

THISIS Core Functions Guide

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A note to users

In this manual, **bold** is used to signify vocabulary terms or field and features in the system. Many of these terms can be found in the glossary. *Italics* is used to emphasize important points of instruction.

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Chapter 1 THISIS Overview

Learning Objectives:

- Explain the purpose and benefits of implementing the THISIS Electronic Disease Surveillance System.
- Understand the purpose of users, roles, and groups in THISIS.
- Demonstrate the ability to log into THISIS.

1.2 Overview of THISIS

THISIS is the TB, HIV, STD Integrated System (THISIS). THISIS is an electronic disease surveillance system built on a commercial-off-the-shelf, Web-based business rules engine. It provides interactive, automated information gathering and decision support processes for the reporting and management of Tuberculosis (TB), Human Immunodeficiency Virus (HIV), and all reportable Sexually Transmitted Diseases (STD).

THISIS allows public health staff to enter, manage, process, track, and analyze data for disease exposure events, treatment, and follow-up. THISIS allows for secure communication and coordination between state and local health departments. In addition, THISIS enables the immediate exchange of clinical, case management, laboratory, and surveillance information between local and regional health departments and DSHS. Because THISIS allows for a more coordinated exchange of information, it allows for a higher level of quality assurance. The THISIS security environment displays only the data a user needs and is authorized to see. Through data analysis, THISIS can extract surveillance and case management data for the identification of a possible public health emergency.

Additional THISIS functions include:

- Electronic data exchange and flow of work among groups working on public health disease management
- Electronic import of laboratory reports
- Data entry capability
- Customized report creation
- Case management, contact-tracing, and outbreak management.

In short, THISIS serves to improve the efficiency and accuracy of disease information management for Texas in a seamless, user friendly manner.

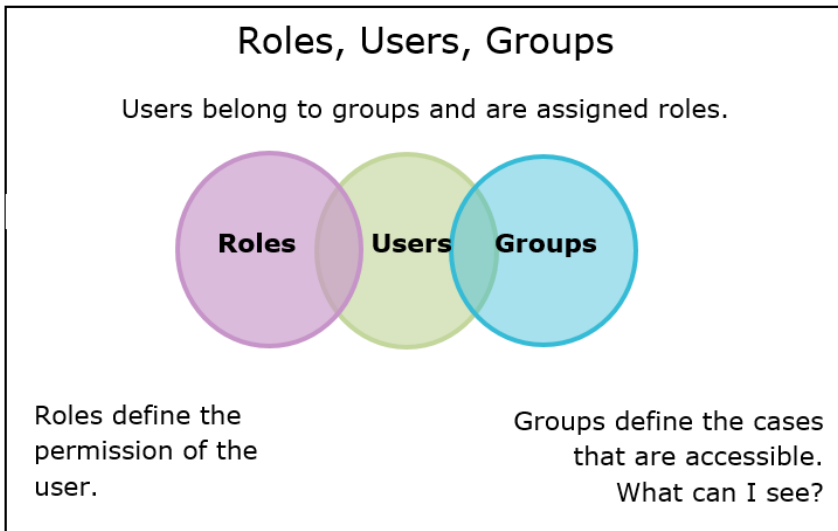
1.3 Users, Roles, and Groups

The THISIS security system is developed in accordance with specific client requirements. Users are assigned a username and password to access the system. Each username is assigned to one or more roles and associated with one or more groups. Roles and groups allow the user to access the specific system features and event information that are necessary to their job. An **event** is the occurrence of a disease and a person. A person can be associated with more than one event, if he or she has multiple diseases. For example, if a man has TB, HIV, and syphilis, he would have three events. If he were re-infected with syphilis two years later, he would have four events.

User: Any individual using the THISIS system.

Role: Roles define the user's permissions - the ability to use specific functions/features in THISIS. Example: a user with the STD First Line Supervisor role would have permission to approve field record dispositions. A TB nurse would have permission to enter and change data.

Group: Groups determine which events are visible to the user. Groups are typically based on jurisdiction (County, District, Region, and State) and a disease classification. Users can search and see events in groups other than their own, but will only receive notifications about events in their own group. Users can belong to more than one group.



To become a user on THISIS, complete the Access Request Form found at: <http://www.dshs.texas.gov/hivstd/policy/security.shtm> under forms. Users need to complete security training and sign a confidentiality form prior to accessing the THISIS system. You will receive the URL for THISIS when you are approved to access the system.

1.4 Logging in to THISIS Main Application

THISIS can be accessed using most Web browsers. THISIS will work with Internet Explorer 7.0 and above, Firefox 3.0 and above, Safari 3.0 and above, Google Chrome 2.0 and above, and Opera 9.0 and above. However, THISIS does not work well with Netscape Navigator.

When logging in with an unsupported browser, the user receives the message below:

Unsupported Browser

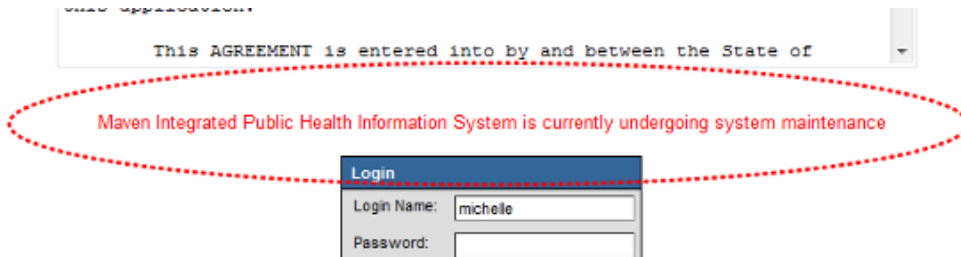
The application has detected an incompatibility issue with your browser. Please verify the following:

- Supported browsers for Maven include:
 - Microsoft Internet Explorer 7.0 and above
 - Mozilla Firefox 3.0 and above
 - Apple Safari 3.0 and above
 - Opera 9.0 and above
 - Google Chrome 2.0 and above
- JavaScript must be enabled in the browser settings for the application to work correctly
- Cookies must be enabled in the browser settings for the application to work correctly

If after verifying the above you are still having problems, please contact your local system administrator for assistance.

THISIS is enterprise-ready and designed to support high-availability. However, the local administrator may choose to put the application into "Maintenance Mode" if there is a need to prevent end-users from modifying case information or when a particular background update or data fix/migration task needs to be executed.

If Maintenance Mode has been triggered by the administrator, the following screen may appear to the user and temporarily prevent login:

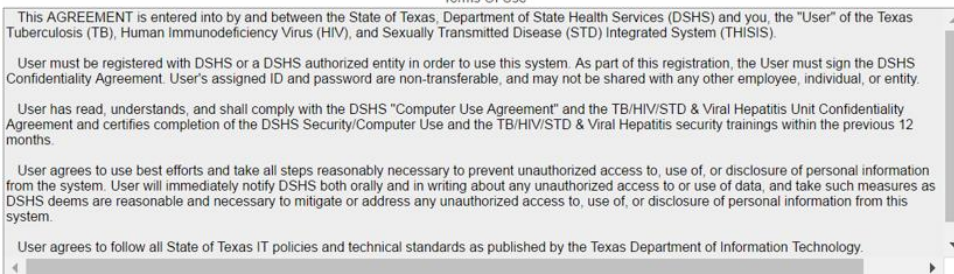


1.4.1 Logging Into THISIS

- Open your Web browser and enter the URL for the login page. You will receive the site address when you have been approved to access THISIS.
- Enter your assigned Username and Password and verify the application field is set to Main.
- Click the Login button.



If you do not agree to be bound by the terms and conditions, promptly exit this application.
Terms Of Use



Your session has expired. Please login again.



1.4.2 Rules for Usernames and Passwords

Usernames and passwords are case sensitive. WXYZ1234 is not the same as wxyz1234.

Passwords expire. THISIS will start prompting the user that their password will expire 15 days before the expiration date. If the user does not reset the password prior to its expiration, they will be prompted to change the password on their next login before being granted access to the system. If you do not log in to the system for an extended amount of time, your password will expire.

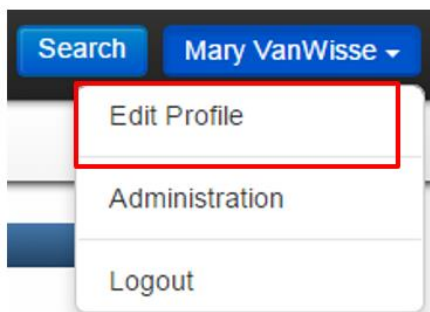
THISIS requires users to establish strong passwords. Passwords must be 8 to 14 characters in length and must contain at least one number and one symbol.

Users may not reuse previous passwords. THISIS can store up to nine previous passwords for each user.

1.4.3 Changing Your Password

If a user forgets a password, the THISIS administrator can be contacted to reset it manually. Alternatively, THISIS provides a more streamlined way of handling this common occurrence. Below the Login button on the Login box is a hot link that says, "Reset your password". Clicking on this link enables a user to have a new password sent to the *e-mail address already configured in their profile in THISIS*. If this e-mail address is not pre-configured by the administrator, the user is prompted to contact the THISIS administrator directly.

To change your password prior to its expiration, login to THISIS, select the blue drop down button with your name on it on the left side of the toolbar, and select **Edit Profile**.



In the **Edit User Information** screen, enter your new password into the Password and Confirm Password fields, then click **Save**.

The screenshot shows a web form titled "Edit User Information" divided into three sections: "User Information", "Login Credentials", and "Contact Information".

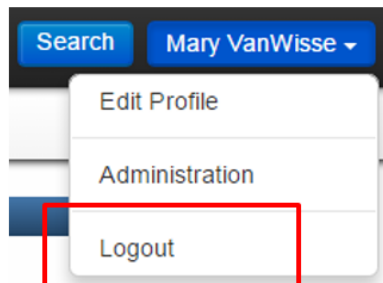
- User Information:** Fields for First Name (Mary), Middle Name, Last Name (VanWisse), Title, Gender (Male), Email (mary.vanwisse@dshs.state.tx.us), Secondary Email, Supervisor, Time Zone, and Accessibility Mode.
- Login Credentials:** Username (mvanwisse), Password, Confirm Password, Security Question, Security Answer, Confirm Security Answer, and a yellow warning box: "Please fill out password fields only if you want to change your password".
- Contact Information:** Street 1, Street 2, City, Zip Code, Home Phone, Mobile Phone, Fax, State (TX), Country (USA), Work Phone, and Pager.

At the bottom of the form are three buttons: "Save", "Cancel", and "Help".

Red circles highlight the Password and Confirm Password fields in the "Login Credentials" section and the "Save" button at the bottom.

1.4.4 Logging Out

To logout of THISIS, click the **Logout** button located in the **User** drop down button at the top right corner of the dashboard.



1.5 Main and Administration Applications

When users log in to THISIS they have the option of choosing from two applications - **Main** or **Administration**. The **Main** application is used to create access and process disease events. The **Main** application is the default setting when logging into the system.

The **Administration** application is used for system administration. IT professionals or administrators can use it to create new users in the system, to create and assign roles and groups, and to manage workflows, reports, and models. This role is limited to a few users; you may or may not have this option when you log in.

Chapter 2 Navigating THISIS

Learning Objectives:

- Identify the three distinct areas of the THISIS dashboard and specify the purpose of each.
- Explore the Event Summary section and add an Event Note.
- Explore the Event Information section and its tabs.
- Copy an event
- Learn about THISIS Question Packages

2.1 The THISIS Splash Screen

The Splash Screen is the opening screen, or home page in THISIS and provides the user with a visual summary of what is going on in the system. It is designed to orient the user at a high level before getting into more detailed screens. It contains an overview of various events, as well as user account access and help information.

