"A network of networks for a healthier nation."

National Electronic Disease Surveillance System (NEDSS) Base System

NEDSS Base System

Training Guide

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Course Objectives

This course is designed to develop the skills necessary to perform disease surveillance activities using the NEDSS Base System (NBS).

By the end of this course, you will be able to perform the following tasks:

- View, add, and edit patient, provider, and organization information.
- View, add, and edit lab reports, morbidity reports, treatments, and vaccinations.
- View, add, and edit public health case investigations.
- Submit notifications to CDC.
- Generate reports and export report output.
- Manage users, security, and the patient registry.
- View, add, and edit custom fields.

Section 1 – Introduction

Section Objectives

After completing this section, you will be able to perform the following functions:

- Explain the purpose of NEDSS and the NBS.
- Identify the investigations the NBS supports and the general process of entering cases.

Lesson 1 – NBS Overview

Lesson Objectives

After completing this lesson, you will be able to perform the following tasks:

- Explain the purpose of NEDSS and the NBS.
- Identify the investigations supported by the NBS.
- Explain how the NBS handles public health case reports.

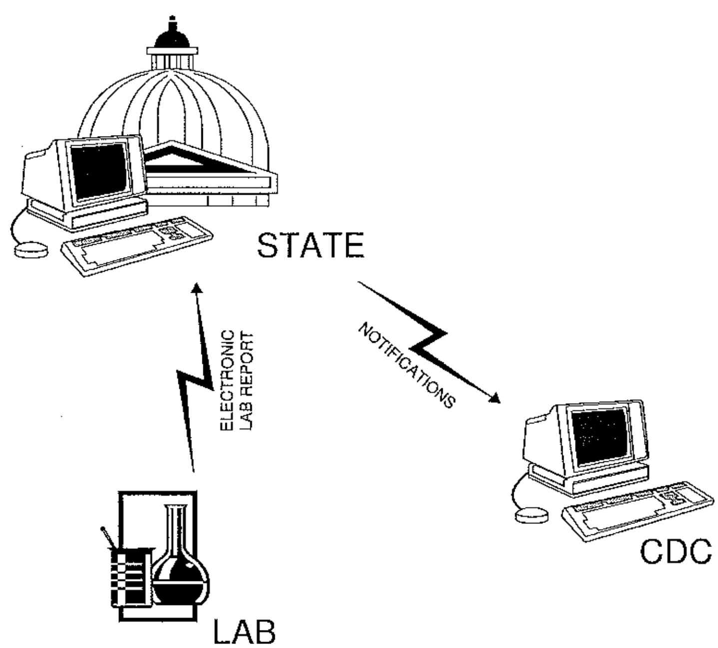
What is NEDSS

NEDSS is an acronym for the **N**ational **E**lectronic **D**isease **S**urveillance **S**ystem. It is an initiative to promote data and information system standards for disease surveillance. Surveillance systems collect and monitor data for disease trends and/or outbreaks. Public health personnel use this data to protect the nation's health.

The goal of the NEDSS initiative is the development of efficient, interoperable, and integrated surveillance systems at federal, state and local levels by facilitating the electronic transfer of appropriate information from clinical information systems in the health care industry to public health departments; reducing provider burden in the provision of information; and enhancing both the timeliness and quality of information provided.

What is the NEDSS Base System?

The NEDSS Base System is a specific implementation of the NEDSS standards. It provides a system for the secure, accurate, and efficient collection, transmission, and analysis of public health data. The NBS also provides a platform upon which program-specific modules can be built to meet state and program area requirements.



State health departments use the NBS to support their surveillance and investigative processes and analysis notifiable diseases and conditions. At a minimum it replaces the functionality currently supported by the National Electronic Telecommunications System for Surveillance (NETSS). Fully leveraged, the NBS can (among other benefits):

- Eliminate the need to process paper public health reports by receiving laboratory results electronically and enabling secure online reporting of laboratory results and clinical diagnoses by authorized health care providers,
- Provide real time access to surveillance and investigative data for all levels of public health (state and local) as appropriate according to each individual's responsibilities,
- Notify CDC about cases and provide anytime/anywhere secured access to allow public health workers to manage public health investigations
- Secure access to the system based on condition, localities, and specific system functions using administrative features that are configured by each area implementing the NBS.

Key NBS terms

- Events are the collection of information for a patient about their public health case(s) or potential case(s)
- Observations originate from a reporting source such as a laboratory or a private provider and trigger or complement a public health case investigation. They include Laboratory Reports and Morbidity Reports (i.e., Provider Reports).
- Investigations are the buckets that hold the collection of information that supports a public health case investigation. They are usually created upon the receipt of an observation and are associated to those observations. The determination that a public health report is a confirmed, suspect, or probable case or that it is not a case usually occurs during the course of the investigation.
- Notifications are generated once a public health investigation is determined to meet the CDC or state case definition for the particular condition. An investigation can exist in NBS without a notification but a notification cannot exist without an investigation.

Features

Using the NBS you can perform the following disease surveillance activities:

- View, add, and edit
  - Demographic information for patients.
  - Observation information, such as laboratory reports and morbidity reports.
  - Treatment information.
  - Vaccination information.
  - Public health case investigations.
  - Reporting source information about providers and organizations
- Electronically submit notifications of reportable conditions to CDC.

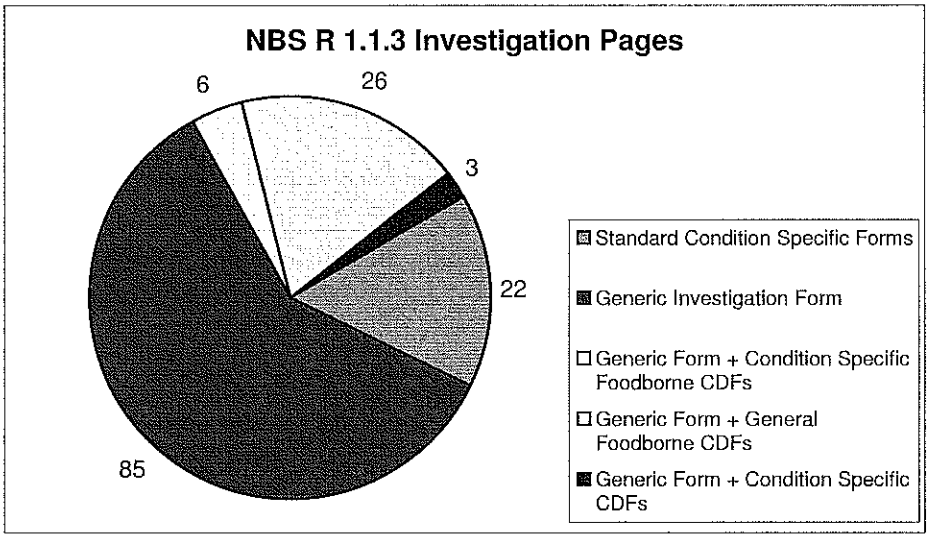
- Customize and run preformatted reports or export line list report output for use in third-party analysis, visualization, and reporting (AVR) tools.
- Create ad hoc analysis reports using third-party AVR tools against the Reporting Database (RDB)

Which Conditions Does the NBS Support?

NBS supports a number of conditions through its core and extended investigation functionality.

Core Investigation Functionality

The core investigation functionality supports approximately 95 conditions using a generic investigation form. The generic form contains a standard set of questions, regardless of the condition under investigation. It includes an investigation summary, reporting source information, clinical and epidemiological information, as well as administrative information.



Program Area Modules

Program Area Modules (PAMs) support the extended investigation functionality, and include the following conditions:

- Hepatitis A, B, C, D, E, and non-ABC
- Bacterial Meningitis and Invasive Respiratory Diseases
  - Meningococcal
  - Streptococcus pneumoniae
  - Haemophilus influenzae
  - Group A and Group B Streptococcus
- Vaccine Preventable Diseases

- Measles
- Rubella
- Pertussis
- Congenital Rubella Syndrome
- Mumps

■ Animal Rabies

■ Foodborne and Diarrheal Diseases

- General Foodborne Conditions
- Listeria
- Botulism
- Cholera
- Salmonella
- Cryptosporidiosis
- Cyclospora

Note: Mumps, Animal Rabies and the Foodborne and Diarrheal conditions are handled by means of Collaboratively Defined Fields and display at the bottom of the View, Add, and Edit Investigation pages.

The PAM forms contain disease-specific questions, in addition to the investigation summary, reporting source, clinical, epidemiological, and administrative sections included in the generic investigation form.

Note: The PAMs are analogous to the NETSS supplemental and disease-specific records.

While it is useful to conceptualize the PAMs as distinct modules or "add-ons" to the core functionality intended to address program needs for disease-specific functionality, their tight integration with the NBS provides you seamless access to both PAM and core functionality.

How Do You Process Public Health Case Reports in the NBS?

Processing public health case reports using the NBS involves first determining the method in which you intend to work. Creating an investigation from an electronic lab report requires different procedures than creating an investigation from paper-based lab reports and morbidity reports. Whatever the method, the process involves entering demographic and condition information in the relevant data entry pages.

Creating a Public Health Case Investigation from an Observation

Note: The term "observation" refers specifically to lab reports and morbidity reports.

To create an investigation from an observation, perform the following procedure:

1. Review an observation entered remotely or received through an electronic laboratory report (ELR). If an investigation is required, then you can create an investigation from the lab report or morbidity report. If an investigation exists the observation can be

associated to the existing investigation. Otherwise, you can mark the observation as reviewed and move on to the next item in your work queue.

2. Create the investigation for the appropriate condition.

   If you have any additional observations for this case, you can assign them to the investigation. You can also add any relevant treatment or vaccination information.

3. Create and submit a notification if the investigated condition meets the case definition.

   If the investigated condition meets the case definition, you can submit a notification of the case to the CDC. Depending on your security permissions, you can submit the notifications directly to the CDC, or to a supervisor who reviews your notification before submitting it.

Creating a Public Health Case Investigation from a Paper-Based Observation

While NBS supports creating a public health case investigation from electronic lab reports and other remotely entered observations, you will still encounter the need to perform manual data entry of information derived from traditional, paper-based lab and morbidity reports.

In general, to create a public health case investigation from a paper-based lab or morbidity report, you perform the following procedure:

1. Find the patient you want.

   If the patient does not exist in the system, add the patient's information.

2. View the patient's file.

   The patient's file contains all of their available events.

3. Add the paper-based observation (e.g., Lab report, Morbidity report, Vaccination record)

   Note: You can also add treatment information by means of a morbidity report, or through an investigation.

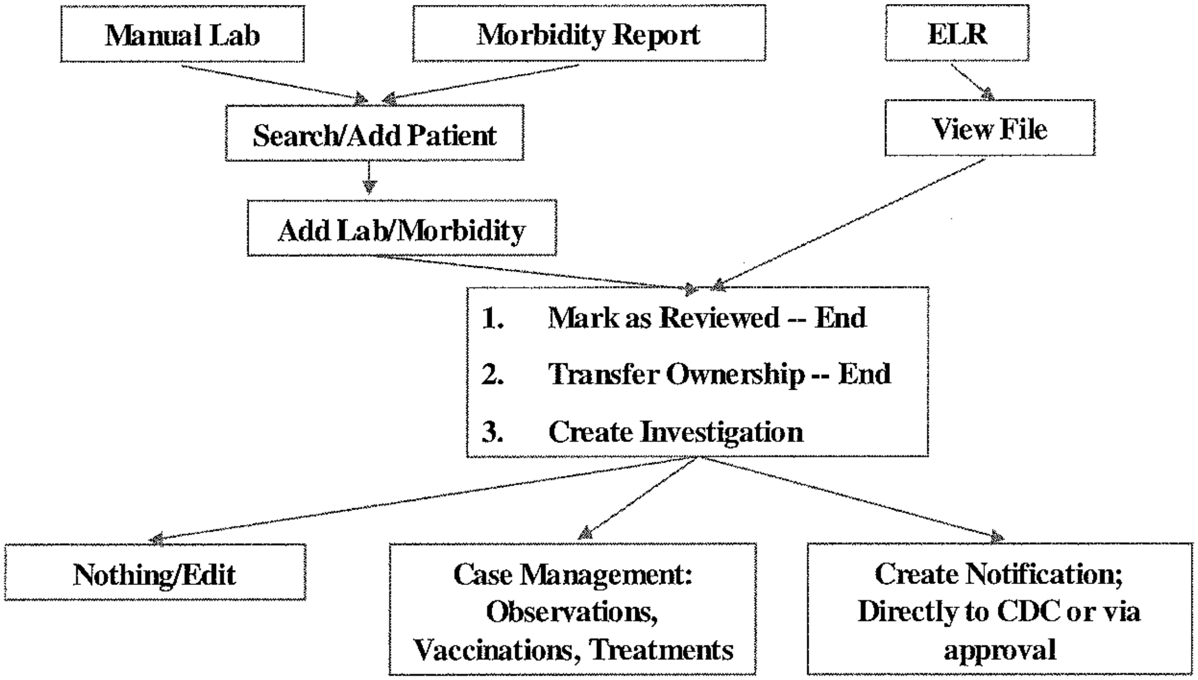
4. Create the investigation.

   If you have any additional observations for this case, you can assign them to the investigation. You can also add any relevant treatment or vaccination information.

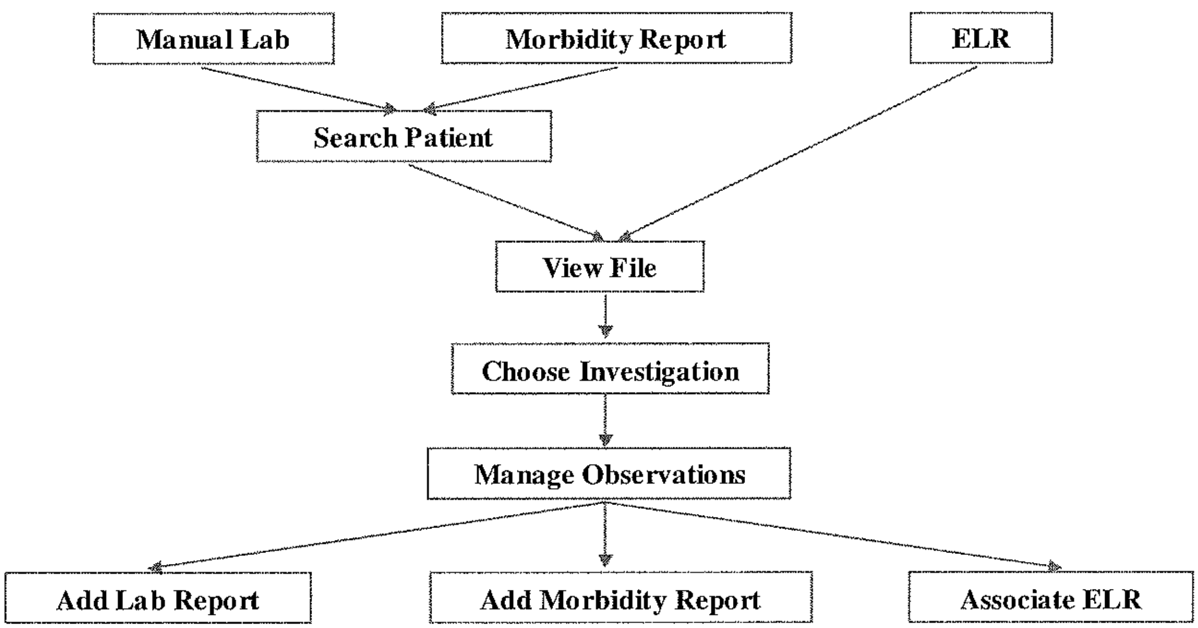
5. Create and submit a notification if the investigated condition meets the case definition.

   If the investigated condition meets the case definition, you can submit a notification of the case to the CDC. Depending on your security permissions, you can submit the notifications directly to the CDC, or to a supervisor who reviews your notification before submitting it.

New Observation Process Flow: No Existing Investigation



New Observation Process Flow: Existing Investigation



Lesson Summary

In this lesson, you learned to perform the following tasks:

- Understand the purpose of NEDSS and the NBS.
- Identify the investigations supported by the NBS.
- Understand the process of creating public health case investigations in the NBS.

Section Summary

In this section, you learned to perform the following functions:

- Explain the purpose of NEDSS and the NBS.
- Identify the investigations the NBS supports and the general process of creating public health case investigations.

Section 2 – Working with Patient, Provider, and Organization Information

Section Objectives

After completing this section, you will be able to perform the following functions:

- Find and view patient and provider information.
- Add, edit, and delete patient and provider information.
- Find and view organization information.
- Add, edit, and inactivate organization information.

Lesson 1 – Finding and Viewing Patient and Provider Information

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- Understand the possibilities for customizing the home page.
- Find a patient or provider.
- View information about a patient or provider.

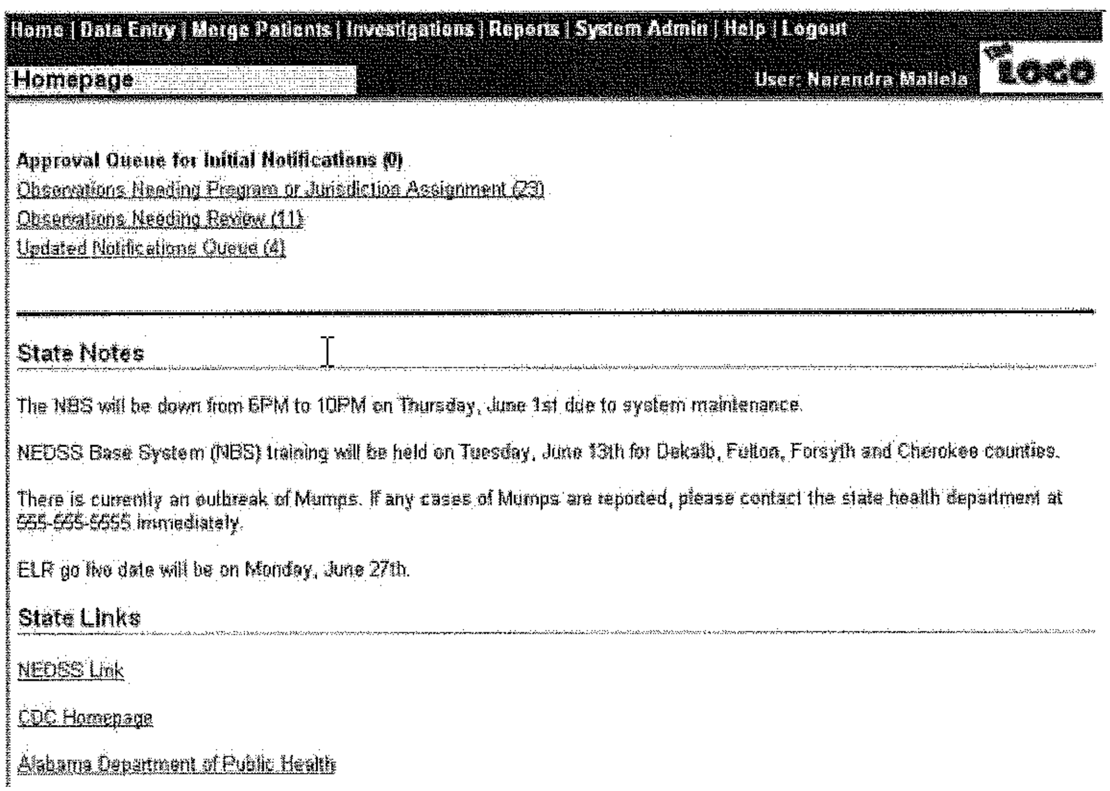
Homepage Customization

The Locally Defined Field (LDF) functionality allows users to add hyperlinks, read-only text and sub-headers to the NBS Homepage. The following may be done from the Homepage:

- Alert users to when the NBS (or other state systems) will be down for maintenance
- Alert users of an outbreak or other related information
- Provide administrative information to users
- Provide links to other web pages

The sample screen shot below includes a section (sub-header) called 'State Notes' and provides four read-only text notes. It also includes a section (sub-header) called 'State Links' that provides three links to various websites. When any of these links is clicked, a new browser window will open and the applicable website will appear.

Note: The Homepage can accommodate only display fields. The fields below are of the types "Subhead (for display only)," "Comments (for display only)," and "Hyperlink."



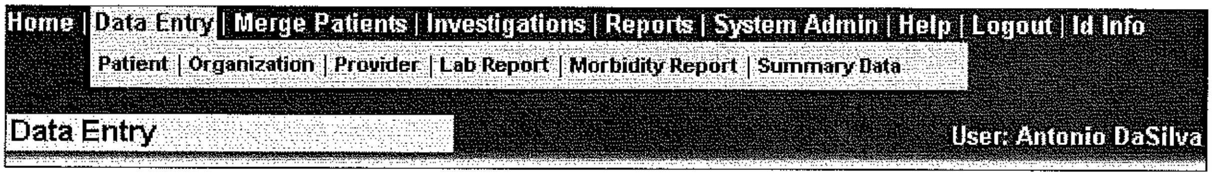
Finding and Viewing Patients

You can find a specific patient in the NBS using the Find Patient page.

To find a patient, perform the following procedure:

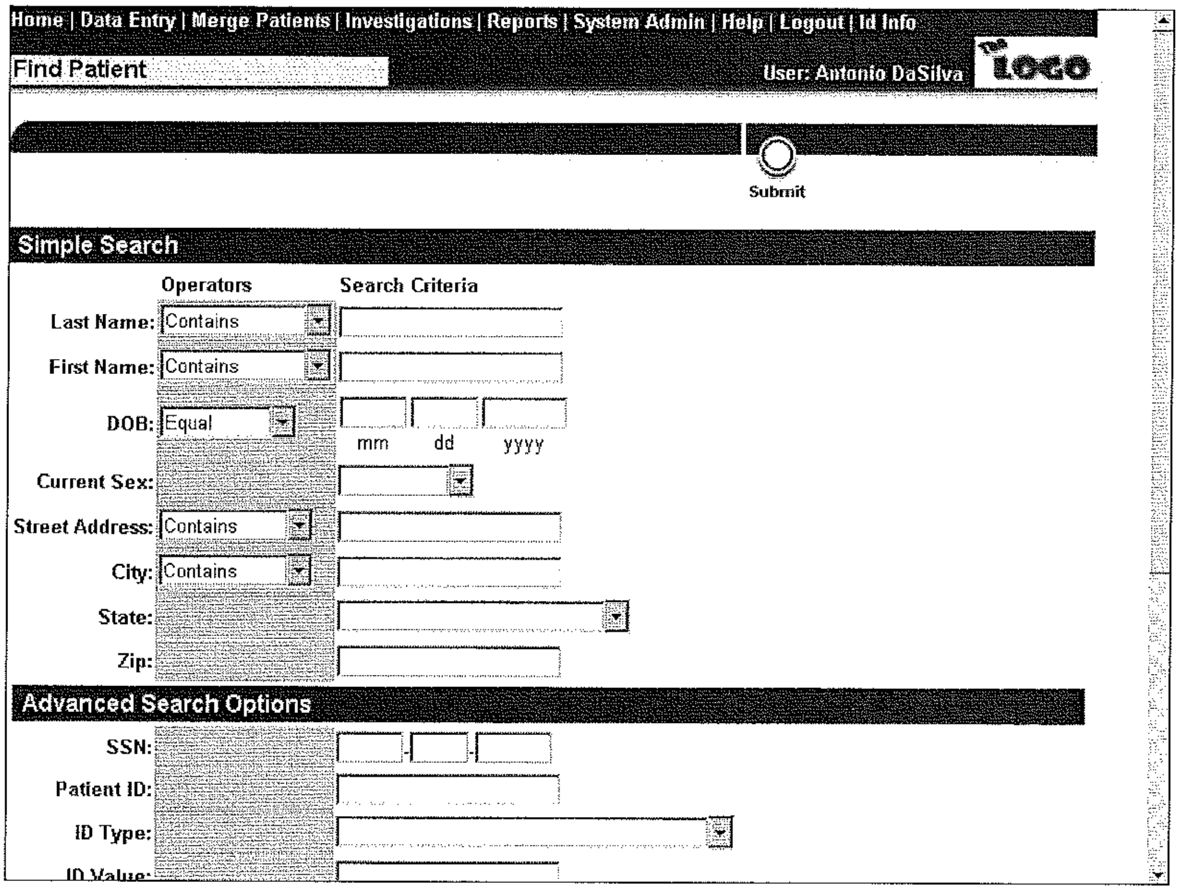
1. Click **Data Entry** on the navigation bar.

The NBS displays a list of available options.



2. Click **Patient.**

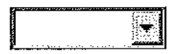
NBS displays the Find Patient page.



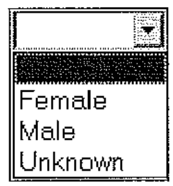
Note: You can search for patients using the Simple Search criteria or the Advanced Search Options using as few or as many fields you need.

Generally, you enter information by clicking the fields you want and typing the information you want. Optionally, you can press the **Tab** key to move on to the next field in the sequence.

Some fields allow you to choose one or more items from a list of options.



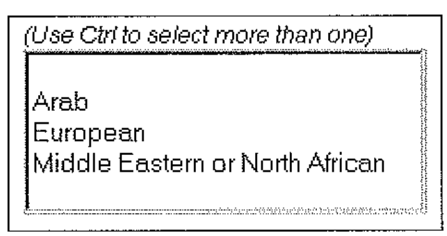
To save screen space, these fields hide the available options until you choose an item.



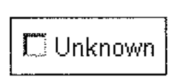
To choose an item from these fields, click the field you want and click the option you want. The NBS displays the selected option in the field.

You can also press the **Tab** key to select the field and use the **Up Arrow** and **Down Arrow** keys to select the item you want. Optionally, you can press the key associated with the first letter of the item you want. For example, you can press the **F** key to select the Female option. In addition, the NBS supports multi character type ahead, which allows you to begin typing your choice. The system will jump through the list to the option that matches the letters you type. The box will change to red if a letter is typed that when added to existing letters results in a mismatch with the pick list choices. For example if the pick list choices were "Male" and "Female" and the user typed "Feme" the entry box would change to red.

Elsewhere in the application are fields that present a list of items for you to choose. To choose an option, click the item you want. To select multiple items of information, you can press and hold the **Ctrl** key and click the items you want.



Other fields enable you to select a checkbox to toggle an option on or off. Click the checkbox to select the option. A checkmark displays indicating that the option is selected. Click the checkbox again to deselect the option.



3. Type the information about the patient you wish to find in the search criteria fields. To enter information, click the fields you want and type or choose the information you want.

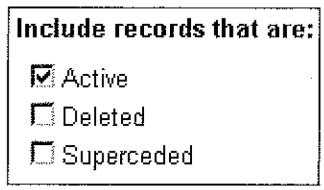
4. Optionally, click the **Operators** list box for the field you want and choose the operator you want.

   Note: You use the **Operators** list box to add conditions to your search. Conditions help you refine the parameters of your search. For example, the **Contains** operator displays records containing any of the text you entered. The **Equal** operator displays records that exactly match the text you entered. NBS displays the **Contains** operator by default.

5. Optionally, do one of the following:

   – Click **Deleted** under "Include records that are" to include deleted records in your search.

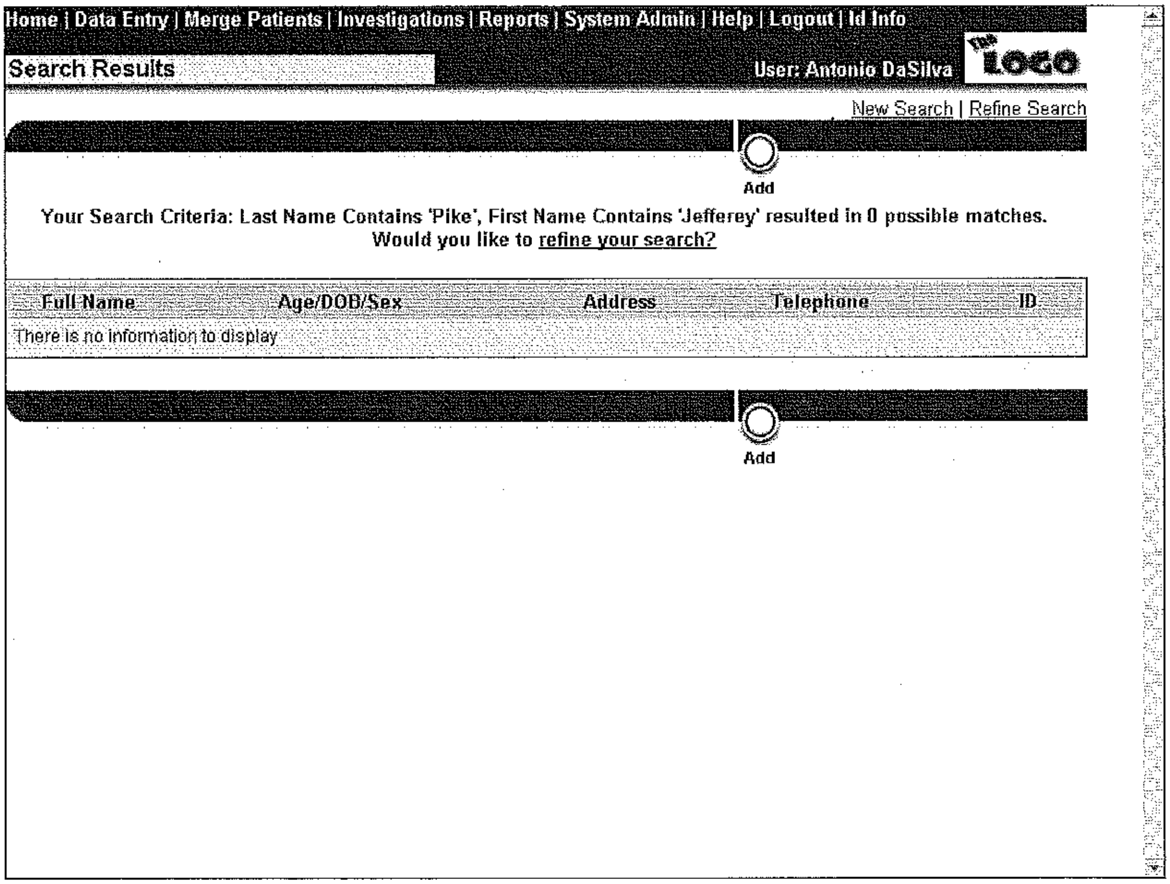
   – Click **Superceded** under "Include records that are" to include superceded records in your search.



Note: Deleted records are records that have been deleted from the system and are inactive. Superceded records are records that have been merged with another record in the system and are inactive. NBS performs searches on active records by default.

6. Click **Submit**.

NBS displays the Search Results page.

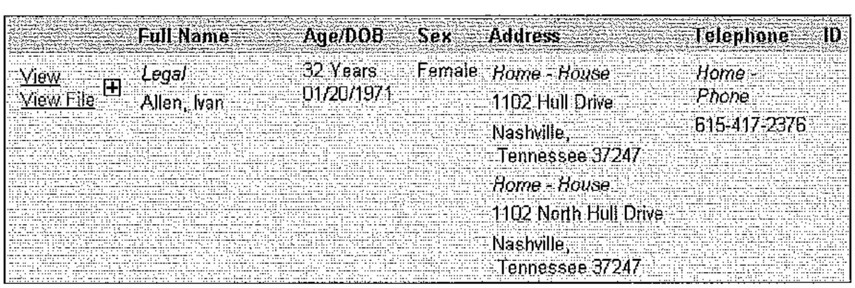


From the Search Results page, you can do the following:

- Perform a new search. To perform a new search, click **New Search** (in the upper-right corner of the page) and repeat steps 3–6 as described above.
- Refine your existing search. To refine your existing search, click **Refine Search** (in the upper-right corner of the page) and repeat steps 3–6 as described above.

Note: You can also add a person from the Search Results page.

7. Optionally, click + (plus sign).



The Search Results page displays a + (plus sign) for each patient record that contains updates to the Master Patient Record (MPR) triggered by an event.

Note: The + displays only for those MPR updates associated with an event.

Clicking + displays the individual changes to the patient demographic information associated with the point-in-time where a new event was recorded.

	Full Name	Age/DOB	Sex	Address	Telephone	ID
View View File ⊟	*Legal* Allen, Ivan	32 Years 01/20/1971	Female	*Home - House* 1102 Hull Drive Nashville, Tennessee 37247 *Home - House* 1102 North Hull Drive Nashville, Tennessee 37247	*Home - Phone* 615-417-2376	
	Legal Allen, Ivan	32 Years 01/20/1971	Female	*Home - House* 1102 Hull Drive Nashville, Tennessee 37247	*Home - Phone* 615-417-2376	
	Legal Allen, Ivan	32 Years 01/20/1971	Female	*Home - House* 1102 Hull Drive Nashville, Tennessee 37247	*Home - Phone* 615-417-2376	

The MPR is the comprehensive record of patient demographic data. Its purpose is to maintain relative dated demographic data associated with patient events (the various disease investigation forms, lab reports, morbidity reports, and vaccination records comprising the patient's record) while maintaining separate, but current patient demographic information at a general patient level.

For example, when a caseworker enters a new patient in the NBS a Master Patient Record is created. As new events are recorded for a patient, the Master Patient Record is automatically updated with any changes to demographic data associated with the event. The changes are assigned an "as of" date and are associated with the event that triggered the change. While the MPR changes over time as new events are recorded and demographic information is updated, each event contains the demographic information recorded at the time the event was captured in the system.

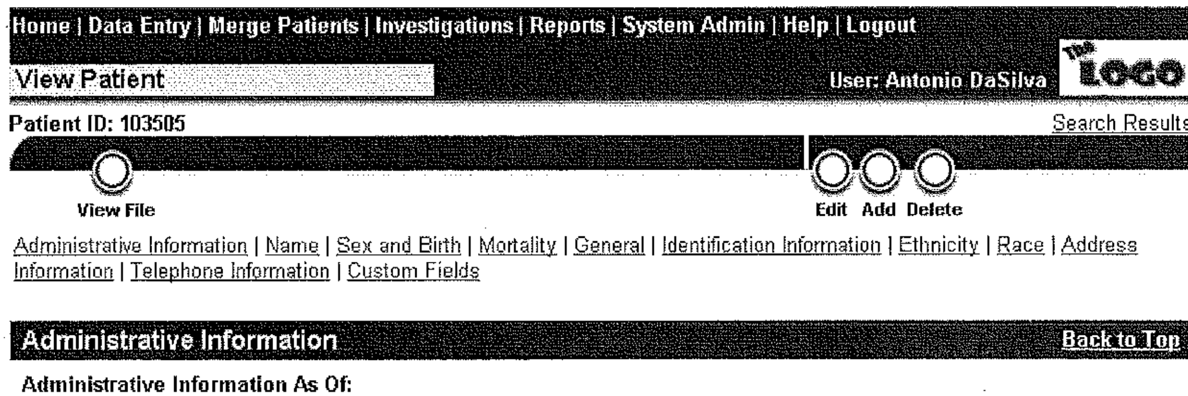
8. View the patient's information. To view the patient's information, do one of the following:

   – Click **View** for the patient you want. NBS displays the View Patient page and the information for the selected patient. You use the View Patient page to view more detailed demographic information about a particular patient.

   – Click **View File** for the patient you want. NBS displays the View File page and the information for the selected patient. You use the View File page to view the patient's file information, which lists the events that particular patient has. Note that you cannot return to the Search Results page once you click View File.

NBS displays the selected page.

Note: Click the **navigation links** at the top of the page to display the various sections of the page. Click **Back to Top** to return to the top of the page. Click **Search Results** to display the Search Results page.



Viewing the Patient's File

The View File page displays the patient's file information. It provides a single view of all public health data available for the patient and includes the following items:

- A summary of the available patient information, including
  - a summary of demographic information.
  - a list of open investigations.
  - a list of new lab reports and morbidity reports for review.
- Detailed demographic information.
- A list of events, including
  - investigations.
  - lab reports and morbidity reports.
  - treatments.
  - vaccination records.

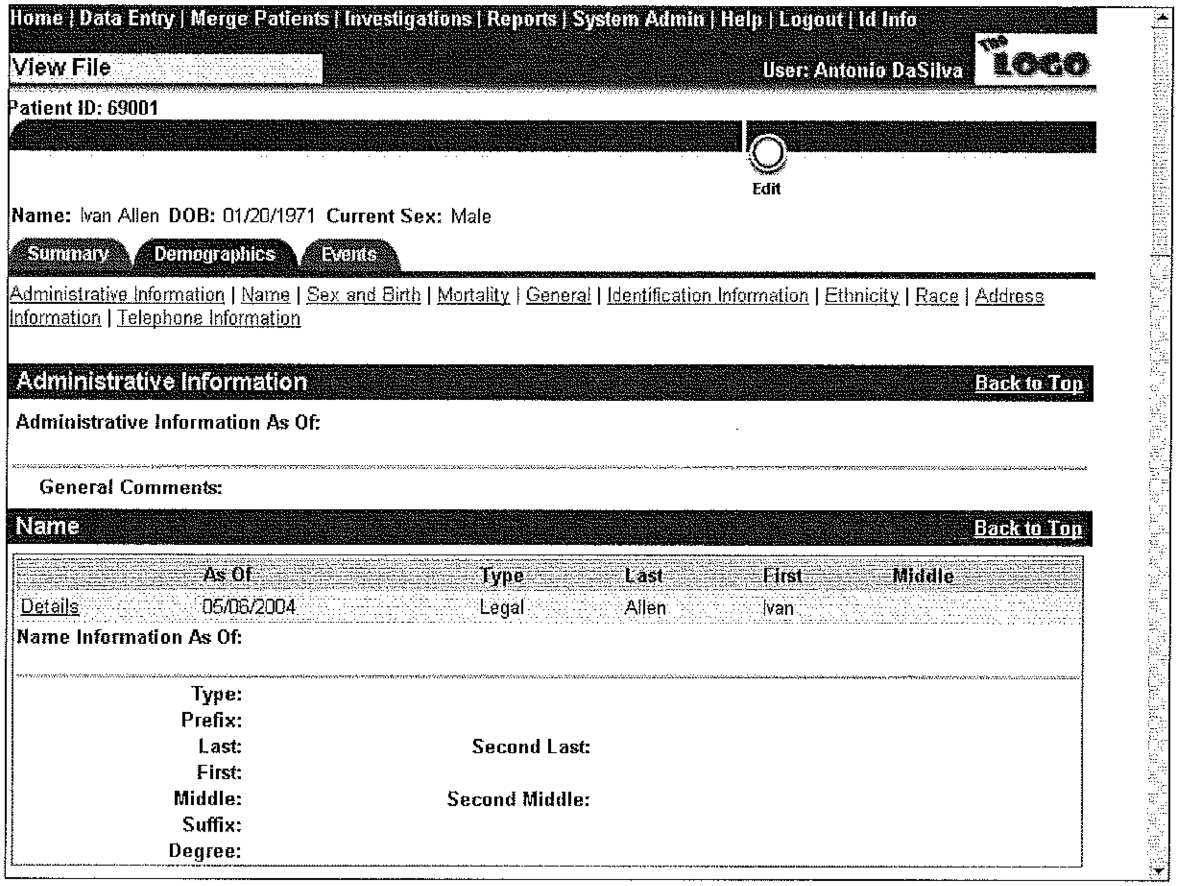
To view a patient's file, perform the following procedure:

1. Find the person you want. To find and view a person, refer to "Finding and Viewing Patients" in this section.
2. Click **View File** for the patient you want.

   The NBS displays a dialog box, indicating that you will not be able to return to the Search Results page if you select the View File link.

3. Click **OK**.

The NBS displays the Demographics tab on the View File page.



The View File page is organized by a series of tabs you use to work with demographic and event information.

The following table lists the available tabs on the View File page and describes their function:

Tab	Description
Summary	Displays a summary of available public health information for the patient. It is organized by sections displaying the following information: ■ A summary of demographic information. ■ A list of open investigations. ■ A list of new lab reports for review. ■ A list of new morbidity reports for review.

Tab	Description
Demographics	Displays detailed demographic information for the patient. It is organized by sections displaying the following information: ■ Name and identification

Tab	Description
	■ Sex, birth, and mortality ■ Ethnicity and race ■ Address, telephone, and physical location ■ General and administrative
Events	Displays the events associated with the patient. It is organized by sections displaying the following information: ■ Investigations – Displays a list of open and closed investigations. ■ Lab Reports – Displays a list of lab reports. ■ Morbidity Reports – Displays a list of morbidity reports. ■ Treatments – Displays a list of treatments. ■ Vaccinations – Displays a list of vaccinations.

4. Do one or more of the following:
   - Click **Summary**. NBS displays the contents of the Summary tab. From the Summary tab, you can view new lab reports and morbidity reports for the patient.
   - Click **Demographics**. NBS displays the contents of the Demographics tab. From the Demographics tab, you view detailed demographic information for the patient.
   - Click **Events**. NBS displays the contents of the Investigations tab. From the Events tab, you can view and add events for the patient.

Finding and Viewing Providers

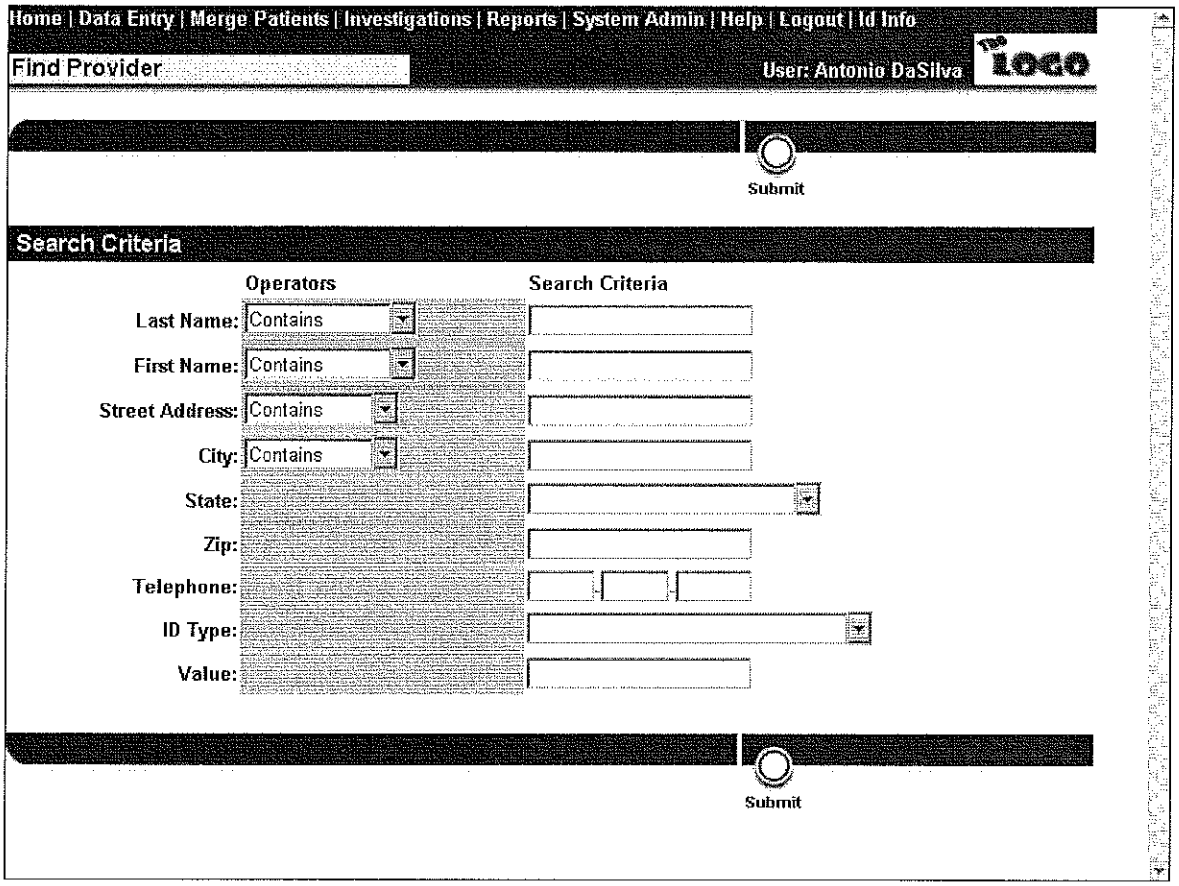
Along with patient information, you can also find a specific provider in the NBS. You find a patient using the Find Provider page.

Note: Providers include physicians, nurses, and other non-patient entities.

To find a provider, perform the following procedure:

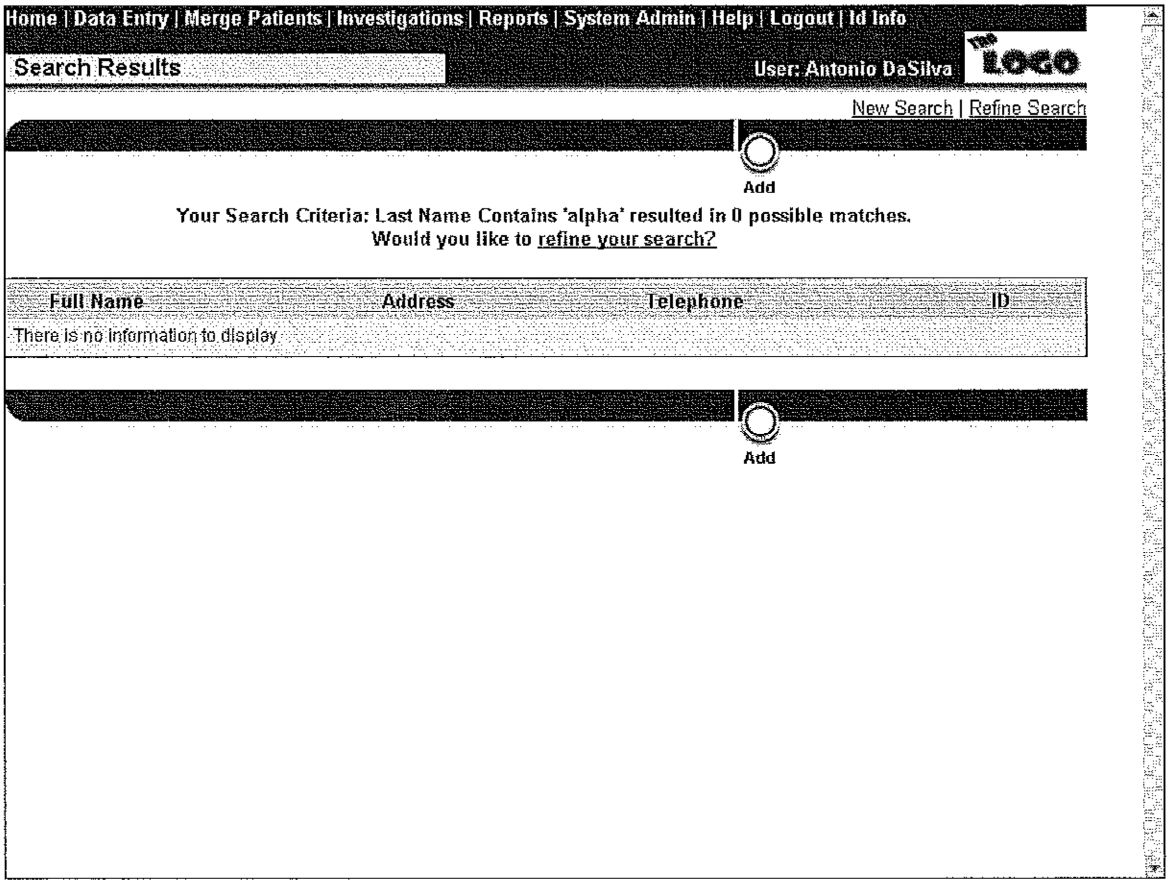
1. Click **Data Entry**.
2. Click **Provider**.

NBS displays the Find Provider page.



3. Type the information for the provider you want in the search criteria fields. Click the fields you want and type or choose the information you want.
4. Optionally, click the **Operators** list box for the field you want and choose the operator you want.
5. Click **Submit**.

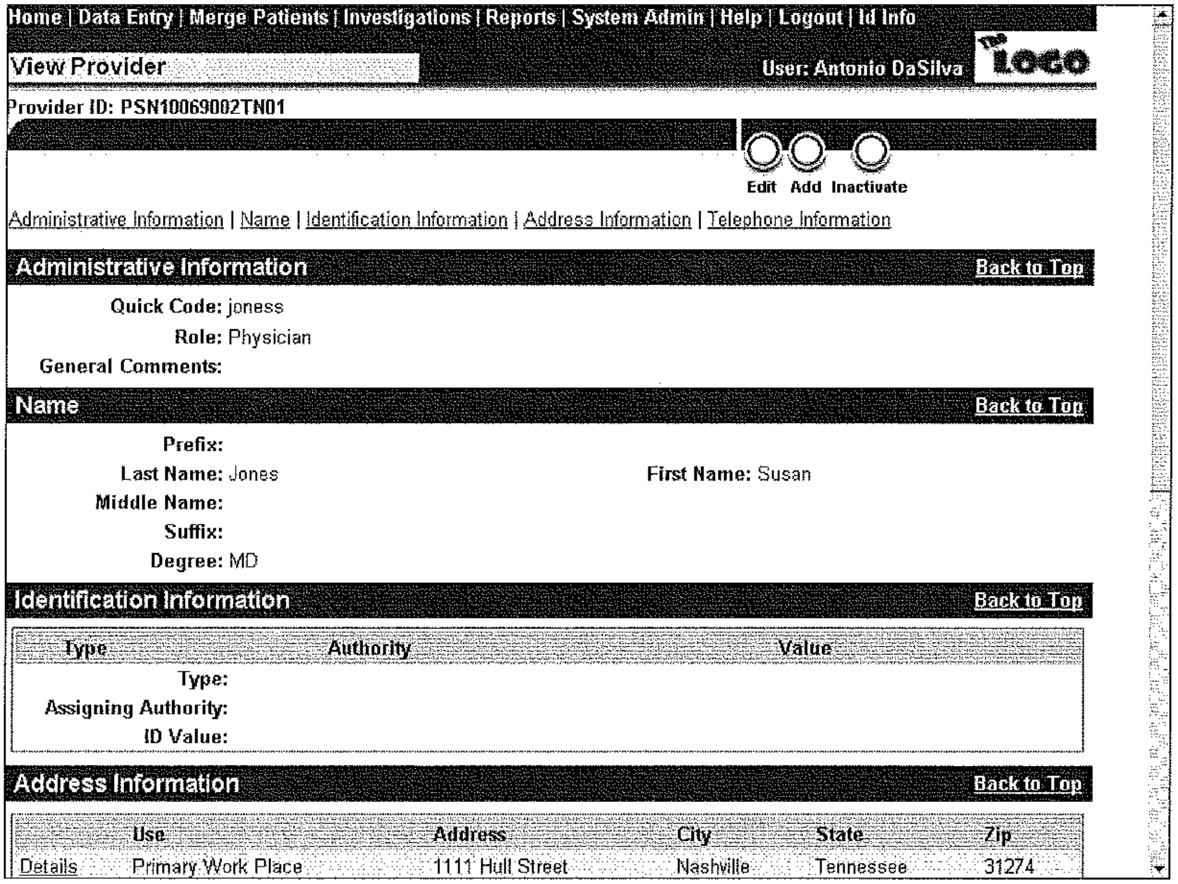
NBS displays the Search Results page.



Note: To perform a new search, click **New Search** and repeat steps 3–5 as described above. To refine your existing search, click **Refine Search** and repeat steps 3–5 as described above. To add a provider, click **Add** on the Search Results page.

6. Click **View** for the provider you want.

NBS displays the View Provider page and the information for the selected provider.



You use the View Provider page to view provider administrative and demographic information.

Lesson Summary

In this lesson, you learned to perform the following functions:

- Find a patient or provider.
- View information about a patient or provider.

Lesson 2 – Adding and Editing Patient and Provider Information

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- Add patients and providers.
- Edit patient and provider information.
- Delete patients and inactivate providers.

