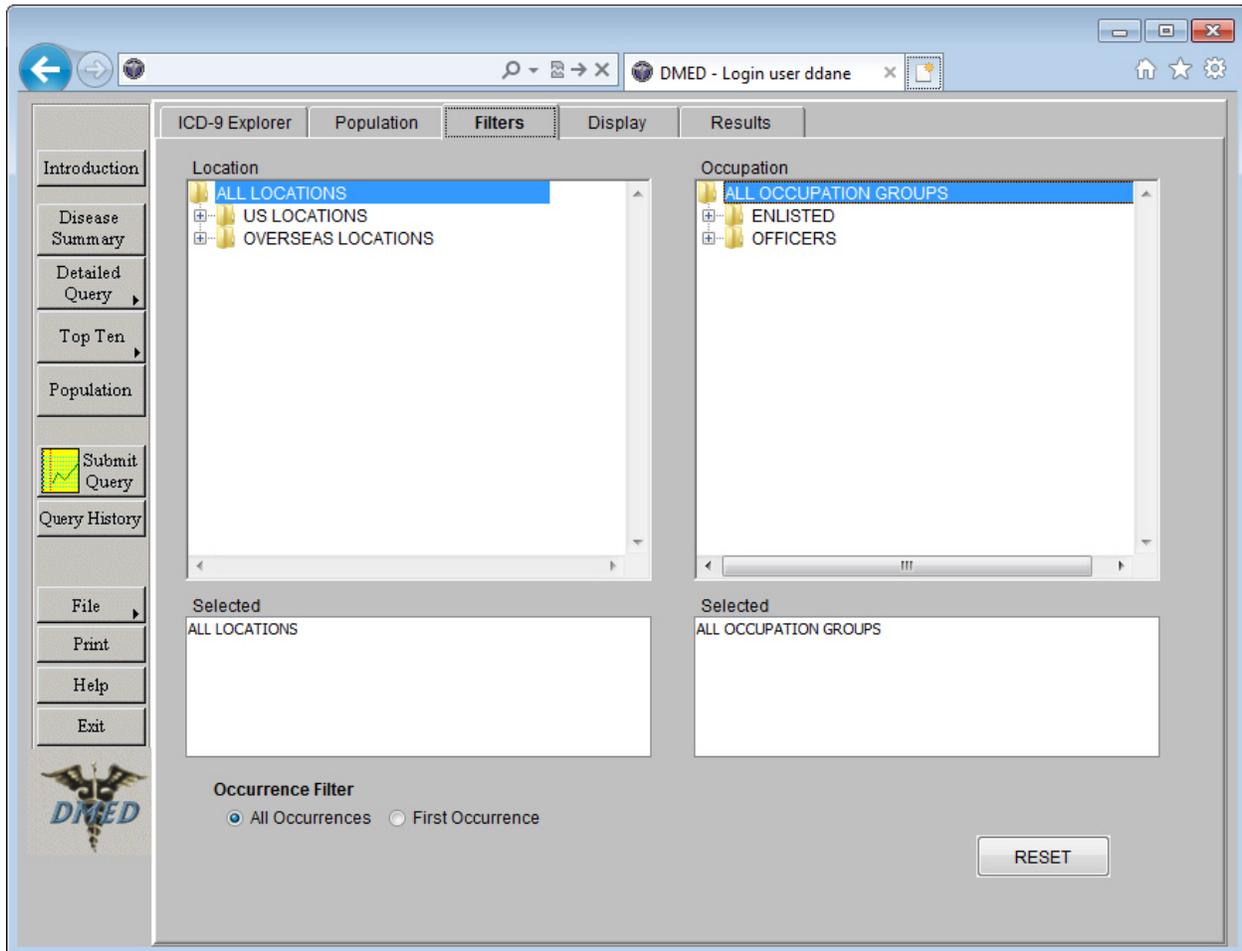
Selectable strata for Demographics include: Gender, Age, Race, Grade, and Marital Status.

Selections for Timeframe include: Last 10 Years only.

Second, you can select additional population filters by selecting the **Filters** tab. Additional filters for Location and Occupational groups are available to define more specifically the population.

Note: Service and Timeframe selections, along with Location and Occupational Group filters are not selectable for Disease Summary queries. Within a stratum, you may select one, all or any combination of values by clicking the check box next to each desired item. At least one stratum must be set to **All** and one other must be set to **All** or multiple values.