The Splash Screen is also sometimes referred to as the *Main* Dashboard because it is an interface that provides an at-a-glance, or snapshot, of the overall THISIS system relevant to a particular user. This Splash Screen, or Main Dashboard, is the place from which users access the main functions available in THISIS. Because users have different permissions and roles, belong to different groups, and work on different cases, the Main Dashboard will often look different for each user. It should be noted that the THISIS Splash Screen, Main Dashboard, homepage, and opening screen all refer to the same screen, and therefore, are terms used interchangeably throughout this manual.

The Splash Screen is configurable, and can include the summary areas: Workflows, Tasks, Recent Cases, an Activity snapshot, links to various resources, and technical

support. A toolbar is located at the top of the Splash Screen and can be used to access a variety of functions within the system. There are also two search functions on the splash screen. One in the upper right (rectangular field), the other is in the upper left (see magnifying glass icon).

Workflows

Workflow Queue	Events
CO Congenital Syphilis Investigation Review and Classification Approval	3 (0)
FLS Congenital Syphilis Investigation Review and Classification Approval	4 (0)
FLS Congenital Syphilis Investigation Review and Classification Approval - Amarillo	1 (0)
FLS Congenital Syphilis Investigation Review and Classification Approval - Corpus Christi	1 (0)
FLS Congenital Syphilis Investigation Review and Classification Approval - Galveston	1 (0)

Tasks

Type	Priority	Name	Disease
Assignment	Medium	Grey, Christian Harding	700 - Syphilis

Recent Cases

Event ID	Name	Disease
100000747	Jones, Alan	300 - Gonorrhea
100000871	Jones, Elan	300 - Gonorrhea
100000863	Grey, Christian	Coinfection
100000864	Grey, Christian Harding	700 - Syphilis
100000862	Grey, Christine	Tuberculosis

Activity

Activity Summary as of 11/15/2016 15:45

Type	# Last Week	# Average Last 4 Weeks	# Last 52 Weeks
200 - Chlamydia	2	1	51
300 - Gonorrhea	1	1	103
900 - HIV	3	3	167
Facility	2	0	24
Provider	1	0	6
Tuberculosis	11	3	51
700 - Syphilis	0	12	326
Coinfection	0	0	56
100 - Chancroid	0	0	12
790 - Congenital Syphilis	0	0	37
900 - HIV Case Report Form - Adult	0	0	14
900 - HIV Case Report Form - Pediatric	0	0	2
Unknown	0	0	2

Help Desk

Contact Us | Email Us
1-800-SUPPORT | help@support.org

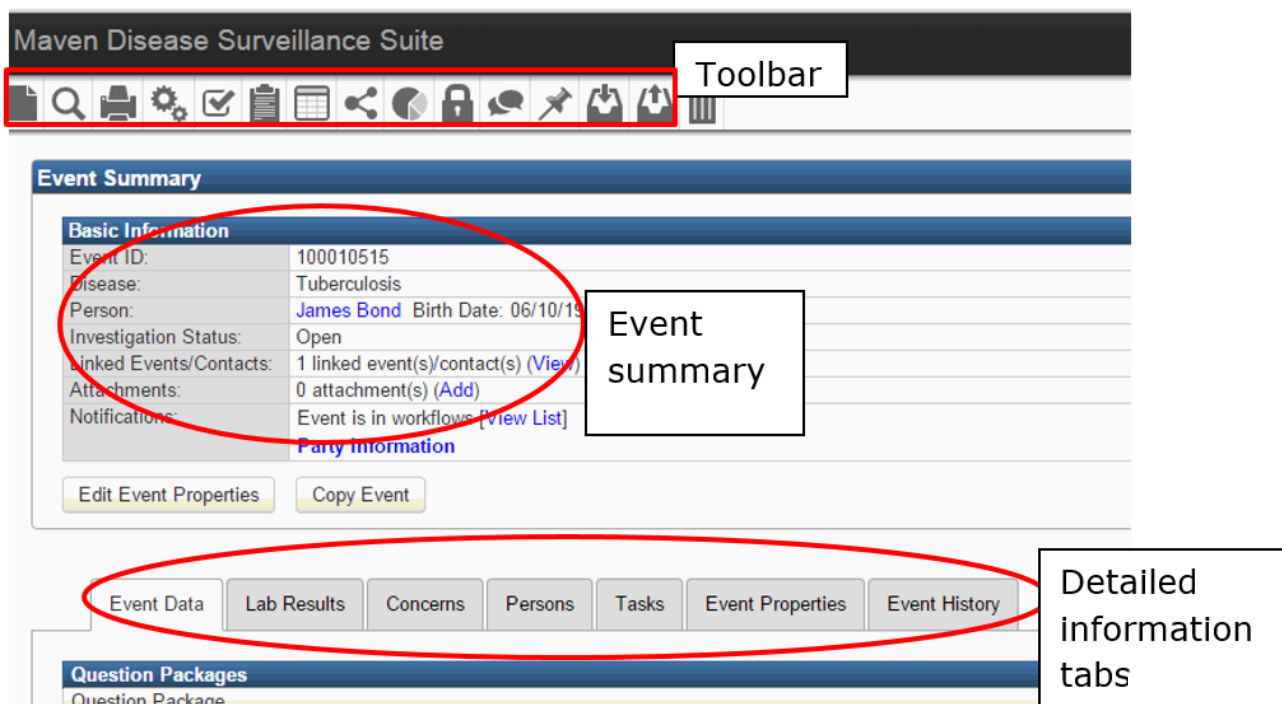
2.2 The THISIS Event Dashboard

In THISIS, there are two types of dashboards: the *main* dashboard and the *event* dashboard. The main dashboard refers to the Splash Screen or THISIS homepage and is described above. The *event* dashboard is the main page for an event and the starting point from which most actions take place. When a user clicks on an Event ID, the event dashboard will open. Users can perform the following actions from the event dashboard (note that some functions not appearing now may appear in a future release):

- Create a new event
- Search for an existing event
- Print a letter
- View workflow queues

- Add a task
- Import rosters
- Update rosters
- Manage reference parties
- View reports
- Share an Event
- Enter data into question packages
- Update/modify person information

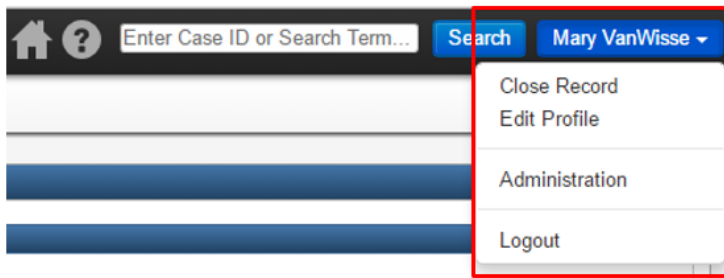
The event dashboard is divided into three separate areas. The first is the **toolbar** which has icons that perform the majority of the functions within the product. *Depending on a user's role, the buttons displayed in the toolbar may vary.* For example, one user might see a trashcan icon which is used to delete an event, while another user may not see a trashcan because his/her assigned role doesn't permit that action.



Below the toolbar is the **Event Summary** section which displays basic summary information about the event. Below the Event Summary are the **Detailed information tabs** which contain more detailed information about the event.

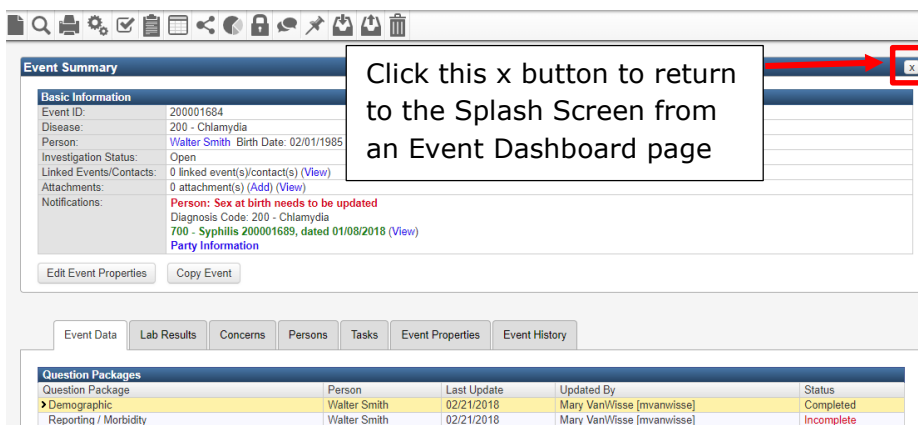
2.3 Shortcut Buttons

At the very top right hand side of all THISIS screens, there are **Shortcut Buttons** that allow the user to return to a home page, open an event, get online help, logout of THISIS, close record, switch to the Administrator site, or edit the user's profile. The logout, close record, switch to Administrator site or edit profile appear as a drop down menu from the user's name.

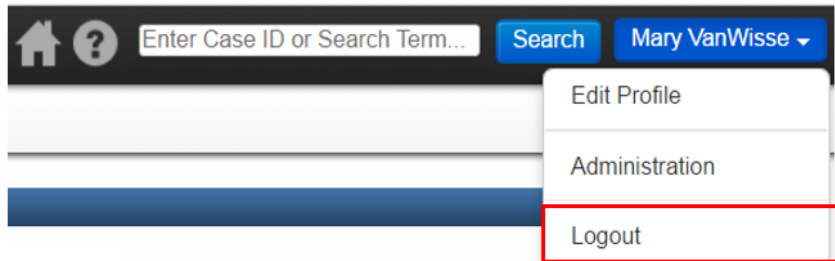


The **Home** button works differently depending upon where the user has been prior to clicking the button. For example, if the user is on the Splash Screen and clicks the Workflows button, clicking on the Home button from the Workflows screen will take the user back to the Splash Screen. However, if the user opens an event, then clicks the Workflows button, clicking the Home button will now return the user to the Event Dashboard screen. Therefore, if the user is working within the context of a specific event and clicks the Home button, s/he will be returned to the Event Dashboard. If an event is not open or actively being worked on and the user clicks the Home button, the user will be returned to the Splash Screen (Main Dashboard).

If a user is working within the context of a specific event and would like to return to the Splash Screen (Main Dashboard/THISIS homepage), click the **Home** button to return to the Event Dashboard page, then click the **x** button at the top right side of the event summary section in the Event Dashboard.

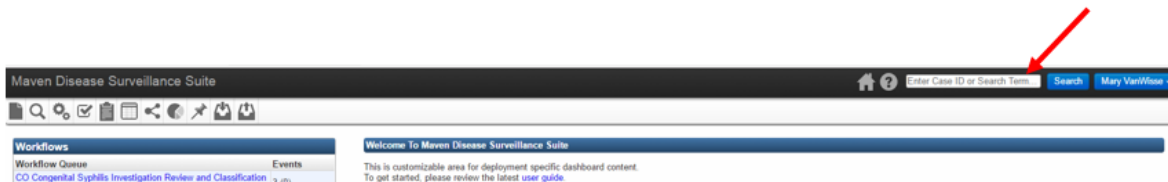


The **Search** button allows the user to quickly open an event. Enter the Event ID in the field to the left of the buttons, then click the Search button. Click on the **User** button to access the dropdown menu. You can then click the **Edit Profile** button to edit the user information, or the **Administration** button to switch to the Administration application, or click the **Logout** button to logout of THISIS and return the user back to the login screen.

