MINNESOTA ELECTRONIC DISEASE SURVEILLANCE SYSTEM

User's Manual – General guide

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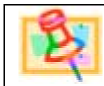
SYMBOLS USED IN THIS MATERIAL

	**NOTE** Clarifies something in the text
	**IMPORTANT** Important facts
	**TIP** Additional useful information.

CHAPTER 1: THE MINNESOTA ELECTRONIC DISEASE SURVEILLANCE SYSTEM (MEDSS)

MEDSS is an electronic disease surveillance system that allows public health officials in Minnesota to receive, manage, process, and analyze disease-related data. This information comes from various health care entities such as clinics, laboratories, hospitals, and local health care providers.

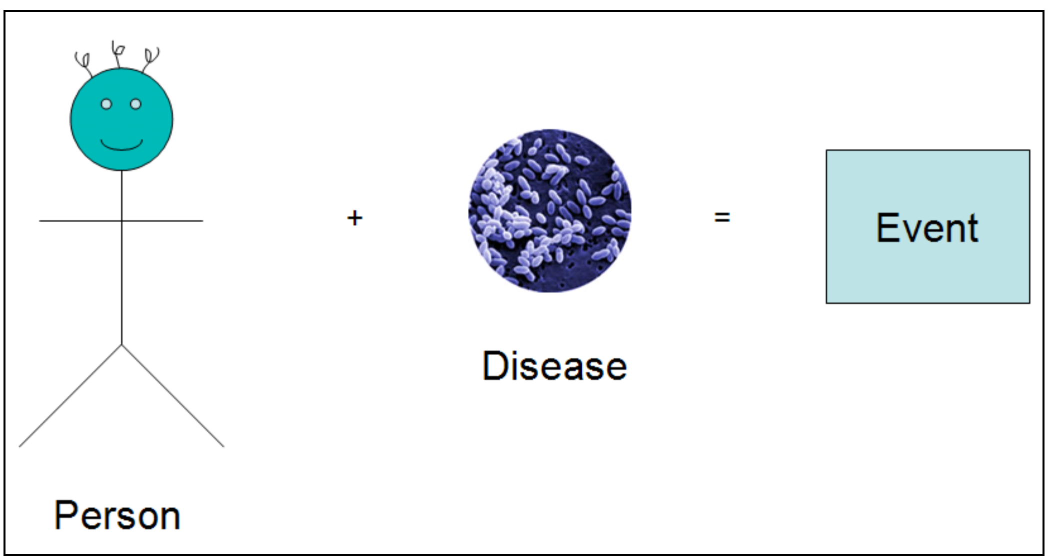
The software that operated MEDSS is Consilience's Maven Electronic Disease Surveillance System and is a commercial-off-the-shelf, (COTS) web-based information system. It provides interactive, automated information gathering and decision support processes for each reportable communicable disease and is compatible with state and national IT standards. It also complies with the Centers for Disease Control and Prevention (CDC) Public Health Information Network (PHIN) published standards.

MEDSS allows secure communication and coordination between state and local health departments. Furthermore, MEDSS enables immediate exchange of information between clinics, labs and local health departments. In addition to reporting, MEDSS's security environment displays only the data someone needs and is authorized to see. MEDSS functions include:

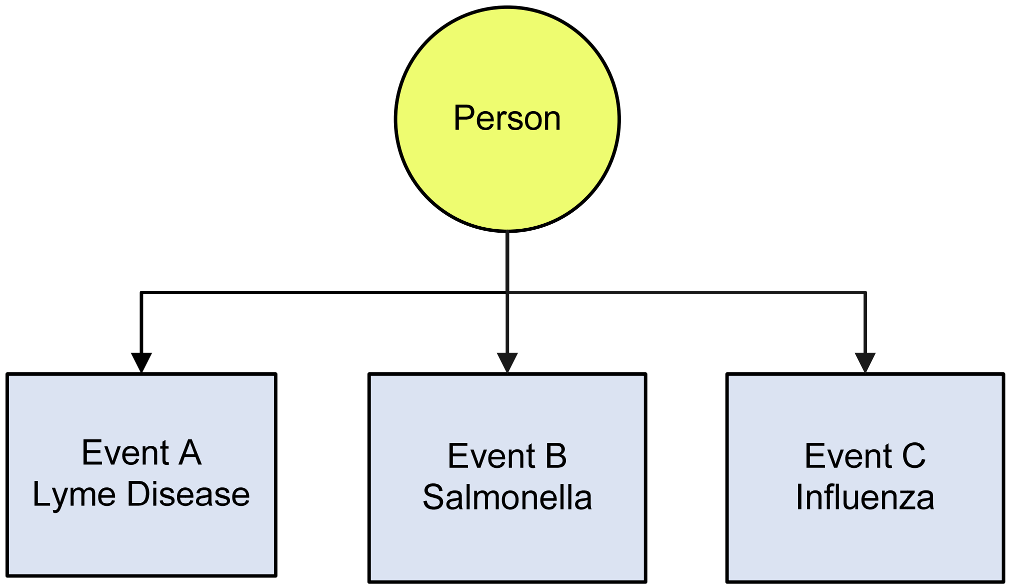
- Electronic data exchange and workflow between different groups working on public health disease management
- Ability for lab reports to be received electronically
- Ability for case reports to be received electronically
- Data entry capability for paper-based reporting (for communities that have not shifted to electronic means)
- Case- and outbreak- management

Persons and events

In MEDSS there are information about both persons and events, however; MEDSS is a person centric system where all information collected is organized around a person. An event within MEDSS is an instance of a person tied to a specific disease at a specific time. Please note that the word **"event**" in this guide would be similar to a **"case"** or a **"record"**.



The same person can be entered into the MEDSS system with various diseases over time with each instance resulting in a different event. When entering a new event, it is important to check if the person and event are already in the system to reduce duplications of people and events.



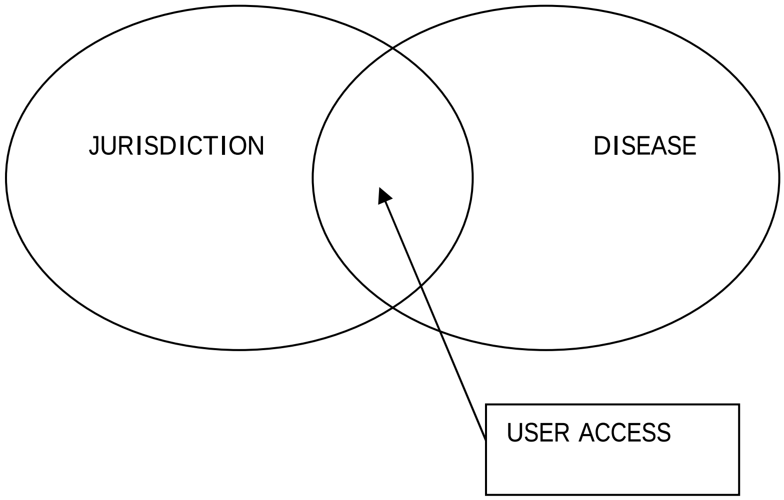
User Groups and Permissions

Information entered into MEDSS is sensitive health data therefore system security is in accordance with Minnesota privacy standards for health information. Users will be assigned a username and password that will provide access to the system. Each username is connected to one or more roles and one or more groups, which give access to specific system features and disease information. The roles and groups to which a user is assigned depend on the job function. Permissions, roles, and groups are described in detail below.

- **Permission**: Permissions provide the ability within the system to perform certain actions, such as "run a report" or "delete an event".

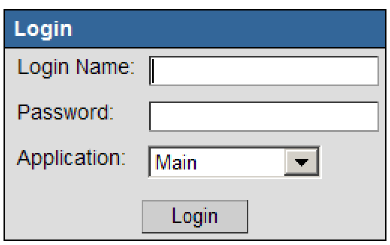
- **Role**: a group of permissions make up a role. For example, one role is a health department data entry person. This role has permissions such as creating or updating events. The role of the health department analyst comes with additional permissions, such as the ability to run reports. The data entry person performs different job functions and therefore has a different set of permissions than a health department analyst.

- **Group**: Groups define what data a user should have access to based on jurisdiction and disease specialization. For example, a Ramsey County TB group may only see TB events in Ramsey County or a Hennepin County foodborne group may see only Hennepin County foodborne disease events; not TB events. MDH staff will for the most part have access to events in the whole state but limited to the disease(s) they work with.



Main vs. Administration Applications

There are two major applications, or computer modes, of the MEDSS system - Main and Administration. This guide will focus only on the Main application. The Main application is where all event data is accessed and edited. For example, users can search for an event, add new events as well as view run reports within MEDSS. The Main application is always the default setting when logging into the system.



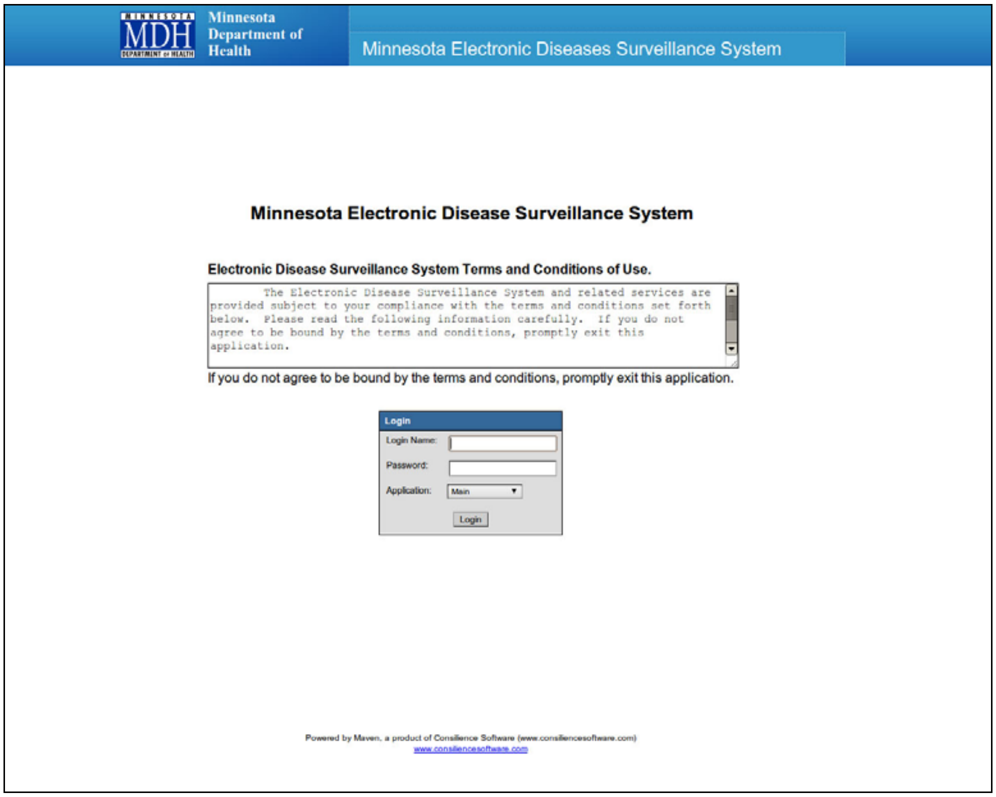
The Administration application is used by MEDSS administrators at the state and local levels. The Administration application allows system administrators to create new users in the system, to assign roles, and to reset passwords.

Logging In

The Minnesota Electronic Disease Surveillance System (MEDSS) can be accessed through Internet Explorer 6.0 or Firefox 2.0; however, MEDSS is not supported by Netscape. To Log into the system, follow these steps:

1. Open a browser and type in the URL

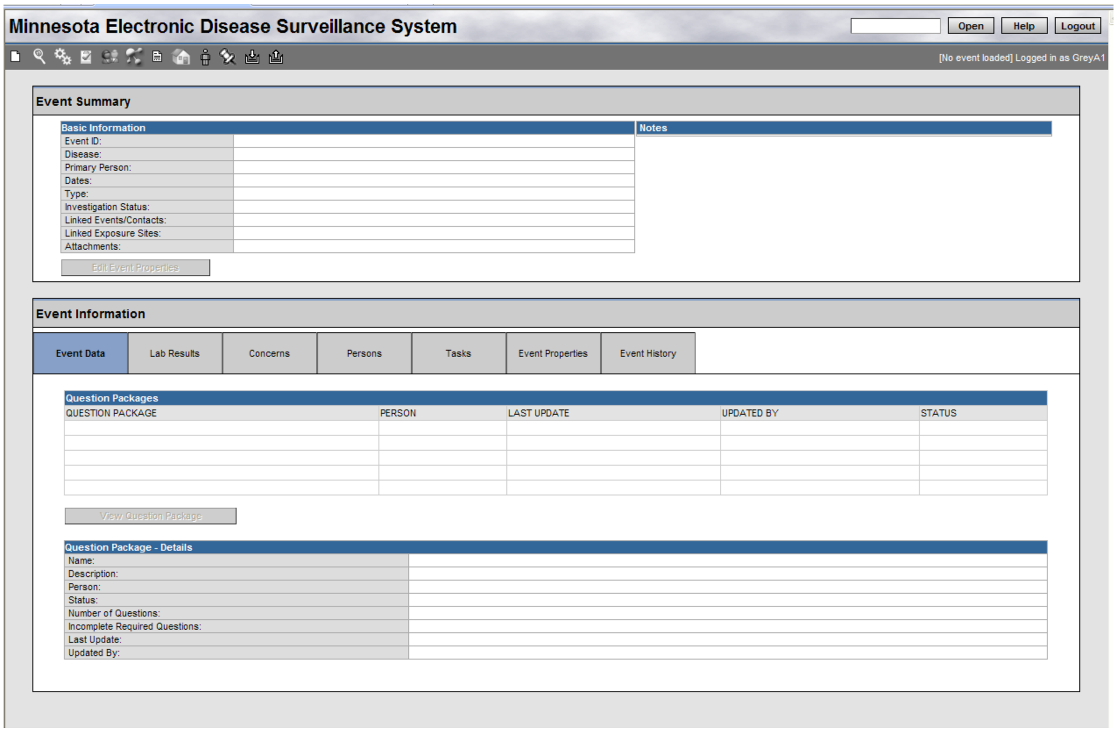
The following screen appears:



2. Enter your assigned **username** and **password** in the appropriate text boxes and verify the Application is set to **Main**.

	IMPORTANT Usernames and passwords are case sensitive so be sure to enter these exactly as they were provided. For example, XYZ123 is not the same password as xyz123.

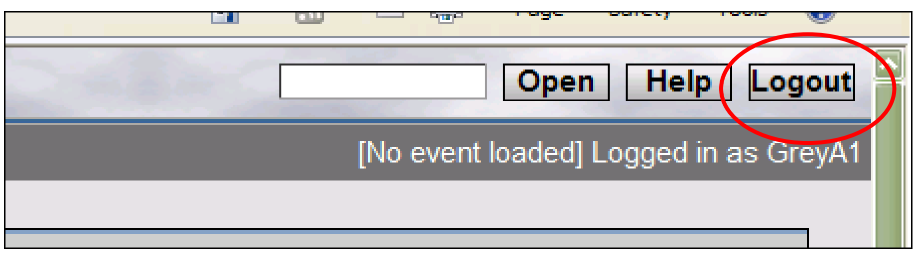
3. Click **Login**. The Main MEDSS dashboard displays:



This is the home screen for the system where users are able to access functions such as searching for an event, adding a new disease report, or printing a letter.

Logging Out

To logout of the system, click the Logout button in the upper right corner on the dashboard screen.

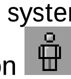


This will log the user out of the system and take the user back to the sign in page at which point it is safe to close the browser window.

	NOTE It's important to always log out from the system instead of just closing the browser window.

The system will automatically log-out a user who hasn't been active for more than 20 minutes. Note that sometimes having a screen open for data entry without doing any saves will be considered as 'inactive' by the system since all activities at this point is taking place in the local browser.

Passwords

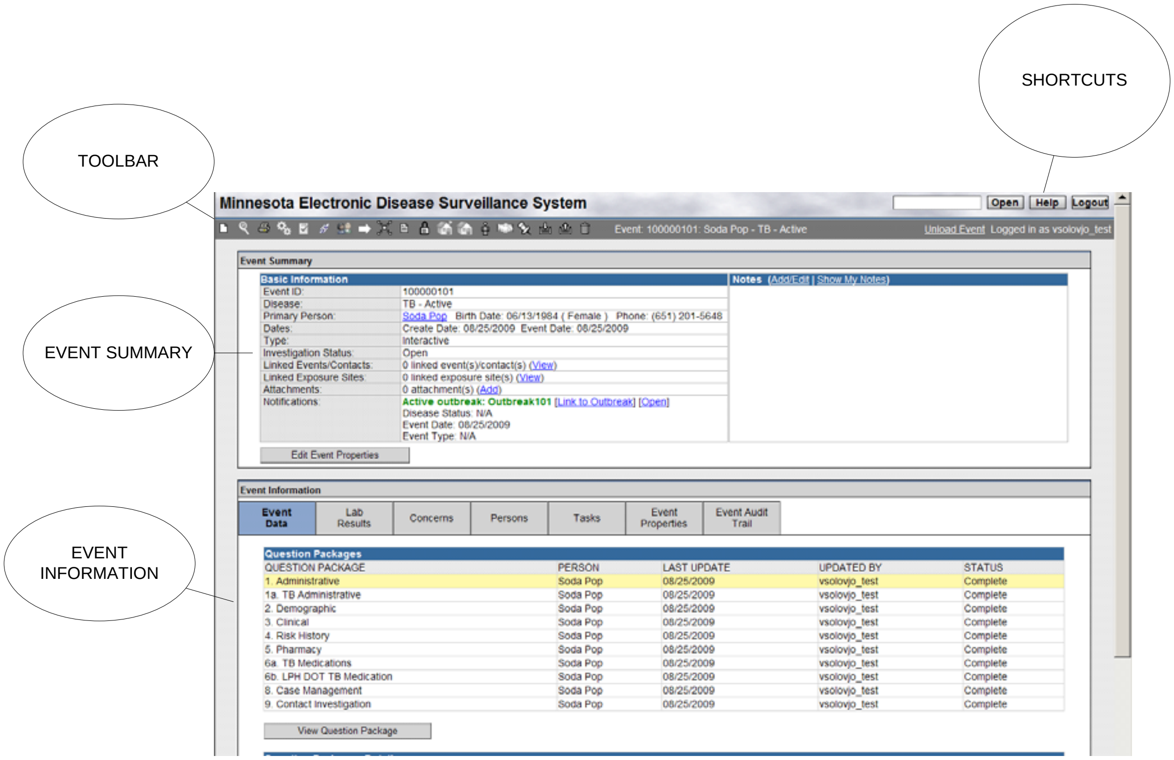
Passwords do expire. The system will begin to warn the user that the password will expire 5 days before it actually expires. If the password expires before it has been reset, the user will need to contact a system administrator (email and phone number located at the end of this guide) to regain access to the system. To change the password before it has expired, first click on the User Information button  in the toolbar then type the new password into the password field and then confirm it by re-typing the same password; click Save to maintain changes.

<u>Password Requirements:</u> MEDSS requires users to establish "strong" passwords. Passwords must be 8-12 characters in length, and contain at least one number and one symbol (e.g. &, #, or !)

CHAPTER 2: OVERVIEW OF THE SYSTEM/DASHBOARD

MEDSS Dashboard

MEDSS Dashboard is the point from which most actions take place. The dashboard consists of the following areas:



- ➢ The **Dashboard Toolbar** has icons that perform the majority of the functions within the system. Depending on a user's role, the number of icons in the toolbar may vary. For example, one user might see a trash can icon which is used to delete an event, while another user may not see a trash can because the assigned role doesn't permit that action. Examples of toolbar actions are creating new disease events, viewing workflow queues, or adding tasks.

- ➢ The **Event Summary** contains a summary of the information specific to each reported disease event such as information about when the event was created, the name of the person the event is about, number of linked events and exposure sites.

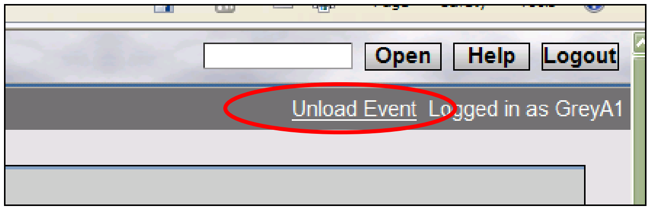
- ➢ The **Event Information** section contains detailed information about the event and is where information may be entered for the event.

- ➢ The **Shortcuts** section contains buttons that can be used to quickly perform certain actions within MEDSS such as logout or open an event.

If an event is loaded into the system you will see the information for this event populated on the **Dashboard**. If the event is not loaded, the dashboard will be empty.

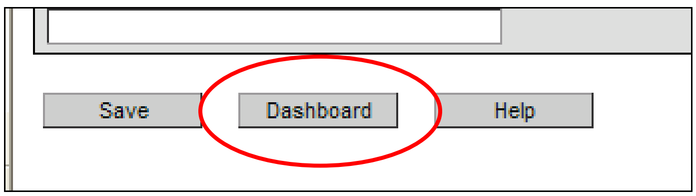
Chapter 3 – Searching for existing events and Chapter 4 – Creating Events in this guide have more information on how to load events into the dashboard.

To unload an event, click the **Unload Event** link in the **Shortcuts** section on the dashboard. Unloading an event is similar to putting the folder back in the file cabinet. By unloading the event, you are making the event accessible to other users to edit when you are finished working on it.



Navigating through the system

Before using MEDSS, a user needs to understand how to navigate through the system. Once logged in, all functions can be access from the dashboard, the main screen of the system. Once navigating away from the dashboard, users should not use the browser's back button to get back to the dashboard, but use the navigation buttons built into the system's pages.



Some additional navigational tips:

- Clicking on the different tabs on the dashboard will display a different view of information below that tab on the same page.
- Any of the blue underlined words are links to pages with additional functions or data on the person or event. To get back, usually on the screen there is a Dashboard or Back button.
- To open new windows, users will need to either double click the name or use the navigation buttons on the page, i.e. View Question Package, View Wizard, or Details.
- When finished working on an event, users should unload the event.

Some browsers will work differently views, text size, and navigation, so if a user has any problems with navigation, contact a system administrator.

MEDSS Toolbar

The Dashboard Toolbar is used to perform different functions in the system, such as searching for an existing event or running a report. User roles are used to define what functions different users should be able to use, and not all users will have access to all icons. The figure below is a sample toolbar for an advanced user. The icons are described from left to right on the toolbar:

Create Event – used to create a new disease event.

Search Event – used to search for an existing disease event based on various search criteria.

Print Event – used to print letters or other forms specific to the open event.

Workflow – used to view workflow queues (electronic to-do/line-lists)

Tasks – used to create, assign and update tasks.

Linked Events / Contacts – used to link events in the system together, such as linking a contact with an index case or linking multiple events in an outbreak together.

Import Roster – used to import information about multiple events or persons from a spreadsheet which will create multiple disease events. The import roster function is specific to some diseases.

Create Outbreak/Exposure Event – used to create an outbreak event or exposure event.

Reports – used to run and export reports from data entered in MEDSS.

Lock Event – used to create a long-term lock on the event which prohibits others from updating it. This is a function specific to off-line use of the system and only available to users using the off-line module.

Linked Exposure Sites – used to view and search for geographic sites which have been linked to existing events.

Manage Exposure Sites – provides a list of all exposure sites and enables the user to rapidly enter multiple exposure sites.

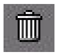
User Information – provides information about the current user of the system. Use this link to enter your contact information and to change your password.

Share Event – provides the user the ability to share a case with someone who would not ordinarily have permissions to access it.

Recent Cases – provides easy access to the previous 20 events that have been opened by the current user.

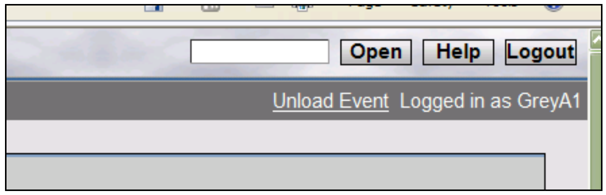
Import Event(s) – used to import events which were updated or created offline. This is a function specific to off-line use of the system and only available to users using the off-line module.

Export Event(s) – used to export events which will be updated offline. This is a function specific to off-line use of the system and only available to users using the off-line module.



Delete Event – used to delete an event. This function is limited to only a few people.

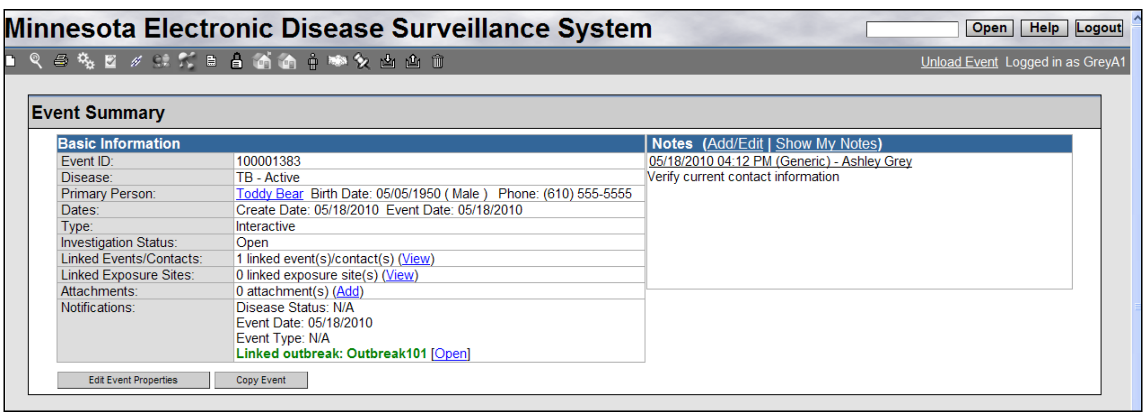
MEDSS Shortcut Buttons



The shortcut buttons allow the user to quickly locate an event by its ID, provide the user help, and allow the user to logout of the system. To locate an event by its ID, enter the ID in the textbox and click the Open button. To obtain general help about the system, not specific to a disease, click the Help button. To logout of the system, click the Logout button. This action will take the user back to the login screen. By pressing Alt + S, C, or H, you can access the keyboard shortcuts for Save, Cancel and Help actions.

MEDSS Dashboard - Event Summary

The **Event Summary** section is divided into two smaller sections: **Basic Information** and **Notes**. This section also has the Edit Event Properties and Copy Event functions.



Basic Information

The Basic Information section, as its name implies, highlights the following items for every event:

Event ID	The unique event number automatically assigned by MEDSS.
Disease	Disease specified in the event.

Primary Person	The name, birth date and gender of the person for the opened disease event are reflected in this field. It also has a link to more detailed information about the person. Clicking the name provides a person summary screen with address, other events the person has in the system, and people who are linked to the person socially (more information is provided on the Person Summary screen later in this chapter).
Dates	Create Date is when the event was created in MEDSS. Event Date is when the event was effective from. Most of the times these two dates will be the same.
Type	The type describes how the event was originally entered into the system. The types include the following: • **Interactive** – case was manually created. • **Batch** – case was created automatically via electronic lab report or HL7 clinical data feed. • **Conversion** – case data was converted to MEDSS from a previously existing database. • **Cluster** – case was created automatically during an automatic outbreak import of events.
Investigation Status	Displays the current status of the event; typically the status will be open, closed or invalid.
Linked Events / Contacts	Displays the number of other events that are linked to this event. This is also a tool where one could initiate the linking of one event to another.
Linked Exposure Sites	Displays the total number of exposure sites linked to this event. This is also a tool where one could initiate the linking of an exposure site to the event.
Attachments	Displays the number of files that are attached to this event. This is also the tool used to access the attachments. Any file, such as a report, letter, or X-ray can be attached to an event.
Notifications	A notification about the event, for example the classification status or a notification of an existing outbreak for disease being entered may display here. This section will also display important information messages about the event, such as inconsistently entered data (concerns) or active outbreaks for the disease.

Event Notes

The **Notes** section displayed in the **Event Summary** section of the MEDSS dashboard allows users to add event specific notes for the event. MEDSS has the capability to keep notes both on an event level and on a person level. Event notes displayed in the Event Notes section on the dashboard are event specific notes and only available for users with access to the event they are created for. They will not be displayed with other disease events associated with the person.

Edit event and Copy event buttons

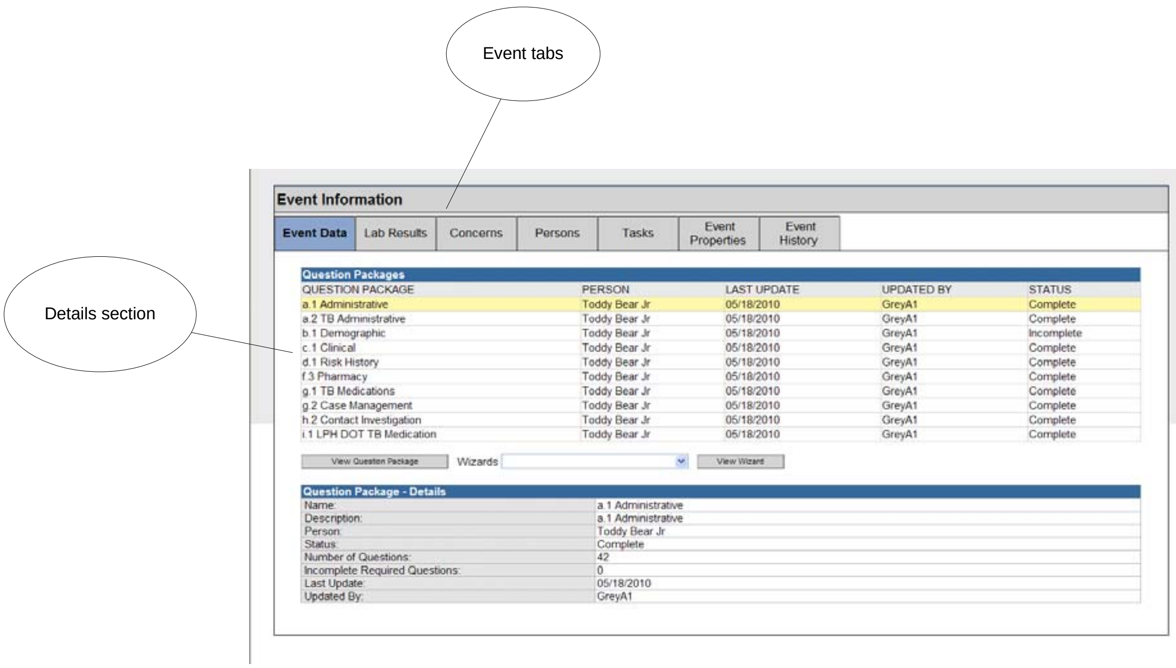
The Edit event button on the dashboard can be used to change the event information such as disease or effective date.

The Copy event button can be used to copy all information for one event and create a new event with the same information.

More information about how to edit event information and copy events can be found in Chapter 7 – Additional event features.

MEDSS Dashboard - Event Information

The **Event Information Section** is divided into two distinct sections as seen in the figure below. There are tabs across the top (Event data, Lab Results, etc.) and the corresponding Details area which change depending upon the chosen tab. Each view will be discussed in more detail.



The Event information section is divided into a number of tabs providing the user with a variety of information about the event. By clicking on each tab different information will be available in the Details section on the screen. Depending on the user’s permissions, he may or may not be able to see each tab. Each tab is described briefly below, but a more detailed description of each tab follows.

Event Data	Lab Results	Concerns	Persons	Tasks	Event Properties	Event History

Event Data The Event Data tab presents the user with the question packages specific to the event. A question package is a series of questions based on the same theme.

Lab Results The Lab Results presents users with the ability to view, add, and edit lab results for a particular event. Electronic lab results are also displayed here.

Concerns The Concerns tab allows the user to see possible issues with data entry. There are different severity settings for concerns.

Persons The Persons tab allows the user to enter or change demographic information for the person this particular disease event is about. All users will have access to the Person tab and this is where shared person information is stored.

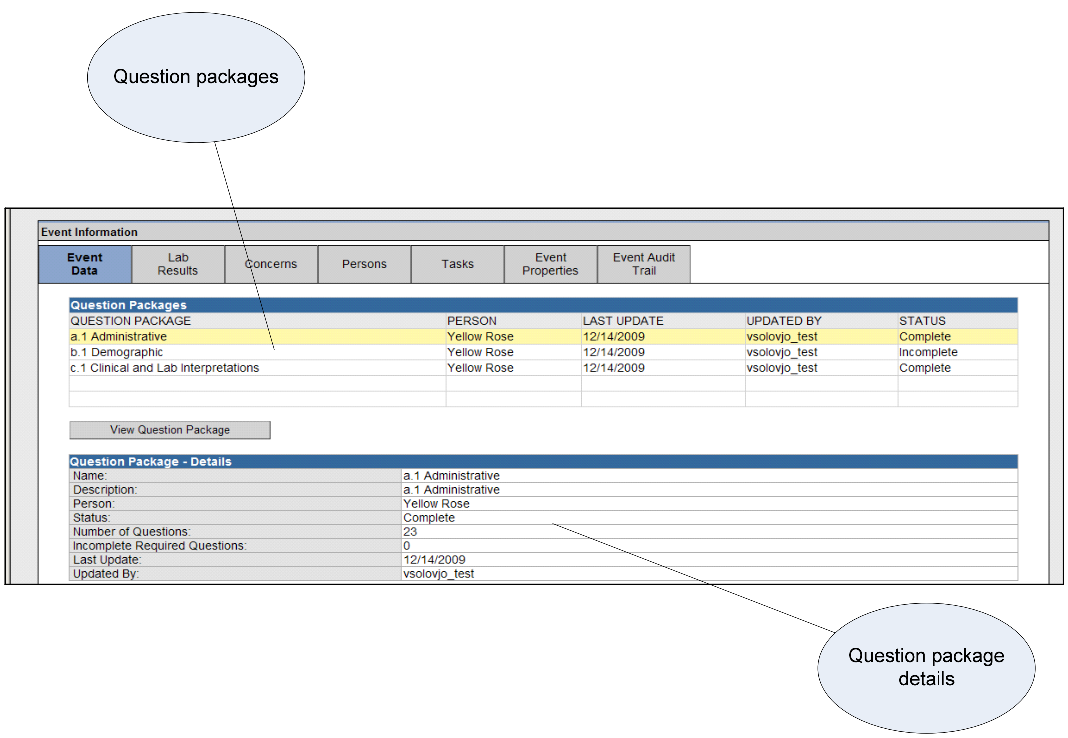
Tasks The Tasks tab will provide the user with information about all the tasks associated with the open event. All tasks for the event will show up in this tab regardless of who is assigned the task.

Event Properties The Event Properties tab provides the user with more information about the case. It reiterates the event ID number and specifies the model being used to trigger the questions.

Event History The Event History tab displays the time, date and user who has created or updated any part of the event.

Event Information – Event Data Tab

The **Event Data** tab is where the user can access the disease-specific question packages. A question package (QP) is a group of questions which share a common theme. For example, the Demographic question package would include information such as age, birth date, address, while the Clinical question package would include information about the case such as symptoms and date of diagnosis. Each disease event will have different question packages available that pertain specifically to that disease event.



The **Question packages** section of the Event data tab, show a list of all available question packages for the event. Different disease events will have different question packages and different question package contents.

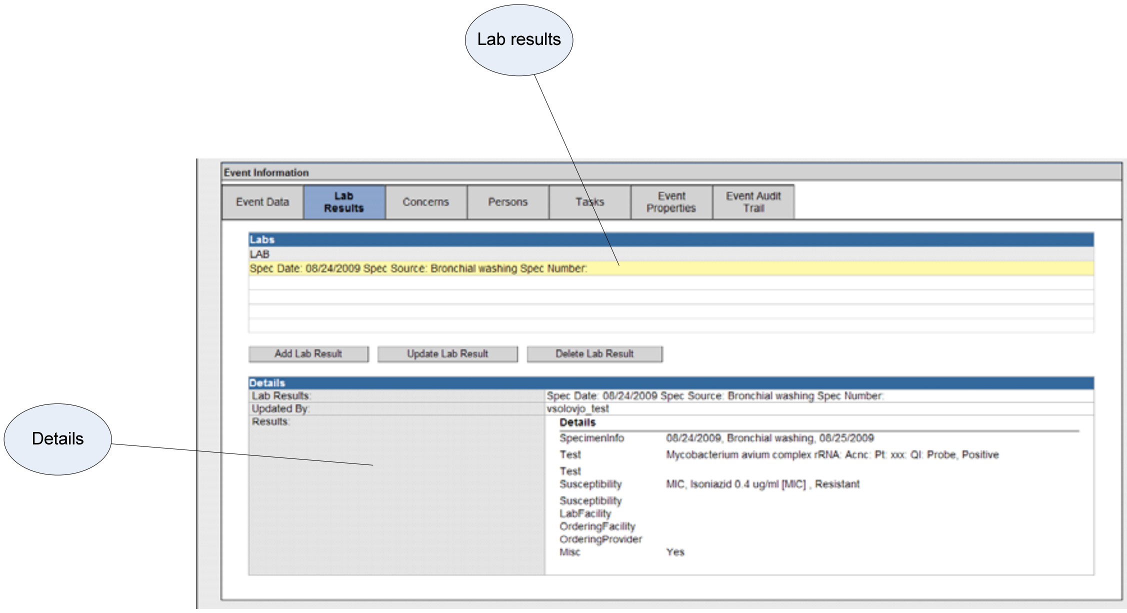
To open a question package double-click on the name of the question package (i.e. a.1 Administrative or b.1 Demographic), or with a question package name highlighted click on the button View Question Package. For example in the image above the question package a.1 Administrative will open up if the View Question package button is clicked).

The **Question Package- Details** section gives a brief summary of the highlighted question package. The headings of the rows are described in detail beneath the figure.

Name & Description	Identifies the title of the question package.
Person	Indicates the name of the person involved in the event
Status	Refers to the completeness of the required questions within the question package. The question package is considered complete if all required (*asterisked [*])* questions have been answered. The status of a question package will be marked as complete by default if it does not contain any required questions.
Number of Questions	List the number of questions in that question package.
Incomplete Required Questions	List the number of unanswered required questions in that question package.
Last Update	Displays information about when each question package was last updated.
Updated By	Identifies the user that made the last update or modification to the question package.

Event Information - Lab Results Tab

The **Lab Results** Tab will display the electronic lab results for the event. Paper-based laboratory results can also be manually entered in the **Lab results Tab** for a specific event.



The top **Lab** section of the lab result tab will show a list of all lab results received or entered for the event. If multiple lab results have been entered or received for different specimens, they will be listed as a separate lab results in the list. If the same specimen number, date and source were tested more than once, each test and result will be listed within the lab result screen.

The **details section** of the lab result tab displays details about the selected/highlighted test result.

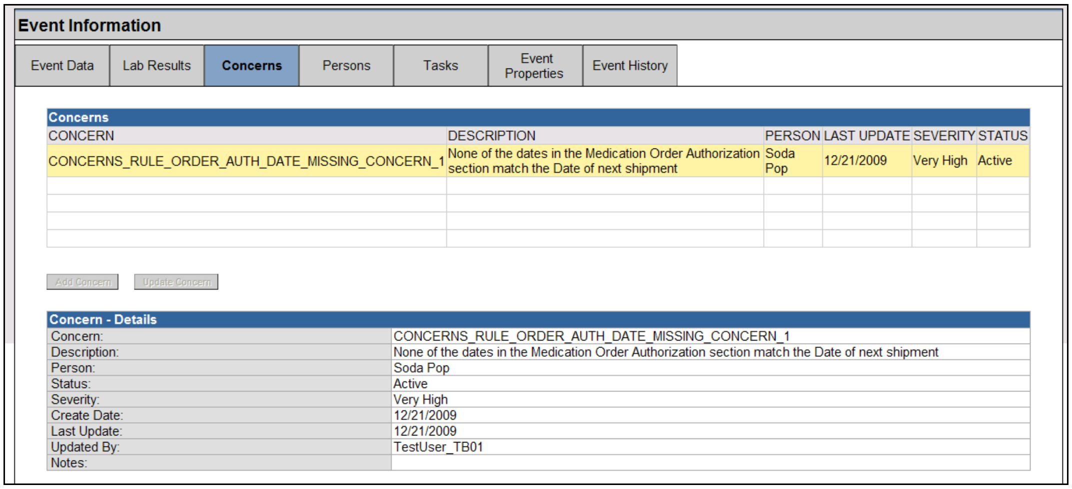
To open a test result, double-click on the test result or click on the button **Update Lab Result** with one of the test results highlighted. This will open a new screen where users can full the complete lab result received.

To add a new test result, click on the **Add Lab Result** button. The user will be brought to the lab result screen where a user can manually enter in the lab information.

More details about how to use the lab results tab can be found in Chapter 6 — View and enter lab information.

Event Information – Concerns Tab

The **Concerns** tab is used to highlight potential data entry issues that may need to be addressed. For example, if someone mistakenly inputs a date of birth that is after the date indicating onset of symptoms, the system would generate a "concern", or a notice that a data entry error may have occurred. Additionally, concerns can be entered manually by clicking the **Add Concern** button.



The headings for the rows in the Details section are described below:

Concern Unique name of the concern in the database.

Description Describes the issue in plain language.

Person The person about whom the event is based.

Status Refers to the current state of the concern – either active or resolved.

Severity Refers to how severe the concern is – Very High, High, Medium, Low, or Very Low.

Create Date The date the concern was created by a user or the system.

Last Update The date the concern was last updated.

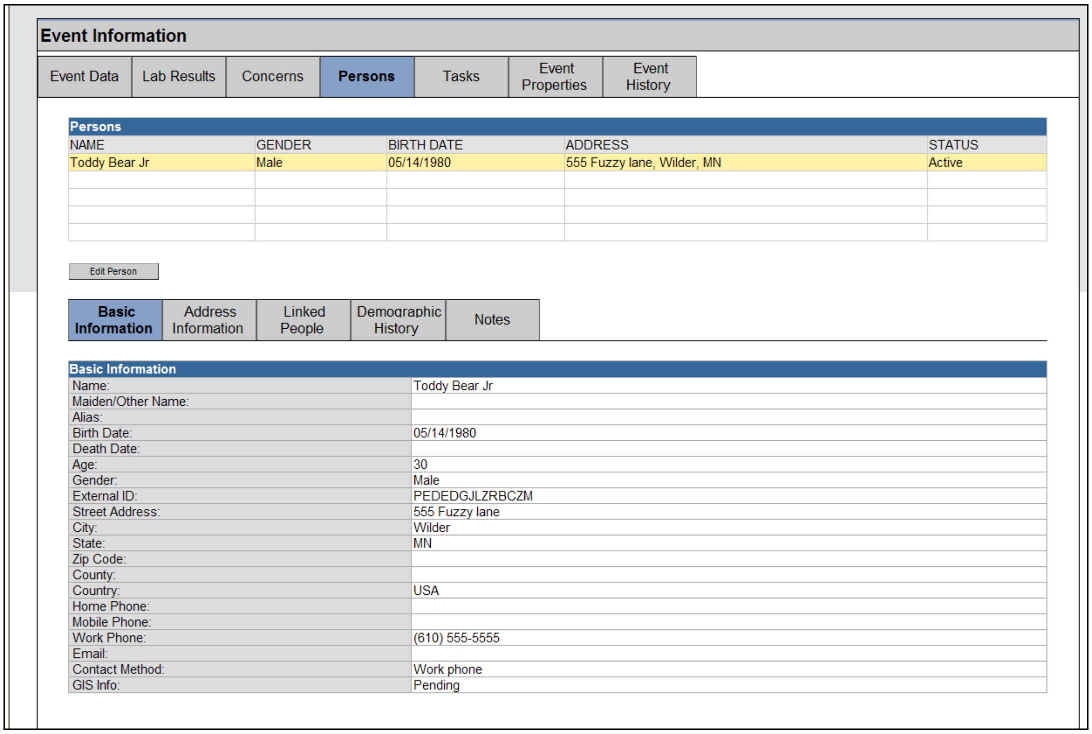
Updated By The username of the user who last updated the concern.

Notes Any notes to help describe or explain the concern.

Event Information – Persons Tab

The person tab contains information about the person involved in a specific disease event and is acentral location for current information. Remember that the system is person centric and all information collected is always linked to a person. All users of the system will have access to the people but only the disease events they have permissions to view.

The **Persons tab** is the only way to access or change the current person information stored in the system. Note that information about the person involved in the case may change over the course of the event and those changes can be made from the Demograpgic Question Package. The **Persons tab** is used to update address or name information as well as to view other historical demographic information. Under this tab, there are additional tabs to provide further information on the person.

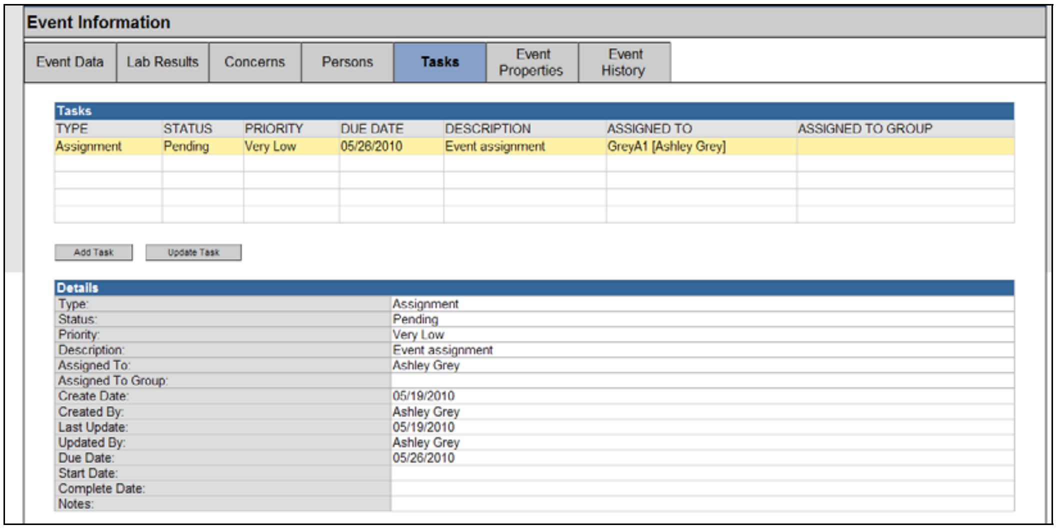


Basic Information	This tab offers a look at the current demographic information stored on the person.
Address Information	This tab will show the current and historical address information on the person.
Linked People	This tab will show all the linked people and allow additional links to be entered.
Demographic History	This tab will show the current and historical person demographic information.
Notes	The tab will show any person notes entered.