Select filters



First, select the **Filter** tab. The user may select up to five locations, five occupations, and one Major ICD-9 category from the **Filter** tab. Both the location and occupation explorer are laid out in a tree structure. Clicking on the + sign next to a displayed range expands the display to show the next level of detail. Select locations or occupation by clicking on them with the left mouse button. Your selection(s) will be highlighted and appear in the **Selected** box on the screen. To select (or deselect) multiple codes, hold down the **Ctrl** key and click on each desired code. Alternatively, hold down the **Shift** key to select a range of codes.

Please note that when selecting specific **Location(s)**, the population data being used in your query is defined as the active duty population **ASSIGNED** to a particular location (or group of locations) that you select.

Therefore, for a query, the results returned show the diagnoses information for the active duty population **ASSIGNED** to the **Location(s)** you selected, along with the other demographic selections you have made.

**For clarification purposes, your results do not show the diagnoses information of the active duty population "treated" at the location(s) you selected.

Submit Query

Click the **Submit Query** button.

For more complex queries involving specific selections of Location(s) and/or Occupational Groups, more time may be needed to execute your query, approximately 1 - 3 minutes. At this time, you will be prompted with a dialog box with this information. You may choose to continue or cancel your query. In addition, you can choose to disable the dialog box for future queries.

Results Screen

Top Ten Query results are displayed in tabular format only.

Population Query

Population Statistics

DMED also allows queries on population statistics (the total number of person years documented in the database for the population specified). No diagnosis information is included in these figures.

To obtain population statistics:

1. Select the **Population Button**.
2. The DMED will automatically go to the **Population** tab. Click on the check box next to the population you wish to study.

3. Next, select the **Filter Button**. Select the desired Location and Occupational Group filters.
4. Select the **Submit Query** button. For more complex queries involving specific selections of Location(s) and/or Occupational Groups, more time may be needed to execute your query, approximately 1 - 3 minutes. At this time, you will be prompted with a dialog box with this information. You may

choose to continue or cancel your query. In addition, you can choose to disable the dialog box for future queries.

5. Your query results will be displayed on the **Results** tab in table format.

The screenshot shows a web browser window with the URL 'DMED - Login user ddane'. The application interface includes a navigation menu on the left with options like 'Introduction', 'Disease Summary', 'Detailed Query', 'Top Ten', 'Population', 'Submit Query', and 'Query History'. The main content area is titled 'Person Years for Selected Population Strata' and displays a table of data for the years 2006 through 2013, along with a total. The table includes rows for Army, Navy, Air Force, Marines, and a grand total. Below the table, there is a note: 'Note: Rates are calculated per persons per year. Data with unknown values excluded.' and the source information: 'Source: DMSS 11/4/14 12:03 PM'.

	2006	2007	2008	2009	2010	2011	2012	2013	Total
Army	494,803	510,062	530,101	546,611	560,052	563,857	548,645	530,149	4,284,280
Navy	347,005	333,985	326,975	326,086	323,916	321,448	315,664	316,988	2,612,067
Air Force	345,654	333,655	324,109	327,784	330,957	329,263	328,720	328,548	2,648,690
Marines	178,821	182,576	193,741	202,526	202,512	201,070	197,429	194,680	1,553,355
Total	1,366,283	1,360,278	1,374,926	1,403,007	1,417,437	1,415,638	1,390,498	1,370,365	11,098,392

Additional Features

File / Print Options

Opening queries

To open a previously saved query: choose the **File** button then choose **Open** from the drop down. When this option is selected, a file panel listing all saved queries appears. When the desired query is selected, the ICD-9/Reportable Events Explorer, Population, Filter, and Results tabs are set to the saved values.

Saving queries

To save a query: choose the **File** button then choose **Save** from the drop down. When this option is selected, a file panel appears allowing you to select the directory in which to save the query file.

Exporting Data

To export the results of a query to a tab-delimited ASCII text file: choose the **File** button then choose **Export** from the drop down. This file is easily migrated into commonly used spreadsheet programs (e.g. Excel) for further analysis, graphing and printing. When this option is selected, a file panel appears allowing you to select the directory in which to save the query results file.

Printing results

Choose the **Print** button to print results screens.

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