Adding Patients

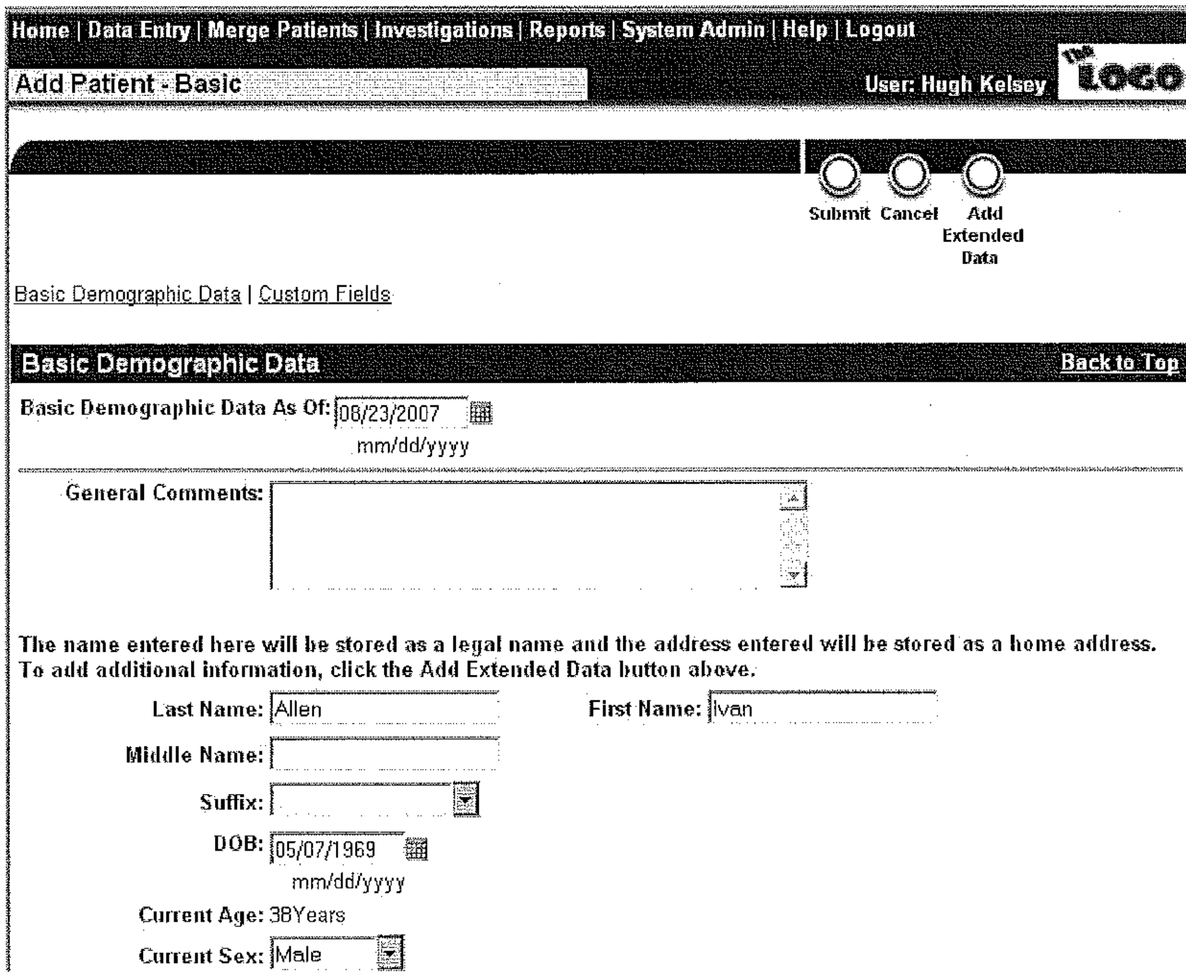
You can add a patient to the NBS records. You use the Add Patient – Basic page to add a patient. The Add Patient – Basic page displays a set of fields you use to enter basic demographic information, such as name, address, and sex.

Note: The NBS also provides the Add Patient – Extended page to support entry of information not available in the basic page. Also note that you can also add a patient as part of adding a lab report or morbidity report. You will learn more about this feature in a subsequent lesson.

To add a patient, perform the following procedure:

1. Click **Add** in the Search Results page or the View Patient page. To display the Search Result or View Person pages, refer to "Finding and Viewing Patients" in this section.

NBS displays the Add Patient – Basic page.



2. Click the fields you want and type or choose the information you want.

   Note: You can add a patient using as few or as many fields as you need.

3. When you are finished, do one of the following:

   – Click **Submit**. NBS saves your changes and displays the View File page and the patient information.

   – Click **Add Extended Data**. NBS displays the Add Patient – Extended page. You use this page to add extended demographic data for the person.

   Note: Click **Cancel** to cancel your changes and display the previous page.

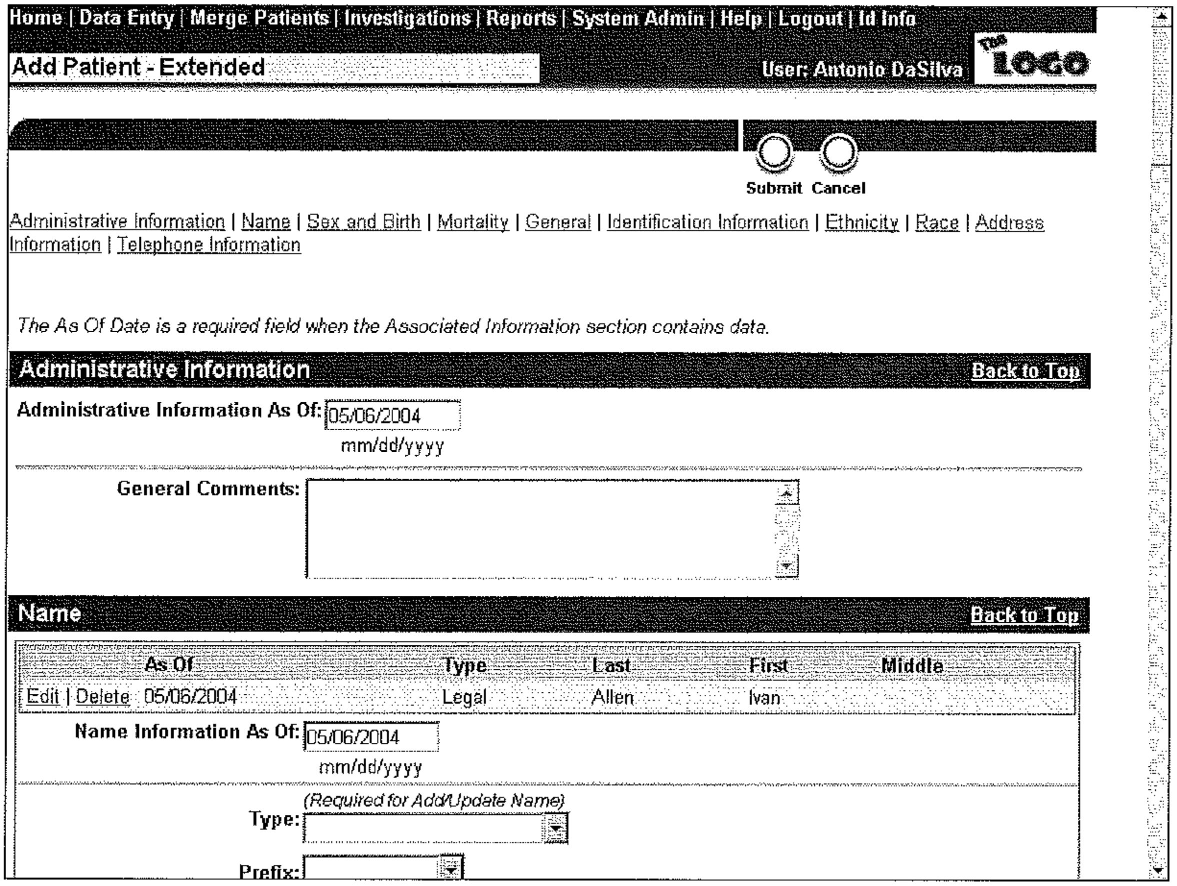
Adding Extended Patient Information

You can add extended demographic information for a patient. The Add Patient – Extended page displays a set of fields containing extended demographic information. You use the Add Patient – Extended page to enter additional patient-related information beyond that which is available on the Add Patient – Basic page.

To add person information, perform the following procedure:

1. Click **Add Extended Data** in the Add Patient – Basic page. To display the Add Patient – Basic page, refer to "Adding Patients."

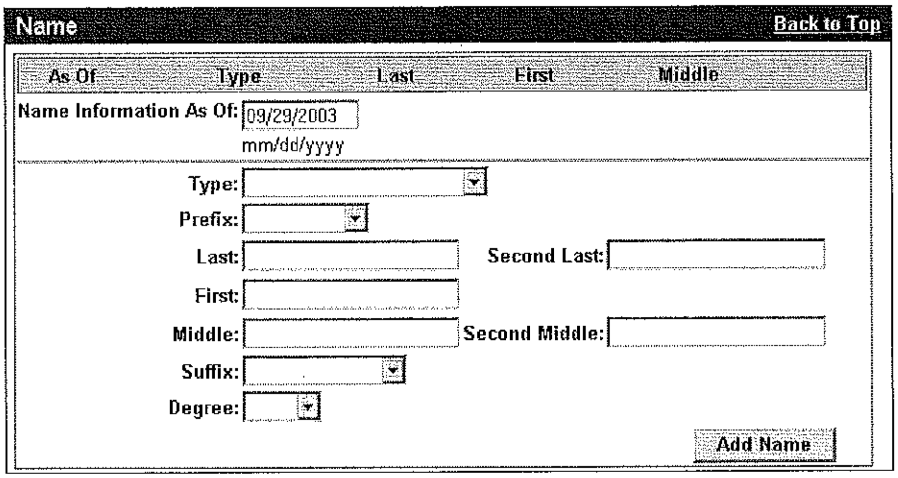
   NBS displays the Add Patient – Extended page.



The information you entered in the Add Patient – Basic page displays in the appropriate fields on the Add Patient – Extended page. Information that NBS carried over to the Name, Identification, Address, and Telephone Information, and the Physical Location section includes a default information type and/or use and displays in a gray table at the top of the section.

Note: The **Cancel** button ends adding the patient. It will not return you to the Add Patient – Basic page.

The sections displaying the gray table indicate the ability to accept multiple values of information. For example, the Name section enables you to enter multiple name types, such as a person's legal name, alias, maiden name, etc.



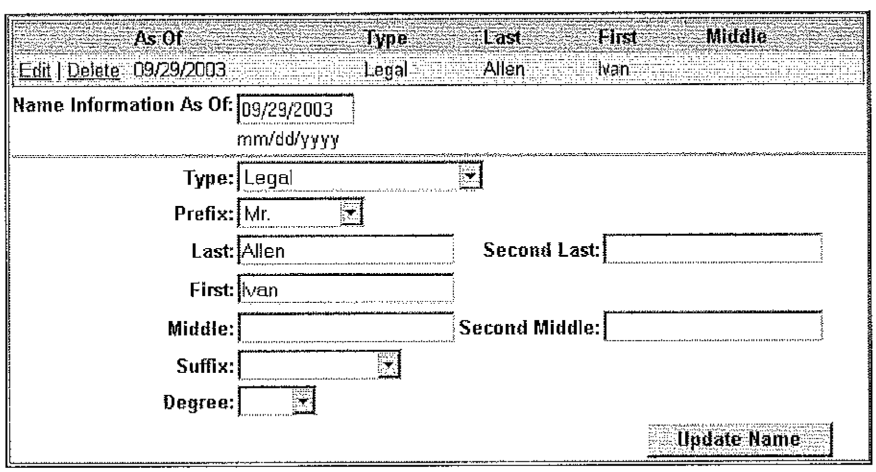
As you add names to the section, the names display in the gray table above the data entry fields. You can edit existing information, or enter new items of information.

Note: Each section contains a field you use to indicate the "As Of" date for the information you enter. You can either accept the default date, or change the date.

2. Optionally, edit the existing information.

   To edit information, do the following:

   – In sections supporting multiple values, click **Edit** for the value you want to edit. When you are finished, click **Update [Section Name]**. Click **Delete** to delete the information in the section.

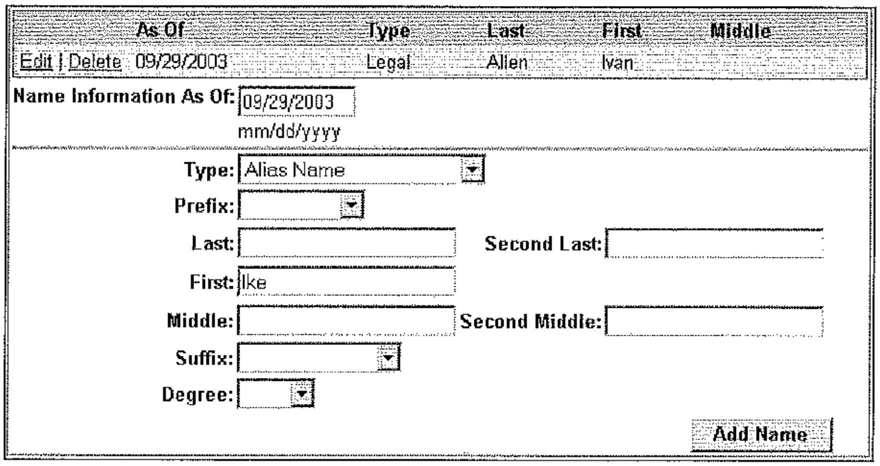


   – In sections supporting single values, click the field you want and type the information you want.

3. Optionally, add new information.

   To add information, do the following:

   – In sections supporting multiple values, click the **Type** list box and choose the type you want. Continue selecting fields and entering the information you want. When you are finished, click **Add [Section Name]**. NBS updates the information. The new information displays in the gray table at the top of the section.



   Note: You must select the **Type** option in sections supporting multiple values. If you attempt to add an item in these sections without selecting the **Type** option, the NBS displays a message indicating that one or more fields are in error and prompts you to select the **Type** field and try again. These procedures apply to any section that supports the entry of multiple values, such as the Name, Identification, Address, and Telephone Information sections.

   Also note that the Address Information and Telephone Information sections require you to indicate the use of the address and telephone number (such Home, Primary Work Place, etc.) by choosing an option in the **Use** field. If you do not select a use, the NBS displays a message indicating that one or more fields are in error and prompts you to select the **Use** field and try again.

   – In sections supporting single values, click the field you want and type the information you want.

4. Continue adding information to the sections you want. When you are finished, click **Submit**.

   NBS saves your changes and displays the Demographics tab on the View File page.

   Note: When adding or editing information in sections supporting multiple values, you must click the **Add [Section Name]** or **Update [Section Name]** button to complete your data entry. If you attempt to save your information by clicking the **Submit** button and you have not added or updated a value in a section supporting multiple values, NBS displays an error indicating that you have entered or edited information and have not clicked **Add** or **Update** in the multiple entry table.

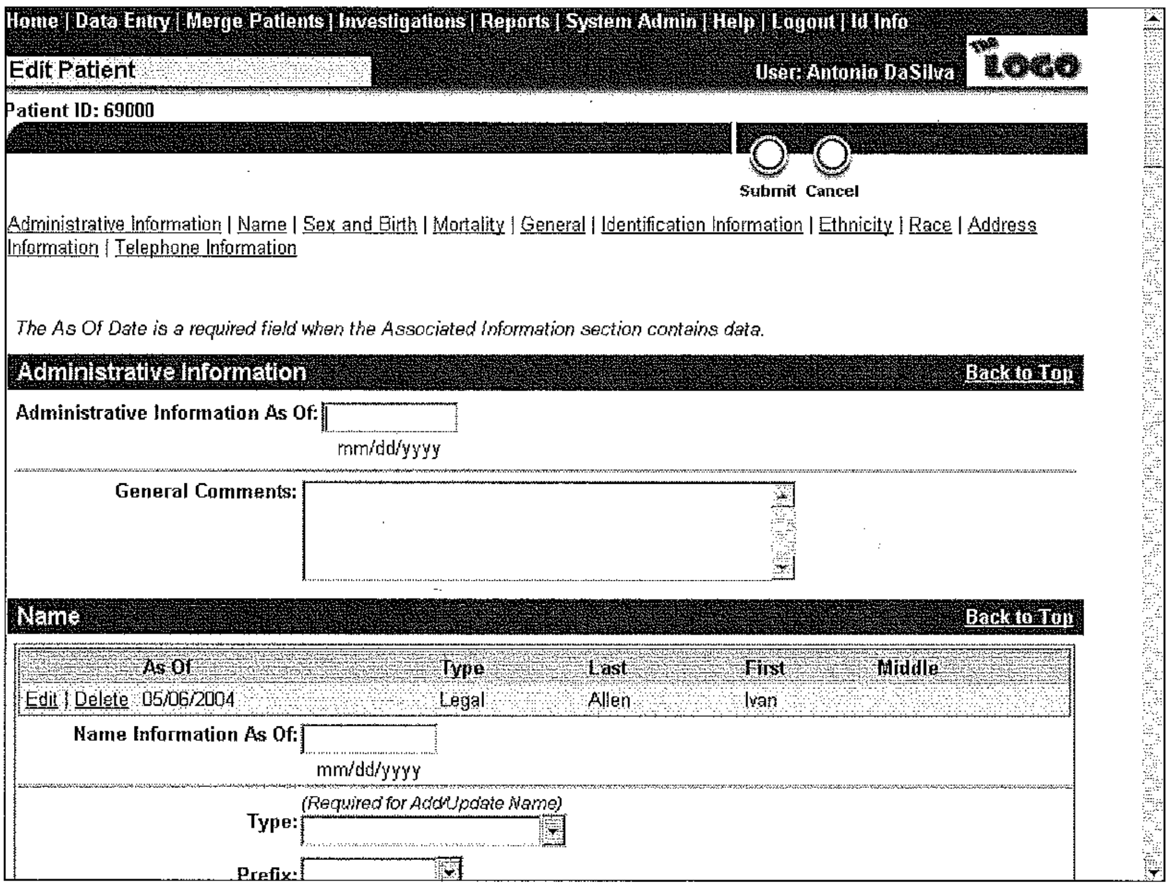
Editing Patient Information

You can change information about a patient, such as updating an address or correcting a misspelled name.

To edit patient information, perform the following procedure:

1. Find and view the patient you want. To find and view a patient, refer to "Finding and Viewing Patients" in this section.
2. Click **Edit**.

   NBS displays the Edit Patient page.



3. Do the following:

   – In sections supporting multiple values, click **Edit** for the value you want to edit. NBS displays the detail information for the selected information type. Continue making changes. When you are finished making changes, click **Update (section name)** to update the section

   – In sections supporting single values, click the field you want and type the information you want.

   NBS updates the information.

4. Continue editing and adding information to the sections you want. When you are finished, click **Submit**.

   NBS saves your changes and displays the View File page.

   Note: When adding or editing information in sections supporting multiple values, you must click the **Add [Section Name]** or **Update [Section Name]** button to complete your data entry. If you attempt to save your information by clicking the **Submit** button and you have not added or updated a value in a section supporting multiple values, NBS displays an error indicating that you have entered or edited information and have not clicked **Add** or **Update** in the multiple entry table.

Adding Providers

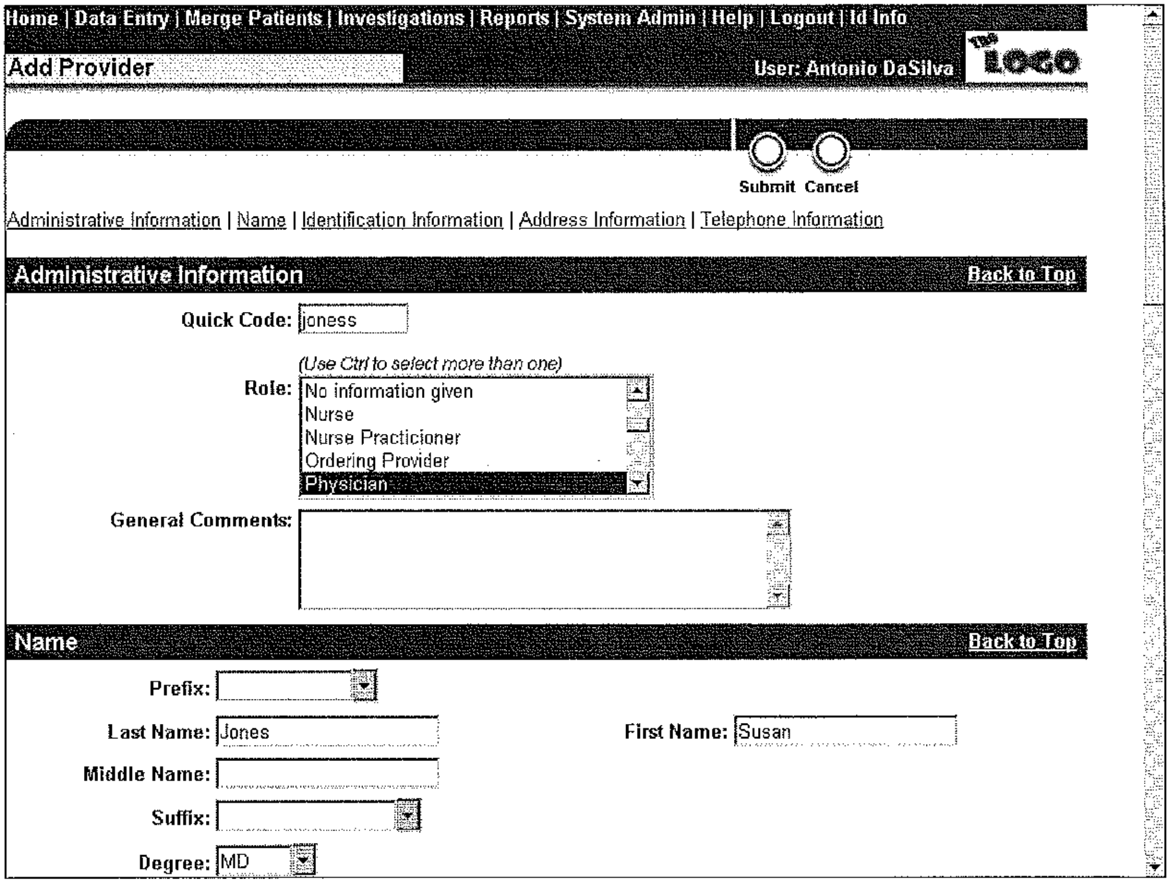
You can add a provider to the NBS records. You use the Add Provider page to add a provider. The Add Provider page displays a set of fields you use to enter administrative and demographic information, such as role, name, address, etc.

Note: In most cases, provider information is pre-populated into the NBS as part of the initial system configuration.

To add a provider, perform the following procedure:

1. Click **Add** in the Search Results page. To display the Search Result page, refer to "Finding and Viewing Providers" in this section.

NBS displays the Add Provider page.



2. Click the fields you want and type or choose the information you want.

Note: You can add a provider using as few or as many fields as you need.

You should consider entering a quick code for the provider in the **Quick Code** field. The quick code serves as an alias for the provider, enabling you to quickly enter information for a provider in the relevant sections of an investigation or observation data entry page. Rather than searching for a provider by name, you can type a short quick code and instantly display the information for a provider.

In sections supporting single values, click the field you want and type the information you want. In sections supporting multiple values (generally indicated by a gray table atop a set of fields), click the **Type** list box and choose the type you want. Continue selecting fields and entering the information you want. When you are finished, click **Add [Section Name]**. NBS updates the information. The new information displays in the gray table at the top of the section.

Also note that the Address Information and Telephone Information sections require you to indicate the use of the address and telephone number (such as Home, Primary Work Place, etc.) by choosing an option in the **Use** field. If you do not select a use, the NBS displays a message indicating that one or more fields are in error and prompts you to select the **Use** field and try again.

3. When you are finished, click **Submit**. You can click **Cancel** to cancel your changes and display the previous page.

   NBS displays the View Provider page and the provider information you entered.

   Note: When adding or editing information in sections supporting multiple values, you must click the **Add [Section Name]** or **Update [Section Name]** button to complete your data entry. If you attempt to save your information by clicking the **Submit** button and you have not added or updated a value in a section supporting multiple values, NBS displays an error indicating that you have entered or edited information and have not clicked **Add** or **Update** in the multiple entry table.

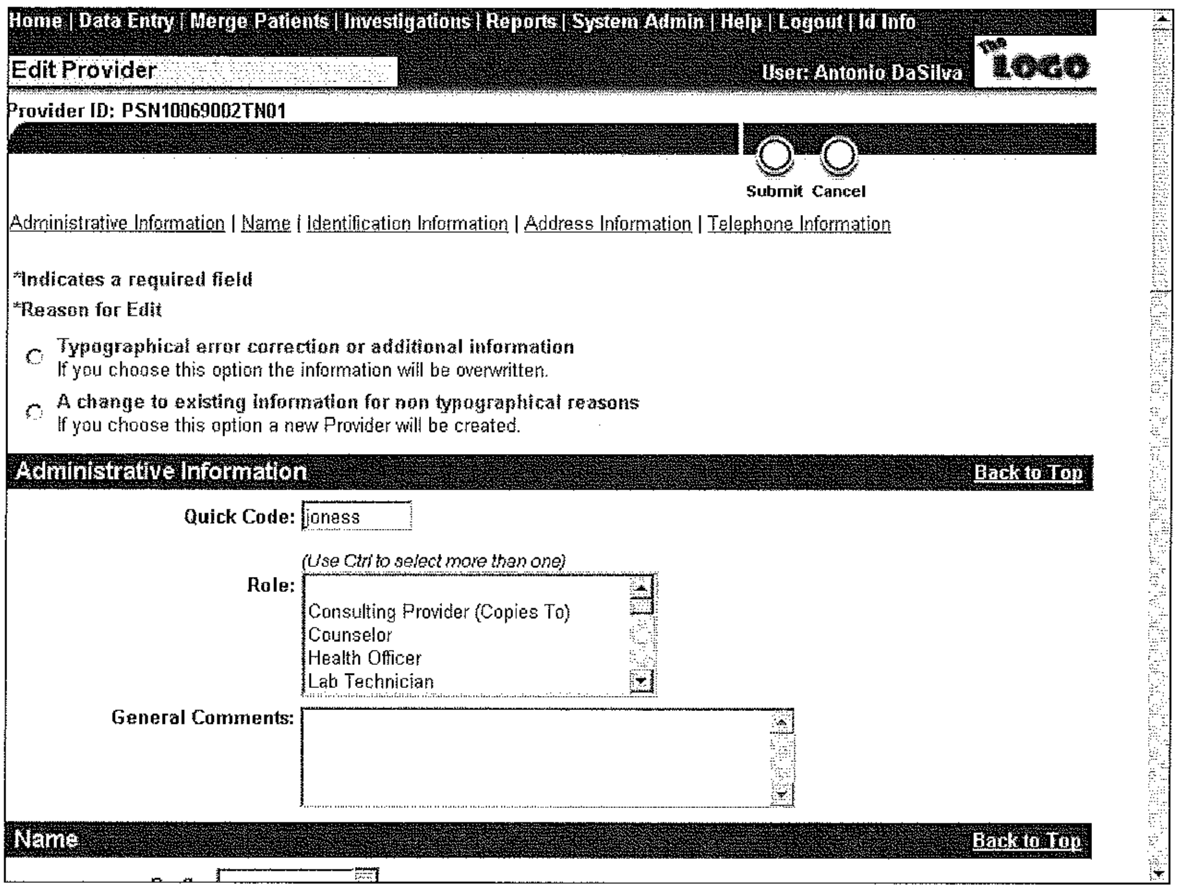
Editing Provider Information

You can change information about a provider, such as updating an address or correcting a misspelled name.

To edit provider information, perform the following procedure:

1. Find and view the provider you want. To find and view a patient, refer to "Finding and Viewing Providers" in this section.
2. Click **Edit**.

   NBS displays the Edit Provider page.



3. Indicate the reason for the edit. To indicate a reason for edit, do one of the following:

   – Click **Typographical error correction or additional information** to indicate a change due to error correction or additional information. Choosing this option overwrites the existing information.

   – Click **A change to existing information for non typographical reasons** to indicate a change due to non typographical reasons. Choosing this option creates a new provider.

4. Do the following:

   – In sections supporting multiple values, click **Edit** for the value you want to edit. NBS displays the detail information for the selected information type. Continue making changes. When you are finished making changes, click **Update (section name)** to update the section.

   – In sections supporting single values, click the field you want and type the information you want.

   NBS updates the information.

5. Continue editing and adding information to the sections you want. When you are finished, click **Submit**.

   NBS saves your changes and displays the View Provider page.

   Note: When adding or editing information in sections supporting multiple values, you must click the **Add [Section Name]** or **Update [Section Name]** button to complete your data entry. If you attempt to save your information by clicking the **Submit** button and you have not added or updated a value in a section supporting multiple values, NBS displays an error indicating that you have entered or edited information and have not clicked **Add** or **Update** in the multiple entry table.

Deleting Patients

You can delete a patient from the set of active NBS records. Once you delete a patient, the patient's record becomes inactive. You can perform searches on deleted patients by choosing **Deleted** in the Find Person page.

Note: You must have the appropriate security permissions to delete patients or work with deleted records.

To delete a patient, perform the following procedure:

1. Click **Delete** in the View Patient page. To display the View Patient page, refer to "Finding and Viewing Patients" in this section.

   Note: Use the View Patient page to view the patient's information. Do not use the View File page.

   NBS displays a message prompting you to confirm that you want to delete the patient.

2. Click **OK**.

NBS deletes the patient. If your attempt to delete a person is not successful, NBS displays the person Delete Denied page indicating that you cannot delete the patient.

Inactivating Providers

You can inactivate a provider from the set of active NBS records. Once you inactivate a provider, the patient's record becomes inactive.

Note: You must have the appropriate security permissions to inactivate providers.

To inactivate a provider, perform the following procedure:

1. Click **Inactivate** in the View Provider page. To display the View Provider page, refer to "Finding and Viewing Provider " in this section.

   NBS displays a message prompting you to confirm that you want to inactivate the provider.

2. Click **OK**.

   NBS inactivates the provider and displays the NBS Home page.

   Note: You cannot search for inactive providers, or re-activate providers whom you have inactivated.

Lesson Summary

In this lesson, you learned to perform the following functions:

- Add patients and providers.
- Edit patient and provider information.
- Delete patients and inactivate providers.

Lesson 3 – Finding and Viewing Organization Information

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- Find an organization.
- View information about an organization.

Finding and Viewing Organizations

You can search the NBS to find an organization using the Find Organization page.

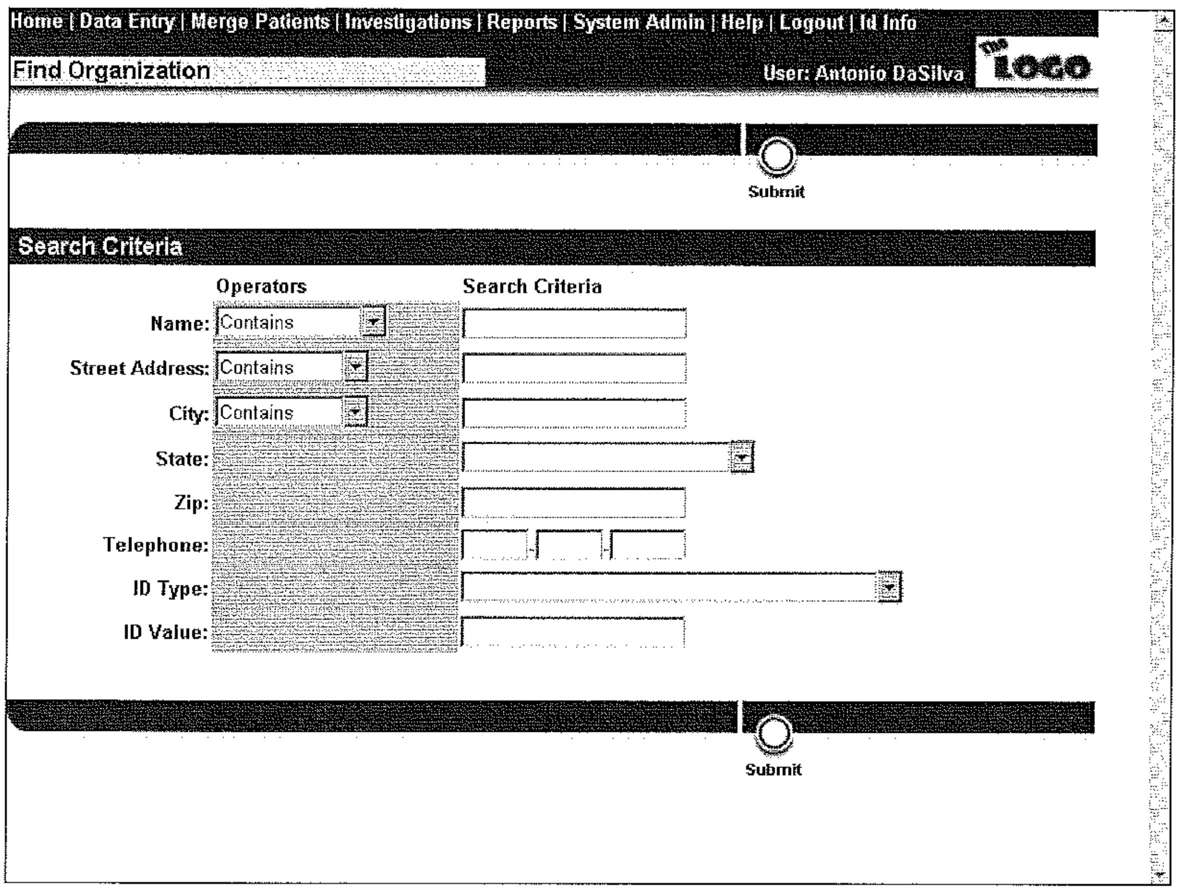
To search for an organization, perform the following procedure:

1. Click **Data Entry** on the navigation bar.

   NBS displays the Organization link.

2. Click **Organization**.

   NBS displays the Find Organization page.



3. Click the fields you want and type or select the information you want.
4. Optionally, click the **Operators** list box for the field you want and choose the operator you want.
5. Click **Submit**.

   NBS displays the Search Results page and the results of your search. If no match exists, NBS displays a message indicating that your search has no matches.

   From the Search Results page, you can do the following:

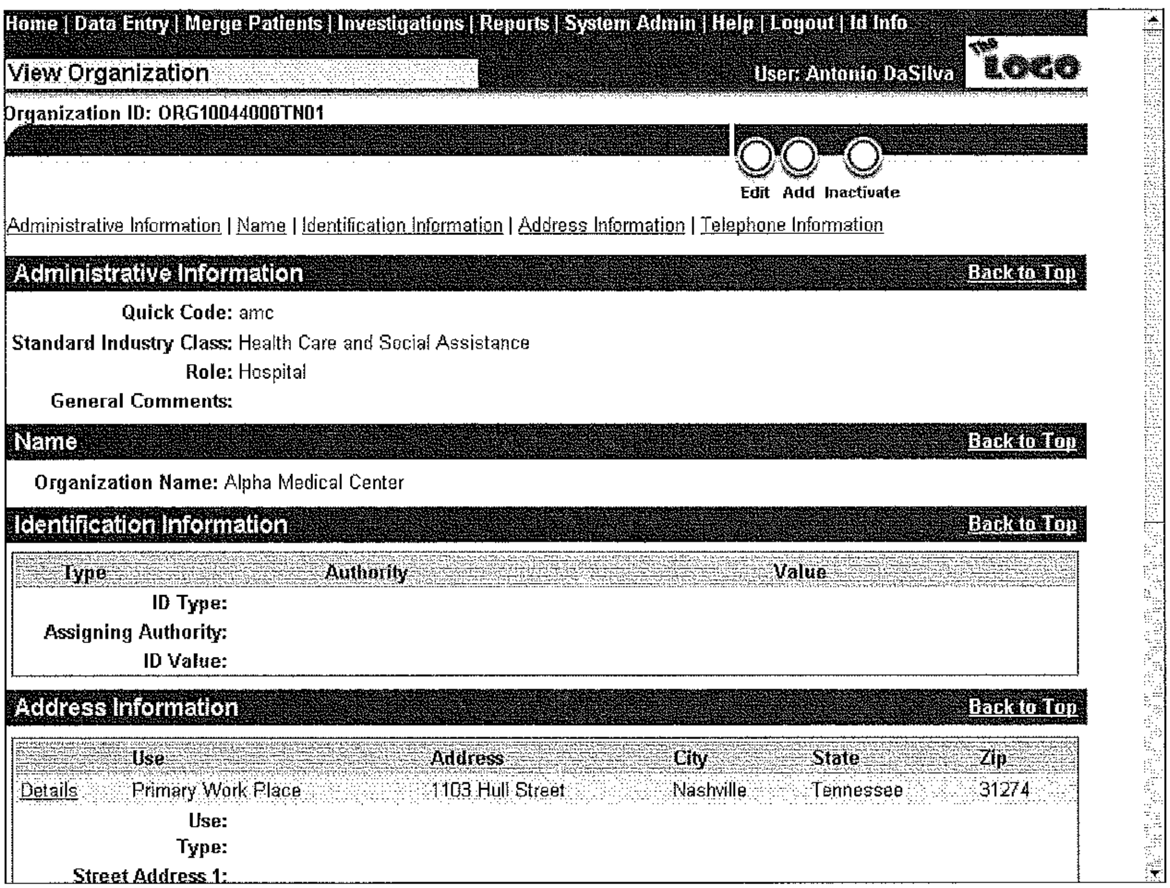
   – Perform a new search. To perform a new search, click **New Search** and repeat steps 3–5 as described above.

   – Refine your existing search. To refine your existing search, click **Refine Search** and repeat steps 3–5 as described above.

   Note: You can also add an organization from the Search Results page.

6. Click **View** to select the organization you want.

   NBS displays the View Organization page.



Once you view the organization's information, you can do the following:

- Display the Search Results page and perform a new or refined search.
- Add a new organization.
- Edit the organization's information.
- Inactivate the organization.

Lesson Summary

In this lesson, you learned to perform the following functions:

- Find an organization.
- View information about an organization.

Lesson 4 – Adding and Editing Organization Information

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- Add an organization.
- Edit organization information.
- Inactivate an organization.

Adding Organizations

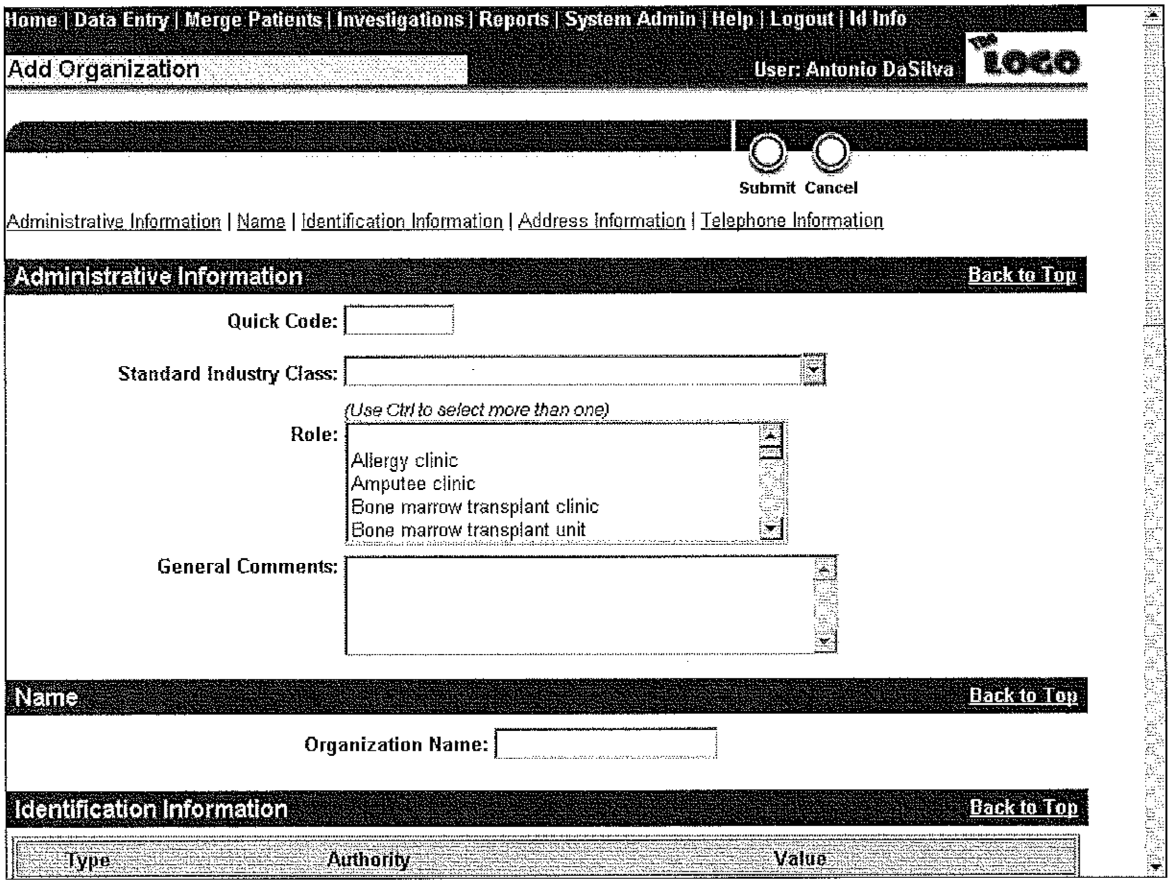
You can add an organization to the NBS records. Organizations include such things as hospitals, labs, and doctors' offices.

Note: In most cases, organization information is pre-populated into the NBS as part of the initial system configuration.

To add an organization, perform the following procedure:

1. Click **Add** in the View Organization or Search Results page. To display the View Organization or Search Results page, refer to "Finding and Viewing Organizations" in this section.

NBS displays the Add Organization page.



2. Click the fields you want and type or choose the information you want.

   In sections supporting single values, click the field you want and type or choose the information you want. In sections supporting multiple values, click the **Type** list box and choose the type you want. Continue selecting fields and entering the information you want. When you are finished, click **Add [Section Name]**. NBS updates the information. The new information displays in the gray table at the top of the section.

   Also note that the Address Information and Telephone Information sections require you to indicate the use of the address and telephone number (such as Home, Primary Work Place, etc.) by choosing an option in the **Use** field. If you do not select a use, the NBS displays a message indicating that one or more fields are in error and prompts you to select the **Use** field and try again.

3. When you are finished, click **Submit**.

   NBS saves your changes and displays the View Organization page.

   Note: When adding or editing information in sections supporting multiple values, you must click the **Add [Section Name]** or **Update [Section Name]** button to complete your data entry. If you attempt to save your information by clicking the **Submit** button and you have not added or updated a value in a section supporting multiple values, NBS displays an error indicating that you have entered or edited information and have not clicked **Add** or **Update** in the multiple entry table.

Once you add the organization information, you can do the following:

- Add another organization.
- Edit the existing organization information.
- Inactivate the organization.

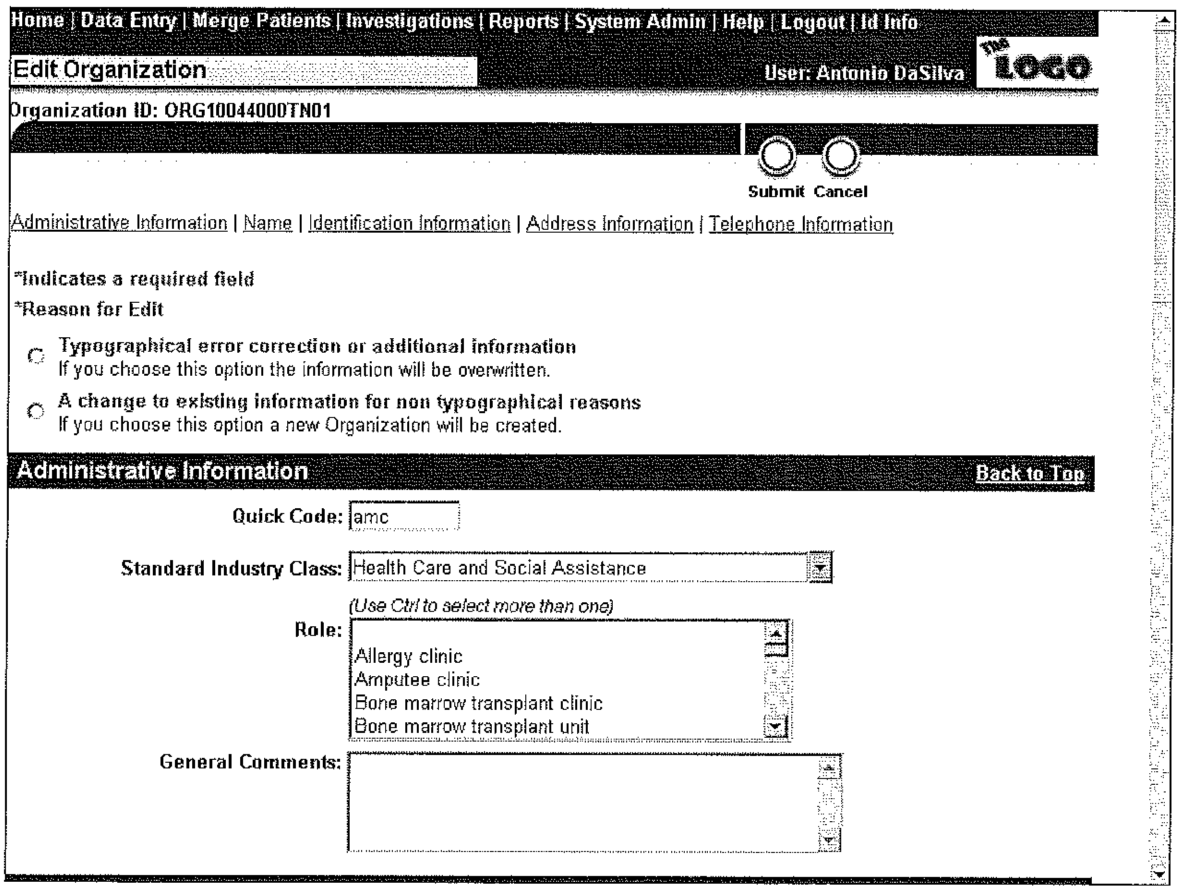
Editing Organization Information

You can change information about an organization, such as updating an organization's address or correcting a misspelled name.

To edit organization information, perform the following procedure:

1. Find and view the organization you want. To find and view an organization, refer to "Finding and Viewing Organizations" in this section.
2. Click **Edit** in the View Organization page.

   NBS displays the Edit Organization page.



3. Indicate the reason for the edit. To indicate a reason for edit, do one of the following:

   – Click **Typographical error correction or additional information** to indicate a change due to error correction or additional information. Choosing this option overwrites the existing information.

   – Click **A change to existing information for non typographical reasons** to indicate a change due to non typographical reasons. Choosing this option creates a new provider.

4. Do the following:

   – In sections where single values display, click the field you want and type or choose the information you want.

   – In sections where multiple values display, click **Edit** for the value you want to edit. NBS displays the detailed information for the selected information type. Continue making changes. When you are finished making changes, click **Update (section name)** to update an existing value in a section where multiple values display.

   NBS updates the information.

5. Click **Submit** to save your changes.

   NBS saves your changes and displays the View Organization page.

   Note: When adding or editing information in sections supporting multiple values, you must click the **Add [Section Name]** or **Update [Section Name]** button to complete your data entry. If you attempt to save your information by clicking the **Submit** button and you have not added or updated a value in a section supporting multiple values, NBS displays an error indicating that you have entered or edited information and have not clicked **Add** or **Update** in the multiple entry table.

Inactivate Organizations

You can inactivate an organization from the set of active NBS records. Once you inactivate an organization, the organization's record can no longer be searched, viewed, or edited.

Note: You must have the appropriate security permissions to inactive organizations.

To inactivate an organization, perform the following procedure:

1. Click **Inactivate** in the View Organization page. To display the View Organization page, refer to "Finding and Viewing Organizations" in this section.

   NBS displays a message prompting you to confirm that you want to inactivate the organization.

2. Click **OK**.

   NBS inactivates the organization and displays the NBS Home page.

Lesson Summary

In this lesson, you learned to perform the following functions:

- Add an organization.
- Edit organization information.
- Inactivate an organization.

Section Summary

In this section, you learned to perform the following functions:

- Find and view patient and provider information.
- Add, edit, and delete patient and provider information.
- Find and view organization information.
- Add, edit, and inactivate organization information.

Section 3 – Working with Lab Reports, Morbidity Reports, and Vaccinations

Section Objectives

After completing this section, you will be able to perform the following functions:

- Review observations.
- Assign program areas and jurisdictions to observations.
- View, add, and edit, observations and vaccination.

Lesson 1 – Understanding Observations

Lesson Objectives

After completing this section, you will be able to perform the following functions:

- Review observations.
- Assign program areas and jurisdictions to observations.

Understanding Observations

In the NEDSS terminology, *observations* are primarily reports that come into the health department from a reporting source, such as a laboratory or a doctor's office. In general, observations trigger the start of a public health case investigation. They can also complement an existing investigation.

While observations can also refer to other information that is part of an investigation into a report that comes into the health department, this lesson will focus specifically on *morbidity reports* and *lab reports*:

- Morbidity reports contain basic information regarding a single instance of a condition and originate from a health care provider, such as a hospital or doctor's office either as a manual (paper) report or as an electronic report entered remotely via the web from a provider's office.
- A lab report contains lab order and results information and originates from a laboratory in either a manual or electronic format.

The NBS enables you to manually enter morbidity report and lab report information received from providers and clinical laboratories. Depending on a user's access rights to the NBS, morbidity and lab information can be entered with or without accessing the patient registry information. You will learn more about these options later in this section.

With manual lab report and morbidity report entry, you enter the information contained on the paper copy of the report into the NBS. If the report contains information about a patient and/or providers that are not in the NBS, you must first add the patient and/or provider information before you can add the report information.

Note: External users or non-trusted users can add patient information. However, they cannot search for patients since they do not have access to the patient registry. Similarly, non-trusted or external users can search for provider information, but cannot add new providers to the system. Along with the business process intended to review data entry by external users, the NBS provides a means to deal with duplicate records resulting from the external users adding patients that may be in the system. You will learn more about external users later in this section.

Electronic Lab Reports

In addition to accepting lab reports you physically enter into the NBS, the system's messaging component can securely connect with organizations to accept electronic lab reports (ELRs). Upon receipt of an electronic lab report, the NBS examines the information on (also called attributes of) the lab report and either associates it with an existing patient in the system or creates a new patient if no information is present. It also associates the lab report with existing providers and facilities in the system. Again, if no information is present, the NBS creates new provider/facility information using the information contained in the lab report. To apply security to the lab report, the NBS also derives and assigns the lab report a program area and jurisdiction based on the information contained in the report. (Note: If either program area or jurisdiction cannot be derived the NBS routes the report to the Observations Needing Program Area or Jurisdiction Assignment. The NBS allows limited access to this queue in order to secure the reports until they are assigned a program area and jurisdiction.) Lastly, NBS routes it to the Observations Needing Review queue where it is accessible for review by the appropriate user to determine if it requires follow-up, if it should be associated with an existing investigation, or if no action on the lab report is needed.

Functionality for ELRs is the same as that for manual lab reports, except for some important distinctions detailed below. For lab reports submitted electronically, the system displays a note at the top of the page indicating that the lab report was submitted electronically. In addition, the report cannot be edited, but provides a text box for the user to enter comments.

Once any lab report (ELR or manual) enters the work queue, Observations Needing Review, you can perform the following functions:

- View the lab report.
- Mark the lab report as reviewed.
- Transfer ownership of the lab report.
- Create an investigation based on the lab report.
- Associate the lab report to an existing investigation.

Note: Your options vary depending on your security permissions. Not all options may be available to you.

Reviewing Observations

As observations enter the NBS through ELR, remote entry or batch data entry, the system automatically updates the Observations Needing Review work queue with those lab reports and morbidity reports. When viewing the queue you will only see those lab reports and morbidity reports to which you have access (i.e., those that are assigned to your program area and jurisdiction). You can view these observations and determine what action to take with them. You use the Observations Needing Review page to view the new observations.

Once you view the observations, you can determine your next course of action based on the available information. In some cases, you may need to initiate an investigation based on the lab report or morbidity report. In other cases, a user may simply mark the observation report as reviewed and go on to the next item on the list.