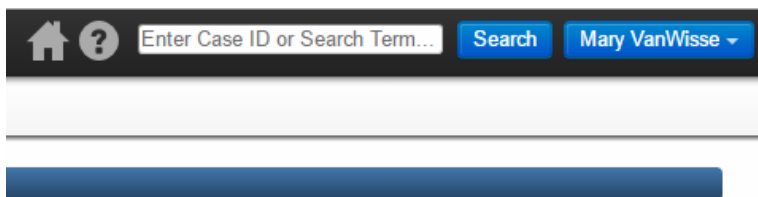


2.4 Free-Text Search

The advanced **Free Text Search** box in THISIS allows you to perform freeform queries on a number of fields within the system. By default, THISIS will look through all searchable fields for the text provided. The Free Text Search box is located in the top right section of the toolbar accessed from the Splash Screen or Event Dashboard.



Close up:



To perform a basic search, simply type the terms into the search box and click 'Search'. For example, if the user types "John Smith Boston" in the Search box and then clicks **Search**, THISIS will search for the words "John", "Smith", and "Boston" across all searchable fields of accessible cases.









A query language is available, which allows the user to build complex queries to filter the results down to exactly the cases that a user is interested in. For more information on advanced search functions, see Appendix A.










2.5 Toolbar

The **toolbar** contains icons (buttons) that perform the majority of the functions in THISIS. **The buttons displayed on the toolbar may vary depending on a user's role.** For example, while one user might see a trashcan icon on the toolbar for deleting an event, another user may not see the same icon because his/her assigned role doesn't permit that action. Another user may be able to delete events, but not run reports.



2.5.1 Toolbar Buttons

Button name	Function
	Create Event - Used to create a new event.
	Search Event - Used to search for an existing event based on various search criteria.
	Print Event - Used to print letters or forms specific to the open event.
	Workflow - Used to view user workflow queues. Workflow queues are designed to bring attention to events which may need user action.
	Tasks - Used to assign, update, and complete tasks.
	Import Roster - Allows a user to import a roster and create multiple events automatically.
	Update Roster - Allows a user to update answers to model questions from a list of selected events on a single screen.
	Manage People and Facilities - Allows a user to manage reference entities like physicians or laboratories directly from the end-user interface.

	Create Outbreak/Exposure Event Report - Allows the user to create an outbreak event or exposure event to manage a number of different situations.
	Reports - Used to view, print, and export reports from data entered in THISIS.
	Lock Event - Used to set a long-term lock on the event, which prohibits others from updating this event. Primarily used with the THISIS offline functions.
	View User Calendar - Used to view or update information in the user calendar.
	Share Event - Used to share an event with a user or group who would not ordinarily have permissions to see it.
	Recent Events - Used to provide access to the last 20 events the user has opened or created
	Import Event(s) - Used to import one or more events from one THISIS instance to another (for example, from a test to a production environment). This feature is often used for offline event updates.
	Export Event(s) - Used to export one or many events from one THISIS instance to another (for example, from a test to a production environment). This feature is often used for offline event updates.
	Delete Event - Used to remove an event.












2.6 Section 508 Compliance and Keyboard Shortcuts

THISIS is covered under section 1194.22 (Web-based Intranet and Internet Information and Applications) of Section 508 and is fully compliant with the guidelines set forth in Section 508. THISIS's capabilities are accessible to persons with disabilities through the THISIS's Web interface. THISIS is interoperable with common assistive technologies for vision-impaired users and allows for data entry using only the keyboard.

As a result of this work, a number of standard keyboard shortcuts have been implemented in THISIS to enable and improve general navigation within forms. Three of these shortcuts, Save (S), Cancel (C), and Help (H), can be used pervasively through the system. However, the shortcuts are accessed using

different key combinations depending on the client's browser. THISIS supports a number of different popular browsers, including Google Chrome, Firefox, Internet Explorer, Opera, and Apple Safari.

Browser-Based Access to Save (S), Cancel (C), and Help (H)

Browser	Keys	Stroke
Google Chrome		+ S / C / H
Firefox	 + 	+ S / C / H
Internet Explorer		+ S / C / H
Opera	 + 	+ S / C / H
Safari 3	 ( for Windows)	+ S / C / H
Safari 4	 +  ( for Windows)	+ S / C / H

2.7 The Event Summary Section

The **Event Summary** section sits at the top of the event dashboard screen and displays **Basic Information** about the event. The **Notes** area on the right displays event-specific notations. The **Edit Event Properties** button allows the user to modify event properties like investigation status.

The **Basic Information** section displays essential information about the event.

Event Summary

Basic Information	
Event ID:	100000747
Disease:	300 - Gonorrhea
Person:	Alan Jones
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	300 - Gonorrhea 100000033, dated 12/16/2015 (View) 700 - Syphilis 100000030, dated 12/16/2015 (View) 700 - Syphilis 100000748, dated 08/24/2016 (View) 900 - HIV 100000029, dated 12/16/2015 (View) Diagnosis Code: 300 - Gonorrhea Party Information

2.7.1 Basic Information Fields

Basic Field Name	Description
Event ID	The unique event number automatically assigned by THISIS.
Disease	The disease selected from a dropdown menu when a record is first entered into THISIS is reflected in this field.
Person	The person about whom data is entered when an event is input into THISIS is reflected in this field.
Investigation Status	The investigation status displays the current status of the event. Typically, the status will be either open or closed.
Linked Events/Contacts	Displays the number of other events that are linked to this event. This is also a tool where one would initiate the linking of one event to another.
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. This will only be displayed if there are custom notifications built into the system.

2.8 Person Summary Page

THISIS is constructed based on a person and their linked events. This makes it a **Person-Centric** (party-centric) system. There is a **Person Summary** page that, given the right permissions, allows the user to see across a person's multiple events, links, and labs. This page also provides demographic and contact information for an individual whose data is in THISIS. The Person Summary page can be accessed directly from the event dashboard when one of a party's events is loaded. It should be noted that in most cases, person and party are interchangeable terms.

For Electronic Disease Surveillance users, the Person Summary page lets the user:

- Easily view co-infections (all the cases that the patient has had)
- Update demographic information (without opening a case - basically edit person outside of case context)
- View all labs for the person (regardless of which case the lab is in)

To access the Person Summary page, click the link on the person's name in the Event Summary section of the Event Dashboard for that person.



The screenshot shows the 'Event Summary' window with the following data:

Basic Information	
Event ID:	200001684
Disease:	200 - Chlamydia
Person:	Walter Smith
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add) (New)
Notifications:	Person: Sex at birth needs to be updated
	Diagnosis Code: 200 - Chlamydia
	700 - Syphilis 200001689, dated 01/08/2018 (View)
	Party Information

Buttons: Edit Event Properties, Copy Event

The Person Summary page displays essential party information.



Person Summary

Demographic Information (View History)

Name:	Jones, Alan
Birth Date:	
Death Date:	
Living Status:	Alive
Social Security Number:	
Party ID:	PFMESBREPFIK
Create Date:	12/16/2015



Demographic

Contact Information

Type	
Home * Primary	

Edit Person

Event Information

Event Information

Events

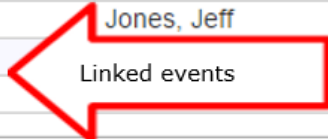
Event ID	Person
100000748	Jones, Alan
100000747	Jones, Alan
100000033	Jones, Alan
100000030	Jones, Alan
100000029	Jones, Alan



Event

Linked Events/Contacts

Event ID	Person	Statu
100000026	Jones, Jeff	Oper
100000031		Oper
100000024		Oper



Linked events

Labs			
Lab No.	Collection Date	Test	Result
1	12/05/2016	CHLAM - NAAT(SDA, TMA, PCR)	Positiv



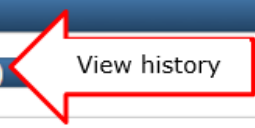
The top section of the screen details demographic information about the person. It is followed by the Address Information section which contains the most recent address information for the person. The **Events** section lists all the other events for the person.

The **Linked Events** section shows all of the other events that are associated with other parties, but linked back to this party's events. The Linked People section may include names of STD partners, children, and TB exposures.

The Labs section contains all of the lab information for the party, regardless of the event, consolidated in one place. Lastly, located at the bottom of the dashboard is a section for Additional Information.

A user also has the ability to view a list of all changes to the demographic fields for a person in the Demographic History section of the Person History page.

Person Summary	
Demographic Information (View History)	
Name:	Rye, Catcher
Birth Date:	01/15/1989
Death Date:	
Living Status:	Alive
Age:	27
Social Security Number:	
Sex at Birth	Male
Current Gender Identity	Male
Party ID:	PFMERGMCIWI
Create Date:	08/26/2015
Contact Information	
Type	Address
Home * Primary	1500 5th Ave, New York, NY 27007
<input type="button" value="Edit Person"/>	



When clicking on the View History link, the Person History page opens, showing past information about the person. An example of this page can be seen in the

image below.

Person History - Catcher Rye

Demographic History					
Date	Field	Old Value	New Value		
12/01/2015	Gender		Male		

Address History					
Type	Dates	Address	County	Phone	Residence Ty
Home	08/26/2015 - 02/29/2016	1500 5th Ave, New York, NY 27007	Erie County		Apartment/co

Deduplication History		
Date	Primary	Secondary
No merges		

Additionally, the Demographic History screen will also give you information on Address History and Deduplication History. In the example above, no deduplications occurred.

2.9 Copying an Event

The **Copy Event** button allows the user to copy data to a new event or to an existing event. The user can control which question packages and data fields (attachments, notes, concerns, investigations) are copied to the new location.

Event Summary	
Basic Information	
Event ID:	100010549
Disease:	790 - Congenital Syphilis
Person:	Catcher Rye Birth Date: 01/15/1989
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	This patient is not a child. Are you sure you want Event is in workflows [View List] 900 - HIV 100010056, dated 08/26/2015 (View) Congenital Syphilis Case Status: No Case
Party Information	
<input type="button" value="Edit Event Properties"/>	<input type="button" value="Copy Event"/>

Note: The Copy Event button is permission-dependent. If you can't see it and you need access, talk with your system administrator.

Clicking the Copy Event button takes the user to the Copy Event screen. The upper half of the Copy Event screen has the **Source Event section** which lists information about the event being copied.

The **Target Event section** allows the user to change the disease or the event status before copying the event. Additionally, the user can choose which **question packages** and fields (attachments, lab results, notes, etc.) to copy by checking the appropriate boxes. Finally, the user can choose whether to link the new case to the source case.

Selecting the Save button copies the specified data to the new case.

The screenshot displays the 'Copy Event' interface, divided into two main sections: 'Source Event' and 'Target Event'.

Source Event Section: This section contains a table of details for the event being copied. A red arrow points to the 'Disease' field, which is '200 - Chlamydia'. The details include:

Source Event	
Event ID:	100001332
Disease:	200 - Chlamydia
Dates:	Create Date: 12/09/2016
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:	Grace Jones
Gender:	Female
Birth Date:	05/05/1985
Social Security Number:	
Address:	TX
County:	
Country:	USA

Target Event Section: This section allows for configuration of the new event. A red arrow points to the 'Copy Mode' dropdown, which is set to 'Copy to new event'. Other fields include 'Disease' (set to '300 - Gonorrhea'), 'Status' (set to 'Open'), and a 'Notes' text area. Below these are 'Copy Question Packages' and 'Copy Fields' sections, each with a list of checkboxes. A callout box with the text 'Select the question packages you want to' points to the 'Copy Question Packages' list. At the bottom, there are 'Save', 'Cancel', and 'Help' buttons. A red arrow points to the 'Save' button, and a callout box with the text 'Save after selecting some packages to copy' points to it.

2.9.1 Copy Event Fields

Field in Copy Event	Function
Event Date	Defaults to the current event's date, but can be changed to a new date 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.
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.

2.10 The Tabs

The tabs occupy the bottom half of the event dashboard page and display more detailed information about the event. The user can click to change the information presented by selecting each different tab. The section below the tab bar displays additional details about each tab.