The **Edit Person** button can be used to modify the person information displayed. For more information on how to use the Persons tab, see Chapter 5 — entering event and person information.

Event Information – Tasks Tab

The MEDSS system has the capability to create tasks associated with different disease events. Examples of tasks are reminders to call a person back or reminders to go back in and update some information at a later time. Tasks can also be used to assign the whole event over to another user or group. The **Tasks tab** provides information about the tasks associated with the open event.



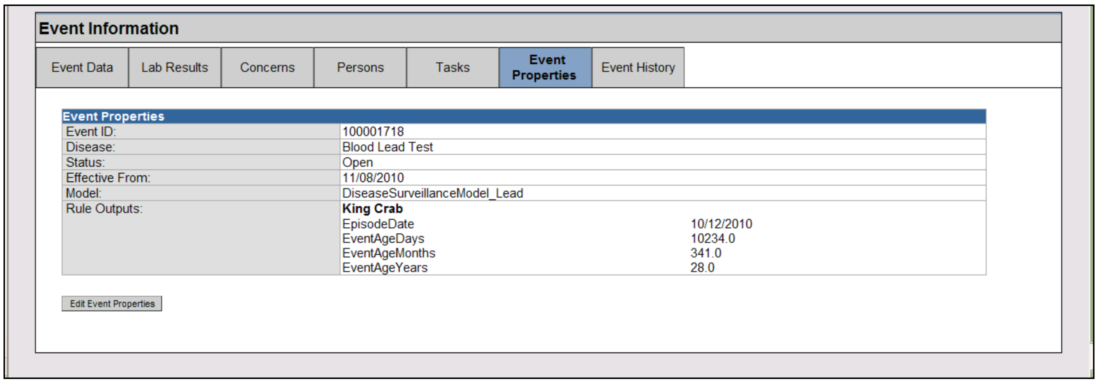
All tasks associated with the open event will display in the table, and when highlighted more information is displayed in the Details section underneath. The headings of the rows are described in detail beneath the image. (More information on tasks is described in Chapter 8 — workflow queues and tasks).

Type	The type of task.
Status	The status of the task — pending, in progress, or completed.
Priority	The priority of the task as set by the user who created the task.
Description	The short description of the task as written by the creator of the task or automatically given by the system.
Assigned to	Displays the name of the user to which the task is assigned.
Assigned to Group	Displays the name of the group to which the task is assigned.
Create Date	The date the task was created.
Created By	Displays which user created the task.
Last Update	The date the task was last updated.
Updated By	The user who last updated the task.
Due Date	The date specified by the user who created the task as the date by which the task should be complete.
Start Date	The date the task was started.
Complete Date	The date the task was completed.

Notes The notes associated with the task.

Event Information – Event Properties Tab

The Event Properties tab will display an overview of the basic information on the event such as event ID, disease, and status. From this tab, users can edit event properties such as status or disease. Not all users will have access to the Event Properties tab.

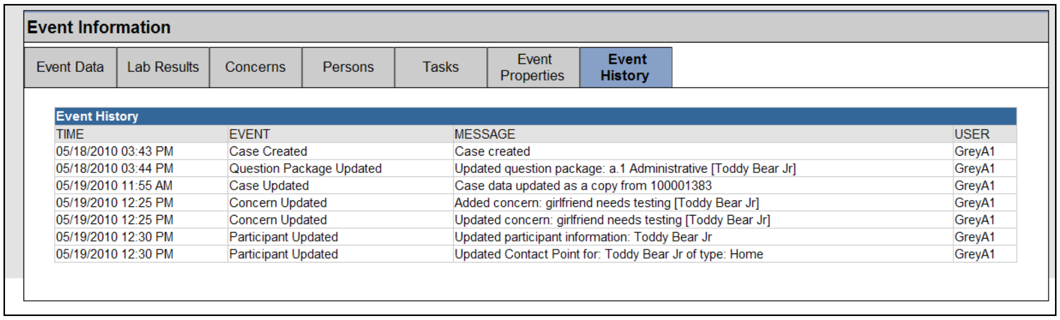


Information on the different row headings are described below:

Event ID	The unique identification ID for the event.
Disease	The disease of the event.
Status	The investigation status of the event.
Effective From	The date MDH considered this event a case. This date is not used as much as the episode date.
Model	This is the question model used for this disease event.
Rule Output	This shows the name, episode date and age of the person.

Event Information - Event History Tab

Sometimes it can be important to track changes to the data during the lifecycle of the event. This can be done using the **Event History** tab. In this section, users can view information about who has entered data in what question package as well as updates to other information such as event assignments, person information, concerns, and lab results. The event history tab only appears for certain roles; many people may not see this tab.



The columns are described below:

Time	The date and time of the occurrence of the event.
Event	The type of event that occurred.
Message	A more detailed description of the event.
User	The username of MEDSS user.

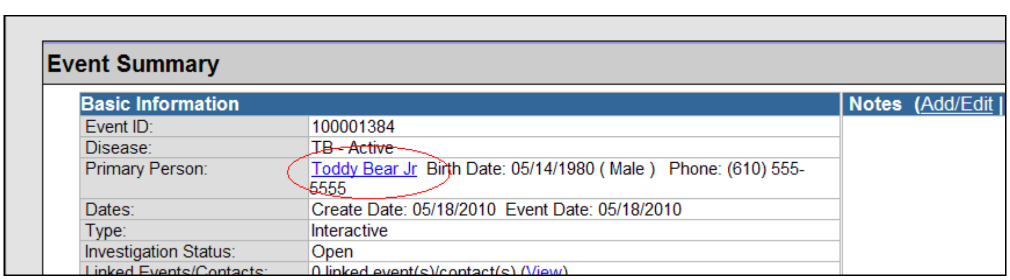
	NOTE All activity on an event, including edits to question packages and tasks created, can be tracked under the Event History Tab. All user activity within MEDSS can be tracked using audit reports which include activity on any events in the system for an individual user.

Person Summary Screen

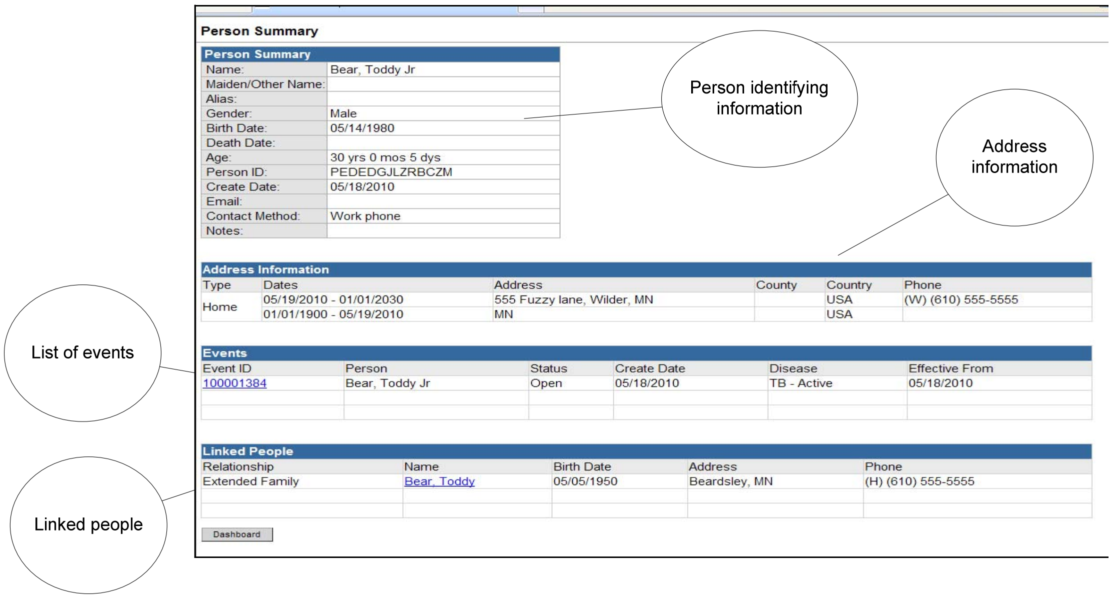
The **Person Summary** displays to the user other events which have been associated with the same person, current demographic information and linked people. This alleviates the potential need to link events of one person to other events for the same person. For example, it might be helpful to know if a person with Chlamydia has been diagnosed with any other sexually transmitted infections. However, the user will only be able to see disease events that user has access to.

To access the Person Summary screen:

4. Click the person's **name** in the **Event Summary** section of the MEDSS dashboard.



5. This provides a screen which displays the **Person Summary** information.



The top section of this screen displays the **person's identifying** information, such as name, birth date and gender. The next section shows, in chronological order, the address history. The third section lists the **other events** for the person and the final section shows the **Linked People** or household information.

	NOTE Only other events the user has access to will show up in the list of events. This usually means other events of diseases the user has access to within the jurisdiction.

6. Click the links under **Event ID** in the **Events** table to open the other events for the person (to get back to the original event, repeat the procedure, opening the person summary and click on the link to the original event).
7. To close and return to the Dashboard click on the **Dashboard** button at the bottom of the summary screen.

	IMPORTANT Don't use the back button in the browser to get back to the dashboard, instead use the Dashboard button at the bottom of the person summary screen.

CHAPTER 3: SEARCHING FOR EXISTING EVENTS

Before entering in a new event, it is important to ALWAYS search for that event first because many groups at MDH and around the state will be using MEDSS. This event may have already been entered electronically or by another MEDSS user. This will help reduce duplications in the system, which can clog the system.

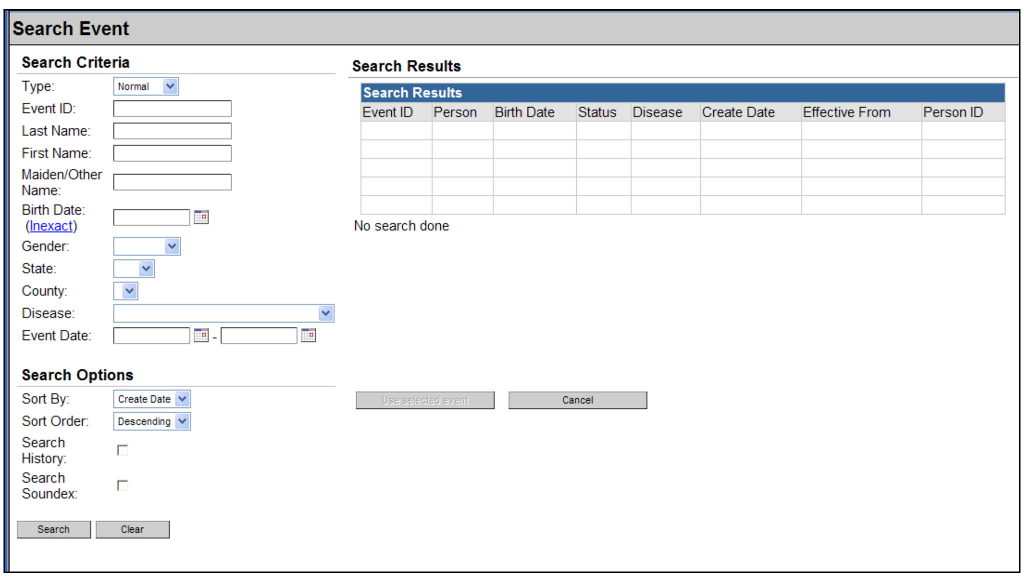
Searching is also useful when finding events already entered in the system for further modification.

Performing an Event Search

Remember that the disease events in MEDSS are an event for a person at a specified point in time. The MEDSS system keeps information organized around a person and one person can have multiple events. This section describes how to search for **disease events**. The only way to search for persons is when a new event is created as described in Chapter 4 — Creating Events.

To search for an existing event, follow the steps below:

1. Click the **Search Event**  icon in the MEDSS toolbar and the following screen will appear.



MEDSS provides multiple search criteria to find events. The user can use one or many of the search criteria to find a specific events. However, the more search criteria provided; the fewer results will display. Therefore, it is sometimes often better to put in less information (e.g. just a first name or a birth date) in case the previous data entry does not exactly match the information you currently have. For example, if you are looking for Maria Ramirez Gonzalez, and you enter Gonzalez as the last name, the original user might have input Ramirez Gonzalez as the last name, and your search would not bring up the desired case. Thus, the fewer criteria you put in, the more search results will result. In most cases, it is therefore advisable to enter a small amount of criteria first and then add more criteria to narrow the search.

TIP

MEDSS support wildcards * when doing searches. The wildcard indicates that the system should look for anything instead of the wildcard character.

- *mit in the last name field will look for anyone with a last name ending with mit (finding Schmit but not Smith nor Schmitt)
- sch* in the last name field will look for anyone with a last name starting with sch (finding Schmit, Schmitt but not Smith).
- *mit* will look for anyone with the string mit in the name, finding all Schmit, Schmitt and Smith names.

MEDSS can also search for names with similar sounds (finding both Schmit and Schmitt) and including the name history when looking for matches. There are checkboxes on the search screen to indicate that similar sounding names and history should be included in the search.

Below are the definitions of the search event criteria:

Type Allows the user to specify if the event being searched is a normal event or if it is an outbreak event.

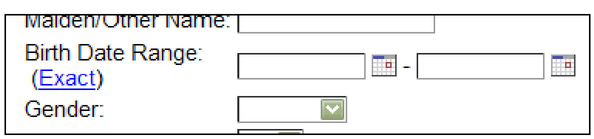
Event ID Allows the user to search for a specific event if the Event ID is known.

First Name Any First Name for whom the user wishes to search.

Last name Any Last Name for whom the user wishes to search.

Maiden/Other Name Any other name including a maiden name for whom the user wishes to search. Only maiden/other names entered specifically in the maiden name field will be found through this search. Therefore, it may be helpful to also search for a patient's previous last name(s) in the last name field.

Birth Date Any birth date using the mm/dd/yyyy search format. It's also possible to search for an inexact birth date which means searching a range of possible birth dates by clicking on the link inexact dates



Gender Allows the user to search by gender.

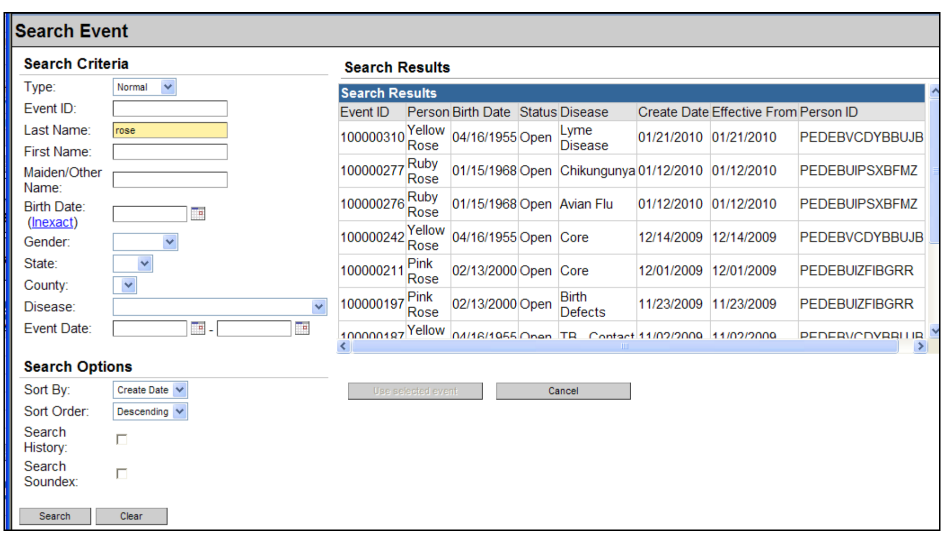
State Allows the user to specify the state of residence associated with the person.

County Allows the user to specify the county of residence associated with the person.

Disease	Allows the users to search for events for a specific disease. All diseases are listed in this dropdown, however if the user only has permissions to see specific diseases, and selects a disease for which the user does not have permissions, no results will be presented due to the role.
Event Date	Allows the user to search for an event by when the event was created in the system by using a date range format.
Sort By	Provides two dropdown menus for the user to choose how the search results are presented. The first dropdown menu specifies which field to sort results by and the other dropdown specifies the order in which the results will be presented – ascending (alphabetical or numeric) or descending (reverse alphabetical or numeric).
Search History	When checked, historical demographic/address information is compared against search criteria. This should be used if your person may have switched last names since being added to the system.
Search Soundex	Checking this will search for names that sound similar to the name the user is searching for. This will not work with wildcards and only if first and/or last name is entered.

2. Enter parameter information into one or more of the fields. The minimum criteria are at least two letters of the last or first name or choosing a disease.

3. Set the **Sort** by criteria in the way you'd like the search results to appear. Search History and Search Soundex may be helpful tools to find the event you are searching for; however, they may yield more results.
4. Click **Search**. (Clicking the **Clear** button will delete any search parameters that have been entered.)
5. Search results will display in the table to the right of the screen, as shown.

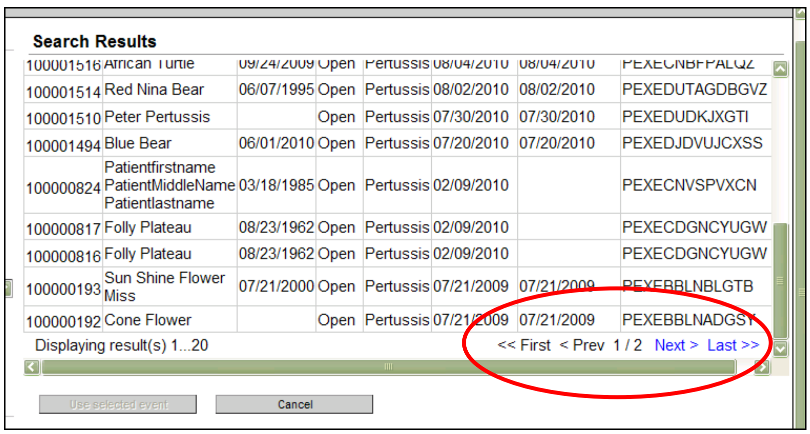


Event searching is tied to security. Users will only see the events that have access to. For example, users with access to only vaccine preventable diseases will only find disease events for vaccine preventable diseases in their jurisdiction when searching, no other disease events, even if these exist in the system.

6. Upon locating the event in question, select the corresponding line and click **Use Selected Case** or simply double-click on the record.
7. This action automatically closes the search window and displays the selected event in the MEDSS dashboard.

Search Results Table

When viewing the search results, the table will hold up to 20 events. To move to the next page of results, scroll to the bottom right corner of the results. This link may not always be visible without scrolling. To see the total number of results, users should go to the last page of results for the total count.



Searching Tips

When trying to find events, the following examples may help users find the right event.

Example 1: A user is trying to find the name Maria Ramirez Gonzalez with birthday 10/15/1975 and located in Hennepin County. Instead of entering all information in the search fields, a user could enter just the name. However, not knowing if another user entered "Ramirez Gonzalez" as the full last name or "Ramirez" as the middle name, the best strategy is to enter *Gonzalez and the system will search and find both Gonzalez and Ramirez Gonzalez.

Example 2: A user is trying to find the name Abu Mohammed with birthday 01/01/1970. Knowing how popular this birth date and name is among foreign born persons, it is suggested to enter both name and birth date into the fields. In addition, to help the search, checking Search Soundex will help if the spelling of the name is slightly different.

Example 3: A user has the person's name but is unsure it is the most recent name. The user also knows the disease, county and birth date. For this situation, it is suggested to search for name disease and birth date since it is possible the county name was not entered and also checking Search History in case the name has changed.

Recent Cases

A simple alternative to searching for a recently viewed event is to use the **Recent Cases** icon in MEDSS toolbar. This option is a quick method of locating the twenty most recent events on which the user has opened. To open an event using the Recent Cases link, follow the steps below.

1. Click the **Recent Cases**  icon in the MEDSS toolbar.
2. Look at the events listed in the table for the event to be edited.

Recent Cases

Recent Cases

Event ID	Person	Status	Disease	Effective From	Access Time
100000101	Pop, Soda	Open	TB - Active	08/25/2009	08/25/2009 03:32 PM
100000110	Pop, Fountain	Open	TB - Active	08/25/2009	08/25/2009 03:24 PM
100000065	Yellow, Mellow	Open	TB - Active	07/23/2009	08/24/2009 02:00 PM
100000100	Yellow, Mellow	Open	TB - Active	08/24/2009	08/24/2009 01:59 PM
100000074	Outbreak101	Open	TB - Active		08/24/2009 01:51 PM
100000096	Candy, Chocolate	Open	Cholera	08/11/2009	08/11/2009 03:38 PM
100000079	Wedding	Open	Campylobacteriosis		08/11/2009 02:54 PM
100000081	Fish, Bubbly	Open	Campylobacteriosis	07/30/2009	08/11/2009 02:53 PM
100000077	Yellow, Mellow	Open	Cryptosporidiosis	07/30/2009	08/11/2009 02:15 PM
100000082	Church Potluck	Open	Salmonellosis		08/03/2009 04:31 PM
100000019	Fish, Balloon	Open	Campylobacteriosis	07/06/2009	08/03/2009 08:58 AM
100000080	Fish, Augratin	Open	Campylobacteriosis	07/30/2009	08/03/2009 08:57 AM
100000078	Yellow, Mellow	Open	Hepatitis A	07/30/2009	07/30/2009 03:28 PM
100000054	Beer, Root	Open	TB - Active	07/21/2009	07/30/2009 10:13 AM
100000009	Fish, Lovely	Open	Lyme Disease	07/06/2009	07/30/2009 10:10 AM
100000064	Records, Dummy	Open	TB - Active	07/23/2009	07/28/2009 03:47 PM
100000011	Fish, Wet	Open	Cryptosporidiosis	07/06/2009	07/28/2009 03:44 PM
100000021	Fish, Puffer	Open	Cryptosporidiosis	07/06/2009	07/28/2009 03:43 PM
100000073	Run for the Hills	Open	Cryptosporidiosis		07/28/2009 03:43 PM
100000052	Soda, Grape	Open	TB - Active	07/21/2009	07/28/2009 11:42 AM

Dashboard Help

Event ID The Event ID of the event. Click this number to view that event in MEDSS Dashboard.

Person Person's full name.

Status The investigation status of the event (open or closed).

Disease The disease associated with the person.

Access Time The time the event was last accessed by the user.

3. Click the **Event ID** of the event to be updated.

Recent Events

Recent Events

Event ID	Person	Status	Disease	Effective From	Access Time
100001570	ABC, Monster	Open	ABC	09/07/2010	11/08/2010 10:49 AM
100001440	Robin, Sandra	Open	Vectorborne	06/25/2010	11/05/2010 11:15 AM
100001454	Beetle, Box Elder	Open	VPD	07/01/2010	11/05/2010 11:09 AM
100001659	Balloon, Red	Open	Lyme Disease	10/26/2010	11/04/2010 03:47 PM

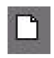
4. This action will close the Recent Cases window and will open the event in MEDSS Dashboard.

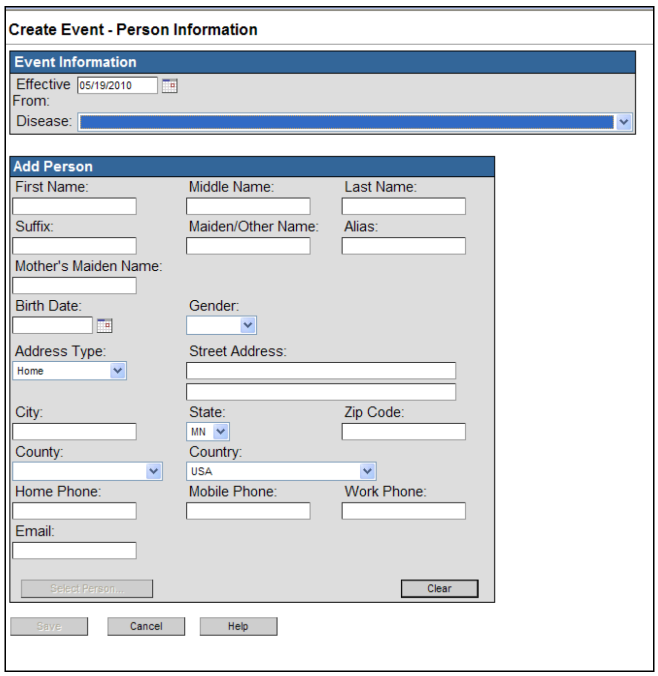
CHAPTER 4: CREATING PERSON AND EVENT

MEDSS offers the option to manually add new disease events to the system. However, as explained in the last chapter, uses should search for events before manually created them in order to avoid duplications. This is due to the multiple ways events are added to the system (electronically, uploaded or created by other users). This chapter will explain how to create a new disease event in addition to searching for people and creating new people in the system.

Create event

To create an event in MEDSS, complete the following steps:

1. Click the **Create Event** icon  in the MEDSS Toolbar and the following screen will appear.

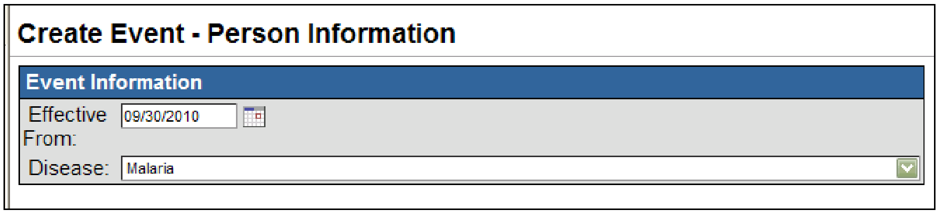


The Create Event page is divided into two separate sections: **Event Information** and **Add Person**.

Create event - Event information

The Event Information section lets the user choose the effective from date and the disease. The **Effective from** date is when the event actually took place. It will default as the current date, but a user has the option to choose a date in the past.

The **Disease** dropdown allows the user to select a specific disease from the list of diseases available. (The list of diseases in the dropdown will depend on what diseases the user has access to create events for). The appropriate disease is accessed by left clicking the down arrow, scrolling to the correct disease and clicking on it.



2. Enter a date in the **Effective From** field
3. Select a disease for the event in the **Disease** drop-down.

TIP

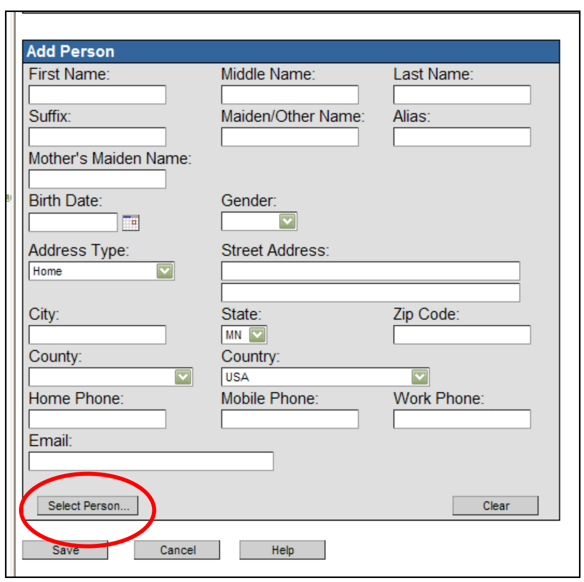
To navigate the disease list more quickly, type the first letter of the disease being entered. This will quickly take the user to the diseases that begin with that letter.

Create event – Search for existing person

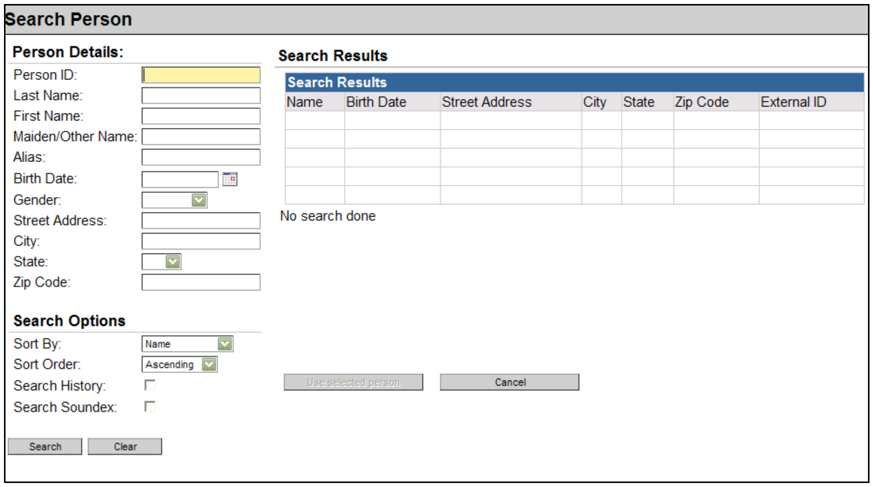
Before entering new person information, it is important to search to see if the person already exists in the system. Remember a person may be tied to multiple disease events and all users have access to all the people in the system.

To search the database for the person, utilize the **Select Person** button that will become active after choosing a disease. This allows the user to enter information into a search screen to locate a person who may already be in the MEDSS system. This search is not dependent on the disease selection.

4. Before entering any information in the Add person section, click the **Select Person** button at the lower left of the **Add Person** screen.



5. The Search Person window will appear.



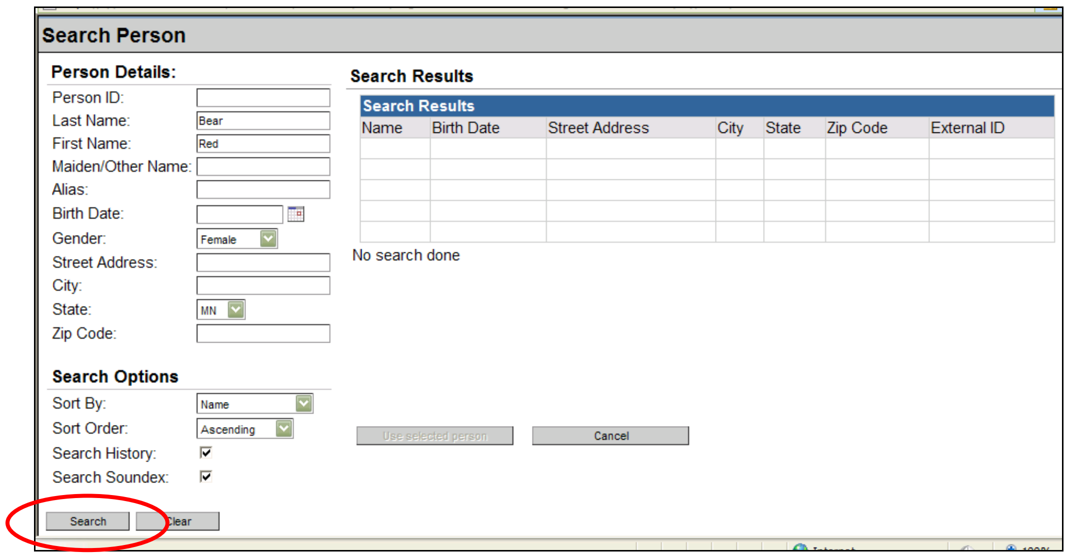
6. Search for the <u>person</u> by using any of the fields listed on the left. You must enter at least the minimum criteria of at least two letters from the first or last name, or enter search criteria in at least two of the other fields (not names).

Below are the definitions of the search person criteria

Person ID	The unique person identification/record number assigned by MEDSS.
Last Name and First Name	Search by last name or first name or a combination of both. An * can be used as a wildcard finder. By putting the * before the letters, the engine will search for names with that letter combination at the end. By putting the * after the letters, the engine will search for names with that letter combination at the beginning. By putting the * at either end of the letters, the engine will search for names with that letter combination in the middle of the name.
Birthdate	Search by the exact birthdate of the person.
Gender	Search by the person's gender: female, male, unknown or other.
Street Address, City, State, Zip code	Search for a specific person by the street address, city, state or zip code where that person may live
Search History	When checked, historical demographic/address information is compared against search criteria. This can be used if your person may have switched last names since being added to the system or address information.
Search Soundex	Checking this will search for names that sound similar to the name the user is searching for. This will not work with wildcards and only if first and/or last name is entered.

7. Click the **Search** button when desired search criteria have been entered. Clicking on the **Clear** button will empty all entered search criteria.

	TIP When searching for people, try using less search criteria to broaden your search and clicking on Search Soundex and Search History for a more thorough search results.



8. If the person is located, select the person's name from the list on the right side and click the **Use Selected Person** button. This will populate the fields in the Add Person section.
9. Users can review the information populated and when done, click **Save**. Users will be brought to the dashboard for the new event.

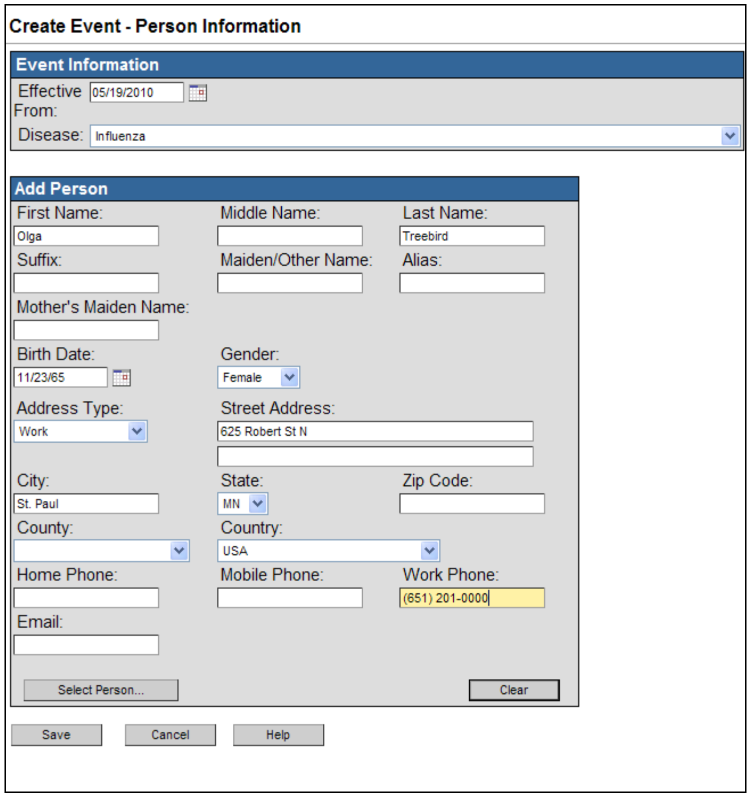
If the person is not in the system, follow the steps in the next section for how to create a new person in the system.

	TIP When searching for people, if you are uncertain if the search result given is the same person you are searching for (i.e. different address, city, etc), try using the Search History option to see if the name or address you have is in the person's history. If you are still unsure, create the new person and a system administrator will determine if it is the same person or not.

Create event – Add person

If the person is not found during the person search, users will have to create a new person entry in MEDSS. After searching for the person, click on **Cancel** on the person search window, and this will bring you back to the create event window and you can enter the information manually into the Add Person section.

10. Fill in the name, birth date and gender in the appropriate fields.



11. For accurate geocoding of the address, users should format the address according to US postal formats. For example, if the address is in Brooklyn Park, MN, do not enter the city as Minneapolis. Plese review the address standards in Appendix B.
12. The city field will generate a list of cities based on what the user is typing so no spelling errors occur. By default, the state will be set to MN, so make sure to change the state field, if the city is in another state.
13. The phone and zip code fields will only allow the appropriate digits, so if the address is in a different country, make sure to change the defaulted country field so those fields will allow more digits.

While the minimum information needed for the **Add Person** section is the first name, it is better to enter as much information known about the person. Any data that needs to be changed after entry can always be updated later via the Edit Person screen.

IMPORTANT

Please be aware that in the system, Burma is not used. Please choose Myanmar for any entries from that country.

14. Once finished, click **Save** and you will be brought to the dashboard for the newly created event (displayed in the following image). Additionally, the question packages, triggered by the specific disease previously selected, are displayed in the Event Data section of MEDSS Dashboard.

IMPORTANT

It is important to **ALWAYS** do a patient search before entering a new person into the system to avoid duplicates. If the person is in the system (regardless of disease) they will appear in the **Person Search** even if you don't have access to the disease event they are in the system for. You will see them in the system but you will not be able to see what disease they have. **Avoid duplicates in the MEDSS system.**

MEDSS stores a **Master Patient Index** in the database. This means that *anytime an event is entered into the system, whether or not the event was reported and even if the event is closed immediately, the person associated with the event exists as an entry in the database*. Because this person now exists in the database, it is important to remember to reuse the person information rather than creating a new person entry in the system. Keeping only one entry per person helps to keep data and reporting information as up-to-date and accurate as possible.

For example: Fountain Pop has been entered in MEDSS as a social relationship of someone else. She does not have a disease and therefore the event is closed. Two years later Fountain Pop presents with Lyme disease. To create the new event in the system for Fountain Pop, remember to utilize the **Select Person** button on the create event screen. If Fountain's personal information has changed since she was originally entered in the database two years earlier, please review the steps explained earlier on how to modify person information.

IMPORTANT

If the person for certain is found during the person search but has a different address in the system (for instance it's known that the person has moved recently from the stored address), it's better to use the existing person and then change the address once the event is created.

Potential Match Screen

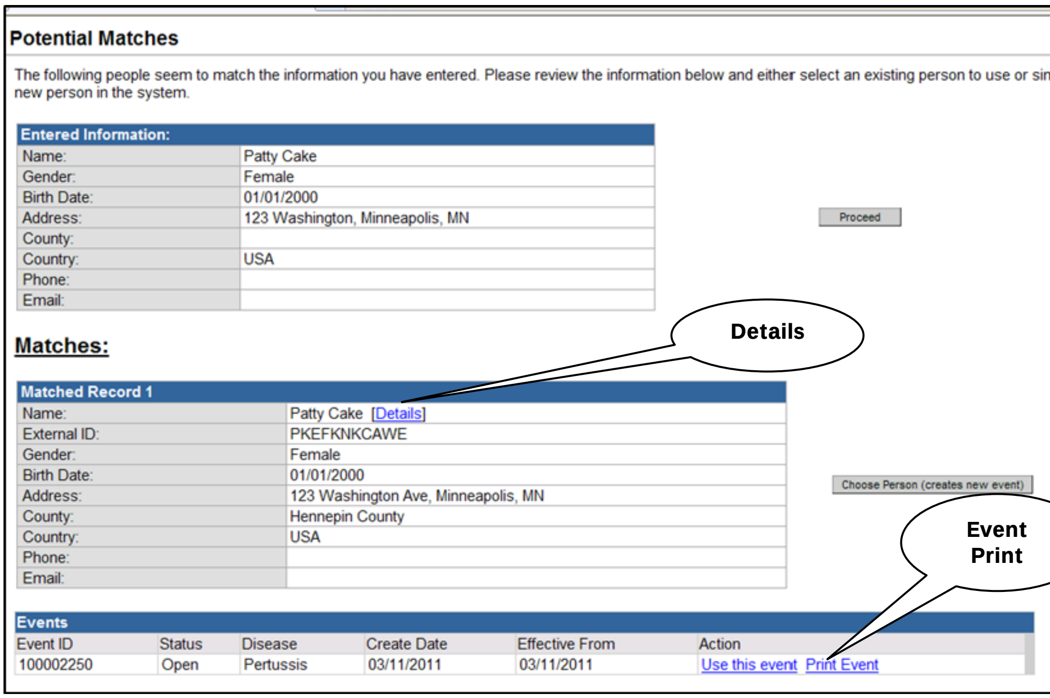
Adding Duplicates

One way MEDSS will find duplicates in the system is by running a background check when a new event is being created. If MEDSS thinks a duplicate person or event is in the system, it show the Potential Match Screen before the new event can be created. This will happen if the user did not search for the event or person before creating a new entry. Before continuing, the user will need to tell the system to either use the existing event and/or person or create a new entry. Below outlines two specific scenarios for when the potential match screen will show.

Scenario 1

Imagine the following scenario: A state epidemiologist receives a phone call from a local hospital reporting a woman named Patty Cake was diagnosed with Pertussis. That state epidemiologist begins to enter the data into MEDSS by creating a new event for Patty Cake. The user does not search for the event or person first. Meanwhile, the state lab has sent a lab report for Patty Cake which automatically created a new event. At this point, two events exist for the same person with the same instance of the disease.

To prevent duplicate and potentially conflicting data, these duplicate events must be identified and merged. If MEDSS identifies a potential match, the system will notify the user of the match when they are creating the new event. The screen shown below shows both a matched person and event.



The Potential Matches screen shows that a potential person match was found. To view more information about the matching person, a user can click on **Details** and a new window will appear with the person summary. The user can then print out the person summary for a side-by-side comparison. To view more information about the matched event, a user can click on **Event Print** and a new window will appear with all the data entered for that event.

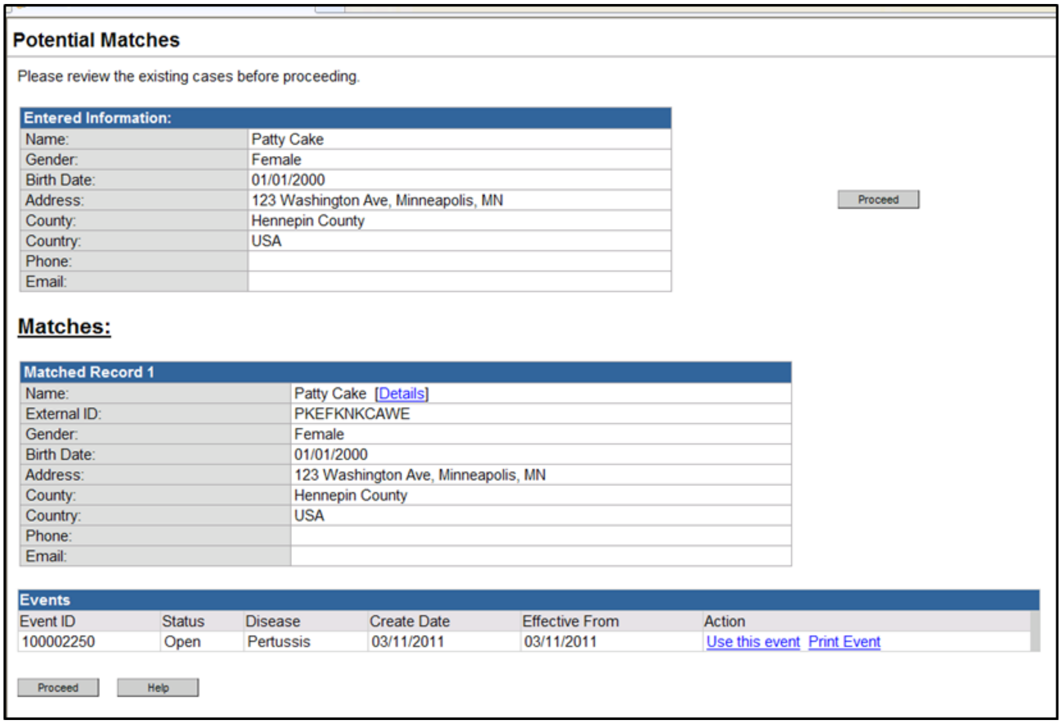
After verifying if the people are a match or not, the user has the option to:

A. **Proceed**, which will create a new person and new event.
B. **Choose Person**, which will attach the new event to the matched existing person.
C. **Use this event**, which will cancel the new person and new event creation. This will bring the user to the dashboard for that event.

After selecting an option, the user will be brought to the dashboard for the event.

Scenario 2

Imagine the following scenario: A LPH user has received word of a new Pertussis event in their jurisdiction for a man named Purple Monster. The user follows the correct steps of searching for the event but does not find one. So the user decides to create a new event. After choosing the disease, they search for the man and find him in the system already. After selecting the person, a different Potential Match screen appears:



This screen (which appears when using the Select Person button) is telling the user that a matching event has been found and is verifying the creation of a duplicate event for the same person.

The user has two options:

A. **Proceed**, which will create the new event for the selected person with a new event ID (thus creating a known duplicate event but not person).
B. **Use this event**, which will cancel the creation of the duplicate event and bring the user to the dashboard of the existing event.

This page does not offer the button to choose this person, but create a new event. The proceed button is doing that on this screen.

After selecting an option, the user will be brought to the dashboard for the event.

Note: A user may also be flagged about a potential duplicate from the dashboard after events or person information is modified. More on the deduplication process and merging events is in a separate training guide available to users who will have access to this function.

CHAPTER 5: ENTERING PERSON AND EVENT INFORMATION

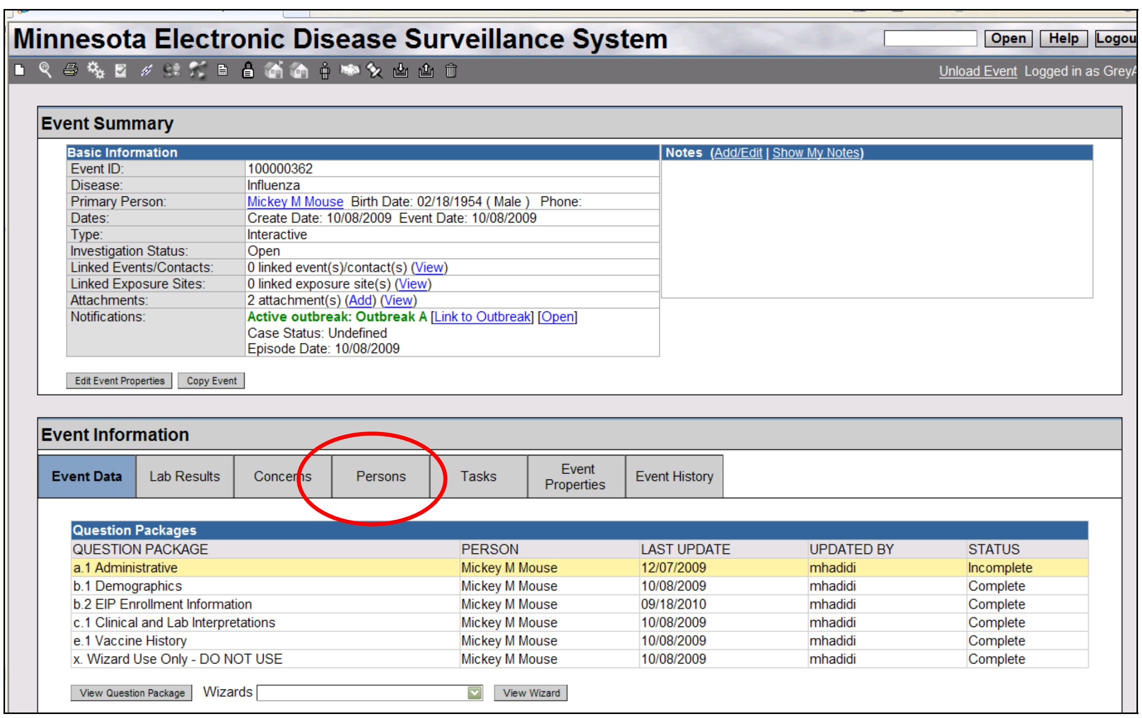
As a reminder, MEDSS is a person centric system and a single person may have several disease events ties to that person. Therefore some person information will be entered in the question packages while other information is shared among all disease groups and modified in the person tab. However, event specific data will be entered into the question packages and only be accessed by those users with permission to view that disease. The next chapter explains how to modify both person and event information.