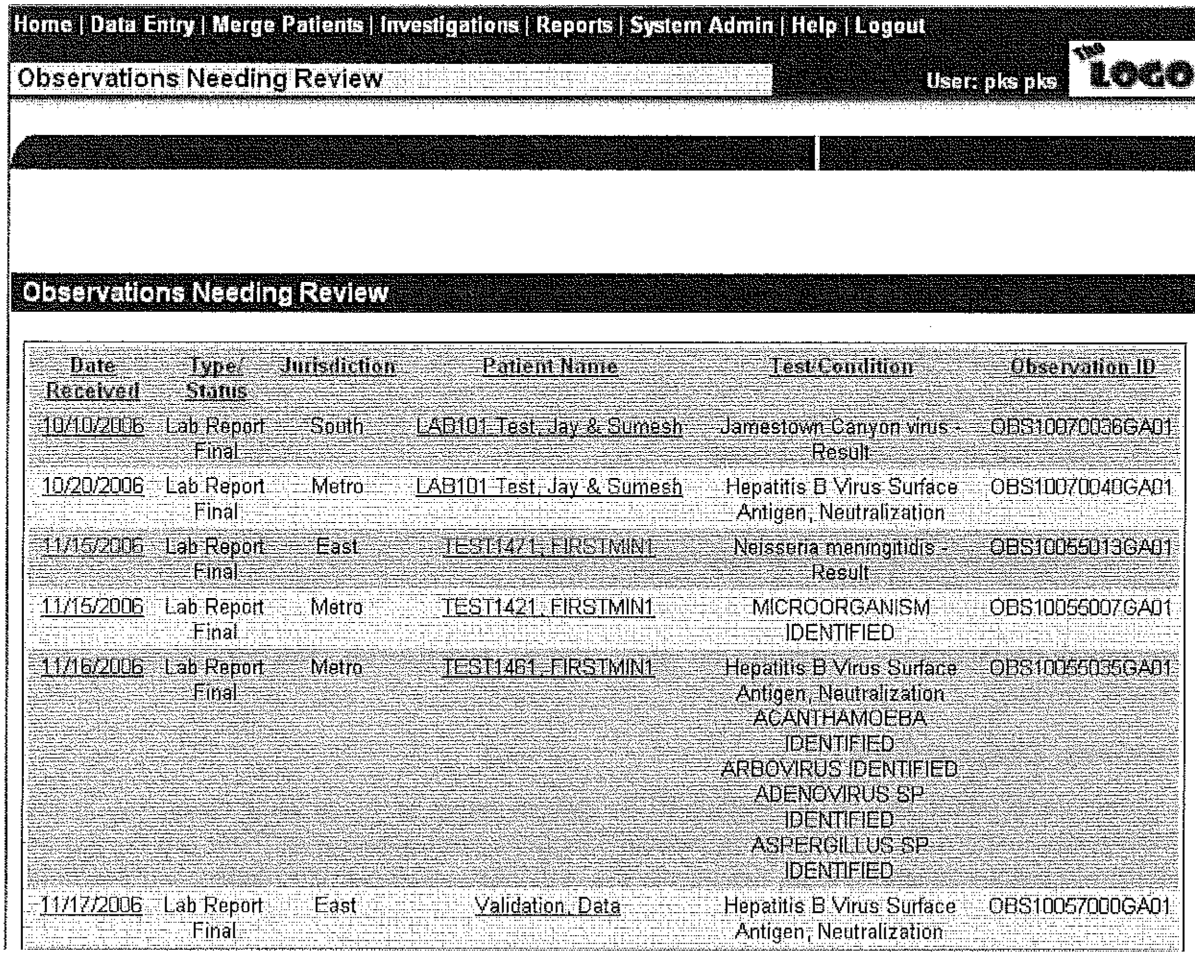
By marking the observation as reviewed, you indicate to the system that it warrants no further action. The observation falls off the Observations Needing Review work queue and is stored as part of the patient's file. You can access the observation using the Events tab in the View File page for the patient.

To review new observations, perform the following procedure:

1. Click **Observations Needing Review** on the NBS home page.

   Note: Click **Home** from the top navigation menu to display the NBS Home page, if it is not already displayed.

   The NBS displays the Observations Needing Review page.



Date Received	Type/ Status	Jurisdiction	Patient Name	Test/Condition	Observation ID
10/10/2006	Lab Report Final	South	LAB101 Test, Jay & Sumesh	Jamestown Canyon virus - Result	OBS10070036GA01
10/20/2006	Lab Report Final	Metro	LAB101 Test, Jay & Sumesh	Hepatitis B Virus Surface Antigen, Neutralization	OBS10070040GA01
11/15/2006	Lab Report Final	East	TEST1471, FIRSTMIN1	Neisseria meningitidis - Result	OBS10055013GA01
11/15/2006	Lab Report Final	Metro	TEST1421, FIRSTMIN1	MICROORGANISM IDENTIFIED	OBS10055007GA01
11/16/2006	Lab Report Final	Metro	TEST1461, FIRSTMIN1	Hepatitis B Virus Surface Antigen, Neutralization ACANTHAMOEBA IDENTIFIED ARBOVIRUS IDENTIFIED ADENOVIRUS SP IDENTIFIED ASPERGILLUS SP IDENTIFIED	OBS10055035GA01
11/17/2006	Lab Report Final	East	Validation, Data	Hepatitis B Virus Surface Antigen, Neutralization	OBS10057000GA01

   The Observations Needing Review page displays a list of lab reports and morbidity reports associated with your program area and jurisdiction

   Note: Click **Next** and **Previous** to move through the list of observations. The list can also be sorted by clicking on any of the column headings.

2. Click **Patient Name** for the observation you want. The NBS displays the View File page for the patient. New observations display on the Summary tab in the New Lab Reports for Review and New Morbidity Reports for Review sections.

Note: From the Observations Needing Review page you can click **Date Received** for the observation to display the View Morbidity Report page or View Lab Report page, depending on your selection.

3. Review the contents of the patient file to determine if the lab or morbidity report should be associated with an existing investigation. If so, click on the **Start Date** to go the the View Investigation page and click the **Manage Observations** button at the top of the View Investigation page.
4. Optionally from the View File page, click on the **Date Received** of either the lab report or the morbidity report to view the contents of the observation. At this point, you have a number of options:
   - You can click **Mark as Reviewed** if you determine that the observation requires no further action. NBS marks the observation as reviewed and displays the View Lab Report page or View Morbidity Report page, depending on your initial selection. Once you mark the report as reviewed, the lab report drops off your work queue on the Observations Needing Review page. The number associated with the Observations Needing Review link on the Home page also decreases by one.
   - You can transfer ownership of the observation. You will learn more about transferring ownership of an observation in an upcoming lesson.
   - You can edit and delete the observation, depending on the type of observation and your security permissions. You will learn more about editing and deleting observations in an upcoming lesson.
   - You can create an investigation based on the observations. You will learn more about creating and investigation from an observation in an upcoming lesson.
   - You can click **Print** to print the observation as a pdf file.

   Note: Your options may vary depending on the security permissions assigned to your role. Not all options may be available to you.

Assigning Observations to Program Areas and Jurisdictions

While the NBS programmatically derives and assigns observations to a specific program area and jurisdiction based on the information contained within the report, some observations may not contain enough information for the system to make a determination. This might be due to incomplete data entry on the part of a provider or caseworker, or may be due to insufficient mappings between the laboratory tests and conditions to program area and/or between addresses and jurisdictions in the NBS.

In either case, you may be required to manually assign a program area and/or jurisdiction for the observation. By assigning a program area or jurisdiction, you transfer the observation's ownership to one of the various program areas and jurisdiction supported by the NBS. This program area and jurisdiction assignment determines the security the NBS places on the observation. They may or may not reflect the Health Department's programmatic and/or geographic distinctions. You use the Transfer Ownership page to transfer responsibility for an observation to another program area and/or jurisdiction.

To assign a program area and/or jurisdiction to an observation, perform the following procedure:

1. Click **Observations Needing Program or Jurisdiction Assignment** on the NBS home page.

   Note: Click **Home** from the top navigation menu to display the NBS Home page, if it is not already displayed.

   The NBS displays the Observations Needing Assignment page.

   The Observations Needing Assignment page displays a list of lab reports and morbidity reports requiring program area and/or jurisdiction assignment.

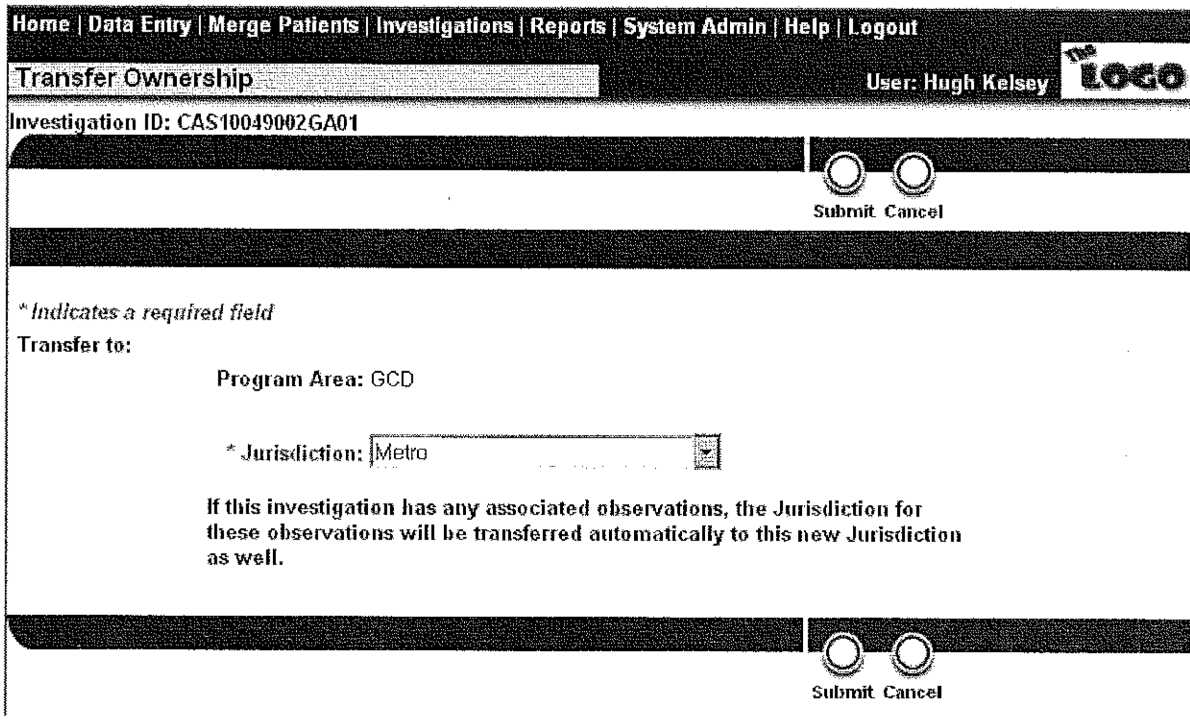
   Note: Click **Next** and **Previous** to move through the list of observations. Note that if you reach the maximum limit of 500 items in your work queue, you cannot view any new observations without processing the existing ones. By default, the NBS will display up to 300 Laboratory Reports and up to 200 Morbidity Reports. Also, the list can be sorted by clicking on the column headings.

2. Click **Date Received** for the observation you want.

   NBS displays the View Morbidity Report page or View Lab Report page, depending on your selection.

3. Click **Transfer Ownership**.

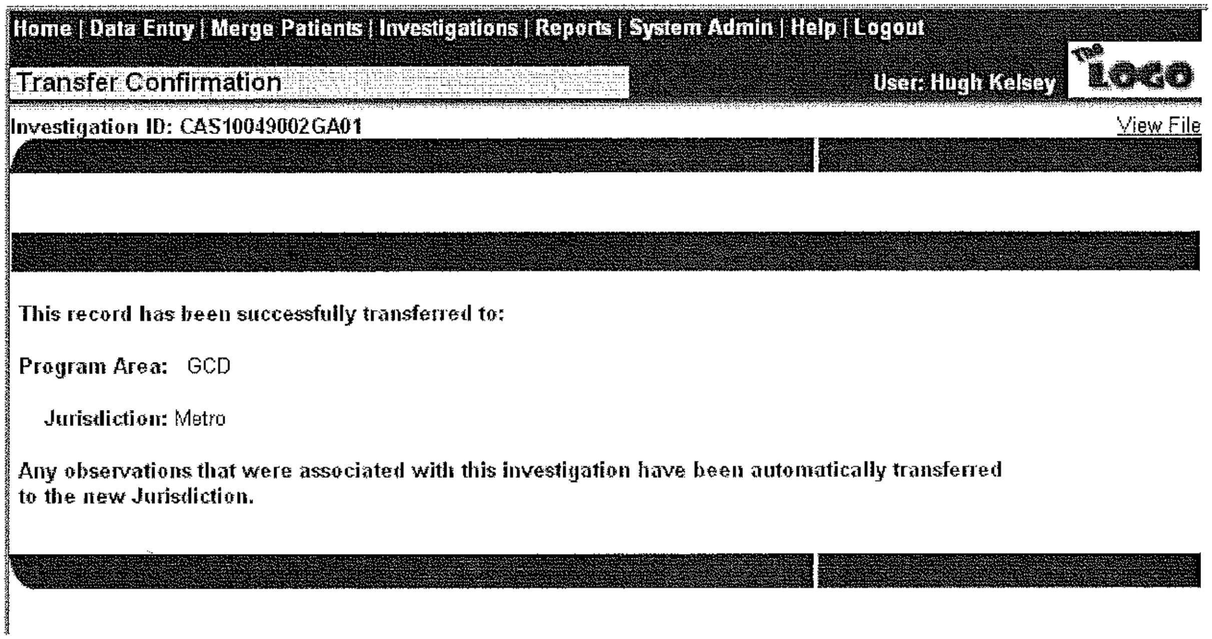
   The NBS displays the Transfer Ownership page.



4. Optionally, click **Program Area** and choose the program area you want.
5. Optionally, click **Jurisdiction** and choose the jurisdiction you want.

6. Click **Submit.**

   The NBS transfers ownership of the observation and displays the Transfer Confirmation page.



   Note: If you transfer ownership of the observation to a program area and/or jurisdiction for which you do not have permission, you will no longer be able to work with the observation.

7. Do one of the following:
   - Click the **Home** link.
   - Click **Home** or any other option on the navigation bar.

   The NBS displays the NBS Home page.

Lesson Summary

In this lesson, you learned to perform the following functions:

- Review observations.
- Assign program areas and jurisdictions to observations.

Lesson 2 – Viewing, Adding, and Editing Laboratory Reports

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- View a lab report.
- Add a lab report.
- Edit a lab report.

Viewing a Lab Report

You can view a summary listing of all existing lab reports in the patient's file. You view the individual lab reports using the View Lab Report page.

Note: For a new lab report, once you perform an operation such as marking the lab report as reviewed or creating an investigation based on a lab report, the NBS removes that lab report from the Observations Needing Review queue that is on the Home page.

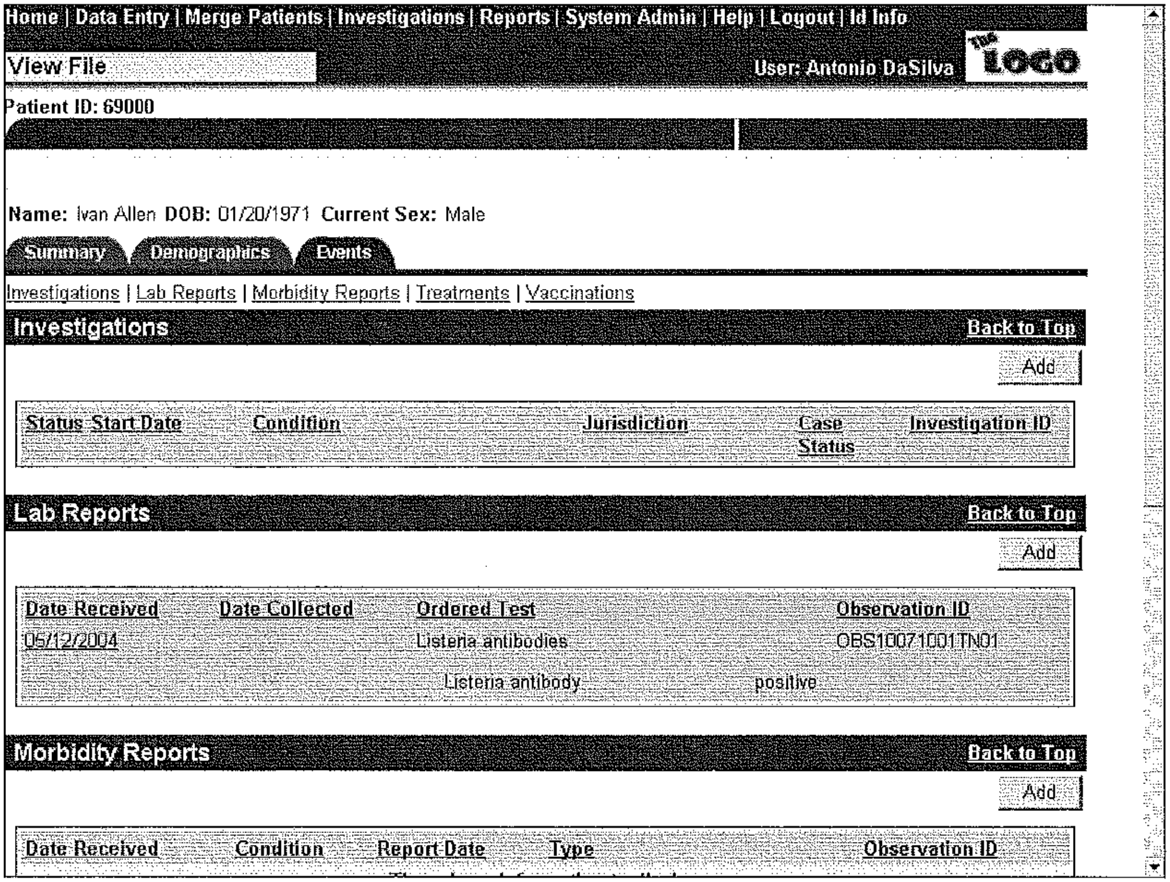
To view an existing lab report, perform the following procedure:

1. Display the View File page for the patient. To find and view a patient, refer to "Finding and Viewing Patient and Provider Information" in "Section – 2, Working with Patient, Provider, and Organization Information."

   The NBS displays the contents of the View File page for the selected patient.

2. Click the **Events** tab.

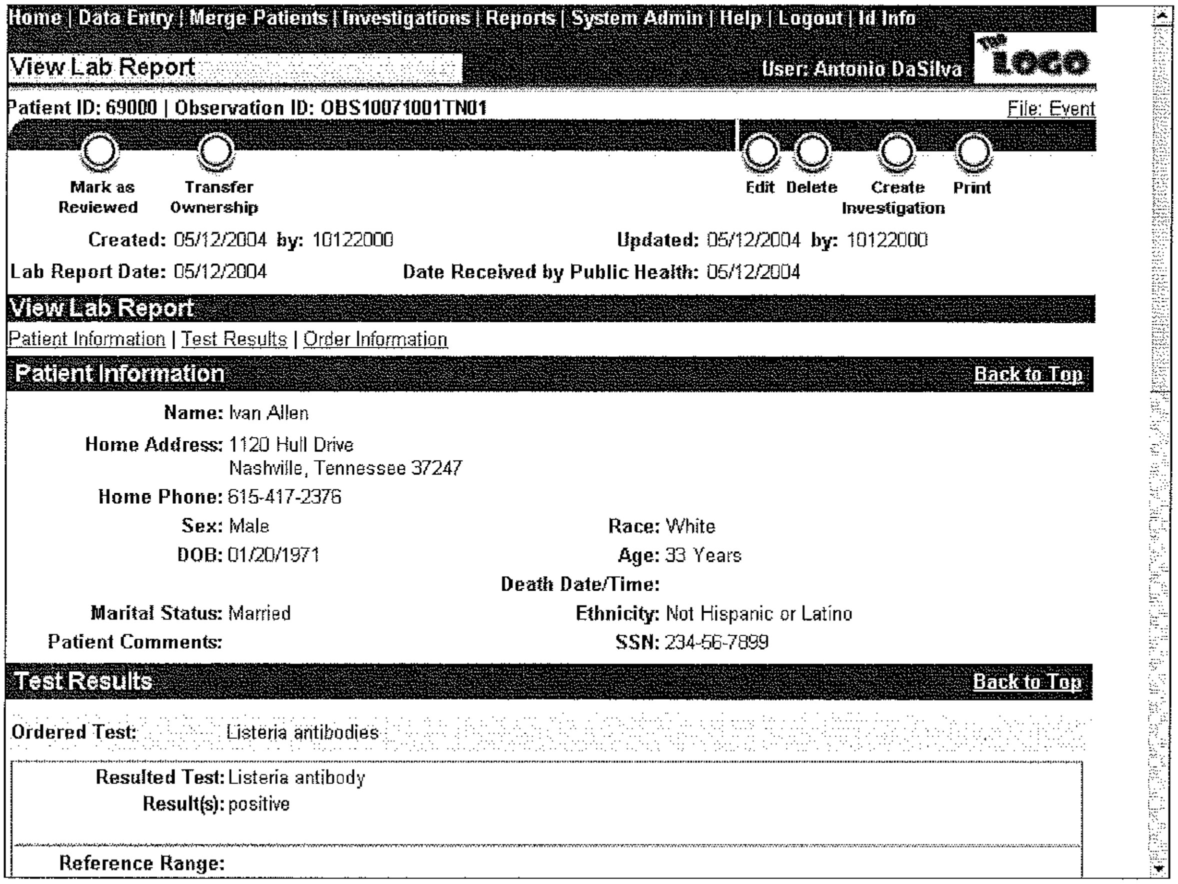
   The NBS displays the contents of the Events tab.



3. Click **Date Received** for the lab report you want in the Lab Reports section.

   Note: You can scroll to the Lab Reports section, or click the **Lab Reports** navigation link at the top of the page.

The NBS displays the View Lab Report page and the details of the lab report.


Home | Data Entry | Merge Patients | Investigations | Reports | System Admin | Help | Logout | Id Info

View Lab Report — User: Antonio DaSilva — LOGO

Patient ID: 69000 | Observation ID: OBS10071001TN01 — File: Event

Mark as Reviewed | Transfer Ownership | Edit | Delete | Create Investigation | Print

Created: 05/12/2004 by: 10122000 — Updated: 05/12/2004 by: 10122000

Lab Report Date: 05/12/2004 — Date Received by Public Health: 05/12/2004

View Lab Report

Patient Information | Test Results | Order Information

Patient Information — Back to Top

Name: Ivan Allen
Home Address: 1120 Hull Drive, Nashville, Tennessee 37247
Home Phone: 615-417-2376
Sex: Male — Race: White
DOB: 01/20/1971 — Age: 33 Years
Death Date/Time:
Marital Status: Married — Ethnicity: Not Hispanic or Latino
Patient Comments: — SSN: 234-56-7899

Test Results — Back to Top

Ordered Test: Listeria antibodies
Resulted Test: Listeria antibody
Result(s): positive
Reference Range:

From the View Lab Report page, you can do the following:

- Edit the lab report. You cannot edit electronic lab reports or lab reports enter by an external user. Please refer to the section on System Administration about how to indicate that a user is an external user. Note that electronic lab reports display a notice at the top of the page indicating that the report has been electronically submitted.
- Delete the lab report. You cannot delete electronic lab reports.
- Mark the lab report as reviewed.
- Transfer ownership of the lab report.
- Create an investigation based on the lab report.
- Print the lab report.
- Return to the patient's View File page.

Note: Your options vary depending on your security permissions assigned. Not all options may be available to you.

Adding a Lab Report from the Events Tab

You can add a lab report from the Events tab on the View File page. You add a lab report using the Add Lab Report page.

To add a lab report, perform the following procedure:

1. Display the View File page for the patient. To find and view a person, refer to "Finding and Viewing Patient and Provider Information" in "Section – 2, Working with Patient, Provider, and Organization Information."

   The NBS displays the contents of the View File page for the selected patient.

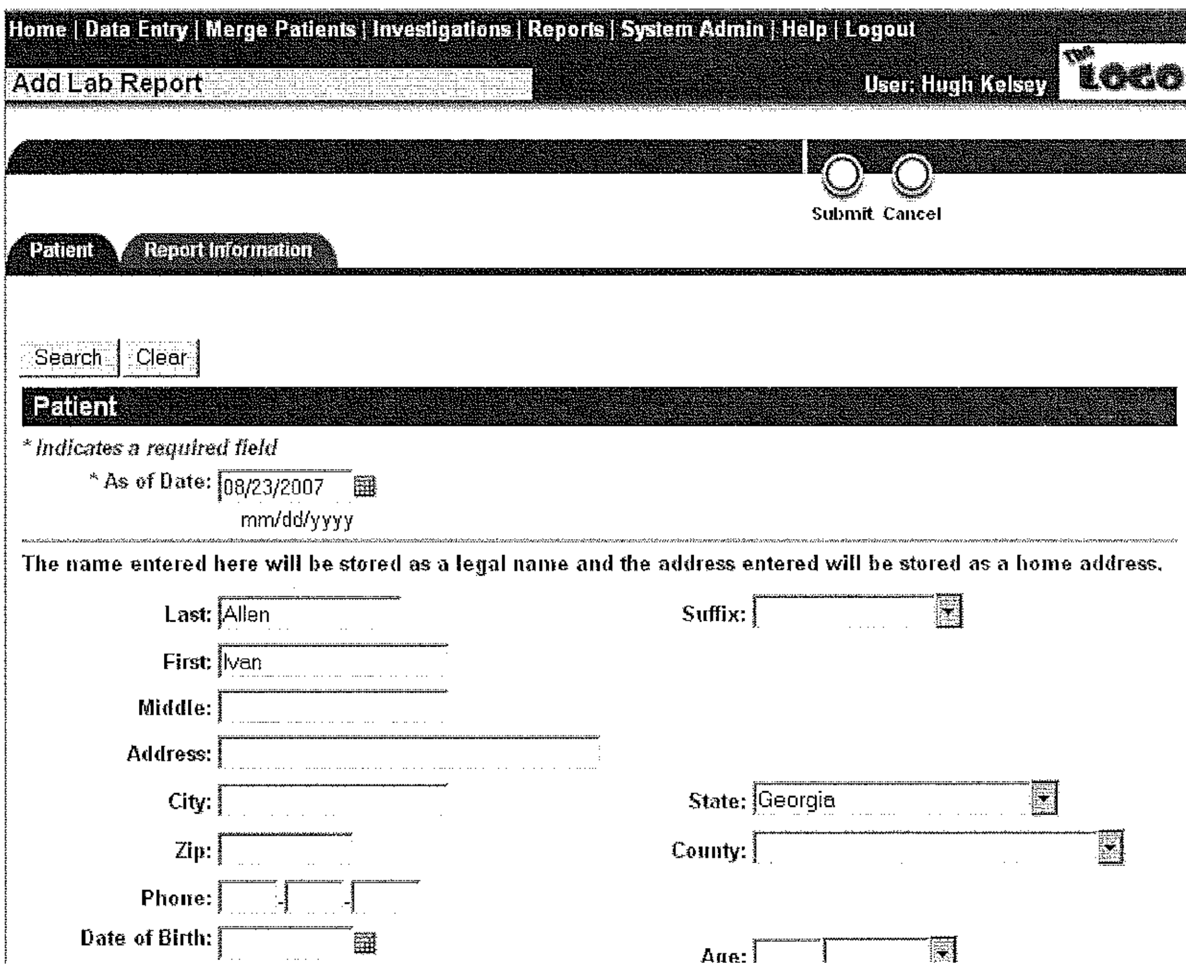
2. Click **Events**.

   The NBS displays the contents of the Events tab.

3. Click **Add** in the Lab Reports section.

   Note: You can scroll to the Lab Reports section, or click the **Lab Reports** navigation link at the top of the page.

   The NBS displays the Add Lab Report page and the contents of the Patient tab.



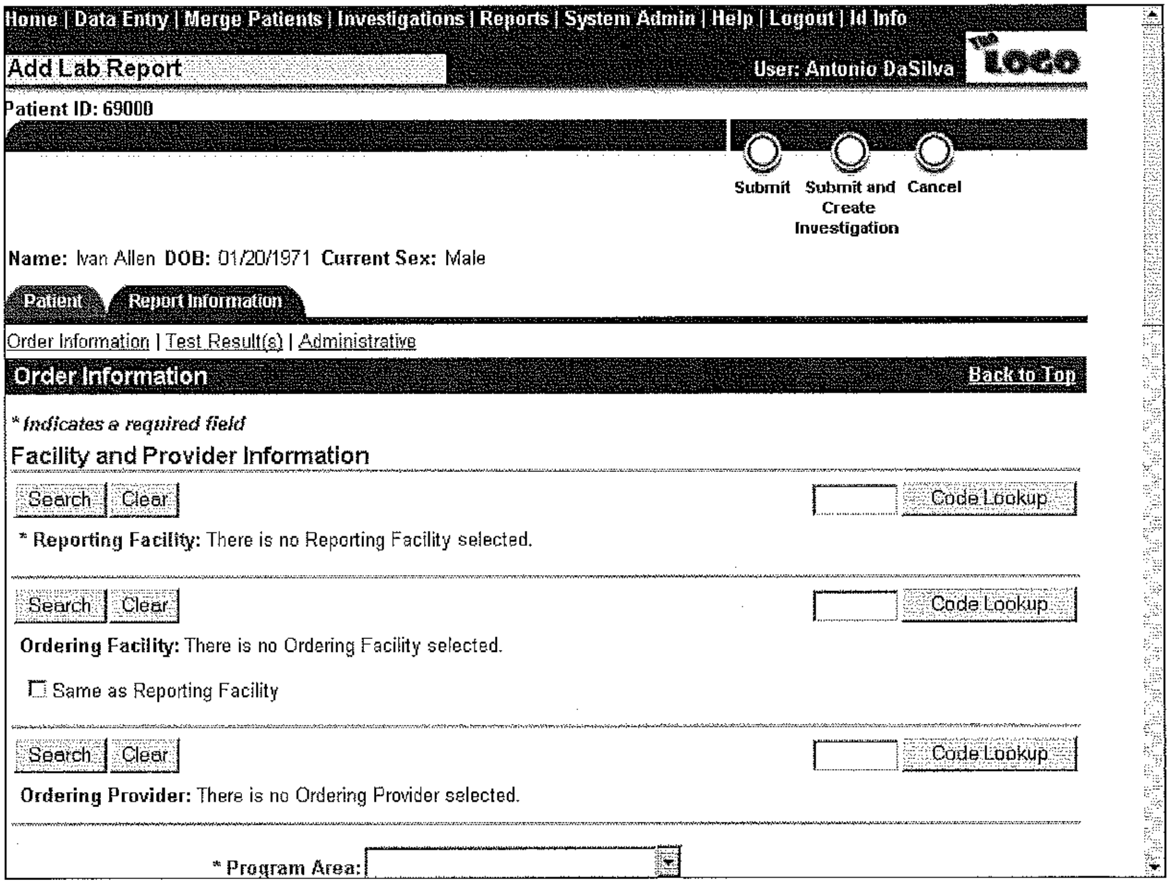
The current patient demographic information displays in the available fields on the Patient tab. You can add new demographic information, edit existing demographic information, or remove all pre-populated information. The changes you make to the information are assigned the "as of" date indicated in the **Basic Demographic Data As Of** field and is reflected in the master patient record. The NBS defaults the as of date to the current system date.

Note: The master patient record (MPR) is the historical record of all demographic and event information for the patient. All changes you make to the patient's information are recorded in the Master Patient Record. When you View File for the patient, the NBS will display the information with the most recent "as of" date.

Note: If the appropriate as of date for the event is different from the current system date the user must edit the as of date. Among other uses the NBS calculates the Reported Age by subtracting the patient's date of birth from the **Basic Demographic Data As Of** when adding an event. The NBS uses the **Basic Demographic Data As Of** date field to populate the as of dates for each section of the patient demographics associated with the lab report being entered. For example, the NBS uses the **Basic Demographic Data As Of** date for the **Sex and Birth Information As of** date, which is the as of date for Reported Age.

4. Optionally, edit the patient's demographic information.
5. Click **Report Information.**

The NBS displays the contents of the Report Information tab.

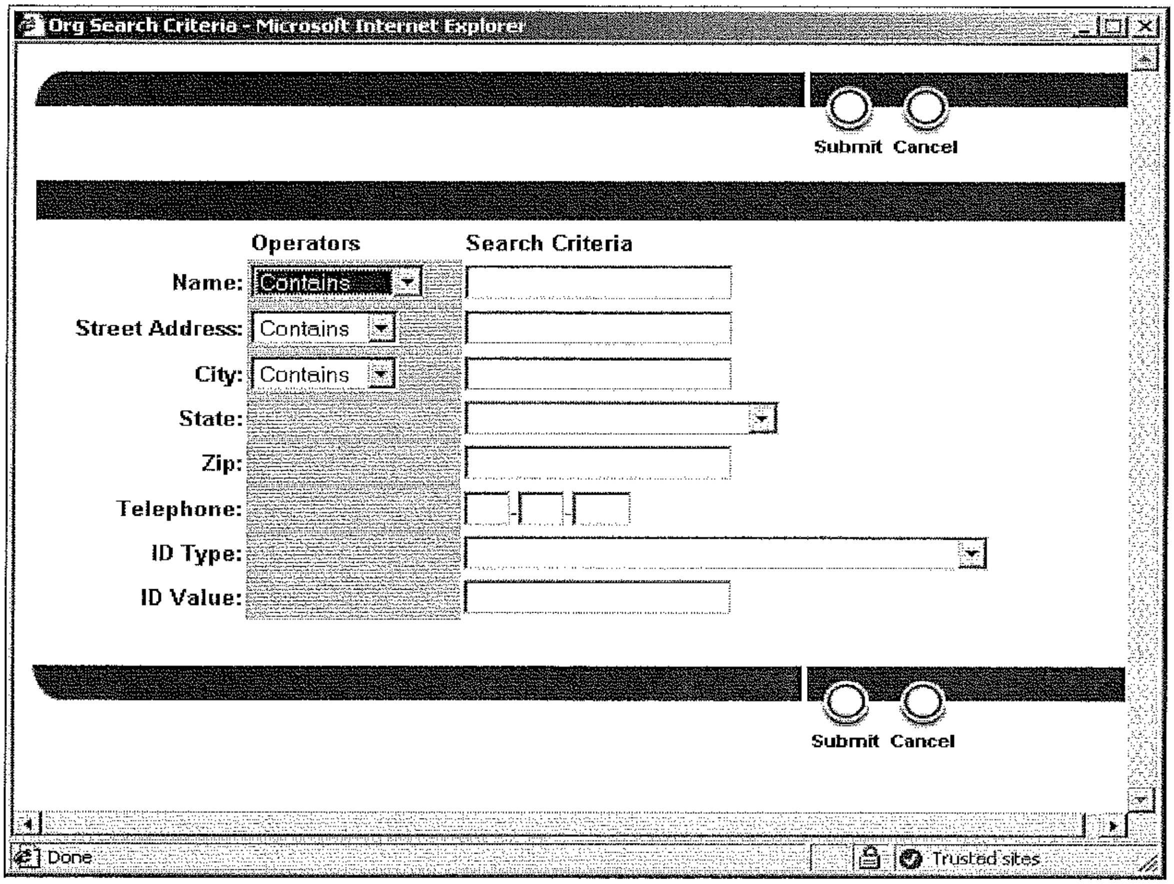


Note: Not all-available fields display on the page. Some fields are hidden and display depending on the selections you make.

6. Choose a reporting facility. To choose a reporting facility, click **Search** in the Reporting Facility section. This is a required field. The pick list choices for ordered and resulted test fields will not populate until the Reporting Facility and the Program Area are selected.

   Note: Click **Clear** to clear the existing Reporting Facility information.

The NBS displays the search criteria pop-up window for the selected section.



7. Type the information you want in the Search Criteria fields.

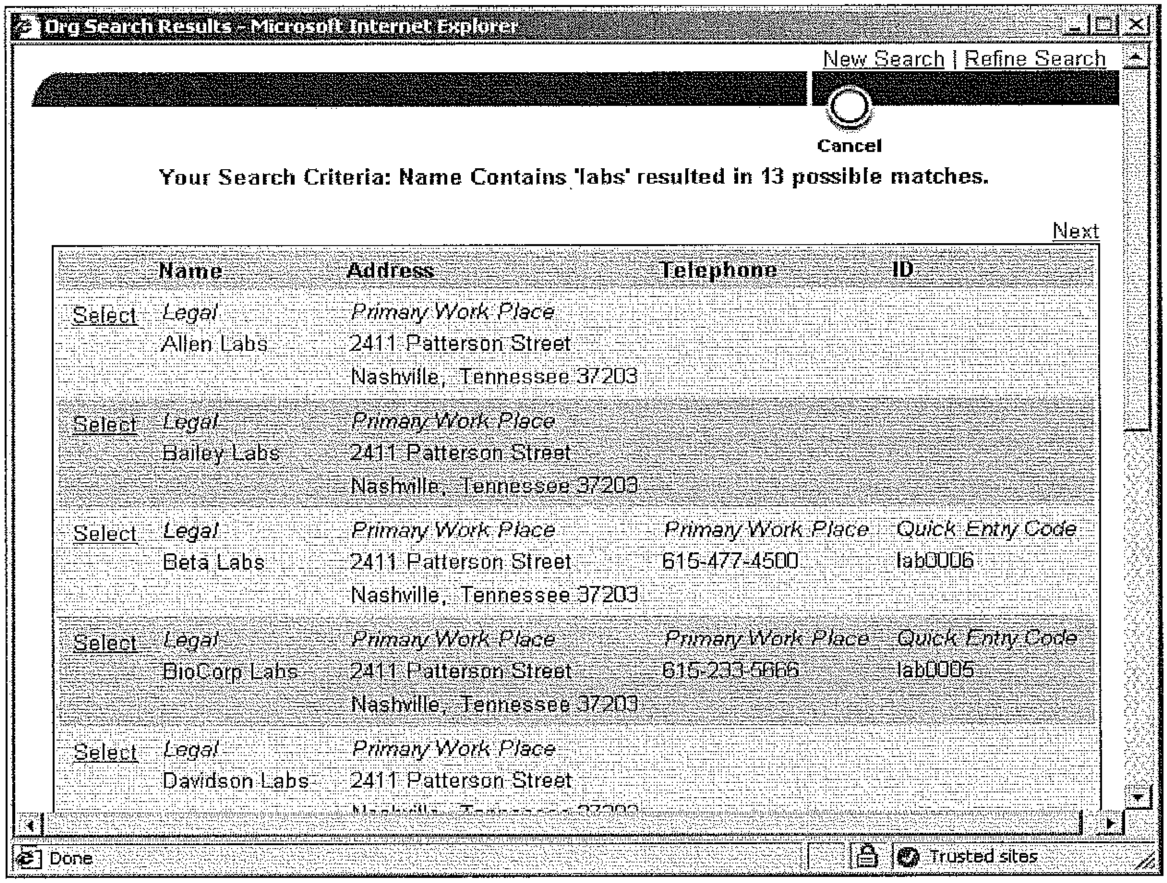
   Note: You can search for records using as few or many fields as you need. You must enter at least one item.

8. Optionally, click the **Operators** list box for the field you want and choose the operator you want.

   Note: You use the Operators list box to add conditions to your search. Conditions help you refine the parameters of your search. For example, the Equal operator displays records that exactly match the text you entered. The Contains operator displays records containing any of the text you entered. The NBS displays the Contains operator by default.

9. Click **Submit**.

   The NBS displays the results of your search.



   Note: If no match exists, the NBS displays a message indicating that your search has no matches. Click **New Search** to perform a new search, or click **Refine Search** to refine your existing search criteria.

10. Click **Select** for the information you want.

    The NBS displays the parent page with the selected reporting facility information.

    Note: You can also choose a reporting facility by typing the quick code you want in the Code Lookup text box and clicking **Code Lookup**. If the quick code for the information you want is available, the NBS displays the reporting facility information. If no quick code information is available, the NBS displays an error, indicating that the code you entered does not match any found in the system and prompts you to modify your entry and try again, or use the Search function to find the data you need.

11. Optionally, choose an ordering facility. To choose an ordering facility, click **Search** in the Ordering Facility section.

12. Repeat steps 7 – 10 to select the ordering facility you want.

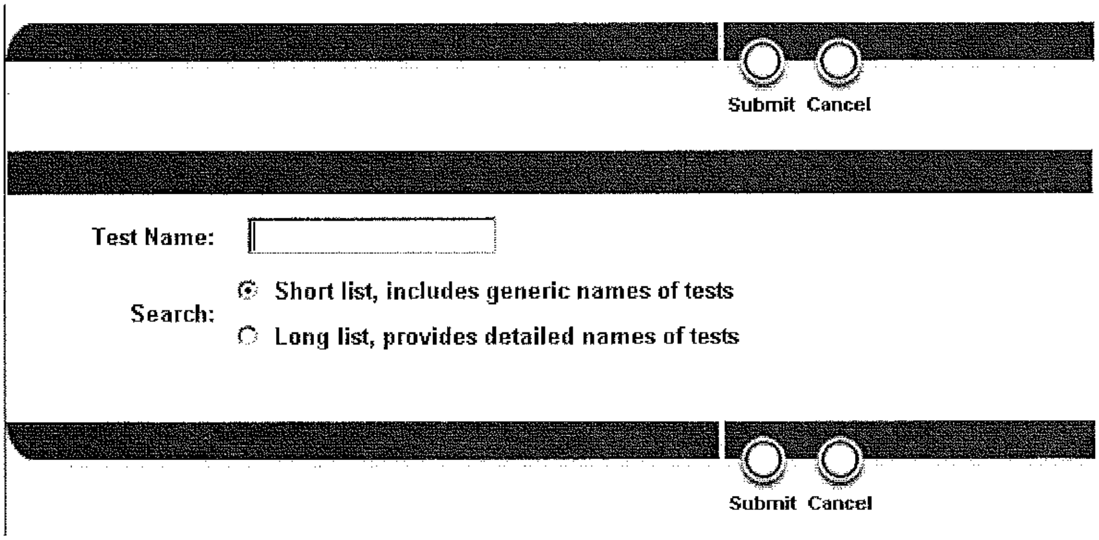
    Note: You can display the name of the reporting facility in the ordering facility section by clicking the **Same as Reporting Facility** checkbox.

13. Optionally, choose an ordering provider. To choose an ordering provider, click Search in the Ordering Provider section.
14. Repeat steps 7 – 10 to select the ordering provider you want.
15. Click **Program Area** and choose the program area you want. This is a required field. The pick list choices for ordered and resulted test fields will not populate until the Reporting Facility and the Program Area are selected.
16. Click **Jurisdiction** and choose the jurisdiction you want or to change the current jurisdiction information. Jurisdiction is a required field.

    Note: If enough address information is available when you choose to add a lab report, the system will derive the jurisdiction from the address information. However, if the address information is added or changed on the patient tab while entering a lab report the system will not automatically update the jurisdiction information.
17. Optionally, click **Share record with Guests for this Program Area and Jurisdiction** to disable guest access for this record.

    Note: NBS shares records with guest users by default. Guest permissions provide the ability to further secure an individual event. Users whose access to the program area and jurisdiction of the event is as a guest will no longer have access to the record if the share indicator is off. The NBS system administrator controls a users access and assigns their Guest permissions.
18. Optionally, click **Lab Report Date** and type the date you want.
19. Optionally, click **Date Received by Public Health** and type the date you want. This is a required field. NBS defaults the value to the current date, but you may edit the date.
20. Optionally, click **Ordered Test Name** and choose the test you want. The choices in the list are based on the Reporting Facility and the Program Area that you selected.

    Note: If the test you want does not display in the Ordered Test Name list, you can search for the test you want. To search for a test, click **Select**. The NBS displays the search criteria pop-up window. Type the test name you want. You can search for the test name in either the **Short list, includes generic names of tests,** which searches the list of lab tests associated with the Reporting Facility regardless of Program Area, or the **Long list, provides detailed names of tests,** which searches the entire list of LOINC tests. Use the radio button to indicate which list you want to search.



Click **Submit** to initiate the search. The NBS displays the results of your search. Click **Select** for the test you want. NBS closes the pop-up window and displays the selected test name in the Ordered Test Name field.

20. Optionally, click **Accession Number** and type the number you want.
21. Optionally, click **Specimen Source** and choose the source you want.
22. Optionally, click **Specimen Site** and choose the site you want.
23. Optionally, click **Date Specimen Collected** and type the date you want.
24. Click **Resulted Test Name** and choose the test you want. This is a required field. Also note that your subsequent options for entering results and susceptibility tests depend on the test name you choose in this field.

    Note: If the test you want does not display in the **Resulted Test Name** list, you can search for the test you want. To search for a test, click **Select**. The NBS displays the search criteria pop-up window. Type the test name you want. You can search for the test name in either the **Short list, includes generic names of tests,** which searches the list of lab tests associated with the Reporting Facility regardless of Program Area, or the **Long list, provides detailed names of tests,** which searches the entire list of LOINC tests. Use the radio button to indicate which list you want to search.

26. Optionally, click **Organism Name** and choose the value you want. When displayed, this field is required.

    Note: The **Organism Name** field remains hidden until you choose a relevant test in the **Resulted Test Name** field. This field replaces the **Coded Result Value** field.

27. Optionally, click **Coded Result Value** and choose the value you want.

    Note: The **Coded Result Value** field is hidden and the **Organism Name** field displayed when you choose a relevant test in the **Resulted Test Name** field.

28. Optionally, click **Numeric Result Value**, type the value you want, and choose the unit or measurement you want.

29. Optionally, click **Text Result Value** and type the value you want.
30. Optionally, click **Reference Range**, type the starting value you want, click **to** and type the ending value you want.
31. Optionally, click **Result Status** and choose the status you want.
32. Optionally, click **Result Comments** and type the comments you want.
33. Optionally, Click **Susceptibility Test** and choose the value you want.

    Note: Choosing **Yes** displays the options you use to enter susceptibility information. The **Susceptibility Test** field remains hidden until you choose a relevant test in the **Resulted Test Name** field.
34. Optionally, click **Resulted Method** and choose the option you want.
35. Click **Drug Name** and choose the option you want. This is a required field.

    Note: To search for a drug, click **Select**. The NBS displays the search criteria pop-up window. Click **Drug Name** and type the test name you want. Optionally, choose the **Long list, provides detailed names of tests** radio button to search based on a detailed test name list. Click **Submit** to initiate the search. The NBS displays the results of your search. Click **Select** for the drug you want. NBS closes the pop-up window and displays the selected test name in the Drug Name field.
36. Optionally, click **Coded Result Value** and choose the value you want.
37. Optionally, click **Numeric Result Value** and choose the value you want.
38. Optionally, click **Interpretive Flag** and choose the value you want.
39. Click **Add Susceptibility**.

    The NBS displays the susceptibility information in the gray table at the top of the section.

    Note: Click **Edit** for the susceptibility information you want to edit. When you are finished making changes, click **Update Susceptibility**. The NBS displays the updated susceptibility information in the gray table at the top of the section. Click **Delete** to delete the selected susceptibility information. You can continue to add as many Susceptibility tests as are appropriate.
40. Optionally, click **Result Comments** and type the comments you want.
41. Click **Add Test Result**.

    The NBS displays the resulted name and result value information in the gray table at the top of the Test Results section.

    Note: Click **Edit** for the test information you want to edit. When you are finished making changes, click **Update Test Result**. The NBS displays the updated test information in the gray table at the top of the section. Click **Delete** to delete the selected test information. You can continue to add as many test results as are appropriate.
42. Optionally, click **Comments** (in the Administrative section) and type the comments you want.

43. Click **Submit**.

    NBS saves the lab information and displays the View File page. The new lab report displays as a line item in the Lab Reports section.

    To view a lab report, refer to "Viewing a Lab Report" in this section.

    Note: You can also click **Submit and Create Investigation** to submit the lab report and create an investigation. To create an investigation refer to Section – 4, Working with Investigations.

Adding a Lab Report from the Data Entry Button

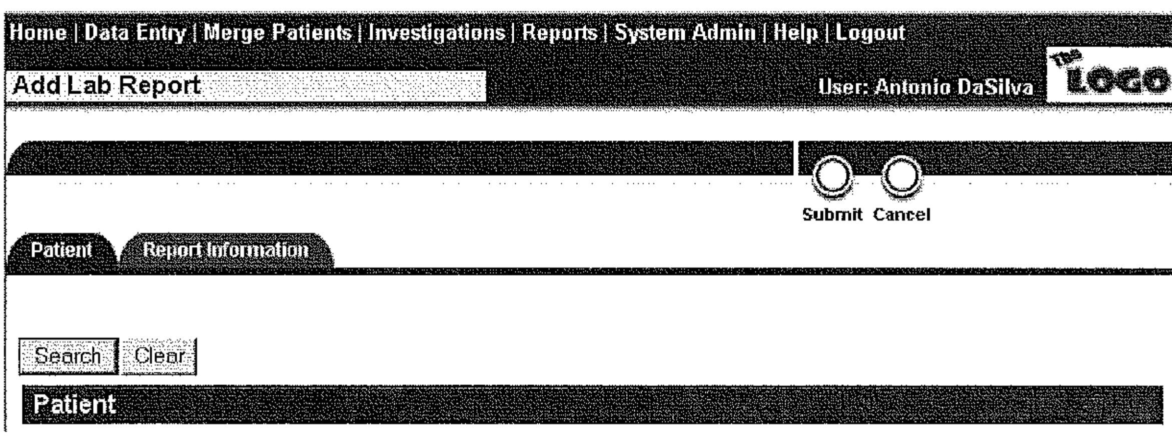
You add a lab report using the Add Lab Report page. In addition to navigating to the Add Lab Report page by searching for a patient and choosing to add a lab report from the Events tab on the View File page, you can also navigate to the Add Lab Report page by clicking on **Data Entry** then **Lab Report** from the top navigation bar.

This route is primarily design to support entry by users who are external to the public health department because access to lab entry can be given without providing access to the patient registry. Users internal to the public health department can also use this route for batch entry of laboratory reports as it provides functionality to retain patient information and or reporting facility information. However, following this path to enter a lab report does not offer the functionality to **View File** for the patient or to **Submit and Create Investigation**.

To add a lab report, perform the following procedure:

1. Click **Data Entry**.
2. Click **Lab Report**.

    The NBS displays the Add Lab Report page.



3. If your permission set allows, search for the patient, otherwise manually enter the patient information:

- Search for the patient.

  To search for a patient, click **Search**. The NBS displays the Search Criteria pop-window. Type the information for the patient you want in the search criteria fields. To enter information, click the fields you want and type or choose the information you want. Click **Submit**. The NBS displays the results of your search. Click **Select** for the person you want. The patient demographic information displays in the available fields on the Patient tab.

- Manually enter the patient information. To manually enter patient information, click the fields you want and type or choose the information you want.

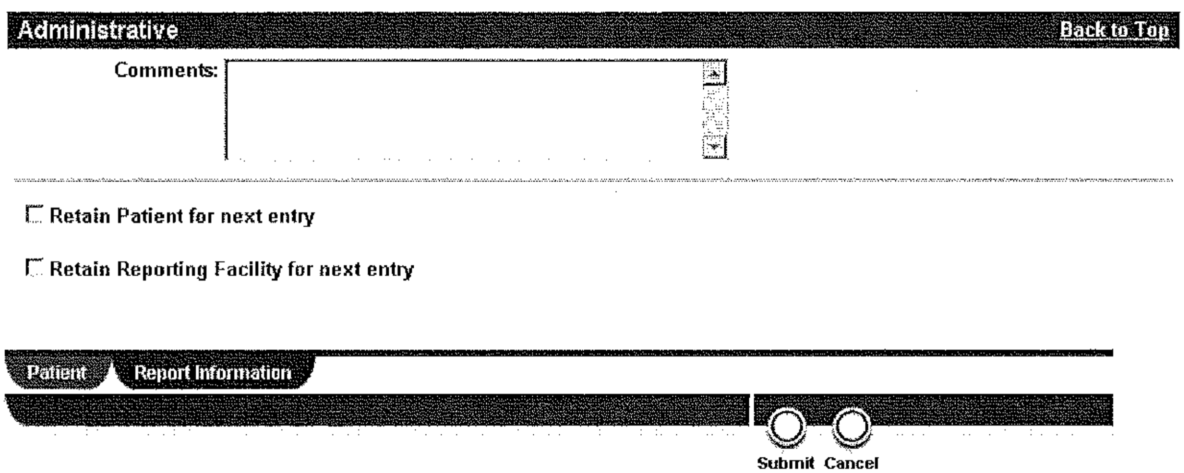
4. Click **Report Information**.

   The NBS displays the contents of the Report Information tab.

5. Repeat steps 6 – 42 in the "Adding a Lab Report from the Events Tab" lesson to enter the details of the lab report.

   Note: If you are an external user the Reporting Facility will be prepopulated with the Reporting Facility associated with your user id.

6. Optionally, you can choose to **Retain Patient for next entry** to add additional lab reports for the same patient and/or **Retain Reporting Facility for next entry** to add additional lab reports from the same reporting facility by checking the corresponding box.



Note: The **Retain Reporting Facility for next entry** option is not offered if you are an external user as your reporting facility is prepopulated.

7. Click **Submit**.

   NBS saves the lab information and displays the View File page. The new lab report displays as a line item in the Lab Reports section.

   To view a lab report, refer to "Viewing a Lab Report" in this section.