Basic Information	
Event ID:	10000864
Disease:	700 - Syphilis
Person:	Christian Harding Grey Birth Date: 01/01/1980
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	<p>Ethnicity is missing</p> <p>Morbidity Zip Code is missing</p> <p>Must have an Early Syphilis case linked to this one (either as a FR or a Partner/Cluster)</p> <p>Race is missing</p> <p>Sex at Birth is missing</p> <p>Event is in workflows (View List)</p> <p>Diagnosis Code:</p> <p>Party Information</p>

[Edit Event Properties](#) [Copy Event](#)

[Event Data](#)
[Lab Results](#)
[Concerns](#)
[Persons](#)
[Tasks](#)
[Event Properties](#)
[Event History](#)

Question Packages	
Question Package	Person
Demographic	Christian Harding Grey
Reporting / Morbidity	Christian Harding Grey
Case Assignment / Field Record	Christian Harding Grey
Follow-up Activity	Christian Harding Grey
Risk Behaviors	Christian Harding Grey
Partners / Clusters	Christian Harding Grey
Clinical	Christian Harding Grey
Venues	Christian Harding Grey
Create new Providers or Facility	Christian Harding Grey
Coinfection Management	Christian Harding Grey

[View Question Package](#)

Tab

Additional information about each tab

2.10.1 The Tabs

The information accessed by using the Event Information Tabs provide the user with a variety of data about the event. The tabs displayed on the screen and seen by the user can vary based on the user's assigned roles.

[Event Data](#)
[Lab Results](#)
[Concerns](#)
[Persons](#)
[Tasks](#)
[Event Properties](#)
[Event History](#)

Tabs

Tab Name	Function
Event Data	Clicking the Event Data tab presents the user with the various question packages specific to the event.
Lab Results	Clicking the Lab Results tab presents the user with the ability to view, add, and edit lab results for a particular event. Summary information about each lab result is shown.
Concerns	Clicking the Concerns tab allows the user to view concerns about data entry issues. Additionally, the user can enter his/her own concerns.
Persons	Clicking the Persons tab allows the user to enter or change demographic information for the person in the event. Additional sub-tabs provide additional categories of patient data.
Tasks	Clicking the tasks tab allows the user to assign event-specific tasks as well as view information about all tasks associated with the open event.
Event Properties	Clicking the event properties tab displays basic information about the event and allows for editing of the disease, case status, and deduplication. These editing rights will be limited to specific users.
Event History	The event history displays the time and date the event was created and keeps track of the times the event has been updated, including which question packages were modified and the username of the person who updated the event.

2.11 The Event Data Tab

- [Question packages](#)
- [Question package table fields](#)
- [Entering data in a question package](#)
- [Picker-type questions](#)
- [Picker results preview](#)

- [Saving the data](#)

Clicking the **Event Data** tab allows the user to access disease-specific question packages and their Details summary view.

2.11.1 Question packages

A **question package** is a group of questions that share a common theme. In THISIS, question packages are located in the Event Data tab of a person’s Event Dashboard. A Clinical question package may include information such as symptoms and treatment and pregnancy status. The Administrative question package includes critical information about event assignment, as well as how and when the disease was reported. For a detailed description of each of the disease-specific question package, users should refer to the appropriate disease specific manual (e.g. TB or STD).

The question packages displayed to the user vary depending on the disease for the event and the user's security profile. Additionally, the individual questions in each package are disease-specific and are displayed and edited based on the user's profile.

Clicking once on a question package displays a summary of the question package in the lower section of the screen. The **Question Packages table** displays general information about each package.

The screenshot shows the Maven Disease Surveillance Suite interface. At the top is the 'Event Summary' section with a 'Basic Information' table. Below this is a navigation bar with tabs: 'Event Data', 'Lab Results', 'Concerns', 'Persons', 'Tasks', 'Event Properties', and 'Event History'. The 'Event Data' tab is selected, showing a 'Question Packages' table. A red circle highlights the 'Question Package' column, and a red arrow points from a text box labeled 'Question Package' to this column. Another red arrow points from a text box labeled 'View question package' to the 'View Question Package' button at the bottom left of the table.

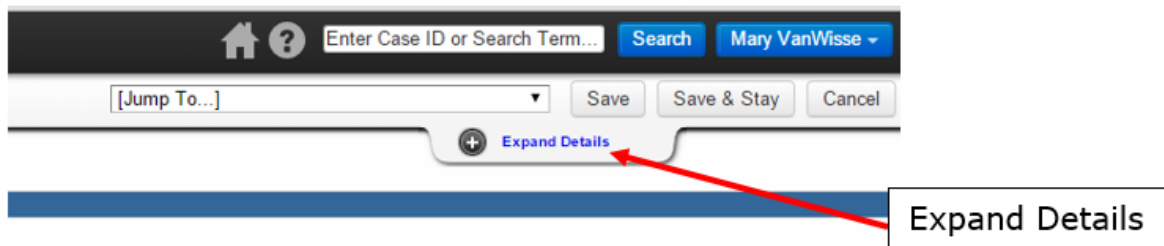
Question Package	Person	Last Update
Reporting / Morbidity	James Bond	01/19/2016
Case Assignment / Field Record		01/20/2016
Follow-up Activity		01/19/2016
Risk Behaviors		01/20/2016
Partners / Clusters		01/20/2016
Cluster Interview	James Bond	01/20/2016
Clinical	James Bond	01/19/2016
Venues	James Bond	01/19/2016
Create new Providers or Location/Venues	James Bond	01/19/2016

2.11.2 Question package table fields

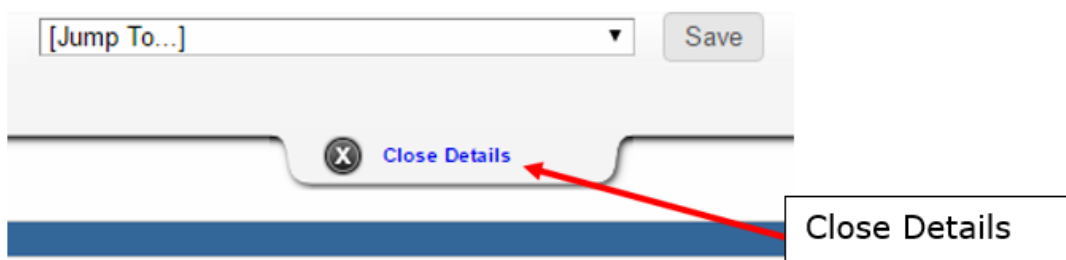
Name	Function
Person	Indicates the name of the person involved in the event.
Status	Refers to whether the required questions within the question package have been completed.
Last Update	Displays the date when each question package was last updated.
Updated By	Identifies the user who made the last update or modification to the question package.

To open a question package, select the package and click on the **View Question Package button**, or **double-click** the selected question package. This will open the question package so the user can see its contents in detail.

At the top of the open question package is a floating header with the name of the question package, the name of the person associated with the event, the name of the disease, and a [Jump To...] navigation bar. Under the navigation bar, there will be a file folder tab that says **Expand Details**.



If you click on the **Expand Details** file tab, an expanded header will appear which will detail any lab results from the event's Lab Tab. Clicking on the **Close Details** file tab will contract the detail screen. If the option to **Expand Details** does not appear, it is likely there are no associated labs for the loaded event.



Also available on the floating header are a set of useful buttons: **Save** which will save any edits and return the user to the Dashboard, **Save & Stay** which will save edits and the user will remain in the question package, and **Cancel** which will not save edits and will return the user to the person’s Event Dashboard. The header and navigational buttons are always available to the user, even when the page is scrolled for long question packages.

The [Jump To...] menu allows the user to navigate between a number of useful screens within an event without having to return to the Event Dashboard, streamlining user navigation through the application, and requiring fewer clicks.

The screenshot shows the 'Maven Disease Surveillance Suite' interface. The main header displays 'Demographic - Jason Bourne - 700 - Syphilis' and a search bar with the text 'Enter Case ID or Search Te'. Below the header is a form with the following fields:

Sex at birth	Male
Party specified birth date	07/21/1971
Initial jurisdiction zip code	
Initial jurisdiction city	
Full Soundex Name	J250 B650
Disease product code	SYPH
(hidden) concern that person only had sex	No

At the bottom of the form are three buttons: 'Save', 'Cancel', and 'Help'. To the right of the form is a 'Jump To...' menu with the following options:

- Question Packages**
 - Demographic
 - Reporting / Morbidity
 - Case Assignment / Field Record
 - Follow-up Activity
 - Risk Behaviors
 - Partners / Clusters
 - Clinical
 - Venues
 - Create new Providers or Facility
 - Coinfection Management
- Concerns**
 - Must have an Early Syphilis case linked to this one (either as a FR or a Partner/Cluster)
 - Add Concern...
- Tasks**
 - Add Task...
- Lab Results**
 - Spec Date: 10/03/2016 Spec Source: Spec Number: Test: Result:
 - Spec Date: 10/04/2016 Spec Source: Spec Number: Test: Result:

2.11.3 Entering data in a question package

Fill in the fields displayed on the question package screen. Use the **Tab** key to move between fields. **Required questions** are indicated by an asterisk *; Answering all the required questions will result in a question package status of complete. *Fields marked with ** are required in order to Save the page.* If not saved, an error will appear at the top instructing the user that the field must be answered in order to **Save**.

Fields with a gray shaded background are locked and cannot be edited. Clicking the **calendar icon** to the right of a **Date** field opens a calendar control. Question package answers can also be rendered as dropdowns, checkboxes, or radio buttons.

Question Packages often contain **reflexive** questions. When you answer a reflexive question, additional questions dynamically appear after it. These additional

questions are called "additional", or "child", questions. For example, if the user answers "yes" to the question "Is the patient pregnant?" additional **child** questions about the pregnancy dynamically appear after the original question. We will refer to these child questions as additional questions and the reflexive questions as main questions.

Is / was patient symptomatic?

Patient received treatment

Was the patient Pregnant at the initial exam for this infection? **Main or reflexive**

Additional pregnancy in the last 12 months?

Congenital investigation status

Save Cancel Help

After selecting yes, the following fields appear:

Live virus immunization in last 6 weeks

Do not place TST within 6 weeks of live virus immunization.

Patient is pregnant **Additional or child questions. These only appear when Yes is selected to the pregnancy question.**

As of (date) 03/01/2016

Due date MM/DD/YYYY

Placenta evaluated

Pregnancy clinical notes
Note written by:
Date and time:

Did anyone in the patient's household have a baby in the last 3 months?

Population Risks
Contact to infectious TR patient (2 users or less)

Question packages also contain **repeating** questions. A repeating question allows for multiple answers. Repeating questions are identified by the **Add New** link to the right of the question.

Email Type: Home (individual) [Add New](#)

Email Address: mags96@aol.com

Electronic Contact Type: Chatroom handle [Add New](#)

Electronic Contact:

Phone Number Type: [Add New](#)

Save Cancel

Repeating question. Multiple answers can be entered.

For repeatable questions, the order of the next iteration may be different depending on how the questions are modeled. That is, a new repeated block of questions may

appear either at the top or the bottom of the list of iterations, depending on the settings in the local deployment.

Note: Multi-select questions rendered as checkboxes can be nested so that checking a specific box displays one or more unique child questions. However, the child questions will display underneath the whole multi-select list rather than under the checkbox.

Risk Behavior History
Was behavioral risk assessed? Yes and risks were identified

Sexual Behaviors within 12 Months
Had sex with a female in past 12 mos? Y - Yes, Anal or Vag
Type of Sex
 A - Anal
 V - Vaginal
 O - Oral

Number of female partners
Had sex with a male in past 12 mos?

2.11.4 Picker-type questions

There are different question types within a question package that have search capability. That is, the user can search for available responses and “pick” from the available options. These include person/party, event, or user, as well as reference code questions that sometimes point to long lists that would be impractical to render on the screen.