Modifying Person Information

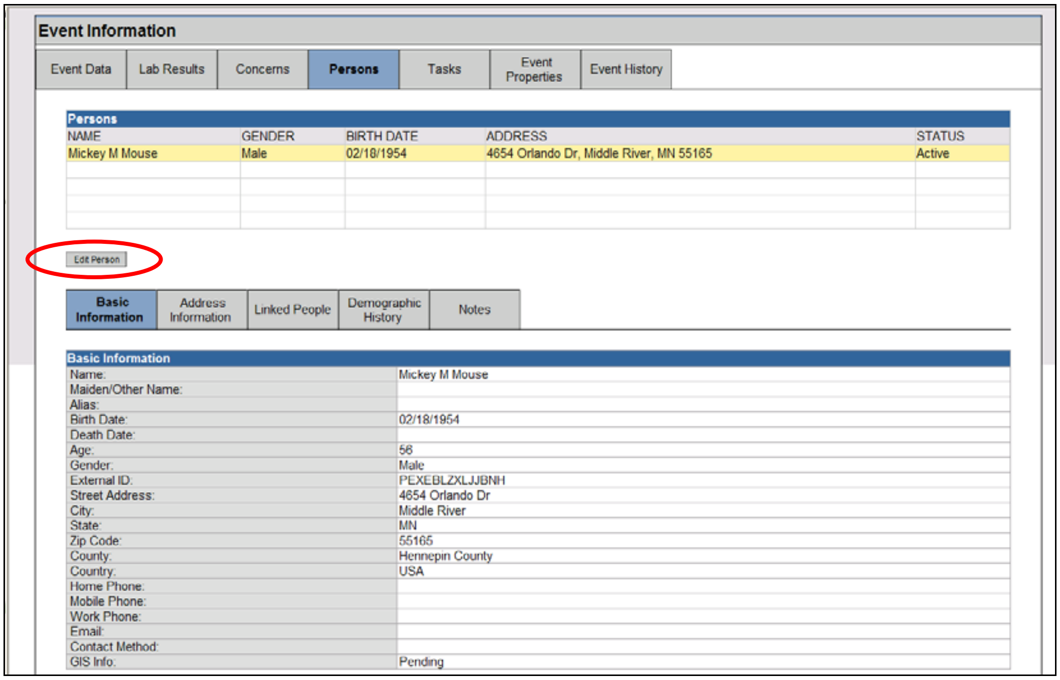
MEDSS stores a Master Patient Index in the database, which means that even after events are closed, the person associated with the event exists as an entry in the database. This is important for two reasons. First when creating new events, users need to search the system first for that person to avoid adding duplicate people to the database (this is explained more in chapter 3 — Searching). Second when updating person information, users must go to a central location shared by all disease groups.

Some person information is entered in the persons tab whereas other information will be stored in the demographic question package. The information that is entered in the persons tab applies to all events for the person. The information in the demographic question package is not necessarily the same across all events.

To modify person information, open one of the events the person has and click on the **Persons tab**.

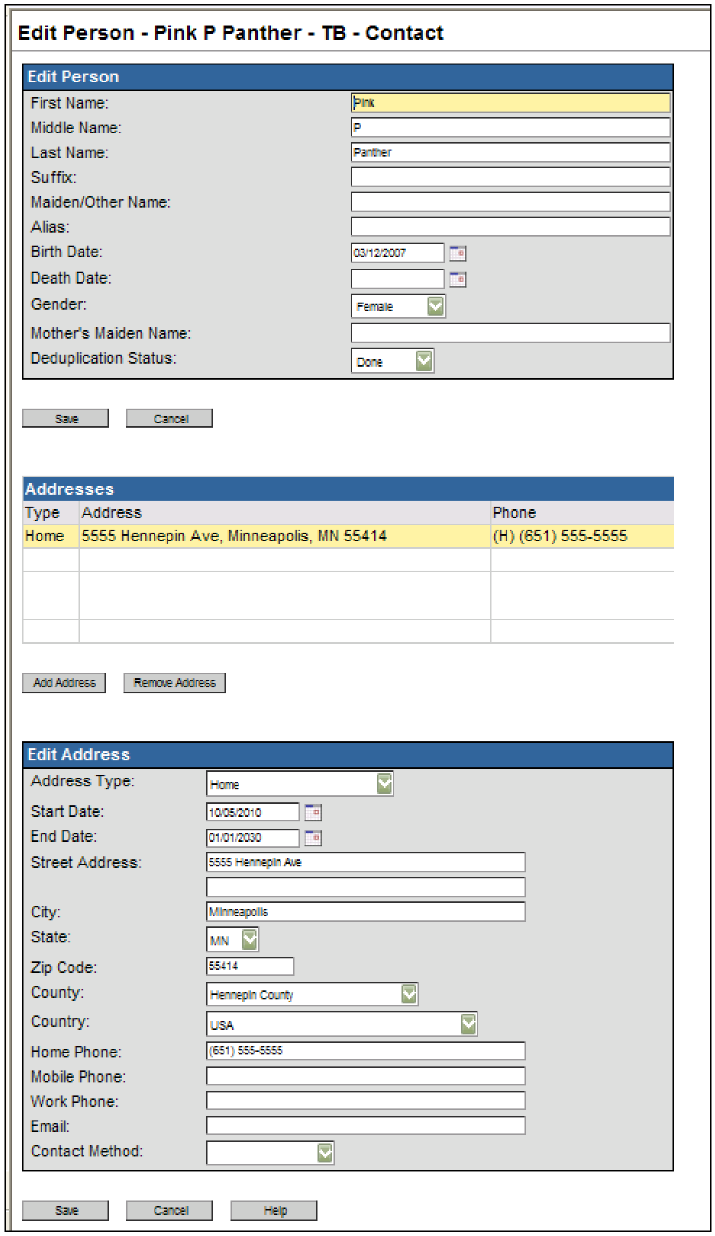


The following screen will show when the person tab is opened. The Person tab is divided into a summary table on the person, additional tabs (explained below) and a details table that shows the information located in the additional tab.



Modifying person information – names, birth and death date

From the **Person tab** click the **Edit Person** button to make changes to nearly all basic information about the person. This includes changes to date of birth, address changes, address additions, name changes, etc. This screen is the only place to update current address information or enter a death date since this information will be shared with all disease events. The Edit Person screen is shown on the next page. Please observe that the form on the top of the page includes demographic information, the middle of the screen lists the addresses, and the lower form provides further information about the addresses and the ability to edit them.

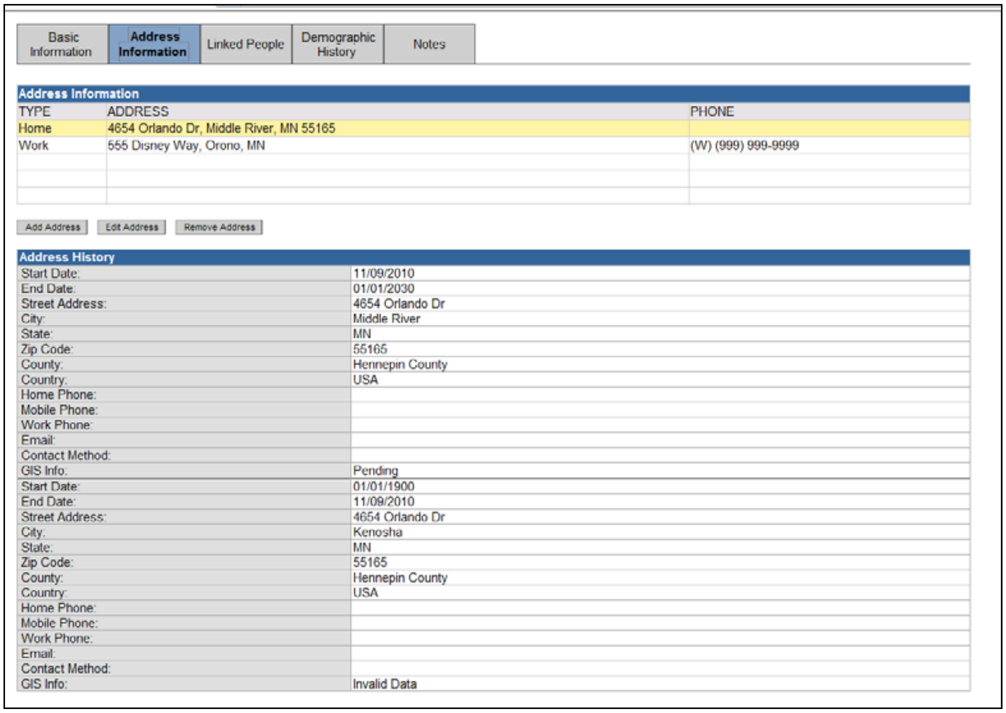


To change any of the person's identifying information such as name, suffix, aliases, birth and death date enter the correct information in the corresponding fields and click the **Save** button under the edit person section.

	IMPORTANT Changing any of the information in the Person Tab will change this information for all events the person has (created in the past or in the future). The system will keep a name and an address history to ensure that data is not lost.

Modifying Person Information – Address information

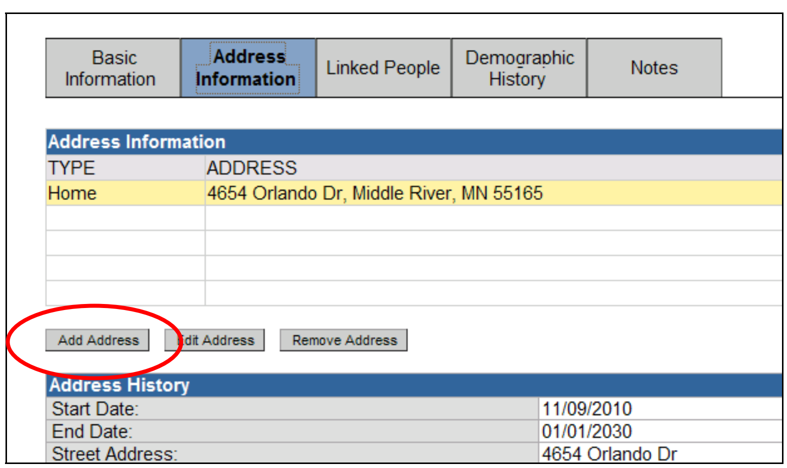
The **Address Information** tab contains the listing of the person's current and past addresses. Addresses can be home, work, vacation, etc. and can be marked appropriately. Addresses will be listed in chronological order in the address history section. The oldest addresses will be at the bottom and the newest, most up-to-date information will be on the top.



To add an address, follow the steps below:

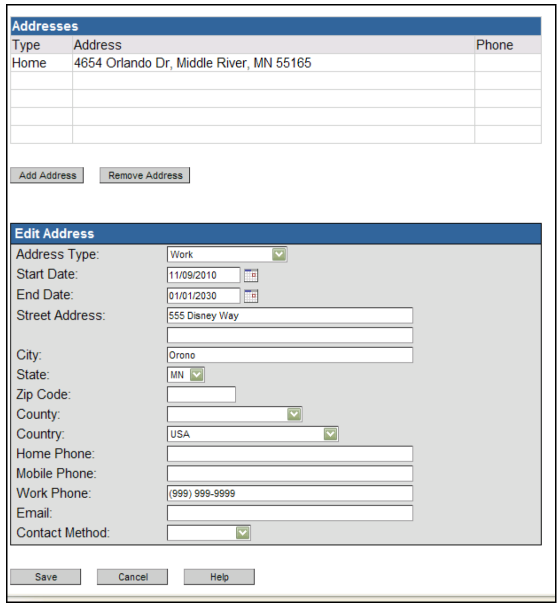
1. Click on the Address Information tab under the Person tab.

2. Click on **Add Address** button.



3. The **Edit Person** screen will appear where the user can enter an address type and enter in the address information. The user is only able to enter one of each type of address for

the person. When entering in address information, make sure to follow US Postal formatting. Plese review the address standards in Appendix B.



4. The start date will default to the current date and the end date will default to January 2030. Make sure to edit these fields to reflect the date range that the person is at this address.

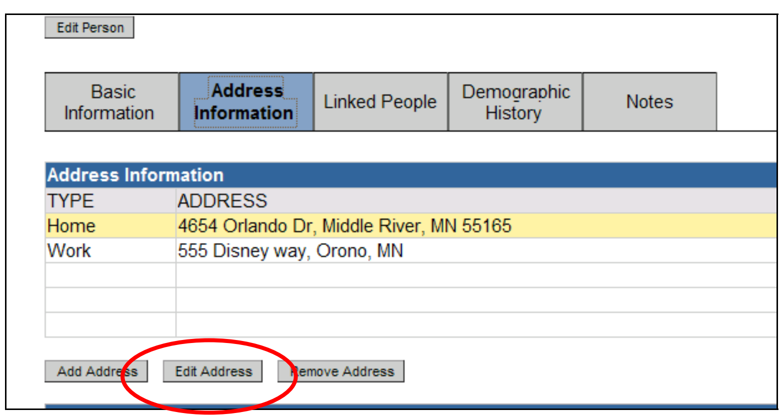
5. When finished, click **Save** and the address will be added to the person's demographic information.

Edit Address

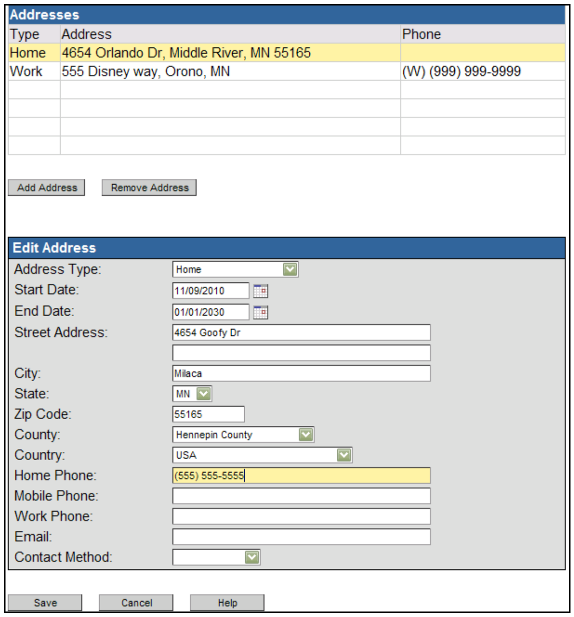
To change an address, follow the steps below:

1. Click on the Address Information tab under the Person tab.

2. Highlight the address that needs to be changed and click on **Edit Address** button.



3. The **Edit Person** screen will appear with the address loaded in the fields ready to be edited by the user.



4. The start date will default to the current date and the end date of the old address will change to the current address. The address's start and end dates help keep the address information in chronological order.
5. When finished editing the address, click **Save**. The old address will remain in the person's address history.

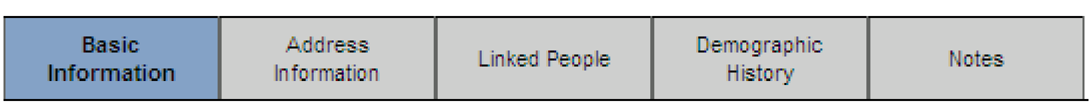
An address can be removed by clicking the **Remove Address** button under the Address Information tab. MEDSS will confirm that this address should be removed. However, remember that the address will remain in the address history for the person.

IMPORTANT

There are fields in the Demographic question package for 'address at time of reporting'. This address will be copied into the event when the disease event is created and will not change if the current address changes.

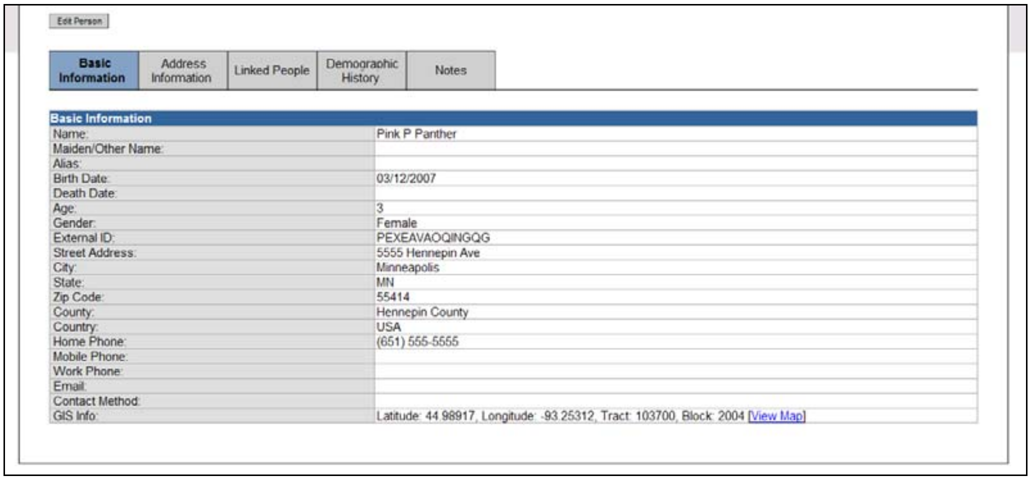
Modifying Person Information - Additional Tabs

Located in the **Person's tab** on the MEDSS dashboard are additional tabs that provide further information about the person and allow for changes and additions to be made. Information such as address history, social relationships, and if applicable, name changes can be viewed, added, or changed. All information in the persons tab will appear across all disease events for each person.



Basic Information

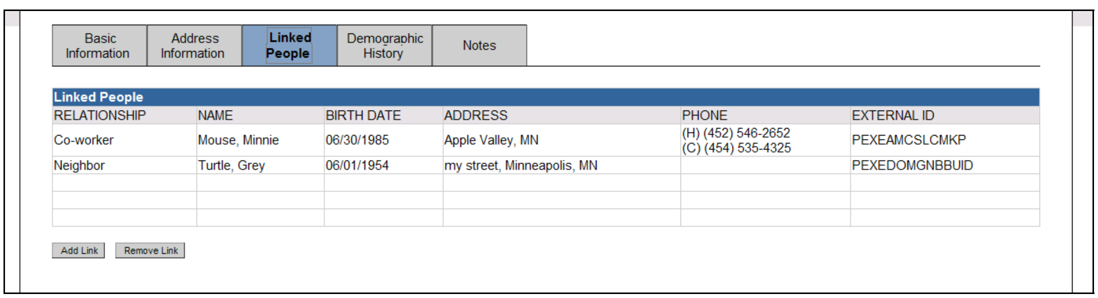
The **Basic Information** tab contains the most recently entered information about the person such as name, address, birth date, age, gender. Also, if the address information was able to be mapped, the GIS information will be available. The Basic information tab is available for viewing only.



Basic Information	
Name:	Pink P Panther
Maiden/Other Name:	
Alias:	
Birth Date:	03/12/2007
Death Date:	
Age:	3
Gender:	Female
External ID:	PEXEAVAOQINGQG
Street Address:	5555 Hennepin Ave
City:	Minneapolis
State:	MN
Zip Code:	55414
County:	Hennepin County
Country:	USA
Home Phone:	(651) 555-5555
Mobile Phone:	
Work Phone:	
Email:	
Contact Method:	
GIS Info:	Latitude: 44.98917, Longitude: -93.25312, Tract: 103700, Block: 2004 [View Map]

Linked People

The **Linked People** tab provides information about the person's contacts or social network information. These links are not necessarily associated with a specific event but are instead links to the person itself and such as household information or social networks. For example, if the patient is a 6 year old with Lyme disease, the disease is not communicable, but the patient is too young to be considered legally able to make decisions regarding her treatment. Therefore, it may be beneficial to create the social link in the **Persons** tab to the child's legal guardian.



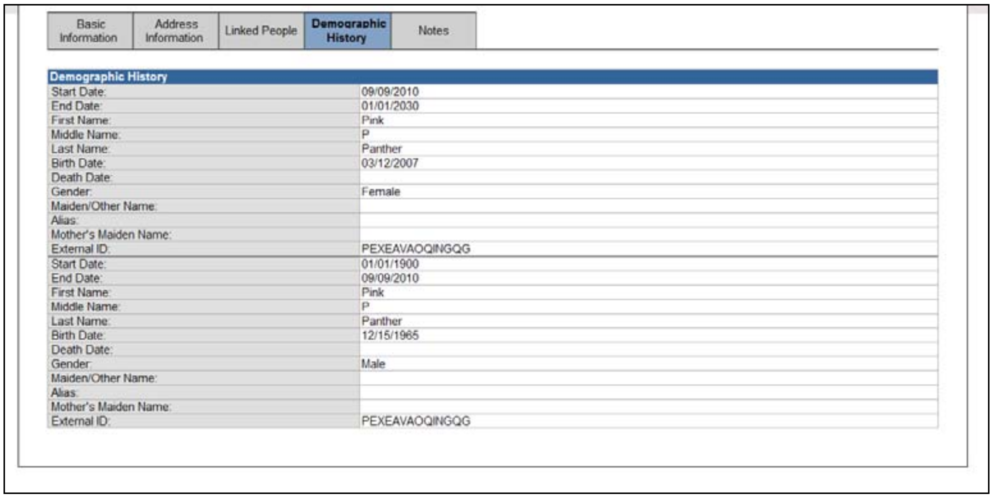
RELATIONSHIP	NAME	BIRTH DATE	ADDRESS	PHONE	EXTERNAL ID
Co-worker	Mouse, Minnie	06/30/1985	Apple Valley, MN	(H) (452) 546-2652 (C) (454) 535-4325	PEXEAMCSLCMKP
Neighbor	Turtle, Grey	06/01/1954	my street, Minneapolis, MN		PEXEDOMGNBBUID

Linked person information is bi-directional (if a user links a parent and a child, the link will be created for both the parent and the child) and stays with the person's data regardless of which disease or how many diseases they have in MEDSS unless the link is removed.

For more information on how to create and remove relationship links, see Chapter 10 — Linking Persons and Events.

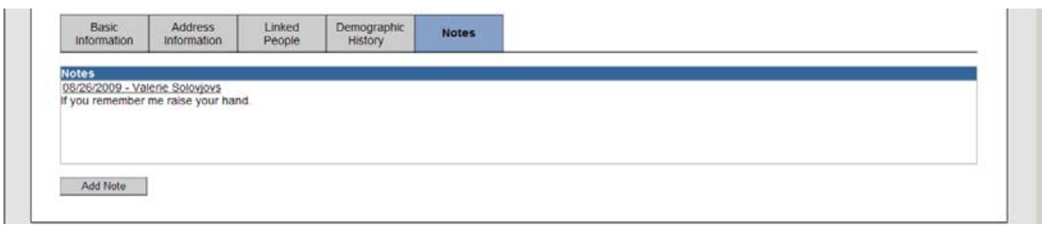
Demographic History

The **Demographic History** tab is where person information can be tracked. If any person information is changed (names, dates, gender, etc.), the demographic history tab will list the information in chronological order with the older information at the bottom of the screen. This does not include address history, which is displayed under the **Address Information** tab.



Person notes

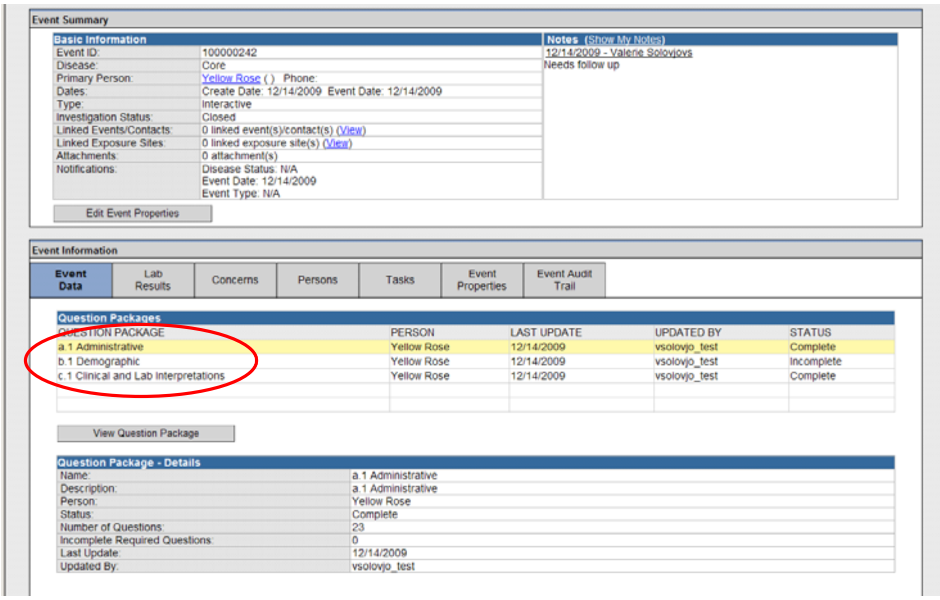
The **Notes** section is used to keep track of notes that are related to the person, not to the event. These would be notes such as the fact that a person is blind, paraplegic, or has Down's Syndrome; these things are unlikely to change over time and are not necessarily specific to a person's event. Just as with the case notes, the date and user name are associated with each person note entered.



	IMPORTANT It is important to recognize the difference between **Event Notes** which are entered in the **Event Summary** section of the dashboard and the **Person Notes** which are entered in the Persons tab. The event notes won't show in any other past or future event(s) this person may have, but the person notes persist with the person and can be accessed by anyone with access to the person information.

Question Packages (QP's)

A **Question Package** (QP) is a series of questions that carry the same theme. For example the Demographic question package contains questions about a patient's residence and race/ethnicity while the Clinical and Lab Interpretations question package will have questions about the providers the patient has seen.



Available question packages depend on the disease selected for the event; however, all diseases will have three core question packages as described below. For more details on the specific core fields and definitions, see the Core Fields Data Dictionary at the end of this guide. Different question packages will be available for different disease events. In addition to having different question packages, the information available within a question package will vary depending on the disease selected. **Note:** more information on disease's specific QPs will be in a separate document.

The three core question packages are:

Administrative	Includes information about the event such as dates and statuses. Examples includes date sent to CDC, episode date, case status (confirmed, probable), investigation statuses, assigned jurisdiction, information about the reporting source(s) and contact information of the reporting source.
Demographics	Used to store person demographic information, race and ethnicity, some information (such as the birth date and current address) are displayed from the patient tab into the demographics QP. Address at time of report, as well as county the case should be counted in is stored on the demographics QP.
Clinical and Lab Interpretations	Used to store clinical findings and information about lab results. This includes any information about the diagnosis, symptoms and other findings, including start and end dates.

NOTE

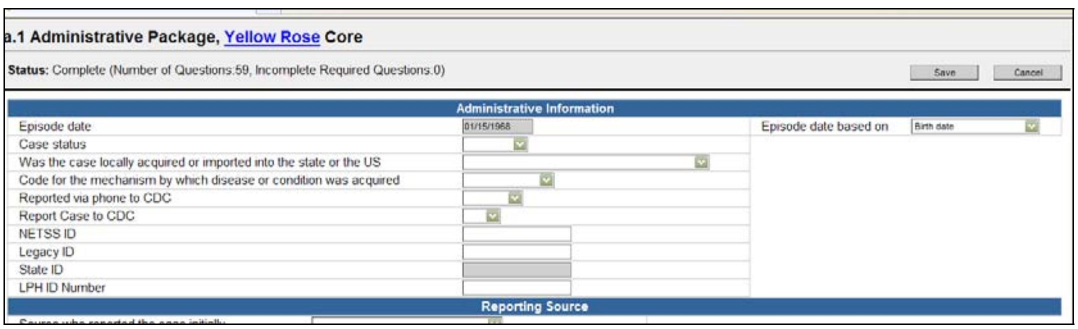
The question packages are disease specific, which means that the different diseases will have different question packages and the fields will be different within each question package.

Modify Question Packages

It is often necessary to add, change, or delete information entered for an existing event. Much of the data entry and edits will be done within the question packages.

To modify existing event information, follow the steps below:

1. Using one of the already-mentioned search techniques (see chapter 3 — Searching for Existing Events), locate the event to be updated or enter a completely new event (see chapter 4 — Creating Person and Events).
2. On the dashboard, the Question Packages are located in the Event Data tab.
3. Click the Event Data tab and open the **Question Package** that needs to be updated. To open a QP, double click the name or click on **View Question Package**.



4. Make the changes necessary within the question package.
5. Click **Save** to keep the changes. Save and Cancel buttons are located at the bottom of every page or in the header that moves when you scroll. Once saved, this action closes the question package screen and reopens MEDSS Dashboard.
6. The **Cancel** button on the bottom of the form will back out of the question package without saving the information. Don't use the 'back' navigation in the browser to go back.

IMPORTANT

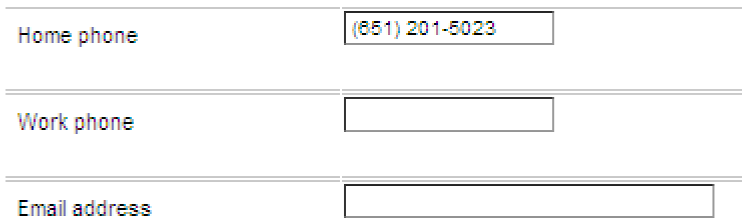
It is recommended that users save frequently. MEDSS times out after a half hour of inactivity. If the user receives a phone call, the user should save the question package before taking the call. If the user does not click the **Save** button and MEDSS does time out, the data that has been entered since the last save will be lost.

Entering Data

The question packages within the system are tailored to include information relevant to the disease the event is about. To be able to enter information into the question packages you need to know about the different ways MEDSS stores information.

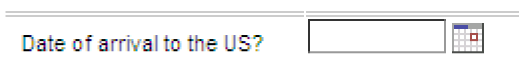
	TIP When navigating on the form the TAB key will move the cursor to the next field in the form. SHIF+TAB will move the cursor to the previous field.

Text fields

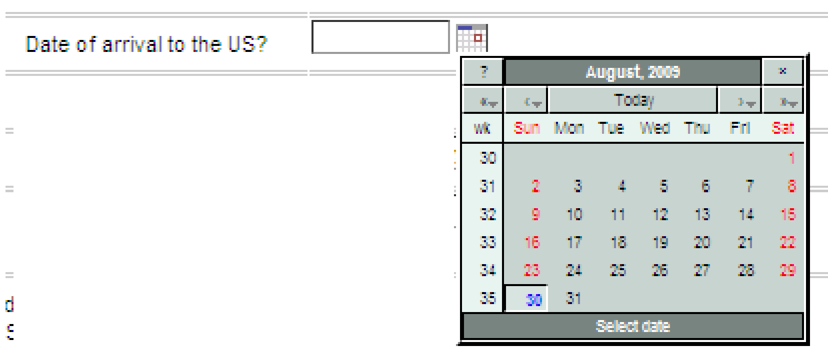


Text fields are used to enter/store shorter text items. You enter information into these fields by typing.

Date fields



Date fields are used to store dates. You can either enter a date directly into a date-field or pick a date from the date-selection tool. A date will be automatically formatted to the format DD/MM/YYYY, this means that if you enter 03132004 the system will automatically insert the slashes and save 03/13/2004. If you enter 031304 the system will format this to 03/13/2004.

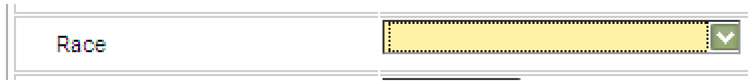


	NOTE To change a date that's already entered into a date field you need

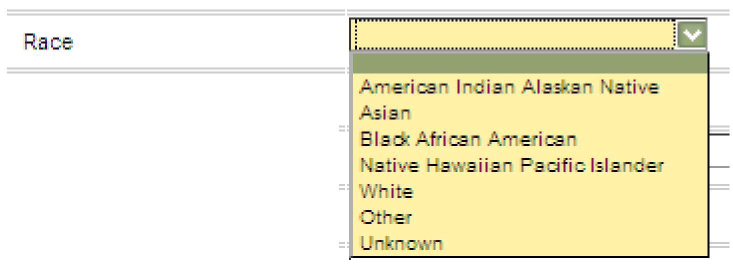
	to first delete the existing date.

Drop-down list

Drop-down fields have a list of values to select from.



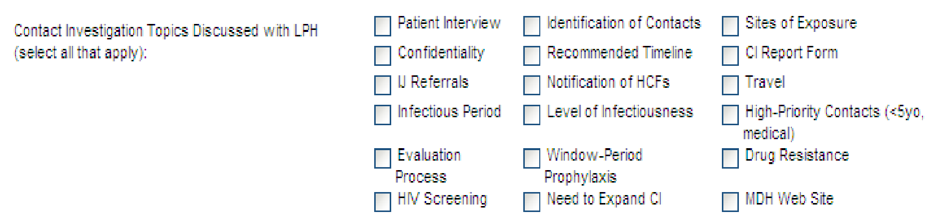
To see the values in the drop-down click on the arrow to the right of the field.



If you don't want to use the mouse to scroll through the values in a drop-down list you can type the first letter of the choice you want or use the arrow-down keys to scroll through the choices. Enter will select the highlighter choice.

Checkbox list

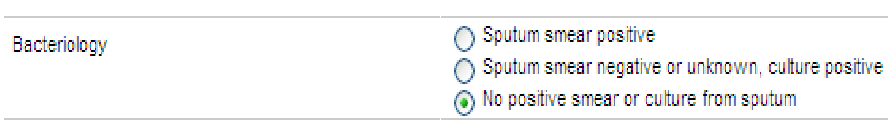
Checkboxes are a list of choices where you can select more than one value.



If you tab through a form the tab will stop on each of the choices in a checkbox list. Spacebar will select (or de-select) the highlighted value.

Radio button lists

Radio buttons are a list of choices where you only can select one value.



If you tab through a form the tab will stop on each of the choices in a radio button list. Spacebar will select the highlighted value.

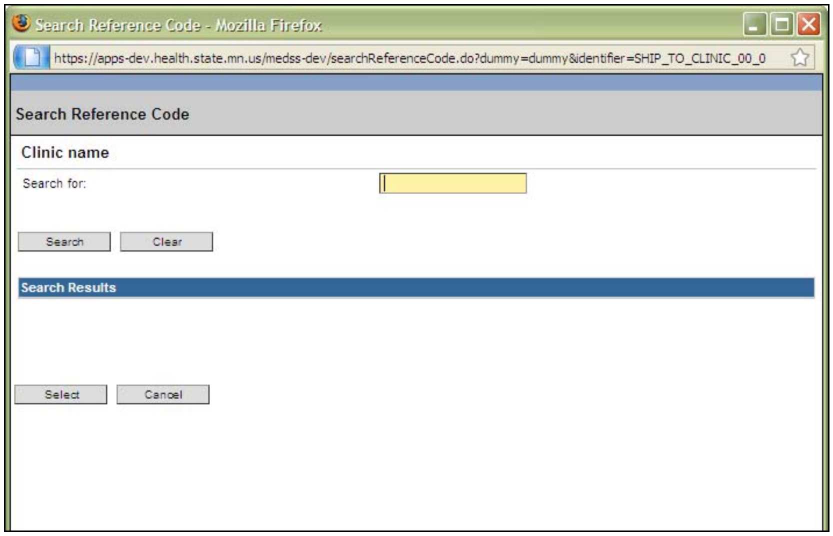
Search and select

Search and select is used when a drop-down list are too large to scroll through.

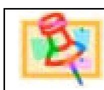
To use a search and select field:

1. Click on the search icon to the right of the field to bring up the search window.

2. Enter the information you want to search for in the search field and click search.



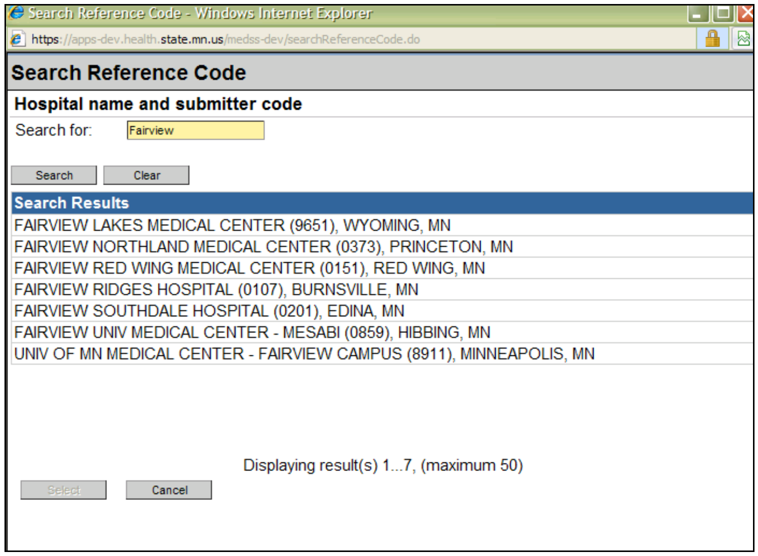
The search and select function for reference lists works different that the search for persons and events in the system. When searching reference lists the system will look for a match anywhere in the string you are searching and no wildcards can be used. For example searching for the word 'Allina' in the clinics reference list above will not only provide results starting with Allina but instead provide all clinics with the word Allina somewhere in the name.



NOTE

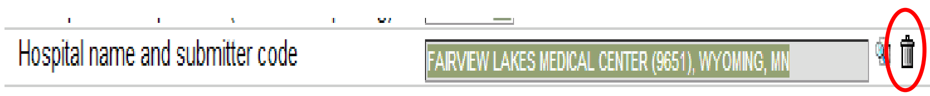
Use the rule 'less is more' and always use as few letters as possible to bring up all possible matches, for example it's better to enter "All" to find "Allina clinic" than to use the whole word "Allina".

3. The search results will be listed under Search results:



4. Click on the value you wanted to have in your field and click on **Select**.

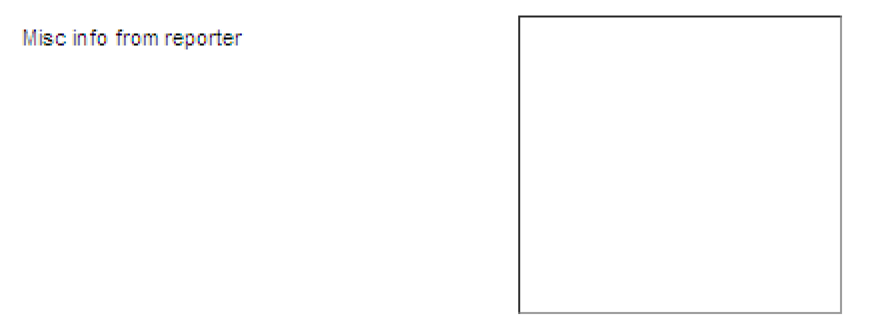
To remove a value from a search and select field, click on the **Trashcan** icon, to the right of the search icon.



IMPORTANT

In the current system, when a clinic address is picked and address line 2 has a value, if the clinic is changes to one without address line 2 the previous address line 2 will stay in the address line 2 field and it is not possible to delete the value in that space. (In updated systems of MEDSS, this glitch will be solved).

Freeform Freeform fields are used to store more text than the text fields.



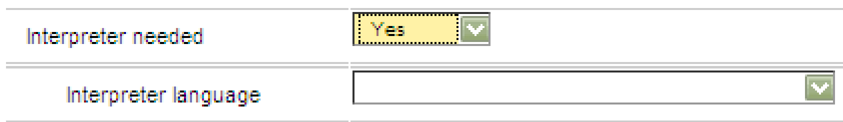
Prompted fields

Some question fields will only appear if prompted by the response in the previous question.

For example:

If "Interpreter Needed" is not answered, or answered as No the next field on the form is "Is the person dead?"

When Interpreter needed is answered 'Yes' the next field on the form is 'Interpreter language'.

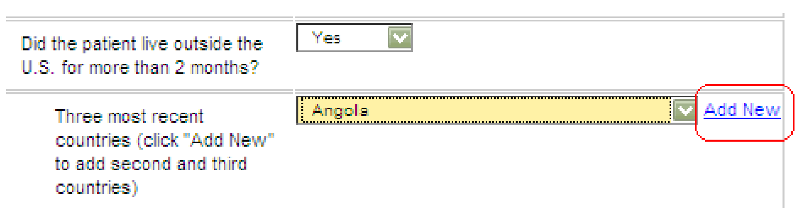


NOTE

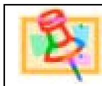
There are some fields where the prompted question is a text field; for these fields the next question will be displayed when the cursor is moved out of the field, not when the text is entered.

Repeatable fields and sections

Repeatable sections are use if a block of fields can have multiple values (such as visit information collected multiple times for the same event, multiple treatments given, multiple races or multiple countries for trips or residences).



You add a new section by clicking on the 'add new' link to the right of the parent question for the block.

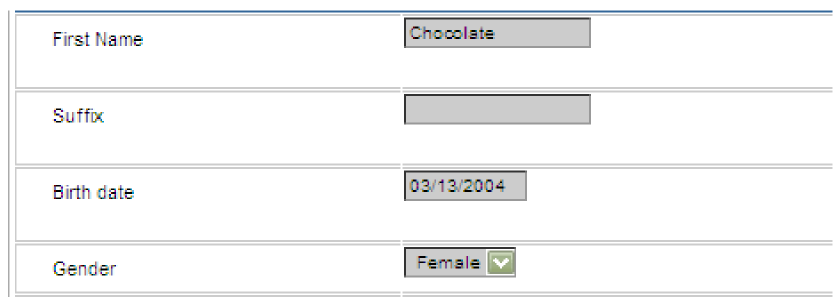


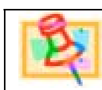
NOTE

The **Add New** link will not be visible until the parent question has been answered.

Read only fields

Read only fields are marked in gray background color and indicates that the information in these fields are entered somewhere else in the system. This is mainly used for information entered on the person tab but is in some instances also inherited information between different question packages





NOTE

Some fields will automatically be filled in with data when the event is created; however, some questions offer the option to manually override the automated value.

For example, age at time of episode will automatically be filled in based on the difference between the birth date and episode date. If this value or unit is incorrect, in the Demographic QP, there is a field where the age and units can be manually entered.

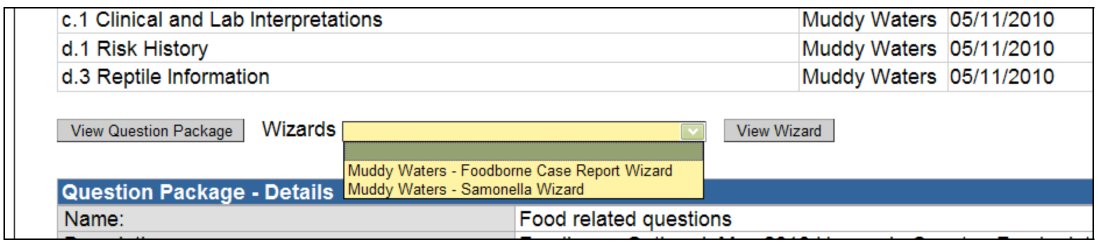
Another example is address at time of reporting in the Demographic QP where the address the person has when the event is created is copied into the address at

	time of reporting fields.

Wizards – for easier data entry

When manually entering data for an event, a wizard may be available for easier data entry. Wizards (also called Virtual Question Packages) combine questions from multiple question packages to provide a data entry screen that's more similar to previously used paper forms such as the current case report forms. The different options available may show more questions or allow different edits. The benefit of the wizards is that they reduce the data entry process and the need to open each question package.

After opening or creating an event, if a wizard is available, it will appear next to the View Question Package button. The drop down menu may offer different wizard options for different stages of the data entry process. Choose which option fits your data entry needs by choosing the name in the drop down and clicking on **View Wizard**.



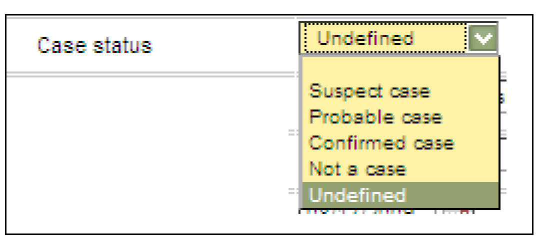
If a case is closed, a wizard may still be viewed but no further edits can take place.

Important Administrative Fields

Some fields in the Administrative Question Package will be required to answer for the extract which will be sent to CDC; other fields are needed for MDH use. The following fields are important to know when entering in event data:

Case status

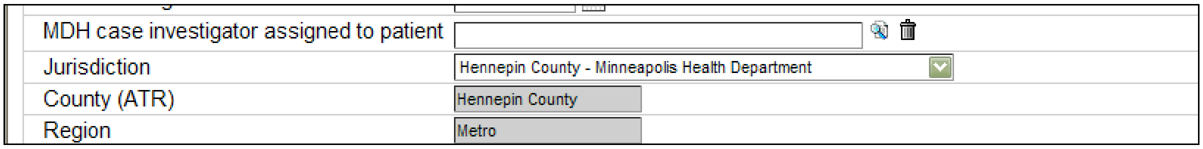
The **Case Status** in the Administrative QP is used for identifying the event as a 'case/suspect/probable or confirmed case' – this field is used to determine if an event should be included in reporting to CDC and on other 'case count/line list' reports.



It's important that the Case status field is set correctly before any information is sent to CDC.

Jurisdiction

This is the county that will have access to the event. By assigning the owning county's jurisdiction, it will guarantee that the county will have access to the event in the future, and it signifies which county is responsible for the investigation and data entry. If assigning cases to LPH, make sure to fill in the jurisdiction field in order to open the event up for that county.



Episode date and Effective from date

When creating an event in MEDSS, the **Effective from date** field will automatically default to the current date. This field is defined as when MDH was first notified of the event. Since each disease group will define this differently, leave the current date in this field and use the field **Episode date** in the Administrative QP instead.