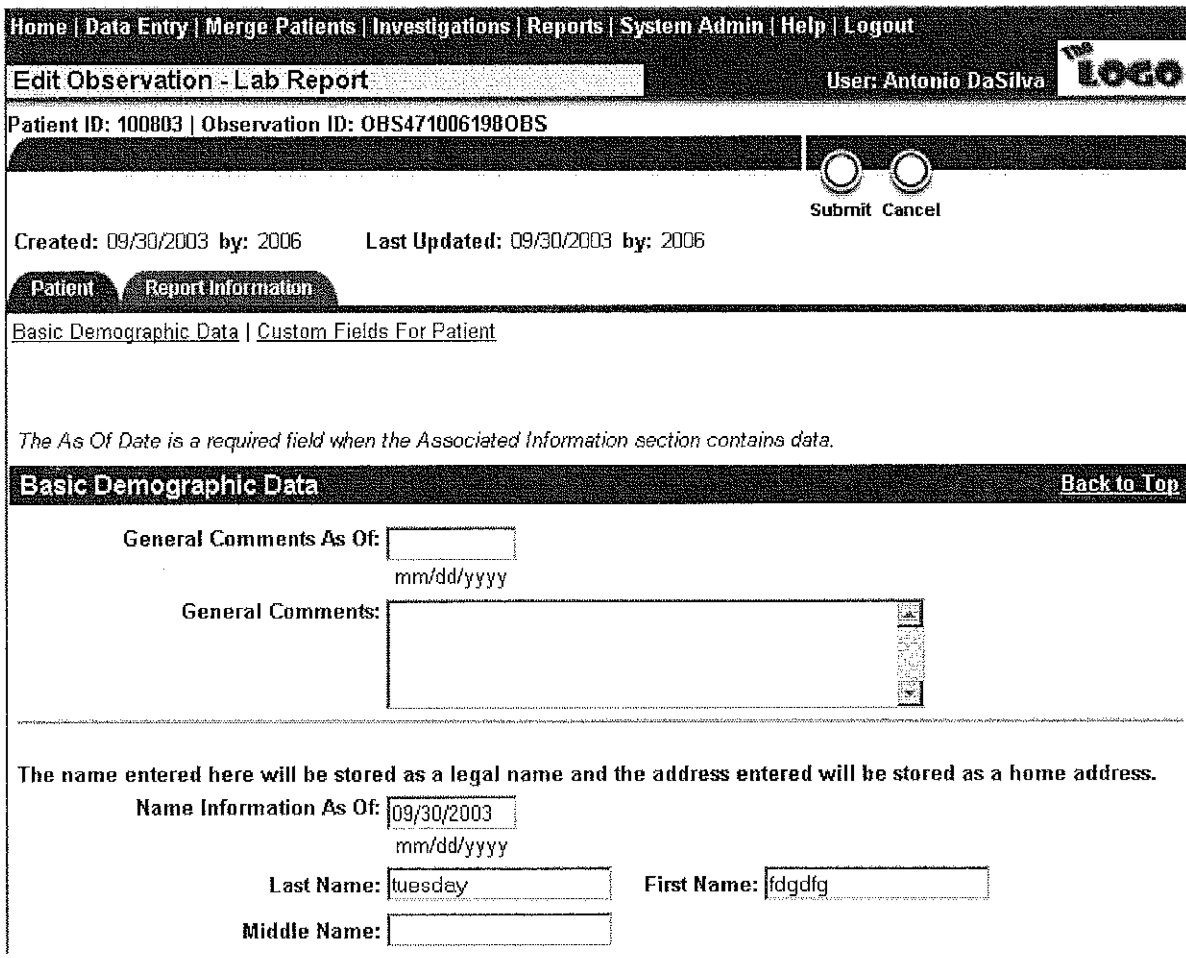
Editing a Lab Report

You can edit an existing lab report. You edit a lab report using the Edit Lab Report page.

To edit a lab report, perform the following procedure:

1. View the lab report for the patient you want. To view a lab report, refer to "Viewing a Lab Report."
2. Click **Edit.**

   The NBS displays the Edit Lab Report page.



   Note: The Patient tab displays by default for all events.

3. Click the fields you want and type or choose the information you want. To work the various field on the Edit Lab Report page, refer to "Adding a Lab Report" for the required procedures.

Lesson Summary

In this lesson, you learned to perform the following functions:

- View a lab report.
- Add a lab report.
- Edit a lab report.

Lesson 3 – Viewing, Adding, and Editing Morbidity Reports

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- View a morbidity report.
- Add a morbidity report.
- Edit a morbidity report.

Viewing a Morbidity Report

You can view an existing morbidity report in the patient's file. You view the morbidity report using the View Morbidity Report page.

Note: Once you perform an operation on a morbidity report, such as marking the morbidity report as reviewed or creating an investigation based on a morbidity report, the NBS removes the morbidity report from the queue on the Observations Needing Review page.

To view an existing morbidity report, perform the following procedure:

1. Display the View File page for the patient. To find and view a person, refer to "Finding and Viewing Patient and Provider Information" in "Section – 2, Working with Patient, Provider, and Organization Information."

   The NBS displays the contents of the View File page for the selected patient.

2. Click the **Events** tab.

   The NBS displays the contents of the Events tab.

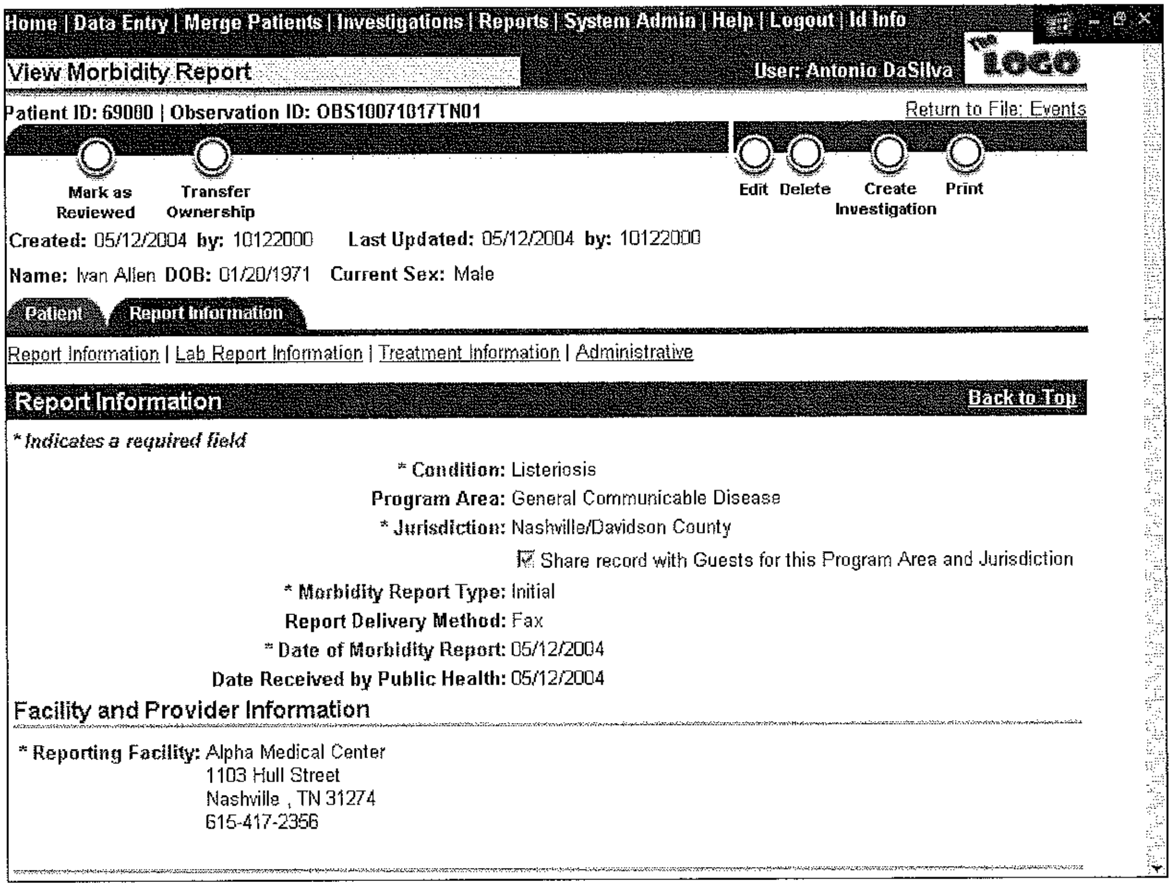
3. Click **Date Received** for the morbidity report you want in the Morbidity Reports section.

   Note: You can scroll to the Morbidity Reports section, or click the **Morbidity Reports** navigation link at the top of the page.

   The NBS displays the View Morbidity Report page.

4. Click the tab **Report Information.**

The NBS displays the contents of the report information tab and the details of the morbidity report.



From the View Morbidity Report page, you can do the following:

- Edit the morbidity report.
- Delete the morbidity report.
- Mark the morbidity report as reviewed.
- Transfer ownership of the morbidity report.
- Create an investigation based on the morbidity report.
- Print the morbidity report.
- Return to the patient's View File page.

Note: Your options vary depending on your security permissions assigned. Not all options may be available to you.

Adding a Morbidity Report from the Events Tab

You can add a morbidity report from the Events tab on the View File page. You add a morbidity report using the Add Morbidity Report page.

To add a morbidity report, perform the following procedure:

1. Display the View File page for the patient. To find and view a person, refer to "Finding and Viewing Patient and Provider Information" in "Section – 2, Working with Patient, Provider, and Organization Information."

   The NBS displays the contents of the View File page for the selected patient.

2. Click **Events**.

   The NBS displays the contents of the Events tab.

3. Click **Add** in the Morbidity Reports section.

   Note: You can scroll to the Morbidity Reports section, or click the **Morbidity Reports** navigation link at the top of the page.

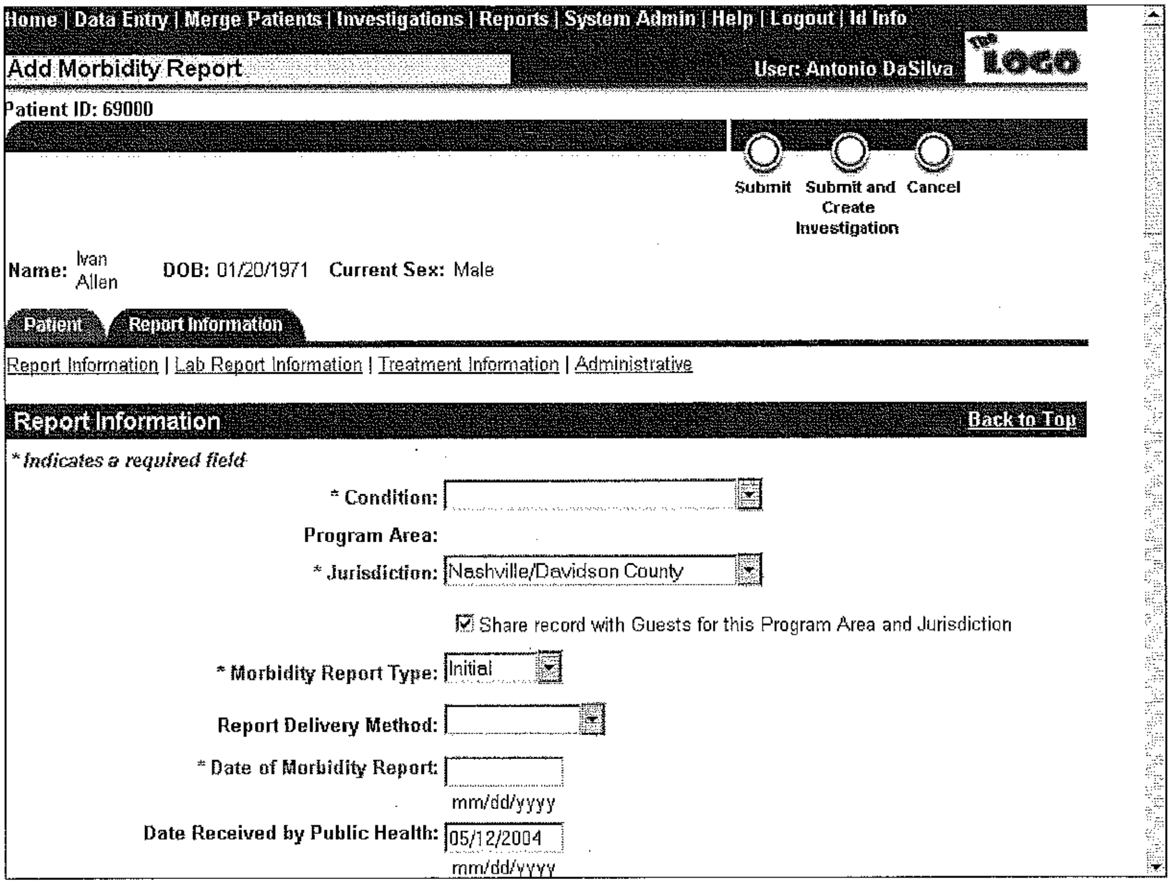
   The NBS displays the Add Morbidity Report page and the contents of the Patient tab.

4. Optionally, edit the patient's demographic information.

   Note: Changes you make to the information are assigned the "as of" date indicated in the **Basic Demographic Data As Of** field and are reflected in the master patient record. The NBS defaults the as of date to the current system date. If the appropriate as of date for the event is different the user must edit the as of date. Among other uses the NBS calculates the Reported Age by subtracting the patient's date of birth from the **Basic Demographic Data As Of** when adding a morbidity report. The NBS uses the **Basic Demographic Data As Of** date field to populate the as of dates for each section of the patient demographics at the point in time of the associated event. For example, the NBS uses the **Basic Demographic Data As Of** date for the **Sex and Birth Information As of** date, which is the as of date for Reported Age at the time of the event.

5. Click the tab **Report Information**.

The NBS displays the contents of the Report Information tab.



6. Click **Condition** and choose the condition you want. The system will derive the program area from the selected condition. This is a required field.

8. Click **Jurisdiction** and choose the jurisdiction you want if it is not already displayed, or if you want to change the current jurisdiction information. This is a required field.

   Note: If enough address information is available when you choose to add a morbidity report, the system will derive the jurisdiction from the address information. However, if the address information is added or changed on the patient tab while entering a morbidity report the system will not automatically update the jurisdiction information.

8. Optionally, click **Share record with Guests for this Program Area and Jurisdiction** to disable guest access for this record.

   Note: NBS shares records with guest users by default. Guest permissions provide the ability to further secure an individual event. Users whose access to the program area and jurisdiction of the event is as a guest will no longer have access to the record if the share indicator is off. The NBS system administrator controls a users access and assigns their Guest permissions.

9. Optionally, click **Morbidity Report Type** and choose the option you want. The NBS displays the Initial type by default. This is a required field.

10. Optionally, click **Report Delivery Method** and choose the option you want.
11. Optionally, click **Date of Morbidity Report** and type the date you want.
12. Optionally, click **Date Received by Public Health** and type the date you want.

    Note: Today's date displays by default.
13. Choose a reporting facility. You can either **Search** the organization registry or indicate the **Code Lookup** of the facility. This is a required field.

    Note: Click **Clear** to clear the existing information.

    If you click **Search** to find the facility, the NBS displays the search criteria pop-up window for the selected section.
14. Type the information you want in the Search Criteria fields.

    Note: You can search for records using as few or as many fields as you need. You must enter at least one item.
15. Optionally, click the **Operators** list box for the field you want and choose the operator you want.

    Note: You use the Operators list box to add additional criteria to your search. Criteria help you refine the parameters of your search. For example, the Equal operator displays records that exactly match the text you entered. The Contains operator displays records containing any of the text you entered. The NBS displays the Contains operator by default.
16. Click **Submit**.

    The NBS displays the results of your search.

    Note: If no match exists, the NBS displays a message indicating that your search has no matches. Click **New Search** to perform a new search, or click **Refine Search** to refine your existing search criteria.
17. Click **Select** for the information you want.

    The NBS displays the parent page with the selected information.

    Note: You can also choose the information you want by typing the quick code you want in the Code Lookup text box, and clicking **Code Lookup**. If the quick code for the information you want is available, the NBS displays the information. If no quick code information is available, the NBS displays an error indicating that the code you entered does not match any found in the system.
18. Optionally, choose a provider. To choose a provider, click **Search**. Repeat steps 14 – 17 to select the provider you want.
19. Optionally, choose a reporter. To choose a reporter, click **Search**. Repeat steps 14 – 17 to select the reporter you want.
20. Optionally, click **Date of Onset** and type the date you want.
21. Optionally, click **Date of Diagnosis** and type the date you want.

21. Optionally, click **Did Patient Die from this illness?** and choose the option you want.

    Note: The morbidity report and the investigation asked about mortality related to the specified condition. The patient record asks about the patient's vital status with the question, **Is the patient deceased?**

23. Optionally, click **Patient Hospitalized** and choose the option you want.

    Note: Choosing **Yes** displays additional fields you use to enter hospital information.

24. Optionally, click **Admission Date** and type the date you want.
25. Optionally, click **Discharge Date** and type the date you want.
26. Optionally, choose a hospital. To choose a hospital, click **Search**. Repeat steps 13 – 17 to select the hospital you want.
27. Optionally, click **Pregnant** and choose the option you want.
28. Optionally, click **Food Handler** and choose the option you want.
29. Optionally, click **Associated with Day Care Facility** and choose the option you want.
30. Optionally, click **Affiliated with Nursing Home** and choose the option you want.
31. Optionally, click **Affiliated with Health Care Organization** and choose the option you want.
32. Optionally, click **Suspected Food or Waterborne Illness** and choose the option you want.
33. Optionally, click **Other, specify** and type the information you want.

    You can enter lab report information in the Add Morbidity Report page. To enter lab information, perform the procedures outlined in the steps below.

34. Optionally, click **Collection Date** and type the date you want.
35. Optionally, click **Lab Report Date** and type the date you want.
36. Optionally, click **Specimen Information** and type the information you want.
37. Click **Resulted Test Name** and choose the test you want. This is a required field. Also note that your subsequent options depend on the test name you choose in this field.

    Note: If the test you want does not display in the **Resulted Test Name** list, you can search for the test you want. To search for a test, click **Select**. The NBS displays the search criteria pop-up window. Type the test name you want. You can search for the test name in either the **Short list, includes generic names of tests,** which searches the list of lab tests associated with the Reporting Facility regardless of Program Area, or the **Long list, provides detailed names of tests,** which searches the entire list of LOINC tests. Use the radio button to indicate which list you want to search.

38. Optionally, click **Organism Name** and choose the option you want. The Organism Name field remains hidden until you choose a relevant test in the Resulted Test Name field.

Note: To search for an organism, click **Select**. The NBS displays the search criteria pop-up window. Click **Organism Name** and type the name you want. Click **Submit** to initiate the search. The NBS displays the results of your search. Click **Select** for the organism you want. NBS closes the pop-up window and displays the selected organism name in the Organism Name field.

39. Optionally, click **Coded Result Value** and choose the option you want. The Coded Result Value field remains hidden until you choose a relevant test in the Resulted Test Name field.
40. Optionally, click **Numeric Result Value**, type the value you want, and choose the unit of measurement you want.
41. Optionally, click **Text Result Value** and type the value you want.

    Note: One of the result value fields **Coded Result Value**, **Numeric Result Value**, and **Text Result Value** must contain data.

42. Optionally, click **Result Comments** and type the comments you want.
43. Click **Add Lab Report**.

    The NBS displays the lab report information in the gray table at the top of the Lab Report Information section.

    Note: Click **Edit** for the test information you want to edit. When you are finished making changes, click **Update Lab Report**. The NBS displays the updated test information in the gray table at the top of the section. Click **Delete** to delete the selected test information.

44. Optionally, click **Treatment Date** in the Treatment section and type the date you want.
45. Optionally, click **Treatment** and choose the treatment you want.
46. Optionally, click **Treatment Comments** and type the comments you want.
47. Click **Add Treatment**.

    The NBS displays the treatment information in the gray table at the top of the Treatment Information section.

    Note: Click **Edit** for the treatment information you want to edit. When you are finished making changes, click **Update Treatment**. The NBS displays the updated treatment information in the gray table at the top of the section. Click **Delete** to delete the selected treatment information.

48. Click **Submit**.

    The NBS saves the morbidity report information and displays the View File page. The new morbidity report displays as a line item in the Morbidity Reports section.

    Note: If you entered lab and treatment information, the View File page displays a line item for the lab and treatment you entered in the Lab Reports and Treatments sections.

    To view a morbidity report, refer to "Viewing a Morbidity Report" in this section.

Note: You can also click **Submit and Create Investigation** to submit the morbidity report and create an investigation.

Adding a Morbidity Report from the Data Entry Button

You can add a morbidity report from the Events tab on the View File page. You add a morbidity report using the Add Morbidity Report page.

To add a morbidity report, perform the following procedure:

1. Click **Data Entry**.
2. Click **Morbidity Report**.

   The NBS displays the Add Morbidity Report page and the contents of the Patient tab.
3. Do one of the following:
   - Search for the patient you want.

     To search for a patient, click **Search**. The NBS displays the Search Criteria pop-up window. Type the information for the patient you want in the search criteria fields. To enter information, click the fields you want and type or choose the information you want. Click **Submit**. The NBS displays the results of your search. Click **Select** for the person you want. The patient demographic information displays in the available fields on the Patient tab.
   - Manually enter the patient information. To manually enter patient information, click the fields you want and type or choose the information you want.
4. Click **Report Information**.

   The NBS displays the contents of the Report Information tab.
5. Repeat steps 6 – 48 in the "Adding a Morbidity Report from the Events Tab" lesson to enter the details of the morbidity report.

Editing a Morbidity Report

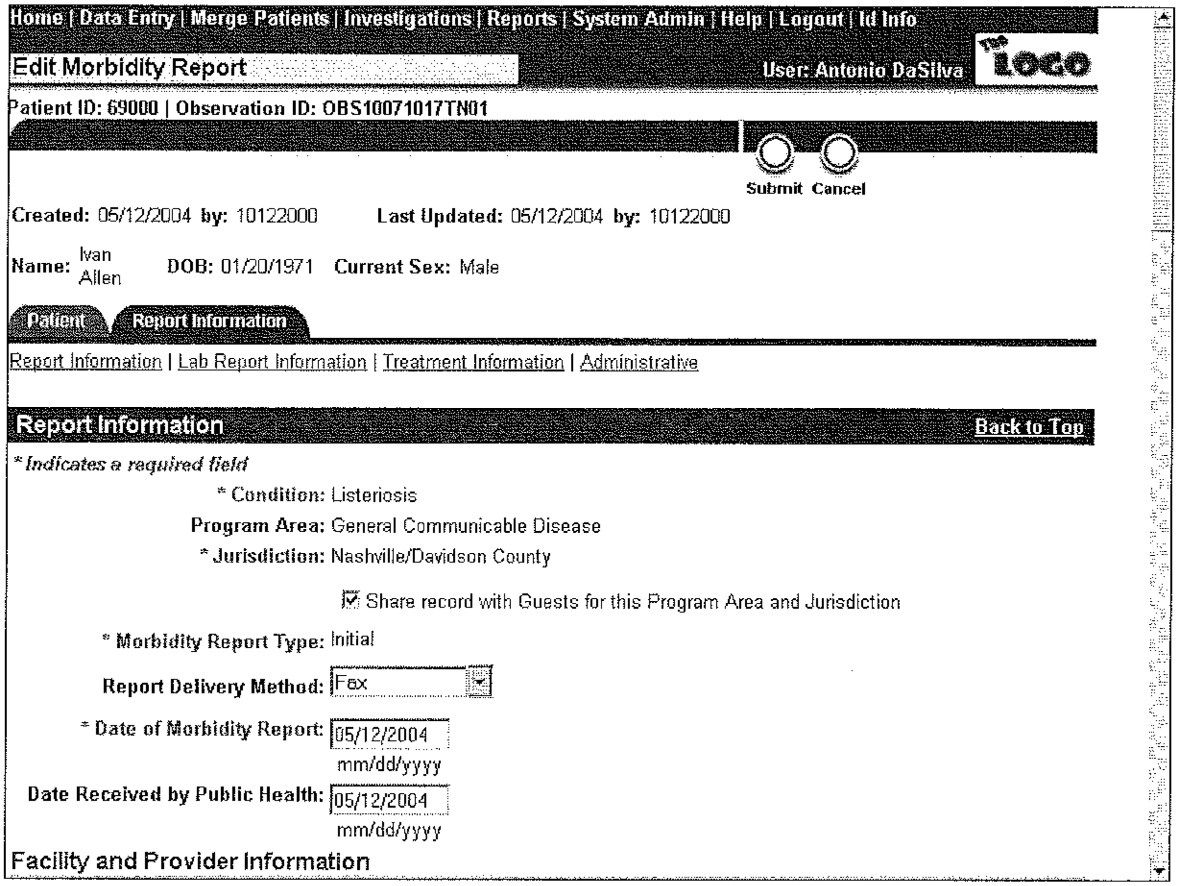
You can edit an existing morbidity report. You edit a morbidity report using the Edit Morbidity Report page.

To edit a morbidity report, perform the following procedure:

1. View the morbidity report for the patient you want. To view a morbidity report, refer to "Viewing a Morbidity Report."
2. Click **Edit**.

   The NBS displays the Edit Morbidity Report page.
3. Click **Report Information**.

The NBS displays the contents of the Report Information tab.



3. Click the fields you want and type or choose the information you want. To work the various field on the Edit Morbidity Report page, refer to "Adding a Morbidity Report" for the required procedures.

Lesson Summary

In this lesson, you learned to perform the following functions:

- View a morbidity report.
- Add a morbidity report.
- Edit a morbidity report.

Lesson 4 – Viewing, Adding, and Editing Vaccination Records

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- View a vaccination record.
- Add a vaccination record.
- Edit a vaccination record.

Viewing Vaccination Records

You can view vaccination records. You view vaccination records using the View Vaccination Record page.

To view a vaccination record, perform the following procedure:

1. Display the View File page for the patient. To find and view a person, refer to "Finding and Viewing Patient and Provider Information" in "Section – 2, Working with Patient, Provider, and Organization Information."

   The NBS displays the contents of the View File page for the selected patient.

2. Click **Events**.

   The NBS displays the contents of the Events tab.

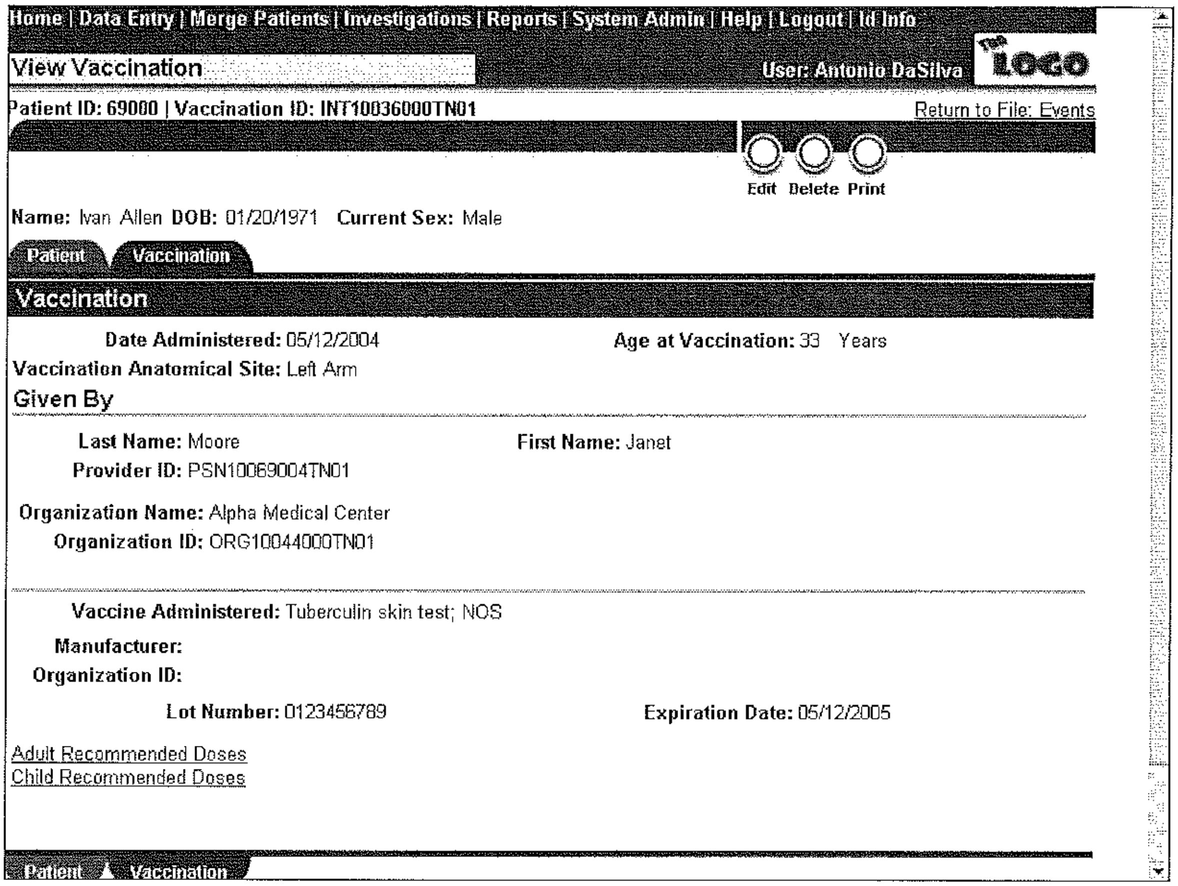
3. Click **Date Administered** for the vaccination record you want in the Vaccinations section.

   Note: You can scroll to the **Vaccinations** section, or click the **Vaccinations** navigation link at the top of the page.

   The NBS displays the View Vaccination page.

4. Click **Vaccination**.

The NBS displays the contents of the Vaccination tab.



From the View Vaccination page, you can do the following:

- Edit the vaccination record.
- View adult and child recommended dose information.
- Delete the vaccination record.

Note: Your options vary depending on your security permissions assigned. Not all options may be available to you.

Adding Vaccination Records

You can add a vaccination record to the NBS. You add a vaccination record using the Add Vaccination page.

To add a vaccination record, perform the following procedure:

1. Display the View File page for the patient. To find and view a person, refer to "Finding and Viewing Patient and Provider Information" in "Section – 2, Working with Patient, Provider, and Organization Information."

   The NBS displays the contents of the View File page for the selected patient.

2. Click **Events**.

   The NBS displays the contents of the Events tab.

3. Click **Add** in the Vaccinations section.

   Note: You can scroll to the Vaccinations section, or click the **Vaccinations** navigation link at the top of the page.

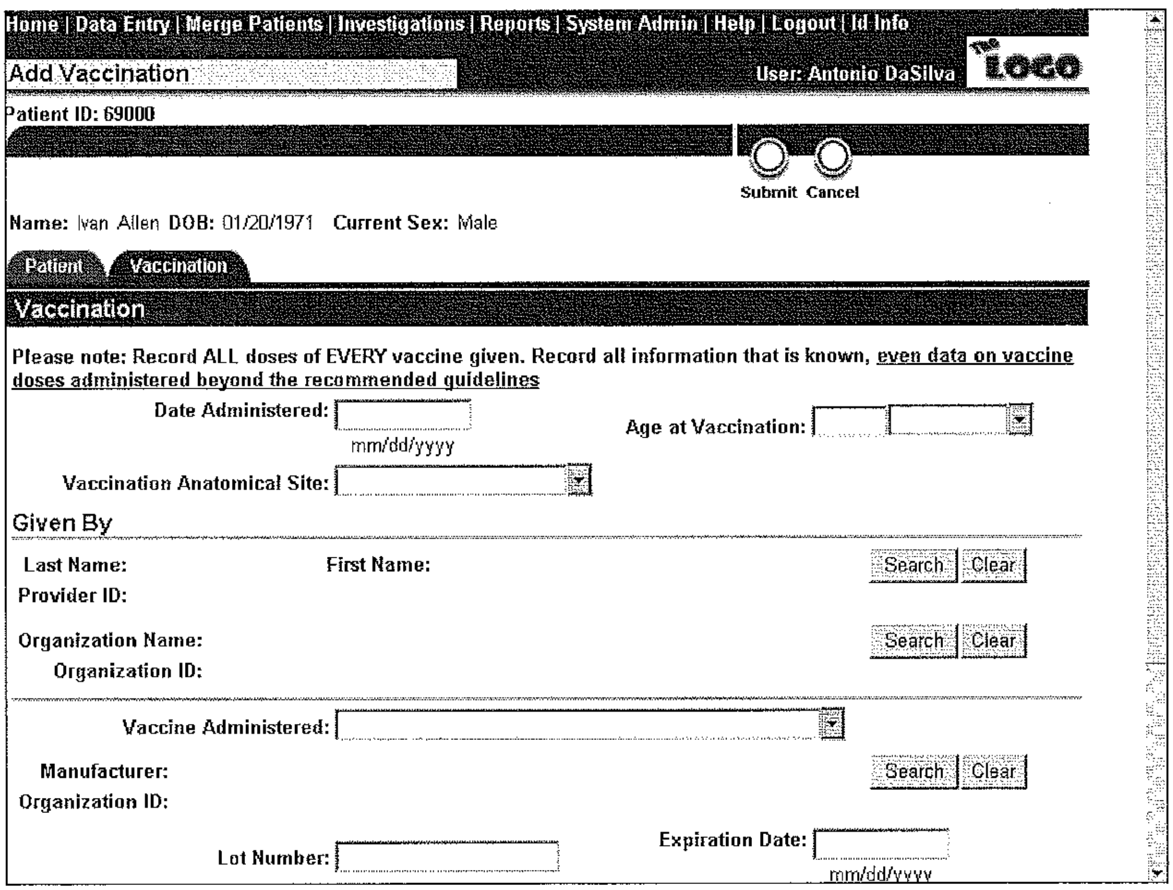
   The NBS displays the Add Vaccination page and the contents of the Patient tab.

4. Optionally, edit the patient's demographic information.

   Note: The changes you make to the information are assigned the "as of" date indicated in the **Basic Demographic Data As Of** field and is reflected in the master patient record.

5. Click **Vaccination**.

   The NBS displays the contents of the Vaccination tab.



6. Optionally, click **Date Administered** and type the date you want.

7. Optionally, click **Age at Vaccination**, type the age you want, and choose the unit of measurement you want.

8. Optionally, choose the provider that administered the vaccination in the Given By section.

   To choose a provider, click **Select**. The NBS displays the search criteria pop-up window. Type the information for the provider you want in the Search Criteria fields. Optionally, click the **Operators** list box for the field you want and choose the operator you want. Click **Submit**. The NBS displays the results of your search. Click **Select** for the provider you want. The NBS displays the parent page with the information you selected.

9. Optionally, choose the organization that administered the vaccination in the Given By section.

   To choose an organization, click **Select**. The NBS displays the search criteria pop-up window. Type the information for the organization you want in the Search Criteria fields. Click the **Operators** list box for the field you want and choose the operator you want. Click **Submit**. The NBS displays the results of your search. Click **Select** for the organization you want. The NBS displays the parent page with the information you selected.

   Note: Click **Clear** to clear the existing information.

10. Optionally, click **Vaccine Administered** and choose the vaccine you want.

11. Optionally, choose the organization that manufactured the vaccine.

    To choose the vaccine manufacturer, click **Select**. The NBS displays the search criteria pop-up window. Type the information for the organization you want in the Search Criteria fields. Click the **Operators** list box for the field you want and choose the operator you want. Click **Submit**. The NBS displays the results of your search. Click **Select** for the organization you want. The NBS displays the parent page with the information you selected.

    Note: Click **Clear** to clear the existing information

12. Optionally, click **Lot Number** and type the number you want.

13. Optionally, click **Expiration Date** and type the date you want.

    Note: To view dosage information, click **Adult Recommended Doses** or **Child Recommended Doses**. The NBS displays the dosage information in a new window. Note that you must have the Adobe Acrobat Reader software installed in order to use this feature.

14. Click **Submit**.

    NBS saves the vaccination information and displays the View File page. The new vaccination record displays as a line item in the Vaccinations section.

    To view a vaccination record, refer to "Viewing Vaccination Records" in this section.

Editing Vaccination Records

You can edit an existing vaccination record. You edit a vaccination record using the Edit Vaccination page.

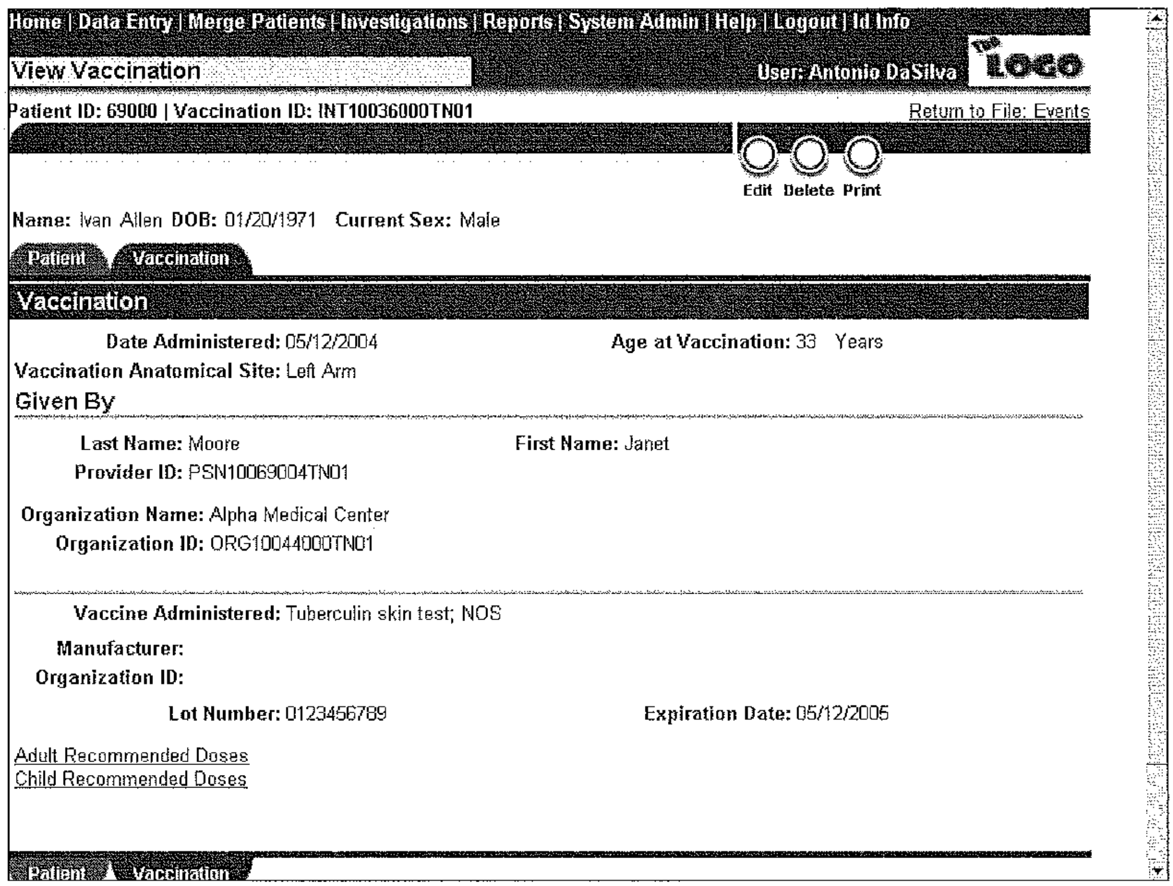
Note: Users without Registry Manger permission cannot edit vaccination records.

To edit a vaccination record, perform the following procedure:

1. View the vaccination record for the patient you want. To view a vaccination record, refer to "Viewing Vaccination Records."
2. Click **Edit.**

   The NBS displays the Edit Vaccination page.
3. Click **Vaccination.**

   The NBS displays the contents of the Vaccination tab.



3. Click the fields you want and type or choose the information you want. To work the various field on the Edit Vaccination page, refer to "Adding Vaccination Records" for the required procedures.

Lesson Summary

In this lesson, you learned to perform the following tasks:

- View a vaccination record.
- Add a vaccination record.
- Edit a vaccination record.

Section Summary

In this section, you learned to perform the following functions:

- Review observations.
- Assign program areas and jurisdictions to observations.
- View, add, and edit, observations and vaccination.

Section 4 – Working with Investigations and Notifications

Section Objectives

After completing this section, you will be able to perform the following functions:

- View, add, edit, and delete investigations.
- Assign existing observations and vaccinations to an investigation.
- Transfer ownership of investigations.
- Create notifications, review initial notifications, review rejected notifications and monitor updated notifications.
- View summary data, add summary reports, and submit summary notifications.

Lesson 1 – Viewing, Adding, Editing, and Deleting Investigations

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- View an investigation.
- Add an investigation.
- Edit an investigation.
- Delete an investigation

Viewing an Investigation

You can view investigation and investigator detail information. The NBS enables you to display a list of open investigations assigned to your program area using the My Program Area's Investigations page or the Summary tab on the View File page. As with observations, the NBS programmatically assigns investigations to your work queue based on your program area and jurisdiction. Once you set an investigation's status to closed, that investigation drops off your work queue.

To view open investigations assigned to your program area, perform the following procedure:

1. Click **Investigations** on the navigation bar.

The NBS displays the My Program Area's Investigations page.

My Program Area's Investigations User: xxxxxxxx

Previous | Next

Start Date	Investigator	Jurisdiction	Patient	Condition	Case Status
INV147	INV100, INV101	INV107	INV100, INV101	INV169	INV163
01/31/2003	Kilpatrick-Wilmington, Samantha	Dekalb	Doe, John	Lyme	Confirmed
01/30/2003	Potter, Harry	Fulton	Miller, Reggie	Hepatitis B	Confirmed
01/24/2003	Haskell, Eddie	Dade	Smith, Jane	Salmonella	Confirmed
01/23/2003	Leblanc, Ray	Cook	Arnold, Regina	Lyme	Confirmed
01/23/2003	Elway, John	Polk	Smithson, Beth	Pertussis	Confirmed
01/23/2003	Doe, John	Henry	Bennett, Tony	Cholera	Not a Case
01/12/2003	Beckham, David	Fulton	Coleman, Gary	Shigella	Suspect
01/02/2003	Potvin, Felix	Polk	Gibbs, Barry	Rubella	Unknown
01/02/2003	Charles, Ray	Henry	Doe, Jane	Tetanus	Unknown

Previous | Next

The My Program Area's Investigations page contains a set of fields you use to view all open investigations for the program areas to which you have access.

Note: Click **Next** and **Previous** to move through the list of investigations. Click the column headings to sort the list.

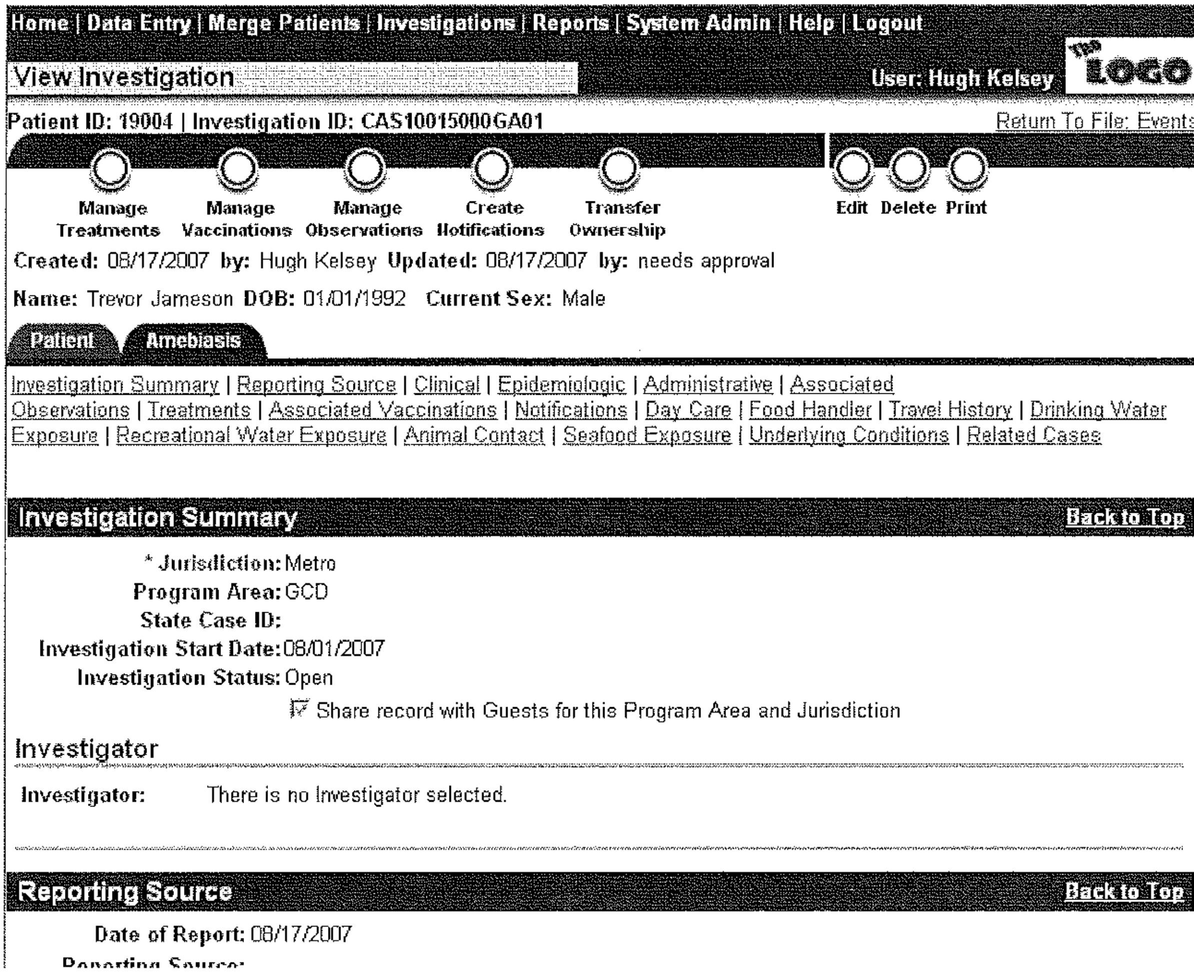
2. Click the **Condition** link for the investigation you want.

   The NBS displays the View Investigation page and the contents of the Condition tab. **Note:** The user has now entered the Patient record.

3. Click the Condition tab.

   Note: The Condition tab displays the name of the condition covered in the investigation. For example, a Hepatitis investigation would display "Hepatitis" on the Condition tab.

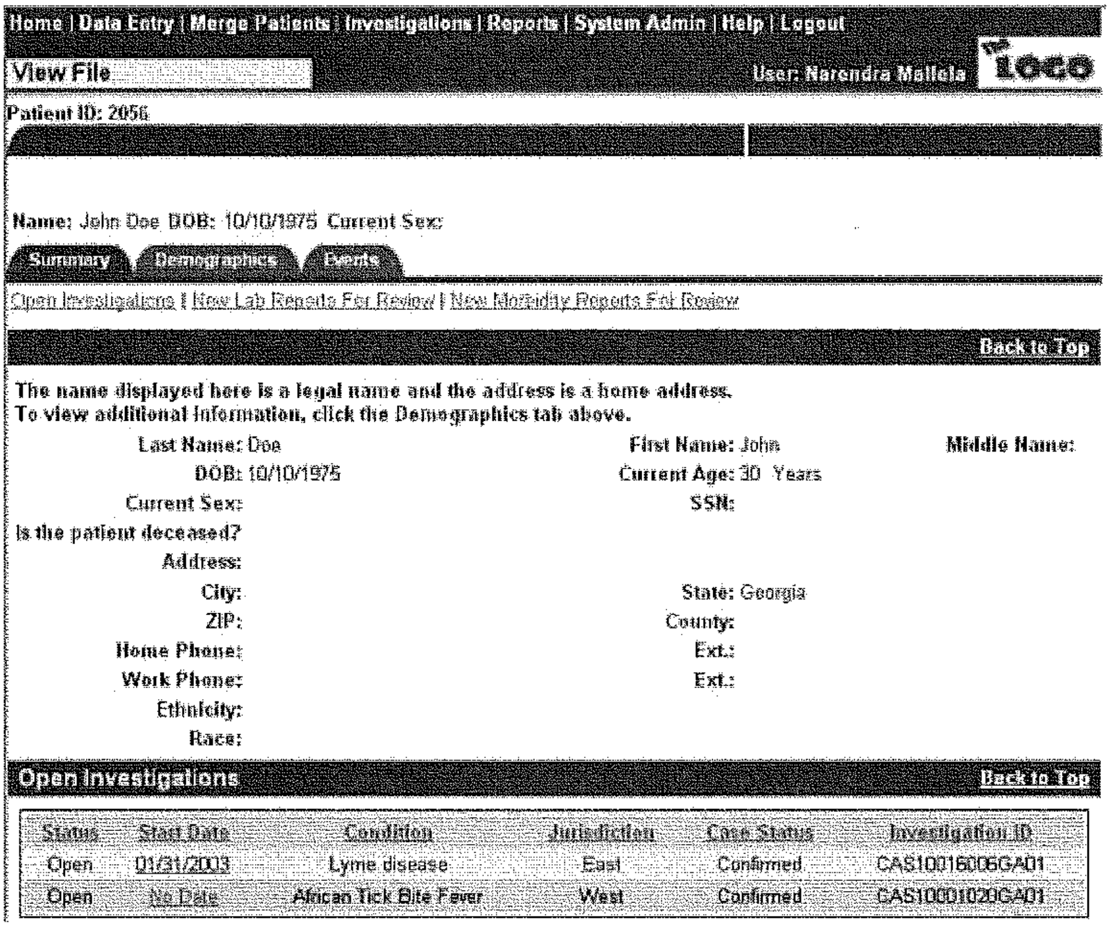
The NBS displays the contents of the Condition tab and the details of the investigation.



4. Another option is to click **File: Summary**. The NBS then displays the **View File** page for that patient record.
5. Another option from the **My Program Area's Investigations** page is to click **Patient** name. The NBS displays the **View File** page for that patient record.

Note: To return to the **My Program Investigations** page, click **Investigations** on the navigation bar at the top of the page.

The NBS displays the Summary tab on the View File page.



Note: You can view a list of open investigation for the patient in the Open Investigations section on the Summary tab. To display the Open Investigations section, scroll to the Open Investigation section or click the **Open Investigation** navigation link at the top of the page. To view an investigation, click the **Start Date** link for the investigation you want.

Viewing an Investigation from the View File Page

You can also view a list of investigations associated with a specific patient. You use the Investigations section of Summary tab on the View File page to view investigations associated with a patient.

To display an investigation, perform the following procedure:

1. Display the View File page for the patient. To find and view a person, refer to "Finding and Viewing Patient and Provider Information" in "Section – 2, Working with Patient, Provider, and Organization Information."

   The NBS displays the contents of the View File page for the selected patient.

2. Click the **Events** tab.

The NBS displays the contents of the Events tab.

3. Click **Start Date** for the investigation you want in the Investigations section.

   Note: You can scroll to the Investigations section, or click the **Investigations** navigation link at the top of the page.

   The NBS displays the View Investigation page and the contents of the Patient tab.

4. Click the Condition tab.

   The NBS displays the contents of the Condition tab and the details of the investigation.

From the View Investigation page, you can do the following:

- Manage treatments, vaccinations, and observations
- Edit investigations
- Create notifications
- Transfer ownership of investigations

Note: Your options vary depending on your security permissions. Not all options may be available to you.

Adding an Investigation

The NBS supports creation of investigations for a variety of diseases of interest to public health. In general, you create an investigation based on an observation that indicates a condition requiring investigation. If the investigation meets the case definition, you can send a notification of the case to the CDC.

Note: You can also create an investigation independent of an observation.

You can add an investigation from the Add Morbidity Report page and Add Lab Report page at the time you submit the observation. You click **Submit and Create an Investigation** to submit the observation and either choose the condition you want (in the case of a lab report), or immediately display the Add Investigation page for the selected condition (when working with morbidity reports).

You create an investigation using the Add Investigation page. The NBS provides disease-specific pages for the conditions covered by the PAMs. For all other conditions, the NBS provides a generic investigation page.

While the NBS provides both disease-specific and generic investigation pages, the general procedures for adding an investigation are similar across all pages. Where differences exist, these variations arise from disease-specific questions associated with a given page.

With regard to investigation pages for conditions such as Bacterial Meningitis and Infectious Respiratory Diseases and Hepatitis, the NBS presents you with additional options not available in the generic and other disease-specific page. In the case of the Bacterial Meningitis and Infectious Respiratory Diseases investigation pages, the NBS first presents a generic Bacterial Meningitis page. Once you select the bacterial species associated with the condition, the title of the page changes to the selected condition and the page displays condition-specific questions. As for Hepatitis, once you select a specific Hepatitis diagnosis, a disease-specific tab displays containing a series of fields appropriate to the selected diagnosis.

To add a generic investigation, perform the following procedure:

1. Display the View File page for the patient. To find and view a person, refer to "Finding and Viewing Patient and Provider Information" in "Section – 2, Working with Patient, Provider, and Organization Information."

   The NBS displays the contents of the View File page for the selected patient.