Searching these questions in THISIS is straightforward and intuitive. From a picker-type question, such as a user picker, click on the magnifying glass to the right of the field to enable a search.

When the magnifying glass icon is clicked from a picker question, the appropriate Search screen will appear, for example (Search User, Search Person, or Search Event for).

Does the person have a positive TST or IGRA lab? Pending
Is this a surveillance activity?
Case registry jurisdiction at diagnosis Austin-Travis County Health and Human Services
Contracted jurisdiction at diagnosis Austin-Travis County Health and Human Services
Managing case registry jurisdiction
Managing contracted jurisdiction
Primary reason evaluated for TB Unknown
Manually enter the primary reason evaluated for TB? Yes
Administrative type
Targeted testing
Case transferred from another area
Reporting provider Not answered
Reporting facility Not answered
Medical record number
Date of initial assessment MM/DD/YYYY
Date first reported to local health department
Legacy first reported to local health department date
Select Address at the Time of Diagnosis
Address type Home
Residence type Mobile home
Street address 1234 Main Street
City Austin
State TX
Zip code 78709

Search Case
Search Criteria
Party ID
Status
Last Name
First Name
Street
City
State
Zip Code
Disease
From Date
To Date
Search Options
Search History
Search Soundex
Sort By
Sort Order
Descending

Search Results
Event ID Name Birth Date Disease
Showing 0 to 0 of 0 entries
Search Cancel Help

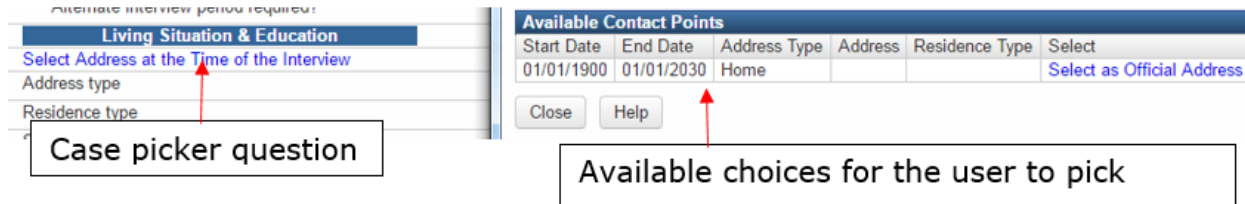
Each Search screen appears with a set of appropriate search fields. Using THISIS' enhanced search capabilities, searches can be run on exact matches or inexact matches and can find close matches using a number of different algorithms including **Soundex**. **Soundex** searches for items that sound like the search criteria used. Some searches in THISIS can also be broadened to include historical values, such as old addresses and alternate names, by using the **History** option. Also, if there are alternate spellings for a name, you can enter partial names. Entering Trib* will yield the records for the last name Tribbiani as well as Tribble.

Wildcard searches

A simple way of searching on an exact match also includes the use of **wildcard** characters using the asterisk * in a THISIS search screen. This means that while a simple search on a first name of "John" may only find those exact matches, a search on the string "Jo*" will give John, Jon, Jonathan, Joseph, and so forth. The asterisk may be entered at the beginning, end or middle of the word. In order for a wildcard search to work, however, the user must enter at least two letters in at least one search criteria field.

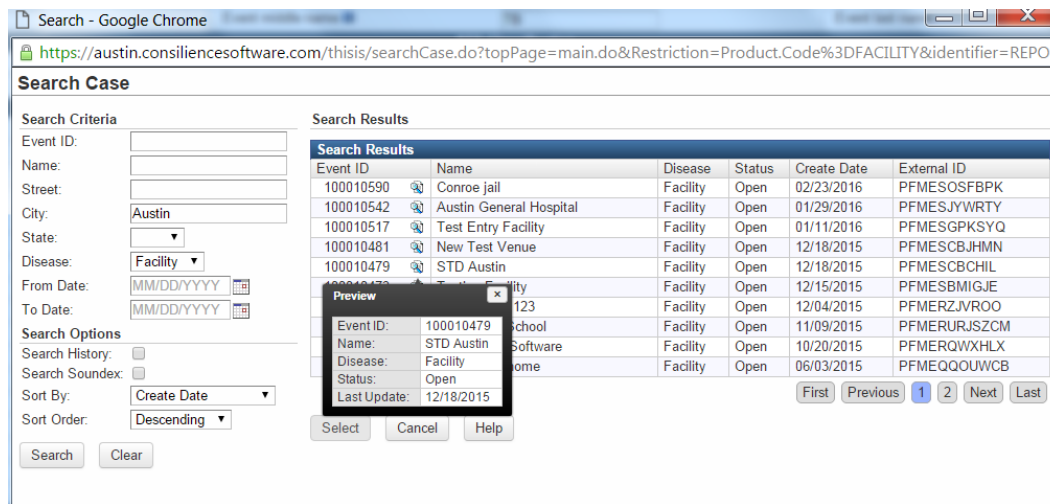
Case picker questions and party picker questions render as links in the question package. The link for case picker questions navigate to the case selected. The link for party picker questions navigate to the party view for the party selected. These features are used in situations where you need to search for a person within

another person's event, such as linking cases to contacts. Additionally, the view summary icon is displayed next to the question answer. Selecting the view summary icon will cause the Event Print to open in a new window if the user has access to view the selected case.




2.11.5 Picker results preview

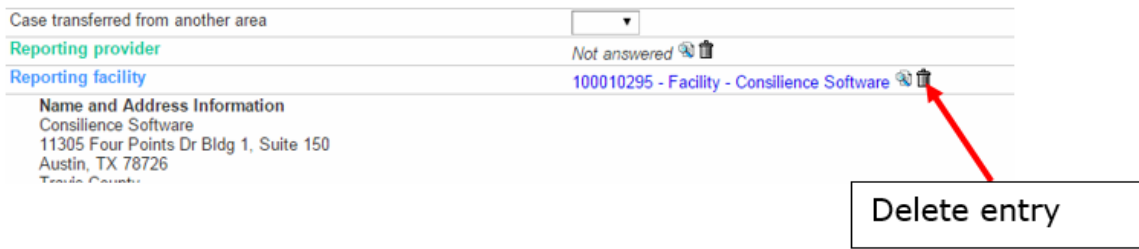
When a search returns a line list of multiple similar values, it is sometimes helpful to have more information about the items displayed in order to choose the correct one. THISIS provides **preview** capability so that the user can get more information on the returned records without having to leave the Search screen. The details are pulled up in a separate window when the Preview button (magnifying glass icon) is clicked next to the record in the search list.



The Preview window can be closed by clicking on the "X" in the upper right hand corner.

If the user populates a picker with an incorrect value, there are two choices to remove the value. The first is to search again for the correct value in the system, which will replace the incorrect value currently in the field. Alternatively, the user

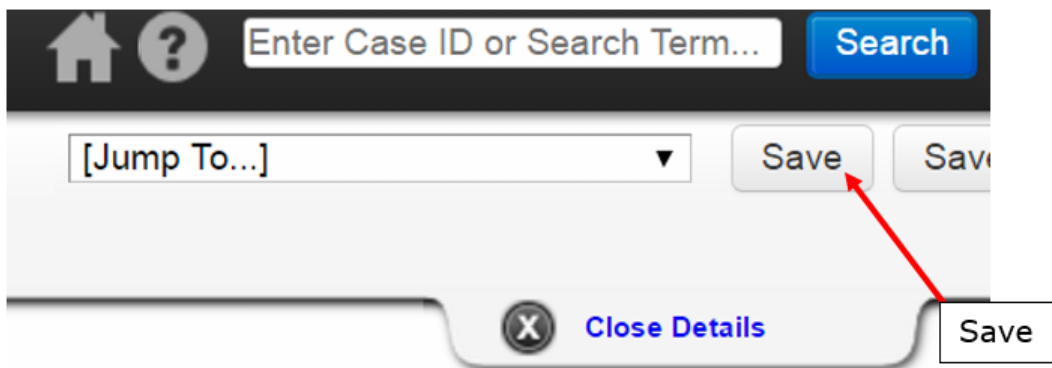
can press the Delete button  next to the field to leave the field empty, with no selected value at all.



2.11.6 Saving the data

To save the data entered in a question package, the user must click the **Save** button either in the floating header or at the bottom of the screen. Once the user clicks the **Save** button, the question package closes and the user is returned to the event dashboard. Clicking the **Cancel** button exits the question package without saving any changes. *It is recommended that users save frequently. For security, THISIS is designed to time out after a half hour of inactivity. If the data entered into a question package has not been saved when THISIS times out, the data will be lost.*

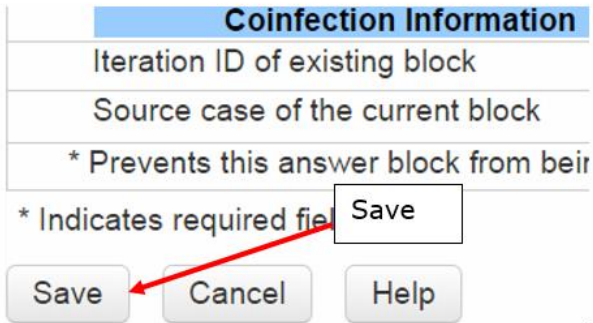
Upper right:



Below entry fields:

Coinfection Information	
Iteration ID of existing block	
Source case of the current block	
* Prevents this answer block from being	
* Indicates required field	Save

Save Cancel Help



2.12 The Lab Results Tab

Clicking the **Lab Results** tab allows the user to view lab results associated with the event. The user can also add new lab results to the event manually. A brief summary of the lab results is displayed on this screen, including information about the specimen collection date, test, result and ordering facility. Additionally, if you highlight an individual lab report, all of the information on the report will display in the lower section of the screen in a summary format.

Event Summary

Basic Information	
Event ID:	100000864
Disease:	700 - Syphilis
Person:	Christian Harding Grey Birth Date: 01/01/1980
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	<p>Morbidity Zip Code is missing Must have an Early Syphilis case linked to this one (either as a FR or a Partner/Clus Event is in workflows (View List) Diagnosis Code: Party Information</p>

Lab result

Labs			
Lab No.	Collection Date	Test	Result
> 1			

Details	
Template:	STD_LAB_TEMPLATE
Last Update:	09/14/2016
Updated By:	Mary VanWisse [mvanwisse]
Report Source	
Report Source:	Laboratory Report
Date Received at HD:	09/11/2016
HD Name where Lab Received:	Austin/Travis County
Has Medical Record:	NO
Specimen Info	
Specimen Type:	Blood
Specimen Site:	Forearm
Date Received at Lab:	09/09/2016

Note: The Lab Results tab Summary and Details views may look different depending on the user's rights.

2.12.1 Lab Results Categories

Category	Description
Header	Defines how the lab was entered in THISIS (Manual or Electronic), and the name of the person from the lab report.

Report Source	Details the source of the report, as well as the date and location the lab report was received.
Patient Information	Details the patient, including their name, date of birth, sex, race/ethnicity, social security number, and address.
Specimen Info	Details the specimen that was examined. These include the date the specimen was taken, the number assigned to the specimen, and the source of the specimen.
Ordered Test	Details the test or panel of tests that were ordered.
Resulted Test	Details the test that was performed. These details include the test name, results, and the date the results were reported. Use the Add link to the right of the Result Date to add more tests <i>for this specimen</i> . The Delete link will only display for users who have permission to delete a result.
Performing Laboratory	Identifies the facility where the test was performed.
Ordering Facility & Ordering Provider	Identifies the laboratory facility that placed the order for the test(s) to be done. The doctor or clinic that ordered the test. This displays the detailed address and phone information for that doctor or clinic.
Additional Clinical Information	Details clinical information, such as pregnancy status, that the healthcare provider included on the lab report.
Alternate Identifiers	Any additional identifiers included on the lab report, such as a medical record number. This includes the facility that assigned the identifier and the type of identifier. Use Add link to add multiple identifiers for this patient.
Next of Kin	Details the patient's next of kin if provided in the lab report. This includes the name of the next of kin, phone number, and address.
Comments	Details any additional comments, including the person writing the comments and the date of the comment. Use Add link to add multiple identifiers for this patient.