Episode date is working together with the field **Episode Date Based On** to identify when the case should be 'counted' on reports. Since different diseases have different criteria for what date to use when counting the case, it is important to select the correct '**Episode date based on**' for the event. The Event date will then automatically be calculated based on the selection in the **Episode date based on**.

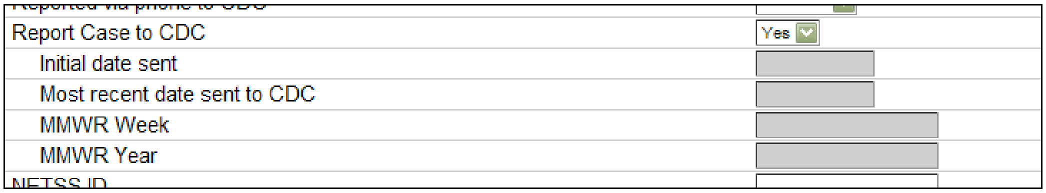
IMPORTANT

Incorrect selections in the event date might result in an incorrect case-count. It is very important to select the right and relevant field in the **Episode Date Base On** section.

When selecting **Episode based on** make sure to select a field that has a value. Selecting a field without a value will result in an empty episode date. **For example**, if Episode date based on is set to 'Specimen collection date' but the specimen collection date is empty, the Episode date will also be empty. To correct this, either select another date in 'episode based on' or enter a date in the specimen collection date field.

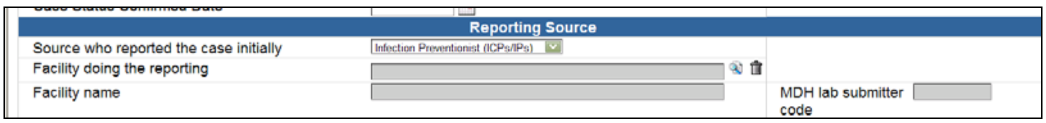
Report case to CDC

To report the case to the CDC, in the Administrative question package there is a field called 'Report Case to CDC'. By setting this field to Yes, the event will be included in the next transfer to CDC. MMWR week and year fields will be calculated after the case is sent together with date initially sent and last date sent. Events will be re-sent to CDC with the next transfer if the event has been modified after the last date sent.



Source who reported the case initially

CDC requires that this field is filled in and a facility name, city and zip code are associated with that source.



Case report received

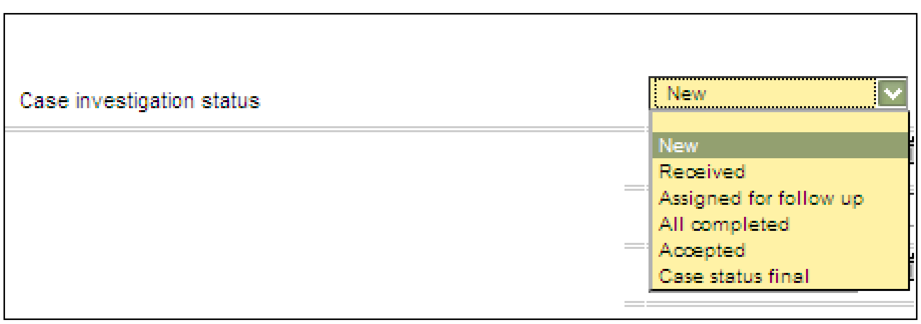
This field should be answered in order to fill in reporting person information. The date the report is received must be answered in order to view hidden fields. If date is unknown, fill in the date MDH heard of the event.

ELR lab reviewed

This field is the trigger to delete the event from the ELR workflows. Each time a lab report comes into MEDSS electronically, this field will be set to NO so the report will flow into a disease specific ELR workflow or inbox. After reviewing the lab report, users need to respond yes to this field or the event will remain in the workflow.

Case investigation status

Case investigation status in the Administrative QP is used for identifying where in the 'process' the case/event is. This field is used to place the event on different to-do lists/workflows.



Different diseases will have different options in the investigation status field and some diseases have additional investigation fields as well.

Important demographic fields

Address at time of reporting

When an event is added in MEDSS, the address associated with the person will be added to both the current address fields and the address at time of reporting fields. The address at time of reporting fields are editable while the current address fields can only be changed in the person tab. If the current address is changed those fields in the QP will be automatically update (even if the case is closed); however, the address at time of reporting will remain the same.

Race – Multiracial

If users need to classify a person as multi-racial, they can indicate multiple races for the person by using the 'add new' function. Users can specify as many races as the person indicates. Do NOT select "other" then type "multi-racial".

If neither of the specific races is known, but users want to indicate that the person is multiracial, select other as the race than, click on 'add more' and add another instance of other. Below are some examples of how the data will be sent to CDC:

- White, White will be linked and sent as White to CDC
- White, Black will be sent as multiracial
- Unknown, White will be sent as multiracial
- Unknown, unknown will be sent as multiracial
- White, empty will be sent as White
- White will be sent as white.

Age, units and manual age entry

Age at time of episode will be automatically calculated by the birth date of the person and the date of the episode; however, if birth date or date of episode is unknown, the age at time of episode will be blank. If the calculated age is incorrect, users can manually enter the age and the units.

Select hospital/clinics/labs from the facility list

The MEDSS system has a master list for hospitals, clinics and laboratories called the 'facility list'. This reference list is used in search and select functions in multiple places in the different question packages such as the facility doing the reporting in the administrative QP or the provider and hospitalization information in the Clinical and lab interpretation QP. How to search and select for a facility is explain on page 50.

When searching, it can help to use less wording in the title or use the submitter code. If using the exact name, the name needs to match what is on the facility lists including punctuation (i.e. after abbreviation of Saint). The facility list will be updated according to the information provided by the different disease groups and current website information. If a facility is not found on the list, users can select 'other' and manually enter in the name. To have a facility added to the list, contact a system administrator.

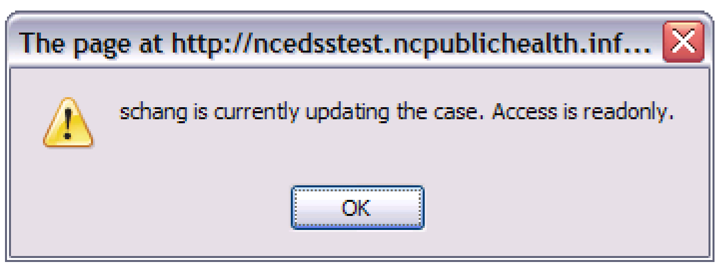
Event status/investigation status

The **Event Status/Investigation Status** displayed on the event summary screen is a system field and can be set to Open, Closed or Invalid. This field is not used to determine if the event is truly a case or not and this field does NOT set the case status in the administrative QP.

This field should be Open for all cases someone is currently working on; closing the field will lock the case for further editing. For more information, see Chapter 7 — Additional event functions.

Temporary Locks

When a user is working on an event, other users are not able to work on the same event. The system automatically puts temporary locks on all active (open in someone's Dashboard) events. When a different user opens the event, a notice regarding who is already working on it is displayed.



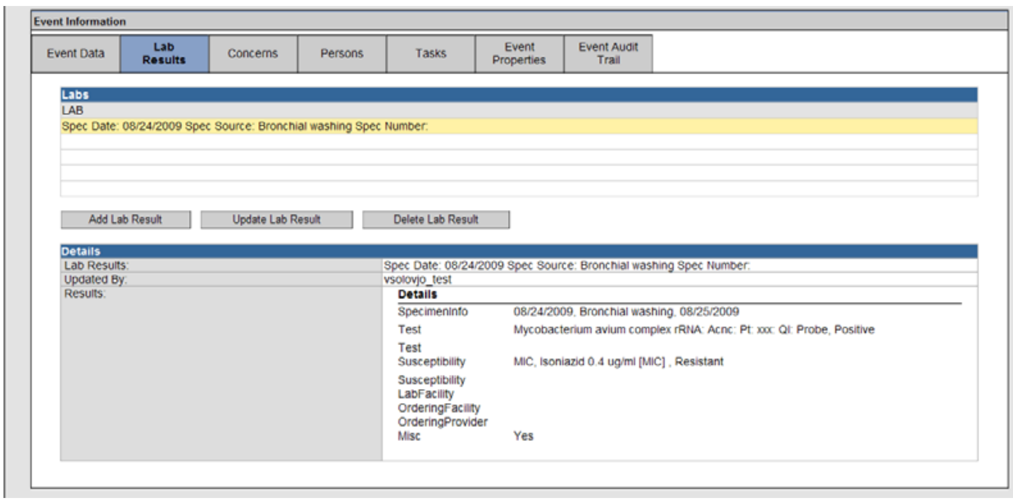
This user will still have access to the event; however the access is read-only. It is important to recognize that if someone is viewing an event in a read-only state, the fields in the question package still seem to be editable; however, the Save button is deactivated thus no data can be saved. Users may also receive this warning if another user does not properly unload the event before logging out of the system. MEDSS may get confused on which user is currently editing the event. The main point is that **two people cannot update events at the same time.**

CHAPTER 6: VIEW AND ADD LAB INFORMATION

MEDSS events allow for multiple lab reports to be recorded. These lab reports can be added both manually and electronically. Lab information for each event can be found under the **Lab Results tab** in the event information section from the dashboard.

Viewing lab information

Lab information for each event can be found under the **Lab results tab** in the event information section from the dashboard. Highlight the specimen or row and details for that result will display in the table as seen in the image below.



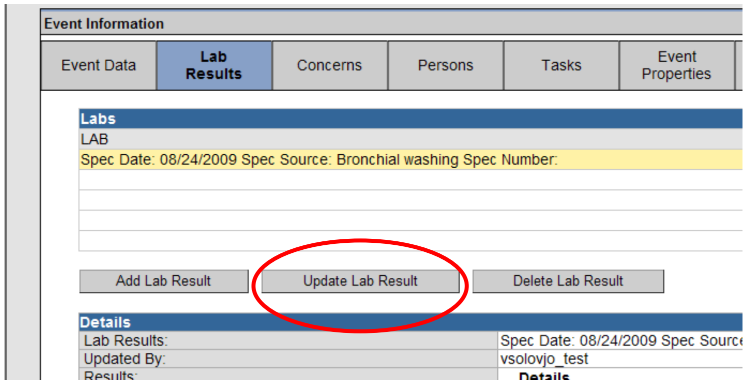
If there are lab results for this event they will be listed in the lab result section. The results will be organized around the specimen (specimen date, source and specimen number), so each specimen will be listed with a separate entry in the line list. Results will be order chronological with oldest reports on the bottom.

View or update an existing lab result

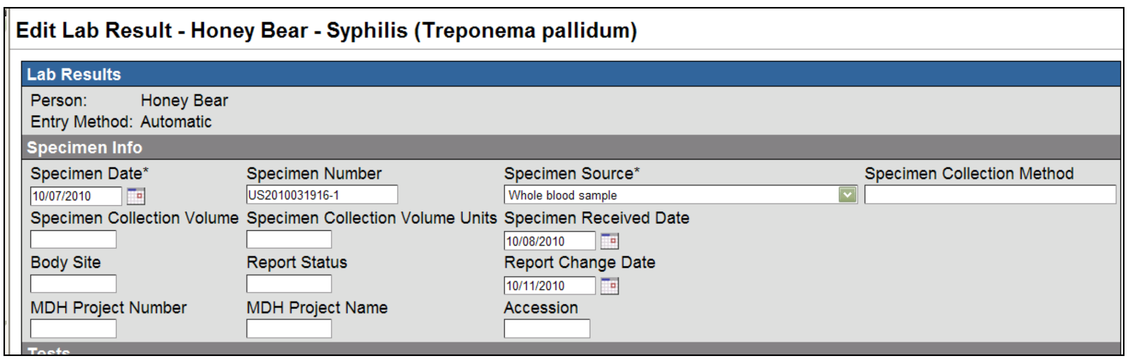
If more than one test was run on the same specimen (specimen date, source and specimen number), users can view the multiple tests and results by opening the lab report. They will be listed on the same screen but only if the date, source and number are the same. Users will also need to open the lab report if they need to view the MDH project number, accession number or comments from the lab.

To view or update an existing lab result, follow these steps:

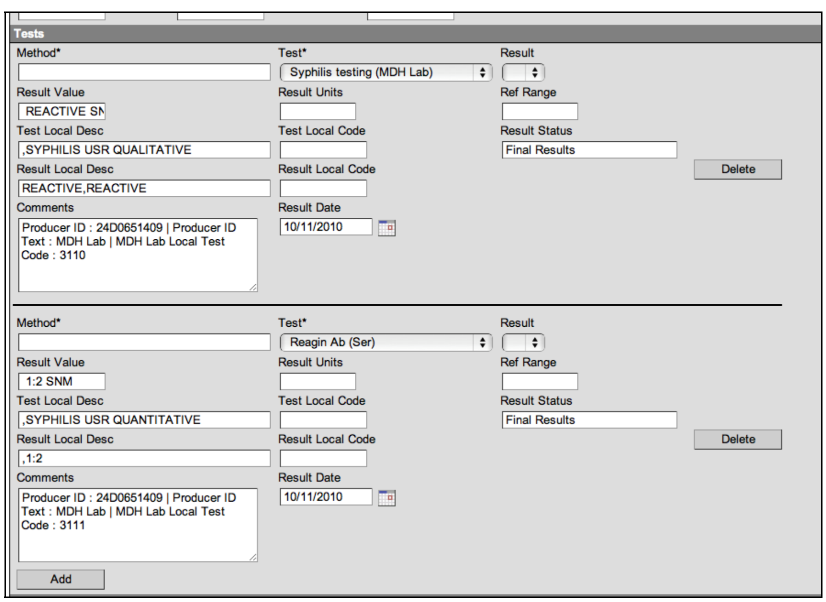
1. Highlight the test result in the lab results section and click on **Update Lab Result** (Or double-clicking on the Lab Result Line Item).



2. A new screen will appear with the complete lab report.
3. Review the MDH project number and Accession number in the Specimen Info section.



4. If multiple tests were done on the same specimen, those tests and results will appear in the test section.



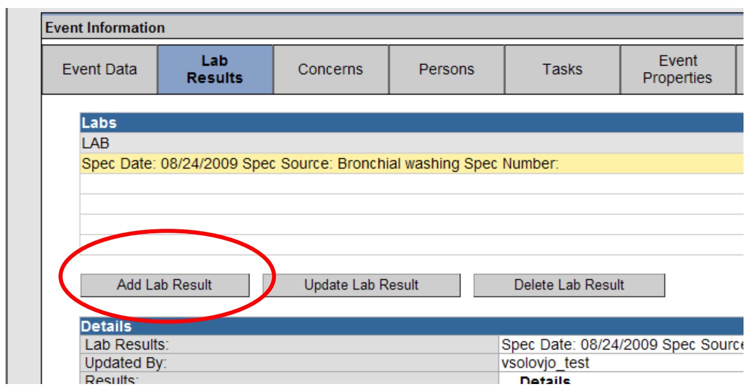
5. When finished reviewing or updating the lab result, click **Save** or **Cancel** to go back to the dashboard.

Often events are created by electronic lab results (ELR) being received into the MEDSS system. These lab results have been sent by laboratories and received in to the system. Lab results that have been received into MEDSS via ELR are not editable by users, regardless of the role of the user

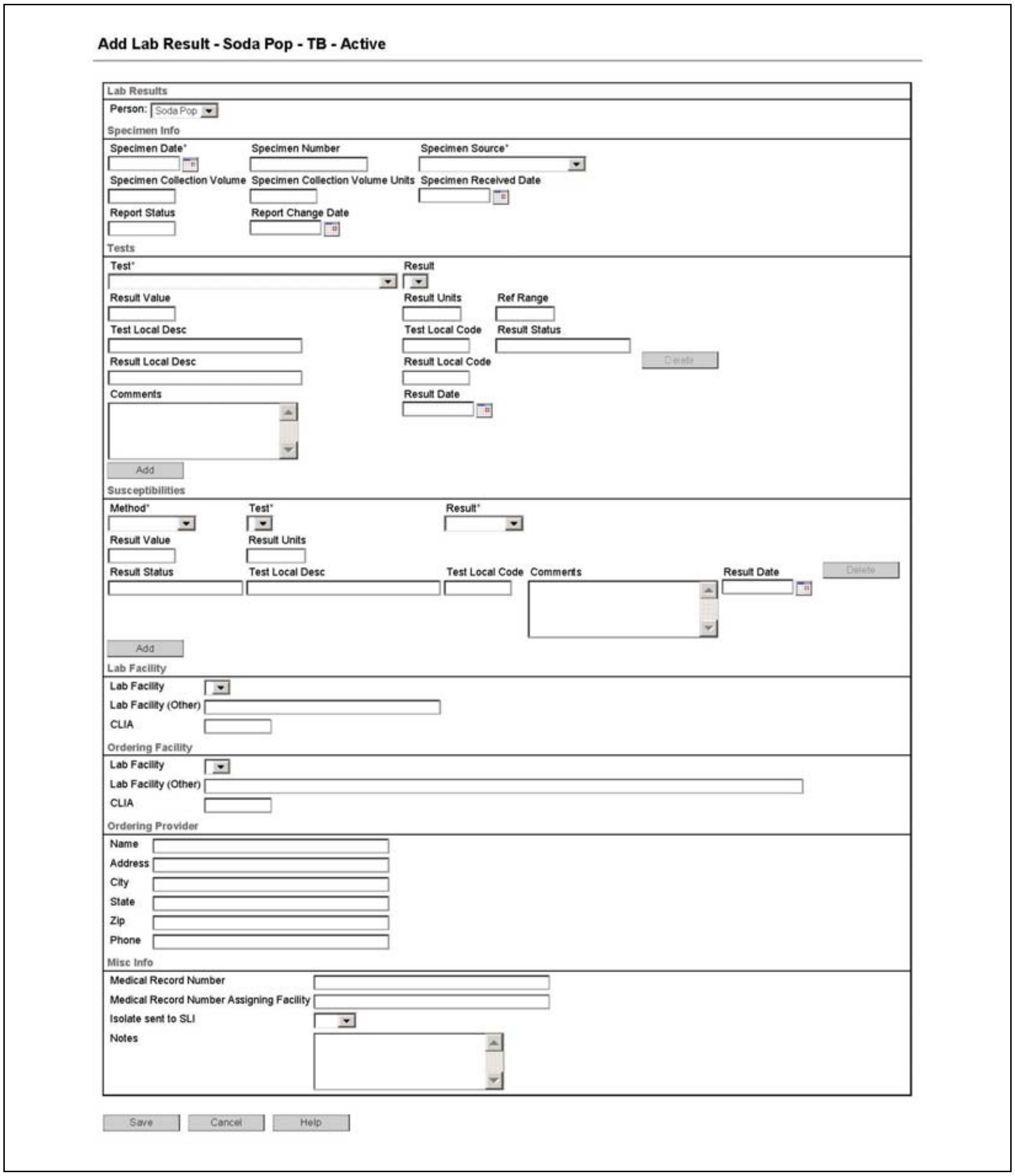
Adding lab results

If users receive paper-based lab results, users will need to manually enter these results. To do this, follow the steps below:

1. Open the event on the dashboard and click on the Lab Results tab.
2. Click on the **Add Lab Result** button.

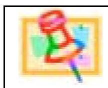


3. The screen on the next page will display.



Though this screen will look similar for each disease, all information contained on this screen will be disease-specific, (i.e. laboratory tests for TB will only show in TB events).

4. Fill in the lab fields according to the paper lab report.
5. When finished click **Save** and the user will be brought back to the dashboard.



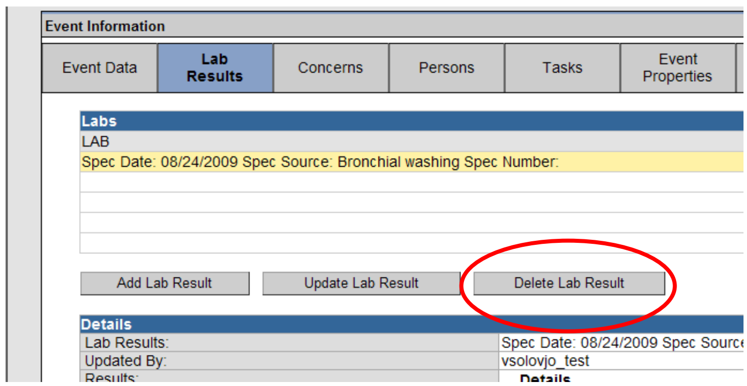
NOTE

Users will be able to update or edit manually entered lab reports but not the reports that are entered in MEDSS through ELR.

Deleting lab results

Some users will have the permissions to delete lab reports from an event if they were created erroneously or data is missing. To delete lab reports, follow the steps below:

6. Open the event on the dashboard and click on the Lab Results tab.
7. Highlight the row of the lab report.
8. Click on the Delete Lab Result button.



9. MEDSS will confirm that the user wants to delete the selected lab result.

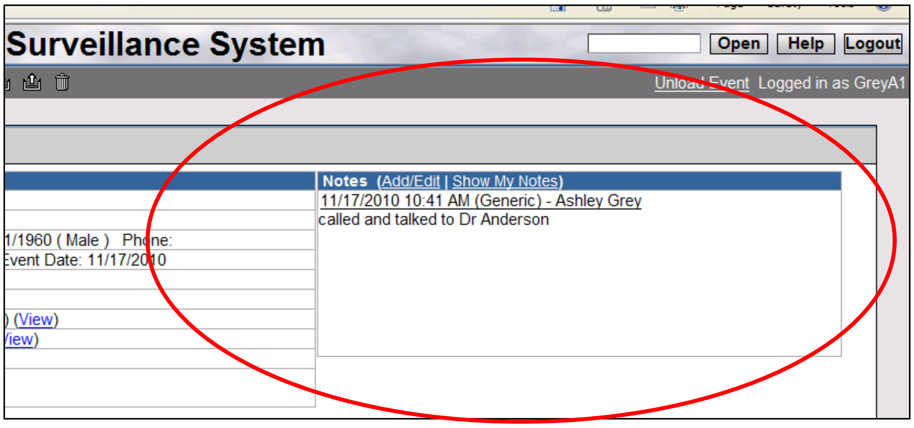
	NOTE Not all users have access to delete lab results. The Delete Lab Result button will only be visible for users with this access.

CHAPTER 7: ADDITIONAL EVENT FUNCTIONS

This chapter explains some of the additional functions that users will be able to access from the dashboard including editing event properties, copying events and deleting events. Some users will not be able to access all of these functions based on role permissions.

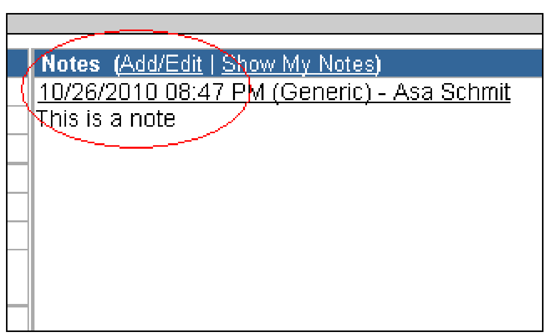
Event notes

The MEDSS system has the capability to store notes for each events. These notes are created and displayed from the Event notes section on the MEDSS dashboard summary screen.

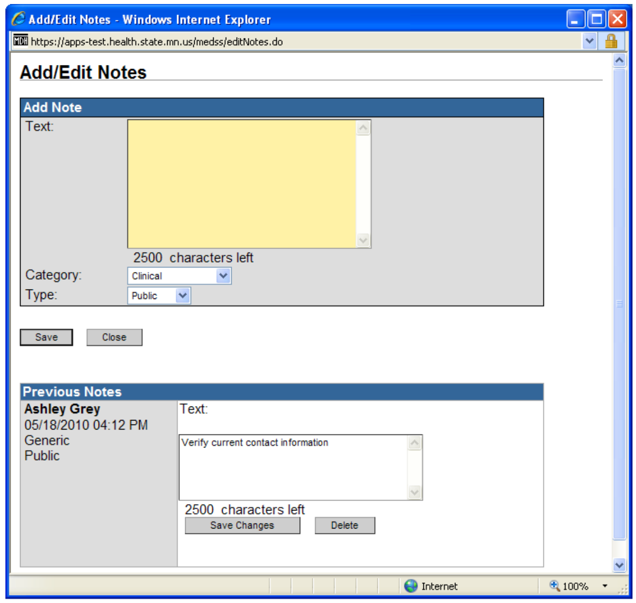


	NOTE Event notes are different from Person notes in the way that person notes are tied to the person and not to the specific event. Person notes are added and viewed from the person tab in the system and can be opened by anyone with access to the person information. Event notes are viewed and managed from the Event summary section and can only be accessed by anyone with access to the event.

1. To create/add a new event note click on the **Add/Edit** link found beside the section title **Notes** as seen below.



Clicking this link will present the user with a new screen (shown below).



2. Enter the notes text in the Text field.
3. Enter a category for the note in the Category field. Notes can be organized using different categories: **Generic**, **Outreach**, **Clinical**, **Case Management**, and **Education**.
4. Select **Public** or **Sensitive** in the type dropdown menu.

A user's role determines which notes can be viewed. Some user roles have the ability to see all notes (public and sensitive) and others will see only public notes. The time and date are stamped with each note for easy tracking of a case's history.

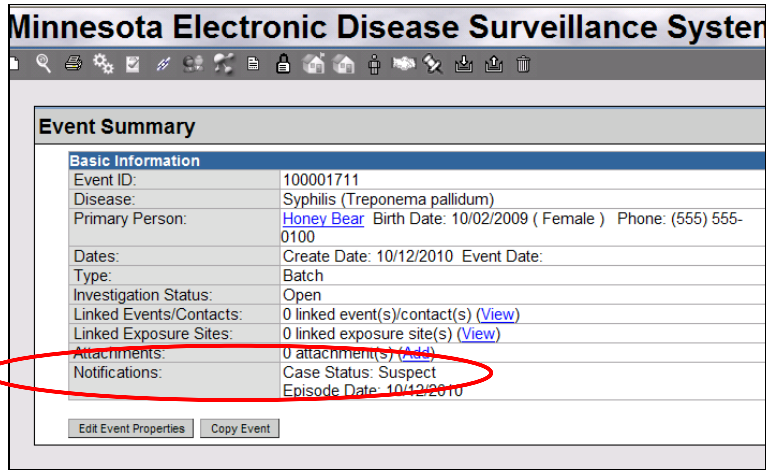
	IMPORTANT Users are able to edit their own most recent note *only* if it was the last note added to the event. It will be displayed for editing at the bottom of the **Add Note** screen. One can edit or delete one's own notes as long as nobody else has left another note on the same case. Using the example on the past page, Ashley Grey would only be able to edit and/or delete the generic note 'Verify current contact information' if no other user had entered a new note to the event.

Attach files (attachments)

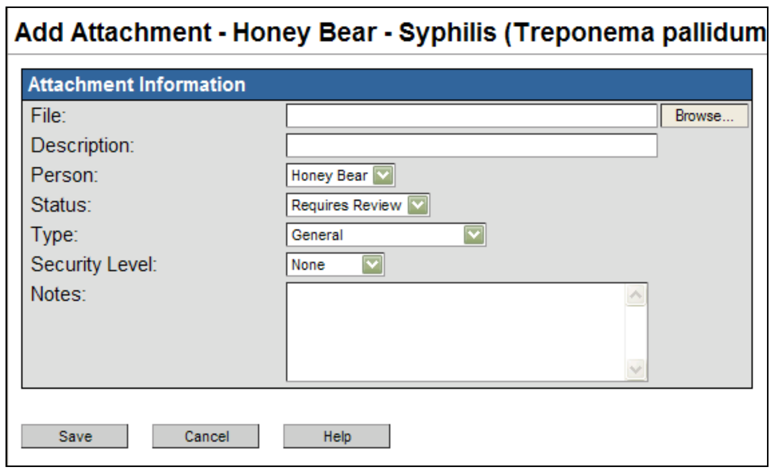
Often, there may be a document or file, such as a lab report, letter, or photograph that should be attached to an event. Any file accessible from the user's computer can be attached to an event. Attachment information is displayed in the Event Summary table at the top of the dashboard.

To attach a file, follow these steps:

5. Open the event on the dashboard.
6. In the Events summary section, locate the Attachments row.



7. Click on **Add**.
8. A new window opens.

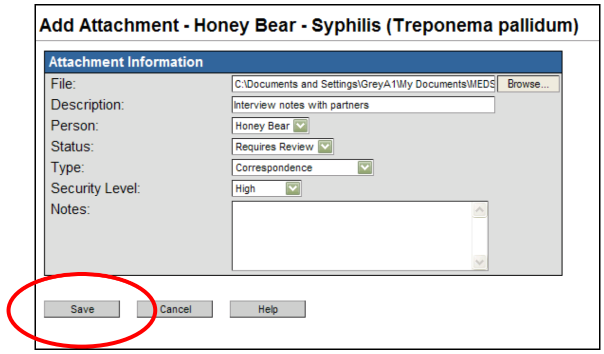


The Add Attachment fields are defined below:

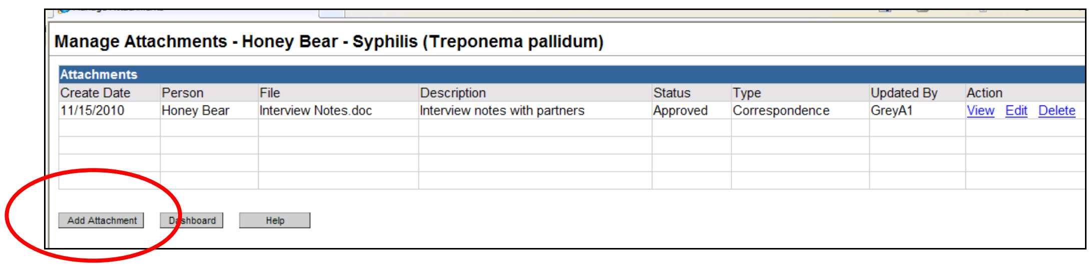
File	The name and path of the file to be attached.
Description	A description of the file being attached. (Required)
Person	The name of the participant in the current event.
Status	The status of the attachment and whether it requires review, or is approved or rejected.
Type	The type of file being attached– this can include photographs, hospital discharge reports, correspondence, etc.
Security Level	Allows the user to associate a specific security level to the attachment. This is similar to event or person notes. Ability to view is determined by user permissions.
Notes	Notes about the attachment.

9. Click on **Browse** to find the file on your computer. Click **Open** to add the file to the Add Attachment screen.

10. Give the attachment a brief description. This field is required.
11. Set the status and type of attachment.
12. Add a note if necessary.



13. Click **Save** and the Manage Attachments screen opens.



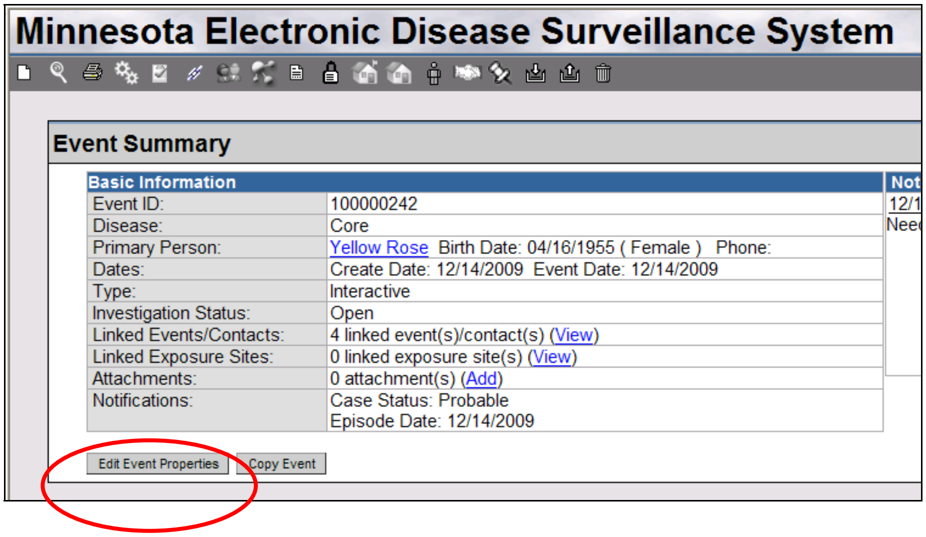
14. From this screen, users can add another attachment or view, edit or delete the file attachments in the table.
15. When finished, click **Dashboard** to go back.

Edit Event Properties

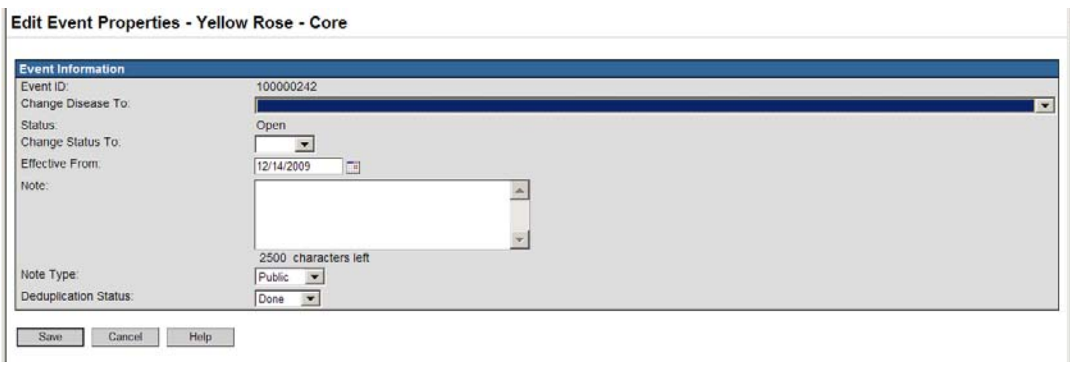
Event properties are the information that defines the event such as the disease, investigation status or effective from date. The Edit Event Properties is located in the Event summary on the dashboard when an event is opened.

To change an event's properties, follow the steps below:

1. Open the event on the dashboard.
2. Click on the **Edit Event Properties** button in the Event Summary section.



3. Upon clicking **Edit Event Properties**, a new screen appears. The available actions a user can change are described below.



Event ID Displays the MEDSS Event ID of the current event.

Change Disease To Allows the user to change the selected disease to another disease of a similar type. More details are located below.

Status Displays the current investigation status of the event. More details are located below.

Change Status To Allows the user to change the current investigation status of the event to open, closed or invalid.

Effective From This is the generic field used throughout MEDSS to indicate when the event started. This field should be defaulted, but if blank, users will need to enter a date in order to save changes.

Note Allows the user to enter an event-related note. (This produces the same result as adding a note in the notes section above.)

Note Type Allows the user to set the note type to Public or Sensitive.

Deduplication Status	This displays the deduplication status of the event. The deduplication status can be either 'Done' or 'Pending'. By changing this field to Pending the de-duplication process will be triggered for the event and any possible matches will be identified.

4. When finished, click **Save**. The system may prompt a confirmation before any changes are made. Any changes will be recorded in the history of the event.

Investigation status

The **Event Status/Investigation Status** displayed on the event summary screen is a system field and can be set to Open, Closed or Invalid. This field is not used to determine if the event is truly a case or not and this field does NOT set the case status in the Administrative QP.

This field should be Open for all cases someone is currently working on; closing the field will lock the case for further editing.

Change Disease

If a disease associated with an event needs to be changed, it is possible for someone with the appropriate permissions to change it. Open the event to be changed in the MEDSS dashboard. Click the **Edit Event Properties** button and change the **Disease** dropdown to the appropriate disease. The dropdown list will only display diseases that the user has access to.

Remember that questions differ between diseases so if the user changes the disease for an event, all data that does not apply to the new disease will be lost. Changing back to the original disease will not bring back the lost data.

To prevent losing data, another option would be to copy the event to a new disease event if the user has those permissions. Then on the old event, set the classification status of the event to **Does Not Meet Criteria** and **Close** the event.

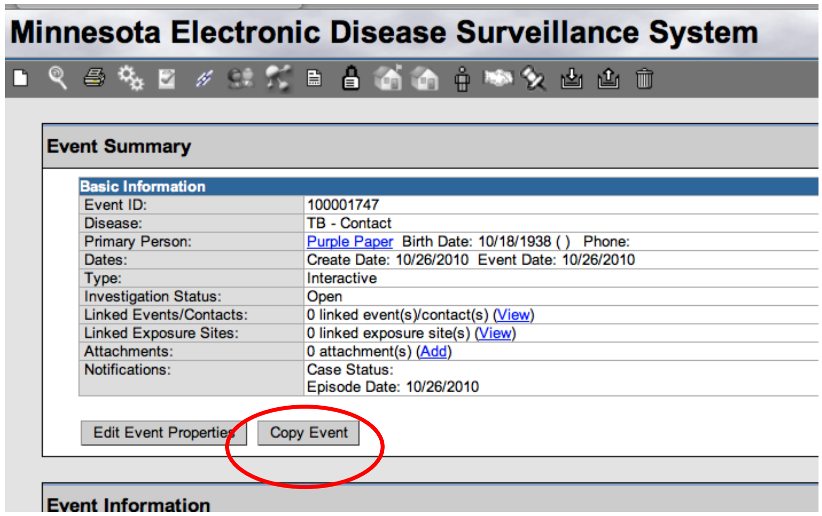
Copy Event

The copy event feature allows users to copy data from an existing event to a new event or to another existing event. When copying events, the user can control what information will be transferred based on the available options (question packages, attachments, notes, lab reports, etc.). The information will fill in the fields in the new event and the event will have a new ID number. If copying to an existing event, the data will fill into the open fields in a question package or be added to the existing event's information like with the lab results. Not all users will have permissions to use this function.

Copy the information from an existing event to a new event

Copying events to a new event can help if users want to retain data from events after the disease has changed or progressed. An example is if a TB contact patient develops a latent infection. Instead of losing data from the TB Contact event by changing the disease, a user can copy the event to a TB LTBI event, thus retaining the record in their history. To copy an existing event to a new event, follow the steps below:

1. Open the event on the dashboard.
2. Click on the Copy Event button in the Event Summary section.


Minnesota Electronic Disease Surveillance System

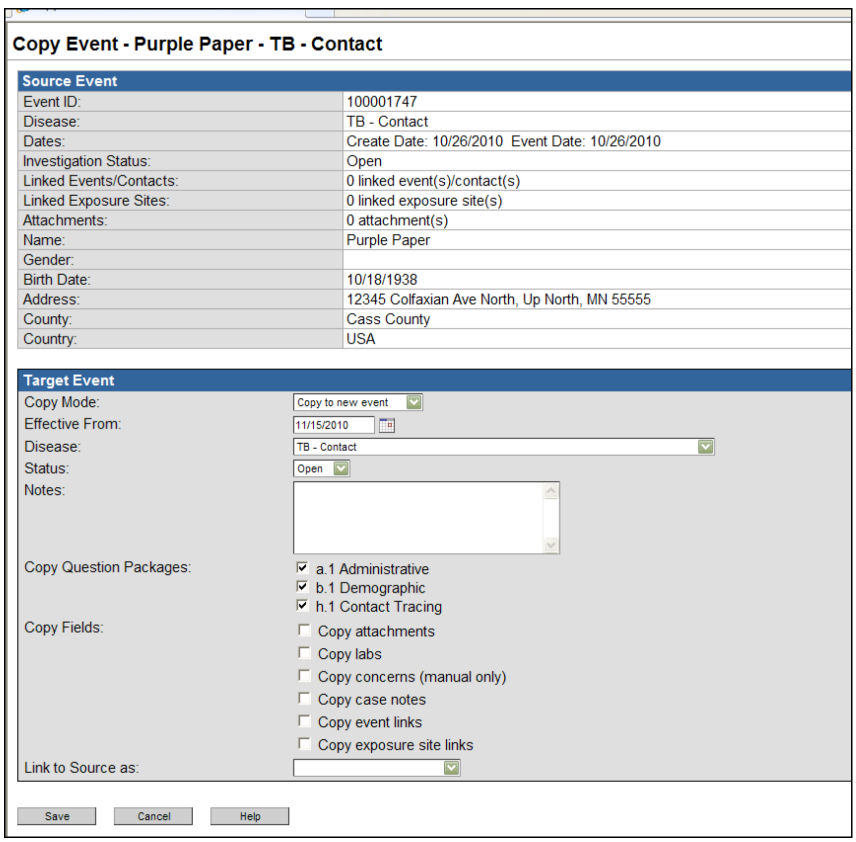
Event Summary

Basic Information	
Event ID:	100001747
Disease:	TB - Contact
Primary Person:	Purple Paper Birth Date: 10/18/1938 ( ) Phone:
Dates:	Create Date: 10/26/2010 Event Date: 10/26/2010
Type:	Interactive
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Linked Exposure Sites:	0 linked exposure site(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	Case Status: Episode Date: 10/26/2010

Edit Event Properties | Copy Event

Event Information

3. A new screen opens which shows different copy options.


Copy Event - Purple Paper - TB - Contact

Source Event	
Event ID:	100001747
Disease:	TB - Contact
Dates:	Create Date: 10/26/2010 Event Date: 10/26/2010
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s)
Linked Exposure Sites:	0 linked exposure site(s)
Attachments:	0 attachment(s)
Name:	Purple Paper
Gender:	
Birth Date:	10/18/1938
Address:	12345 Colfaxian Ave North, Up North, MN 55555
County:	Cass County
Country:	USA

Target Event	
Copy Mode:	Copy to new event
Effective From:	11/15/2010
Disease:	TB - Contact
Status:	Open
Notes:	
Copy Question Packages:	☑ a.1 Administrative ☑ b.1 Demographic ☑ h.1 Contact Tracing
Copy Fields:	☐ Copy attachments ☐ Copy labs ☐ Copy concerns (manual only) ☐ Copy case notes ☐ Copy event links ☐ Copy exposure site links
Link to Source as:	

Save | Cancel | Help

The fields are defined below:

Copy Mode	Allows the user to copy either as a new event or to an existing event.
Event Date	Defaults to the current event's date, but can be changed to a new date in the copied event.

Disease	Defaults to the current event's disease, but can be changed to a new disease in the copied event.
Status	Defaults to the current event's status, but allows the user to change the current investigation status of the event.
Notes	Allows the user to enter event-related notes.
Copy Question Packages	Allows the user to selectively choose which question packages should be copied over to the new event. Only shows question packages where questions have been answered.
Copy Fields	Allows the user to selectively choose which other field information should be copied over to the new event.
Link to Source As	Allows the user the option to create a link between the new event and the copied event, according to a configurable list of predetermined link types.

NOTE

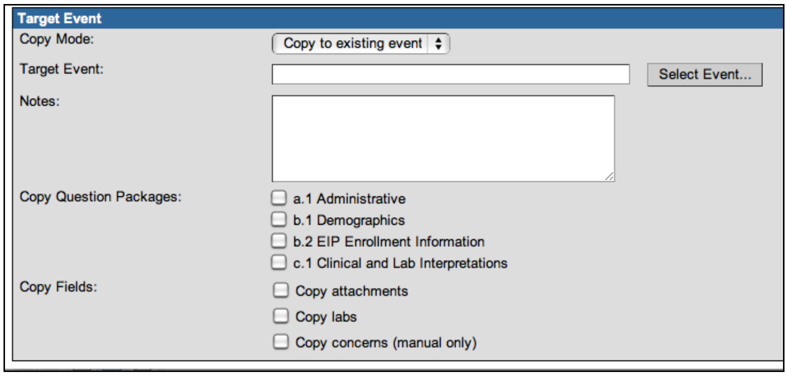
The top section called **Source Event** lists information about the event being copied. The bottom section called **Target Event** is where the user can select which information that should be copied over.

4. To copy to a new event, make sure the copy mode is set to **Copy to New Event**. Select a disease and which data fields will be copied. If choosing a different disease, only the data in the fields that match between the two diseases will be carried over to the new event.
5. When finished selecting, click **Save**. A new event will be created with a new MEDSS Event ID.

Copy the data from an existing event to another existing event

Copying existing events to another existing event can be useful if users find duplicate events and need to manually merge the two together. This function allows users the flexibility of which fields to merge with the existing event and will not delete the first event. Copying information to another event can be helpful if multiple persons with the same address face the same disease and prognosis. This can eliminate data entry. To copy the information from an existing event to another existing event, follow the steps below:

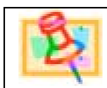
1. Open the event on the dashboard.
2. Click on the Copy Event button in the Event Summary section.
3. On the copy event screen, change the copy mode to Copy to Existing Event.



4. Select the target event by clicking on Select Event button. The user will be brought to a search event window.
5. Choose which date fields should be copied over. The options that are available will depend on the information availabel in the source event.

   Remember the data will only be copied into the existing event if the field exists and is not already filled in. However lab results and attachments will be added as a separate entry to the existing event.

6. When finished, click **Save**. The user is brought to the dashboard of the Target event.



NOTE

Copying an event to an existing event does not delete the source event so a user is able to close that event to retain for the records. If a user chooses to delete the source event, that will need to be done in an additional step.

Delete event

Only specific users will have the permissions to delete an event from MEDSS. This will only delete the event, not the person, from the database. Deleting events should be reserved for those that were incorrectly added; however, if users want to retain the event for their records, users should deactivate the event by marking the status as *invalid* in the Edit Event Properties menu.

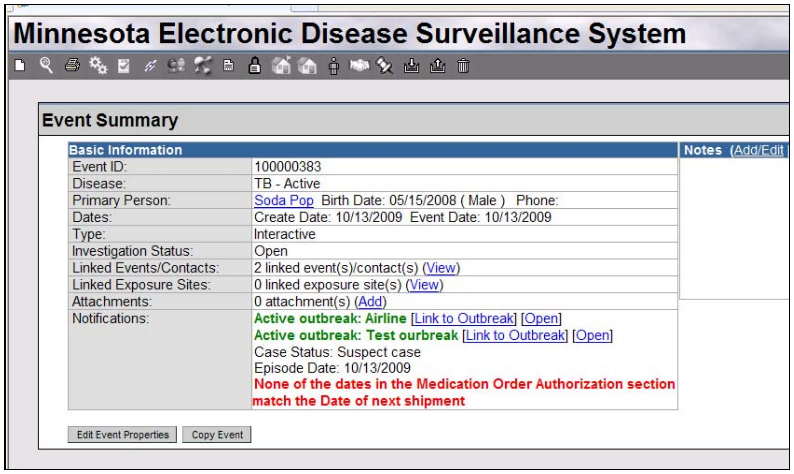
To delete an event from MEDSS, follow the steps below:

1. Open the event on the dashboard.
2. Depending on role permissions, users will see the trashcan icon in the toolbar.
3. Click on the trashcan icon and MEDSS will verify that the event should be deleted.
4. Confirm the delete.