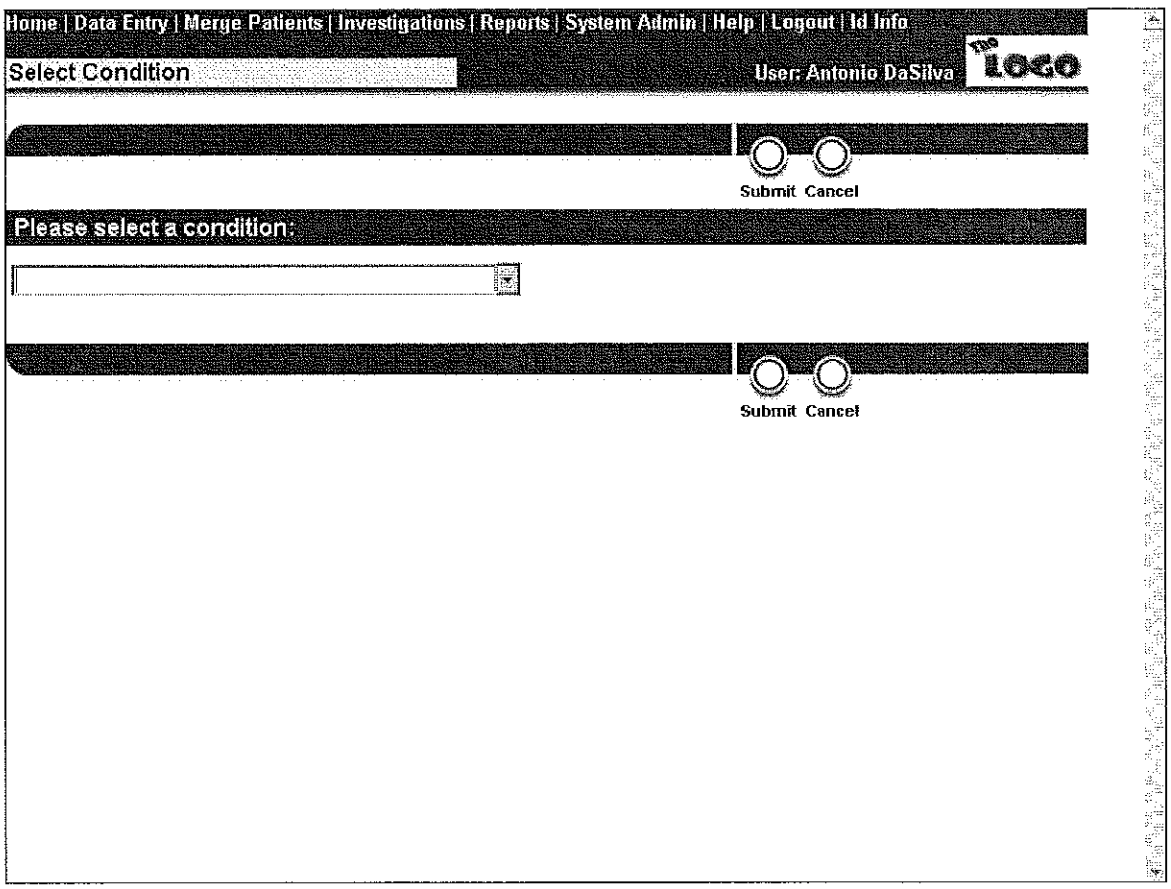
2. Click **Events**.

   The NBS displays the contents of the Events tab.

3. Click **Add** in the Investigations section.

   Note: You can scroll to the Investigations section, or click the **Investigations** navigation link at the top of the page.

   The NBS displays the Select Condition page.



4. Click the list box under "Please select a condition" and choose the condition you want.
5. Click **Submit**.

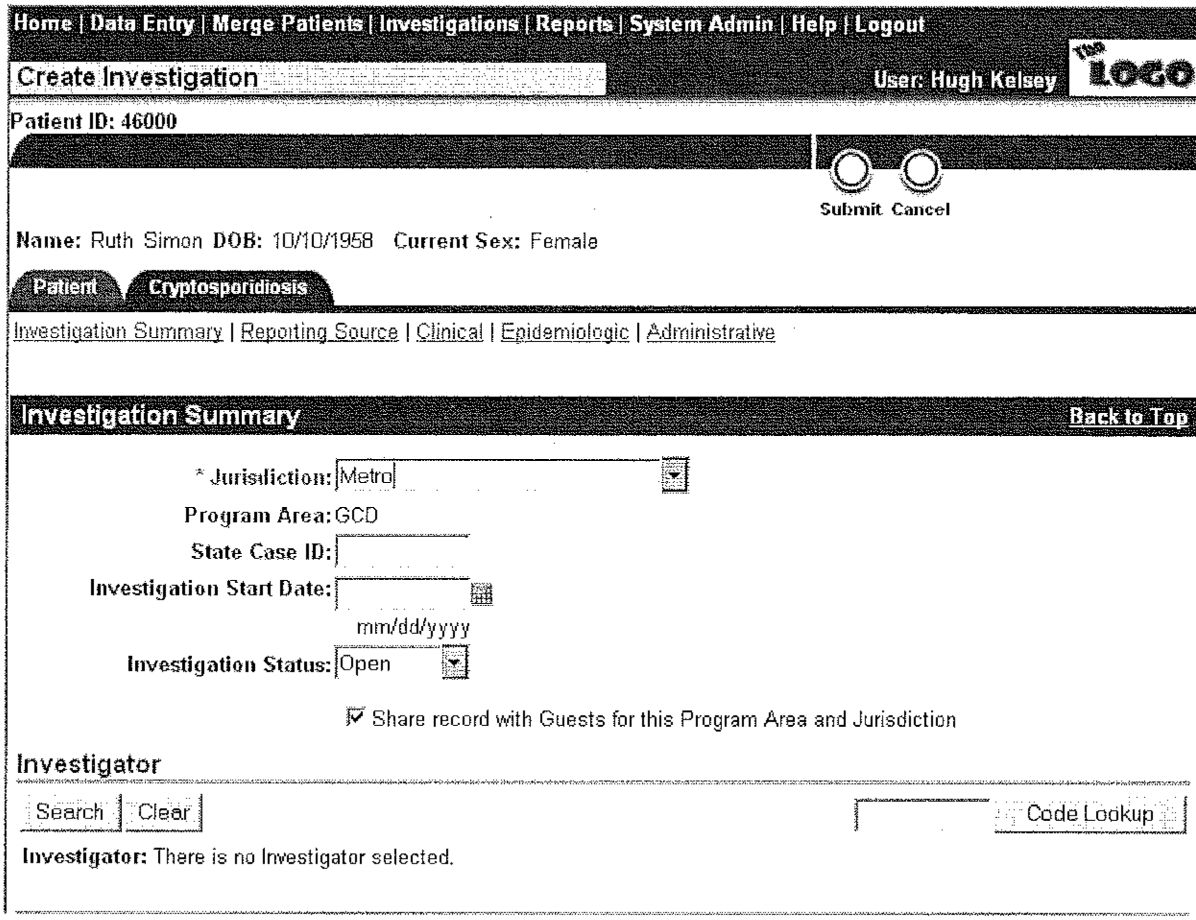
The NBS displays the Add Investigation page and the contents of the Patient tab.

6. Optionally, edit the patient's demographic information.

   Note: Changes you make to the information are assigned the "as of" date indicated in the **Basic Demographic Data As Of** field and are reflected in the master patient record.

7. Click the **Condition** tab.

   The NBS displays the contents of the Condition tab.



   Note: The Condition tab displays the name of the condition covered in the investigation. For example, a Hepatitis investigation would display "Hepatitis" on the Condition tab.

8. Optionally, click **Jurisdiction** and choose the jurisdiction you want. This is a required field.

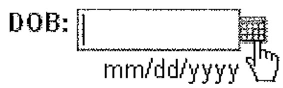
   Note: The NBS displays a default jurisdiction based on the most recent address information for the patient.

9. Optionally, click **State Case ID** and type the state case ID you want.

10. Optionally, click **Investigation Start Date** and type the date you want. The NBS displays the Open status by default.

Note: A calendar icon is available on the screen for NBS date fields. This allows the user to either enter a date manually or click on the calendar icon and select the appropriate date from the calendar pop-up window (as shown in the screen shots below).

Step 1: User clicks on the Calendar Icon



Step 2: Pop-Up Calendar Appears and User Selects Applicable Date

Step 3: Date Selected Populated

Note: The pop-up calendar will be available for LDFs, but will not be available for CDFs or Custom Subforms.

11. Optionally, click **Investigation Status** and choose the status you want.
12. Optionally, click **Share record with Guests for this Program Area and Jurisdiction** to disable guest access for this record.

    Note: The NBS shares records with guest users by default. Guest permissions enable users from other program areas and jurisdictions to access records in your program area and jurisdiction. The NBS system administrator controls Guest permissions.
13. Optionally, click **Select** in the Investigator section to choose Investigator information.

    The NBS displays the search criteria pop-up window for the selected section.
14. Type the information for the person you want in the Search Criteria fields.

    Note: You can search for records using as few or many fields as you need. You must enter at least one item.
15. Optionally, click the **Operators** list box for the field you want and choose the operator you want.

Note: You use the **Operators** list box to add conditions to your search. Conditions help you refine the parameters of your search. For example, the Equal operator displays records that exactly match the text you entered. The Contains operator displays records containing any of the text you entered. The NBS displays the Contains operator by default.

16. Click **Submit**.

    The NBS displays the results of your search.

    Note: If no match exists, the NBS displays a message indicating that your search has no matches. Click **New Search** to perform a new search or **Refine Search** to refine your existing search criteria.

17. Click **Select** for the item you want.

    The NBS displays the parent page with the information you selected.

    Note: Click **Clear** to delete the existing information.

18. Optionally, click **Date Assigned to Investigation** and type the date you want. This field remains hidden until you choose an investigator.
19. Optionally, click **Date of Report** in the Reporting Source section and type the date you want.
20. Optionally, click **Reporting Source** and choose the reporting source you want.
21. Optionally, click **Select** in the Reporting Source section to choose source name and address information. Repeat steps 14-17 to enter a reporting source.
22. Optionally, click **County** and type the date you want.
23. Optionally, click **State** and type the date you want.
24. Optionally, click **Select** in the Reporter section to choose reporter information. Repeat steps 14-17 to enter a reporter.
25. Optionally, click **Select** in the Physician section to choose physician information. Repeat steps 14-17 to enter a physician.
26. Optionally, click **Was the patient hospitalized for this illness?** and choose the option you want.

    Note: Choosing **Yes** displays additional fields for entering hospital information, admission and discharge information, and information on the duration of the hospital stay. To display hospital information, click **Select** in the Hospital section. Refer to steps 14-17 for the procedure for selecting a hospital. To enter admission, discharge, and duration information, click the fields you want and type the information you want.

27. Optionally, click **Diagnosis Date** and type the date you want.
28. Optionally, click **Illness Onset Date** and type the date you want.
29. Optionally, click **Illness End Date** and type the date you want.
30. Optionally, click **Illness Duration**, type the duration you want, and choose the unit of time you want.

Note: The NBS displays the Days option by default.

31. Optionally, click **Age at Onset** and choose the unit of time you want.

    Note: The NBS displays the Years option by default.

32. Optionally, click **Is the patient pregnant?** and choose the option you want.

33. Optionally, click **Does the patient have pelvic inflammatory disease?** and choose the option you want.

34. Optionally, click **Did the patient die from this illness?** and choose the option you want.

35. Optionally, click **Is this patient associated with a day care facility?** in the Epidemiologic section and choose the option you want.

36. Optionally, click **Is this patient a food handler?** and choose the option you want.

37. Optionally, click **Is this case part of an outbreak?** and choose the option you want.

    Note: Choosing **Yes** displays an additional field for choosing outbreak name information. To choose outbreak name information, click **Outbreak Name** and choose the name you want.

38. Optionally, click **Where was the disease acquired** and choose the option you want.

    Note: Choosing any option other than **Indigenous** or **Unknown** displays additional fields for entering geographic information such as the country, state, city, and county where the disease was acquired. To choose geographic information, click the fields you want and choose or type the information you want.

39. Optionally, click **Transmission Mode** and choose the mode of transmission you want.

40. Optionally, click **Detection Method** and choose the method of detection you want.

41. Optionally, click **Confirmation Method** and choose the method of confirmation you want.

    Note: Press the **Ctrl** key and click the options you want to select multiple items.

42. Optionally, click **Confirmation Date** and type the date you want.

43. Optionally, click **Case Status** and choose the status you want. This field is required to submit a notification. It is not required to save the investigation.

44. Optionally, click **MMWR Week** and type the week you want. This field is required to submit a notification. It is not required to save the investigation.

    Note: The NBS displays the current MMWR Week by default.

45. Optionally, click **MMWR Year** and type the year you want. This field is required to submit a notification. It is not required to save the investigation.

    Note: The NBS displays the current MMWR Year by default.

46. Optionally, click **General Comments** in the Administrative section and type the comments you want.

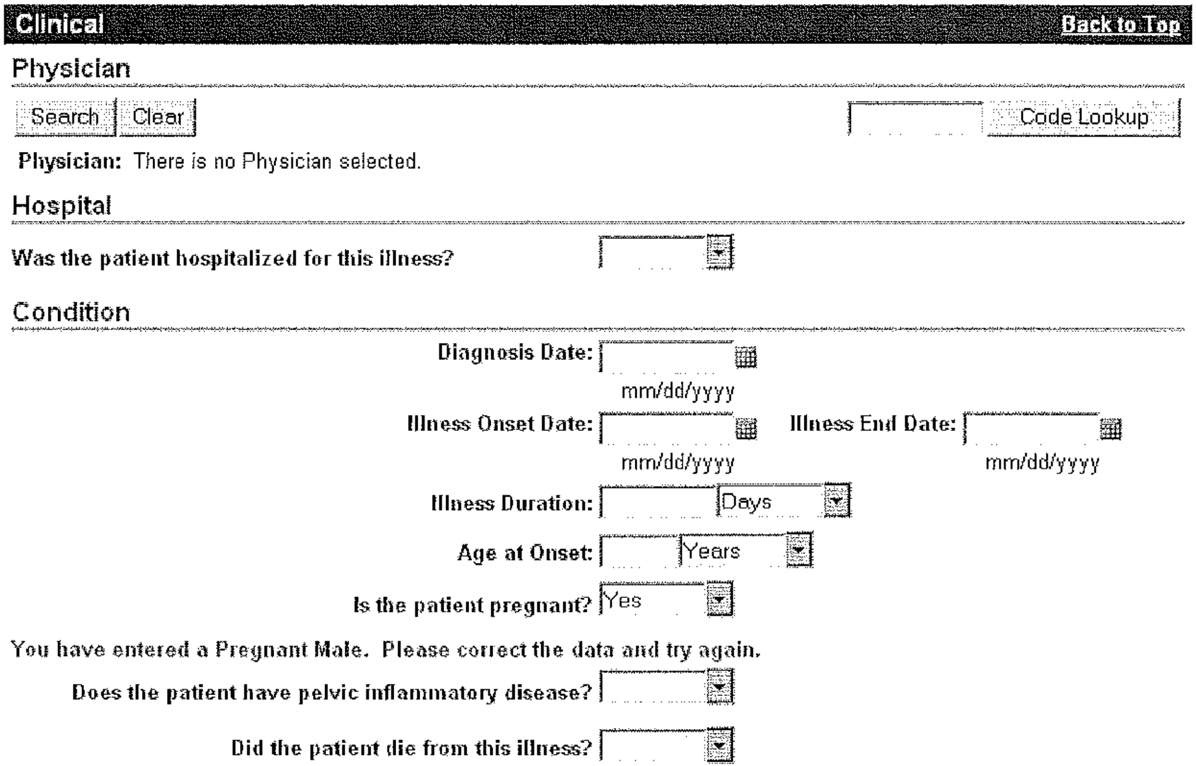
47. Click **Submit** when you are finished.

    The NBS saves your changes and displays the View Investigation page.

Note: the NBS offers several client-side validations to help improve the quality of data that is entered into the NBS. The data validations are as follows:

#	Event Type	Data Validation
1	Investigation	Patient DOB > Diagnosis Date
2	Investigation	Patient DOB > Illness Onset Date
3	Investigation	Patient DOB > Date Reported to County
4	Investigation	Patient DOB > Date Reported to State
5	Investigation	Patient DOB > Investigation Start Date
6	Investigation	Illness Onset Date > Diagnosis Date
7	Investigation	Pregnant Male
8	Lab Report	Patient DOB > Date Specimen Collected
9	Lab Report	Lab Report Date >Date Received by Public Health
10	Morbidity Report	Pregnant Male

Note: Each of these data validations will be triggered when the user attempts to submit the applicable event (i.e., Investigation, Lab Report or Morbidity Report).



Editing an Investigation

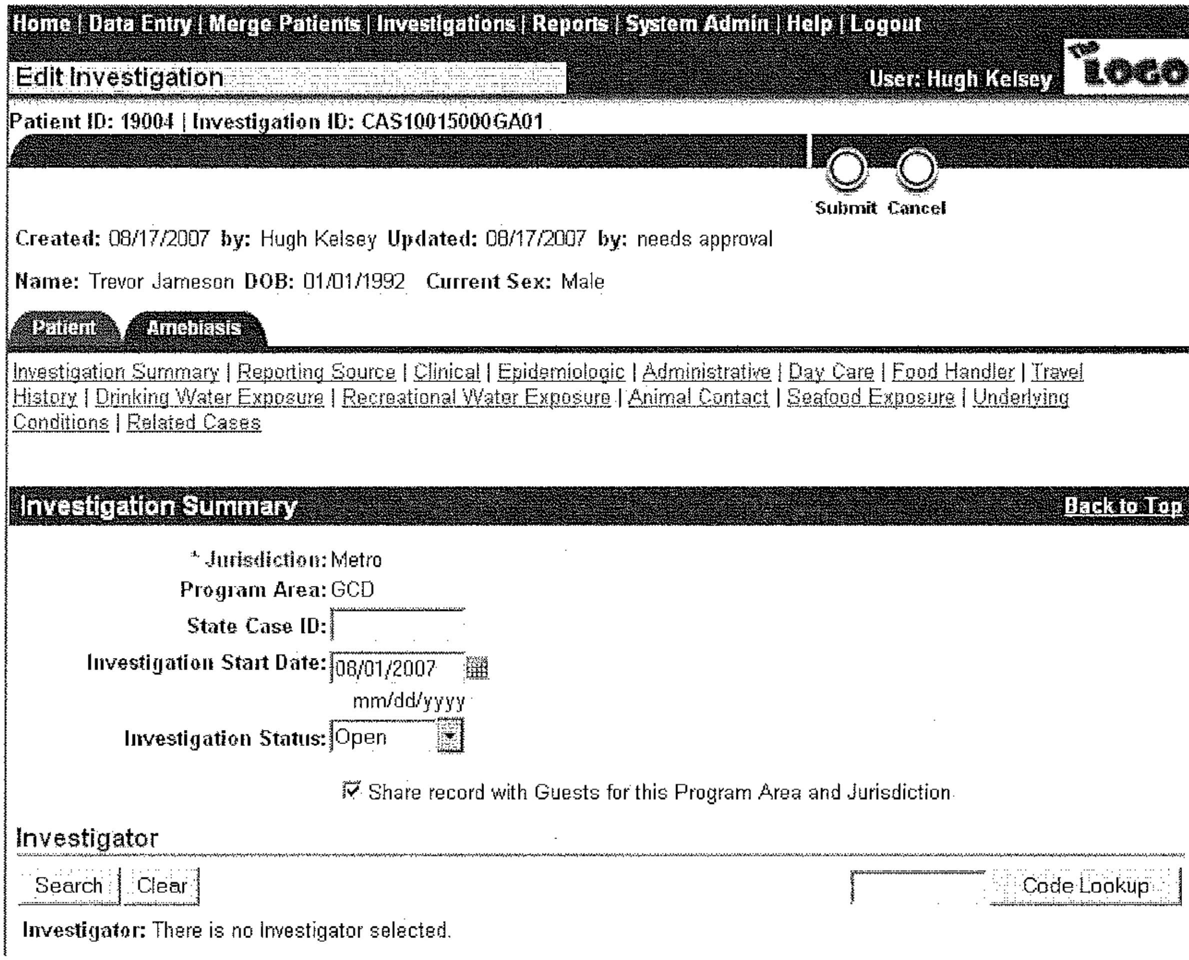
The NBS enables you to edit an investigation. You edit investigations using the Edit Investigations page.

To edit an investigation, perform the following procedure:

1. View the investigation for the patient you want. To view an investigation, refer to "Viewing an Investigation from the View File Page."
2. Click **Edit.**

   The NBS displays the Edit Investigation page.
3. Click the **Condition** tab.

The NBS displays the contents of the Condition tab.

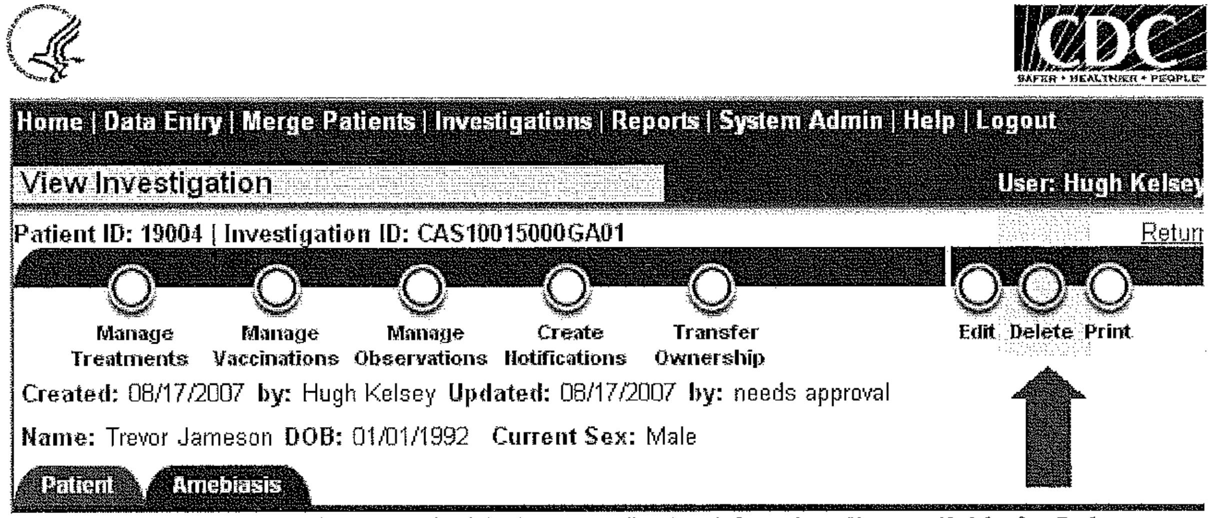


3. Click the fields you want and type or choose the information you want. To work with the various field on the Edit Investigation page, refer to "Adding an Investigation" for the required procedures.

Deleting an Investigation

The NBS allows users to logically delete an investigation. Users should be aware that 'logical delete' means that the record still exists in the database but is not available through the NBS application. Users must have 'Delete Investigation' permissions for the applicable Program area and Jurisdiction combination in order to delete an investigation.

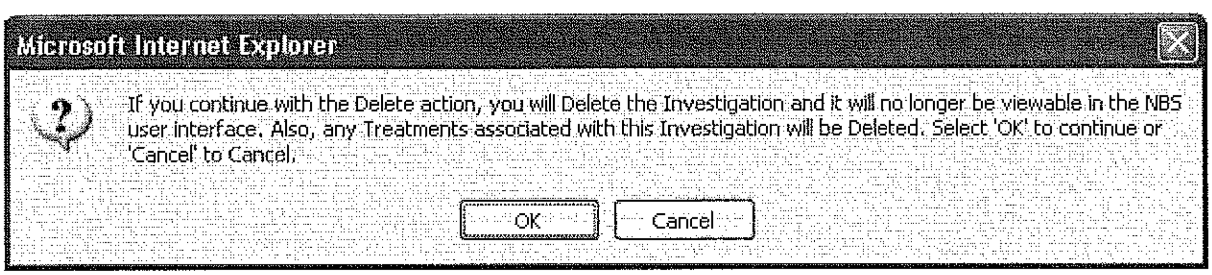
Users given the rights to delete an investigation will see a 'Delete' button on the View Investigation page between the 'Edit' and 'Print' buttons.



The 'Delete' button provides users with the same 'Delete' functionality available for Lab Reports and Morbidity Reports. Once an Investigation is deleted, the Investigation Status will automatically be set to 'Closed,' and the Case Status will automatically be set to 'Not a Case,' whether or not a Case Status was previously entered. Deleted Investigations will also no longer be viewable anywhere in the user interface including the following locations:

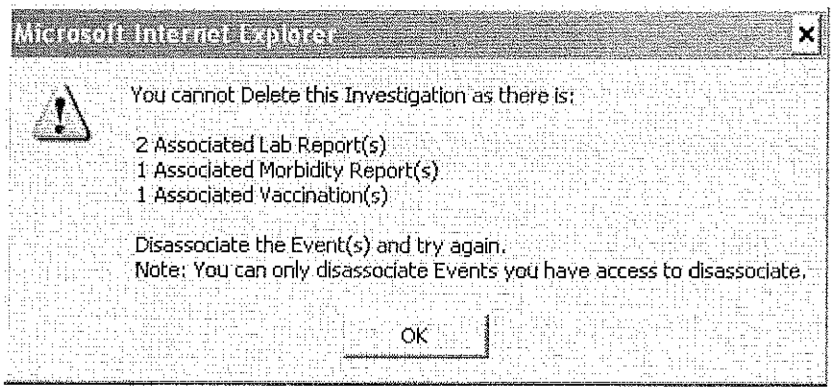
- View File Events
- View File Summary
- My Program Area Investigations
- All of the Notification queues:
  - Approval Queue for Initial Notifications
  - Rejected Notifications Queue
  - Updated Notifications Queue

When the user clicks the 'Delete' button, the user will be presented with a dialog box confirming the deletion. If the user presses 'OK,' the delete will be processed and the user will be taken to the location where they initiated the View Investigation. If the user presses 'Cancel,' the user will be returned to View Investigation.



If the investigation being deleted has any Treatment(s) associated, the Treatment(s) will automatically be deleted along with the investigation.

Users will not be able to delete an Investigation if there are any Lab Reports, Morbidity Reports, or Vaccinations associated with the Investigation. If this scenario is encountered, the below message will be displayed showing the number of associations that have to be removed.



Deleted investigations will **NOT** show up in any NBS Standard Reports or Report Templates.

Lesson Summary

In this lesson, you learned to perform the following functions:

- View an investigation.
- Add an investigation.
- Edit an investigation.
- Delete an investigation

Lesson 2 – Managing Vaccinations and Observations

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- Assign existing vaccinations and observations to an investigation.
- Transfer ownership of an investigation.

Managing Observations

You can create an investigation based on a single observation, a set of observations, or without an observation. When you create an investigation based on existing observation, the NBS automatically associates the observation with the investigation. Once you submit the investigation, the observation information displays in the Associated Observations section of the View Investigation page.

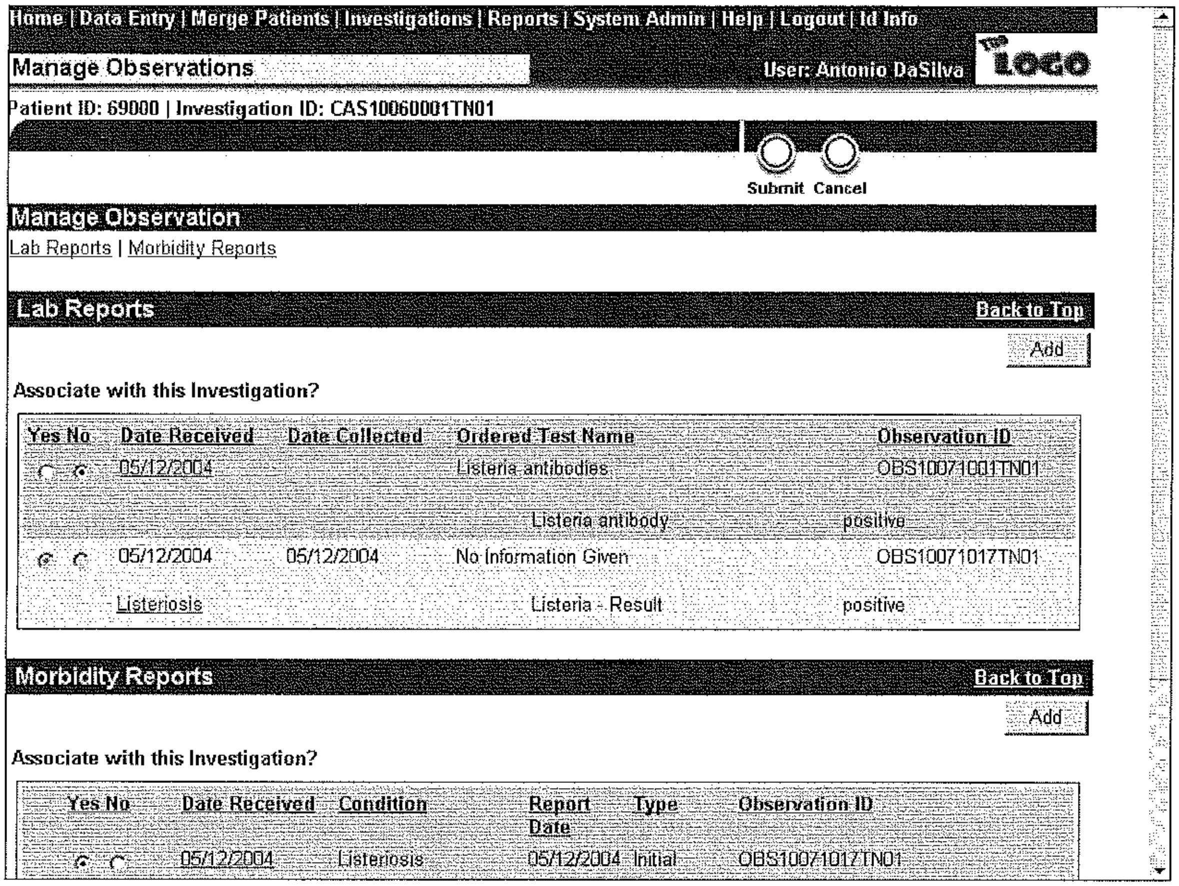
Since the NBS enables you to add an observation before adding an investigation, the system provides a means by which you can manually associate these existing observations to an existing investigation.

The NBS terminology refers to this process as "managing" observations. You manage observations by associating them with an existing investigation using the Manage Observations page.

To manage observations, perform the following procedure:

1. Click **Manage Observations** in the View Investigation page. To display the View Investigation page, refer to "Viewing an Investigation" in this section.

The NBS displays the Manage Observations page.



2. Optionally, do one of the following:
   - Click the **Lab Reports** link to display the Lab Reports section.
   - Click the **Morbidity Reports** link to display the Morbidity Report section.

   Note: You can also use the scroll bar to display the section you want.

3. Optionally, click the **Date Received** link for the observation you want.

   Note: Click **Add** in the Lab Report or Morbidity Report section, respectively, to add an observation. To add observations, refer to "Section 3 – Working with Lab Reports, Morbidity Reports, and Vaccinations."

   The NBS displays the View Observation page for the selected lab or morbidity report. When you are finished, click **Return to Manage Observations** to display the Manage Observations page.

4. On the Manage Observations page, do one of the following:
   - Click **Yes** to associate the observation with the investigation you want.
   - Click **No** to disassociate the observation with the investigation you want.

5. Click **Submit**.

The NBS displays the View Investigation page and the contents of the Patient tab.

6. Click the Condition tab and click **Associated Observations** at the top of the View Investigation page.

   The NBS displays (or removes, depending on your initial selection) the selected observation in the Associated Observations section.

Managing Vaccination Records

As with observations, you manage vaccination records by associating them with an existing investigation. Vaccination information associated with an investigation displays in the Associated Vaccinations section of the View Investigation page. You manage vaccination records using the Manage Vaccinations page.

To manage vaccination records, perform the following procedure:

1. Click **Manage Vaccine Records** in the View Investigation page. To display the View Investigation page, refer to "Viewing Investigations" in this section.

   The NBS displays the Manage Vaccinations page.

   Note: Click **Add** in the Manage Vaccinations page to display the Add Vaccination page and add a vaccination. To add a vaccination, refer to "Viewing, Adding, and Editing Vaccinations" in "Section 3 – Working with Lab Reports, Morbidity Reports, and Vaccinations."

2. Optionally, click the **Vaccination ID** link (the alphanumeric string starting with the letters "INT") for the vaccination record you want.

   The NBS displays the View Vaccination page for the selected vaccination record. When you are finished, click **Return to Manage Vaccinations** to display the Manage Vaccinations page.

3. On the Manage Vaccinations page, do one of the following:

   – Click **Yes** to associate the vaccination record with the investigation you want.

   – Click **No** to disassociate the vaccination record with the investigation you want.

4. Click **Submit**.

   The NBS displays the View Investigation page and the contents of the Patient tab.

5. Click the Condition tab and click **Associated Vaccinations** at the top of the View Investigation page.

   The NBS displays (or removes, depending on your initial selection) the selected vaccination in the Associated Vaccinations section.

Note: While the View Investigation page displays the Manage Treatments button, this functionality is not fully implemented in this release. You can, however, add a treatment from the Manage Treatment page.

Transferring Ownership

In some cases, you may find it necessary to change the jurisdiction associated with an investigation. By assigning or changing the jurisdiction, you transfer the observation's ownership. You use the Transfer Ownership page to assign or transfer responsibility for an investigation to another jurisdiction.

When an Investigation is transferred to a new Jurisdiction, any associated Lab Reports or Morbidity Reports will be transferred to the new Jurisdiction automatically. It is not necessary to manually change the Jurisdiction of the Lab Reports and/or Morbidity Reports associated to the Investigation after the Investigation has been transferred.

Note: The cascade of Transfer Ownership is unidirectional, meaning that transferring the Investigation to a new Jurisdiction will result in the associated Lab Reports and Morbidity Reports being transferred as well. However, transferring the ownership of Lab Reports or Morbidity Reports to a new Jurisdiction will not change the Jurisdiction of the associated Investigation.

To assign or transfer the ownership of an investigation, perform the following procedure:

1. View the investigation you want. To view an investigation, refer to "Viewing an Investigation" in this section.
2. Click **Transfer Ownership**.

   The NBS displays the Transfer Ownership page.
3. Click **Jurisdiction** and choose the jurisdiction you want.

   Note: You cannot transfer program areas for investigations.
4. Click **Submit**.

   The NBS transfers ownership of the investigation and displays the Transfer Confirmation page.
5. Do one of the following:
   - Click **Investigations** on the navigation bar. The NBS displays the My Program Area's Investigations page.
   - Click the **Home** link or **Home** on the navigation bar. The NBS displays the NBS Home page.

Note: If you transfer ownership of the investigation to a jurisdiction that you do not have permission to view, you will no longer be able to view the investigation.

Lesson Summary

In this lesson, you learned to perform the following functions:

- Assign existing observations and vaccinations to an investigation.
- Transfer ownership of investigations.

Lesson 3 – Creating Notifications, Reviewing Notifications Needing Approval and Monitoring Updated Notifications

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- Create notifications.
- Review notifications needing approval.
- Monitor updated notifications.

Creating Notifications

After you add an investigation and its associated observation, treatment and vaccination information, you can create and submit a Nationally Notifiable Disease (NND) notification to the CDC. You use the Create Notifications page to create and submit NND notifications.

When you submit a notification, the NBS creates the notification message based on the attributes of the persons and observations associated with the investigation. Depending on your security permissions, the NBS either sends the notification message to the CDC or it gets routed to another user for review and approval. If a notification has already been created for the investigation, any edits made to the investigation or any event associated with the investigation (e.g., morbidity report, vaccination or lab report), will cause the notification to be auto-resent to the CDC.

Before you create a notification, you must ensure that the investigation on which it is based includes the following fields required to submit a notification:

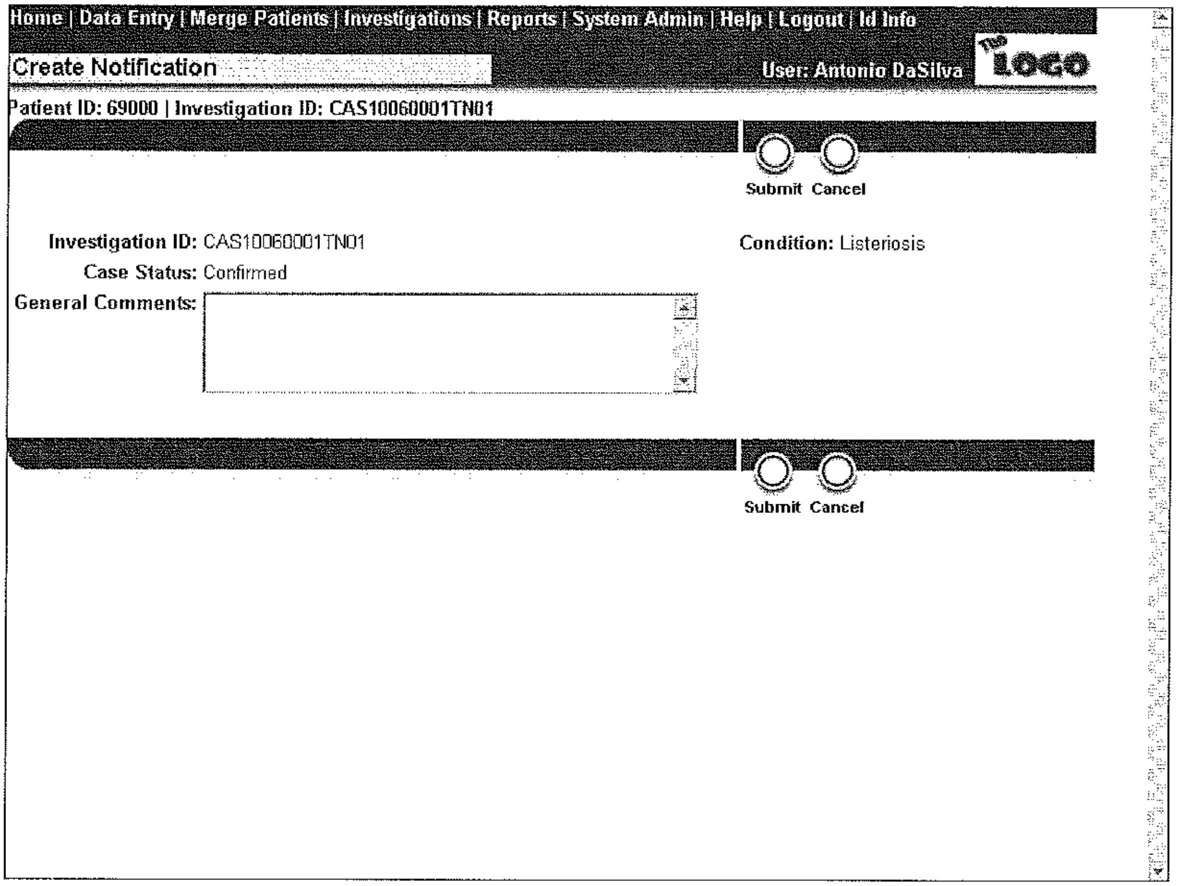
- Case Status
- Number of Cases (for Summary Reports)
- MMWR Week
- MMWR Year

If you create a notification from an investigation that does not contain these required fields, the NBS displays an error and prompts you to edit the investigation. To edit an investigation, refer to "Editing Investigations" in this section.

To create a notification, perform the following procedure:

1. View the investigation you want. To view an investigation, refer to "Viewing an Investigations from the View File Page" in this section.
2. Click **Create Notifications**.

The NBS displays the Create Notification page.



3. Click **General Comments** and type the comments you want.
4. Click **Submit** when you are finished entering comments.

   Depending on your security permissions, the NBS creates the notification and either sends the notification message to the CDC, or to a supervisor for review and approval.

   If the system accepts the notification, the NBS displays the View Investigation page. If the system rejects the notification, the NBS displays an error and prompts you to edit the investigation. You can click **Edit Investigation** to display the Edit Investigation page and make the required changes to the investigation.

Reviewing Notifications

If there is an initial notification that is created by a user that needs approval, the notification is routed to the Approval Queue for Initial Notifications. From this queue, a supervisor or similar user with the notification approval security permission can review pending notifications. Once you complete your review, you can either approve and send the notification to the CDC, or reject the notification. If the notification is successful, the NBS displays a confirmation message and removes the notification from the work queue on the Approval Queue for Initial Notifications page.

To review notifications, perform the following procedure:

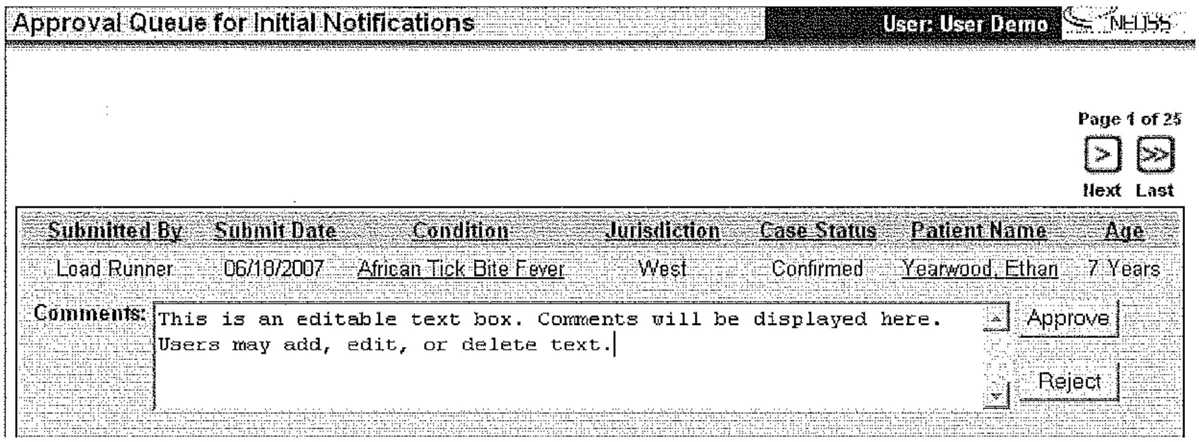
1. Click **Home** on the navigation bar.

   The NBS displays the Home page.

2. Click **Approval Queue for Initial Notifications**.

   Note: The number displayed within the parentheses next to the Approval Queue for Initial Notifications indicates the total number of notifications in your work queue.

   The NBS displays the Approval Queue for Initial Notifications page and a list of submitted notifications for review.



3. Optionally, click the **Name** link for the investigation you want.

   The NBS displays the View Investigation page.

4. Click **Return to Approval Queue for Initial Notifications**.

   The NBS displays the Approval Queue for Initial Notifications page.

5. Optionally, click the **Comments** field and type the comment you want.

6. Do one of the following:

   – Click **Approve** to approve the notification.

   – Click **Reject** to reject the notification.

   The NBS performs the selected function. Depending on your selection, the NBS displays a confirmation message.

   The following table lists the available confirmation messages:

Message	Description
The Notification [Notification ID] has been approved.	Confirms that you approved the notification.
The Notification [Notification ID] has been rejected.	Confirms that you rejected the notification.
The system could not approve notification [Notification ID]. Please	Indicates that the system was unable to post the notification as approved.

Message	Description
create a new notification and try again.	

If the NBS approves the notification, the system removes the notification from your work queue.

Note: You can view the status of a notification in the Notifications section on the Condition tab of the View Investigation page. To understand how to view an investigation, refer to "Viewing an Investigation" in this section.

From the **View Investigation** page, you may do the following:

- Click **Edit** to change or add information to the investigation record.
- Click **Manage Observations**, where you can associate an existing laboratory or morbidity report to the investigation
- Click **Create Notifications** to create an updated notification that is sent directly to the CDC

Rejected Notifications

The **Rejected Notifications Queue** provides users with a listing of notifications that were rejected for transmission to the CDC (from the **Approval Queue for Initial Notifications**) by an approver. From this queue, any user with the permission "Create Notification, Needs Approval" or "Create Notification, Does Not Need Approval" can view notifications rejected by an approver provided the notification is one the user is permissioned to see by Jurisdiction and Program Area. Rejected notifications are automatically removed from the queue based on installation settings (default is 30 days).

To review rejected notifications, perform the following procedure:

1. Click **Home** on the navigation bar.

   The NBS displays the Home Page

2. Click **Rejected Notifications Queue**

   Note: The number displayed within the parentheses next to the **Rejected Notifications Queue** indicates the total number of rejected notifications in your work queue.

   The NBS displays the **Rejected Notifications Queue** page and a list of rejected notifications for review.

   The name of the user who submitted the notification (**Submitted by**) and the name of the user who rejected the notification (**Rejected by**), along with any notification comments, are displayed.

3. Click the **Condition** to see the **View Investigation** page for that case.
   Note: This page displays the **Return to Rejected Notifications Queue** navigation link at the top of the page.

4. Click the **Patient Name** to see the **View File** page for that patient.
   Note: This page does not have a navigation link back to the **Rejected Notifications Queue**.

5. From the **View Investigation** page, you may do the following:
   - Click **Edit** to change or add information to the investigation record.
   - Click **Manage Observations**, where you can associate an existing laboratory or morbidity report to the investigation
   - Click **Create Notifications** to create an updated notification that is either
     a. returned to the **Approval Queue for Initial Notifications** if the user has only "Create Notification, Needs Approval" permission or
     b. sent to the CDC if the user has "Create Notification, Does Not Need Approval" permission

Rejected Notifications Queue User: xxxxxxx

Default Sort on Page Load is by Notification Date Submitted (Oldest First)

Links to View Investigation

Links to View Patient File

Previous | Next

Submitted By	Date Submitted	Condition	Jurisdiction	Case Status	Patient Name	Rejected By
NOT104	NOT103	NOT101	INV107	NOT100	DEM102, DEM104	NOT116
Comments: This is not a confirmed case. Please change the case status to not a case.						
Beth Lewis	09/01/2006	Lyme	Dekalb County	Confirmed	Wilmington, Samantha	Anne Smith
Comments: This is not a confirmed case. Please change the case status to not a case.						
Cindy Hall	09/09/2006	Hepatitis B	Fulton County	Probable	Potter, Harry	Jim Jones
Comments: There is no Investigation Start Date. Please update and create a new notification.						
Cindy Hall	09/25/2006	Salmonella	Dade County	Suspect	Haskell, Eddie	Jim Jones
Comments: This is not a suspect case. Please change the case status to not a case.						
John Smith	10/02/2006	Lyme	Cook County	Confirmed	Leblanc, Ray	Jim Jones
Comments: There is no Investigation Start Date. Please update and create a new notification.						
Reggie Jones	10/11/2006	Pertussis	Polk County	Confirmed	Elway, John	Will Yates
Comments: This is not a confirmed case. Please change the case status to not a case.						

Previous | Next

Monitoring Updated Notifications

A notification is auto-resent to CDC any time an investigation that already has a notification created for it is edited or any lab report, morbidity report, or vaccination record associated with that investigation is edited. This is true regardless of whether or not the user making the edit has permission to create a notification that does not require approval. The Updated Notifications Queue provides a way to audit and review these records that have been edited by users without notification approval permission. Only users with the appropriate security permission have access to the Updated Notifications Queue.

To monitor updated notifications, perform the following procedure:

1. Click **Home** on the navigation bar.

   The NBS displays the Home page.

2. Click **Updated Notifications Queue**.

   Note: The number displayed within the parentheses next to the Updated Notifications Queue indicates the total number of updated notifications in you work queue.

3. The NBS displays the Updated Notifications Queue page and a list of updated notifications.

Updated Notifications Queue

User: xxxxxxxx

This queue lists all instances of Notifications that were auto-resent based on edits made to investigations by users without Notification Approval permissions.

Submit

Note: *Indicates that the Case Status was changed

Check All | Clear All

Previous | Next

Remove	Patient Name	Condition	Jurisdiction	Case Status	Submitted By	Notification Update Date
☐	Moore, Dudley	Measles	Polk County	*Confirmed	Smith, John	01/31/2003
☐	Kilpatrick-Wilmington, Samantha	Lyme	Dekalb County	*Confirmed	Stevens, Roy	01/31/2003
☐	Potter, Harry	Hepatitis B	Fulton County	*Probable	Lewis, Beth	01/30/2003
☐	Haskell, Eddie	Salmonella	Dade County	*Suspect	Hall, Cindy	01/24/2003
☐	Leblanc, Ray	Lyme	Cook County	Confirmed	Howard, Ted	01/23/2003
☐	Elway, John	Pertussis	Polk County	Confirmed	Smith, John	01/23/2003
☐	Doe, John	Cholera	Henry County	Not a Case	Hall, Cindy	01/23/2003
☐	Beckham, David	Shigella	Fulton County	Suspect	Hall, Cindy	01/12/2003
☐	Potvin, Felix	Rubella	Polk County	Unknown	Smith, John	01/02/2003
☐	Charles, Ray	Tetanus	Henry County	Unknown	Smith, John	01/02/2003

Previous | Next

Submit

4. Optionally, click the **Condition** link to view the investigation.

   The NBS displays the View Investigation page.

5. Click **Return to Updated Notifications Queue**.

   The NBS displays the Updated Notifications Queue page.

6. Click the check box in the Remove column next to the record(s) that you would like to remove (or click **Check All** to check all records on the page) and then click **Submit.** This will remove all the checked records from the queue.

Notification History

The history of any notification is available on the appropriate View Investigations page under the section heading line item, **Notifications**. The Notification history has been 'rolled-up' such that the only line item that initially appears on the View Investigation page load is the Notification line item with the most recent Status.

Note: The example shown below is for an Investigation that has had a Notification history (e.g., PEND_APPR, APPROVED, COMPLETED). If the Notification only has one line item (e.g., PEND_APPR) then the '+' symbol would not appear since it would not be applicable.

Notifications Back to Top

Status Change Date	Date Sent	Jurisdiction	Case Status	Status
⊞ 04/16/2007		Metro	Confirmed	APPROVED
Comments: A morbidity report was also sent on this case by a physician.				

The following figure shows the expanded view of the Notification history. This is what the user will see if he/she clicks on the '+' button from the screen shot above. The most recent Status will appear at the top, while the oldest Status will appear at the bottom.

Notifications Back to Top

Status Change Date	Date Sent	Jurisdiction	Case Status	Status
⊟ 04/16/2007		Metro	Confirmed	APPROVED
Comments: A morbidity report was also sent on this case by a physician.				
04/16/2007		Metro	Confirmed	APPROVED
Comments: Case was confirmed by a laboratory report.				
04/16/2007		Metro	Confirmed	APPROVED
Comments: More information is being sent on this case.				
04/16/2007		Metro	Probable	APPROVED
Comments: More information is being sent on this case.				
04/16/2007		Metro	Probable	APPROVED
Comments: This is very likely a case.				

Deleting Investigations has the following effect on Notifications:

Notification Status		Notification sent to CDC?	Notes
From	To		
Approved (Not yet sent)	Logically Deleted	No	
Approved (Already sent)	Logically Deleted	Yes	Case Status = ' Not a Case'
Rejected	Logically Deleted	No	
Completed	Logically Deleted	Yes	Case Status = ' Not a Case'

Lesson Summary

In this lesson, you learned to perform the following functions:

- Create notifications.
- Review initial notifications.
- Monitor updated notifications.

Lesson 4 – Working with Summary Data

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- View summary data.
- Add a summary report.
- Submit a summary notification.