2.12.2 Adding, Editing, and Saving Lab Results

To enter a new lab result, click the **Add Lab Result** button to open the Add Lab Result screen. The user first enters the type of result:

Maven Disease Surveillance Suite

Add Lab Result - Mary TB Testcase - Tubercu

Lab Results

Lab Results: TB Lab Result

In this scenario, the user is entering information into a TB event; the only option available is TB lab report. Records are tied to a person and event, and are specific to a disease.

Next, information is entered into the open fields for the lab result:

Lab Results

Lab Results: TB Lab Result

Report Source

Report Source: Laboratory Report Date Received at HD: 03/01/2016 HD Name where Lab Received: Abilene-Taylor County Public Health District

Patient Information

First Name: Middle Name: Last Name: Date of Birth: Sex: Race: Ethnicity: SSN:

Address1: Address2: City: State: Zip: Phone:

Specimen Info

Collection Date: 02/24/2016 Accession Number: Specimen Type: Blood Specimen Site Modifier: Left Specimen Site: Adrenal Gland Date Received at Lab: 02/26/2016

Ordered Test

Test LOINC	Test Description	Test	Test Local Code	Test Local Description
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Resulted Test

Test	Other (Specify)	Result	Result Value	Result Units	Ref Range	False Positive
Molecular testing for drug resistance	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Test Result Date: 03/01/2016	Screening Type: <input type="text"/>	Drawn By: <input type="text"/>	TestType: <input type="text"/>	Status: <input type="text"/>	Lab Notes: <input type="text"/>	
Test Local Code: <input type="text"/>	Test Local Description: <input type="text"/>	Result Local Code: <input type="text"/>	Result Local Description: <input type="text"/>			
Test LOINC (raw): <input type="text"/>	Test Description (raw): <input type="text"/>	Result Value (raw): <input type="text"/>				

Similar to question packages, the user enters data into the fields displayed on the screen. To save the data, the user must click the **Save** button at the top or bottom of the screen.

Note: THISIS records and displays the person who has updated the record and when it was updated.

The screenshot shows the 'Labs' tab selected in the navigation bar. Below the navigation bar is a table with the following data:

Lab No.	Collection Date	Test
1	02/24/2016	IGRA
2	02/24/2016	Molecular testing for drug resistance

Below the table are three buttons: 'Add Lab Result', 'Update Lab Result', and 'Delete Lab Result'. Below these buttons is a 'Details' section with the following information:

Last Update:	03/01/2016
Updated By:	Mary VanWisse [mvanwisse]
Report Source:	Laboratory Report
Date Received at HD:	03/01/2016
HD Name where Lab Received:	Austin-Travis County Health and Human Services Department
Specimen Info:	

Save the record and return to the lab results tab, you will now see a second lab test.

The screenshot shows the 'Labs' tab selected in the navigation bar. Below the navigation bar is a table with the following data:

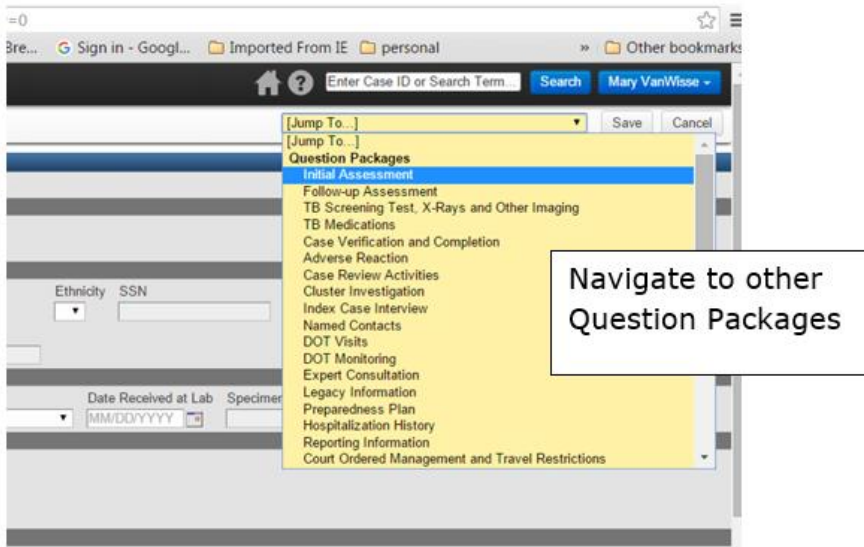
Lab No.	Collection Date	Test
1	02/24/2016	IGRA
2	02/24/2016	Molecular testing for drug resistance

Below the table are three buttons: 'Add Lab Result', 'Update Lab Result', and 'Delete Lab Result'. Below these buttons is a 'Details' section with the following information:

Last Update:	03/01/2016
Updated By:	Mary VanWisse [mvanwisse]
Report Source:	Laboratory Report
Date Received at HD:	03/01/2016
HD Name where Lab Received:	Austin-Travis County Health and Human Services Department
Specimen Info:	

A red arrow points from a box labeled 'Second lab' to the second row of the table. Another red arrow points from a box labeled 'THISIS records information on updates' to the 'Updated By' field in the details section.

The top of the Lab screen has a [Jump To...] navigation bar that can be used to directly access other areas in THISIS.



Once the user selects the **Save** button, the Add Lab Result screen closes and the user is returned to the event dashboard. Selecting the **Cancel** button exits the screen and returns the user to the event dashboard without saving any changes.

To update the information in an existing lab result, select the result and click the **Update Lab Result** button. To delete a lab result, select the result and click the **Delete Lab Result** button. Whether the user sees the Delete Lab Result button will depend on the user's role.

2.12.3 Electronic Lab Results (ELR's)

Most lab results will be imported electronically into THISIS and can be configured to occur automatically at a set time or frequency. THISIS attempts to match all imported lab reports to existing persons and events. When this occurs, the Electronic Lab Report (ELR) will be:

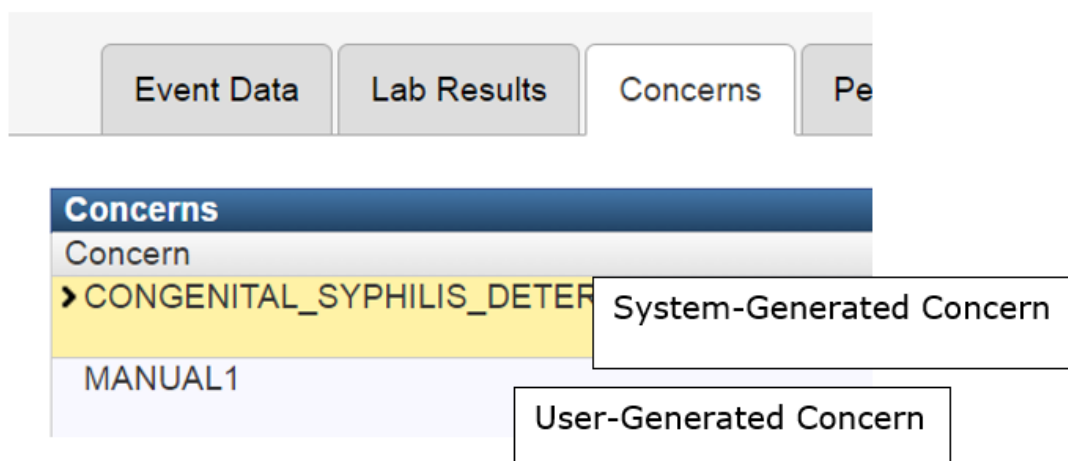
1. Automatically attached to an existing event in the system if the related event exists; or
2. If an event doesn't yet exist for the person, a new event will be automatically created; or
3. If the person doesn't exist in the system, a new person and event will automatically be created.

2.13 The Concerns Tab

A **Concern** is an important issue that could affect the event. There are two types of concerns in THISIS:

System-Generated Concerns is *automatically generated by THISIS* and is used to highlight a data entry issue. For example, if someone mistakenly inputs a date of birth for the person that is after the date of onset of symptoms, THISIS can generate a concern - a notice that a data entry error may have occurred. *Because data entry errors in THISIS are shown as concerns, it is important to check the Concerns tab regularly.* Some concerns will prevent the user from saving the question package until the concern is addressed. "Prevent save" and other messages will display on the event dashboard alerting the user to connections needed.

User-Generated Concerns are *added manually by the user* to bring attention to an issue. These concerns can be about any aspect of the case. This is different from a note a supervisor may have about a case or the way a case is being handled. *A concern refers to the data entered into the system. A note about a case will appear in the Notes section of the Event Summary on a person's Event Dashboard and refers to how the case is being investigated (Depending on a user's role and permissions, some users may not be able to see or edit notes).* Concerns will only show up in an event that is assigned to a user.



2.13.1 Concerns Fields

Concern	Unique name of the concern in the database.
Description	Explanation of the issue in plain English.
Person/Party	The person or party about whom the event is based.
Last Update	The date upon which the concern was last updated. If no updates have been made to the concern, this date refers to the date the concern was entered.
Severity	Indicates severity level of the concern (very high to very low).
Status	Indicates the current state of the concern – either active or resolved.

2.13.2 Adding a Concern

To add a user-generated concern, click the **Add Concern** button. In the Add Concern screen, enter a short description of the concern. Click the **Save** button to create the concern.

The screenshot shows a web form titled "Add Concern - Christian Harding Grey - 700 - Syphilis". The form is titled "Concern Information" and contains the following fields:

- Concern: MANUAL2
- Severity: Medium (dropdown menu)
- Status: Active (dropdown menu)
- Description: missing zip code
- Notes: The morbidity zip code is missing (text area)

At the bottom of the form are three buttons: Save, Cancel, and Help.

The user can also set the **Severity** of the concern. Setting the severity level to **Very High** causes the concern to display in bright red in the Event Summary section.

Event Summary

Basic Information	
Event ID:	10000085
Disease:	700 - Syphilis
Person:	Sallie Example Birth Date: 01/01/1980
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	Concerns (1) Example of Very High Concern General Notifications (1) Diagnosis Code: Party Information (1) Party Information

Concerns	
Concern	Description
MANUAL1	Example of Very High Concern

Concern Information Fields

Field Name	Description
Severity	The severity level of the concern – from Very Low to Very High. Changing this setting to Very High will display the concern in red text in the Event Summary section.
Status	The status of the concern – either Active or Resolved.
Description	A short description of the concern.
Notes	Any notes about the concern.

After saving the concern, the concerns tab now displays the manually entered user-generated concern.

Concerns	
Concern	Description
STD_VALIDATION_RULE_DEMO_VALUE_CHECK_CONCERN_ZIP_CODE_MISSING	Morbidity Zip Code is mi
SYPH_MISSING_MATCHING_EARLY_CASE	Must have an Early Sypl
MANUAL2	missing zip code
MANUAL1	Correction to concern ab

2.13.3 Resolving Concerns

To resolve a system-generated concern, simply correct the data entry issue. As soon as the issue is fixed, the concern will cease to display on the concerns table.

To resolve a user-generated concern, click the **Update Concern** button and change the **Status** of the concern from **Active** to **Resolved**. It is common practice to note how the concern was resolved in the notes field. Click the **Save** button to close the Edit Concern screen. User-generated concerns remain in the concerns table even after they've been resolved.