Once an event is deleted, it can not be undeleted.

Concerns

Concerns are used in the system to highlight possible data issues. Critical active concerns will show up in the Event summary section when an event is open in the dashboard (in the notifications area).



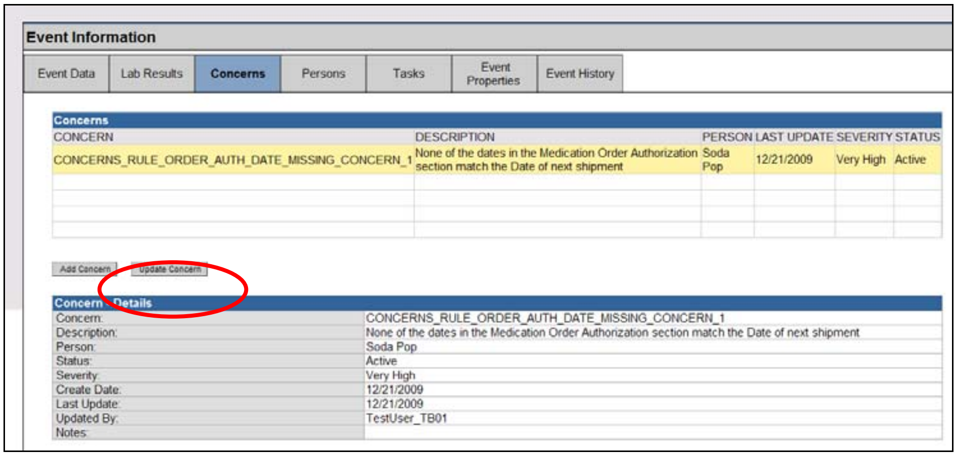
Sometimes the concerns may not be invalid, so the user has the ability to note that the concern has been acknowledged and that the data entry is fine as-is. For example, the system might produce a concern about an extremely high body temperature that a user input into the clinical question package. If the concern was valid, the user could go back into the question package and correct the error and the concern will no longer display. However, if the temperature was truly this extreme, the user could acknowledge the concern and keep the information in its present condition.

All concerns for an event can also be found under the **Concerns Tab** and they can also be manipulated in that tab.

Acknowledge a concern

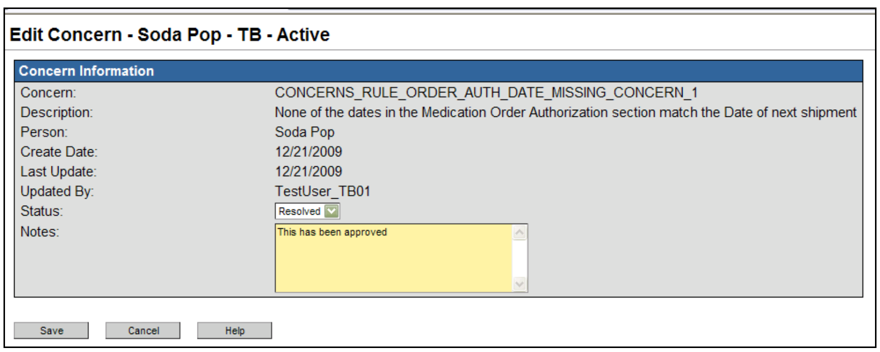
To acknowledge that a concern has been recognized, follow the steps below:

1. With the event open on the dashboard, click on the **Concerns tab.**
2. Highlight the concern. Notice that details display in the table.



3. Click on **Update Concern**.

Set the status to resolved and add a note if necessary. Setting the status to **Resolved** indicates to other users that someone has acknowledged the concern and ascertained that the data is accurate. No concern can be deleted.



The fields on the Edit Concern screen are described below:

Concern	Unique name of the concern in the database produced by MEDSS.
Description	Describes the issue in plain language.
Person	The person about whom the event is based.
Create Date	The date upon which the concern was created.
Last Update	The date upon which the concern was last updated.
Updated By	The name of the user who last updated the concern. If the concern itself has not been updated, the username of the person who entered the data that triggered the concern will appear.
Status	Refers to the current state of the concern – either active or resolved.
Notes	Notes about the concern.

CHAPTER 8: WORKFLOWS QUEUES AND TASKS

Workflow Queues and Tasks can help users keep track of their daily duties and events in MEDSS. Workflow Queues are a way to know which events are new and can define the process of where events go. Tasks help organize workloads and remind users what work needs to be completed.

Workflow Queues (electronic to-do lists)

Workflow queues are important in MEDSS because they allow users to keep up with events and work that needs to be done on them. Events can be placed in workflow queues automatically based on what has happened or has to happen with the event. For example, if a case management report is past due, the event may display in a "TB CMR due" workflow queue. Also, events can be placed in workflow queues manually in the form of a task (more on tasks later in this chapter).

You can open the workflows by clicking the **Workflows** icon  in the MEDSS toolbar on the dashboard. On the **Workflow Queues** screen, workflow queues are differentiated from one another as **Case Specific Monitors** or **Task Specific Monitors**.

Workflow Queues

Workflow Queues (Hide empty workflows)

Workflow Queue	Total Count (Assigned to me)	Details
Case Specific Monitors		
CDC transmit - ready to send (11/15/2010 12:26 PM)	0 (0)	
Cases with multiple current providers (11/15/2010 12:26 PM)	0 (0)	
Cases without Episode date (11/15/2010 12:26 PM)	3 (0)	Details
ELR Lab Need Review (11/15/2010 12:26 PM)	0 (0)	
New - Reportable Cases (high priority only) (11/15/2010 12:26 PM)	0 (0)	
New - Reportable Cases (high priority only) pending 1 day or more (11/15/2010 12:26 PM)	0 (0)	
New - Reportable cases (11/15/2010 12:26 PM)	0 (0)	
Open Cases - All (11/15/2010 12:26 PM)	33 (0)	Details
Open Cases - All Cases pending 5 days or more (11/15/2010 12:26 PM)	19 (0)	Details
Open Cases - Assigned for Follow-up (11/15/2010 12:26 PM)	0 (0)	
Open Cases - Assigned to Current User (11/15/2010 12:36 PM)	0 (0)	
Open Cases - Case report without a mandatory Lab Report (11/15/2010 12:26 PM)	0 (0)	
Shared Cases - Cases shared by me (11/15/2010 12:36 PM)	0 (0)	
Shared Cases - Cases shared with me or my group(s) (11/15/2010 12:36 PM)	1 (0)	Details
ELR Monitors		
New ELR reports - All (11/15/2010 12:26 PM)	0 (0)	
Task Specific Monitors (Add Task)		
My Assigned Cases (11/15/2010 12:36 PM)	0 (0)	
My Groups' Open Tasks (11/15/2010 12:36 PM)	0 (0)	
My Open Tasks (11/15/2010 12:36 PM)	1 (1)	Details
My Overdue Tasks (11/15/2010 12:36 PM)	1 (1)	Details
Open Tasks Created by Me (11/15/2010 12:36 PM)	1 (1)	Details
Overdue Tasks Created by Me (11/15/2010 12:36 PM)	1 (1)	Details

Dashboard Help

The fields within the workflow screen are described below:

Workflow Queue The name of the workflow organized in groups such as 'case specific monitors' or 'disease specific monitors'. The name of the workflow is also a link that will open the workflow itself when clicked (the same as clicking on the Details link).

Total Count (Assigned to me) The number of events in each workflow. The number within parentheses () is the number of events that have been assigned to the user.

Details	Clicking the Details link will open a new screen where all the events in the workflow are listed.
Case Specific monitors – Event workflows	These workflows will be automatically filled by the system. The names describe which events each workflow will contain. Available workflows vary depending upon the user's permissions within the system.
Disease Specific Monitors – Event workflows	These workflows will be determined by each disease group and will refer to specific processes for that group. Available workflows vary depending upon the user's permissions within the system.
Task Specific monitors/workflows	These workflows will list the manually created tasks that have been assigned to a specific user or group. These workflows will differ depending on the user and are always emptied manually by the user completing the task.

Event Workflows (case and disease specific)

Event workflows are automatically "watching" for a specific occurrence which will trigger it. These occurrences may vary from disease to disease and role to role. An example is when an electronic lab result creates a new event, a Case Specific Monitor workflow (i.e. New Reportable Case) will update and indicate that there is a new event in MEDSS. Usually these types of monitors can be cleared and the workflow queue emptied by filling in a field (or fields) in a question package.

IMPORTANT

MEDSS runs queries intermittently throughout a 24 hour period. Some workflow queries run 1 time in 24 hours, where others may run as frequently as every 5 minutes.

The frequency with which the workflow query runs is based on the criticality of the workflow as well as the burden on the system. Some queries look at more data and therefore take longer to run than those that look at only one or two pieces of information.

TIP

Each workflow has a timestamp visible to the right of the workflow name in the workflow queue that indicates the last time the queue was updated.

It is not necessary to have an event open in order to view the Workflow Queue. To interact with the Workflow Queues, follow these steps:

1. After logging into MEDSS, click the **Workflow** icon in MEDSS toolbar on the dashboard.
2. Available workflows will be listed in the Workflow queue.

Workflow Queues

Workflow Queues (Hide empty workflows)

Workflow Queue	Total Count (Assigned to me)	Details
Case Specific Monitors		
CDC transmit - ready to send (11/15/2010 12:26 PM)	0 (0)	
Cases with multiple current providers (11/15/2010 12:26 PM)	0 (0)	
Cases without Episode date (11/15/2010 12:26 PM)	3 (0)	Details
ELR Lab Need Review (11/15/2010 12:26 PM)	0 (0)	
New - Reportable Cases (high priority only) (11/15/2010 12:26 PM)	0 (0)	
New - Reportable Cases (high priority only) pending 1 day or more (11/15/2010 12:26 PM)	0 (0)	
New - Reportable cases (11/15/2010 12:26 PM)	0 (0)	
Open Cases - All (11/15/2010 12:26 PM)	33 (0)	Details
Open Cases - All Cases pending 5 days or more (11/15/2010 12:26 PM)	19 (0)	Details
Open Cases - Assigned for Follow-up (11/15/2010 12:26 PM)	0 (0)	
Open Cases - Assigned to Current User (11/15/2010 12:36 PM)	0 (0)	
Open Cases - Case report without a mandatory Lab Report (11/15/2010 12:26 PM)	0 (0)	
Shared Cases - Cases shared by me (11/15/2010 12:36 PM)	0 (0)	
Shared Cases - Cases shared with me or my group(s) (11/15/2010 12:36 PM)	1 (0)	Details
ELR Monitors		
New ELR reports - All (11/15/2010 12:26 PM)	0 (0)	
Task Specific Monitors (Add Task)		
My Assigned Cases (11/15/2010 12:36 PM)	0 (0)	
My Groups' Open Tasks (11/15/2010 12:36 PM)	0 (0)	
My Open Tasks (11/15/2010 12:36 PM)	1 (1)	Details
My Overdue Tasks (11/15/2010 12:36 PM)	1 (1)	Details
Open Tasks Created by Me (11/15/2010 12:36 PM)	1 (1)	Details
Overdue Tasks Created by Me (11/15/2010 12:36 PM)	1 (1)	Details

Dashboard Help

3. Click **Details** beside the appropriate workflow queue name and a screen similar to the one below will appear.

Workflow Queues - Open Cases - All

Select all Clear all

Open Cases - All (Type: Case) 10/04/2010 11:25 AM

Event	Person	Status	Create Date	Disease	Effective From	Last Update	Assigned To	Assigned To Group
100001588	Bird, Ginger (Hutchinson, MN)	Open	09/23/2010	Core	09/23/2010	09/23/2010		
100001419	Cake, CoCo (Minneapolis, MN)	Open	06/04/2010	Core	06/04/2010	06/04/2010		
100001416	Bear, Red (Minneapolis, MN)	Open	06/04/2010	Core	06/04/2010	06/04/2010		
100001415	Bear, Black (Minneapolis, MN)	Open	06/04/2010	Core	06/04/2010	06/04/2010		
100001388	Flower, Red (Coon Rapids, MN)	Open	05/20/2010	Core	05/20/2010	06/04/2010		
100001293	Boat, Banana	Open	03/26/2010	Core	03/26/2010	03/26/2010		
100001292	Bean, Coffee	Open	03/26/2010	Core	03/26/2010	03/26/2010		
100001291	Seed, Poppy	Open	03/25/2010	Core	03/25/2010	03/25/2010		
100001281	doughnut, jelly	Open	03/25/2010	Core	03/25/2010	05/20/2010		
100000387	Toast, French	Open	03/08/2010	Core	03/08/2010	03/08/2010		
100000351	Chip, Chocolate	Open	02/25/2010	Core	02/25/2010	03/03/2010		
100000341	Pan, Peter (London, MN)	Open	02/23/2010	Core	02/23/2010	09/13/2010		
100000331	Cakes, Pan (St. Paul, MN)	Open	02/09/2010	Core	02/09/2010	04/08/2010		
100000298	Ho, Hi (St. Paul, MN)	Open	01/13/2010	Core	01/13/2010	01/13/2010		
100000279	Schmoe, Joe (St. Paul, MN)	Open	01/12/2010	Core	01/12/2010	01/12/2010		
100000242	Rose, Yellow	Open	12/14/2009	Core	12/14/2009	09/13/2010		
100000241	Dandy, Handy (Minneapolis, MN)	Open	12/14/2009	Core	12/14/2009	12/14/2009		
100000240	Pop, Grape (St. Paul, MN)	Open	12/14/2009	Core	12/14/2009	12/14/2009		
100000238	Dan, Dapper D (St. Paul, MN)	Open	12/10/2009	Core	12/10/2009	05/18/2010		
100000236	Dan, Dapper D (St. Paul, MN)	Open	12/10/2009	Core	12/10/2009	03/03/2010		

Displaying result(s) 1...20 << First < Prev 1 / 2 Next > Last >>

Assign selected items to user: Assign selected items to group Assign Reassign

Workflows Dashboard Help

NOTE

The Details link will only be available for workflows with at least one event. Empty workflows will not have this link.

The workflow list is divided into nine sections described below:

Event The Event ID for the event. The event-id is listed as a link and will open the event when clicked. Some workflows will open the event in the dashboard and some workflows will open a pre-defined question package where data is supposed to be entered or modified to remove the event from the workflow.

Person The name, city, and state of the person the event is about.

Status The event status of the event (open, closed or invalid). A closed event will be locked for editing.

Create Date The date the event was first created.

Disease The disease specified in the event.

Last Update The last time something was changed in this event.

Assigned To The person to whom this event is assigned.

Assigned to Group The group to whom this event is assigned.

NOTE

Any of the Workflow Queues can be sorted (ascending or descending) by clicking the title head in each column. Only one sort criteria can be used at a time.

Other actions performed on this page are noted below:

Select all Places a check mark inside the checkboxes to the left of each event visible on the screen. Checking multiple (or individual) events allows for an action to be completed on those events, such as reassigning them or performing a bulk action.

Clear all Removes any checks within the checkboxes.

Assign selected items to user Allows the current user to assign selected events to a specific MEDSS user.

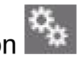
Assign selected items to group Allows the current user to assign selected events to a specific MEDSS group.

To Open an event from the workflow list

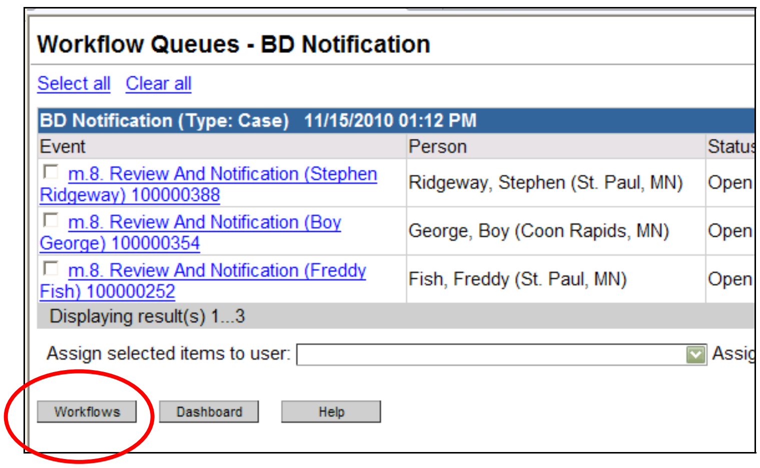
Click the link beside the **Event ID** if applicable. This will either open the appropriate question package or open the event to the dashboard so that the required action(s) may be performed.

IMPORTANT

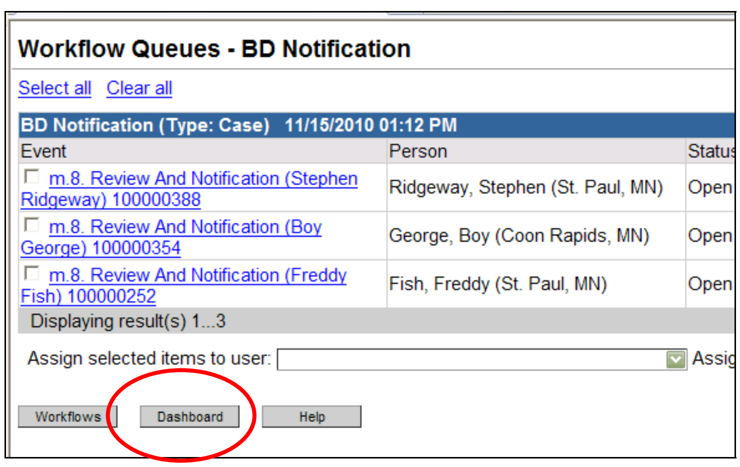
If changes are made to a question package, remember to click the Save button before navigating back to the workflow.

If an event was opened from a workflow, the next time the user clicks on the Workflow icon  in the toolbar, that same workflow list will open.

To navigate back to the workflow queues, click on the **Workflow** button from the opened workflow list.

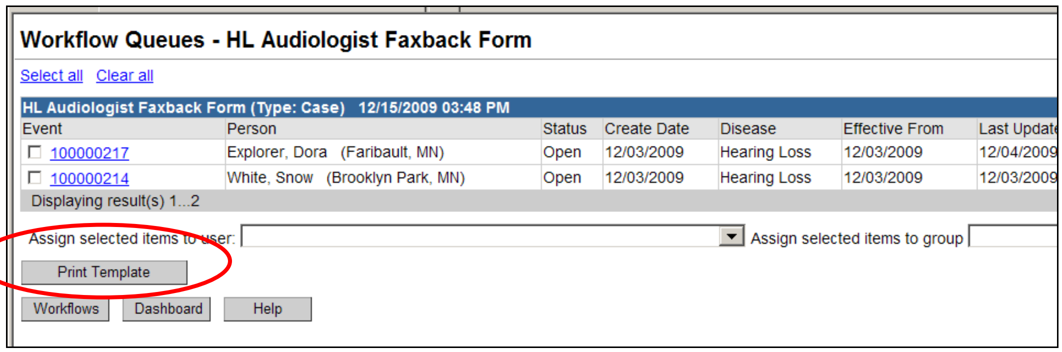


To navigate back to the dashboard from either the workflow queues window or an open workflow list, click on the **Dashboard** button.



Bulk Actions in workflows

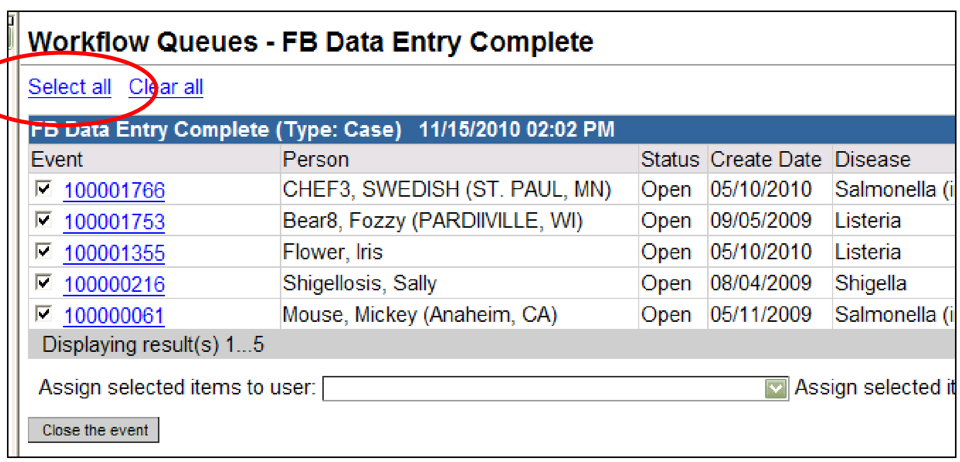
Bulk actions are actions that take place on more than one event within a workflow queue. An example of a bulk action could be to print letters for multiple people at one time, to close several events at once, to change the disease classification status for multiple events, to enter the current date into a field for several events at one time, or to report several events to CDC. The bulk actions which will be available to users will vary. The bulk actions are pre-programmed into the system and not all workflows allow for bulk action. If there is a bulk action available (and if a user has access), it will show up as a button at the bottom of the workflow (i.e. Print Template or Report to CDC).



To use a bulk action

Follow the steps below on how to use a bulk action:

4. Open a workflow that has a bulk action associated.
5. Select the events the bulk action should apply to by clicking the box next to the event ID.



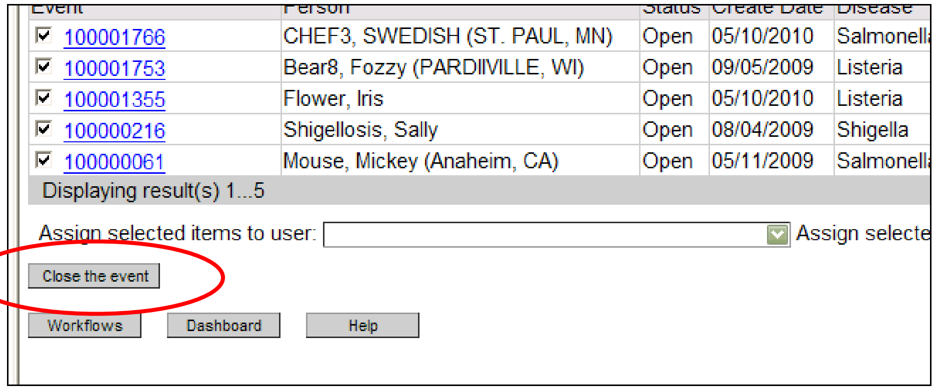
6. If the bulk action applies to all listed event, click on Select All.

NOTE

Using the Select All function will only check the boxes on the current page, so if

	the workflow has more than one page, uses will need to repeat the bulk action.

7. Click on the Bulk Action.



8. The user will then be brought back to the Workflow Queues page. If the user goes back into the specific workflow, the cases that were selected will be removed (if that bulk action was a trigger to move the case).

	IMPORTANT Be careful when you use bulk actions that change information in the selected cases. If a bulk action is used to change information for the case, the only way to re-do the change is to manually go into the cases and change the field back.

Workflows — Task Specific Workflows

The Task specific workflows have tasks listed instead of events. The tasks are either event assignments, event related tasks or non-event related tasks. Examples of task specific workflows are:

My Open Tasks	All tasks (both event related and non-event tasks) created in the system that has been assigned to the user.
My Overdue Tasks	All tasks (both event related and non-event tasks) created in the system and assigned to the user and where the due date is in the past.
Open Tasks created by me	All tasks (both event related and non-event tasks) created by the user in the system. This will include tasks created by the user and assigned to someone else.

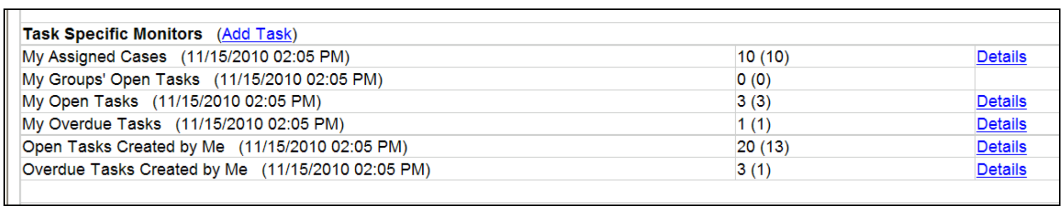
My Assigned events All tasks that has been created by the system during event assignments. The workflow My assigned events will have one task for each event assigned to the user.

IMPORTANT

The task specific monitors will include both created tasks and events assigned to users using the workflows.

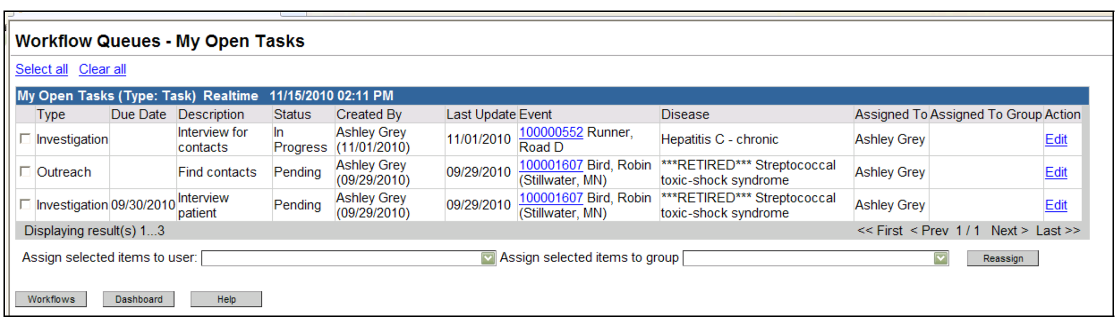
To access a task specific workflow, follow the steps below:

1. From the dashboard open the workflow queues by clicking on the workflow icon in the toolbar.
2. At the bottom of the page, locate the heading Task Specific Monitors.



Task Specific Monitors (Add Task)		
My Assigned Cases (11/15/2010 02:05 PM)	10 (10)	Details
My Groups' Open Tasks (11/15/2010 02:05 PM)	0 (0)	
My Open Tasks (11/15/2010 02:05 PM)	3 (3)	Details
My Overdue Tasks (11/15/2010 02:05 PM)	1 (1)	Details
Open Tasks Created by Me (11/15/2010 02:05 PM)	20 (13)	Details
Overdue Tasks Created by Me (11/15/2010 02:05 PM)	3 (1)	Details

3. Click **Details** next to the workflow that needs to be opened.



Workflow Queues - My Open Tasks

Select all Clear all

My Open Tasks (Type: Task) Realtime 11/15/2010 02:11 PM

Type	Due Date	Description	Status	Created By	Last Update	Event	Disease	Assigned To	Assigned To Group	Action
Investigation		Interview for contacts	In Progress	Ashley Grey (11/01/2010)	11/01/2010	100000552 Runner, Road D	Hepatitis C - chronic	Ashley Grey		Edit
Outreach		Find contacts	Pending	Ashley Grey (09/29/2010)	09/29/2010	100001607 Bird, Robin (Stillwater, MN)	***RETIRED*** Streptococcal toxic-shock syndrome	Ashley Grey		Edit
Investigation	09/30/2010	Interview patient	Pending	Ashley Grey (09/29/2010)	09/29/2010	100001607 Bird, Robin (Stillwater, MN)	***RETIRED*** Streptococcal toxic-shock syndrome	Ashley Grey		Edit

Displaying result(s) 1...3 << First < Prev 1 / 1 Next > Last >>

Assign selected items to user: Assign selected items to group Reassign

Workflows Dashboard Help

The columns for the task workflow are described below:

Type This is the type of task. All assignment tasks will be located in My Assigned Cases workflow but all other types of tasks will be in My Open Tasks workflow.

Due Date This is the date the task is due to be completed by.

Description This is a short description of the task given by the creator or the name of the workflow (if assigned from the workflow).

Status This is the status of the task: Pending, In progress or Completed.

Created By This is the user who created or assigned the task.

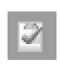
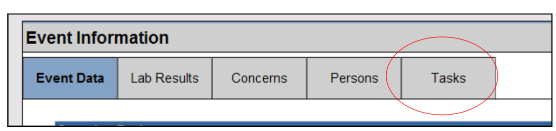
Last Update	The date the task was last updated.
Event	The event (name, city and state) the task is associated with. If the task was not tied to a specific event, the event column will indicate that.
Disease	What disease the event is tied to.
Assigned To	The user the task is assigned to (this should be the user logged into MEDSS.
Assigned To Group	The group the task is assigned to.
Action	This column has a link that the user can use to edit the task, including changing due dates, assigned to name and status.

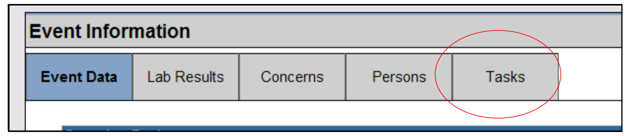
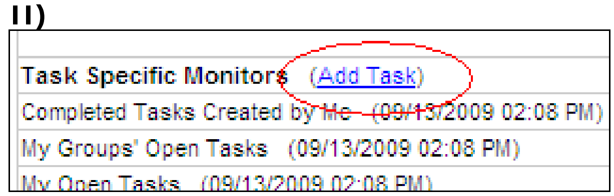
4. Once in the workflow, users can work on the task by opening the event by clicking the event ID.
5. If work is completed on the task, users can click on **Edit** in the right action column to change the status of the task to complete.

More information on tasks and how to add, edit or delete them is in the next section.

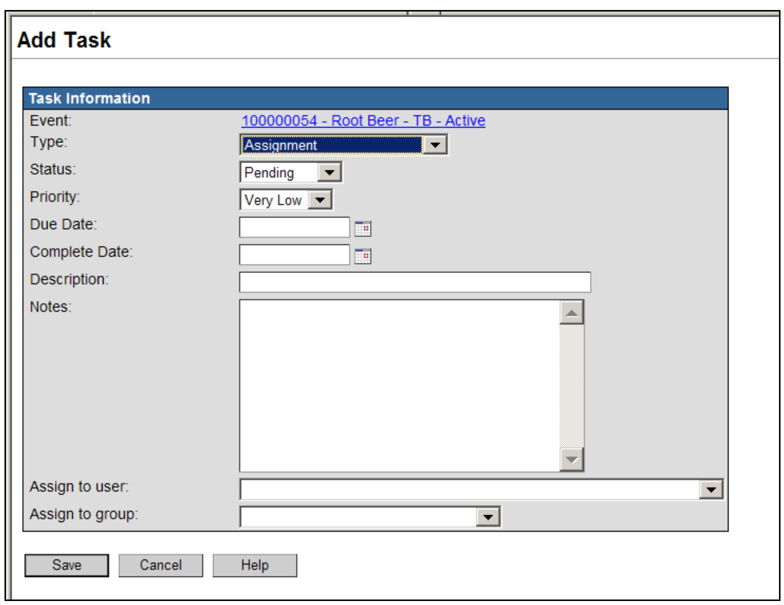
Tasks (Overview)

A task within MEDSS is a technique for users to delegate assignments or work to others. There are two different types of tasks in the system: event assignments or action tasks (both associated with an event and non-event specific). There are multiple places in the system where tasks can be created and depending on where the task is created, different types of tasks will be created. The table below has more information on all three types of tasks.

Task Type	Description	Created from
Event assignment	Tasks used to track when events have been assigned to specific users or groups of users. When an event is assigned from any workflow an event task is always created.	**I)** created automatically when events are assigned from Workflows. **II)**  From the **Task** icon in the MEDSS toolbar – **Add Event task** has to be selected when creating the task and assignment should be selected as the type.  **III)** From the **Tasks tab** in the event information section on the dashboard – assignment has to be selected as the type.
Action task, associated with an event	Tasks for assigning action items related to a specific event. **Examples** are a reminder to update the persons' medications	**I)**  From the **Task icon** in the MEDSS toolbar – **Add Event task** has to be selected when creating the task.

	after a specific date, to review the event data for completeness after a period of time or to contact a patient for an interview.	**II)**  From the **Tasks tab** in the event information section on the dashboard.
Action task, non-event specific	Tasks for assigning action items that are not related to a specific event. **Examples** are a reminder to review all closed cases or to run a report on a specific date. Another example would be to create a reminder for someone to review lab results for all salmonella cases received recently and check for similarities.	**I)**  From the **Task** icon in the MEDSS toolbar – **Add task** has to be selected when creating the task. **II)**  Using the **Add task** link in the workflow queues.

Regardless of where the tasks are created, the **Add Task** screen is being used. The fields in this screen are described below.



Event The Event ID, Full Name, and Disease to which a task is to be associated. (This will not appear if the task is not specific to an event; instead the user will see "Not specific to a case.")

Type The type of task: assignment, outreach, directly observed therapy, business rule, other.

Status	The status of the task. The status will be Pending by default when a task is first assigned. The statuses include Pending, In Progress, and Resolved.
Priority	Assigns a specific priority to the case. (Very High, High, Medium, Low, Very Low)
Due Date	The date by which the task is to be completed.
Complete Date	The date entered by the user completing the task; indicating the completion date of the task.
Description	Describes briefly the task to be accomplished.
Notes	Further notes regarding the task to be completed.
Assign to user	A dropdown list of users on MEDSS system.
Assign to group	A dropdown list of groups on MEDSS system.

Assigning Events (Event assignment tasks)

Sometimes it's useful to be able to assign events to other users or groups, for example when another jurisdiction is being asked to gather information for an event (such as a contact) or an event is assigned to another group for follow-up.

Assigning tasks can help manage workloads, but a user can only assign an event to another user who has permission to view the event. If the user tries to assign an event to someone who does not have permission to view the event, the event will not be assigned and the user will see a note at the top of the screen indicating the following:

"Warning: The group selected does not have access to at least one of the selected cases."

If the event is not visible by the user or group to whom the event is being assigned, it will need to be shared (more on sharing in Chapter 11 – Sharing Events).

When events are assigned to users or groups from workflows, the system automatically creates assignment tasks to track the assignment. It is also possible to assign events using the Task tab in the event.

NOTE

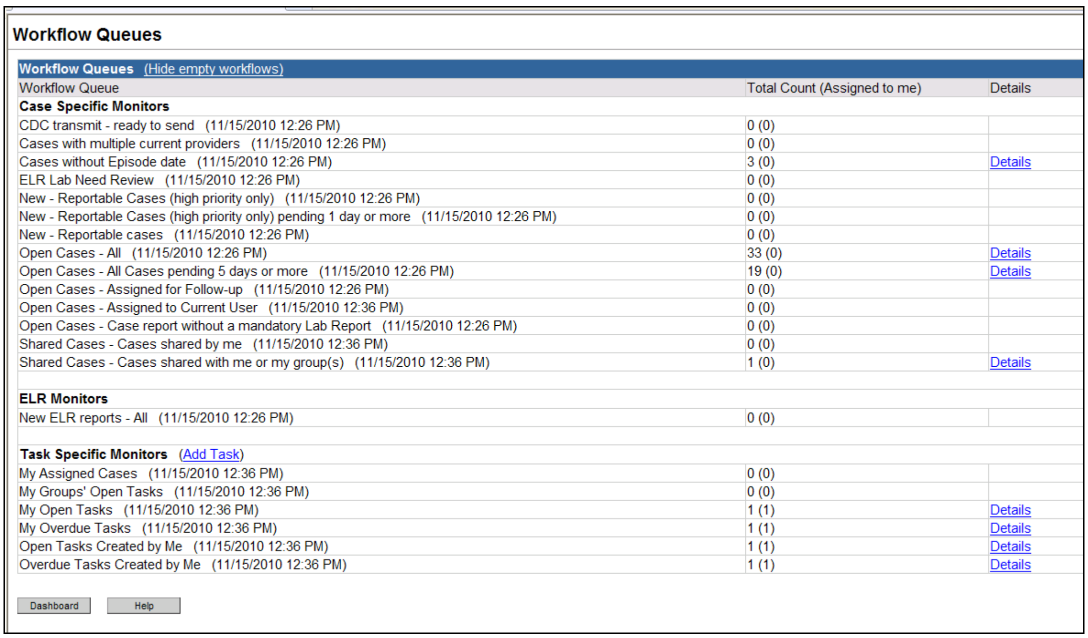
When assigning an event in the workflow queue, it's important to recognize that the event will also be assigned to that user or group if the same event is listed in other workflow queues.

Assigning Events from Workflows

With a workflow open, users have the option to assign an event to individual users or to an entire group. This will create an assignment task. Assigning events from the workflow do not remove the event from the workflow, but place the event in the users' **My Assigned Cases** workflow. Note that assigned users currently will not receive an email notification for assigning tasks this way and will only know of the new assignment by monitoring their individual workflow.

To assign an event from the workflow, follow the steps below:

1. Open the Workflow Queues by clicking the workflow icon in the MEDSS toolbar.



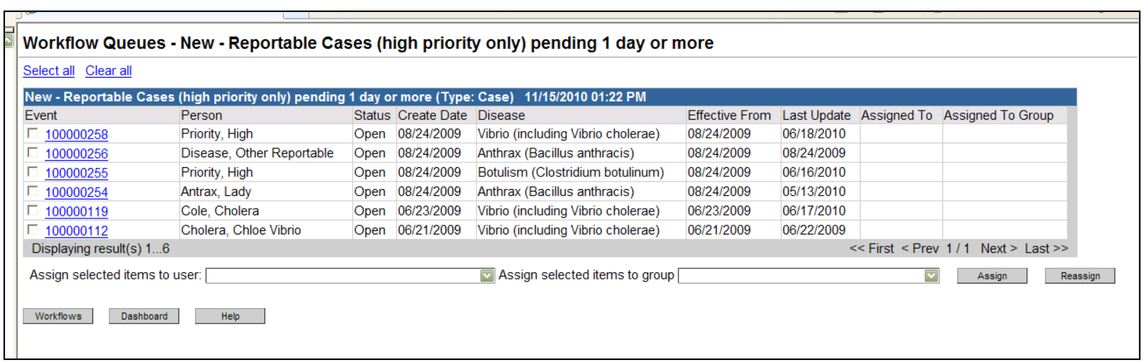
Workflow Queues

Workflow Queues (Hide empty workflows)

Workflow Queue	Total Count (Assigned to me)	Details
Case Specific Monitors		
CDC transmit - ready to send (11/15/2010 12:26 PM)	0 (0)	
Cases with multiple current providers (11/15/2010 12:26 PM)	0 (0)	
Cases without Episode date (11/15/2010 12:26 PM)	3 (0)	Details
ELR Lab Need Review (11/15/2010 12:26 PM)	0 (0)	
New - Reportable Cases (high priority only) (11/15/2010 12:26 PM)	0 (0)	
New - Reportable Cases (high priority only) pending 1 day or more (11/15/2010 12:26 PM)	0 (0)	
New - Reportable cases (11/15/2010 12:26 PM)	0 (0)	
Open Cases - All (11/15/2010 12:26 PM)	33 (0)	Details
Open Cases - All Cases pending 5 days or more (11/15/2010 12:26 PM)	19 (0)	Details
Open Cases - Assigned for Follow-up (11/15/2010 12:26 PM)	0 (0)	
Open Cases - Assigned to Current User (11/15/2010 12:36 PM)	0 (0)	
Open Cases - Case report without a mandatory Lab Report (11/15/2010 12:26 PM)	0 (0)	
Shared Cases - Cases shared by me (11/15/2010 12:36 PM)	0 (0)	
Shared Cases - Cases shared with me or my group(s) (11/15/2010 12:36 PM)	1 (0)	Details
ELR Monitors		
New ELR reports - All (11/15/2010 12:26 PM)	0 (0)	
Task Specific Monitors (Add Task)		
My Assigned Cases (11/15/2010 12:36 PM)	0 (0)	
My Groups' Open Tasks (11/15/2010 12:36 PM)	0 (0)	
My Open Tasks (11/15/2010 12:36 PM)	1 (1)	Details
My Overdue Tasks (11/15/2010 12:36 PM)	1 (1)	Details
Open Tasks Created by Me (11/15/2010 12:36 PM)	1 (1)	Details
Overdue Tasks Created by Me (11/15/2010 12:36 PM)	1 (1)	Details

Dashboard Help

2. Open the specific workflow by clicking the name or the **Details** link on the right.



Workflow Queues - New - Reportable Cases (high priority only) pending 1 day or more

Select all Clear all

New - Reportable Cases (high priority only) pending 1 day or more (Type: Case) 11/15/2010 01:22 PM

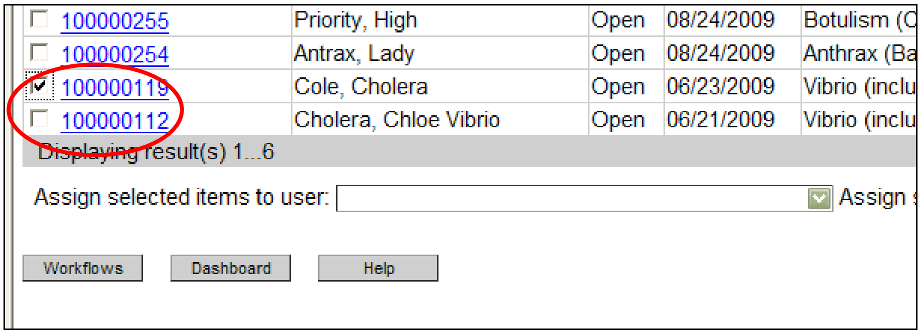
Event	Person	Status	Create Date	Disease	Effective From	Last Update	Assigned To	Assigned To Group
100000258	Priority, High	Open	08/24/2009	Vibrio (including Vibrio cholerae)	08/24/2009	06/18/2010		
100000256	Disease, Other Reportable	Open	08/24/2009	Anthrax (Bacillus anthracis)	08/24/2009	08/24/2009		
100000255	Priority, High	Open	08/24/2009	Botulism (Clostridium botulinum)	08/24/2009	06/16/2010		
100000254	Antrax, Lady	Open	08/24/2009	Anthrax (Bacillus anthracis)	08/24/2009	05/13/2010		
100000119	Cole, Cholera	Open	06/23/2009	Vibrio (including Vibrio cholerae)	06/23/2009	06/17/2010		
100000112	Cholera, Chloe Vibrio	Open	06/21/2009	Vibrio (including Vibrio cholerae)	06/21/2009	06/22/2009		

Displaying result(s) 1...6 << First < Prev 1 / 1 Next > Last >>

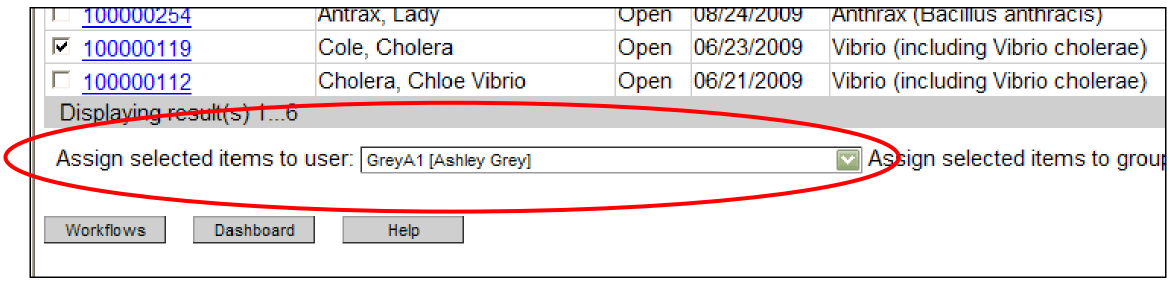
Assign selected items to user: Assign selected items to group Assign Reassign

Workflows Dashboard Help

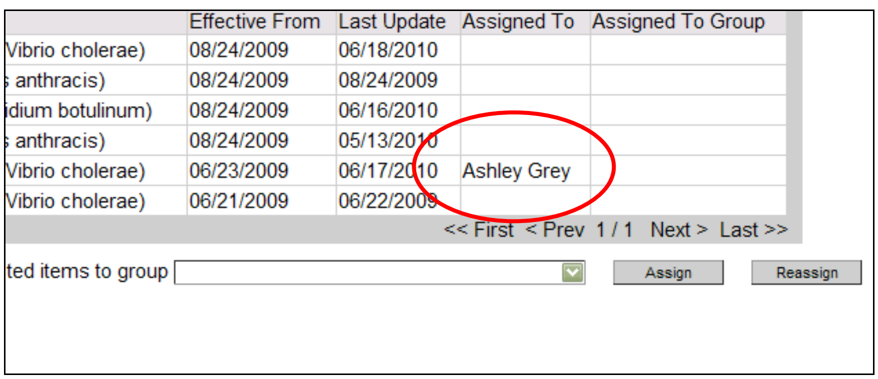
3. Located the event and click on the box to the left of the event ID.



4. Choose the name or group from the dropdown list.



5. Click on **Assign**. The name of the person or group will be automatically updated in the **Assigned To** column.

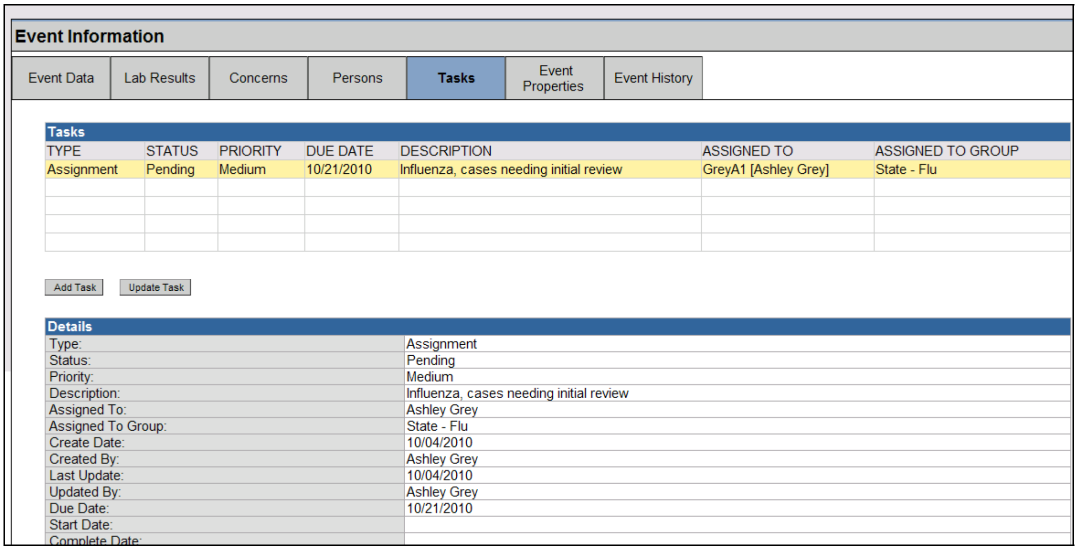


6. Once the event has been assigned, users can change that assignment by clicking the **Reassign** button.

IMPORTANT

It's recommended that assignments are made to groups instead of individuals; this will allow for anyone in the receiving group to pick-up the event and complete the work in case responsibilities or staffing is changed.