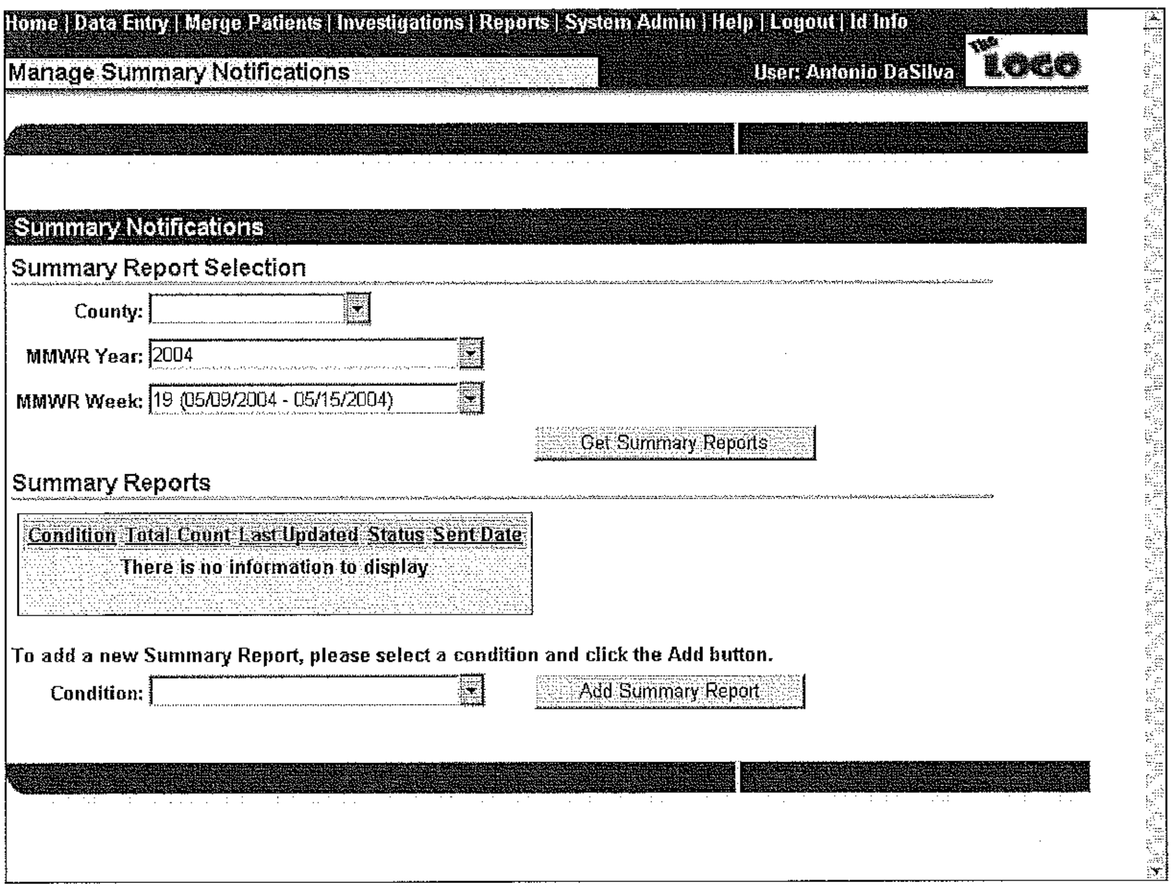
Viewing Summary Data

While many conditions require detailed reporting, some conditions are reported in summary. You can view summary data using the Manage Summary Notifications page.

To view summary data, perform the following procedure:

1. Click **Data Entry** on the on the navigation bar.
2. Click **Summary Data**

   The NBS displays the Manage Summary Notifications page.



2. Click **County** and choose the county you want.
3. Click **MMWR Year** and choose the year you want.
4. Click **MMWR Week** and choose the week you want.
5. Click **Get Summary Reports**.

   The NBS updates the list of conditions in the Summary Reports section.

Note: If the NBS returns no records, you can add a summary report. To add a summary report, refer to "Adding a Summary Report."

Adding a Summary Report

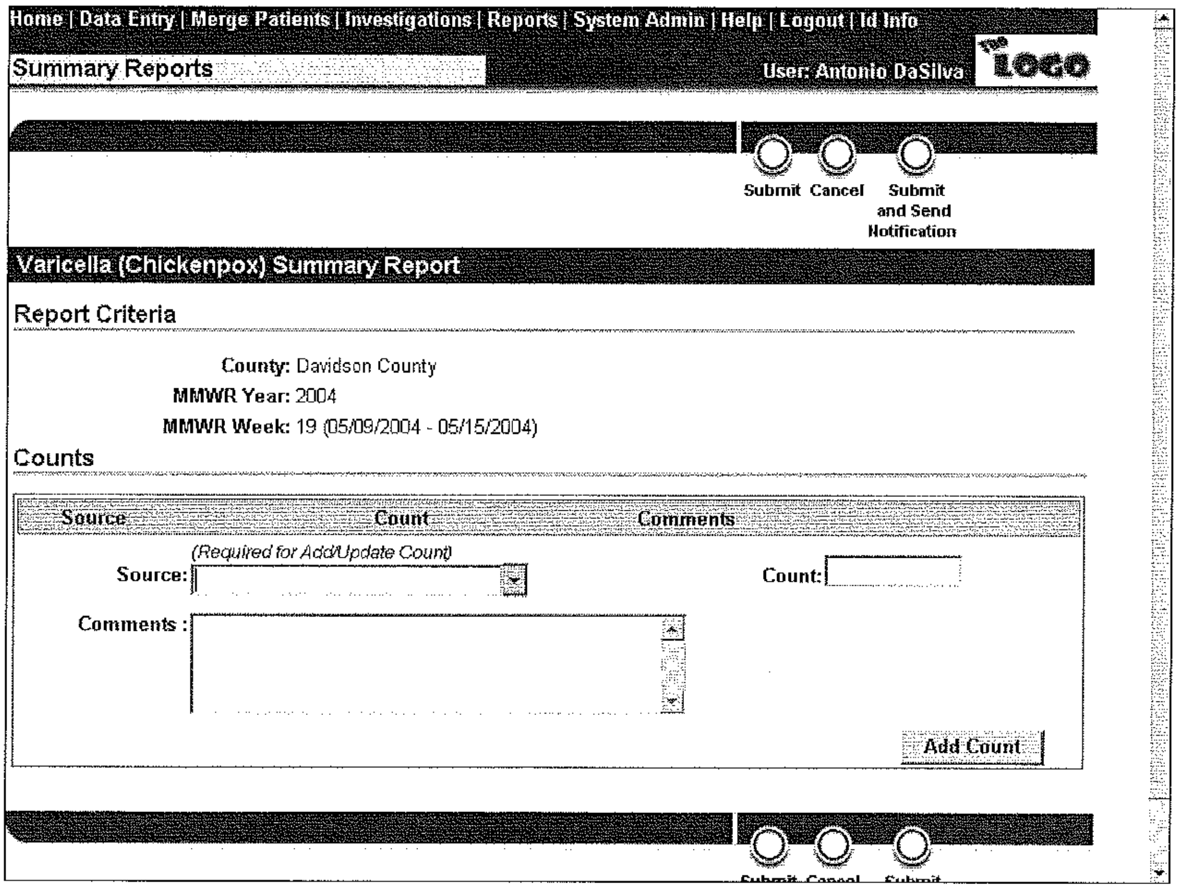
You can add a summary report for a condition.

To add a new summary report, perform the following procedure:

1. View the summary data for the jurisdiction and MMWR Year/Week you want. To view summary data, refer to "Viewing Summary Data" in this section.
2. Click **Condition** and choose the condition you want.
3. Click **Add Summary Report**.

   The NBS updates the list of conditions in the Summary Reports section, and displays a link for the selected condition.
4. Click the link for the condition you want.

   The NBS displays the Summary Reports page for the selected condition.



5. Click **Source** and choose the source you want.
6. Click **Count** and type the count you want.
7. Click **Comments** and type the comments you want.
8. Click **Add Count.**

The NBS updates the source and count information for the condition.

9. Optionally, do one of the following.
   - Click **Edit** to edit the source you want. The NBS displays the selected source information in the fields beneath the list of sources in the Counts section. When you are finished making changes, click **Update Count**. The NBS updates the list of source with the information you entered.
   - Click **Delete** to delete the source you want. The NBS deletes the selected information.
10. Do one of the following.
    - Click **Submit**. The NBS displays Manage Summary Notification page with the updated count for the selected condition in the Summary Reports section.
    - Click **Submit and Send Notification.** The NBS sends the notification and displays the Manage Summary Notifications page with the updated information in the Status and Sent Date column.

Note: Click **Cancel** to cancel and display the Manage Summary Notifications page.

Lesson Summary

In this lesson, you learned to perform the following functions:

- View summary data.
- Add a summary report.
- Submit a summary notification.

Section Summary

In this section, you learned to perform the following functions:

- View, add, and edit investigations.
- Assign existing observations and vaccinations to an investigation.
- Transfer ownership of investigations.
- Create and review notifications.
- View summary data, add summary reports, and submit summary notifications.

Section 5 – Working with Reports

Section Objectives

After completing this section, you will be able to perform the following functions:

- View and select reports.
- Run reports using basic and advanced criteria.
- Export a report's output.
- Save reports.
- Delete reports.
- Create custom reports using report templates.

Lesson 1 – Viewing and Running Reports

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- View and select reports.
- Run reports using basic and advanced criteria.
- Export, save, and delete a report

Understanding Reports

NBS provide eight standard reports you can use to view and analyze data. It also provides report templates you can use to create custom reports.

NBS provides the following standard reports:

- SR2, Counts of Reportable Diseases by County for Selected Time Frame
- SR5, Cases of Reportable Diseases by State
- SR7, Bar Graph of Cases of Selected Diseases vs. 5-Year Median for Selected Time Period
- SR8, State Map Report of Disease Cases Over Selected Time Period
- SR9, Bar Graph of Disease by Month
- SR10, Multi-Year Line Graph of Disease Cases
- SR11, Cases of Selected Diseases by Year Over Time
- SR12, Cases of Selected Disease by County by Year
- SR13, Counts of Selected Diseases by Case Status

To run a report, you perform the following procedures:

- View the available reports and select the report you want.
- Select the basic filter criteria.
- Optionally, select advanced filter criteria.
- Run the report.

You can also

- Create a custom report using a report template.
- Export a report.
- Save a report.
- Delete a report.

Viewing and Selecting Reports

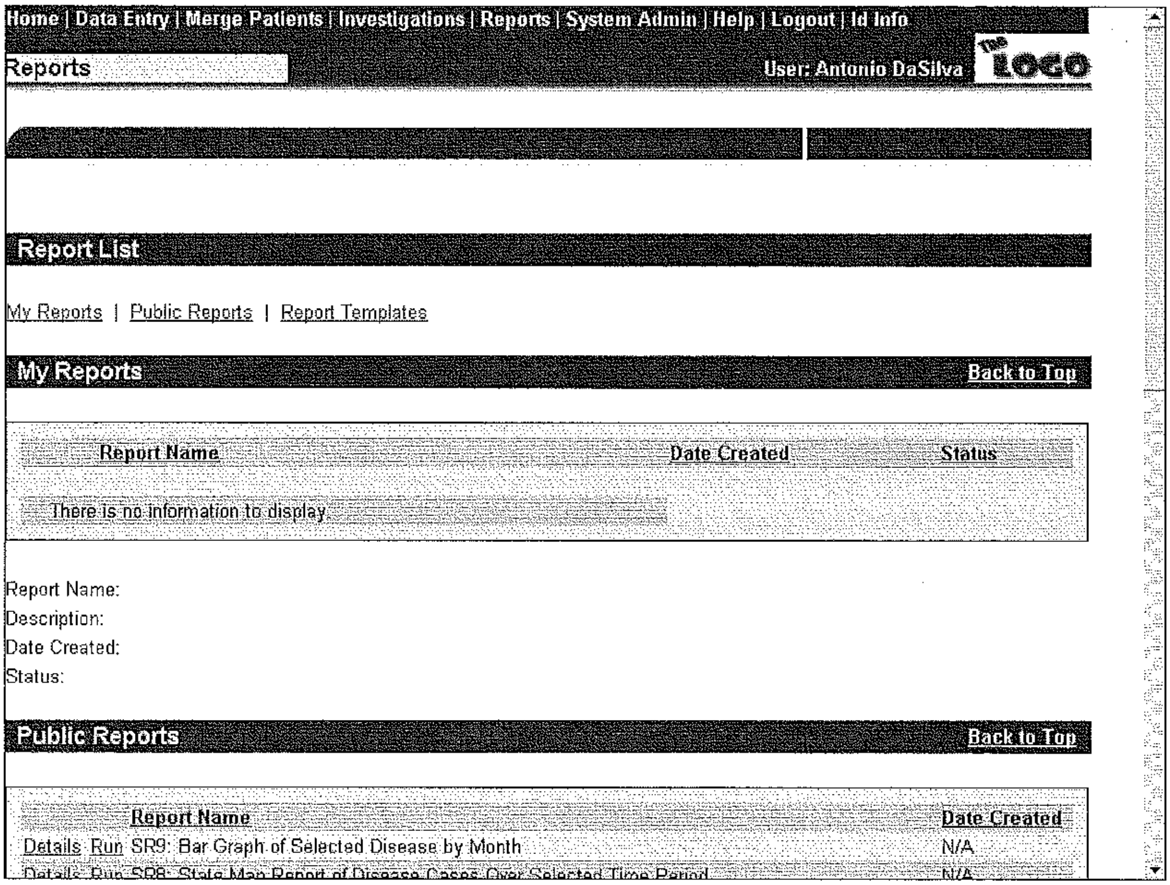
You can view and select a report using the Reports page. The Reports page displays the Reports List and includes a list of the following items:

- Public and private reports accessible only to you in the My Reports section.
- Public reports accessible to any user in the Public Reports section.
- Report templates you use to create a custom report in the Report Templates section.

To view and select a report, perform the following procedure:

1. Click **Reports** on the navigation bar.

   NBS displays the Reports page.



The Reports page is organized by the following sections:

Item	Description
My Reports	Displays a list of public and private reports you created or modified. This list is unique to you and is not available to any other user.
Public Reports	Displays a list of reports available to all users with appropriate permissions.
Report Templates	Displays a list of report templates you use to create a custom report.

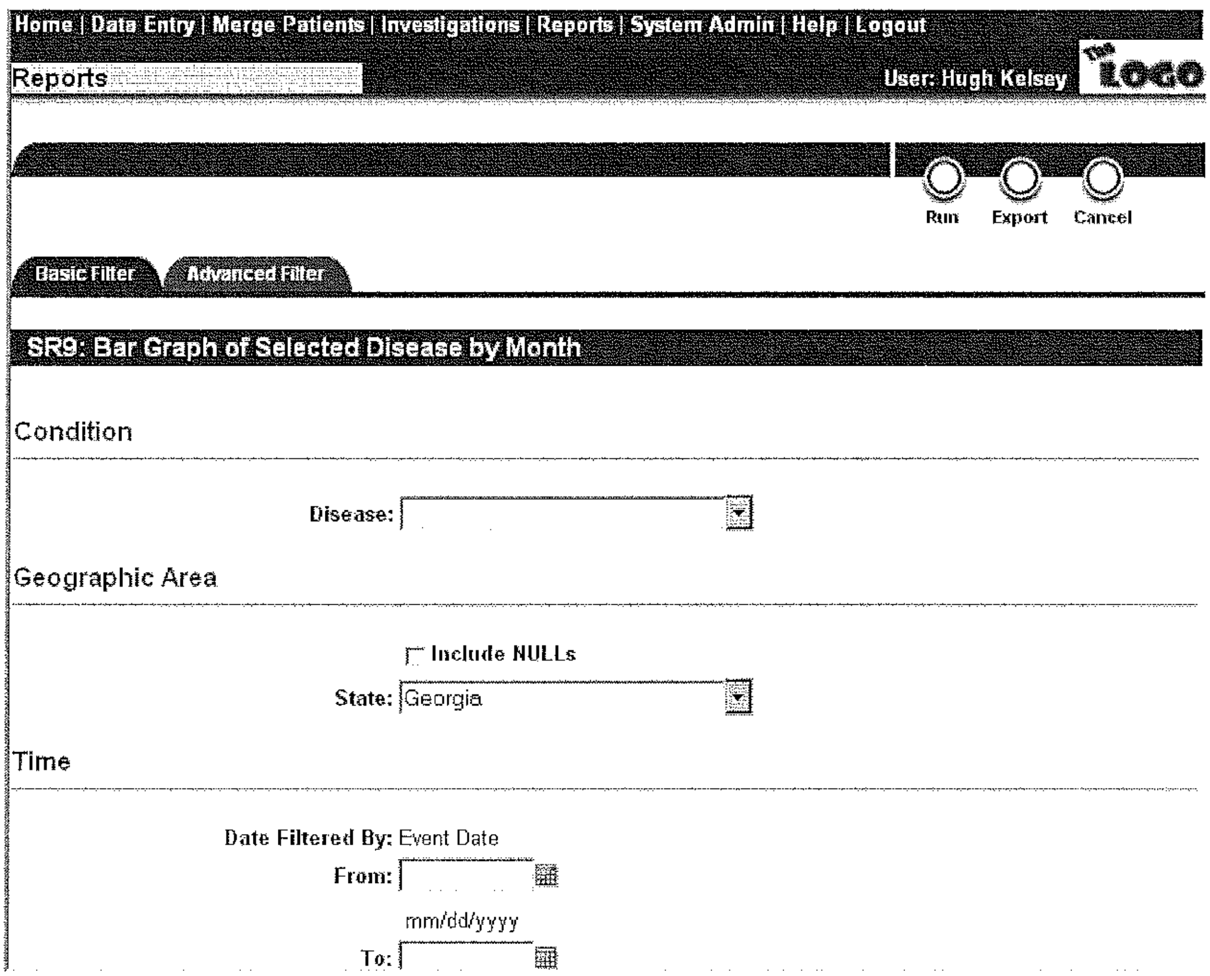
Beneath each section name, the Reports Page displays a list of available reports. You can display details about a report, run a report, and delete a report.

Note: Click the navigation links at the top of the page to display the section you want. Click **Back to Top** to return to the navigation links.

2. Click **Details** for the report you want.

   NBS displays detail information for the report you selected in a set of fields beneath the list of reports.

3. Click **Run** for the report you want. NBS displays the Basic Filter tab on the Reports page for the report you selected.



Once you select the report, you are ready to select the reporting criteria and run the report.

On the Basic Filter tab, there is an "Include NULLs" checkbox. This allows the user to include records with NULL values for a particular Basic Filter in the report output.

Running a Report Using Basic Filter Criteria

You can run a report using the basic filter criteria provided in the Basic Filter tab.

Note: The available criteria depend on the report you choose. Not all sections and their associated criteria are available for all reports.

To run a report using basic filter criteria, perform the following procedure:

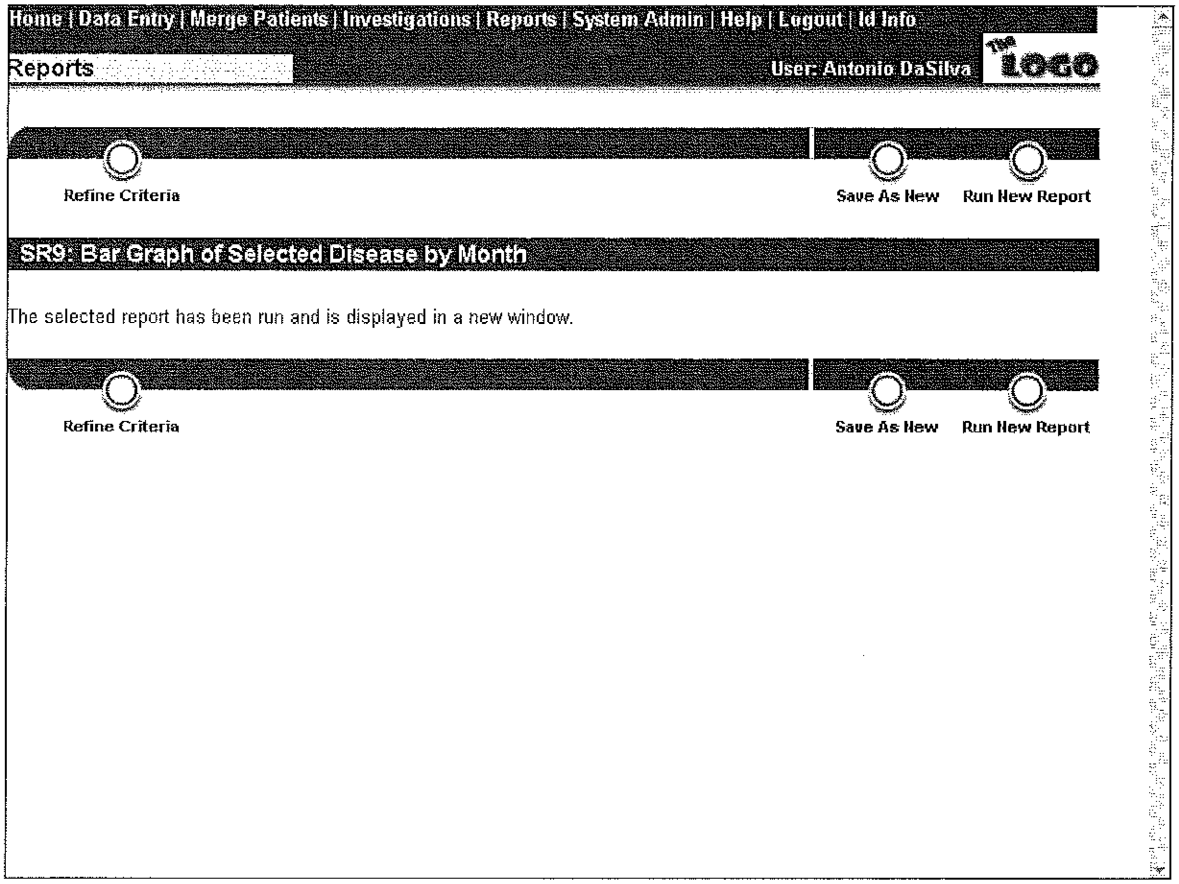
1. Select the report you want. To select a report, refer to "Viewing and Selecting Reports" in this section.
2. Choose the condition you want in the Condition section.

   Note: Condition includes disease-related information.
3. Choose the geographic area information you want in the Geographic Area section.

   Note: Geographic Area includes state, county, or jurisdiction information.
4. Choose the time information you want in the Time section.

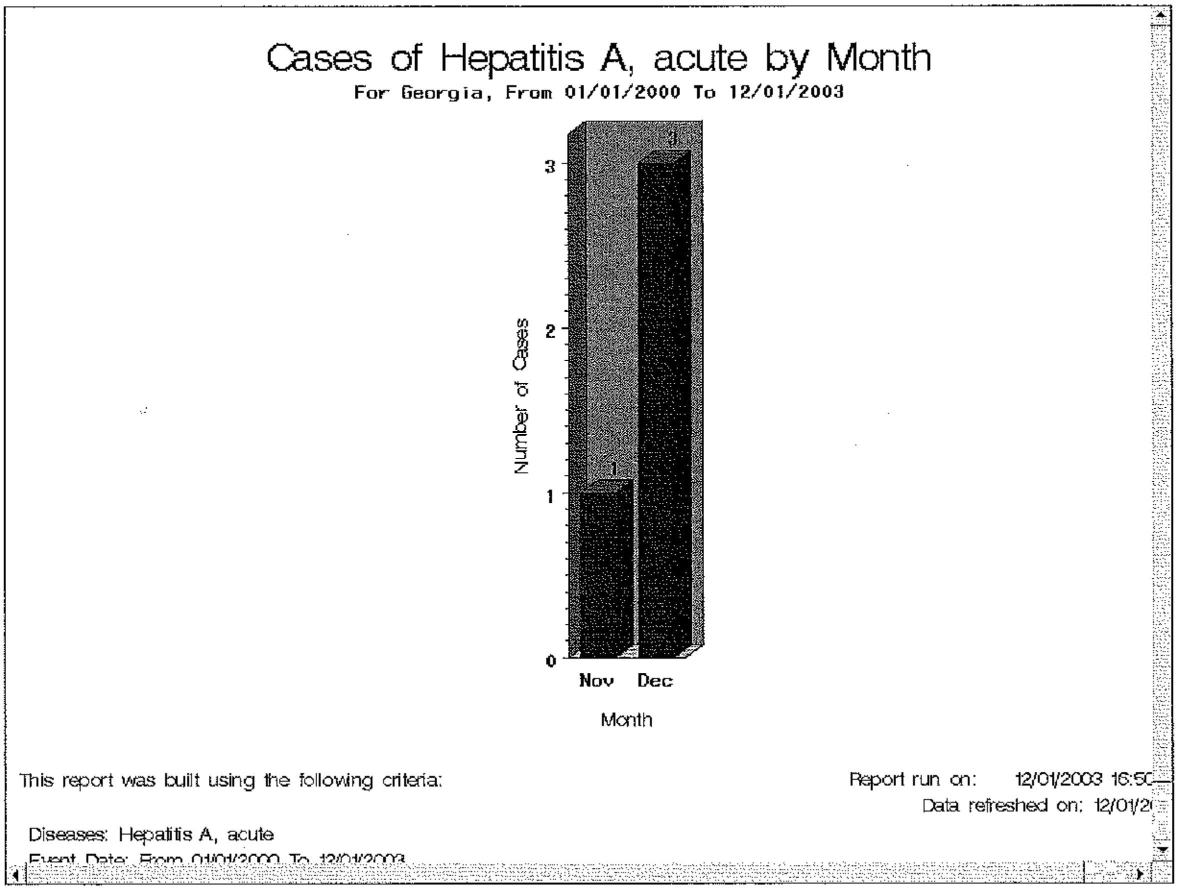
   Note: Time includes a date or date range.
5. Click **Run**.

NBS prompts you that the report is run in a new window and to save or display the report output.



Note: Click **Export** to export and save the report output to your workstation. To export a report, refer to "Exporting Reports" in this section.

NBS also displays the report output in a new browser window.



Note: The viewer in which the output displays depends on your workstation's configuration.

6. Click **Close** to close the browser window displaying the report output.
7. Do one of the following:

- Refine the report criteria. To refine the report criteria, click **Refine Criteria** and repeat steps 2 – 6.
- Run a new report. To run a new report, click **Run New Report** and repeat steps 2 – 6.
- Save the report. To save a report, refer to "Saving Reports" in this section.

NBS performs the selected function.

Note: The user can run any of the template-based reports without entering a Basic Filter. However, the user will be required to select at least one filter from either the Basic Filter OR Advanced Filter in order to run the report.

Running a Report Using Advanced Filter Criteria

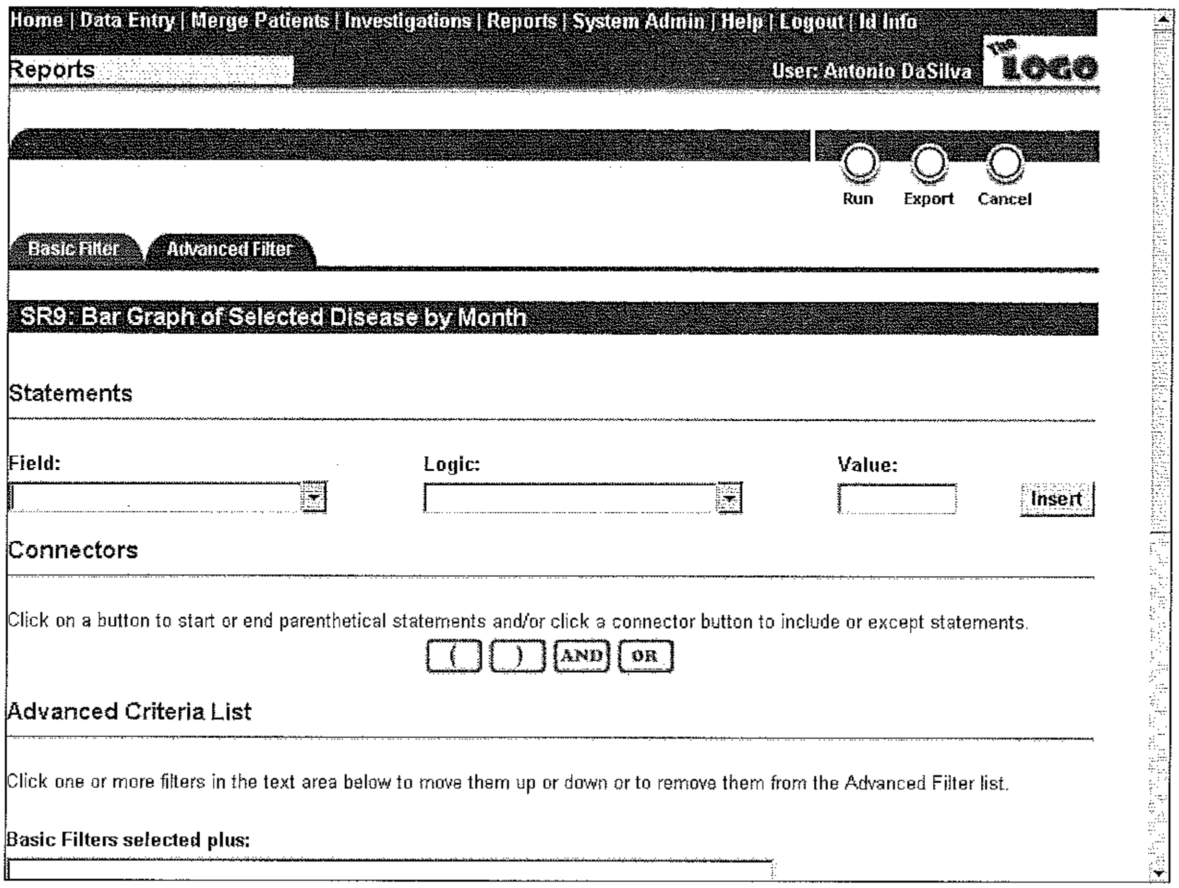
Once you enter basic filter criteria, you have the option of entering advanced filter criteria to further refine your report.

Note: While the use of advanced criteria is optional, you must enter the basic criteria before entering advanced criteria.

To run a report using advanced filter criteria, perform the following procedure:

1. Select a report and enter the basic criteria you want. To select a report and enter basic filter criteria, refer to "Running a Report Using Basic Filter Criteria" in this section.
2. Click **Advanced Filter** in the Reports page.

   NBS displays the contents of the Advanced Filter tab.



   The Statements section contains options for you to input the field, logical operator, and value you want.

3. Click **Field** and choose the field you want.
4. Click **Logic** and choose the operator you want.
5. Click **Value** and type the value you want.
6. Click **Insert**.

NBS displays your query in the Advanced Criteria List and the Current WHERE clause sections.

7. Click the operator you want in the Connectors section to further refine your search criteria.

   The following table list the connectors displayed on the Advanced Filter tab and describes their function:

Item	Description
(	Opened parenthetical connector. Used to start a parenthetical statement.
)	Closed parenthetical connector. Used to end a parenthetical statement.
AND	Concatenation. The AND Boolean operator that requires both of two inputs to be present or two conditions to be met for an output to be made or a statement to be executed.
OR	Alternation. The OR Boolean operator requires either of two inputs to be present or conditions to be met for an output to be made or a statement to be executed.

Advanced Filter Operators: The specific operators available to the user depend on the data type of the field. The following operators will appear based on the data type as shown in the table below:

Data Type	Operators
Date	Between, Is Null, Not Null, Equals, Not Equals, Less Than, Greater Than, Less or Equal, Greater or Equal
Numeric	Between, Is Null, Not Null, Equals, Not Equals, Less Than, Greater Than, Less or Equal, Greater or Equal
String (Free Text)	Contains, Starts With, Is Null, Not Null, Equals, Not Equals
String (Coded Values)	Is Null, Not Null, Equals, Not Equals

8. Click the buttons to the right of Basic Filters Selected Plus list in the Advanced Criteria List section to organize or remove the criteria you want.

The following table list the buttons displayed on the Advanced Criteria List section and describes their function:

Item	Description
^	Move Up. Moves the selected item up.
v	Move Down. Moves the selected item down.
<	Remove. Removes the selected item.
<<	Remove All. Removes all items.

9. Repeat steps 3 – 8 to build your query.
10. Click **Run**.

    NBS displays the report output in a new browser window and updates the Reports page.

    Note: Click **Export** to export the report output and save the output to your workstation. To export a report, refer to "Exporting Reports" in this section.
11. Click **Open** to display the report output.

    NBS displays the report output.

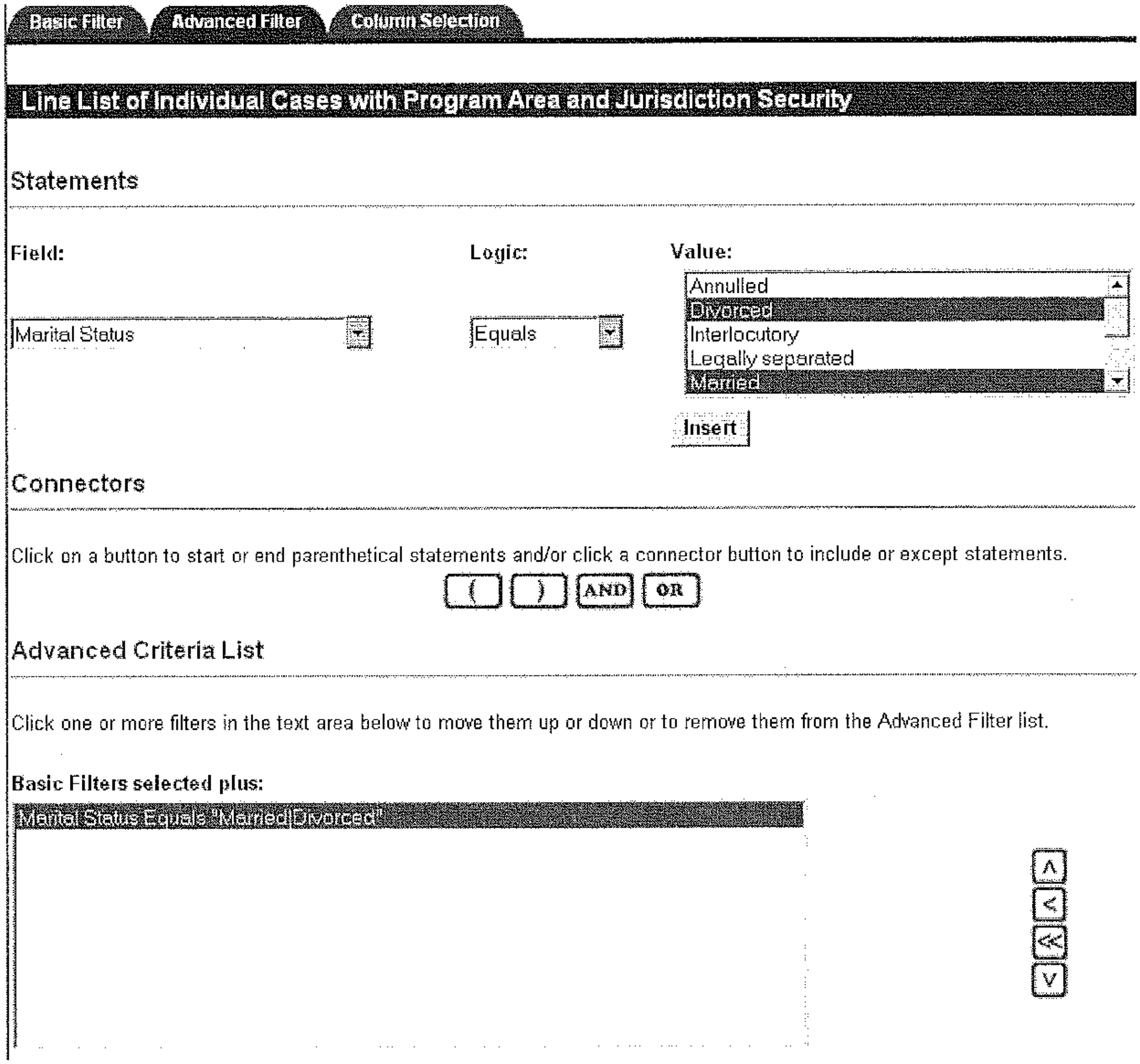
    Note: The viewer in which the output displays depends on your workstation's configuration.
12. Click **Close** to close the browser window displaying the report output.

    NBS also updates the Reports page.
13. Do one of the following:

- Refine the report criteria. To refine the report criteria, click **Refine Criteria** and repeat steps 1 – 12.
- Run a new report. To run a new report, click **Run New Report** and repeat steps 1 – 12.
- Save the report. To save a report, refer to "Saving Reports" in this section.

  NBS performs the selected function.

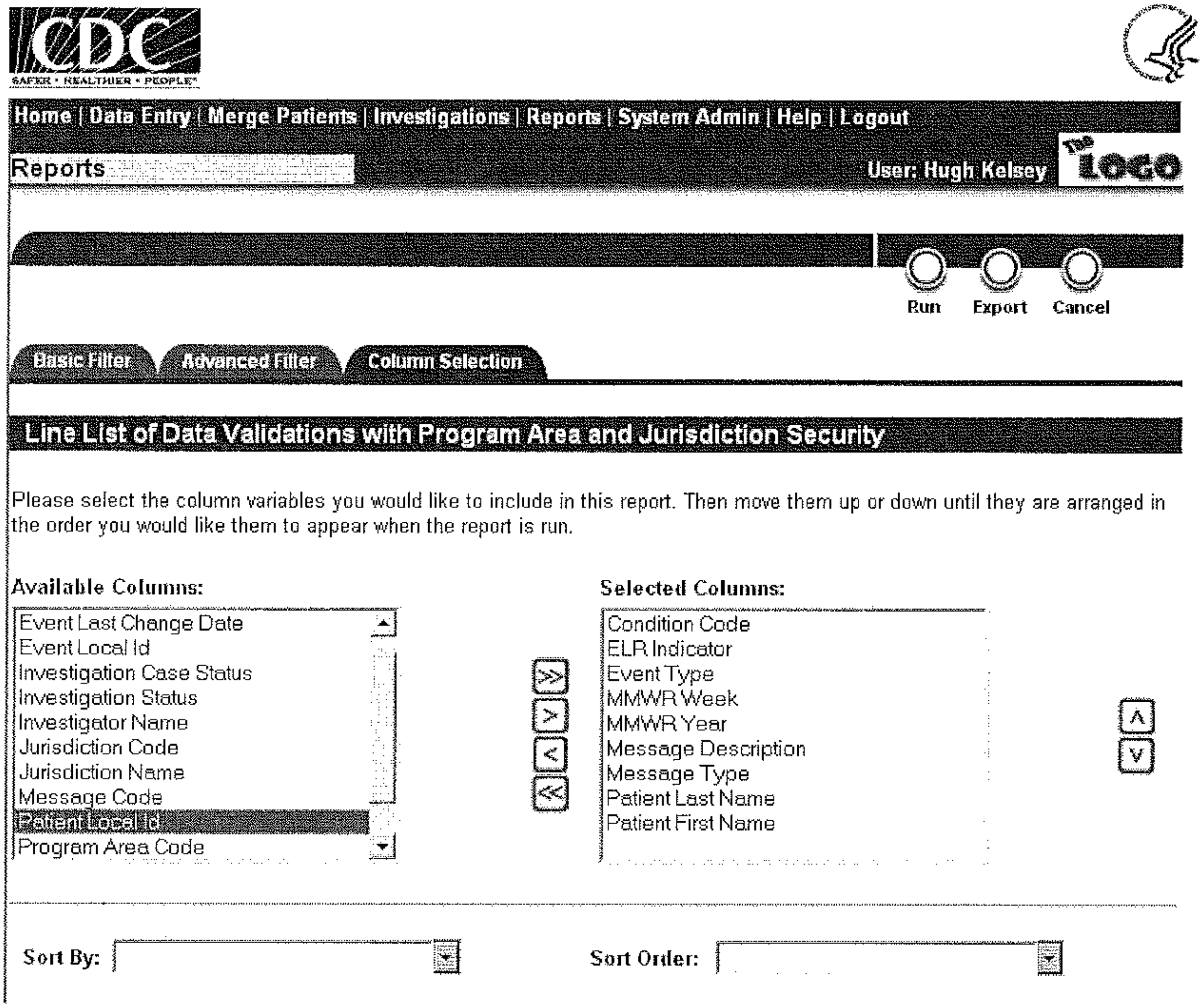
The Advanced Filter tab also displays descriptive values for those fields that have an associated SRT code set. The user will be able to select one or more values from the drop-down, and by clicking on the "Insert" button the values will appear in the Advanced Criteria List, as demonstrated in the screen shot below:



Column Selection

In the Report Templates, users are required to select the columns containing information they would like to include in the report. The Column Selection tab allows the user to place the selected columns in the "Selected Columns" field using the directional arrows. The columns are selected from the "Available Columns" list on the left.

Note: On the Column Selection tab the user can select a column for sorting the report output. The user can also choose whether to sort the column in ascending or descending order. The "Sort By" column is populated based on the fields selected and the field order populated in the "Selected Columns."



Saving Reports

You can save a new report or overwrite a previously saved report. When you save a report, you can give the report a Private or Public status. Private reports are not available to other users and display in the My Reports section.

Note: The My Reports section display a list of public and private reports you created.

Any user with the appropriate permissions can access public reports. They display in the Public Reports section.

Note: The Public Reports section displays a list of all public reports created by all users, as well as the standard reports provides with the NBS.

You can save new reports, or overwrite existing reports.

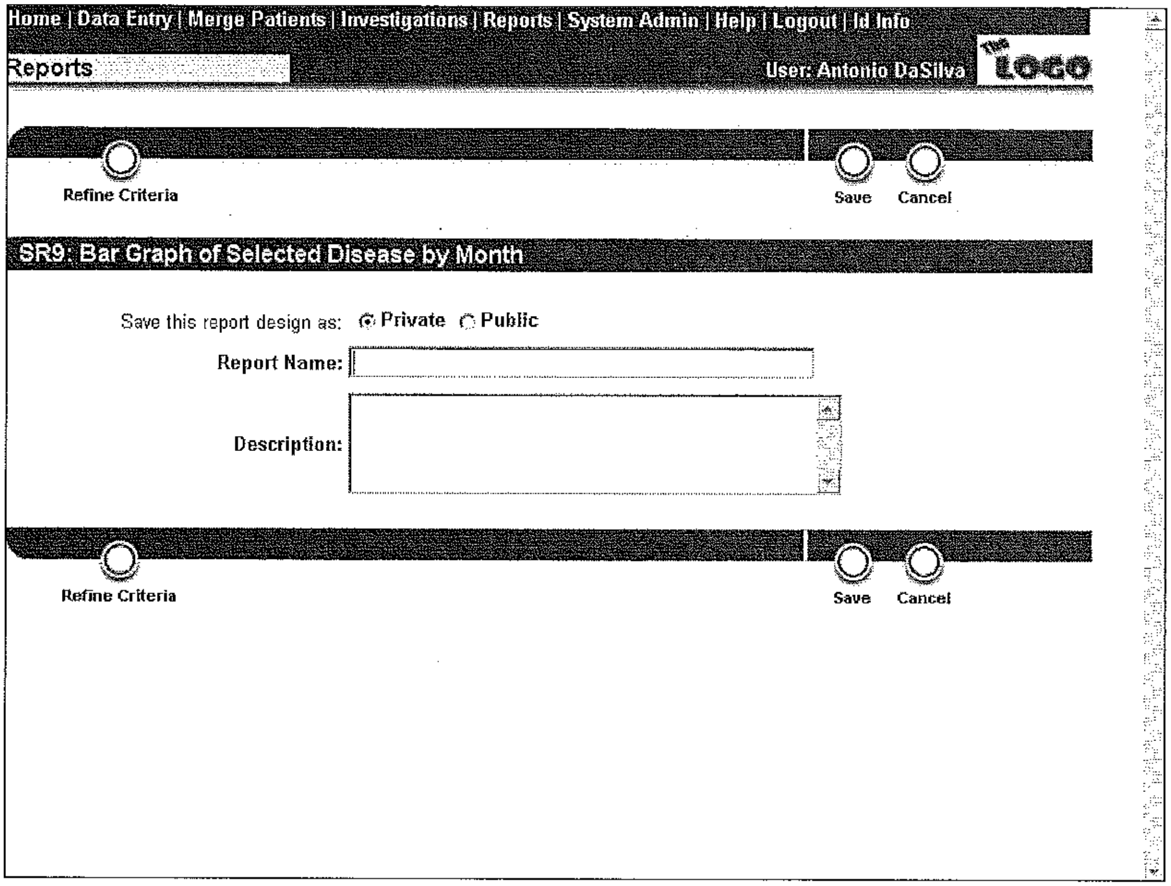
Saving a New Report

To save a new report, perform the following procedure:

1. Select the report you want. To select a report, refer to "Viewing and Selecting Reports" in this section.
2. Choose the basic filter criteria you want. To choose basic filter criteria, refer to "Running a Report Using Basic Filter Criteria" in this section.

3. Optionally, choose the advanced filter criteria you want. To choose advanced filter criteria, refer to "Running a Report Using Advanced Filter Criteria" in this section.
4. Optionally, when working with report templates, select the columns you want. To select columns, refer to "Creating Custom Reports" in this section.
5. Click **Save as New**.

   NBS displays the Reports page and the fields you use to save the report.



Note: Click **Refine Criteria** to modify the criteria for the report. To refine the criteria, refer to "Running a Report Using Basic Filter Criteria" and "Running a Report Using Advanced Filter Criteria" in this section.

6. Do one of the following:

- Click **Public** to save the report as public.
- Click **Private** to save the report as private.

7. Click **Name** and type the name you want.
8. Click **Description** and type the description you want.
9. Click **Save**.

NBS saves the report and displays the report name and description in the My Reports section.

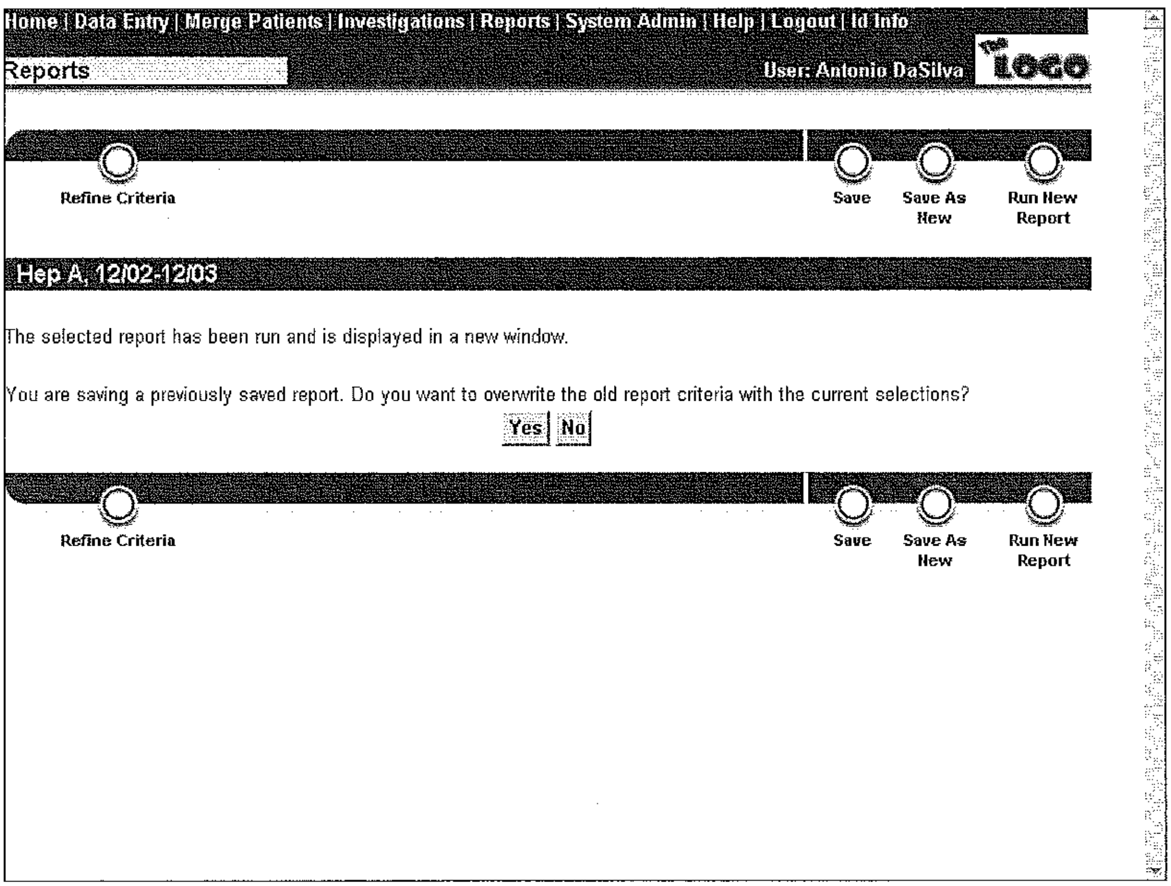
Note: If you saved the report as public, the report name and description also displays in the Public Reports section.

Overwriting a Previously Saved Report

To overwrite a previously saved report, perform the following procedure:

1. Select the report you want. To select a report, refer to "Viewing and Selecting Reports" in this section.
2. Choose the basic filter criteria you want. To choose basic filter criteria, refer to "Running a Report Using Basic Filter Criteria" in this section.
3. Optionally, choose the advanced filter criteria you want. To choose advanced filter criteria, refer to "Running a Report Using Advanced Filter Criteria" in this section.
4. Optionally, when working with report templates, select the columns you want. To select columns, refer to "Creating Custom Reports" in this section.
5. Click **Save**.

   NBS prompts you to overwrite the file.



6. Do one of the following:

- Click **Yes** to overwrite the report and display the Reports List.
- Click **No** to preserve the exiting report.

  NBS performs the selected function.

  Note: Click **Save As New** to save the report with a new name, or click **Run New Report** to run a new report.

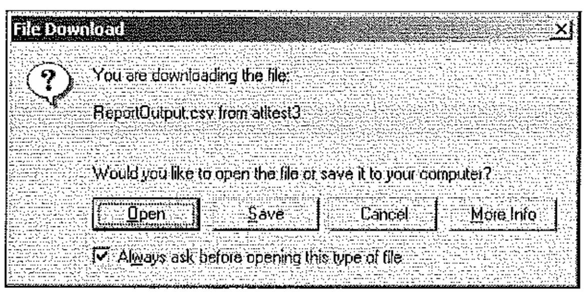
Exporting Reports

You can export the report output and save it to your workstation. Once saved, you can view and manipulate the output using an application such as Microsoft Excel.

To export a report, perform the following procedure:

1. Select the report you want. To select a report, refer to "Viewing and Selecting Reports" in this section.
2. Choose the basic filter criteria you want. To choose basic filter criteria, refer to "Running a Report Using Basic Filter Criteria" in this section.
3. Optionally, choose the advanced filter criteria you want. To choose advanced filter criteria, refer to "Running a Report Using Advanced Filter Criteria" in this section.
4. Optionally, when working with report templates, select the columns you want. To select columns, refer to "Creating Custom Reports" in this section.
5. Click **Export** when you are finished building your query.

   NBS displays the File Download dialog box:

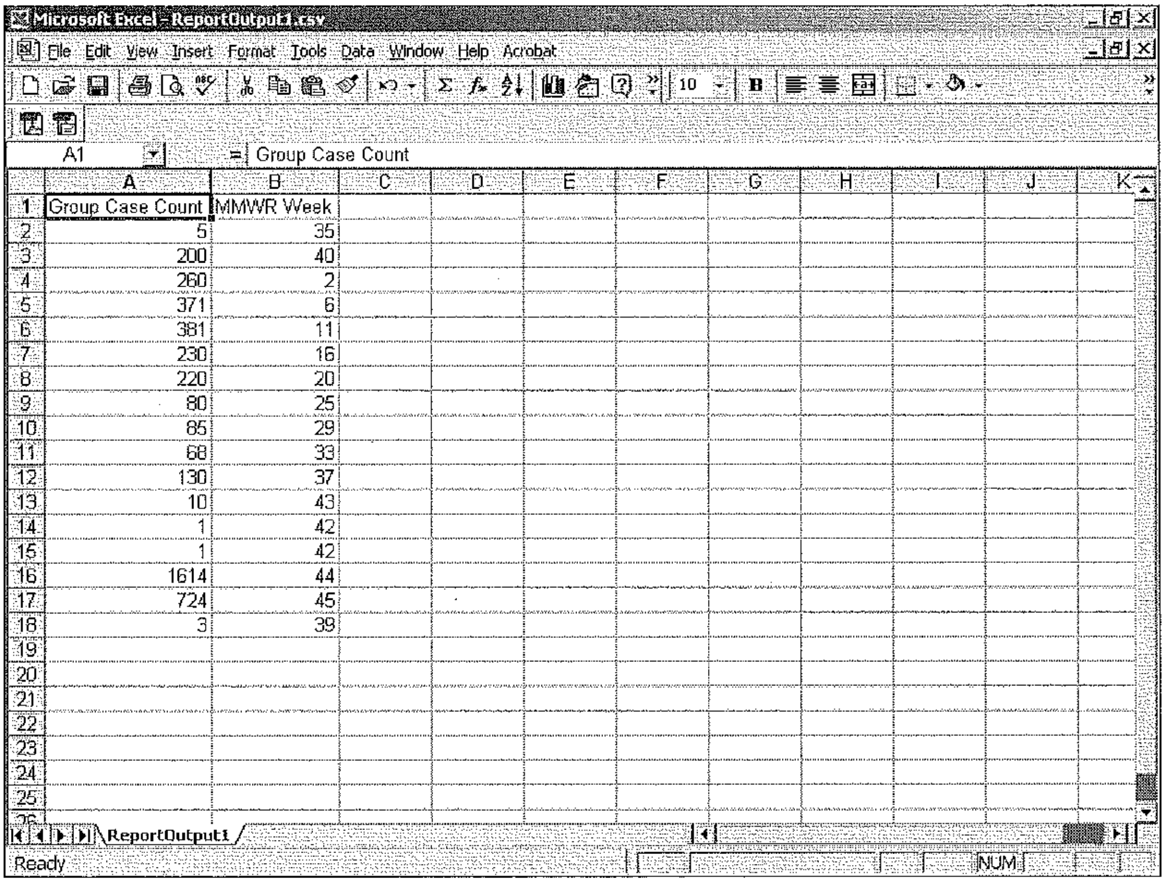


6. Click **Save**.

   NBS displays the Save As dialog box and prompts you to save the file.
7. Type the file name you want.