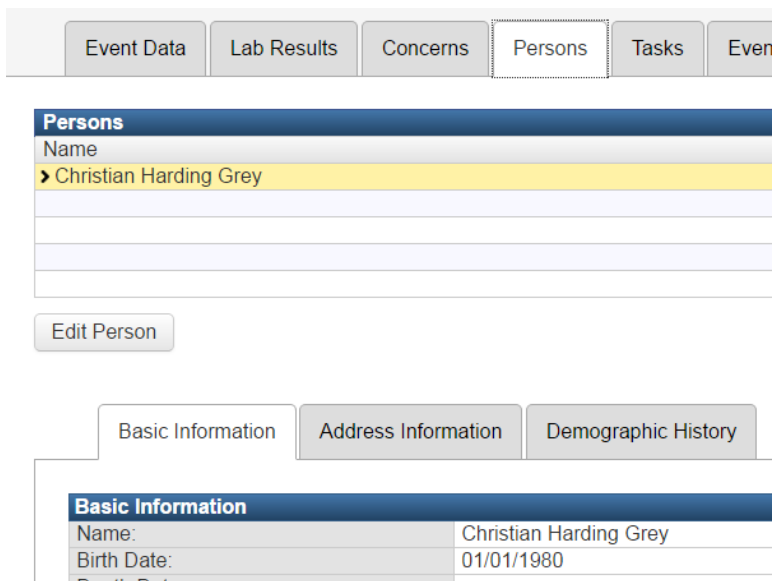
Edit Concern - Christian Harding Grey - 700 - Syphilis

Concern Information	
Concern:	MANUAL2
Person:	Christian Harding Grey
Create Date:	01/31/2017
Last Update:	01/31/2017
Updated By:	Mary VanWisse [mvanwisse]
Severity:	Medium ▼
Status:	Active ▼
Description:	missing zip code-corrected
Notes:	The morbidity zip code has been added

Save Cancel Help

2.14 The Persons Tab

Information about the person involved in the event may change over time. The **Persons** tab is used to add or update demographic information about the person.



Clicking the Persons tab displays several more tabs in the Event Information section. These **sub-tabs** allow the user to view or update information about the person. A more detailed explanation of the Person tab and its various features will be provided in [Chapter 4- Working with Party Information](#).

2.15 The Tasks Tab

The **Tasks** tab provides information about any tasks associated with the open event. The user can create event-specific tasks by clicking the **Add Task** button. A more detailed explanation of Tasks including using the Tasks tab and its various features will be provided in [Chapter 5 Managing the Workflow Queue and Tasks](#).

Add Task

The screenshot shows the 'Add Task' form with the following fields and callouts:

- Event:** 100000864 - 700 - Syphilis - Christian Harding Grey
- Type:** Assignment (dropdown menu)
- Status:** Pending (dropdown menu)
- Priority:** Medium (dropdown menu)
- Due Date:** 09/22/2016 (calendar icon)
- Start Date:** 09/14/2016 (calendar icon)
- Complete Date:** MM/DD/YYYY (calendar icon)
- Description:** Enter a short description of the task
- Notes:** User may provide more detailed information about the task. (highlighted yellow area)
- Task Attachment:** Choose File No file chosen
- Assign to user:** (text input field with search and trash icons)
- Assign to group:** (text input field with search and trash icons)
- Buttons:** Save, Cancel, Help

Callout boxes provide instructions:

- Choose entries from drop-down lists** (points to Type, Status, Priority)
- Open calendars to select dates** (points to Due Date, Start Date, Complete Date)
- Provide a description and notes for user** (points to Description and Notes)
- Use picker function to make sure you select the correct person or assign to self** (points to Assign to user and Assign to group)

2.16 Event History Tab

Sometimes it may be important to research who handled some of the data entry on a given event. This can be done using the **Event History** tab. In this section, users can view information in a question package about who has entered data and when it was entered in a given question package. It also provides information such as who last updated person information, concerns, and lab results. The Event History tab has paging to control the amount of content for long-term cases with a potentially large number of history events.

The event audit trail only appears for certain roles; some users may not see this tab.

Event Data Lab Results Concerns Persons Tasks Event Properties **Event History**

Event History		
Time	Event	Message
09/13/2016 11:51	Case Created	Case created
09/13/2016 11:56	Investigation Updated	Added investigation: Spec Date: Spec Source: Spec Number: Test: R
09/13/2016 11:56	Concern Updated	Updated concern: Unable to make case Determination based on given
09/13/2016 11:57	Case Property Updated	Updated case properties
09/13/2016 14:20	Concern Updated	Added concern: Correct name? [Christian Harding Grey]
09/13/2016 14:36	Concern Updated	Updated concern: Correction to concern about Correct name? [Christi
09/13/2016 14:38	Concern Updated	Updated concern: Correction to concern about Correct name? [Christi
Displaying item(s) 1 - 7		

Note: User information is also displayed in a column on the far right of the history.

2.16.1 Event History Fields

Field Name	Description
Time	The date and time the action occurred.
Event	The type of action that occurred.
Message	A more detailed description of the action.
User	The username of the individual who performed the action.

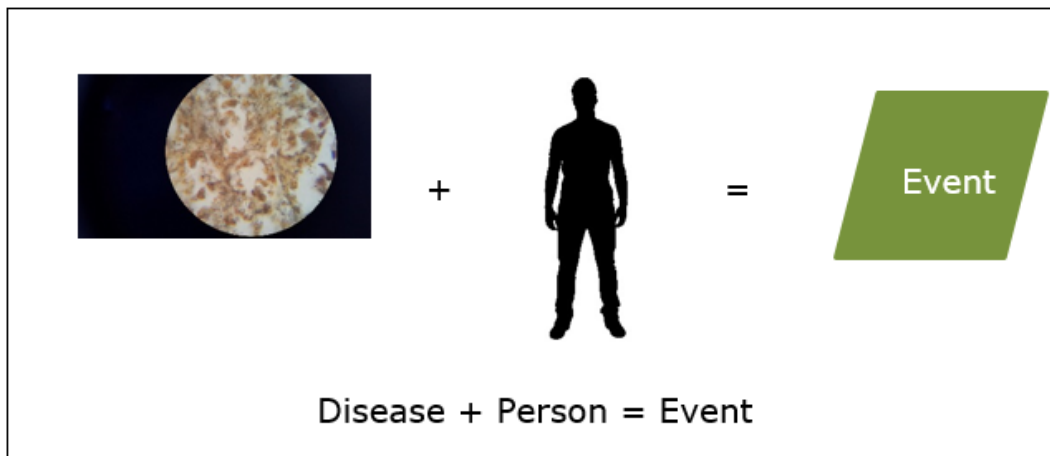
Chapter 3 Working with Events in THISIS

Learning Objectives:

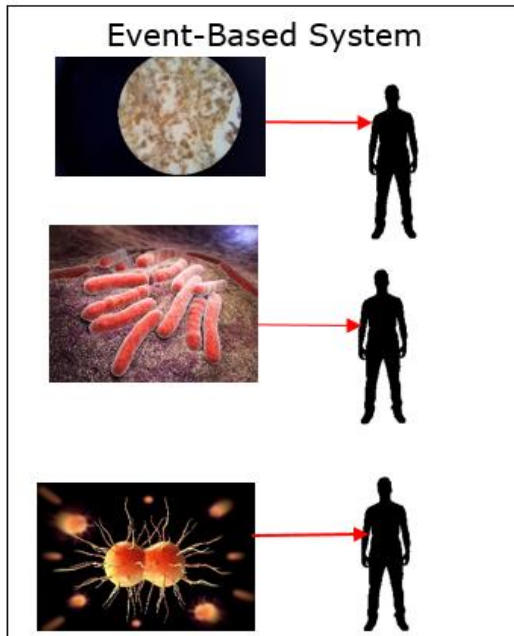
- Create an event in THISIS.
- Open a recently loaded event.
- Search for events in THISIS.

3.1 Understanding Events

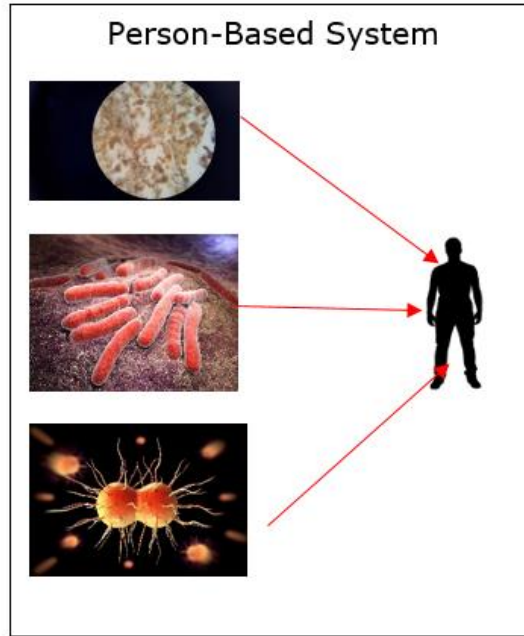
It's important to understand that in THISIS an **Event** is the association of a person or party (information about a patient) with a disease at a point in time. A single person can be associated with multiple diseases, with each instance represented in THISIS as a separate and unique event.



Once an event is created, the user has the option of accessing an individual event to view or update. The user can also see the various events associated with a single person, and the demographic information about the person shared across multiple events.




As an event-based system, THISIS stores each event



As a Person-Based system, THISIS can associate multiple events with a single person. Demographic information about

3.2 Creating an Event

Once the user is logged into THISIS they can create a new event.

Click the **Create Event** button  on toolbar to display the **Create Event** screen.

Create Event - Person Information

Event Information

Disease:

Add Person

First Name:

Middle Name:

Last Name:

Suffix:

Birth Date:

Social Security Number:

Additional Demographics

Name Type: [Add New](#)

Alternate Social Security Number (SSN): [Add New](#)

Alternate Date of Birth: [Add New](#)

TDCJ Number (SID):

Ethnicity:

Race: [Add New](#)

Sex at Birth:

Current Gender Identity:

Born in the US:

Country of Birth:

Date of Arrival in the US:

English Speaking:

Preferred Language:

Note: The Create Event screen can self-populate with several default values, including Address Type, State, and Country.

3.2.1 Choosing a Record Type or Disease

At the top of the **Create Event** screen is the Event Information section which contains a dropdown list of all diseases or record types. The list of diseases in the dropdown will depend on the groups to which the user belongs. This is usually the type of disease, but may include provider or facility information, depending on the role of the user.

Choose a disease by clicking the down arrow and selecting the disease name.