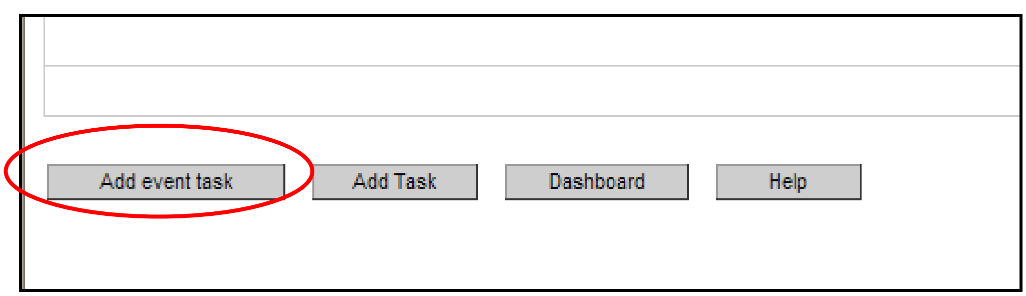
7. On the dashboard for the assigned event, the task will automatically be added to the task list for the event. This can also be viewed on the event's dashboard under the Tasks tab on the Event Summary section.



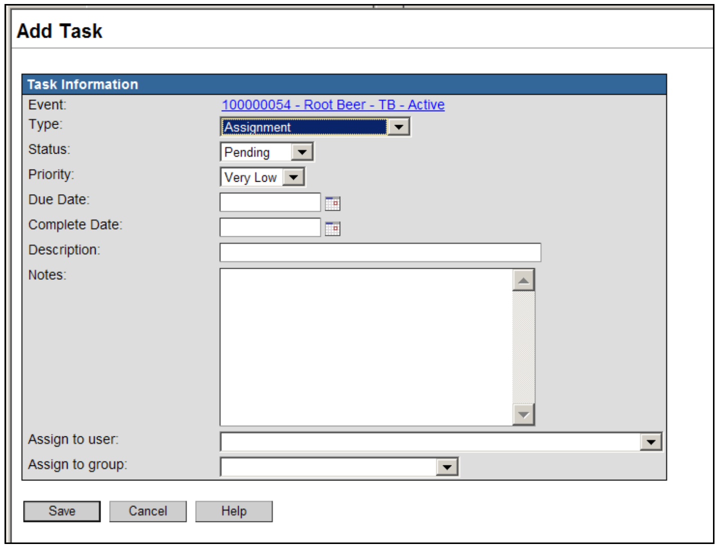
	NOTE If you assign the event to an individual from the workflow, the event will only show up on this person's **My Assigned Cases** workflow, but if you assign it to a group, all individuals will see the event in workflow **My Groups' Open Tasks**.

Assigning Events from the Toolbar

1. First open the event in the MEDSS dashboard.
2. Click the **Tasks** icon in the MEDSS toolbar.
3. The **Tasks** screen will display the tasks for the selected event in the top section and tasks for the user on the bottom. To create a new task, click the button that says **Add Event Task**.



4. You will be brought to the **Add Task** screen.



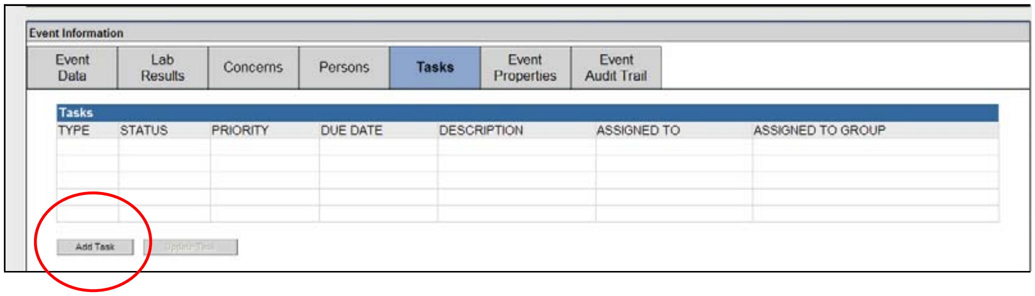
5. Select **Assignment** in the **Type** field using the dropdown list.
6. Select the **Status** of the task. The default status is **Pending** since the user is creating the case. If it should be something other than Pending, select the appropriate option from the list.
7. Select the **Priority** of the task and if necessary, set the **Due Date** of the task.
8. Enter a brief but concise **Description** of the task to be done so that the assignee has a clear understanding of what is to be done. Add notes to clarify if necessary.
9. **Assign** to a user or group from the appropriate dropdown list.
10. Click the **Save** button. The user will be brought back to the dashboard for the open event.
11. This event assignment will be located in the assigned user's **My Assigned Cases** workflow.

NOTE

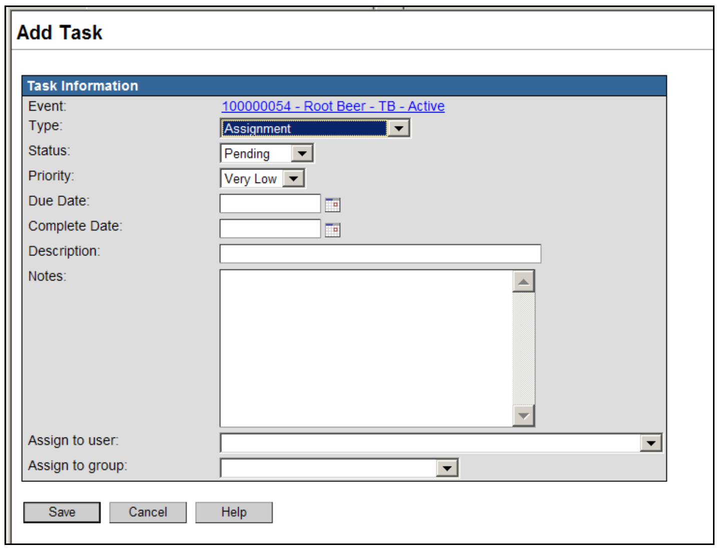
When creating tasks (both assignment and action tasks) from the Tasks tab on the dashboard or the Tasks icon in the toolbar, an email notification of that task will be sent to the assignee. If any changes are made to the task, the creator will receive an email notification.

Assigning an Event from the Task tab

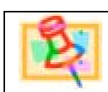
1. First open the event in the MEDSS dashboard.
2. Under the Event Information section, click on the **Tasks tab** followed by the '**Add Task**' button.



3. The **Add Task** screen will be opened.



4. Select **Assignment** in the **Type** field.
5. Select the **Status** of the task. The default status is Pending since the user is creating the case. If the status should be something different, select the appropriate option from the list.
6. Select the **Priority** of the task and if necessary, set the **Due Date** of the task.
7. Enter a brief but concise **Description** of the task to be done so that the assignee has a clear understanding of what is to be done. Add notes to clarify if necessary.
8. **Assign** to a user or group from the appropriate dropdown list.
9. Click the **Save** button. The user will be brought back to the dashboard for the open event.



NOTE

When the task is completed, it will remain under the **Tasks tab** on the event summary, but it will no longer be listed under the user's task lists on the toolbar or under the workflow queue **My Assigned Cases**.

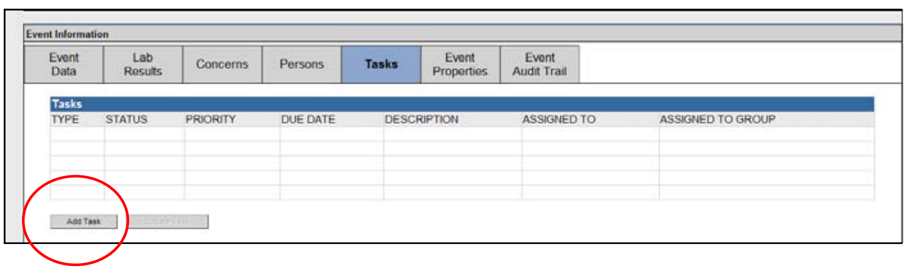
Create and Assign an Action Task for an Event

It is important to note that action tasks can be associated with or not be associated with a specific event. There are two ways to create and assign if associated with an event or not associated with an event. The steps to create either type of task are virtually the same. Follow the procedures outlined below for the different ways to create both event specific tasks and event non-specific tasks.

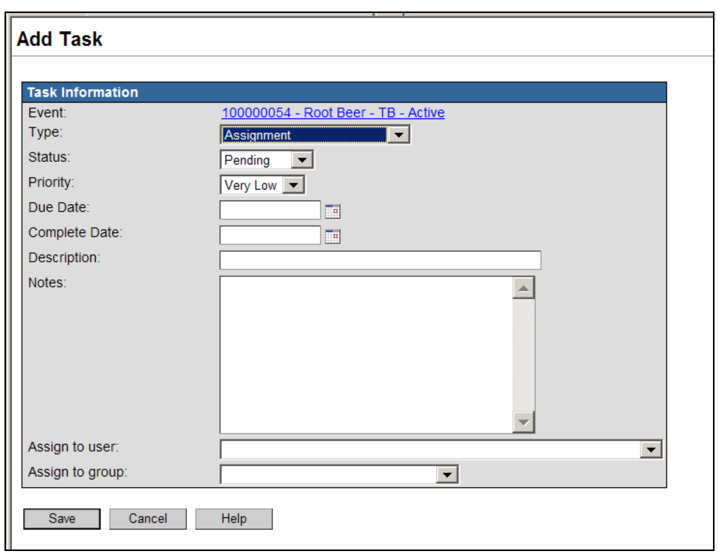
Tip	**TIP** Users will be notified by email when an action task has been assigned to them. Both creator and assignee will receive emails when tasks have been updated.

Create an Event Specific Task from the Task tab

1. If it is necessary to create a task specific to an event, first open the event in the MEDSS dashboard.
2. Under the Event Information section, click on the **Tasks tab** and click on the **Add Task** button.



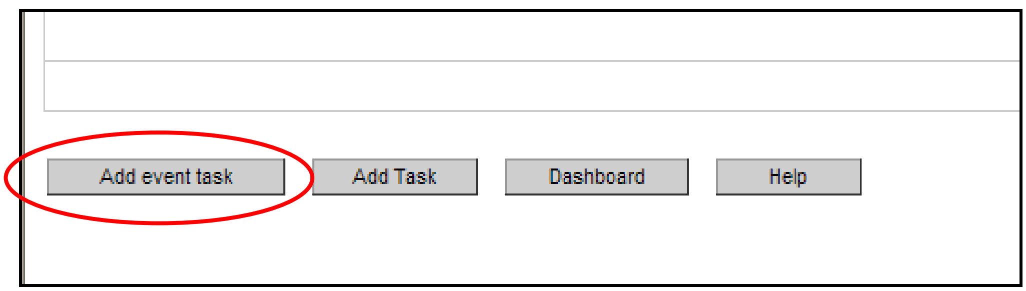
3. You will be brought to the **Add Task** screen.



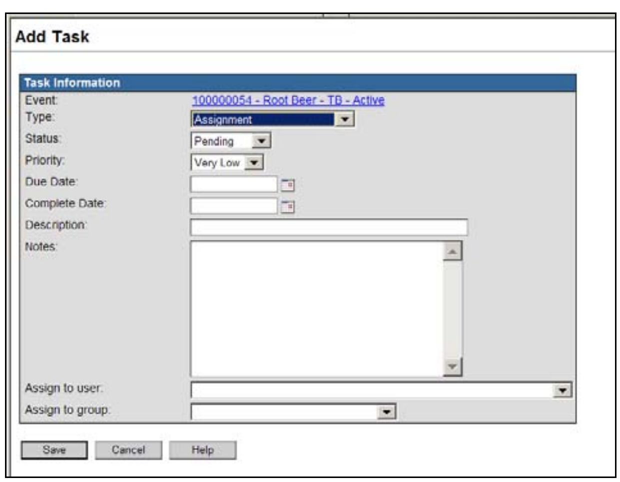
4. Select the **Type of Task** from the dropdown list. Select one of the options other than 'Assignment' since this type "Assignment" is used to assign the entire event to a user. It is recommended to only use this type for that reason (for more information about event assignment see previous section in this chapter).
5. Select the **Status** of the task. The default status is Pending, but if it should be something other than Pending, select the appropriate option from the list.
6. Select the **Priority** of the task and if necessary, set the **Due Date** of the task.
7. Enter a brief but concise **Description** of the task to be done so that the assignee has a clear understanding of what is to be done. Add notes to clarify if necessary.
8. **Assign** to a user or group from the appropriate dropdown list.
9. Click the **Save** button. The user will be brought back to the dashboard for the open event.

Create an Event Specific Task from the Toolbar

1. The other way to create an event specific task is to click the **Tasks** icon  in the MEDSS toolbar.
2. The **Tasks** screen will display the tasks for the selected event in the top section and tasks for the user on the bottom. To create a new tasks click the button that says **Add Event Task**.



3. This will open the same **Add Task** screen shown above.



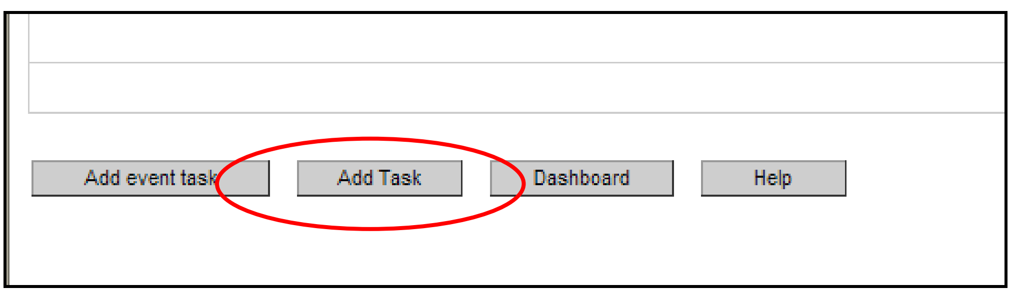
4. Select the **Type of Task** from the dropdown list. Select one of the options other than 'Assignment' since this type "Assignment" is used to assign the entire event to a user. It is recommended to only use this type for that reason (for more information about event assignment see previous section in this chapter).
5. Select the **Status** of the task. The default status is Pending, but if it should be something other than Pending, select the appropriate option from the list.
6. Select the **Priority** of the task and if necessary, set the **Due Date** of the task.
7. Enter a brief but concise **Description** of the task to be done so that the assignee has a clear understanding of what is to be done. Add notes to clarify if necessary.
8. **Assign** to a user or group from the appropriate dropdown list.
9. Click the **Save** button. The user will be brought back to the dashboard for the open event.

Create and Assign a Non-event Specific Task

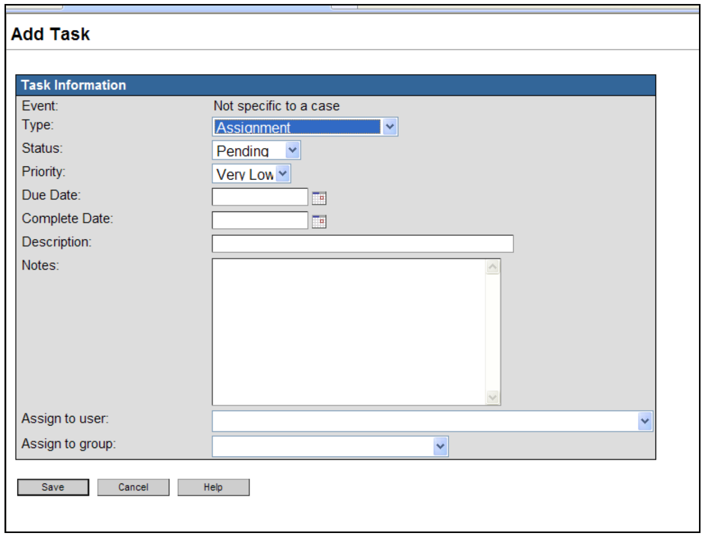
Remember event specific tasks will be associated with a specific disease event and relate to some part of that event, but non-event specific tasks are more general and can relate to a group of events.

Create a Non-event Specific Task from the toolbar

1. One way to create a non-event specific task is to click the **Tasks** icon  in the MEDSS toolbar.
2. The **Tasks** screen will display the tasks for the selected event in the top section and tasks for the user on the bottom. To create a new task not tied to an event, click the button that says **Add Task**.



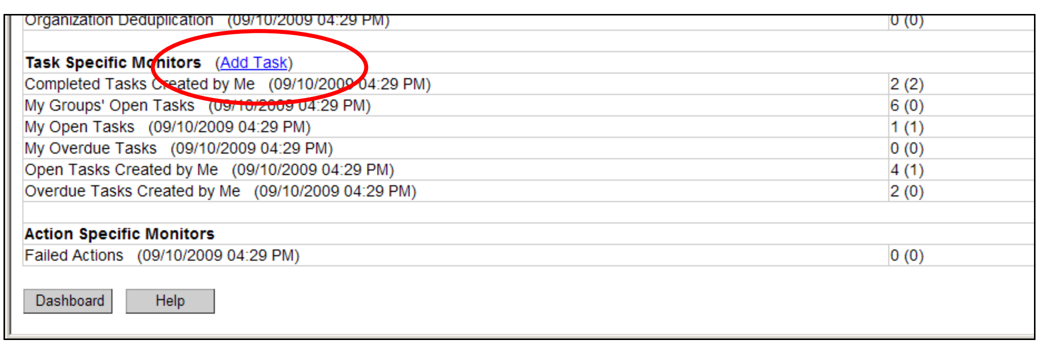
3. This will open the **Add Task** screen described earlier. Please note that for event, it should say "Not specific to a case".



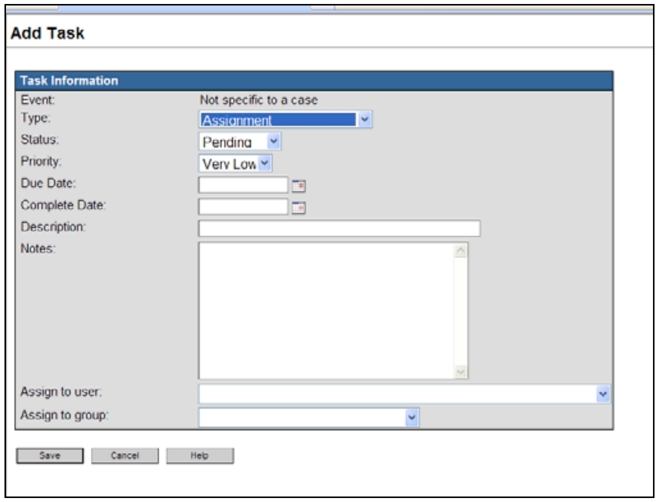
4. Select the **Type of Task** from the dropdown list. Select one of the options other than 'Assignment' since the type 'Assignment' is used to assign the entire event to a user. It is recommended to only use this type for that reason (for more information about event assignment see previous section in this chapter).
5. Select the **Status** of the task. The default status is Pending since the user is creating the case. If it should be something other than Pending, select the appropriate option from the list.
6. Select the **Priority** of the task and if necessary, set the **Due Date** of the task.
7. Enter a brief but concise **Description** of the task to be done so that the assignee has a clear understanding of what is to be done. Add notes to clarify if necessary.
8. **Assign** to a user or group from the appropriate dropdown list.
9. Click the **Save** button. The user will be brought back to the dashboard for the open event.

Create a Non-event Specific Task from the Workflows

1. Click the **Workflow Queues** button  from MEDSS toolbar.
2. Beside Task Specific Monitors, click the **Add Task** link.



3. Clicking this link brings up a screen similar to the Add Task screen above, except for event, it says "Not Specific to a case".



4. Select the **Type of Task** from the dropdown list. Select one of the options other than 'Assignment' since this type "Assignment" is used to assign the entire event to a user. It is recommended to only use this type for that reason (for more information about event assignment see previous section in this chapter).
5. Select the **Status** of the task. The default status is Pending. If it should be something other than Pending, select the appropriate option from the list.
6. Select the **Priority** of the task and if necessary, set the **Due Date** of the task.
7. Enter a brief but concise **Description** of the task to be done so that the assignee has a clear understanding of what is to be done. Add notes to clarify if necessary.
8. **Assign** to a user or group from the appropriate dropdown list.
9. Click the **Save** button. The user will be brought back to the dashboard for the open event.

Working on and Completing Tasks

Task information provided on the **Tasks** screen which is accessed via the **Tasks** icon from the toolbar is different than the task information on the **Workflow Queues** screen.

The Tasks screen (accessed from the toolbar) displays tasks which are specific to the event that is currently open in the dashboard – regardless of whom the task is assigned. Additionally, on the Tasks screen all tasks which are assigned to the current user – regardless of which event they are assigned – will also display.

The task information on the Workflow Queues screen is displayed in several queues within the Task Specific Monitors. The queues displayed on this screen are as follows:

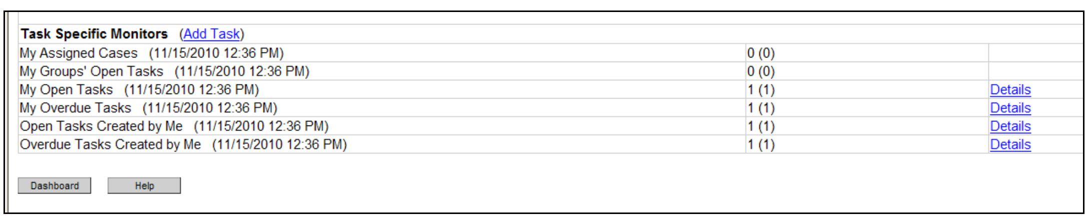
My Assigned Cases	Displays all events that have been assigned to the user. These are tasks with the "Assignment" task type.

My Groups' Open Tasks	Displays a list of tasks that have been assigned to any group or groups of which the user is a part.
My Open Tasks	Displays a list of open tasks that have been specifically assigned to the user. These are event specific and non-event specific tasks.
My Overdue Tasks	Displays a list of the tasks which have been assigned to the user which are past their due date.
Open Tasks Created by Me	Incomplete tasks that have been created by the user.
Overdue Tasks Created by Me	Incomplete tasks that have been created by the user which are past due.

Given that there are two ways to access task information, the steps to complete a task in both locations are discussed below.

Updating Tasks from the Workflow Queue

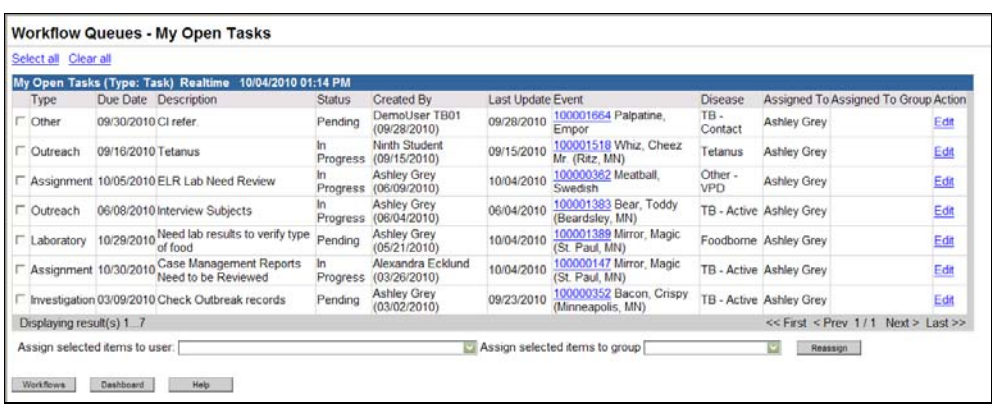
1. After logging into MEDSS, click the **Workflows** icon  in the MEDSS toolbar on the dashboard.
2. Observe the tasks that are listed in the **Task Specific Monitors**.



Task Specific Monitors (Add Task)		
My Assigned Cases (11/15/2010 12:36 PM)	0 (0)	
My Groups' Open Tasks (11/15/2010 12:36 PM)	0 (0)	
My Open Tasks (11/15/2010 12:36 PM)	1 (1)	Details
My Overdue Tasks (11/15/2010 12:36 PM)	1 (1)	Details
Open Tasks Created by Me (11/15/2010 12:36 PM)	1 (1)	Details
Overdue Tasks Created by Me (11/15/2010 12:36 PM)	1 (1)	Details

Dashboard Help

3. Click the **Details** link in the workflow that you would like to open.



Workflow Queues - My Open Tasks

Select all Clear all

My Open Tasks (Type: Task) Realtime 10/04/2010 01:14 PM

Type	Due Date	Description	Status	Created By	Last Update	Event	Disease	Assigned To	Assigned To Group	Action
Other	09/30/2010	CI refer.	Pending	DemoUser TB01 (09/28/2010)	09/28/2010	100001664 Palpatine, Empor	TB - Contact	Ashley Grey		Edit
Outreach	09/16/2010	Tetanus	In Progress	Ninth Student (09/15/2010)	09/15/2010	100001518 Whiz, Cheez Mr. (Ritz, MN)	Tetanus	Ashley Grey		Edit
Assignment	10/05/2010	ELR Lab Need Review	In Progress	Ashley Grey (06/09/2010)	10/04/2010	100000362 Meatball, Swedish	Other - VPD	Ashley Grey		Edit
Outreach	06/08/2010	Interview Subjects	In Progress	Ashley Grey (06/04/2010)	06/04/2010	100001383 Bear, Toddy (Beardsley, MN)	TB - Active	Ashley Grey		Edit
Laboratory	10/29/2010	Need lab results to verify type of food	Pending	Ashley Grey (05/21/2010)	10/04/2010	100001389 Mirror, Magic (St. Paul, MN)	Foodborne	Ashley Grey		Edit
Assignment	10/30/2010	Case Management Reports Need to be Reviewed	In Progress	Alexandra Ecklund (03/26/2010)	10/04/2010	100000147 Mirror, Magic (St. Paul, MN)	TB - Active	Ashley Grey		Edit
Investigation	03/09/2010	Check Outbreak records	Pending	Ashley Grey (03/02/2010)	09/23/2010	100000352 Bacon, Crispy (Minneapolis, MN)	TB - Active	Ashley Grey		Edit

Displaying result(s) 1...7 << First < Prev 1 / 1 Next > Last >>

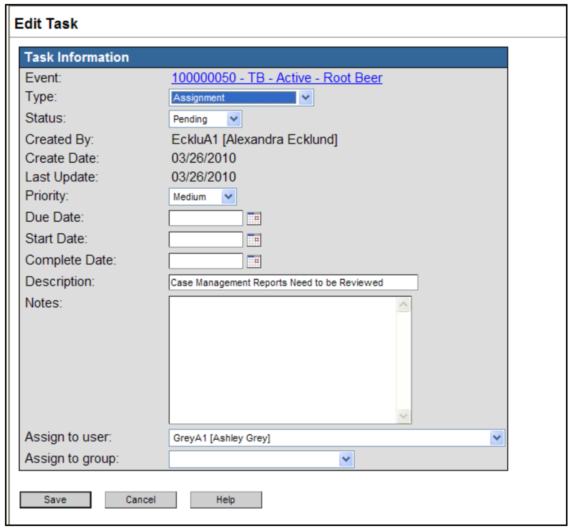
Assign selected items to user: Assign selected items to group Reassign

Workflows Dashboard Help

TIP

If it is necessary to reassign a task, check the box to the left of the specific task and select the appropriate username or group in the dropdown box and click **Reassign**.

4. Click the **Edit** link for the Tasks you want to update and the **Edit Task** screen will show.



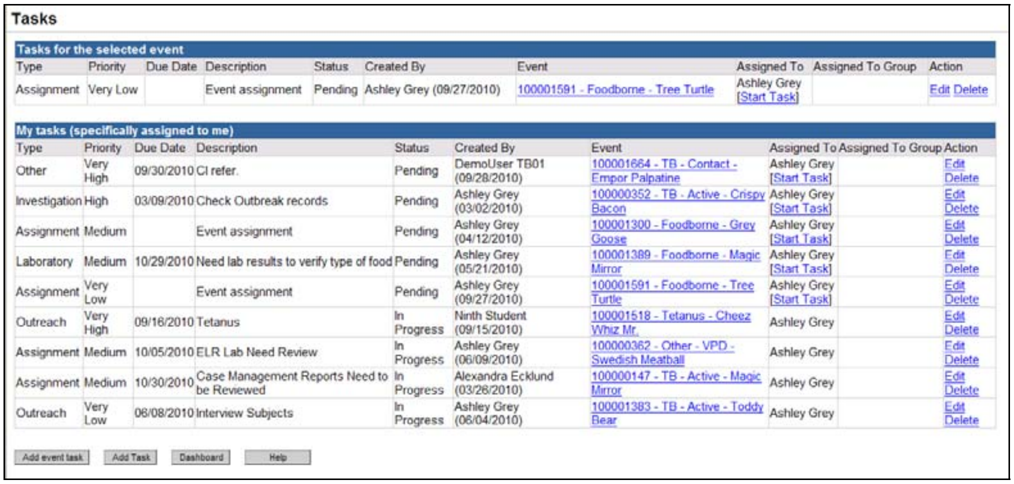
5. Click the **Status** dropdown to select the new status of the task. If the work is not yet completed choose **In Progress** and enter a start date. If the task is complete select **Completed** and enter the **Complete Date**.
6. Click **Save**. This action saves the new status so that the user who assigned the task will see that it's been started or completed.

NOTE

When you have successfully completed a task, it is important to set the status to "completed" and also include a complete date. This will remove the task from your individual workflow, but will remain as a completed task for the specific event in the Task Tab.

Updating Tasks from the Toolbar Tasks Icon

1. To update a task from the dashboard, first click the **Tasks** icon in the toolbar.
2. Review the tasks listed in the table.



Tasks

Tasks for the selected event

Type	Priority	Due Date	Description	Status	Created By	Event	Assigned To	Assigned To Group	Action
Assignment	Very Low		Event assignment	Pending	Ashley Grey (09/27/2010)	100001591 - Foodborne - Tree Turtle	Ashley Grey [Start Task]		Edit Delete

My tasks (specifically assigned to me)

Type	Priority	Due Date	Description	Status	Created By	Event	Assigned To	Assigned To Group	Action
Other	Very High	09/30/2010	CI refer.	Pending	DemoUser TB01 (09/28/2010)	100001664 - TB - Contact - Empor Palpatine	Ashley Grey [Start Task]		Edit Delete
Investigation	High	03/09/2010	Check Outbreak records	Pending	Ashley Grey (03/02/2010)	100000352 - TB - Active - Crispy Bacon	Ashley Grey [Start Task]		Edit Delete
Assignment	Medium		Event assignment	Pending	Ashley Grey (04/12/2010)	100001300 - Foodborne - Grey Goose	Ashley Grey [Start Task]		Edit Delete
Laboratory	Medium	10/29/2010	Need lab results to verify type of food	Pending	Ashley Grey (05/21/2010)	100001389 - Foodborne - Magic Mirror	Ashley Grey [Start Task]		Edit Delete
Assignment	Very Low		Event assignment	Pending	Ashley Grey (09/27/2010)	100001591 - Foodborne - Tree Turtle	Ashley Grey [Start Task]		Edit Delete
Outreach	Very High	09/16/2010	Tetanus	In Progress	Ninth Student (09/15/2010)	100001518 - Tetanus - Cheez Whiz Mr.	Ashley Grey		Edit Delete
Assignment	Medium	10/05/2010	ELR Lab Need Review	In Progress	Ashley Grey (06/09/2010)	100000362 - Other - VPD - Swedish Meatball	Ashley Grey		Edit Delete
Assignment	Medium	10/30/2010	Case Management Reports Need to be Reviewed	In Progress	Alexandra Ecklund (03/26/2010)	100000147 - TB - Active - Magic Mirror	Ashley Grey		Edit Delete
Outreach	Very Low	06/08/2010	Interview Subjects	In Progress	Ashley Grey (06/04/2010)	100001383 - TB - Active - Toddy Bear	Ashley Grey		Edit Delete

Add event task | Add Task | Dashboard | Help

Below is the description for the different columns:

Priority The priority that was assigned to the event.

Type Describes the type of task selected by the creator of the task.

Event ID The Event ID of a specific case, if the task is not tied to a specific Event, "Not specific to a case" will display.

Task Click the link within this column to update the status of the task, to reassign the task to another person or group, or to read any notes associated with the task.

Due Date The date by which this task should be completed. This is decided upon by the user creating the event.

Description The description of the given task.

Status The status of the task. The status will be pending when a task is first assigned.

Disease The disease being reporting upon in the given event. This will be blank if the task is not tied to an event.

Created by The user who created the task.

Last update The last time the task was updated.

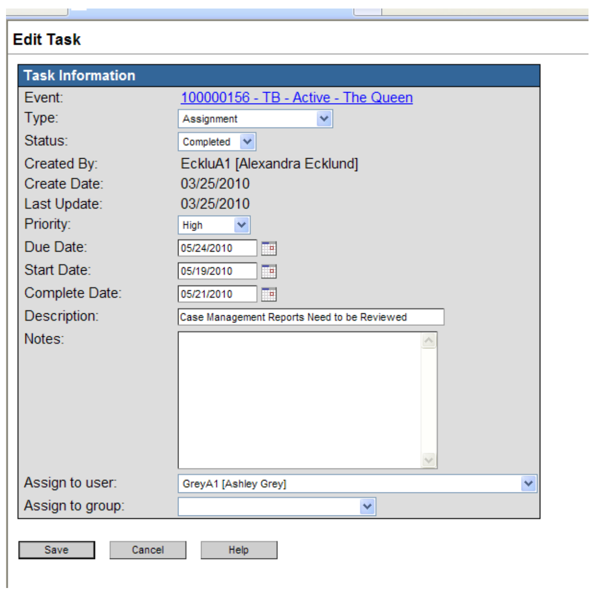
Assigned to The person to whom the task is assigned. (May be blank if not assigned to an individual.)

Assigned to group The group to whom the task is assigned. (May be blank if not assigned to a group.)

NOTE

The list of tasks on the Tasks screen or the Tasks tab are organized based on type, priority and due date criteria and whether the task is pending, in progress or completed.

3. From the tasks screen, users can click the **Start Task** link and the start date will automatically be entered and the status will be updated.
4. To update a task manually, click **Edit** on the appropriate task to open the **Edit Task** screen.



5. The fields can be updated. To close the task, set the status to complete and enter a complete date.
6. When finished, click **Save**. This action saves the new status so that the user who assigned the task will see that it has been completed.

NOTE

When creating events and a user is unknown, assign to a group so all users receive the email of the event assignment. When possible it is better to assign to a group rather than to an individual.

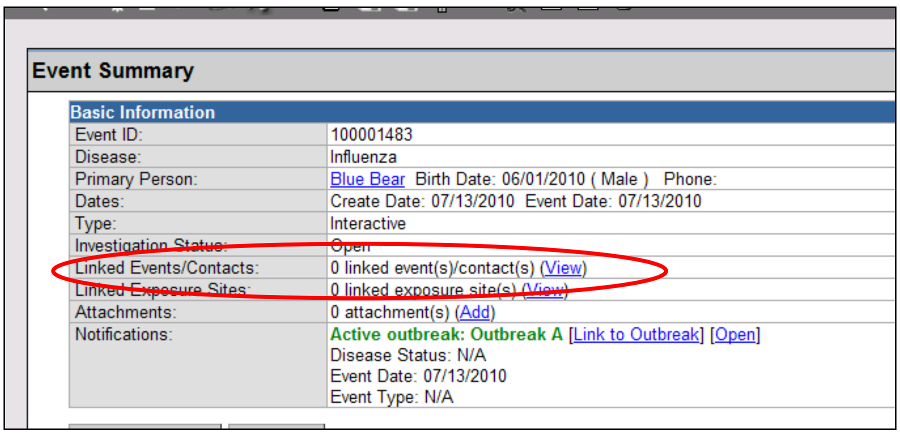
CHAPTER 9: LINKING PERSONS AND EVENTS

MEDSS allows both people and events to be linked. These links can help with investigations by defining who the contacts are or can serve as social relationships to give households or guardian information. In addition, these links may provide more information to aid in the overall investigations and help define if outbreaks have occurred.

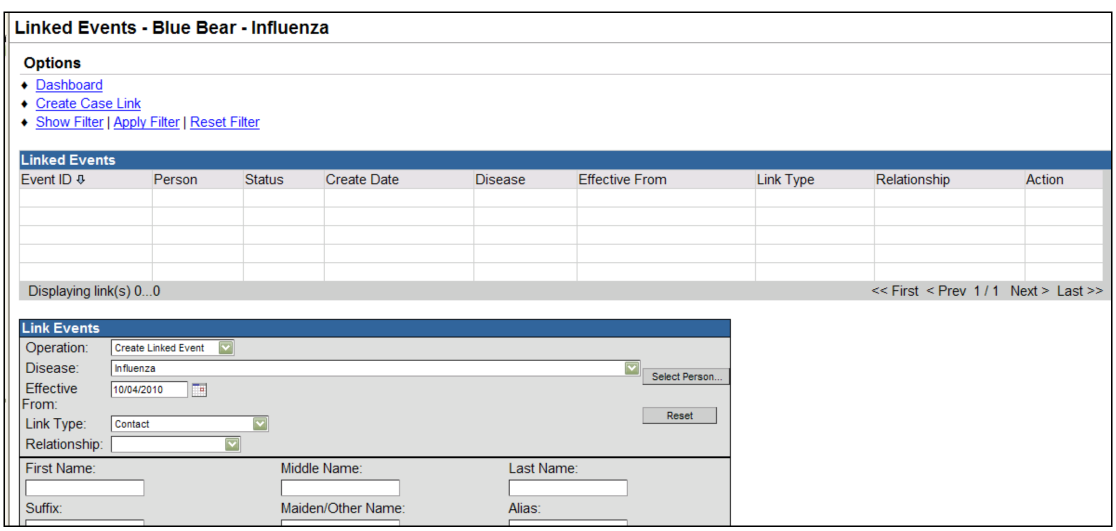
Linking Events and Contacts

For some investigations, it can be helpful to link events to another disease or contact event in the system. To link different events together, follow these steps:

1. With an event open, click on the Linked Events/Contact  icon in the MEDSS toolbar on the dashboard. There is also a link in the Event Summary section on the dashboard.



2. By clicking either link the screen below will appear.



3. First, choose an operation:

Create Linked Event	This option will create a new event for a new person or an existing person in MEDSS. Before choosing this option, remember to search both by event and person to avoid duplications in the system. Steps for this option can be found in the next section.
Link to Existing Event	This option will create a link to an existing event in the system. This option can only be used if the user has access to the existing event.
Link to Multiple Events	This option will create a link to multiple existing events at the same time. Linking to multiple events is useful when creating multiple contact events to one source.

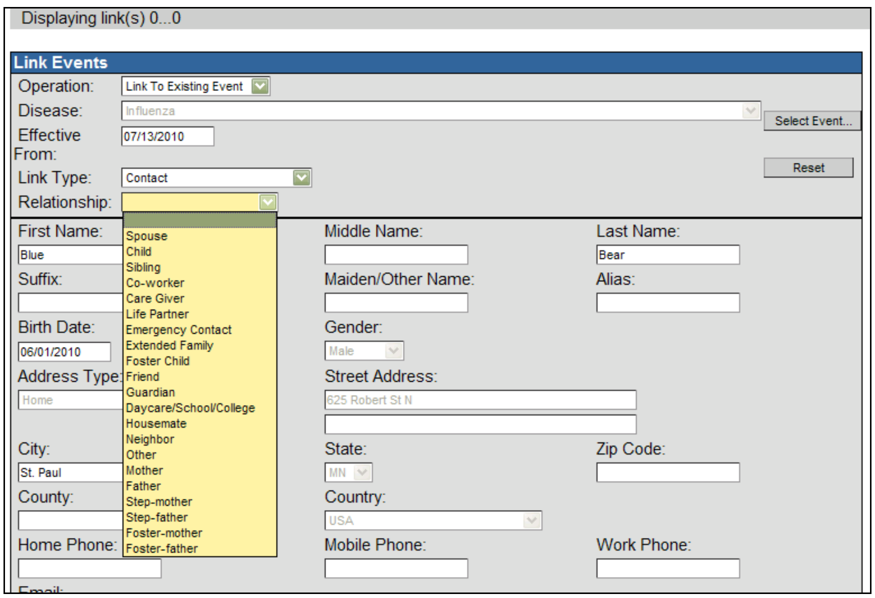
4. Next, choose a link type:

Contact	The person is in direct contact or associated with a communicable disease case. Typically the contact does not have a known disease (or infection) status but is under investigation due to exposure. **Creating a link type of contact will result in the open event being set as the source and the newly linked event as the contact. Always be sure to have the correct event open when linking contacts.**
Source	The original event that contacts are linked to. If links are created from a contact to a source (with the contact open) this option should be selected.
Epi- Linked	The person has been diagnosed with disease and is epidemiologically linked to a case (known person with this disease). An epidemiologic link is one where, after investigation of the parties involved, there is a clear probability that transmission of disease/infection occurred among/between the pair. Both events in this pair would be marked as epi-linked.
Lab-Linked	Indicates Pulsed Field Gel Electrophonesis (PFGE) identical results for enteric bacteria. Other lab results that clearly indicate isolation and identification of genetically identical (within the expectation of normal genetic variation) organisms from two or more individuals can also be considered to be lab linked events. Both events in this pair are marked as lab-linked.
Vertical	The person is a vertical (mother to child) contact. This relationship refers to the biological maternal-child relationships, not an adoptive or guardian relationship. Both events in this pair are marked as vertical.

Other	Refers to a link type that is not on the list. Both events in this pair are marked as other.

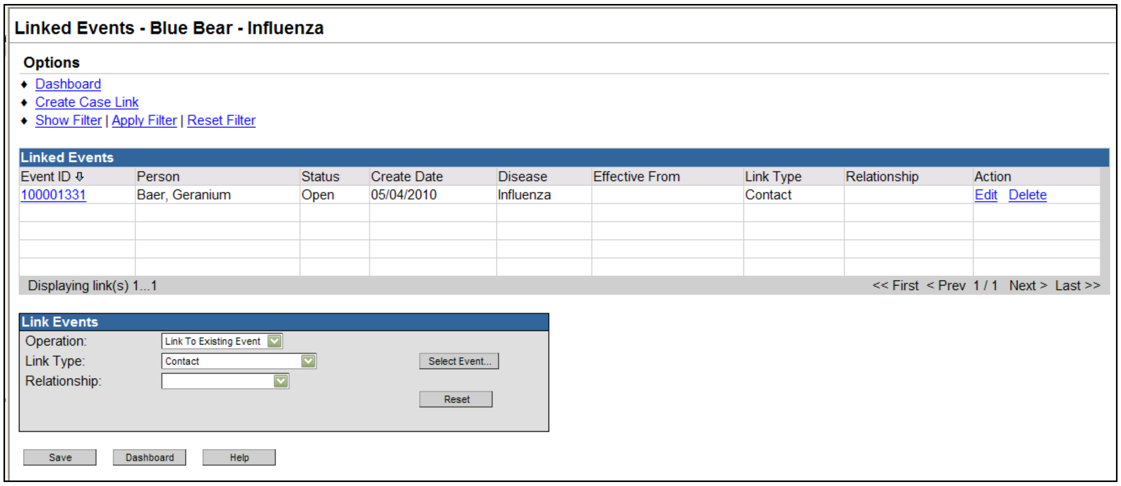
	NOTE Contact and Source links are directional links. If you are looking at a contact event and want to link back to the source, the link type will be defined as 'Source'. However, if you open that source event, the link type will be defined as 'Contact (of Source)'. The link types will change depending on who you link to whom first.

5. Finally define the relationship if known.



	NOTE By defining a relationship a relationship/person link will be created between the two persons in addition to the event link created between the two events. Only add a relationship if this is relevant information for the disease event.

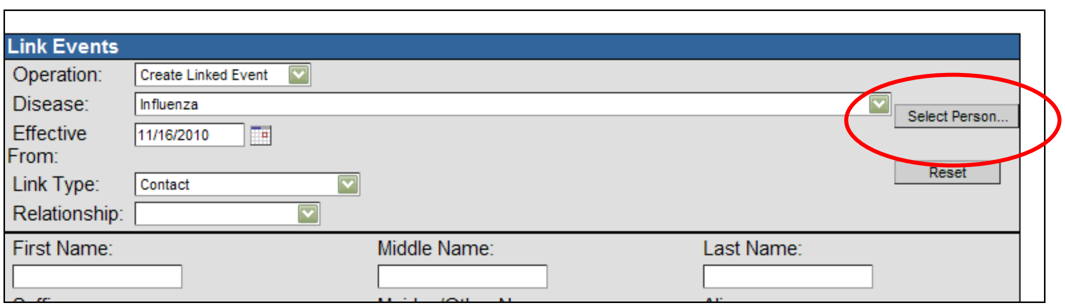
6. After reviewing the information, click **Save**. The newly linked event will show in the Linked Events table.



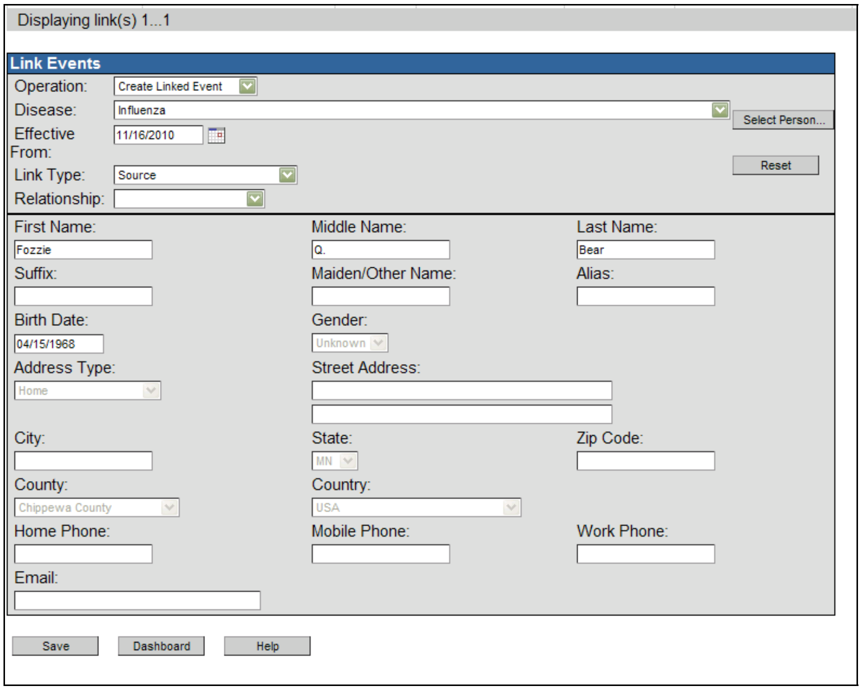
Link Operation: Create Linked Event

The Create Linked Event operation creates a new disease event in MEDSS. It can be a more efficient way to added links, but users should be cautious to avoid creating duplicates in MEDSS. Follow the steps below when choosing the operation Create Linked Event:

7. To avoid duplications of events, only choose this operation after searching if the disease event exists in MEDSS.
8. Before creating a new person, use the Select Person button to search for the person in MEDSS.