   Note: NBS sets the default type to .csv (comma separated values).

8. Open the file using the program you want, such as Microsoft Excel.



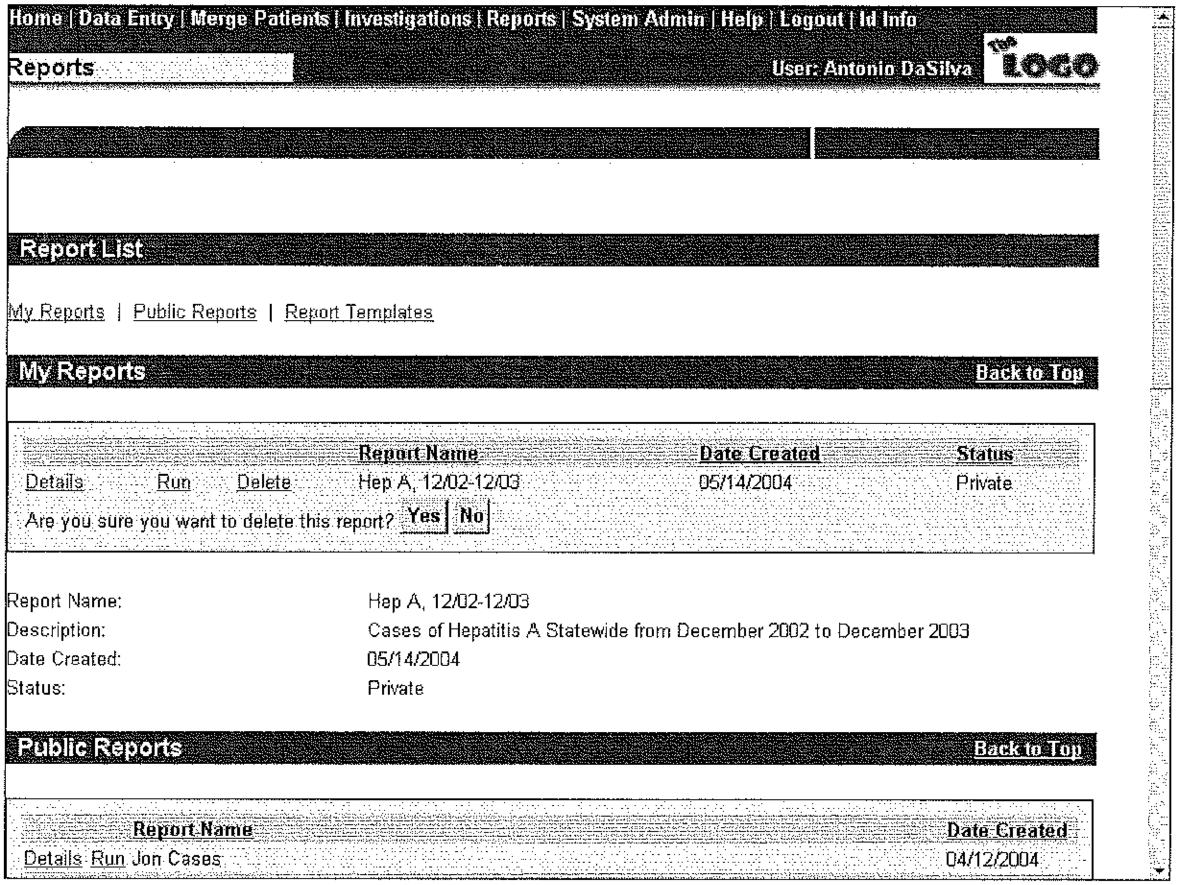
Group Case Count	MMWR Week
5	35
200	40
260	2
371	6
381	11
230	16
220	20
80	25
85	29
68	33
130	37
10	43
1	42
1	42
1614	44
724	45
3	39

Deleting Reports

You can delete private and public reports you create. You cannot delete reports created by another person.

To delete a report, perform the following procedure:

1. Display the Report List. To display the Report List, refer to "Viewing and Selecting Reports" in this section.



2. Click **Delete** for the report you want in the Report List on the Reports page.

   NBS prompts you to delete the report.

3. Click **Yes**.

   NBS deletes the report.

Lesson Summary

In this lesson, you learned to perform the following functions:

- View and select reports.
- Run reports using basic and advanced criteria.
- Export, save, and delete a report.

Lesson 2 – Working with Custom Reports

Lesson Objectives

After completing this lesson, you will be able to perform the following function:

- Create custom report using report templates.

Understanding Custom Reports

NBS provides a number of standard reports you use to analyze your data and enables you to use advanced criteria to further refine your reports. You can also create custom reports to access the data you need that may not be readily available using the criteria available through the standard reports. In the current release, the NBS provides thirteen report templates:

- Case Investigations with Rejected NNDs with Program Area and Jurisdiction Security
- Custom Report for Disease Counts by County
- Deduplication Activity Log Line Listing
- Event Metrics with Program Area and Jurisdiction Security
- Line List of Data Validations with Program Area and Jurisdiction Security
- Line List of Hepatitis Investigations
- Line List of Individual Cases with Program Area and Jurisdiction Security
- Line List of Individual Labs with Program Area and Jurisdiction Security
- Line List of Isolate Tracking
- Line List of Organizations by State and County
- Line List of Resulted Lab Tests
- Line List of Summary Case Reports
- Notification Activity Log Line Listing

You use these report templates to generate custom reports.

For example, if you wanted view data on all cases of a disease in a given county and time range, you could run the standard report SR2: Counts of Reportable Diseases by County for Selected Time Frame.

The following report displays the total count of Varicella in Hamilton County from January 1 to November 14, 2002.

Disease/Condition	County	Total
	Hamilton County	
Varicella (Chickenpox)	4,383	4,383
Total	4,383	4,383

Using the Advanced Filter options, you could further refine this report by to display counts for a specific MMWR week.

The following report displays the total count of Varicella in Hamilton Country in MMWR week 40 for the year 2002.

Disease/Condition	County Hamilton County	Total
Varicella (Chickenpox)	200	200
Total	200	200

While the Advanced Filter options enable you to refine the data displayed, the custom report options provided by the NBS give you additional flexibility in controlling the breadth of data displayed. Continuing with our example, you could create a custom report to display the available counts of a disease for each week in the selected date range.

The following report displays the all counts of Varicella in Hamilton County from January 1 to November 14, 2002, arranged by MMWR week.

Group Case Count	MMWR Week
5.00000	35
200.00000	40
260.00000	02
371.00000	06
381.00000	11
230.00000	16
220.00000	20
80.00000	25
85.00000	29
68.00000	33
130.00000	37
10.00000	43
1.00000	42
1.00000	42
1614.00000	44
724.00000	45
3.00000	39

The ability to create custom reports provides you with additional tools for data analysis. When combined with the ability to create logical query statements using the Advanced Filter options, the NBS gives you the flexibility to extract the data you need to conduct analysis without requiring you to resort to third-party analysis, visualization, and reporting tools.

Creating Custom Reports

You create custom reports using the report templates provided with the NBS. A report template page is identical to a standard report page, with the exception of the Column Selection tab.

Note: The Column Selection tab is only available when you create or edit custom reports using report templates.

When you create a custom report from a report template, you select and arrange the columns you want displayed in the report output.

To create a custom report, you

- Select the report template.
- Select the basic filter criteria.
- Optionally, select the advanced filter criteria.
- Select and arrange the columns you want on the report.

Note: The available columns depend on the report template you use. In the current release, one custom report template is available.

To create a custom report using a report template, perform the following procedure:

1. Display the Reports page and click the **Report Templates** link to display the Report Templates section. To display the Reports page, refer to "Viewing and Selecting Reports" in this section.

   Note: You can use the scroll bar to display the Report Templates section.

2. Click **Run** for the report template you want.

   NBS displays the report template.

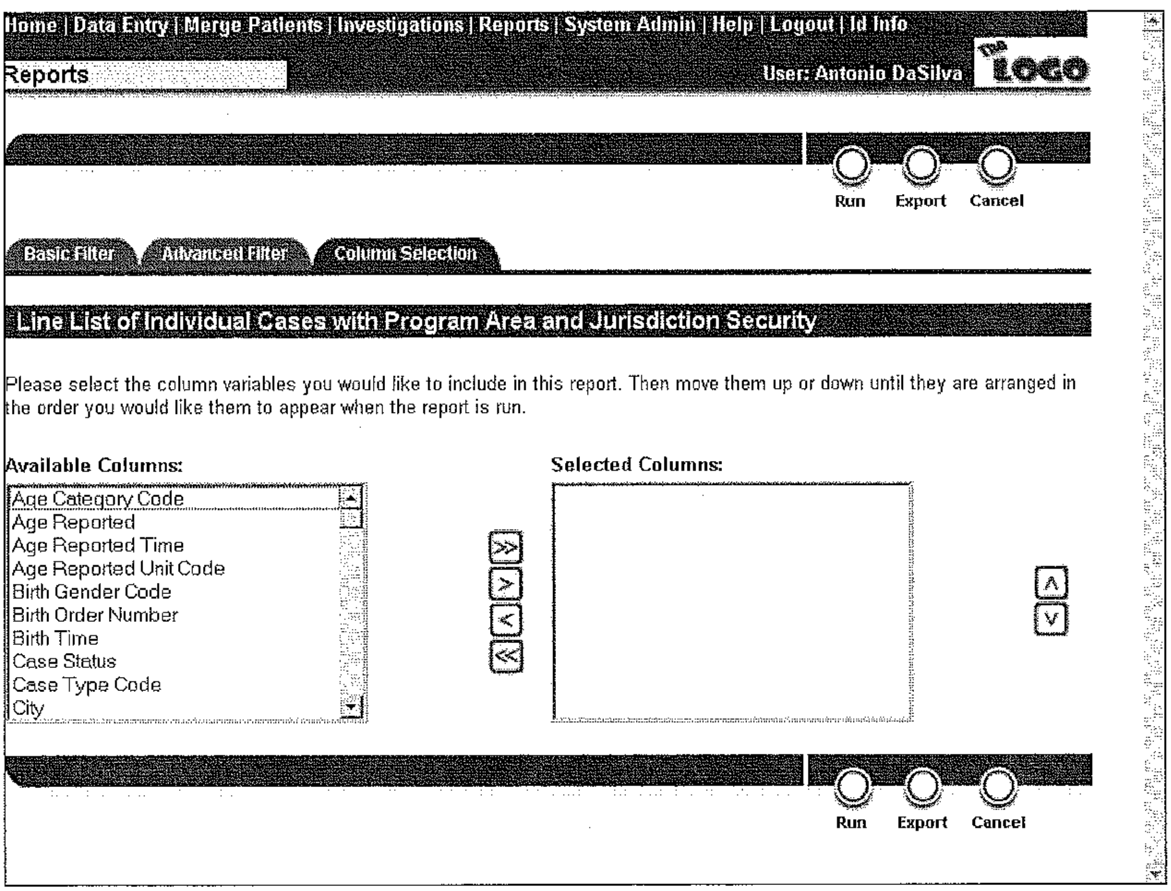
   Note: In the current release, two custom report templates are available.

3. Choose the basic filter criteria you want. To choose basic filter criteria, refer to "Running a Report Using Basic Filter Criteria" in this section.

4. Optionally, choose the advanced filter criteria you want. To choose advanced filter criteria, refer to "Running a Report Using Advanced Filter Criteria" in this section.

5. Click **Column Selection**.

   NBS displays the contents of the Column Selection tab.



6. Click the **column name** you want in the Available Columns list.
7. Click [>].

   Note: You can also double-click the **column name** you want in the Available Columns list to display it in Selected Columns list.

   NBS displays the column name you selected in Selected Columns list and removes the selected column from the Available Columns list.

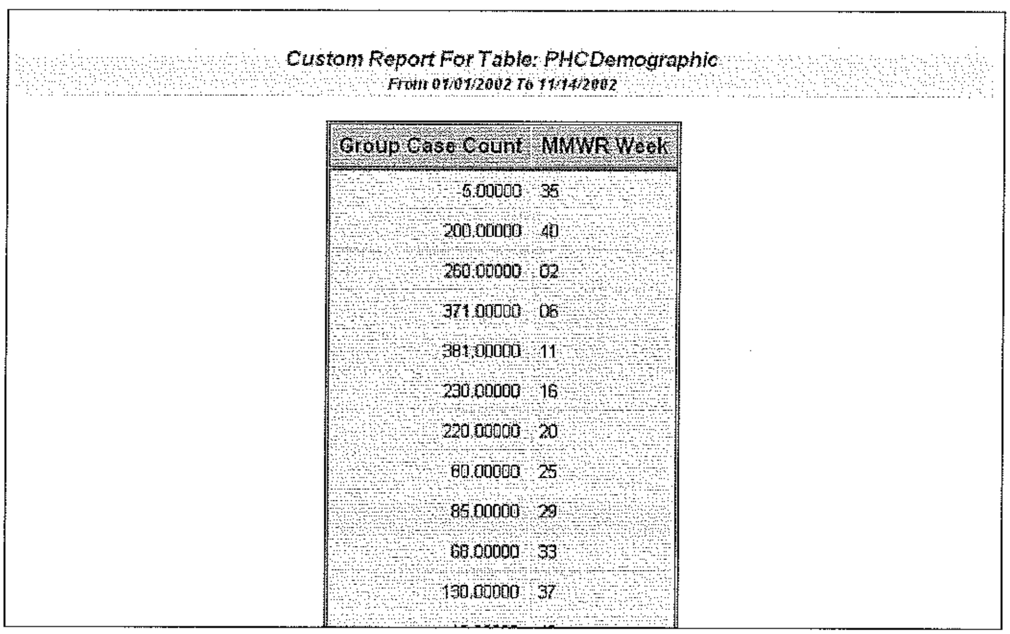
   The following table list the buttons displayed between the Available Columns and Selected Columns lists and describes their function:

Item	Description
>>	Add All. Adds all items in the Available Columns list to the Selected Columns list.
>	Add. Adds the selected item on the Available Columns list to the Selected Column list.
<	Remove. Moves the selected item on the Selected Columns list to the Available Columns list.
<<	Remove All. Moves all items in the Selected Columns to the Available Columns list.

   Note: Click the field you want and click the [^] (Move Up) or [v] (Move Down) buttons to change the order of the columns in the Selected Columns list.

8. Repeat steps 6 – 7 to select the columns you want.
9. Click **Run**.

   NBS displays the report output in a new browser window and updates the Reports page.


Custom Report For Table: PHCDemographic
From 01/01/2002 To 11/14/2002

Group Case Count	MMWR Week
5.00000	35
200.00000	40
260.00000	02
371.00000	06
381.00000	11
230.00000	16
220.00000	20
60.00000	25
85.00000	29
68.00000	33
130.00000	37

Note: Click **Export** to export the report output and save the output to your workstation. To export a report, refer to "Exporting Reports" in this section.

10. Click **Close** to close the browser window displaying the report output.

    NBS also updates the Reports page.

11. Do one of the following:

- Refine the report criteria. To refine the report criteria, click **Refine Criteria** and repeat steps 3 – 10.
- Run a new report. To run a new report, click **Run New Report** and repeat steps 2 – 10.
- Save the report. To save a report, refer to "Saving Reports" in this section.

  NBS performs the selected function.

Lesson Summary

In this lesson, you learned to perform the following functions:

- Create custom report using report templates.

Section Summary

In this section, you learned to perform the following functions:

- View and select reports.
- Run reports using basic and advanced criteria.
- Export a report's output.
- Save reports.
- Delete reports.
- Create custom reports using report templates.

Section 6 – System Administration and Registry Management

Section Objectives

After completing this section, you will be able to perform the following functions:

- View, add, and edit permission sets.
- View, add, and edit user information.
- Monitor ELR activity.
- Manage the patient registry.
- View, add, and edit custom fields.
- Import collaborative fields and subforms.

Lesson 1 – Working with Permission Sets

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- View, add, and edit permission sets.

Viewing Permission Sets

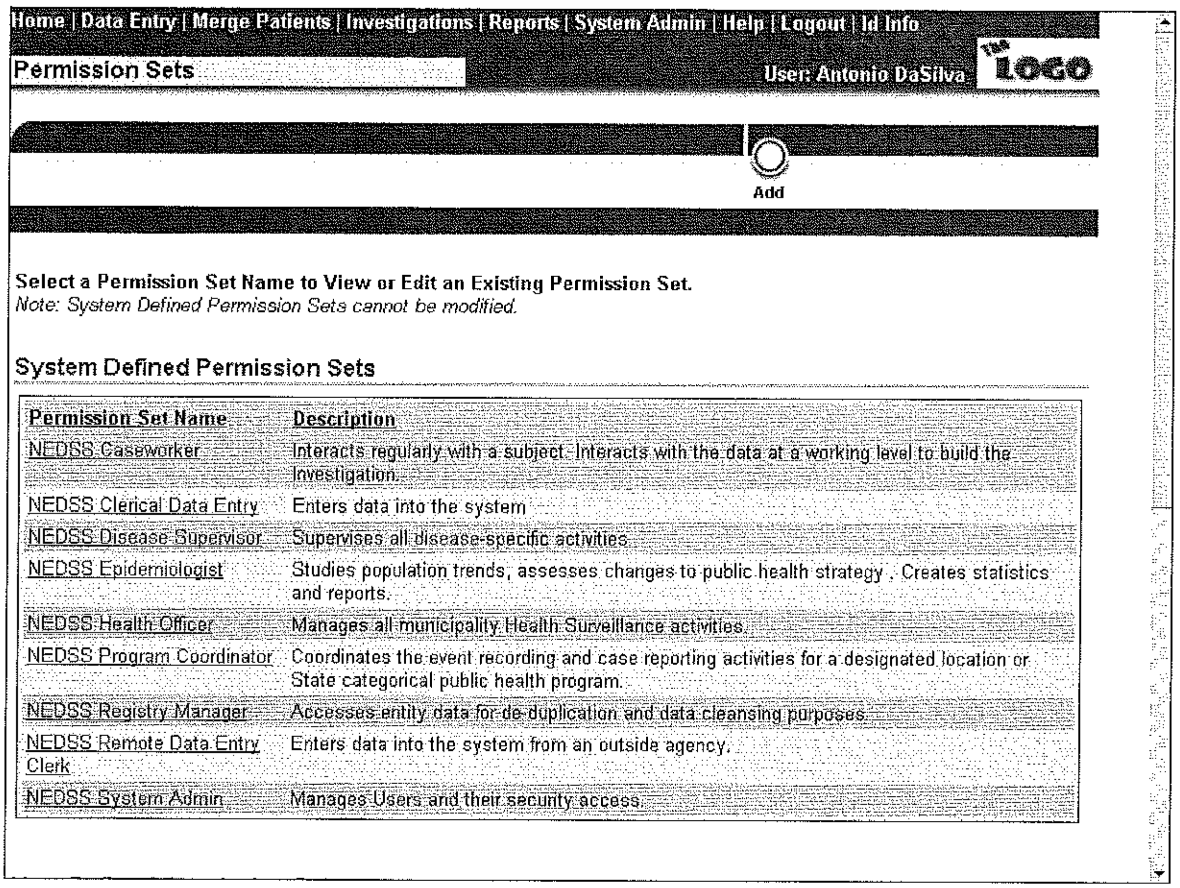
To view a permission set, perform the following procedure:

1. Click **System Admin** on the navigation bar.

   NBS displays the Permission Sets link.

2. Click **Permission Sets**.

   NBS displays a list of permission sets on the Permission Sets page.

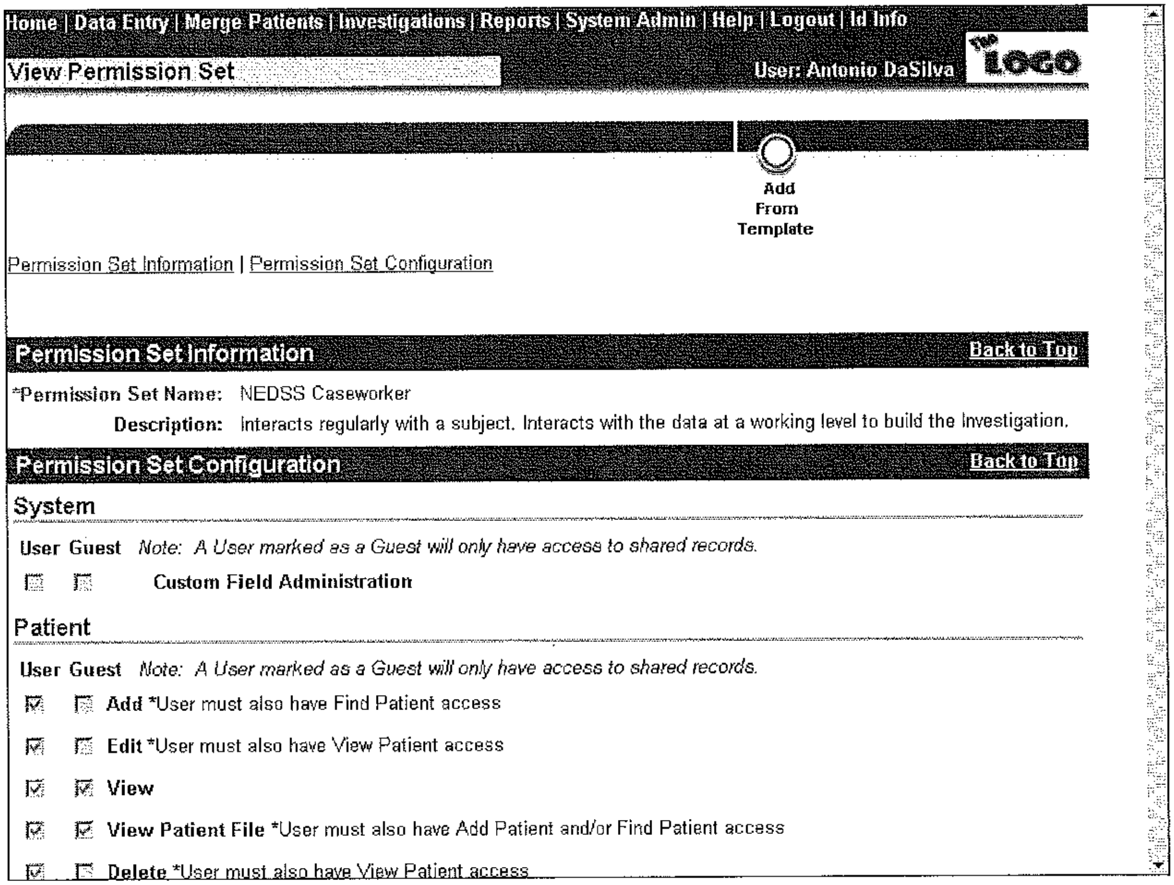


The Permission Sets page displays a list of system and user defined permission sets. You use the Permission Sets page to select a permission set to view and edit.

Note: Click the **Previous** and **Next** links (if available) to view the previous and next list of permission sets.

3. Click the link for the permission set name you want.

NBS displays the View Permission Set page and the information for the selected permission set name.

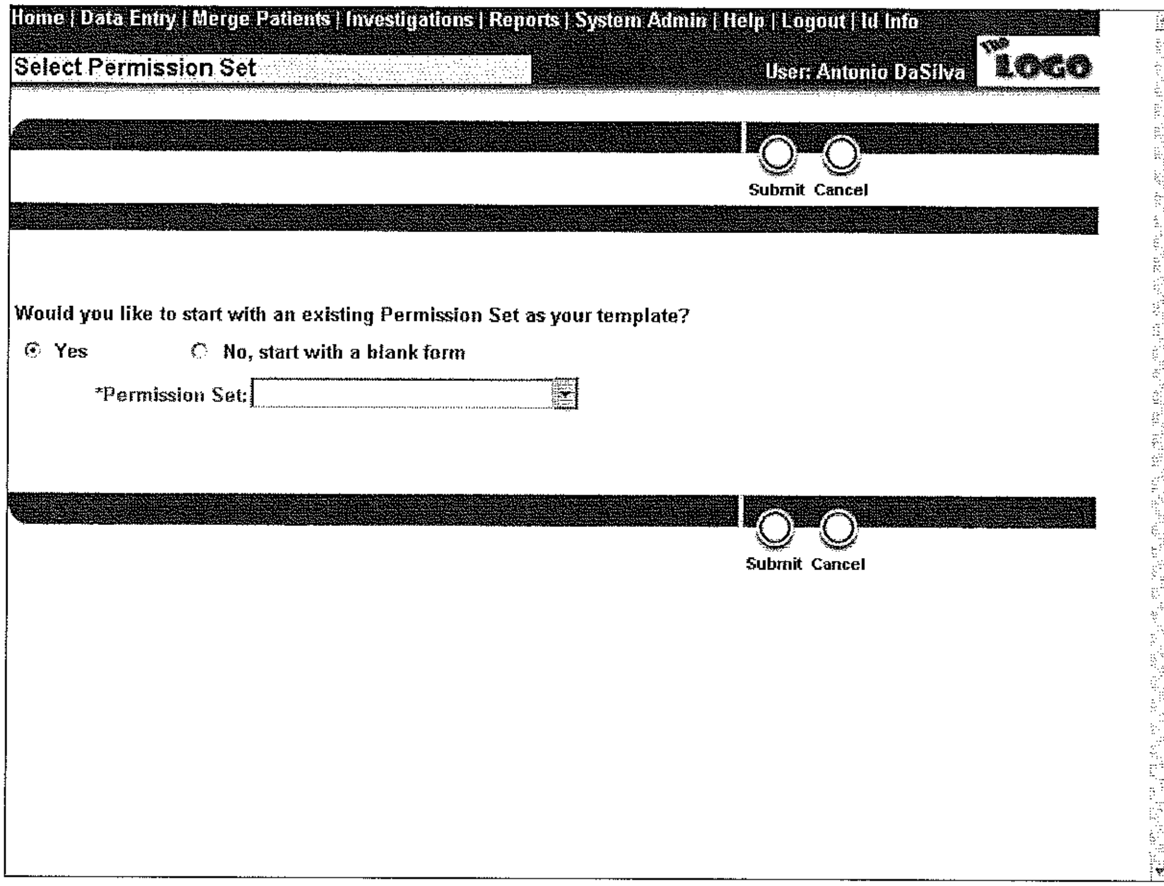


Adding Permission Sets

To add a permission set, perform the following procedure:

1. Display the Permission Sets page. To display the Permission Sets page, refer to "Viewing Permission Sets" in this section.
2. Click **Add**.

   NBS displays the Select Permission Set page.



3. Do one of the following

– Click **Permission Set** and choose the existing permission set you want.

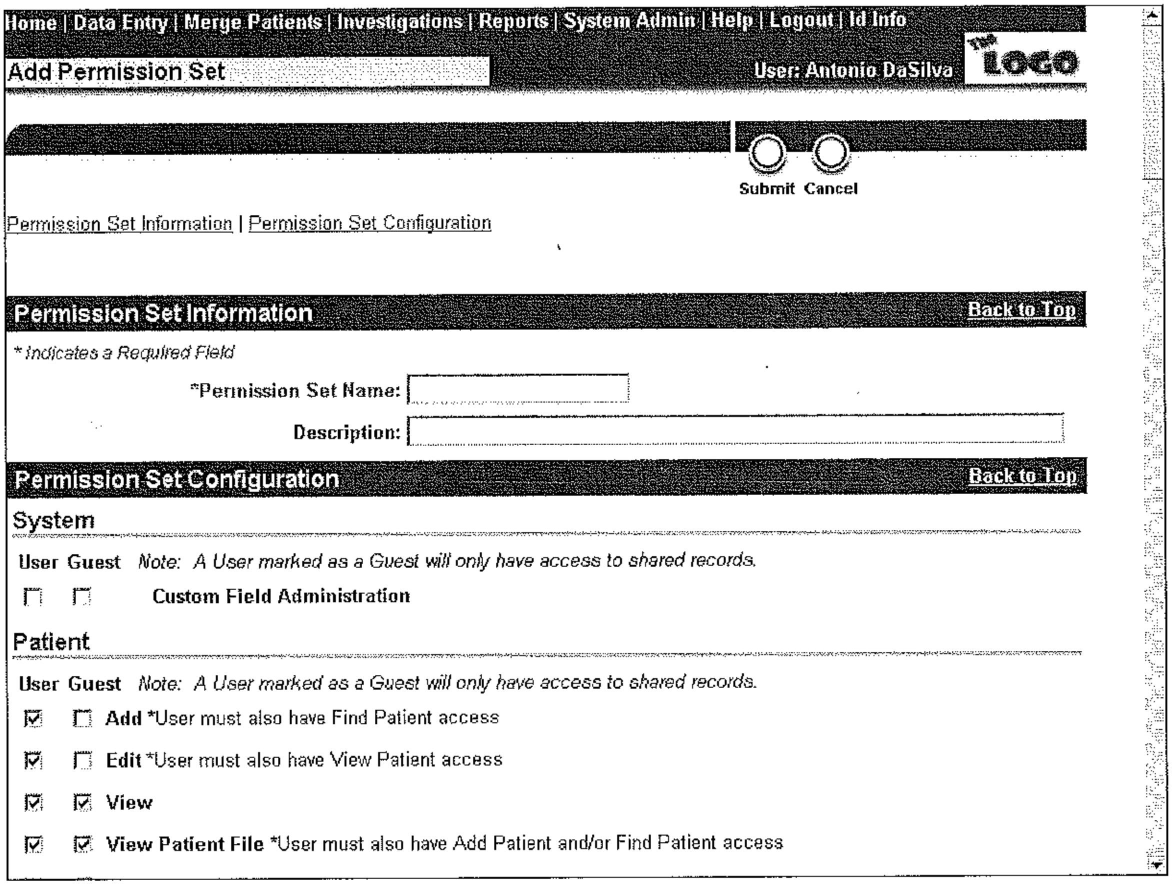
– Click **No, start with a bank form.**

Note: NBS selects the **Yes** option by default.

Note: You can also add a permission set using an existing permission set as a template by viewing the permission set you want and clicking **Add From Template** in the View Permission Set page.

4. Click **Submit**.

NBS displays the Add Permission Set page with options selected based on the permission set you used as a template.



Note: If you selected **No, start with a blank form**, the Add Permission Set page displays with no options selected.

5. Click **Permission Set Name** and type the permission set name you want.
6. Click **Description** and type the description you want.
7. Do one of the following:

- Click the **User** checkbox corresponding to the permission you want to enable/disable.
- Click the **Guest** checkbox corresponding to the permission you want to enable/disable.

Note: Checking **Guest** gives the user guest access to those objects as defined in their permission set. The requirements of your program define the parameters of this access.

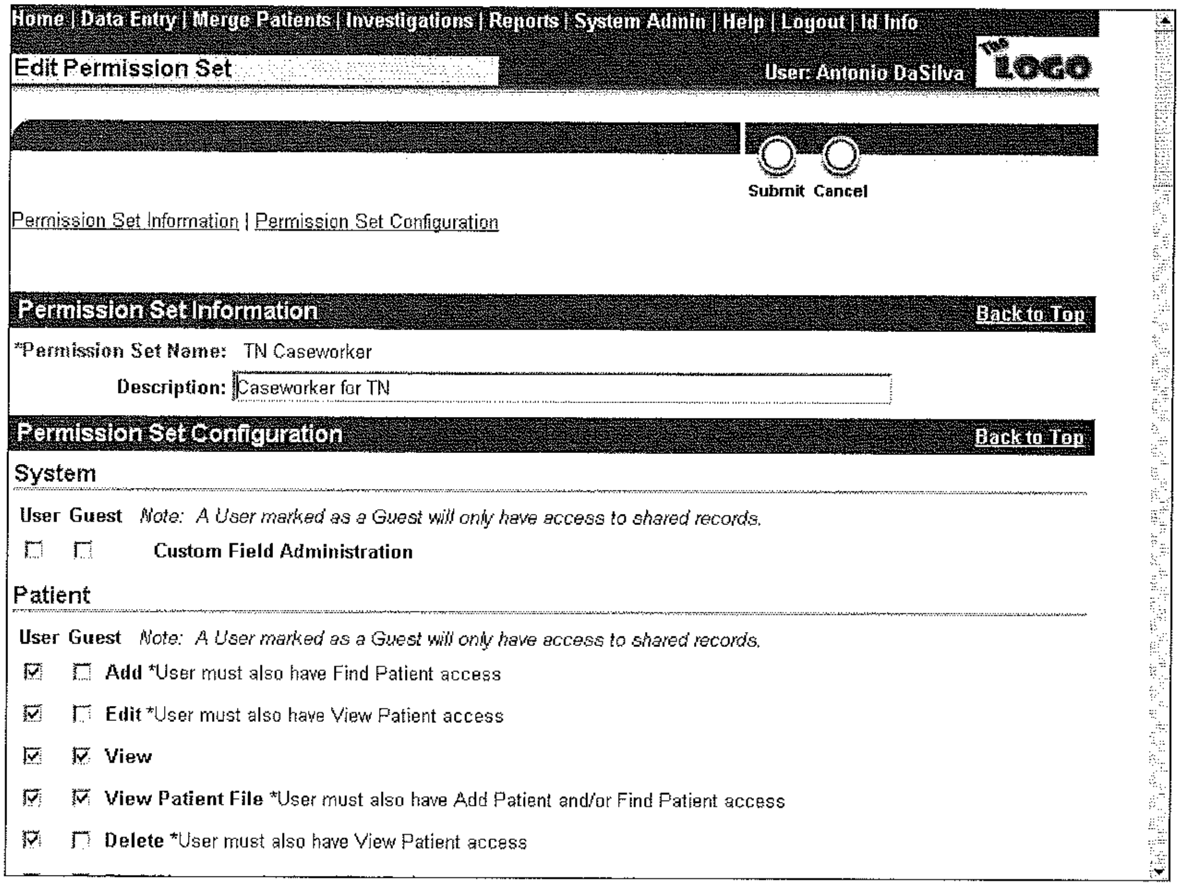
8. Continue making selections. When you are finished, click **Submit**.

NBS displays the Permission Sets page and displays the permission set you created in the User Defined Permission Sets section.

Editing Permission Sets

To edit a permission set, perform the following procedure:

1. Display the permission set you want in the View Permission Set page. To display the View Permission Set page, refer to "Viewing Permission Sets" in this section.
2. Click **Edit**.
3. NBS displays the Edit Permission Set page with options selected based on the selected permission set.



4. Click the **Description** field and type the description you want.
5. Click the **User** and **Guest** checkboxes corresponding to the permission(s) you want to enable/disable.
6. Continue making selections. When you are finished, click **Submit**.

   NBS displays the View Permission Set page for the permission set you modified.

Lesson Summary

In this lesson, you learned to perform the following functions:

- View, add, and edit permission sets.

Lesson 2 – Managing Users

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- View user information.
- Add users.
- Edit user information.

Viewing Users

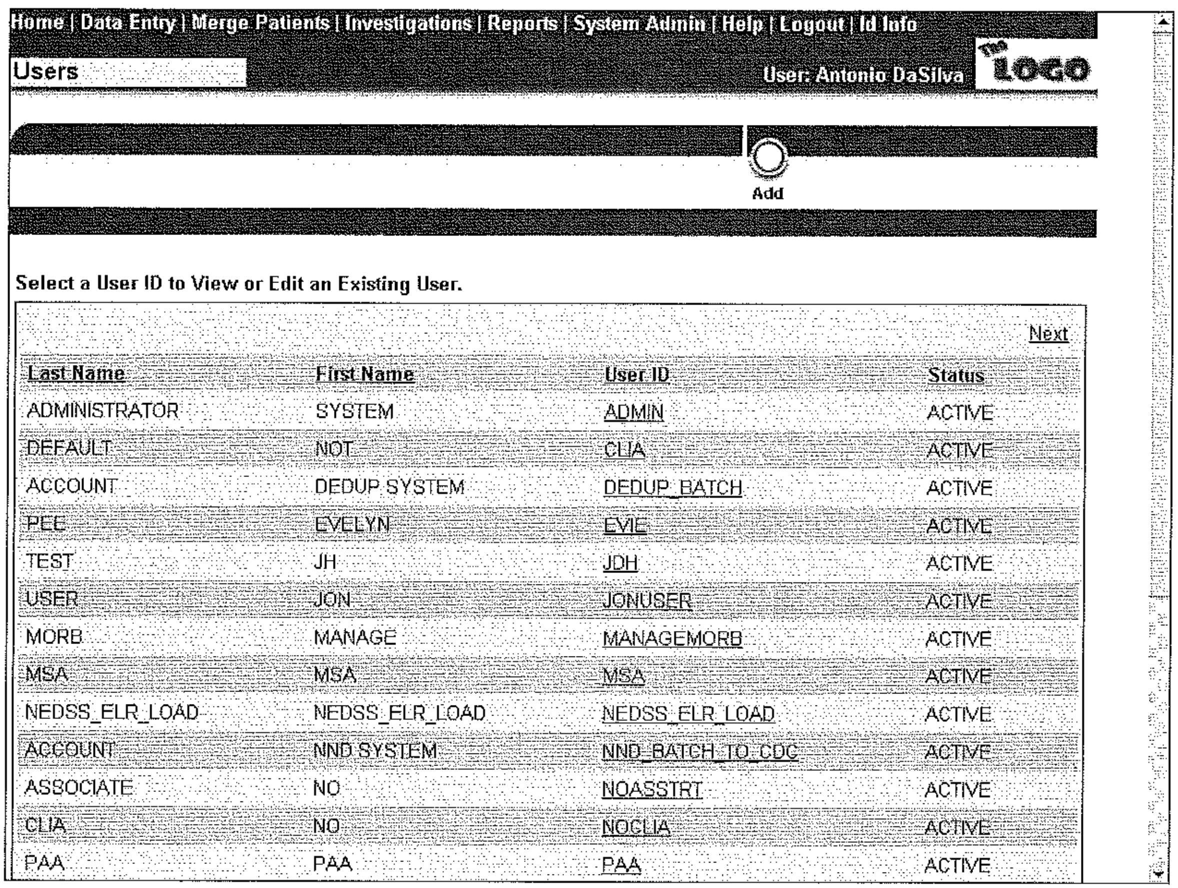
To view a user's information, perform the following procedure:

1. Click **System Admin** on the navigation bar.

   NBS displays the **Users** link.

2. Click **Users**.

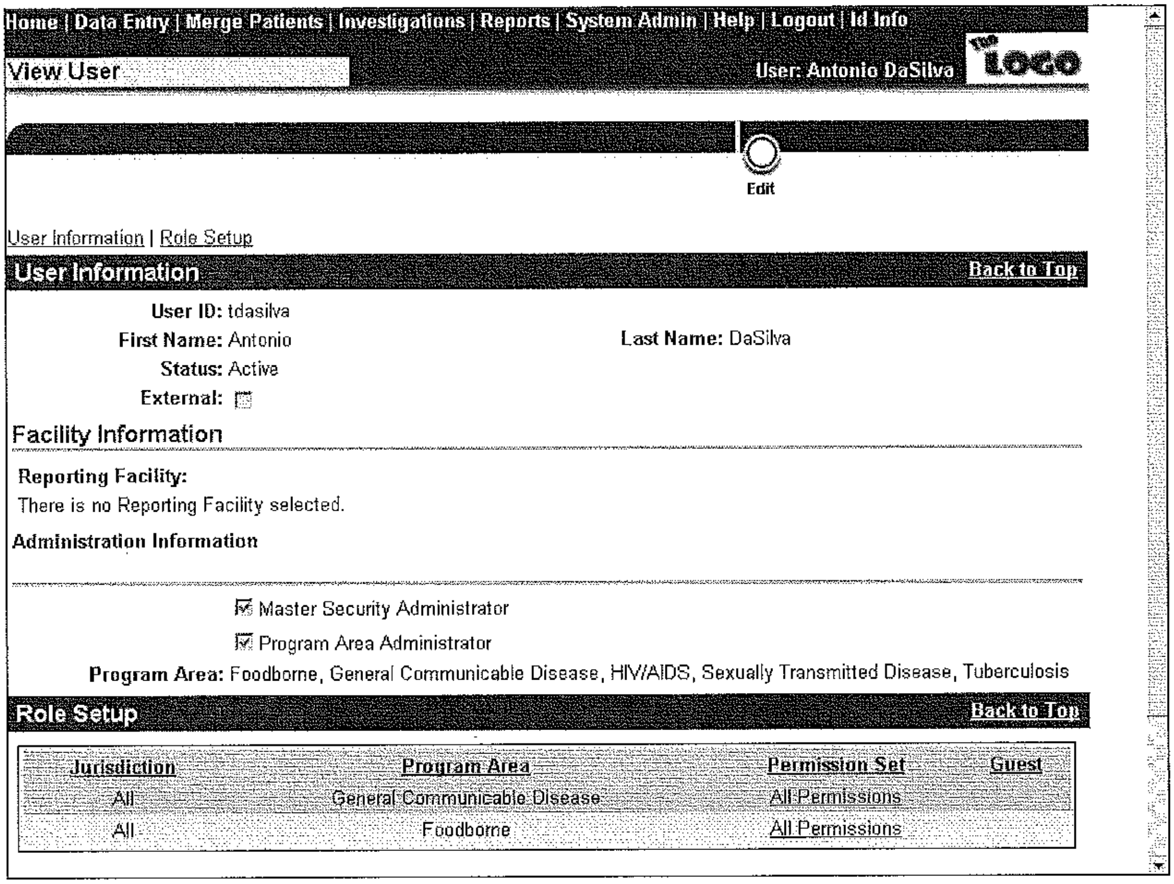
   NBS displays the list of users on the Users page.



Note: Click the **Next** and **Previous** links (if available) to view the previous and next list of users.

3. Click the **User ID** link for the user you want.

NBS displays the View User page and the selected user's role information.



Note: Click the **Permission Set** link in the Role Setup section to view the user's permission set information.

Adding Users

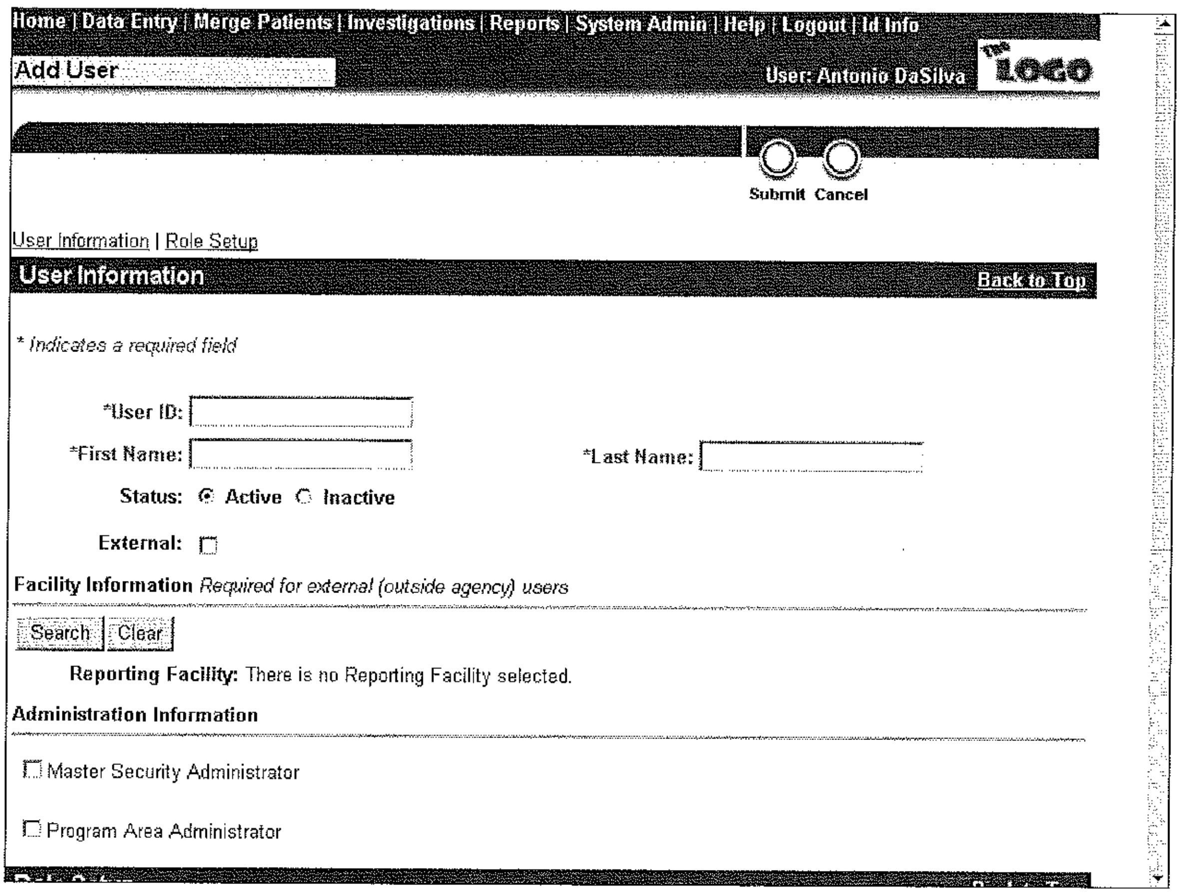
You can add user to the system. You can

- Add the user's role by assigning the program area, jurisdiction, and permission set associated with the role.
- Delete the user's role.
- Enable/disable external status.
- Assign a reporting facility.
- Enable/disable guest permissions.

To add a user, perform the following procedure:

1. Display the Users page. To display the Users page, refer to "Viewing Users" in this section.
2. Click **Add**.

   NBS displays the Add User page.



   The Add User page displays a list of fields you use to add a user.

3. Click **User ID** and type the ID you want. This is a required field.

4. Click **First Name** and type the name you want. This is a required field.
5. Click **Last Name** and type the name you want. This is a required field.
6. Do one of the following:

- Click **Active** to set the user's status to active. Inactive users cannot log in to the NBS.
- Click **Inactive** to set the user's status to inactive.

7. Optionally, click **External** to indicate an external user.

   Note: Setting the External indicator limits the options available to a user on the left navigation menu. However, the user will still have access to the patient registry. You must assign the user a permission set that limits access to patient information, such as NEDSS Remote Data Entry Clerk.

8. Optionally, choose a reporting facility. To choose a reporting facility, click **Search** in the Facility Information section. This is a required field.

   Note: Click **Clear** to clear the existing information.

   NBS displays the search criteria pop-up window for the selected section.

9. Type the information you want in the Search Criteria fields.

   Note: You can search for records using as few or many fields as you need. You must enter at least one item.

10. Optionally, click the **Operators** list box for the field you want and choose the operator you want.

    Note: You use the Operators list box to add conditions to your search. Conditions help you refine the parameters of your search. For example, the Equal operator displays records that exactly match the text you entered. The Contains operator displays records containing any of the text you entered. NBS displays the Contains operator by default.

11. Click **Submit**.

    NBS displays the results of your search.

    Note: If no match exists, NBS displays a message indicating that your search has no matches. Click **New Search** to perform a new search, or click **Refine Search** to refine your existing search criteria.

12. Click **Select** for the information you want.

    NBS displays the parent page with the selected reporting facility information.

13. Do one of the following

- Click **Master Security Administrator**. The MSA is responsible for assigning Program Area Administrators (PAA).
- Click **Program Area Administrators**. The PAA is responsible for assigning security rights to people within Program Areas that are delegated to the PAA.

14. Click **Jurisdiction** and choose the jurisdiction you want.

15. Click **Program Area** and choose the program area you want.
16. Click **Permission Set** and choose the permission set you want.
17. Optionally, click **Guest** to enable/disable guest permissions. Guest permission are disabled by default.
18. Click **Add Role** to add a new role for the user.

    NBS adds the role and displays the role information in the Role Setup section on the table above the entry fields.

    Note: Click **Edit** to edit the role. When you are finished making changes, click **Update Role.** Click **Delete** to delete the role.
19. Repeat steps 14 – 18, as necessary, to build the user's role. You can continue to assign jurisdictions, program areas, and permission sets to a user's role until such time as you are satisfied that they have the access appropriate for their job.
20. Click **Submit.**

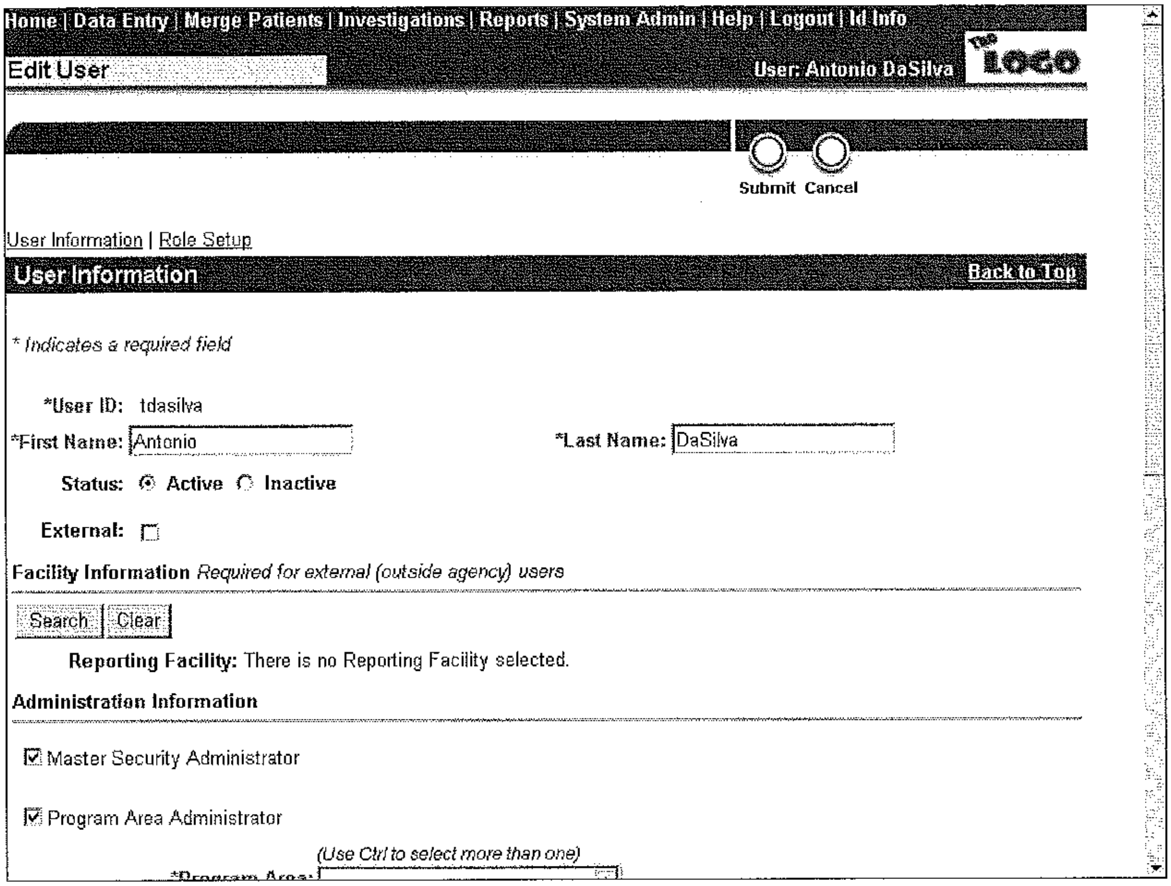
    NBS adds the user information and displays the Users page.

Editing Users

To edit a user, perform the following procedure:

1. Find and view the user you want. To find and view a user, refer to "Finding and Viewing Users" in this section.
2. Click **Edit.**

NBS displays the Edit User page.



The Edit User page displays a list of fields you use to edit a user's information.

3. Click the fields you want and type or choose the information you want. To work the various field on the Edit User page, refer to "Adding Users" for the required procedures.

Lesson Summary

In this lesson, you learned to perform the following functions:

- View user information.
- Add users.
- Edit user information.

Lesson 3 – Monitoring ELR Activity Information

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- Choose filter selection criteria for the ELR Activity Report.
- Run the ELR Activity Report and view its output.

Choosing Filter Selection Criteria

You can monitor ELR activity by viewing the ELR Activity Log. The ELR Activity Log provides you information on the transfer of lab results into the NBS. This information enables you to take action to resolve outstanding issues with lab result transfers, usually through retransmission of the data from the source.