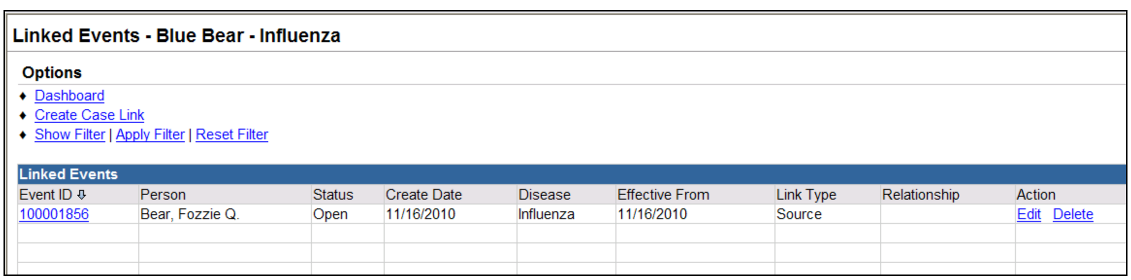


9. In the Search Person window, enter the person details and click **Search**. If the person is found, highlight their name and click Use Selected Person. (This is the same when manually adding events to MEDSS as explained in Chapter 4.)
10. If the name is not found, Click **Cancel**.
11. The found name will be entered into the Link Events form. If the name was not found, the user should manually enter the person information.



12. As explained earlier with adding events to MEDSS, the minimum requirement is the disease and both first and last name. Make sure these are defined and the Link Type.

13. When finished, click **Save** and the newly linked event will be listed on the Linked Events table.



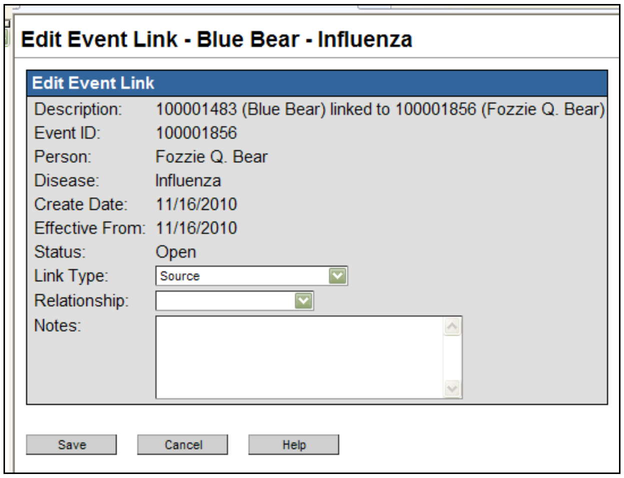
Removing and Editing Event links

After events are linked, they can be edited or removed by any user with access to that disease event. Follow the steps below for either action:

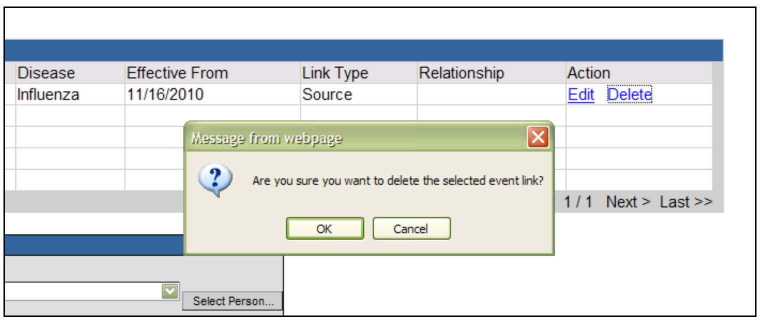
1. Open the Linked Events window by clicking the Linked Events/Contacts icon  in the toolbar or using the dashboard link.

2. In the right action column, click on the **Edit** or **Delete** link.

3. The Edit link will bring the user to the Edit Event Link window where the user can change the Link Type, Relationship or add a Note.



4. When finished, remember to **Save**. The changes will automatically update on the Linked Events table.
5. The **Delete** link will prompt the user to verify that the event link should be removed.



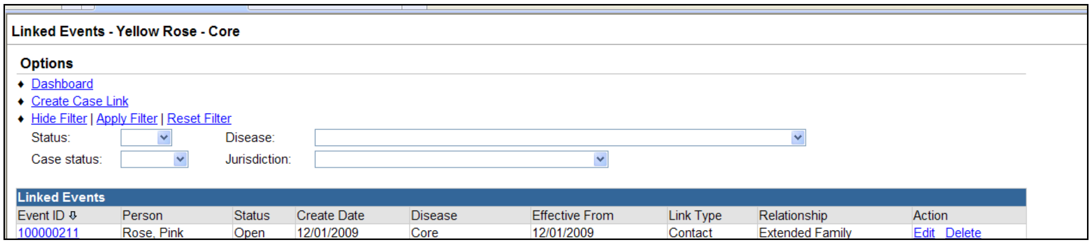
6. If that removal is correct, click **Ok**. The changes will automatically update on the Linked Events table.
7. If the **Delete** link was erroneously clicked, click Cancel and no changes will occur.

Sorting and Filtering

If multiple events are linked to the one event, a user can sort or filter the events to easily view the list of linked events. To sort, click on the heading of any column to change the order of the list (i.e. Event ID, Person, Status, Create Date, etc.).

To filter, follow the steps below:

1. Click on **Show Filter**. The options will appear.



2. Input which filters you would want applied, and click on Apply Filter. The options are to see links based on status (open, closed), case status, disease and jurisdiction.
3. To clear the filter or reset the filter, click on Reset Filter.
4. To close the filter menu, click on Hide Filter.

NOTE

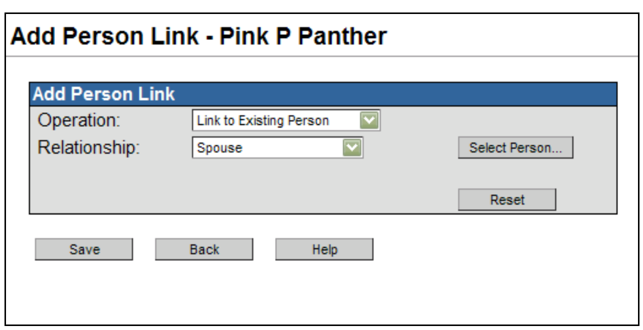
The Linked Events form can be sorted (ascending or descending) by clicking the title head in each column. Only one sort criteria can be used at a time.

Linking people (relationship links)

Person links are a way to define social relationships. This can be helpful if needing to enter guardian information or social contacts. The people in these links do not need to have a disease event in order to be linked. The important thing is to always search for the person before creating a new person in MEDSS in order to avoid duplicates. Linked people operation is found under the **Persons** tab on the dashboard.

To link people in the system, follow the steps below:

1. With an event open on the dashboard, go to the Linked People tab under the Persons tab.
2. Click on the **Add Link** button. A new window opens.

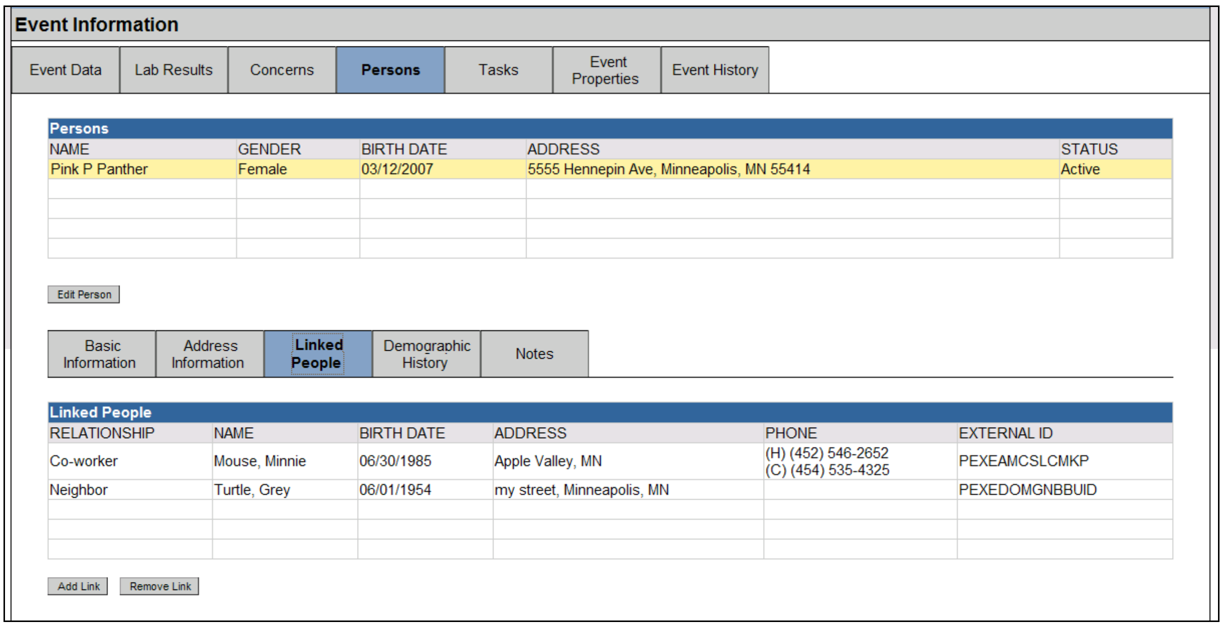


3. Choose the operation. A user can choose to link to an existing person or create a new person. If linking to an existing person, click on the **Select Person** button to do a person search. (This is the same searching as explained in Chapter 4.)

NOTE

If you know the person you are linking to already has an event in the system, always use 'link to an existing person' in the operation drop down.

4. To create a new person in the system (and the Master Patient Index), choose that operation and fill out the person form that appears on the screen. This person will be added to the system <u>without</u> a corresponding disease.
5. Define a relationship and click **Save**. The new link will show under the Linked People tab.

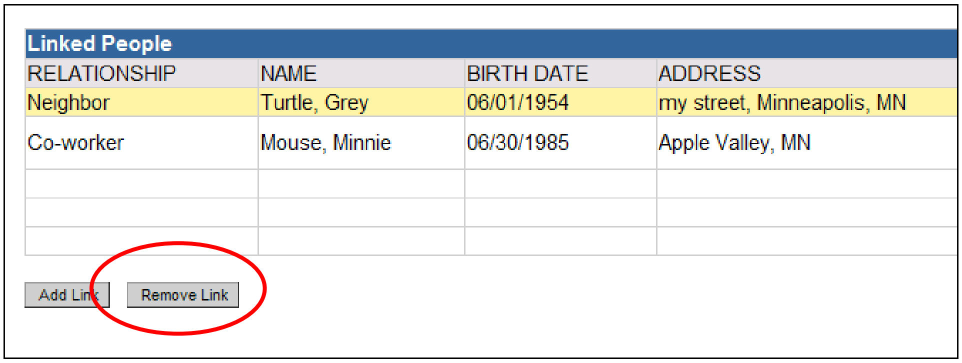


IMPORTANT

It is important that before you create a new linked party, you do a persons search to avoid duplicates in the system. More on this is explained in Chapter 3.

Removing relationship links

Since person links are found under the Persons tab, all users in MEDSS will have access to view the linked people. Any user in the system can then remove the person link. To remove person links, highlight the name and click on **Remove Link**. The link will then be removed.



Overview of all links

MEDSS offers both event and person links and both can help aid in investigations and outbreaks. Event links can only be viewed by users who have access to both linked events; however, person links can be viewed by all MEDSS users who have access to that person. Remember that by defining a relationship when linking events will automatically create a person link. If that event link is later removed, the person link will remain.

CHAPTER 10: LINKING AND MANAGING EXPOSURE SITES

An exposure site is a location where a person may have been exposed to a disease or a biological or chemical agent. The ability to link exposure sites to person events is an extra feature in MEDSS and may not be used by all disease groups. The exposure sites functionality allows for exposure sites to be shared across different disease (or outbreak) events and minimizes data entry. Other benefits of this functionality are as follows:

- Locating all events which are linked to a specific site is simplified.
- Exposure site locations can be plotted on maps to provide a visual representation of the sites on a map.
- The ability to reuse the exposure sites provides for consistency across events.
- Exposure sites can be deduplicated. The deduplication criteria are specific to the street address of the location.

Similar to linking events, there is no limit to the number of exposure sites that can be linked to a particular event.

Exposure Site Link Types

The ability to link exposure sites provides flexibility within the system. The link types are as follows:

Exposure Site	A site at which the person(s) may have been exposed to a disease or a biological or chemical agent.
Other	A site which may need to be tracked in the system that was not necessarily a site of exposure.

Setting Types

In addition to specifying the site link type, it is also possible to specify the setting of the potential exposure. Below are the setting types and examples:

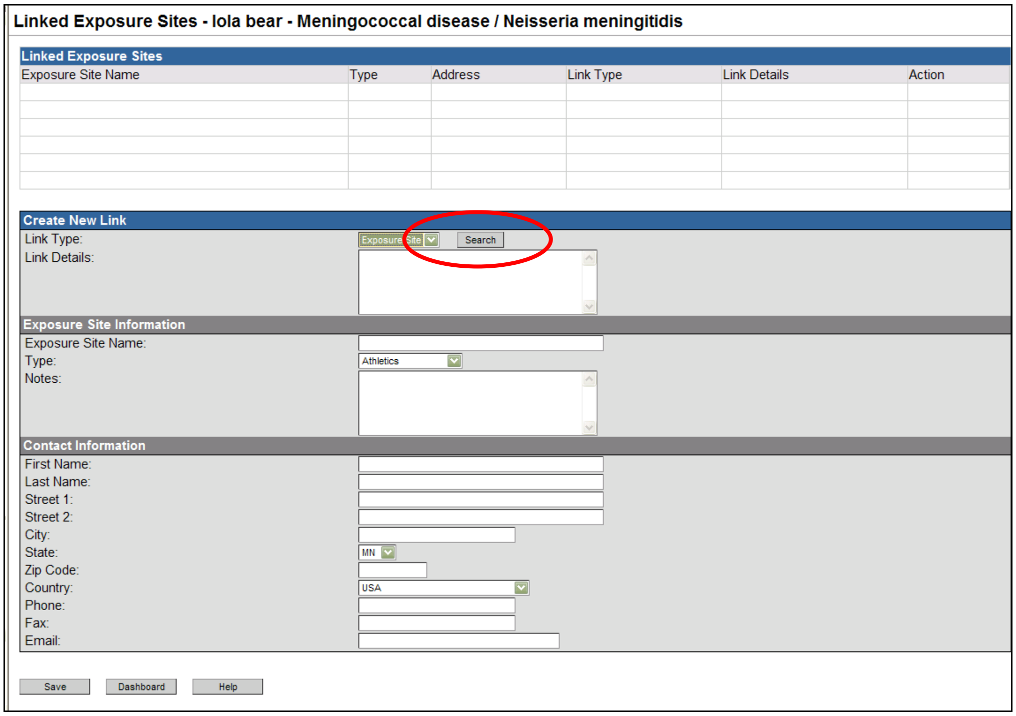
Athletics	Stadium, municipal softball grounds
Camp	Day camp, overnight camp
Community	Routine, incidental contact through normal day-to-day activities (shopping, festivals, flea markets)
Child Care	Licensed, unlicensed, home care
Farm	Animal, crop
Home	Place of residence, summer home
Hospital / Clinic	In addition to a typical in-patient hospital facility, doctor's office, free clinic, emergency care clinic
Hotel / Motel	Also includes bed and breakfast

Laboratory	Chemical lab, medical lab, environmental lab
LTC Facility	Long-term Care Facility - Nursing home, Hospice
Military	In addition to a base, an exposure that during military training or deployment
Other	Anything that doesn’t fall into one of the named categories
Outdoors	General term to be used only when the site of an outdoor exposure is not more specifically defined on this list
Place of Worship	Mosque, church, synagogue
Pond / Lake / River	Also includes creek, waterfall
Pool / Spa	Community pool, backyard pool, water park, resort spa
Prison / Jail	Juvenile home, correctional facility
Restaurant	In addition to typical restaurant dining, mobile lunch carts, food stands at fairs.
School	Elementary, middle, high, charter, Montessori
Shelter	Homeless shelter, women's shelter, children's shelter
Social Gathering	Party, reunion, book club
Travel Conveyance	Airplane, cruise ship, train, bus
University / College	Community college, privately funded college
Unknown	Not known
Work	Place of work

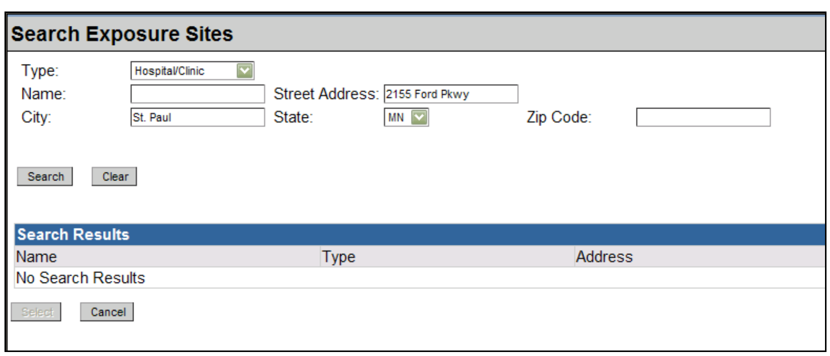
Linking Events to Exposure Sites

To link an exposure site to an event, open the event to which you would like to link an exposure site. Then follow the steps below:

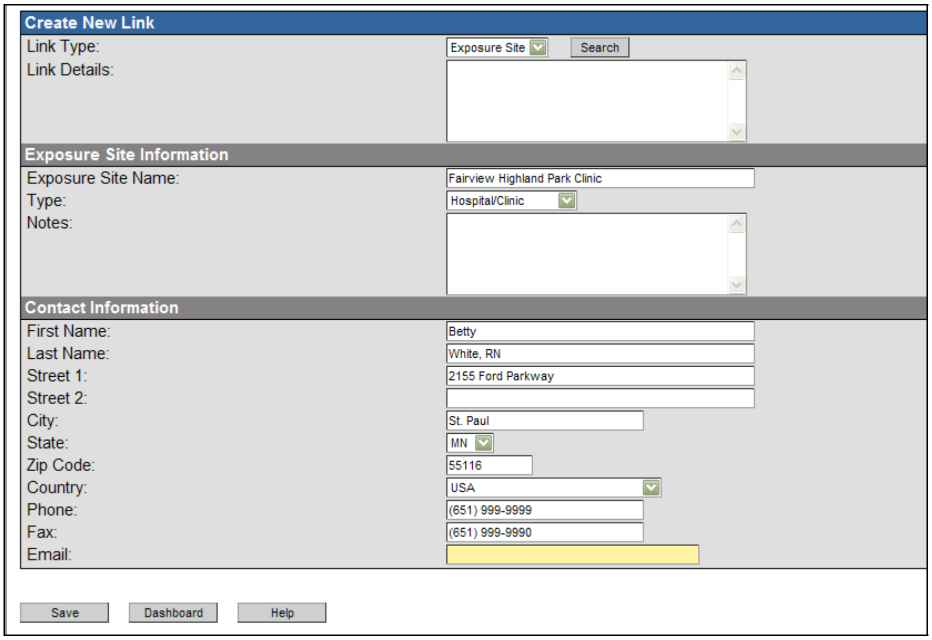
1. Click on the **Linked Exposure Sites** icon  in the MEDSS toolbar. You can also click the word *View* beside Linked Exposure Sites in the basic information section.



2. A new window appears with a table displaying at the top which lists all of the current links and a form beneath the table which enables the user to add a new linked site.
3. Click on **Search** next to Link type to see if the site is already listed in the system. This helps avoid duplication of exposure locations. Deduplication is based on the address of the location.
4. A Search Exposure Sites search window appears. Fill in the address information. The more information entered will narrow the search, and it may help to search more broadly first.



5. If results are found, they will appear in the search results. To choose, double click or highlight the name and click on **Select**. The Exposure site information box will auto-populate with the location information.
6. After reviewing click **Save** to create a new exposure site.
7. If the name is not found, click **Cancel** and you will be brought back to the Linked Exposure Site screen. You will need to enter the location information in the fields provided. Remember to use US Address formatting standards (see Appendix B).



Create New Link

Link Type:	Exposure Site [Search]
Link Details:	

Exposure Site Information

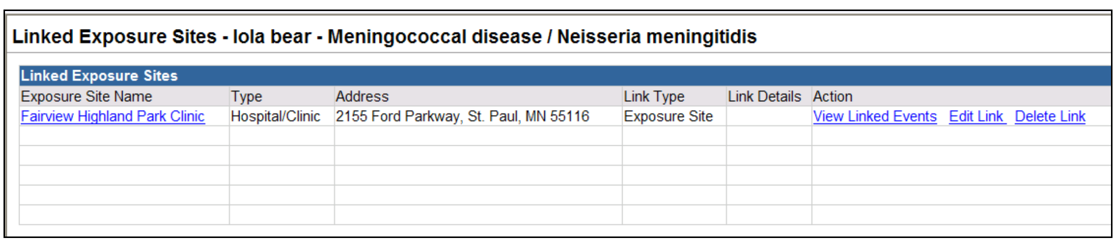
Exposure Site Name:	Fairview Highland Park Clinic
Type:	Hospital/Clinic
Notes:	

Contact Information

First Name:	Betty
Last Name:	White, RN
Street 1:	2155 Ford Parkway
Street 2:	
City:	St. Paul
State:	MN
Zip Code:	55116
Country:	USA
Phone:	(651) 999-9999
Fax:	(651) 999-9990
Email:	

Save Dashboard Help

8. When finished click **Save** and the link will be created. The location will appear in the top table. Below the image is a description of each column for the table.



Linked Exposure Sites - Iola bear - Meningococcal disease / Neisseria meningitidis

Linked Exposure Sites

Exposure Site Name	Type	Address	Link Type	Link Details	Action
Fairview Highland Park Clinic	Hospital/Clinic	2155 Ford Parkway, St. Paul, MN 55116	Exposure Site		View Linked Events Edit Link Delete Link

Exposure Site Name	The name of the exposure site; click the link to edit the address information or contact information, add a note, or view the GIS information.
Type	The kind of setting that was selected from the dropdown list.
Address	The street address, city, state, and zip code.
Link Type	The type of location that was created – exposure site or other.
Link Details	Notes which are specific to the link between the person and the exposure site. These are only visible when the person's event is open.
Action	Allows the user to view all the linked events to that site (if the user has the permission to see the disease events). Also in this column are two other actions: edit the link type or delete the link. Editing link type allows user to change if the link was an exposure site or other. Deleting the link does not remove the exposure site from the

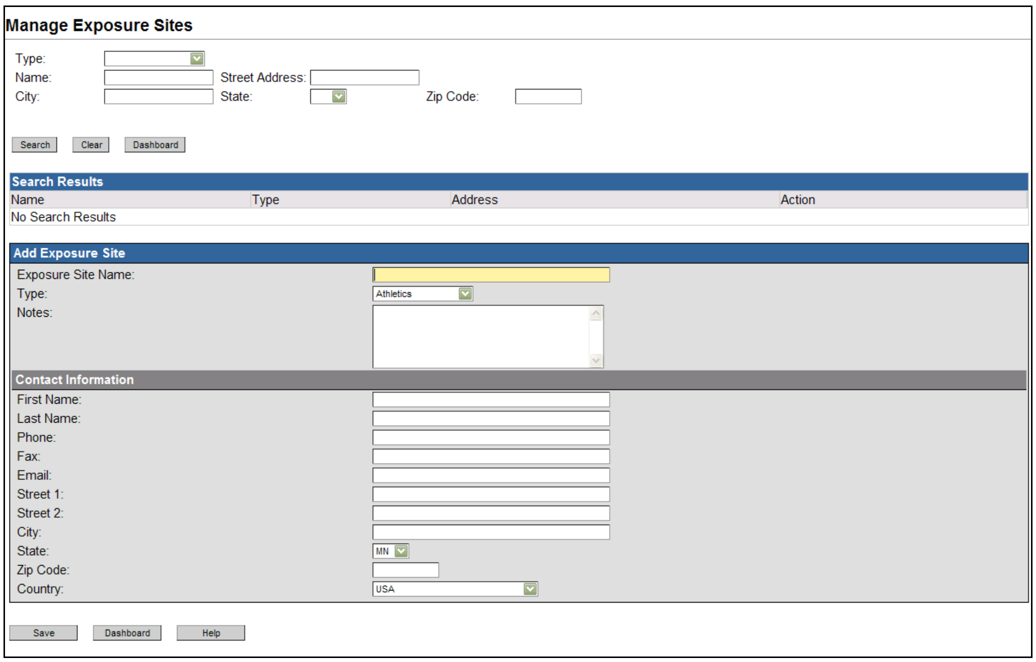
database.

Managing Exposure Sites

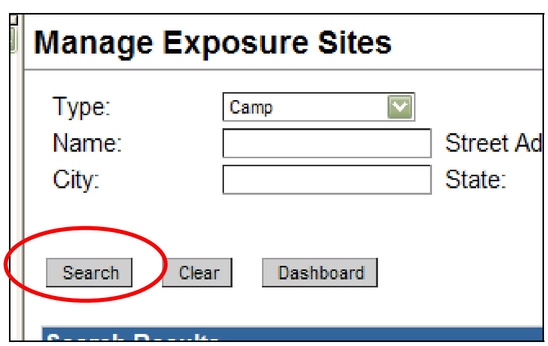
The manage exposure sites feature is used primarily to enter multiple exposure sites into the system, without linking to a particular event, and to edit locations currently in the system. Additionally, it can be used to view the events which are linked to a specific exposure location.

Follow the steps below to search and edit exposure locations:

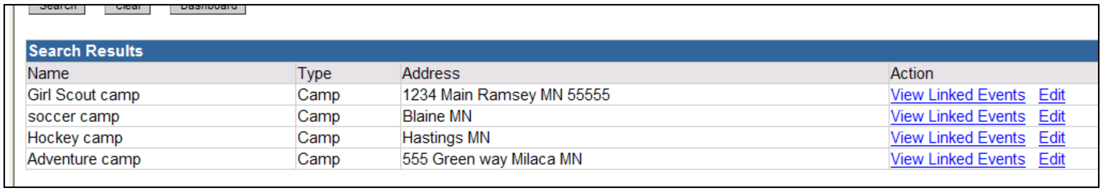
1. Click on the Manage Exposure Sites icon  in the toolbar. This will show the Manage exposure sites screen shown below.



2. To view entire list of exposure sites in a specific category, choose the type, then click **Search**.



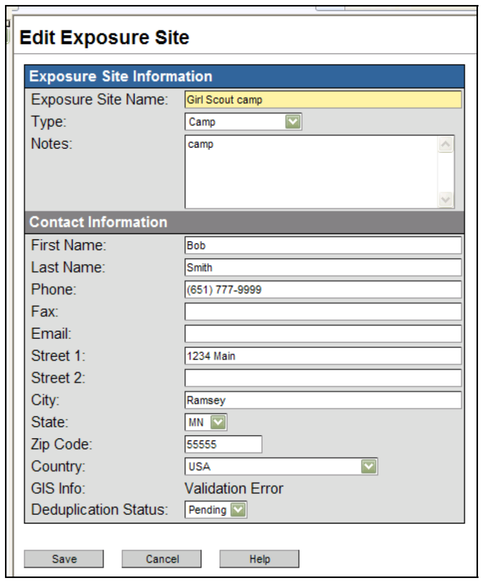
3. The list will appear.



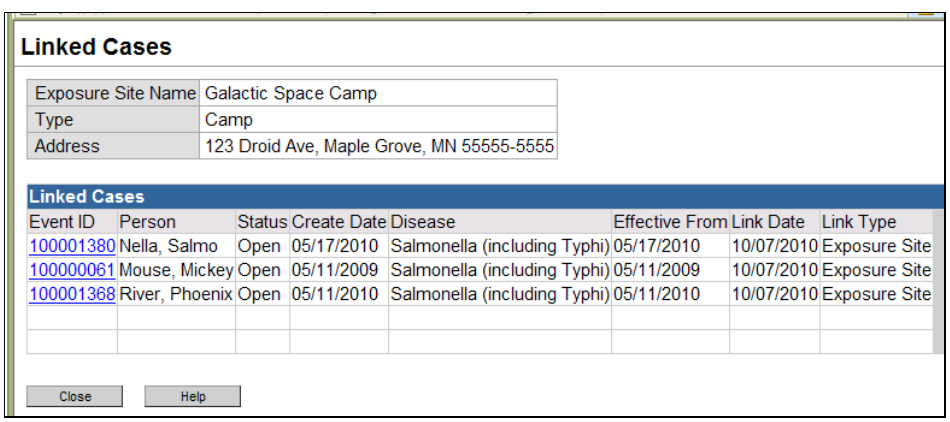
Search Results

Name	Type	Address	Action
Girl Scout camp	Camp	1234 Main Ramsey MN 55555	View Linked Events Edit
soccer camp	Camp	Blaine MN	View Linked Events Edit
Hockey camp	Camp	Hastings MN	View Linked Events Edit
Adventure camp	Camp	555 Green way Milaca MN	View Linked Events Edit

4. The user has the option to edit the address or contact information. To do this click on **Edit** in the action column.



5. A user also has the option to View Linked Events by clicking on that link in the action column.



Linked Cases

Exposure Site Name	Galactic Space Camp
Type	Camp
Address	123 Droid Ave, Maple Grove, MN 55555-5555

Linked Cases

Event ID	Person	Status	Create Date	Disease	Effective From	Link Date	Link Type
100001380	Nella, Salmo	Open	05/17/2010	Salmonella (including Typhi)	05/17/2010	10/07/2010	Exposure Site
100000061	Mouse, Mickey	Open	05/11/2009	Salmonella (including Typhi)	05/11/2009	10/07/2010	Exposure Site
100001368	River, Phoenix	Open	05/11/2010	Salmonella (including Typhi)	05/11/2010	10/07/2010	Exposure Site

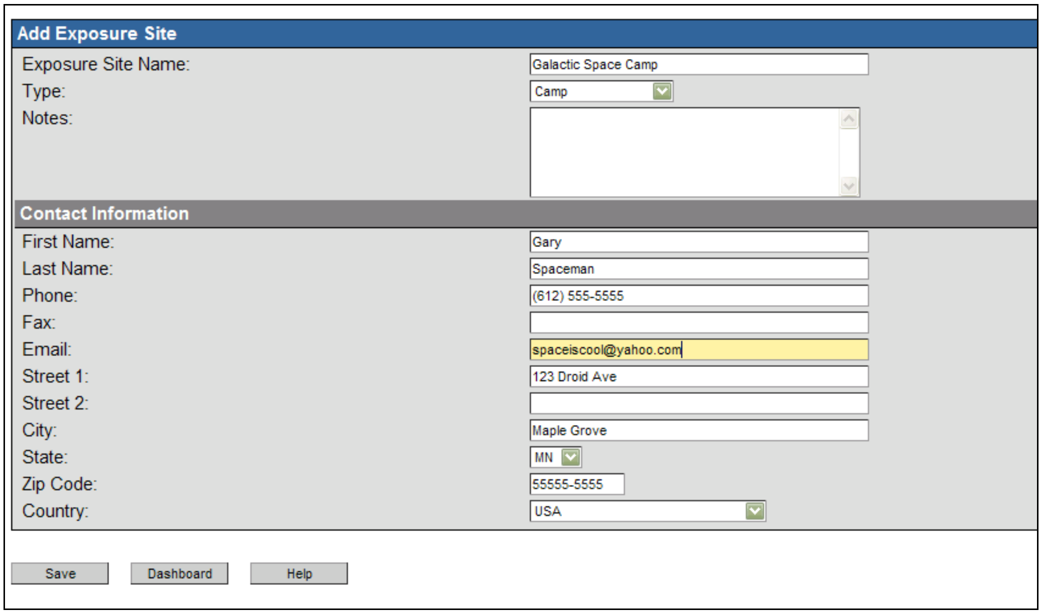
6. This action presents the user with a screen which displays all the events linked to the specific exposure site. Click the **Event ID** link to open the event in the Dashboard.

Add New Exposure Sites

Within the Manage Exposure Sites window, users can add new exposure locations without linking them to an event.

To add new exposure locations, follow the steps below:

7. To add a new exposure site (after determining that it is already not in the system with the search above) fill out the Add Exposure Site form. Remember to use US Address formatting standards (see Appendix B).



8. When finished click **Save**. The site will be entered into the database and the screen will clear. Now any event can be linked to the exposure location.

CHAPTER 11: SHARING EVENTS

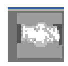
Sharing events or cases can be useful, for example, when multiple counties are working together during a contact investigation. Sharing allows the case to be open among the jurisdictions during the investigation. Not all users will have access to open up an event/case for someone (another county or group) who normally doesn't have access to the case.

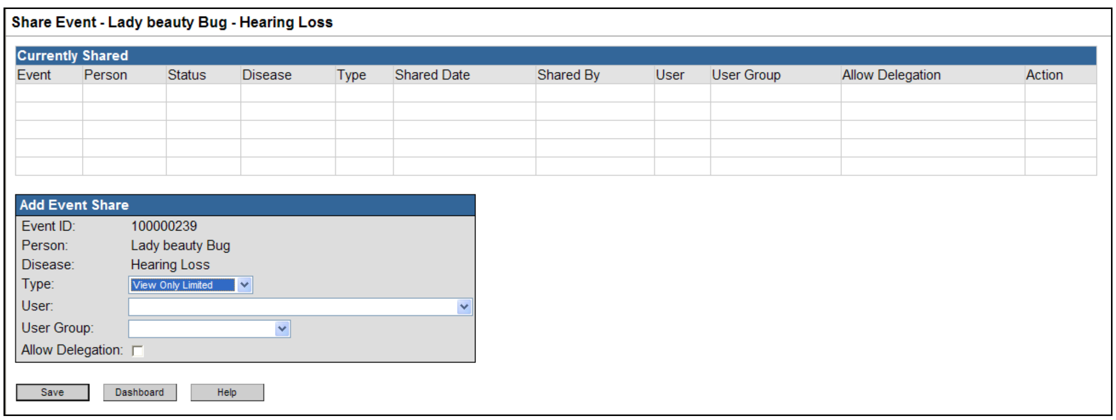
Sharing events

Before sharing events, users should define the jurisdiction in the Administrative QP. That field may open the event for a jurisdiction, thus eliminating the need to share an event.

However, if an event needs to be shared with multiple counties or investigators, follow the steps below.

1. Open the case you want to share in the dashboard screen.

2. Click on the **Share Case** icon  in the toolbar. The screen below will appear that shows existing shared cases and allows the user to add a share.



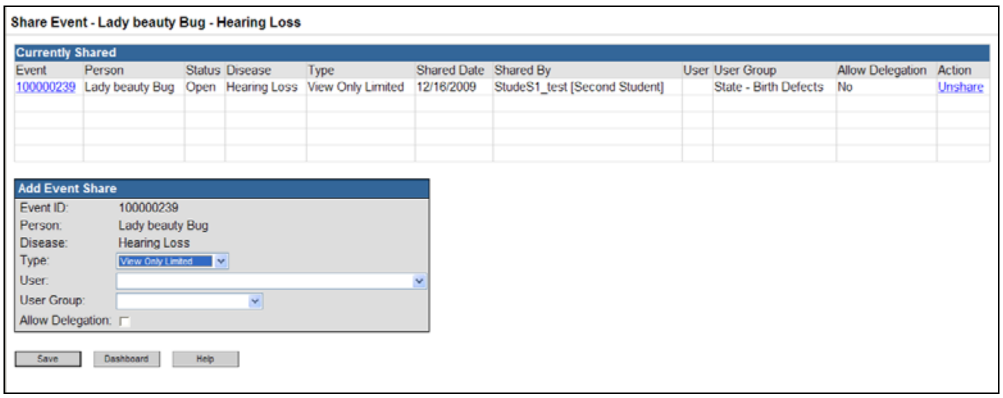
3. Select what type of access you want to share:

View Only Limited	Provides the ability to see a limited number of questions. The person or group the event is shared with will not be able to edit the event, only read the information.
View Only Full	Provides the full range of questions. Editing is not possible with this setting. The person or group the event is shared with will not be able to edit the event, only read the information.
View and Update Limited	Users will be able to view and edit a limited number of questions.
View and Update Full	Users will be able to view and edit the full range of questions.

4. Select the **User** or **Group** you want to share the case with.

	IMPORTANT It's preferred if events are shared with groups rather than individual users, this will allow for the receiving group to access the event even if the individuals or responsibilities within the group changes.

5. Check the box **Allow Delegation** to allow the user/group with whom you are sharing the case with to have the ability to share it with another user or group.
6. When finished, click **Save**.



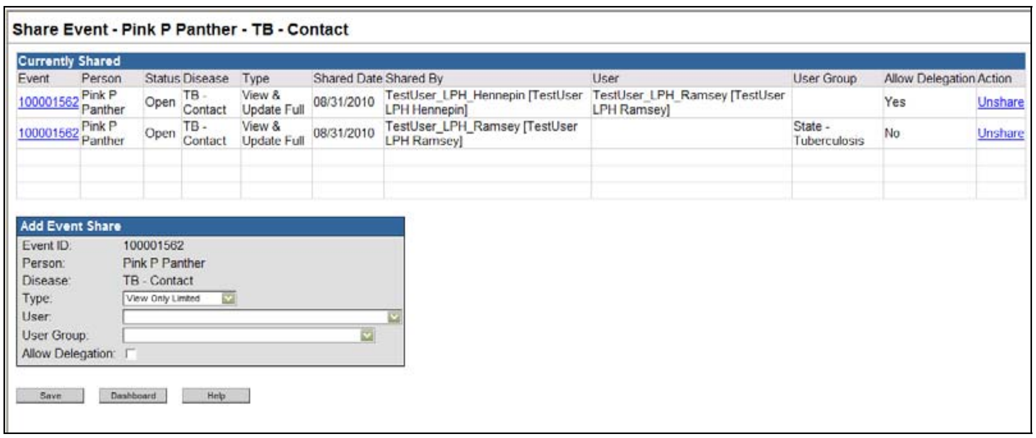
	TIP After sharing an event, the event will be located in the workflows **Shared Cases – Cases shared by me** and **Shared Cases – Cases shared with me or my group**. Users will not receive any notification that a case has been shared with them, but users can create tasks to notify other users of the share.

Un-share an Event

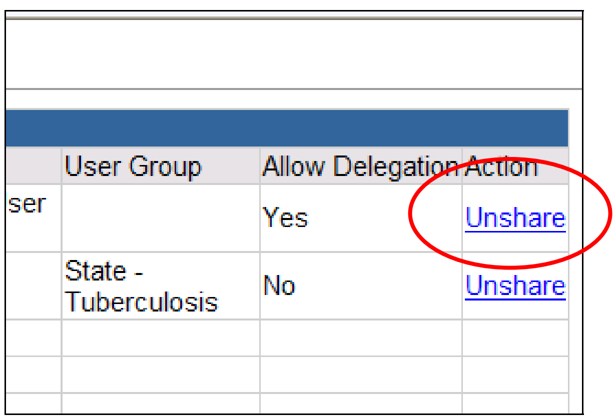
Un-sharing an event will close the access to that event by the shared user. Only the user who created the share can un-share an event (unless Allow Delegation was selected which allows a two-way share link).

To un-share an event, follow the steps below:

1. Open the case you want to share in the dashboard screen.
2. Click on the **Share Case** icon  in the toolbar.
3. The user will see the users with whom the event is being shared with.



4. In the right action column, click on the **Un-share** link to remove the sharing.



5. MEDSS will confirm that the share should be removed.

CHAPTER 12: DATA OUT- PRINTING AND REPORTS

Within MEDSS there are a couple different ways to query the data or extract the data to manipulate in data software programs. MEDSS offers different print documents that can be disease specific and can run simple reports to show comparisons and counts. However each disease group will also be able to extract an entire report to export to a data software program such as Microsoft Excel or SASS.

Different ways of getting data out of MEDSS

Pre-set reports	Pre-defined reports created by the system developers. Sophisticated reports with a variety of calculations and outputs.
Ad-hoc reports	Reports created by the system administrators and advanced users. Ad-hoc reports can have queries and summaries, but are somewhat limited in what they can provide.
Data extracts	A report where the output from the report is provided as an extract file.
Event print	System generated print document which prints every question that has been answered in the active event.
Print templates	The print templates are used to print information about one case/event in a standardized format.

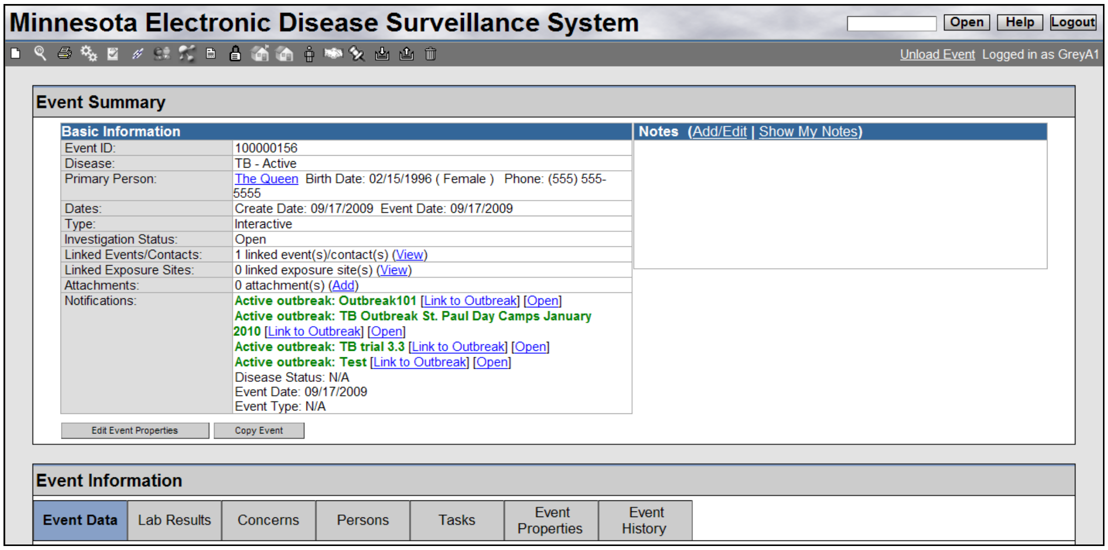
Printing information

In MEDSS, printing can be done by creating print templates that can be automatically updated with the event's information or by using set print documents such as an Event Print which will print all the answered data fields. Both methods are explained below.

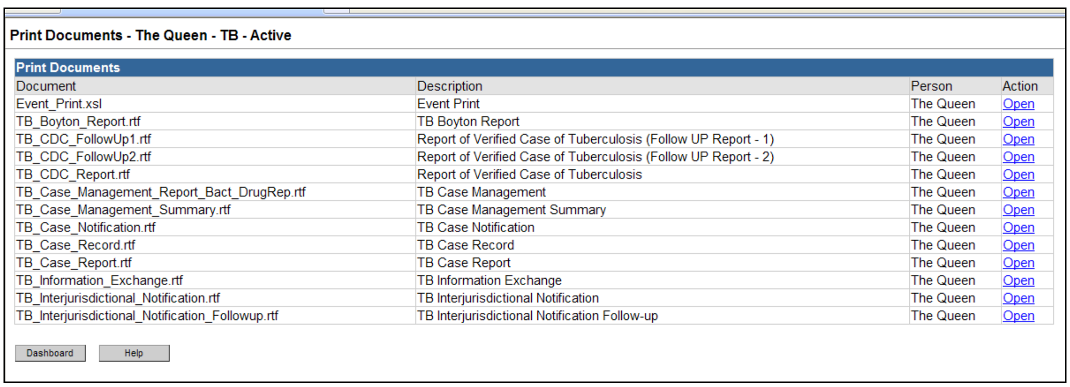
Print Templates

MEDSS allows common letters, forms, and other documentation to be printed with pre-populated information about the disease event and the person. To print a document the user must first select an event to be referenced and then click the **Print** icon in the toolbar. Follow the steps below to print a document using MEDSS.

1. Open the event that needs printed documentation.



2. Click the **Print**  icon in the MEDSS toolbar.
3. A screen will appear listing all documents available for printing for the specific event. This screen is different depending on the disease specified in the event.



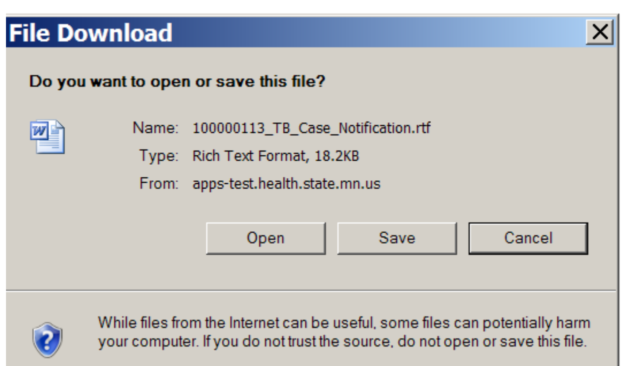
Print Documents - The Queen - TB - Active

Print Documents

Document	Description	Person	Action
Event_Print.xsl	Event Print	The Queen	Open
TB_Boyton_Report.rtf	TB Boyton Report	The Queen	Open
TB_CDC_FollowUp1.rtf	Report of Verified Case of Tuberculosis (Follow UP Report - 1)	The Queen	Open
TB_CDC_FollowUp2.rtf	Report of Verified Case of Tuberculosis (Follow UP Report - 2)	The Queen	Open
TB_CDC_Report.rtf	Report of Verified Case of Tuberculosis	The Queen	Open
TB_Case_Management_Report_Bact_DrugRep.rtf	TB Case Management	The Queen	Open
TB_Case_Management_Summary.rtf	TB Case Management Summary	The Queen	Open
TB_Case_Notification.rtf	TB Case Notification	The Queen	Open
TB_Case_Record.rtf	TB Case Record	The Queen	Open
TB_Case_Report.rtf	TB Case Report	The Queen	Open
TB_Information_Exchange.rtf	TB Information Exchange	The Queen	Open
TB_Interjurisdictional_Notification.rtf	TB Interjurisdictional Notification	The Queen	Open
TB_Interjurisdictional_Notification_Followup.rtf	TB Interjurisdictional Notification Follow-up	The Queen	Open

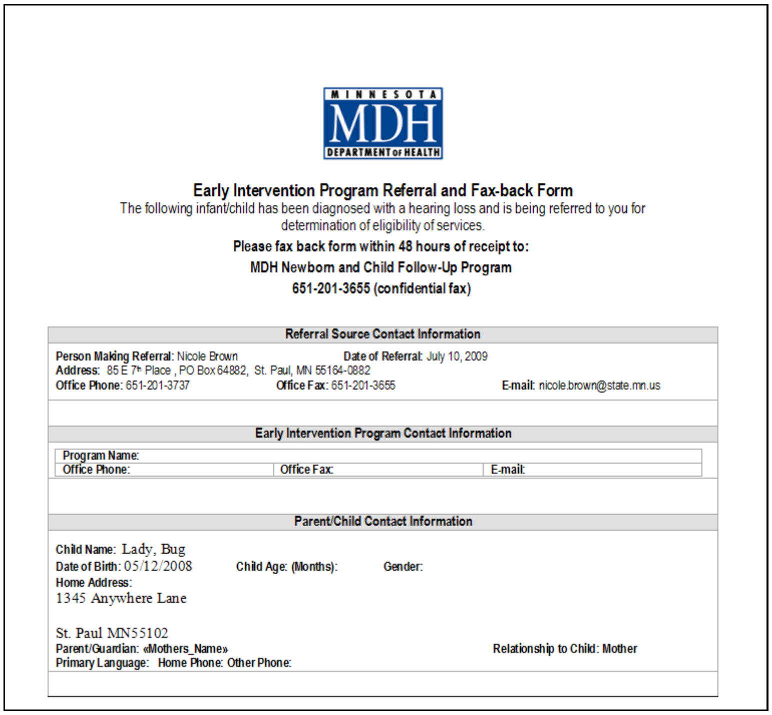
Dashboard Help

4. Locate the document template you want to use in the list.
5. Click the link in the **Action** column that says **Open**.
6. A screen similar to the one below will display prompting the user to **Open** or **Save** the document.



	TIP Please note that if the user is using Microsoft Word 2000, the document must first be saved locally and then opened from where it was saved.

7. Click **Open** to immediately open the document in Word or **Save** to save it before opening. (If the user clicks Save, a Save As window displays such that the user must designate a location in which to save the document.)
8. A document opens in a new window. Data from the event populates the document. The boxes in gray are editable and can be modified if they are incorrect or incomplete. The boxes which highlight the patient information were automatically filled in by MEDSS based on information which had been entered into the event.



MINNESOTA MDH DEPARTMENT OF HEALTH

Early Intervention Program Referral and Fax-back Form

The following infant/child has been diagnosed with a hearing loss and is being referred to you for determination of eligibility of services.

Please fax back form within 48 hours of receipt to:
MDH Newborn and Child Follow-Up Program
651-201-3655 (confidential fax)

Referral Source Contact Information

Person Making Referral: Nicole Brown **Date of Referral:** July 10, 2009
Address: 85 E 7th Place , PO Box 64882, St. Paul, MN 55164-0882
Office Phone: 651-201-3737 **Office Fax:** 651-201-3655 **E-mail:** nicole.brown@state.mn.us

Early Intervention Program Contact Information

Program Name:		
Office Phone:	**Office Fax:**	**E-mail:**

Parent/Child Contact Information

Child Name: Lady, Bug
Date of Birth: 05/12/2008 **Child Age: (Months):** **Gender:**
Home Address:
1345 Anywhere Lane

St. Paul MN55102
Parent/Guardian: «Mothers_Name» **Relationship to Child: Mother**
Primary Language: **Home Phone:** **Other Phone:**

	NOTE If there is pre-populated data that is missing or incorrect in the print document, it's possible to change this directly in the word document before it's printed. However doing this will NOT change the data if the same document is printed in the future. To retain the changes the user MUST go back into MEDSS to make the updates and then run the print template again.

9. To print a hard copy of a document, click the **Print** option within the application. For example, in Microsoft Word, click **File/Print** to print the document.

10. From MEDSS **Print Documents** screen, click the **Dashboard** button to return to MEDSS Dashboard.

NOTE

If you want to print multiple documents at the same time you can use a bulk action print. However, only certain users will have access to this action.

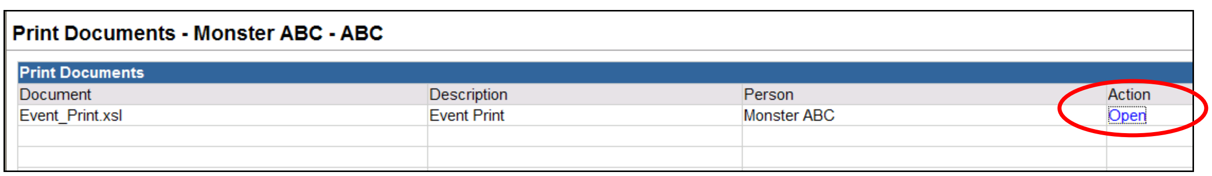
Event Print

MEDSS offers a default print document which prints every question that has been answered in the active event. This is called Event Print. This print document is also unique in that it opens in a browser as opposed to within Microsoft Word. Please note that the only way to "edit" this document is to change data within the current event.

The Event Print file can also be used in the process of deduplication. Only some users will have the authority to deduplicate events in the system, and the process will be explained in a separate document. When trying to determine which event or person to set as the primary, it is helpful to use the print feature to see how much information has been added to the duplicate records.

To use the Event Print function, follow the steps below:

1. With an event open on the dashboard, click the Print icon in the toolbar.
2. Locate the document Event_Print.xsl and in the right action column, click **Open**.

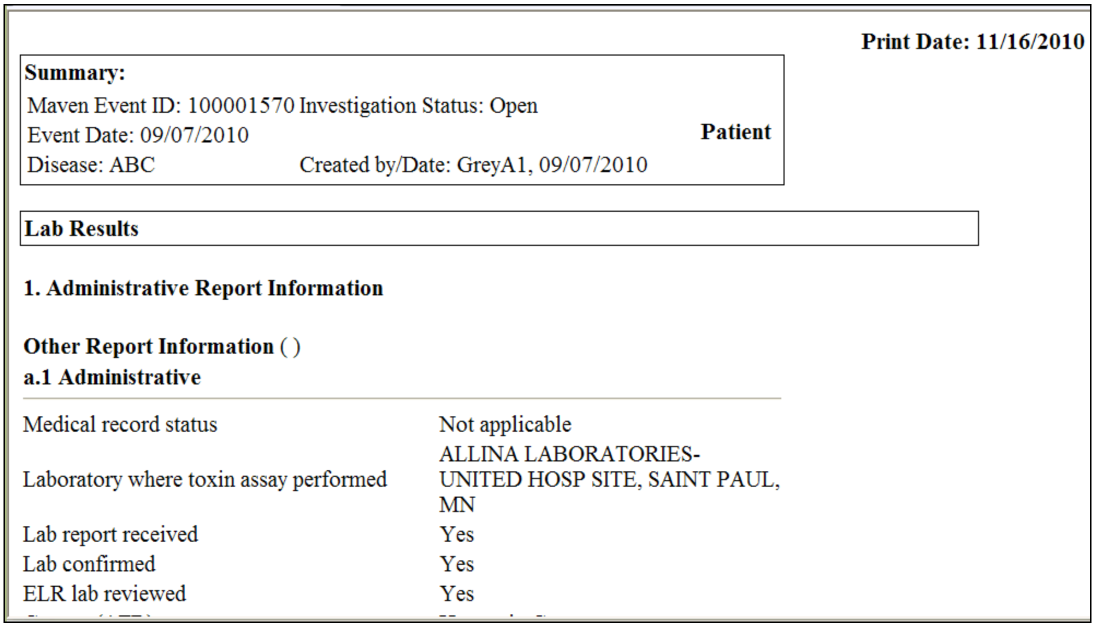


Print Documents - Monster ABC - ABC

Print Documents

Document	Description	Person	Action
Event_Print.xsl	Event Print	Monster ABC	Open

3. A new browser window will open that will show each Question Package and all the answered data fields.



Print Date: 11/16/2010

Summary:
Maven Event ID: 100001570 Investigation Status: Open
Event Date: 09/07/2010 **Patient**
Disease: ABC Created by/Date: GreyA1, 09/07/2010

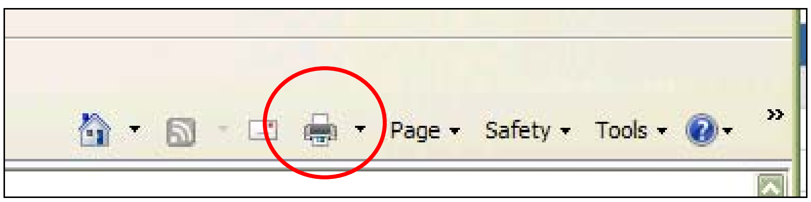
Lab Results

1. Administrative Report Information

Other Report Information ( )
a.1 Administrative

Medical record status	Not applicable
Laboratory where toxin assay performed	ALLINA LABORATORIES-UNITED HOSP SITE, SAINT PAUL, MN
Lab report received	Yes
Lab confirmed	Yes
ELR lab reviewed	Yes

4. To print, use the print icon on your browser's window or File → Print to send the document to your default printer.



5. When finished, close the window and hit the Dashboard button to get back.

Browser print function

When printing in MEDSS, many times it will be more convenient to use the File → Print function from the browser window. However, at times formatting will be difficult to control and your print document will be unreadable.

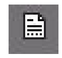
Therefore below are some tips for printing in MEDSS:

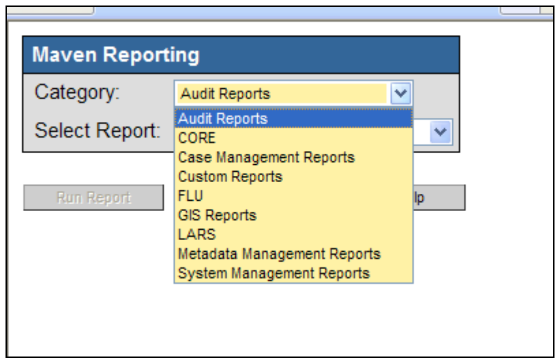
- When printing Question Packages, use the Event print function.
- When printing lab reports, print from the dashboard.
- When printing your tasks, print from the workflow queue. It will print only tasks assigned to you.

Using Reports in MEDSS

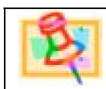
Reports generally are not based on a specific event; therefore, it is not necessary to have an event selected before running a report. Reports can be displayed in a non-editable format within the browser window or can be exported to an external application such as Excel. Exporting data allows for it to be manipulated, formatted, or even graphed. This is great option if looking to compare more complex variables than what MEDSS can offer.

Run a report, show result on the screen

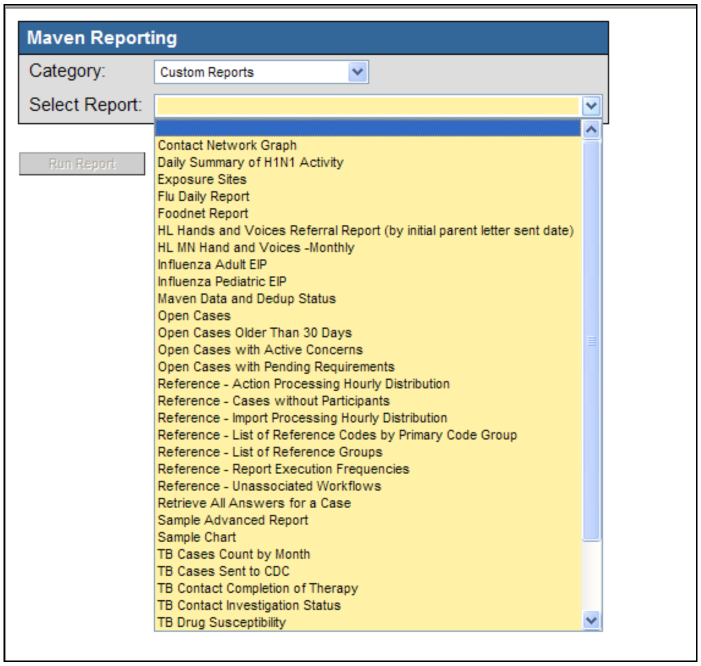
1. From MEDSS Dashboard, click the **Reports** icon  in the MEDSS toolbar.
2. A screen displays with a dropdown list of different categories.



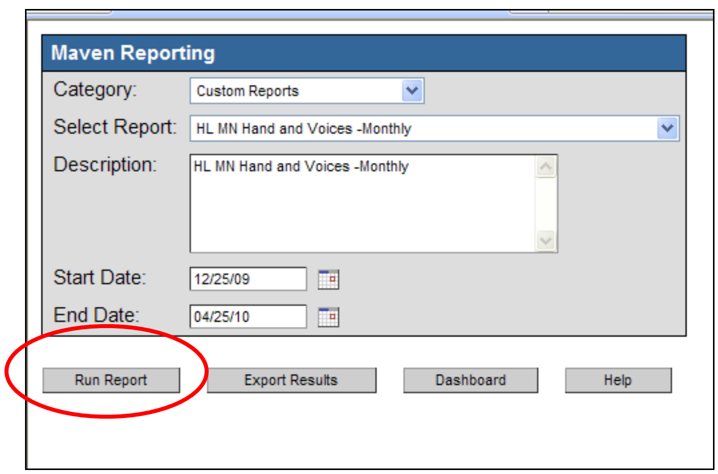
3. Pick the category that fits your needs. Most disease specific reports will be under Custom reports or different disease group specific reports.

	**NOTE** Different users will have access to different reports in the system. All users will be able to access the Core reports which lists different case counts reports.

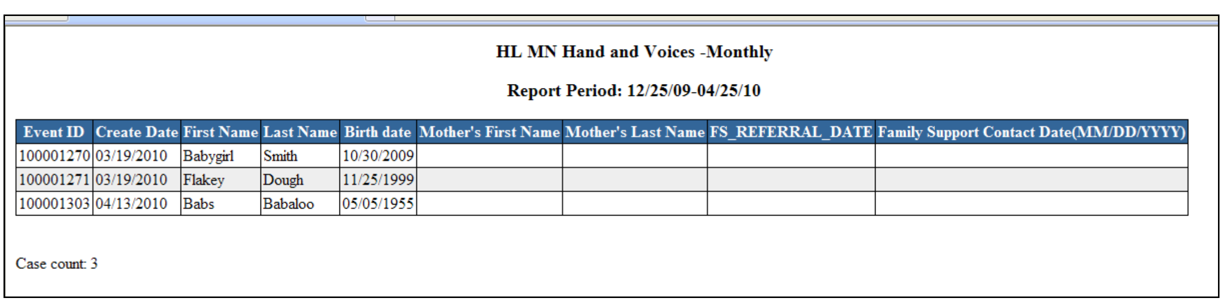
4. From the Select Report dropdown list and select the desired report.



5. Most reports will at least ask for a **Start Date** and **End Date** to define what data should be included.



6. To view the report in a browser window, click the **Run Report** button. This will display the results in a new window and the user will be unable to change the formatting of the data.



HL MN Hand and Voices -Monthly

Report Period: 12/25/09-04/25/10

Event ID	Create Date	First Name	Last Name	Birth date	Mother's First Name	Mother's Last Name	FS_REFERRAL_DATE	Family Support Contact Date(MM/DD/YYYY)
100001270	03/19/2010	Babygirl	Smith	10/30/2009				
100001271	03/19/2010	Flakey	Dough	11/25/1999				
100001303	04/13/2010	Babs	Babaloo	05/05/1955				

Case count: 3

Selection Criteria

Most of the reports in MEDSS require some parameters for the user to enter so MEDSS knows which events to include in the report. Below are some helpful tips when entering those selection criteria:

- The Start Date and End Date are based on the Episode date located in the Administrative QP. If this field is blank, the event will not be included.

- If a user needs to see the data for the current day, the end date should be set to the next day's date.

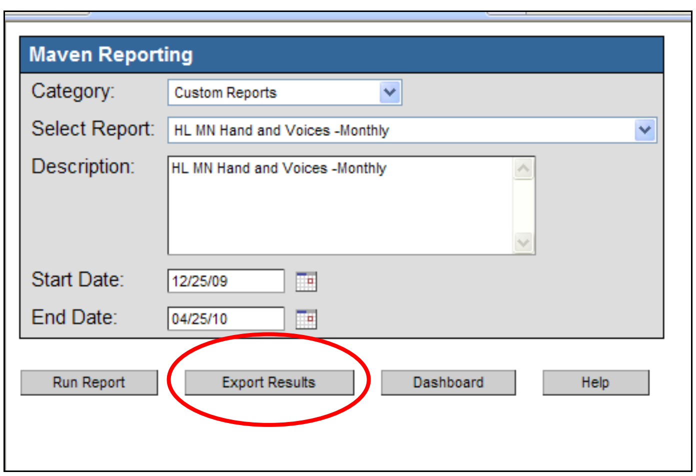
- Some reports require a disease to be selected. Users can choose one disease or multiple by using the shift or control buttons on the keyboard.
    - The shift key will select all entries between the first and last one selected.
    - The control key allows users to pick and choose specific diseases.
    - Clicking without holding one of these keys will delete the selection list.

- Some reports require a county or jurisdiction to be entered. To select all counties, press the shift key after clicking the first and last county.

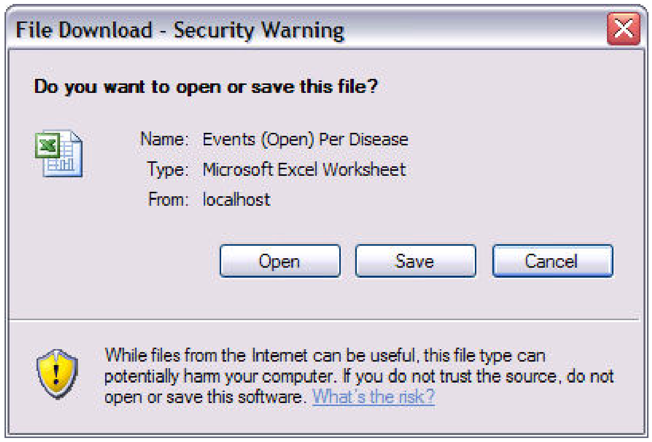
- Remember to fill in all parameters in order for the report to run.

Export the results from a report

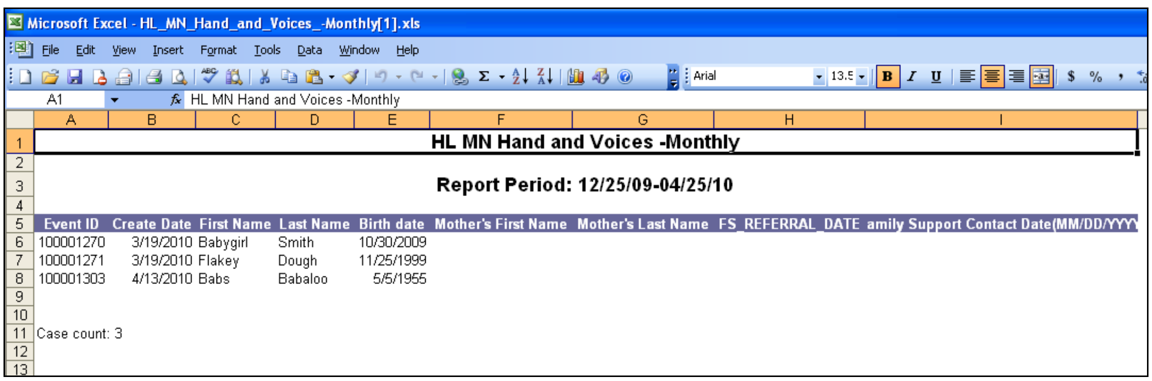
1. Follow the steps to select the report and set the parameters as described above. To view the report in Excel, rather than clicking the **Run Report** button, click the **Export Results** button instead.



2. The user will be prompted with a security warning from Microsoft. (It may not look exactly as shown below, depending upon software version.)



3. Click **Open** to immediately open the report or **Save** to save it before opening. (If the user clicks Save, a Save As window displays so the user must designate a location in which to store the report.)
4. The report opens and the data is able to be manipulated within the limits of Excel. The following image is of a report which has been opened in Excel.



Data Extracts

Most groups in MEDSS will be able to extract all of their data out of MEDSS to manipulate in other programs such as Access or SASS. The extract is based on all of the fields in that disease's question packages and will only show the field if data has been entered for at least one event included in that report. To access the extract report, go to Cutom Reports and choose the report entitled *Case Information Extract*. After filling in the parameters (dates, disease and QPs to include), click Run Report and the extract will open in Microsoft Excel.

SUMMARY

MEDSS is an all purpose electronic data tracking system that allows events to be shared, linked, and assigned for easier management. The system is person centric, so all information is organized around the person not the event or disease. The same person can be entered into the system with various diseases over time; each instance resulting in a different event in the MEDSS system. This is important to remember to avoid person duplications that can slow the system. The **MEDSS** dashboard is divided into four sections. The top two sections help navigation while the bottom two sections are for inputting information on the person and event.

Some important tips to remember:

- When navigating in MEDSS, do NOT use the browser's back button, use the Dashboard link on the screen.
- Save your work often- the system times out after twenty minutes of inactivity.
- Before adding a new event, always search twice by person and event.
- Wildcard characters (*) help searching for a person easier when a user is unsure which characters are used.
- Question package is a set of questions with a common theme. Inside a QP is where some data on the event can be added, modified, or deleted.
- Wizards show the standard data entry forms and may be available for some diseases.
- Demographic information can be edited in several different areas depending on the question: under Persons tab, Demographic QP, or Edit Event Properties.
- All cases' activity can be tracked under the Event Audit Trail Tab for data security and privacy protection.
- Recent cases button on the toolbar help organize and locate the past 20 cases the user was working on.
- Workflows, which are your electronic To-Do lists, and are updated by rules built into the MEDSS system.
- Tasks are to do lists that are created manually either by yourself or another staff member and assigned. You can find tasks using the task icon in the toolbar or by going to workflows.
- Print templates allow for some data from the QPs to automatically be updated on the document before printing.
- Reports are used to extract data from the MEDSS system and can either be viewed on the screen or extracted in Excel.
- Sharing allows cases to be open to different jurisdictions, but not all users have access to open the event for someone.
- MEDSS allows event, person and exposure location links to help with investigations.

Getting Help

If you need help at anytime, here are the resources available to you:

- On-line help in the system (help button)
- IS&TM Helpdesk→ Enter MEDSS in the Assigned to field
- E-mail to group: Health.MEDSS@state.mn.us
- Through the internal website: http://fyi.health.state.mn.us/it/medss/index.html
- Through the external website: www.health.state.mn.us/medss

APPENDIX A: CORE FIELDS DATA DICTIONARY

The core field data dictionary outlines all the core fields by name; defines the fields; and indicates corresponding drop down options. These core fields are visible in all disease events. Some of these fields will display in a different order depending on the disease event. This data dictionary is divided into sections based on all available functions in MEDSS that belong to the core model (e.g. create an event, question packages, etc).

Field Name	Description	Data entry guidelines
Create Event Fields		
Effective From	This is automatically filled in with today's date indicating when the event was entered into MEDSS	Leave as default
Disease	A drop down list will show the diseases the user has access to	If no applicable disease can be found on the drop-down use one of the 'other' diseases.
Person Fields		
First Name	First name of the case, required field	Capitalize as appears on the case report. If unknown, leave blank
Middle Name	Middle name of the case	Capitalize as appears on the case report
Last Name	Last name of the case, required field	Capitalize as appears on the case report. If unknown, use some kind of identification number. Do not leave blank
Suffix	The suffix of the case	Examples include Jr, Sr, 2rd, II, IV
Maiden/Other Name	All other last names or previously used last names	
Alias	Nicknames, aliases or other first names of the case. Multiple Aliases can be entered	Separate each Alias with a comma
Birth Date	Birth date of the case in the format mm/dd/yyyy.	If birth date is not entered, age should be entered into the Demographic QP
Death Date	Death date of the case	Death date can be entered only on the Edit person screen, but is visible in the question packages.

Field Name	Description	Data entry guidelines
Gender	Gender of the case (female, male, unknown, other)	
Mother's Maiden Name	Mother's maiden name of the person/client	
Deduplication Status	The status of the deduplication process of the person if the person was in system more than once. Options include done, pending, merged	This is a system field, please don't change
Address Fields		
Address Type	Indicates the type of address entered into the address fields (Options include: Home, work, company, guardian, mailing, vacation, other, homeless, correctional facility, long-term care facility, shelter, group home)	
Start Date	When the address is effective from	Default will be 01/01/1900
End Date	When the address is no longer valid or when the case will no longer reside at that location	Default will be 01/01/2030
Street Address	The building number and street name of the address. Be as accurate as possible to optimize geo-coding	Use one space (not dashes) between building number and the street name. Use directionals after street type e.g. 123 Main St N
City	The city the address is located in. If uncertain leave the city blank and enter street, state and zip code in appropriate fields	Try to use the correct city for the address if possible. Do not generalize by using bigger city names e.g. use Brooklyn Park not Minneapolis or use Shoreview not St Paul
State	The state the address is located in	Default is MN
Zip Code	The zip code of the address	

Field Name	Description	Data entry guidelines
County	The county of the address. This field is important to know to define jurisdiction	If the address is entered correctly, county will be populated automatically by the geo-coding process.
Country	The country of the address	
Home Phone	Home phone of the case	Area code required. Default format is (555) 555-5555
Mobile Phone	Cell or mobile phone of the case	Area code required. Default format is (555) 555-5555
Work Phone	Work phone of the case	Area code required. Default format is (555) 555-5555
E-Mail	Email address of the case	
Contact Method	The case's preferred method of contact (Options include: Mail, home phone, work phone, Mobile phone, email, do not contact)	
Basic Information (on dashboard) Display only		
Event ID	The Unique identifier of the event in MEDSS	Calculated automatically
Disease	The disease of the event	This is the same as the disease selected when the event was created
Primary Person	The name, birth date, gender and phone of the case	
Dates	Create date and the event date	
Type	How the event was entered into MEDSS: manually (interactive), electronically (batch), uploaded from old system (conversion)	The system will set this field.

Investigation Status	The event status: open, closed or invalid	Closed cases are locked for editing and will need to be re-opened for additional info to be entered
Linked Events/ Contacts	Will show if event is linked to other events with a link to view those links	
Linked Exposure Sites	Will show if the event is linked to an exposure site with a link to view exposure site	
Attachments	Show if any files were attached to event.	Link available to add additional attachments
Notifications	This section will show the disease status, and episode date. If outbreaks or concerns are related to the event, they will display here	
Event Properties fields		
Event ID	The Unique identifier of the event in MEDSS	Calculated automatically
Change Disease To	A drop down of eligible disease changes. Not all users have access to change disease.	Diseases should be changed only if absolutely necessary. Information previously entered might be lost if the new disease doesn't have the same data elements as the old one.
Status	The current investigation status (options include: open, closed, invalid)	Cases should be closed once no more information is needed or expected and when all investigations are completed.
Change Status To	Can change investigation status to open, closed, invalid. Only location in MEDSS where an event can be closed	
Effective From	The date that the event was created. Only location in MEDSS where the event date can be changed.	
Note	Users can add notes about the event.	These will display on the dashboard

Category	The category the note should be categorized under (options include: generic, outreach, clinic, case management, education)	
Note Type	Indicates whether note is public or sensitive	Sensitive notes can be viewed only be certain roles
Deduplication Status	The status of the deduplication process of the event (if more than one disease event is in the system). Options include done, pending, merged	This is a system field, please don't change
Administrative Question Package fields		
Episode Date	The date this case was determined to meet the case definition. Auto-populates based on the field Episode date based on.	The Episode date is a key field and is used in the case count reports
Episode Date Based on	The date in the model that the Episode date should be based on. Options include case report date, event date, diagnosis date, onset date, specimen collection date, death date, lab confirm date, lab received date, birth date, date of first report.	MEDSS will take the date in the selected field and place it into Episode date. Make sure that the field corresponding to the selection in this field has a value
Case Status	The status of the case (options include undefined, suspect, probable, confirmed, carrier, contact, not a case). Some diseases will offer different options. Should be used to track stage of investigation.	This field is set only by MDH users. Use the options applicable to your disease
Reported via Phone to CDC	For MDH use only. Indicates whether the case was reported to CDC via phone.	
Report Case to CDC	For MDH use only. Indicates whether the case should be included in CDC reporting.	
Initial Date Sent	Date the report was initially sent to CDC	Auto-populated after sending to CDC
Most Recent Date Sent to CDC	Date the report was most recently sent to CDC.	Auto-populated after sending to CDC
MMWR Week	The week of the Morbidity and Mortality Weekly Report by the CDC	Auto populated using the episode date.

Field Name	Description	Data entry guidelines
MMWR Year	The year of the Morbidity and Mortality Weekly Report by the CDC	Auto populated using the episode date.
LPH ID Number	The ID number used to identify the case in the Local Public Health Department handling the case	
NETSS ID	Unique identification for NETSS transfer to CDC	
Legacy ID	Unique identification from older systems	Auto-populated after import
State ID	Unique state identification given to event required by CDC.	
Source Who Reported the Case Initially	The first source who reported the case to MDH. Options include: day care, school. Hospital, physician's office, homeless shelter, Indian Health Service, laboratory, emergency room, or other.	This field is sent to CDC
Facility doing the Reporting	Indicates the specific facility doing the reporting	This is a search and select field. Will show name and submiter IDs. Choose 'Other' to manually enter facility.
Date of First Report	The date MDH received the first report	Enter as dd/mm/yyyy
Case Report Received	Indicates whether MDH received a case report form.	A yes in this field will display the subsequent fields about case report date, source and other information about the reporting source.
Case Report Date	The date MDH received the case report form	If the date is unknown use the date you first learned about the case or the date the case was entered into MEDSS
Lab Report Received	Indicates whether MDH received the lab report.	A yes will bring up a date field.
Lab Report Received Date	The date MDH received the lab report	Enter as dd/mm/yyyy

Field Name	Description	Data entry guidelines
ELR Lab Reviewed	Indicates if the epidemiologists reviewed the case and the electronic lab report	This field will automatically be set to No when additional lab reports are received for the case. A Yes in this field will remove the case from the workflow 'ELR needs review'
If MDH Needs Follow-up Information, Contact this Person	Name of a person from the reporting source where additional information can be obtained.	
Contact Person Phone	The contact person's phone number	
Extension	Extension of the contact person's phone number	
Case Invesitgation Start Date	Indicates start date of investigation by MDH or LPH	Field will differ for each disease group
MDH Case Investigator Assigned to Case	The MDH user who is assigned to this event	This is a search and select field that searches by login id, last name, first name, or user's role/group.
Jurisdiction	The jurisdiction for the event's investigation. This field opens the case for LPH access and indicates what LPH agency the case belongs to.	If no local public health agency should have access to the event this field should be set to MDH. As a general rule the Jurisdiction should match the County (ATR) field.
County	The county the event was reported in (address at time of report).	This field is used for the case count by county reports. The data is transferred from the Demographic QP.
Region	The region the event is located in.	Auto populated based on the county.
Local Investigator Name	The name of the local investigator for the case. This is someone not at MDH	Search and select option
Local Investigator type	Indicates what type of investigator. Options include: PHN nurse, Field Epi, LPH, Other	Choose other to specify a different type. List may differ by disease.
Local Investigator Phone	The phone number of the local investigator	Area code required. Default format is (555) 555-5555

Field Name	Description	Data entry guidelines
Local Investigator Fax	The fax number of the local investigator	Area code required. Default format is (555) 555-5555
Local Investigator Email	The email of the local investigator	
Case Reported to LPH date	The date that LPH was notified of the case	Enter as dd/mm/yyyy
Did this Case Occur as part of an Outbreak?	Indicate if event is part of an outbreak. Options include: yes, no, unknown	CDC required field
State Outbreak/ cluster Identification Number	Unique identification of Outbreak.	Field will not be applicable for all diseases.
Patient's Insurance Status	Indicates if the case has health insurance. Options include insured, uninsured or unknown	
Carrier Name	If insured, this is a multi-select field to indicate which company or carrier the case is insured under	If other, please specify
Demographic Question Package fields		
First Name	First name of the case	Transferred over from the edit person screen.
Middle Name	Middle name of the case	Transferred over from the edit person screen.
Last Name	Last name of the case	Transferred over from the edit person screen.
Suffix	The suffix of the case. Examples include Jr, Sr, 2rd, II, IV	Transferred over from the edit person screen.
Maiden/Other Name	Other name of the case	Transferred over from the edit person screen.
Alias	Nicknames, aliases or other first names of the case. Multiple Aliases can be entered.	Transferred over from the edit person screen.

Field Name	Description	Data entry guidelines
Birth Date	Birth date of the case. If birth date is not entered, age should be entered into the demographic QP.	Transferred over from the edit person screen.
Age at Time of Episode	Automatically calculated based on birth date and episode date.	Auto populated. Non-editable
Manual Age Entry	Users can manually enter age if birth date is unknown or if the case is less than 1 week old	If for some reason the age has been calculated incorrectly (due to missing or 'estimated' birth date), this field will take precedence if entered.
Unit	Indicates the unit for Age (options include: year, month or day).	
Did Patient Immigrate to the U.S. during the Period of Interest	During the course of the investigation or disease period, this field indicates if the case moved to the United States.	
Country of Birth	Case's country of birth. Options inlcude all counties.	
Other Country	Freeform to fill out if country is not listed in drop down	
Date of Arrival to the U.S.?	Year contact arrived in the US (if foreign-born)	Enter as dd/mm/yyyy
Marital Status	The marital status of the case. Options include married, single, widowed, divorce, separated, annulled, living together and unknown	
Gender	Contact's gender	Transferred over from the patient screen.
Race	Contact's race	For multiracial, use Add New function to enter additional race. To indicate an 'unknown' multirace, enter two instances of unknown.

Field Name	Description	Data entry guidelines
Please Specify	If a race is chosen that requires more details (i.e. Black African American, Asian, American Indian), this field will show	
Ethnicity	Indicates whether caseis Hispanic or non-hispanic	
Preferred Language	Case's preferred language. Dropdown lists all availabel languages	
Other Language	If other is chosen, freeform to indicate which language	
Interpreter Needed	If language other than English is chosen, this field will show. Options include yes, no, unknown	
Interpreter Language	If interpreter is needed, indicate what language	
Other Language	If language is not on the list, use freeform to indicate which language is needed	
Preferred Contact Method	The case's preferred method of contact (Mail, home phone, work phone, Mobile phone, email, do not contact)	
Is the Person Dead?	Indicates if the patient/client is dead.	
Death Date	Date the case died.	Transferred over from the patient screen.
Address Information (at time of reporting)	The address at time of reporting is used to indicate the address the case had when it was reported.	The address at time of reporting is auto populated when the case is created and after that not changed.
Update Address at Time of Reporting with Current Address	This allows Address at time of report to be auto-populated based on what is in Current address section	Use when address is initially unknown. Update Current address in person tab then auto-populate at time of report
Address Type	Indicates the type of address entered into the address fields at time of reporting. Options include: Home, work, company, vacation, other, etc.	

Field Name	Description	Data entry guidelines
Street 1	The building number and street of the address	Follow US Postal standards
Street 2	Indicate apartment, suite, floor, etc. number	
City	The city the address is located in	
State	The state the address is located in	
Zip	The zip code of the address	
County	The county of the address. This field is important to know to define jurisdiction	
Country	The country of the address	
Address information (current)	Displays the current address from the edit person screen.	To change the current address, use the edit person screen.
Parent/guardian information known	This field needs to be set to yes to be able to enter information in the fields' guardian first name, middle name and last name.	
Guardian First Name	If case is younger than age 18, indicate the guardian or parent's first name	
Guardian Middle Name	If case is younger than age 18, indicate the guardian or parent's middle name	
Guardian Last Name	If case is younger than age 18, indicate the guardian or parent's last name	
Guardian Relationship	If case is younger than age 18, indicate the guardian relationship	
Birthing Facility Name	The facility where the case was born	Only enter if applicable to the case.
MDH Submitter Code	MDH identifying number for the facility	
Address (line 1)	The address of the facility	

Field Name	Description	Data entry guidelines
Address (line 2)	Indicate P.O. box, apartment, suite, floor, etc. number	
City	The city the address is located in	
State	The state the address is located in	
Zip Code	The zip code of the address	
Phone Number (facility main)	The facility's main phone line	
Extension	The extension of the phone number	
Phone Number	Lists alternate phone number to reach physician	
Extension	The extension of the phone number	
Clinical and Lab Interpretations Question Package		
Diagnosis Date	The date the case was diagnosed with the disease	Enter as dd/mm/yyyy
Onset Date	The date symptoms started	Enter as dd/mm/yyyy
Pregnant at Time of Report?	Indicates if the case was pregnant at the time of diagnosis	
Pregnancy Due Date	If yes to the above field, the due date of the baby	Enter as dd/mm/yyyy
Was the Patient Hospitalized?	Indicates if the case was hospitalized at time of reporting and diagnosis	
Hospital Name and Submitter code	Displays the hospital name and submitter code after choosing from the facility list	Search and select field
Hospital Name	The name of the hospital	Auto-populated
MDH Lab Submitter Code	MDH identifying number for the facility	Auto-populated
Address (line 1)	The street number of the building	Auto-populated

Field Name	Description	Data entry guidelines
Address (line 2)	Indicates P.O. box, apartment, suite, floor, etc. number applicable to facility	Auto-populated
City	The city the address is located in	Auto-populated
State	The state the address is located in	Auto-populated
Zip Code	The zip code of the address	Auto-populated
Phone Number (facility main)	The facility's main phone line	Auto-populated
Extension	The extension of the phone number	Auto-populated
Phone Number	Lists alternate phone number to reach facility	
Extension	The extension of the phone number	
Date of Admission	The date the case was admitted to this hospital	Enter as dd/mm/yyyy
Date of Discharge	The date the case was discharged from this hospital	Enter as dd/mm/yyyy
Number of Days Hospitalized	The total number of days case was hospitalized	This field is calculated based on difference between admission date and discharge date
Total Days Hospitalized	This is a freeform field for total days patient was in hospital.	This field is not aplicable for all diseases. Use if Number of days hospitalized is blank.
Duration of illness (in days)	This is a freeform field for total days illness lasted.	This field is located differently based on disease
Died from this illness?	Specifies whether patient died due the specific disease of the current event in MEDSS	
Specimen Collection Date	Date the specimen source was collected from the case	Enter as dd/mm/yyyy

Field Name	Description	Data entry guidelines
Specimen Sent to MDH Lab	Indicated if the specimen was sent to the MDH lab	
Date Sent	The date the specimen was received by the MDH lab	Enter as dd/mm/yyyy
Sent From	Facility that submitted specimen to MDH lab. Will show name and submitter id.	Search and select field
Confirmed by MDH Lab	Indicates if the MDH lab confirmed they received the specimen	
Date Confirmed by MDH Lab	The date the MDH lab confirmed they received the specimen	Enter as dd/mm/yyyy

APPENDIX B: ADDRESS STANDARDS

One of the benefits of MEDSS is the ability to assign GIS coordinates (longitude and latitude) to a person's address or an exposure site and view on a map the location of that person or site. MEDSS de-duplication is also using these addresses when identifying matches. With standardized addresses, the GIS location and de-duplication processes will work better.

In order to increase optimization of the current geocoder and de-duplication processes in MEDSS, it is preferred that users enter address information according to US postal standards. The efficiency of the system relies on this standardization of data entry. Please refer to the following list for guidelines on entering address information. Standard abbreviations are located in the appendix.

Guidelines

The guidelines below are to help assist users when adding address information in MEDSS.

- A *standardized address* is one that is fully spelled out, abbreviated by using the Postal Service standard abbreviations, and uses the proper format for the address style.

- The Postal Service defines a *complete address* as one that has all the address elements necessary to allow an exact match with the current Postal Service files.

- A complete address should contain:
    - Street number (**3186** PILOT KNOB RD)
    - Prefix direction (if necessary) (156 **E** 18TH ST)
    - Street name (3334 **CEDAR** AVE)
    - Street type (3334 CEDAR **AVE**)
    - Suffix direction (if necessary) (1200 34TH ST **W**)
    - Unit number (14955 GALAXIE AVE **STE 300**)
    - City (**MINNEAPOLIS** MN 55406)
    - State (MINNEAPOLIS **MN** 55406)
    - Zipcode (MINNEAPOLIS MN **55406**)

- If the entire address is entered correctly according to these guidelines, MEDSS will be able to find and enter the correct county.

- If the correct zipcode is entered together with a correct street address, MEDSS will be able to find and enter the correct city.

- Punctuation should be omitted from address unless it is a significant part of the address or it is the *hyphen* in a 9 digit zipcode.
    - Hyphens in the address range (i.e. part of box number) are significant and are not removed.
    - Hyphens in the street or city name are not significant and may be replaced with a space.
    - Remove any special characters (i.e. *, &, @) from address line.
    - Do not use punctuation after abbreviation of street type or unit designator.

- When entering address information, try to have these components to have a success address match:
    - Street number, name and street type.
    - State and zipcode

Below breaks down the guidelines into the different address components:

City names

- City names should be spelled out in their entirety.
- MEDSS offers an auto-suggest list when entering in city names. Please use that spelling.
- Any city with abbreviation should have punctuation, i.e. St. Cloud not St Cloud.
- Do not spell out common abbreviations, i.e. use St. not Saint.
- Try to use correct city names for location, i.e. use Brooklyn Center not Minneapolis.
    - If city is unknown or unsure, leave blank.
    - If zipcode is correct and city is blank, the geocoder will find the correct city.

Street names

- Use correct spelling of street names and do not use abbreviations. The geocoder will not find address if the spelling is incorrect.
- Streets with numeric names should be entered as 1st ST rather than First ST.
    - Only exception is when there are duplicate street names within a postal delivery area and the only distinguishing factor is that the one you entered is spelled out.
- When entering in street type, always use the abbreviation, i.e. ST, RD, LN, etc.
    - See the next section for a list of common street types.

Direction Designators

- For the location of a direction designation, place as <u>Suffix</u> after Street type.
    - This is in order to standardize addresses for easier and efficient searching
    - Exception is when address needs both prefix and suffix
    - Use the correct abbreviation— N, S, E, W, NE, NW, SE, SW— and do not punctuate.

Unit Designators

- Secondary address unit designators are preferred to be at the end of the address line, after street type.
    - If unit designator does not fit on the same line, place it in the second address field.
- Avoid using the pound sign (#) unless correct designation (i.e. apartment or suite) is unknown.
    - Use the correct abbreviation (see the next section for most common unit designators).

Post office box addresses

- Print Post Office Box addresses as: PO BOX NN
    - PO BOX should replace street number and street name.
- If dual addresses are needed, place PO BOX on second address line.
- Zipcode should be the correct one for the PO BOX location

Rural route addresses

- Print rural route addresses as: RR N BOX NN.
    - Example: RR 2 Box 152
- Do not use the words RURAL, NUMBER, NO., or the pound sign (#)
- Additional designations, such as street name or town, are not needed.

Abbreviations

Secondary Unit Designators Abbreviations

Apartment	APT
Building	BLDG
Department	DEPT
Floor	FL
Office	OFC
Room	RM
Suite	STE
Unit	UNIT

Common Street Suffix Abbreviations

Alley	ALY	Lane	LN
Avenue	AVE	Meadow	MDW
Boulevard	BLVD	Motorway	MTWY
Bridge	BRG	Mountain	MTN
Causeway	CSWY	Orchard	ORCH
Center	CTR	Parkway	PKWY
Circle	CIR	Passage	PSGE
Court	CT	Place	PL
Creek	CRK	Plaza	PLZ
Divide	DV	Ranch	RNCH
Drive	DR	Ridge	RDG
Estate	EST	Road	RD
Expressway	EXPY	Route	RTE
Ford	FRD	Shore	SHR
Forest	FRST	Skyway	SKWY
Freeway	FWY	Spring	SPG
Garden	GDN	Square	SQ
Grove	GRV	Street	ST
Highway	HWY	Terrace	TER
Hill	HL	Trafficway	TRFY
Hollow	HOLW	Tunnel	TUNL
Junction	JCT	Turnpike	TPKE
Lake	LK	View	VW

GLOSSARY

Dashboard — the dashboard is the main screen for the system. It can be compared to the home screen of a web browser. From the dashboard, users can access all MEDSS functions.

Toolbar — the toolbar is the dark gray bar on the top of the dashboard screen. Most actions can be access from the toolbar.

Event — an event in MEDSS is a person with a disease at a specific point in time.

Case — a case in MEDSS is the same as an event.

Record — a record is much like a case or event; however, a record could also be the information on a single person.

Person — a person in MEDSS will only be entered once but can be tied to multiple disease events

Wildcard — a wildcard is substitute for letters when searching for a name. In MEDSS, users can use the asterisk * if letters of a name are uncertain. However, using a wildcard may yield more results than intended.

Question Package — a question package (QP) is a series of questions that relate to a common theme. In MEDSS the core question packages are Administrative, Demographic and Clinical and Lab Interpretations. However many disease events will also have Risk History, Vaccine History and Activity History.

Workflow Queue—a workflow queue is an electronic inbox or to do list. Events will automatically flow into these inboxes based on specific triggers usually located in the question packages. These workflow queues update every 10 minutes so it is import to stay up-to-date on your assigned workflows.

Unload Event — the unload event link is a way to put the event folder back in the drawer so another user can edit the event. Two users can not edit the same vent at the same time so it is important to properly put back events when finished working on them.

Icon — all the images in the toolbar are known as icons. This term is used throughout the training guide to define the links on the toolbar.

Button — a button in MEDSS is any navigational link that leads the user to a new screen or back to the dashboard. Buttons will usually be gray color and rectangular. Icons are the links in the toolbar while buttons are the links throughout the screens of MEDSS.

Link — a link in MEDSS is any blue and underlined word that leads the user to a new screen.