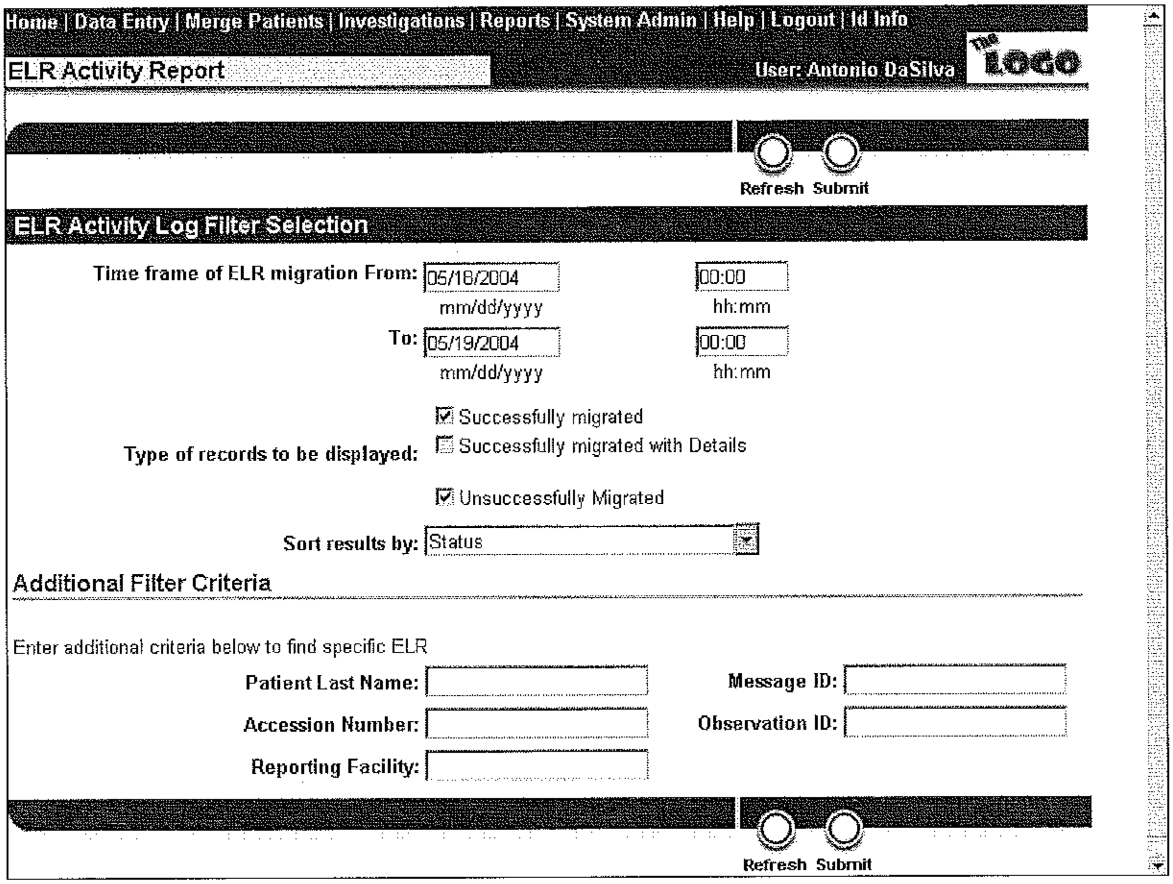
To choose filter selection criteria and run the ELR Activity Report, perform the following procedure:

1. Click **System Admin** on the navigation bar.

   NBS displays the ELR Activity Log link.

2. Click **ELR Activity Log.**

NBS displays the ELR Activity Report page.



3. Choose the Time frame of ELR migration you want. Click **From** and type the start date you want.
4. Click the time field and type the start time you want.
5. Click **To** and type the end date you want.
6. Click the time field and enter the end time you want.
7. Choose the type of records to be displayed:

- Click **Successfully migrated** to display/hide messages indicating success. NBS displays these messages by default.
- Click **Successfully migrated with Details** to display/hide detailed messages indicating success. This option is unavailable until you deactivate the **Successfully migrated** option.
- Click **Unsuccessfully Migrated** to display/hide messages indicating failure. NBS displays these messages by default.

8. Optionally, click **Sort** results by to sort the results. The NBS defaults to the Status option.
9. Optionally, choose the additional filter criteria you want.

- Click **Patient Last Name** and type the name you want.
- Click **Message ID** and type the ID you want.
- Click **Accession Number** and type the number you want.
- Click **Observation ID** and type the ID you want.
- Click **Reporting Facility** and type the facility you want.

10. Click **Submit**.

    NBS runs the ELR report and displays the output in a new browser window.

11. Close the new browser window when you are finished viewing the output.

    Note: Click **Refresh** on the ELR Activity Report page to clear your entries and selections and return to the default state.

Lesson Summary

In this lesson, you learned to perform the following functions:

- Choose filter selection criteria for the ELR Activity Report.
- Run the ELR Activity Report and view its output.

Lesson 4 – Managing the Patient Registry

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- Manually merge patient records.
- Merge system identified candidates.

Merging Patients

You may encounter a circumstance where it is necessary for you to consolidate (or "merge") two or more records for the same patient into a single record.

The NBS provides several options for de-duplication:

- Manual merge, by which you search and select records to be merged.
- System identified merge, by which the system presents you with candidates for merging.
- Batch de-duplication, by which the system automatically identifies and merges identical records into a single entity. Beyond the initial scheduling by the system administrator, no user intervention is required to trigger or complete batch de-duplication.

Note: Your access to the various NBS screens and functions depend on your assigned role and security permissions. Not all available options may be displayed.

Merging Records Manually

You can search for duplicate records and select the record you want to merge.

To merge person records, perform the following procedure:

1. Click **Merge Patients** on the navigation bar.

   NBS displays the Manual Search link.

2. Click **Manual Search**.

   NBS displays the Find Patient page.

3. Click the fields you want and type or select the information you want.

   Note: You can search for persons using the Simple Search criteria and/or use the Advanced Search Options.

4. Optionally, click the **Operators** list and choose the operator you want.

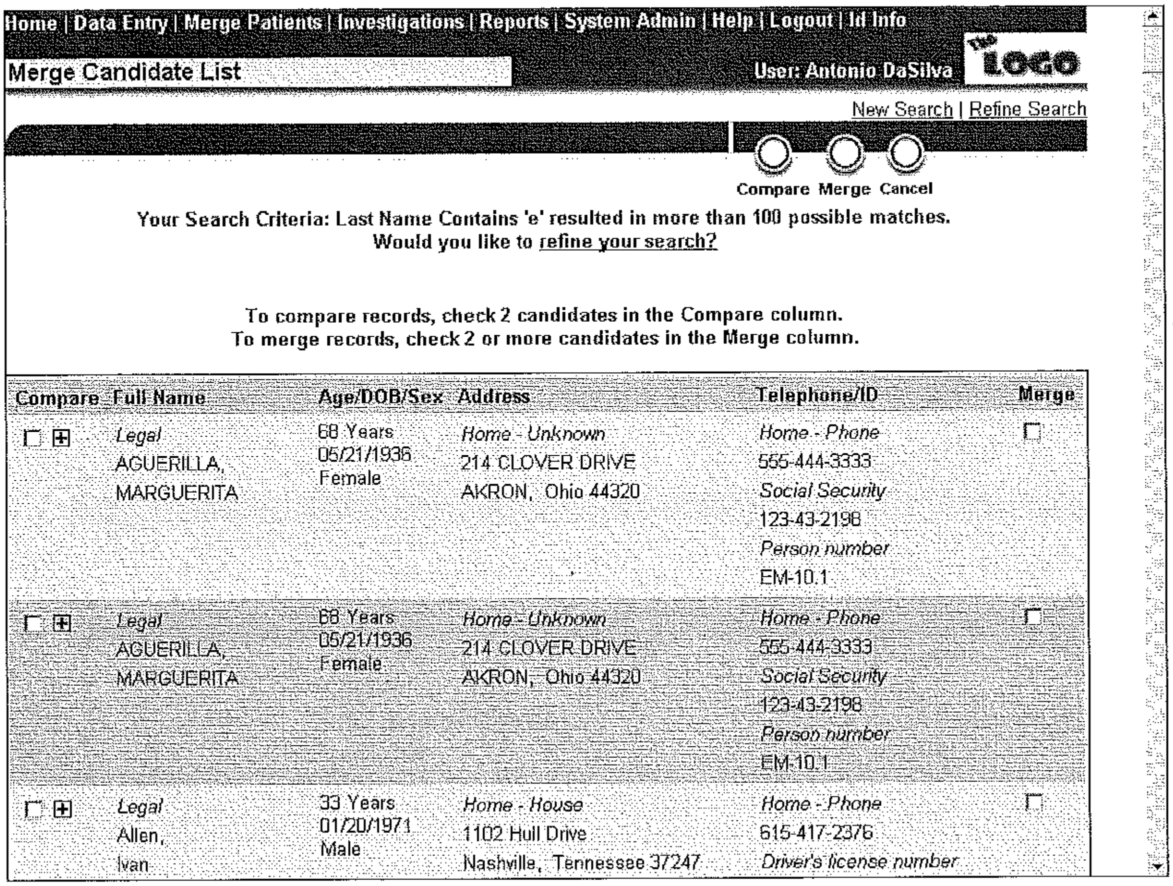
   Note: NBS displays the **Contains** operator by default.

5. Continue choosing fields, choosing operators, and typing text.

   Note: You can search for patients using as few or as many fields you need. You must enter at least one item.

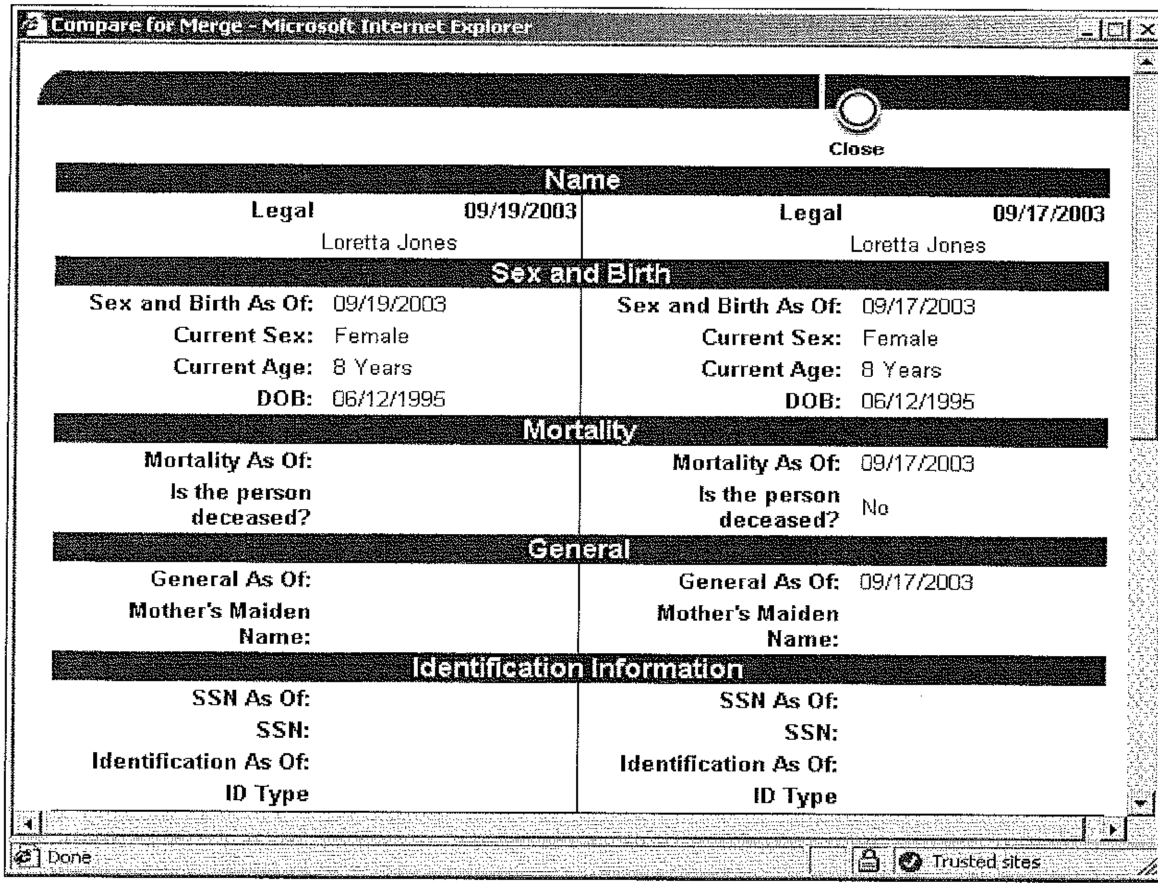
6. Click **Submit**.

NBS displays the Merge Candidate List page. It displays a list of merge candidates that meet your search criteria.



7. Optionally, click the **Compare** checkboxes associated with the records you want to merge and click **Compare**.

NBS displays the Compare for Merge page.



Compare for Merge - Microsoft Internet Explorer

Close

Name

Legal	09/19/2003	Legal	09/17/2003
Loretta Jones		Loretta Jones	

Sex and Birth

Sex and Birth As Of:	09/19/2003	Sex and Birth As Of:	09/17/2003
Current Sex:	Female	Current Sex:	Female
Current Age:	8 Years	Current Age:	8 Years
DOB:	06/12/1995	DOB:	06/12/1995

Mortality

Mortality As Of:		Mortality As Of:	09/17/2003
Is the person deceased?		Is the person deceased?	No

General

General As Of:		General As Of:	09/17/2003
Mother's Maiden Name:		Mother's Maiden Name:	

Identification Information

SSN As Of:		SSN As Of:	
SSN:		SSN:	
Identification As Of:		Identification As Of:	
ID Type		ID Type	

Done | Trusted sites

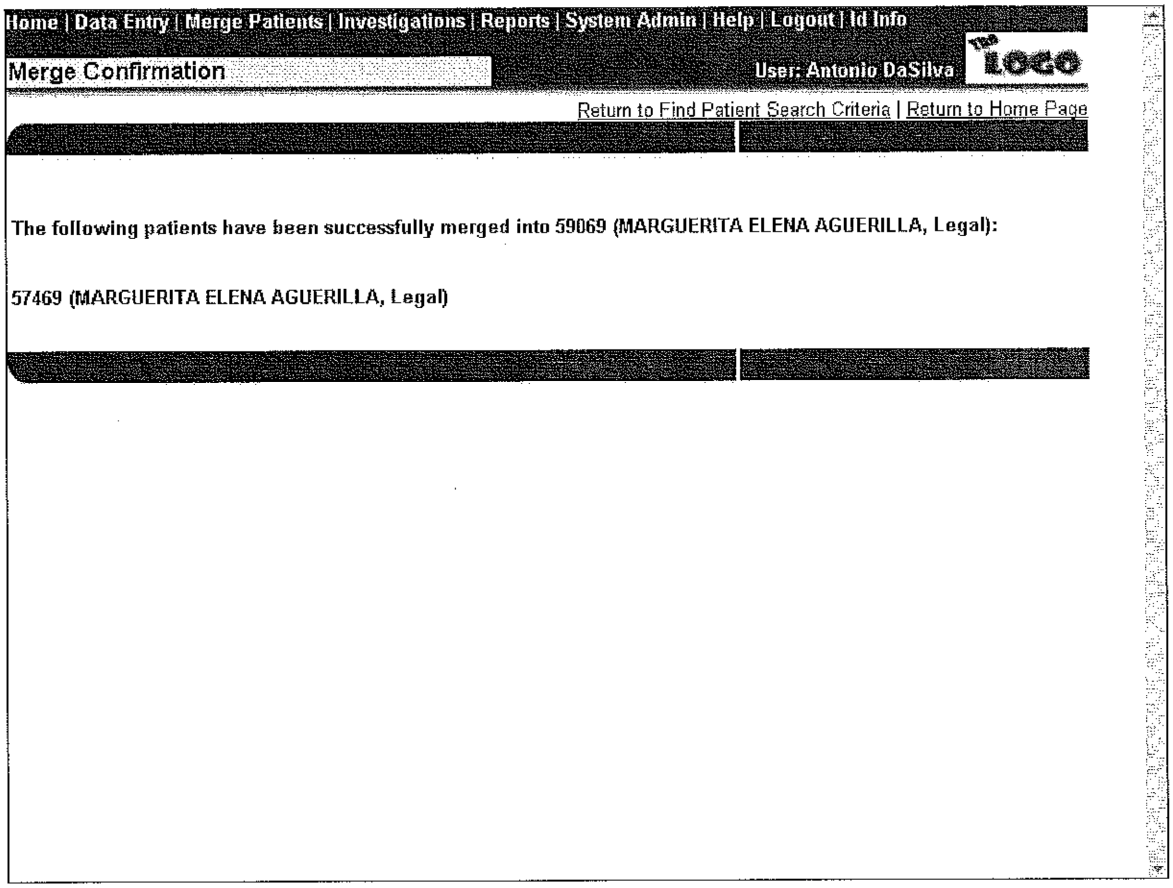
When you are finished comparing the records, click **Close**. NBS closes the Compare for Merge page.

8. Click the **Merge** checkbox associated with the records you want to merge.
9. Click **Merge**.

   NBS prompts you to merge the records.

10. Click **OK**.

NBS merges the selected records and displays the Merge Confirmation page.



Merging System Identified Candidates

While you can manually search for duplicate records and select the record you want to merge, the NBS also automatically searches the patient registry and presents you with candidates for merging.

To merge patient records identified by the system, perform the following procedure:

1. Click **Merge Patients**.

   NBS displays the Manual Search link.

2. Click **System Identified**.

   NBS displays the Merge Candidate List page. It displays a list of merge candidates identified by the system.

3. Optionally, click the **Compare** checkboxes associated with the records you want to merge and click **Compare**. NBS displays the Compare for Merge page. When you are finished comparing the records, click **Close**. NBS closes the Compare for Merge page.

4. Click the **Merge** checkbox associated with the records you want to merge.

5. Click **Merge**.

NBS prompts you to merge the records.

6. Click **OK**.

   NBS merges the selected records and displays the Merge Confirmation page.

   Note: You can use the **No Merge** option to immunize records from further consideration as candidates for merge. In this way, records you identify as unique are not presented as merge candidates in the future. To remove records from future consideration for merging, click the **Return to Merge Candidate List** link to display the records that remain to be considered. NBS displays the Merge Candidate List page and the list of candidates for merge. Click **No Merge**. NBS removes the selected records from consideration for merging, and the system no longer considers the selected records as merge candidates.

Lesson Summary

In this lesson, you learned to perform the following functions:

- Manually merge patient records.
- Merge system identified candidates.

Lesson 5 – Custom Fields

Lesson Objectives

After completing this lesson, you will be able to perform the following functions:

- View Custom fields
- Add and edit locally defined fields.
- Import collaborative defined fields and custom subforms.

Working with Custom Fields

The NBS includes functionality permitting an administrator to add new fields to a set of pages. Collectively, these fields are referred to as Custom Fields.

Note: A "set" of pages refers to the collection of pages supporting a given NBS business object. An example of such a page set might include the View Organization, Add Organization, and Edit Organization pages.

The custom field functionality permits you to capture information not supported by the NBS as it is delivered, and can be used for such purposes as recording information for emerging diseases.

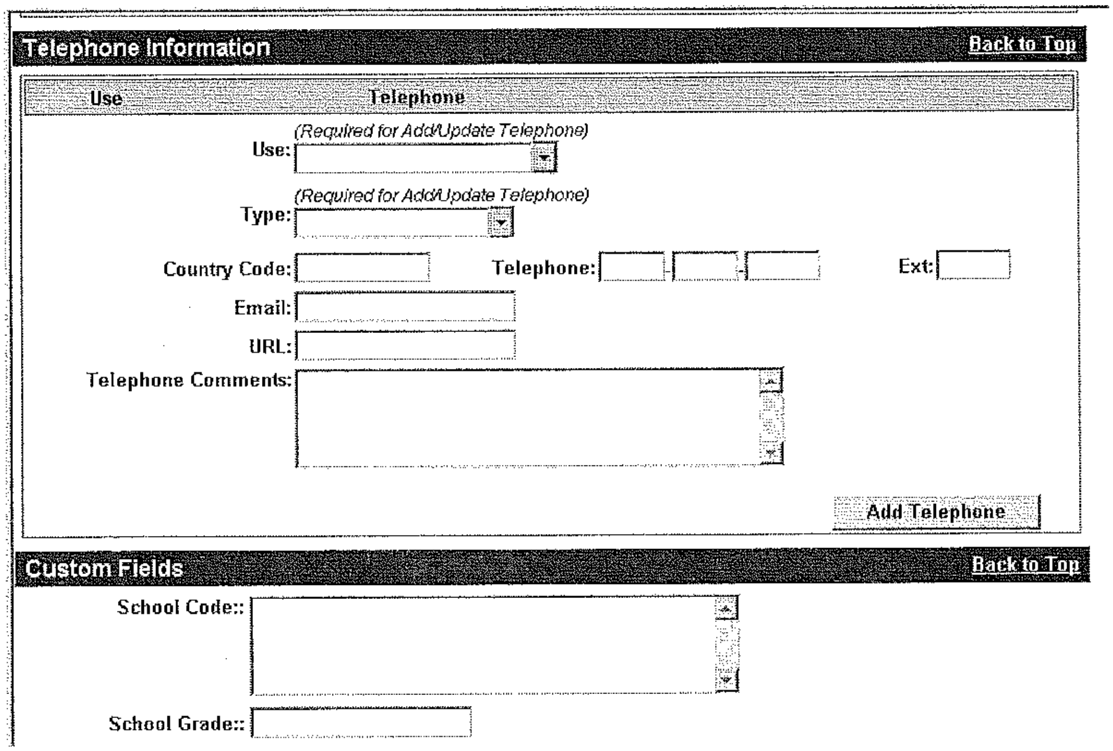
There are three types of custom fields, locally defined fields (LDFs), collaboratively defined fields (CDFs) and legacy fields. Locally defined fields are fields collecting information that meet a state/major jurisdiction specific need. Collaboratively defined fields are defined by CDC in collaboration with one or more state/major jurisdiction or by two or more state/major jurisdictions. They meet multi-jurisdictional needs. Legacy fields are created during event data migration to store information captured in a legacy system that will not be collected in the NBS.

Note: Not every page can accommodate all field types. The Homepage, for example, can accommodate only display fields.

While custom fields operate in much the same way as all other fields, there are some important points to consider:

- Custom fields added to a page display on new records and legacy records (e.g., if a required custom field is added to the Provider pages) require a user editing a legacy Provider record to enter a value for the new required field.
- Data entered in a locally defined field is not reported to the CDC in notifiable diseases messages. However, collaboratively defined fields and legacy fields can be configured so that the data is sent to CDC in the notifiable disease message.
- Information about the custom fields (metadata) is transmitted to CDC to populate a custom fields repository that allows state/major jurisdictions to know what and how other areas are capturing or are asking similar questions/information.
- Custom fields are not included in the Release 1.1.3 Public Health Case Data Mart, so cannot be accessed through the various NBS reports. You can access information captured using custom fields through the Reporting Database (RDB) via third-party tools (e.g., SAS and Epi-Info).

- Custom fields that have been added to a page display in the "Custom Fields" section at the bottom of the page. (See below.)



The NBS provides functionality to incorporate "Groups of CDFs" on existing NBS pages supporting Custom Field functionality as custom subforms. A subform is a self-contained HTML-based file containing both the subform display format definition and field definitions for each field that can be imported into NBS at the state level.

Note: Importing, viewing, adding, and editing custom fields are tasks usually reserved for the NBS system administrator.

Viewing Custom Fields

As a system administrator, you can also view the available custom fields associated with various NBS pages. A "set" of pages refers to the collection of pages supporting a given NBS business object. An example of such a page set might include the View Organization, Add Organization, and Edit Organization pages.

You use the Custom Fields Administration page to view the custom fields associated with a given set of NBS page sets.

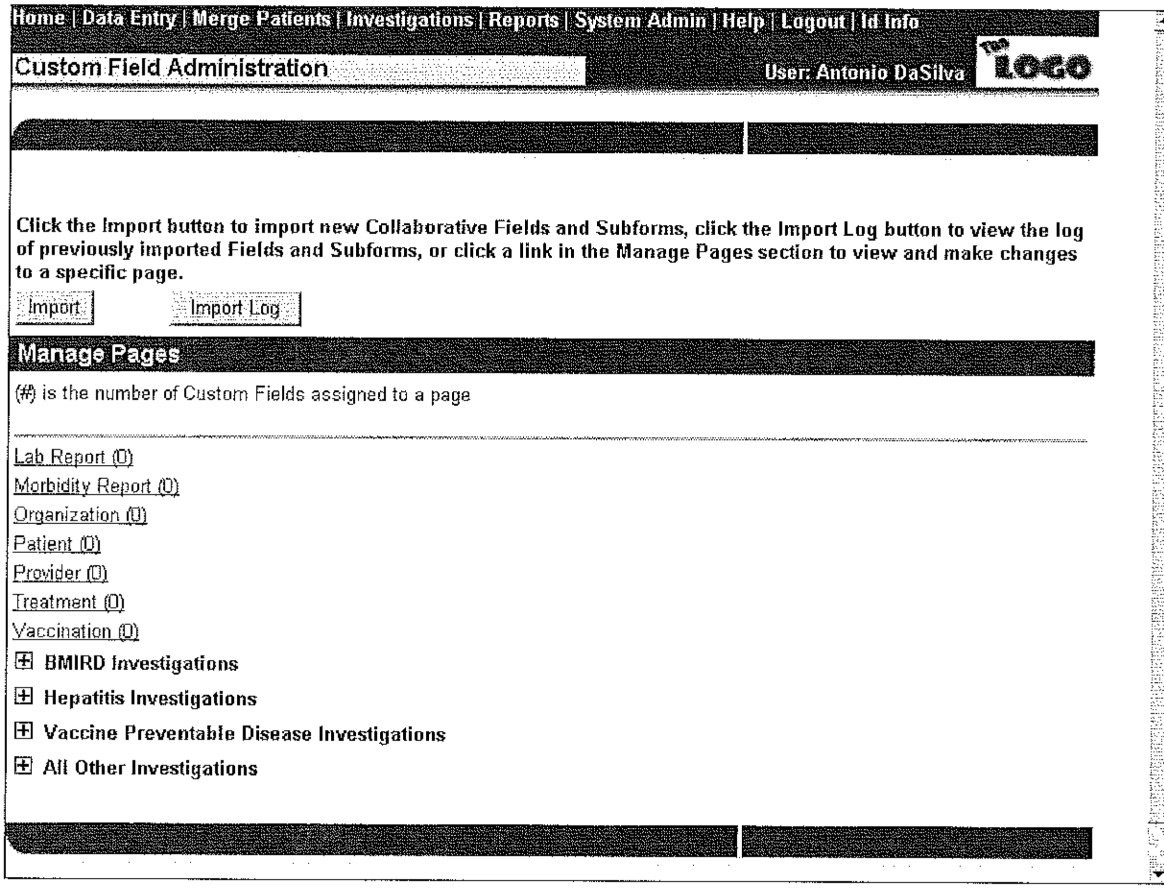
To view custom fields, perform the following procedure:

1. Click **System Admin** on the navigation bar.

   NBS displays the Custom Fields link.

2. Click **Custom Fields**.

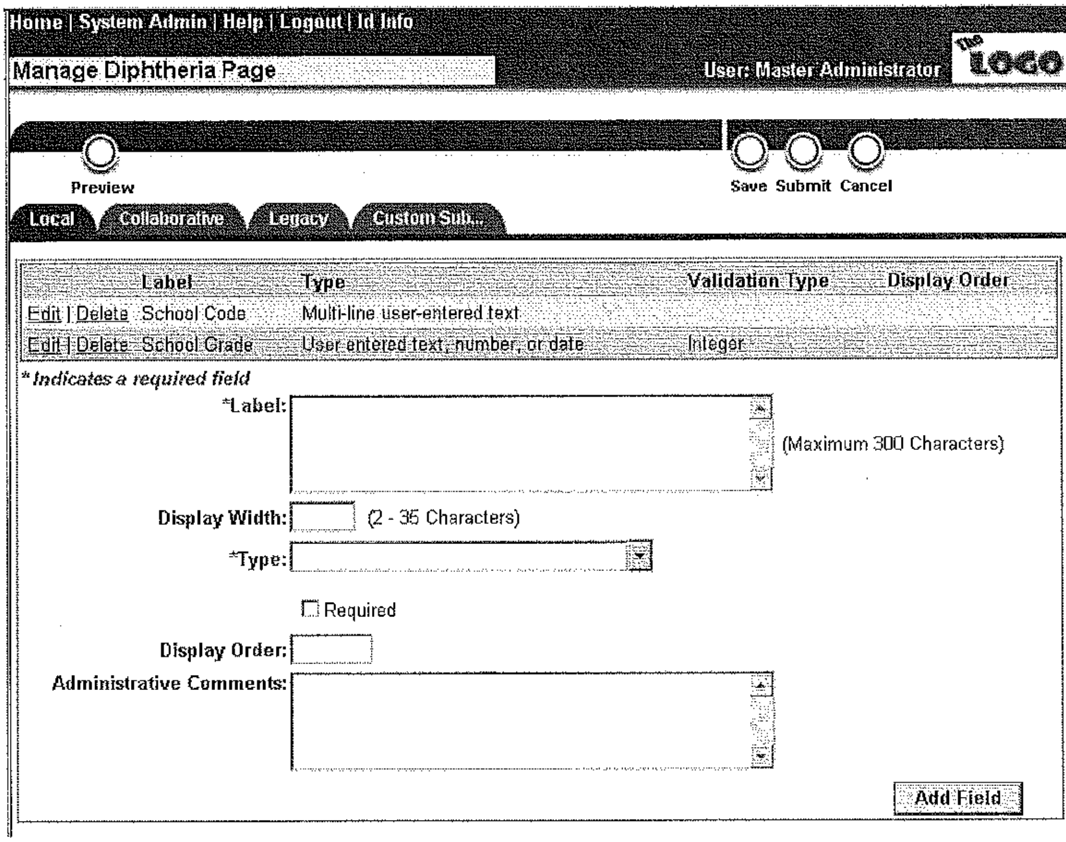
NBS displays the Custom Field Administration page.



3. Click the link for the set of pages you want. Optionally, click ✚ to expand the list of available pages associated with the various investigations supported by the NBS.

   Note: The number within parentheses associated with a link indicates the number of custom fields defined for that set of pages.

NBS displays the available options for the selected page.



The gray table at top of the top of the page displays a list of the various custom fields according to type that are associated with the page set, including the label associated with the field, the field type, its validation type, and the order it is displayed.

Note: From the Local tab click the **Edit** link for the field you want to edit and/or view details for the field. From the other tabs, you can view the details by clicking on the **Details** link. Click **Preview** to display a preview of the custom field within a generic representation of the selected page set. Click **Back** to close the preview page and display the Manage page.

Adding Locally Defined Fields

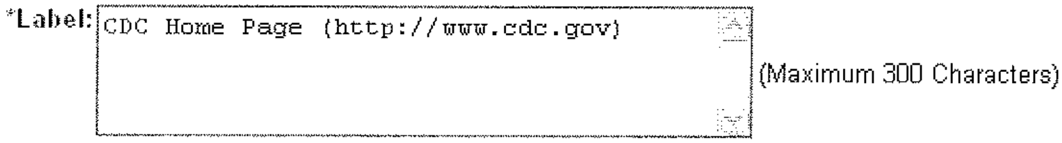
You can add locally defined fields (LDFs) to pages in the NBS. You add LDFs using the Local tab on the Manage page for the selected page set.

Note: You can add LDFs for the pages related to the various business objects listed on the Custom Field Administration page. You add an LDF to a set of pages rather than a single page.

To add locally defined fields, perform the following procedure:

1. View the LDFs for the page set you want. To view locally defined fields, refer to "Viewing Locally Defined Fields" in this section.
2. Click **Label** and type the label name you want. This is a required field.

   Note: If the user chooses to add a **hyperlink**, then the user must enter the label name and then in parenthesis the website that the hyperlink should take the user to. For example if the user wanted to add a hyperlink that is labeled 'CDC Website' that takes the user to http://www.cdc.gov, then the user would enter 'CDC Home Page (http://www.cdc.gov)' in the label text area, as shown below:



3. Optionally, click **Display Width** and type the width of the field you want.
4. Click **Type** and choose the field type you want. This is a required field.

   Note: Depending on the options you choose in the Type field, the NBS displays additional fields:

– Clicking **Coded Value** displays the System Reference Table (SRT) Code Set field and prompts you to choose the code set you want. This is a required field. Refer to the "NBS Administration Guide" document for information about creating new SRT code sets.

  Note: To create a **multi-select field**, select a **Type** of **Coded Value** and set the **Display Width** to a value between 2 and 35. The value selected for **Display Width** will control the number of coded values that will be visible on the screen. To create a **single-select field**, then leave the **Display Width** blank.

– Clicking **User entered text, number, or date** displays the Validation Type field and prompts you to choose the validation type you want. (Alpha only, Custom Java Validation Script, Date- mm/dd/yyyy, or Integer). Choosing **Custom JavaScript** displays a field allowing you to type the script code you want. Note that SQLServer trims the first line of any text within the Custom JavaScript field. To avoid this issue, type a blank line at the start of your script. By doing this, SQLServer trims the empty line, rather than the first line of your script. Refer to the "NBS Administration Guide" for information on creating JavaScript validations.

5. Optionally, click **Required** to make the LDF a **Required Field**.

   Note: Choosing this option results in the display of an error message when a user attempts to save a record without entering information in a field you designate as required.

6. Optionally, click **Display Order** and type the order number you want.
7. Optionally, click **Admin Comments** and type the comment you want.

   Note: This comment does not appear elsewhere in the user interface. It is simply a note/reminder for display on the Custom Field Administrator page.

8. Click **Add Field**.

   The NBS displays the field information in the gray table at the top of the page.

   Note: Click **Edit** for the field information you want to edit. When you are finished making changes, click **Update Field**. The NBS displays the updated field information in the gray table at the top of the page. Click **Delete** to delete the selected field information.

14. Optionally, click **Preview**.

    NBS displays a preview of the LDFs within a generic representation of the selected page set. Click **Back** to close the preview page and display the Manage page.

    Note: The Preview button does not display for page set associated with all investigations for one investigation type (e.g., “All VPD Investigations” option).

15. Click **Submit**.

    NBS saves the information and displays the Custom Field Administration page. Click **Cancel** to cancel your entries.

Editing Locally Defined Fields

To edit an existing LDF, perform the following procedure:

1. View the LDFs for the page set you want. To view locally defined fields, refer to "Viewing Locally Defined Fields" in this section.
2. Click **Edit** for the field you want.

   NBS displays the details of the selected field in the fields beneath the gray table at the top of the page.
3. Click the fields you want and type or choose the information you want. To work the various fields refer to "Adding Locally Defined Fields" in this section for the required procedures.

Importing Collaborative Fields and Subforms

You can import Collaboratively Defined Fields (CDFs) and custom subforms into the NBS from a specific distribution channel. The CDFs and subforms are not editable from the NBS Custom Fields Administration page. You can view CDFs and subforms using the Collaborative and named subform tabs on the Manage page for the selected page set.

The NBS supports the capture of multiple versions of CDFs and subforms. Each new version can add, change, or delete any CDF, existing independently or as part of a subform. That said, each time an updated version of a CDF or subform is imported into the NBS system, the new version of the CDF or subform appears only for new data records created after that point-in-time. As for pre-existing data records, these continue to use the version of the CDF or subform present when those records were originally created.

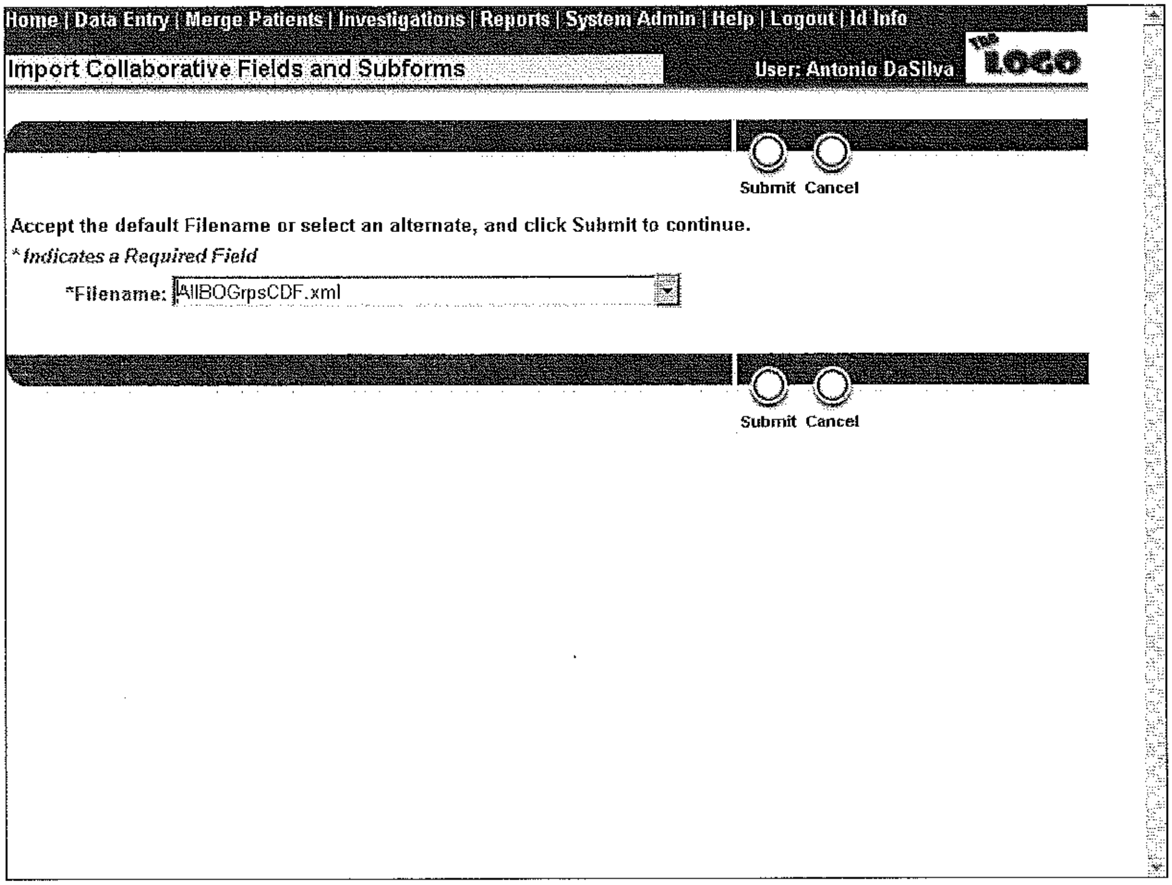
To import CDFs and subforms, perform the following procedure:

1. Click **System Admin** on the navigation bar.

   NBS displays the Custom Fields link.
2. Click **Custom Fields**.

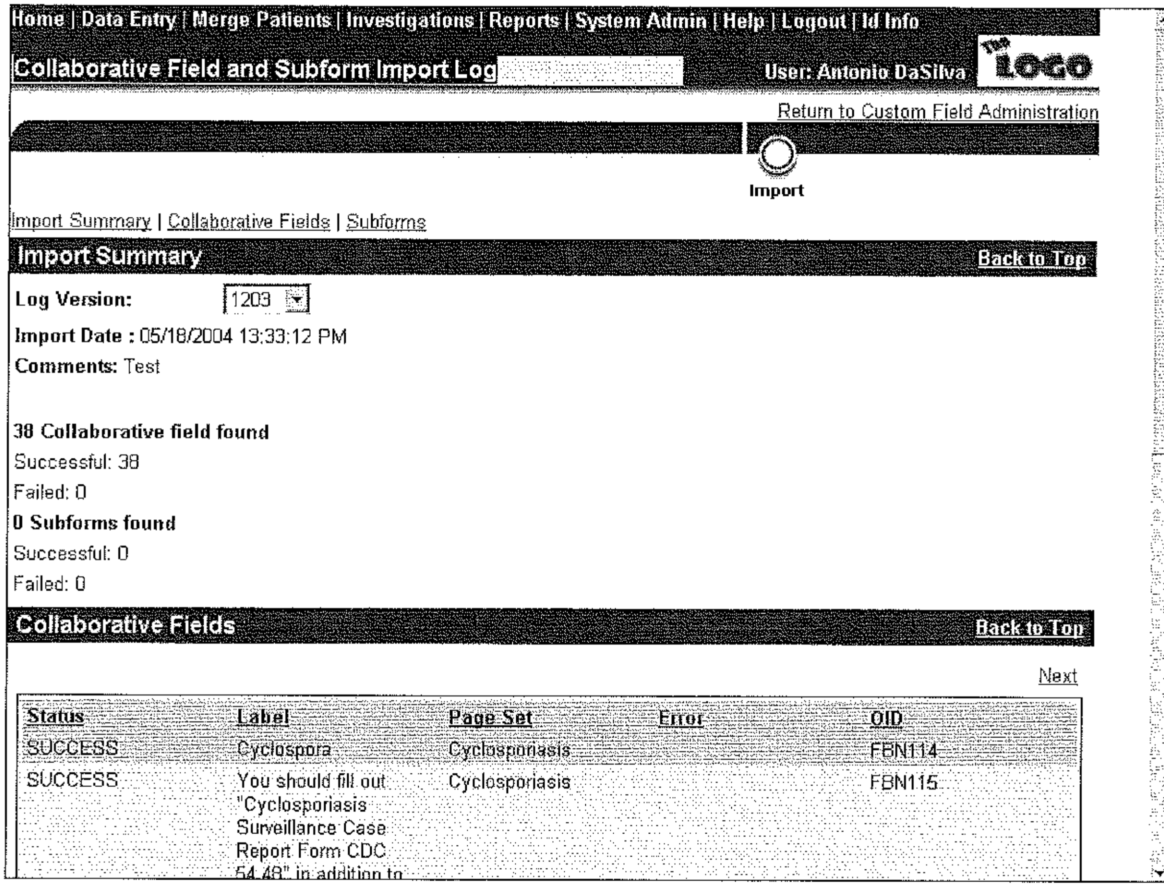
   NBS displays the Custom Field Administration page.
3. Click **Import**.

NBS displays the Import Collaborative Fields and Subforms page.



4. Click the **Filename** drop-down list box and choose the file you want.
5. Click **Submit**.

NBS imports the select file. When the import is complete, NBS display the Collaborative Field and Subform Import Log page and the results of your import.



Lesson Summary

In this lesson, you learned to perform the following functions:

- View custom fields
- Add and edit Locally Defined Fields.
- Import collaborative fields and subforms.

Section Summary

In this section, you learned to perform the following functions:

- View, add, and edit permission sets.
- View, add, and edit user information.
- Monitor ELR activity.
- Manage the patient registry.
- View, add, and edit custom fields.
- Import collaborative fields and subforms.

Appendix A: NBS Acronyms and Definitions

Acronym	Meaning
A	
ABCs	Active Bacterial Core Surveillance
ACK	Acknowledgement Message Segment
A-CPR	Ambulatory-Computer-based Patient Record
ADS	Active Data Store
AIDS	Acquired Immunodeficiency Disease
ANSI	American National Standards Institute
API	Application Programming Interface
ASTHO	Association of State and Territorial Health Officials
ASTPHLD	Association of State and Territorial Public Health Lab Officers
ART	Application Reference Tables
AVR	Analysis, Visualization, Reporting
B	
BLOB	Binary Large Object
BMIRD	Bacterial Meningitis and Infectious Respiratory Diseases
BPRP	Bioterrorism Preparedness Response Program
BREQ	Business Requirements
BRFSS	Behavioral Risk Factor Surveillance System
C	
CDA	Clinical Document Architecture
CDC	Centers for Disease Control and Prevention
CDF	Collaboratively Defined Field
CDM	Core Demographic Module
CDS	Common Data Store
CIO	Carrier Implementation Objects
CIPHER	Common Information for Public Health Electronic Reporting
CLIA	Clinical Laboratory Improvement Act (Unique ID for Labs)
CM	Configuration Management
CMM	Capability Maturity Model
CMP	Change Management Panel
COBRA	Common Object Brokerage Request Architecture
COTS	Commercial off the shelf
CPA	Collaboration Protocal Agreement
CPG	Community Planning Groups
CPT	Current Procedure Terminology Codes
CQ	Change Request
CRA	Countermeasure and Response Administration

Acronym	Meaning
CRS	Congenital Rubella Syndrome
CSC	Computer Sciences Corporation
CSTE	Council of State and Territorial Epidemiologists
CTS	HIV Counseling and Testing System
D	
DAO	Data Access Object
DASTLR	Division of AIDS, STDs, and TB Laboratory Research
DBMD	Division of Bacterial and Mycotic Diseases
DC	Data Collectors
DCML	Data Collector Markup Language
DHHS	US Department of Health and Human Services
DHQP	Division of Healthcare Quality Providers
DIS	Disease Intervention Specialist
DMZ	Demilitarized Zone-Area between two firewalls
DOT	Directly Observed Treatment
DPD	Division of Parasitic Diseases
DRD	Detailed Requirements Document
DSD	Design Specification Document
DSML	Directory Service Markup Language
DSTDP	Division of STD Prevention
DTD	Document Type Identification
DVBID	Division of Vector-Borne Infectious Diseases
DVR	Division of Viral and Rickettsial Diseases
E	
EAI	Enterprise Application Integration
EBP	Elementary Business Processes
ebMS	ebXML Messaging Service
EDI	Electronic Data Interchange
EED	Early Event Detection
EEE	Eastern Equine Encephalitis
EHEC	Enterohemorrhagic *Escherichia coli*
EIP	Emerging Infections Program (ABCs, FoodNet)
ELR	Electronic Laboratory Reporting
EPI-X	Epidemic Information Exchange
EPO	Epidemiology Program Office
ER	Enhancement Request
ERP	Enterprise Resource Planning
ETL	Extraction, Transition, Load

Acronym	Meaning
F	
FDD	Food and Diarrheal Disease PAM
FDDB	Foodborne and Diarrheal Diseases Branch
FLS	Front Line Supervisor
FoodNet	Foodborne Diseases Active Surveillance Network
FP	Family Planning
G	
GI	Granuloma inguinale
GUI	Graphical User Interface
GWAC	Government Wide Available Contracts
H	
HAN	Health Alert Network
HARS	HIV/AIDS Reporting System
HCFA	Healthcare Financing Administration
HEDIS	Health Plan Employer Data Information Set
HGE	Human Granulocytic Ehrlichiosis
HIMSS	Healthcare Information and Systems Society
HIPAA	Health Insurance Portability and Accountability Act
HISSB	Health Information and Surveillance Systems Board
HIV	Human Immunodeficiency Virus
HL7	Health Level 7
HMD	Hierarchical Message Description
HME	Human Monocytic Ehrlichiosis
HMO	Health Maintenance Organization
HTLV	Human T-Lymphotropic virus
HTML	Hypertext Markup Language
HTTP	Hypertext Transport Protocol
HTTPS	Hypertext Transport Protocol Secure
I	
ICCR	Interstate Communication Of Communicable Disease Reporting
ICD9	International Classification of Diseases, 9th Revision
IDR	Integrated Data Repository
IDS	Integrated Delivery System
IP	Interface Program
IPPA	In-Progress Progress Audit
IRMO	Information Resources Management Office
ISP	Innovations in Syphilis Prevention
J	

Acronym	Meaning
J2EE	Java 2 Platform, Enterprise Edition
JAD	Joint Application Development
JAVA	an object oriented programming language developed by Sun Microsystems
JDBC	JAVA Database Connectivity
JDK 1.4	JAVA version used for security
JSSE 1.0.2	Java Secure Sockets Extension
K	
KABB	Knowledge, Attitudes, Beliefs, Behavior
KPA	Key Process Area
L	
LDAP	Lighweight Directory Access Protocol
LDF	Locally Defined Field
LDM	Logical Data Model
LGV	Lymphogranuloma venereum
LIMS	Laboratory Information Management System
LIS	Laboratory Information System
LITS	Laboratory Information Tracking Systems
LOINC	Logical Observation Identifiers Names and Codes
LRN	Laboratory Response Network
M	
MCH	Maternal and Child Health
MCO	Managed Care Organization
MIC	Minimum Inhibitory Concentration
MTDC	Mid Tier Data Center
MIM	Message Information Model
MIS	Mangement Information System
MMWR	Morbidity and Mortality Weekly Report
MPC	Mucopurulent cervicitis
MPI	Master Person (patient) Index
MRSA	Staphylococcus aureus, coagulase-positive, methicillin or oxicillin resistant
MSIS	Model STD Information System
MSPB	Meningitis and Special Pathogens Branch
MT	Middle Tier
N	
NAK	No Acknowledgement message statement
NaSH	National Surveillance System for Healthcare Workers
NBS	NEDSS Base System
NCBDDD	National Center on Birth Defects and Developmental Disabilities

Acronym	Meaning
NCCDP	National Center for Chronic Disease Prevention
NCCDPHP	National Center for Chronic Disease Prevention and Health Promotion
NCEH	National Center for Environmental Health
NCHS	National Center for Health Statistics
NCHSTP	National Center for HIV, STD, and TB Prevention
NCID	National Center for Infectious Diseases
NCIPC	National Center for Injury Prevention and Control
NEDSL	NEDSS Security Library
NEDSS	National Electronic Disease Surveillance System
NETSS	National Electronic Telecommunications System for Surveillance
NGU	Nongonococcal urethritis
NHSN	National Healthcare Safety Network
NIOSH	National Institute for Occupational Safety and Health
NIP	National Immunization Program
NMS	NEDSS Messaging System
NND	National Notifiable Disease
NNDM	Nationally Notifiable Disease Module Reporting
NNDSS	National Notifiable Diseases Surveillance
NNIS/DI	National Nosocomial Infection System/Dialysis
NOW	NEDSS Operational Workgroup
O	
OD	Object Definition
OD	Office of the Director
ODBC	Open Database Connectivity
ODS	Operational Data Store
OIDs	Object Identifiers
OM	Outbreak Management
OMB	Office of Management and Budget
OMS	Outbreak Management System
OOJ	Out of Jurisdiction
OSI	Open Systems Integration
P	
PAM	Program Area Module
PHA	Public Health Advisor
PHCDM	Public Health Conceptual Data Model
PHDIR	Public Health Directory
PHIN	Public Health Information Network
PHIN MS	Public Health Information Network Messaging System
PHIN NCMT	PHIN Notifiable Condition Mapping Tables

Acronym	Meaning
PHIN VADS	PHIN Vocabulary Access and Distribution System
PHIN VS	PHIN Vocabulary Services
PHLIS	Public Health Laboratory Information System
PHMTS	Publica Health Messaging Transport Service
PHPPO	Public Health Practice Program Office
PID	Pelvic Inflammatory Disease
PIP	Process Improvement Plan
PKI	Public Key Infrastructure (standard for authentication)
PMRI	Personal Medical Records Information
PN	Partner Notification
PPQRB	Project Performance and Quality Review Board
PRAMS	Pregnancy Risk Assesment Monitoring System
PVS	Pre-Event Vaccination System
Q	
QA	Quality Assurance
R	
RDB	Respiratory Diseases Branch
RDB	Reporting Database (with NBS)
REVB	Respiratory and Enteric Viruses Branch
RH	Division of Reproductive Health
RIM	Reference Information Model
RPG	Release Planning Group
RRB	Requirements Review Board
RUP	Rational Unified Process
S	
SAD	Software Architecture Document
SAIC	Scientific Applications International Corporation
SAML	Security Assertion Markup Language
SDLC	Software Development Lifecycle
SDN	Secure Data Network
SDO	Standards Development Organization
SENSOR	Sentinel Event Notification System for Occupational Risks
SIP	Supplemental Information Provider
SMPT	Simple Mail Transport Protocol
SNOMED	Systemized Nomenclature of Medicine
SNOMED CT	SNOMED Clinical Terms
SOE	Standard Operating Environment
SP	Service Pack

Acronym	Meaning
SRS	Software Requirements Specifications
SRT	System Reference Table
SSL	Secure Socket Layer
STD	Sexually Transmitted Disease
STS	Serologic Tests for Syphilis
T	
TCP/IP	Transmission Control Protocol/Internet Protocol
TECH	Technical Requirements
TIMS	Tuberculosis Information Management System
U	
UE	User Experience
UI	Unique Identifier
USAB	Usability Requirements
V	
VADS	Vocabulary Access Distribution System (PHIN VADS)
VEE	Venezualan Equine Encephalitis
VISA	Staphylococcus aureus, vancomycin intermediate susceptibility
VPD	Vaccine Preventable Disease
VRSA	Staphylococcus aureus, coagulase positive, vancomycin resistant
W	
WEE	Encephalitis, Western equine
X	
XML	Entensible Markup Language
Y	
Z	

phin

PUBLIC HEALTH INFORMATION NETWORK

Please direct all your NEDSS support related questions to:

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