Create Event - Person Information

Event Information

Disease:

Add Person

100 - Chancroid
 200 - Chlamydia
 300 - Gonorrhea
 700 - Syphilis
 900 - HIV
 900 - HIV Case Report Form - Adult
 900 - HIV Case Report Form - Pediatric
 Coinfection
 Facility
 Provider
 Tuberculosis
 Unknown

First Name:

Suffix:

Birth Date:

MM/DD/YYYY


Additional Demos

Name Type: [Add New](#)

Alternate Social Security Number (SSN): [Add New](#)

Alternate Date of Birth:

Last Name:

 **To navigate the disease list quickly, type the first letter of the disease name to scroll to the first disease that begins with that letter and you will get an alphabetical list of diseases that begin with that letter.**

3.2.2 Searching for Person Information

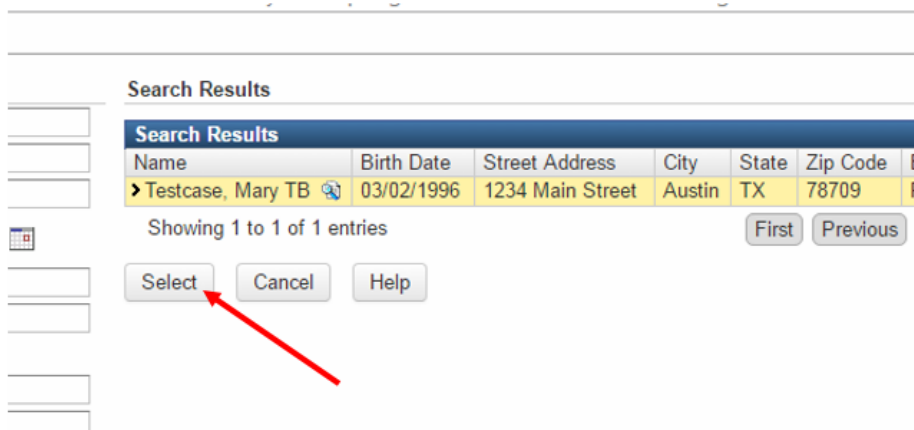
Once the disease is selected at the top of the Create Event – Person Information screen, the next step is to enter information about the person. Before entering any information into the Create Event screen use the **Select Person** button to search for the patient's information in the database. Selecting the button opens a **Search Party** screen, which can be used to locate a person who may already be in THISIS.

To search for a person record, enter information about the person into the various fields under **Search Criteria**, then click the **Search** button. The search results appear on the table to the right.

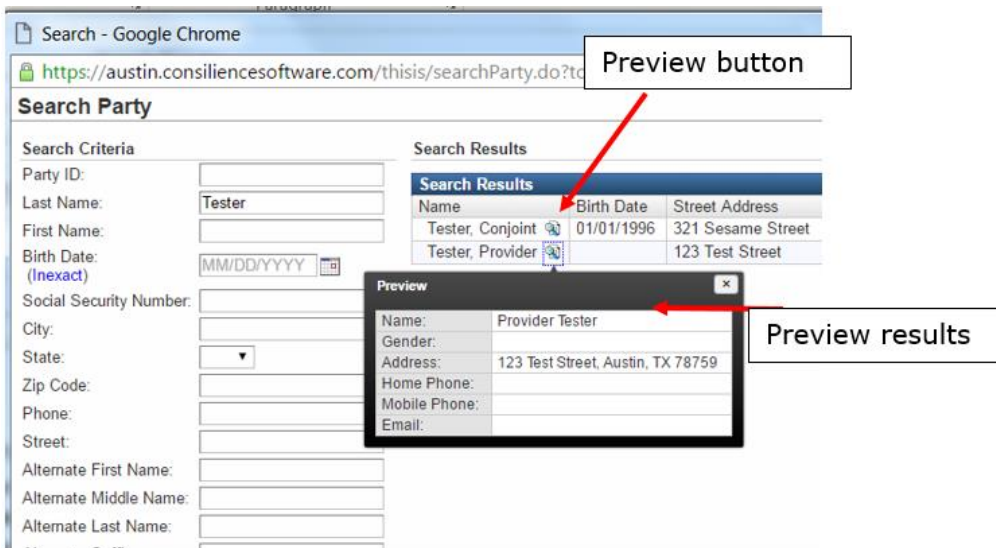
Note: There is a checkbox called "Search History". This enables searching against historical event/party information. When this box is checked, historical demographic/address information is also compared against the search criteria (e.g., old address or old event/party, ID, etc.).

If the system does not find a matching record, a "No Matching Persons Found" message will appear below the table. Click the **Create New** button. This will copy any data that was entered into the search screen where there was not a wildcard used. For example, if the last name was entered as "Smith" and the first name was entered as "J*", clicking the **Create New** button will auto-populate the last name of "Smith" but it will ignore the "J*". This would need to be entered manually. Alternatively, select the **Cancel** button to close the Search Party screen and enter the data manually on the Create Event screen.

If a matching record for the person is located, select the person's name from the table and click the **Use Selected Person** button. This information will not be editable on the create event screen because the person information has already been provided. However, if the user has new information to add about this person, the user should go to the Edit Person screen from inside the event to update the information.



If there are multiple potential matching records found in the search, THISIS provides a Party Preview function when the Party **Preview** button next to the person's name is selected. This enables the user to see more information about the person in the database, and allows the user to identify the correct party without leaving the Search Party screen.



There are similar **preview** functions in the Search Event screen and in the Search Party screen.

3.2.3 Entering Person Information

If information about the person is not in the system, enter the data about the person manually into the fields in the Add Person section. While the Add Person

section requires only a minimal amount of person information to create the event, enter whatever information is available.

The screenshot shows a web form for entering person information. The top section includes fields for 'Sex at Birth' (Female), 'Current Gender Identity' (Transgender - unspecified), 'Born in the US' (Yes), 'Country of Birth', 'Date of Arrival in the US' (MM/DD/YYYY), 'English Speaking', 'Preferred Language' (American Sign Language), 'Email Type', 'Electronic Contact Type', and 'Phone Number Type', each with an 'Add New' link. Below this is a 'Contact Information' section with fields for 'Address Type' (Home), 'Street' (5555 pizza drive), 'City' (Austin), 'State' (TX), 'Zip Code' (78), 'County' (Travis County), 'Country' (USA), 'Home Phone', and 'Residence Type'. A dropdown menu for the Zip Code field is open, showing a list of zip codes from 78701 to 78712. A 'Select Person...' button is located below the form, and 'Save', 'Cancel', and 'Help' buttons are at the bottom.

Populating the city and/or state fields can activate auto-completion or auto-population on the zip code field, based on a configurable list of city and state to zip code mappings. Similarly, this same list is used to auto-populate blank city fields when the matching zip code is entered prior to the city field.


3.2.4 Saving the Event

Once the person information is entered, click the **Save** button. The system will compare the entered person information to existing persons in the data base. If you missed a matching person during the search and the system finds a potential duplicate record for that person, it will open the Potential Matches screen. More information will be given on potential matches in [Chapter 6 Deduplication](#) section.

Selecting **Save** closes the **Create Event** window and brings the user back to the Event dashboard where information about the newly-created event is displayed.

3.3 Recent Events

To quickly locate an event the user has recently worked on or created, use the Recent Events screen. The Recent Events screen contains a table with the twenty most recent events – events either created or loaded by the user.



To load an event using the Recent Events screen, click the **Recent Events** button  on the toolbar. To open the Event Dashboard for one of the listed events, click the **Event ID** link on the left side of the page.



Event ID	Person	Status	Disease	Access Time	Bookmark
100010604	Testcase, Maggie GC	Open	300 - Gonorrhoea	03/03/2016 12:56	
100010610	Testcase, Mary TB	Open	Tuberculosis	03/03/2016 12:30	
100010532	Tester, Conjoint	Open	700 - Syphilis	03/03/2016 12:08	
100010295	Consilience Software	Open	Facility	03/01/2016 13:25	
100010550	Typhoid, Mary	Open	Tuberculosis	03/01/2016 13:21	
100010536	bond, james	Open	900 - HIV	03/01/2016 12:21	
100010285	Cookies, Chocolate	Open	700 - Syphilis	03/01/2016 10:22	

3.3.1 Recent Events Fields


Field Name	Description
Event ID	The unique ID of the event. Click this link to load the event.
Person	The person's full name.
Status	The investigation status of the event (open or closed).
Disease	The record type or disease associated with the event.
Event Date	The date associated with the event.
Info	Additional information about the event.
Access Time	The time the event was last accessed by the user.
Bookmark	Events that are retained and do not expire from the list unless the bookmark is explicitly removed by the user.

To bookmark an event, in the Bookmark column click the star with a green plus sign () over it on the appropriate event. When the star is gold (), the event has been bookmarked. To un-bookmark it, simply click the gold star.

Note: The bookmarked events do not count toward the 20 recent events that are displayed in the list.

3.4 Searching for an Event

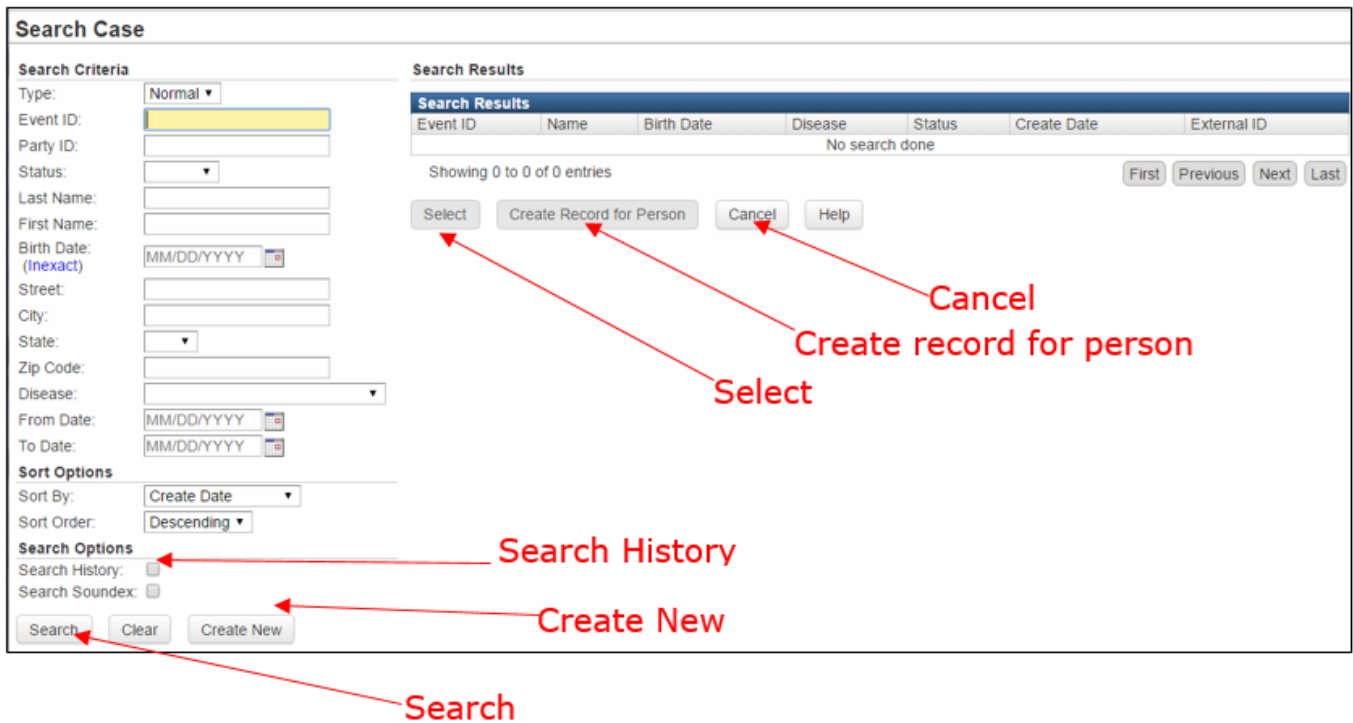
To locate an event the user has not worked with recently, use the **Search Case** screen (via the Search Event button on the toolbar).

To search for an event, click the **Search Event** button  on the toolbar to display the Search Case screen. Enter information about the event into the various fields under Search Criteria, then click the **Search** button. The search results appear in the table to the right.

Note: *There is a checkbox called "Search History". This enables the user to search against historical event/party information. When this box is checked, historical demographic / address information is also compared against the search criteria (e.g., old address or old event/party, ID, etc.).*

If the system does not find a matching record, then a **No Matching Events Found** message will appear below the table. If a matching record for the event is located, select the event from the table and click the **Use Selected Event** button.


The Search Results table will list up to 100 results. If more than 100 records match the search criteria, the message "More results matching criteria are in the database. Please refine your search." will appear below the Search Results table. Refining the search criteria will help to filter the results.

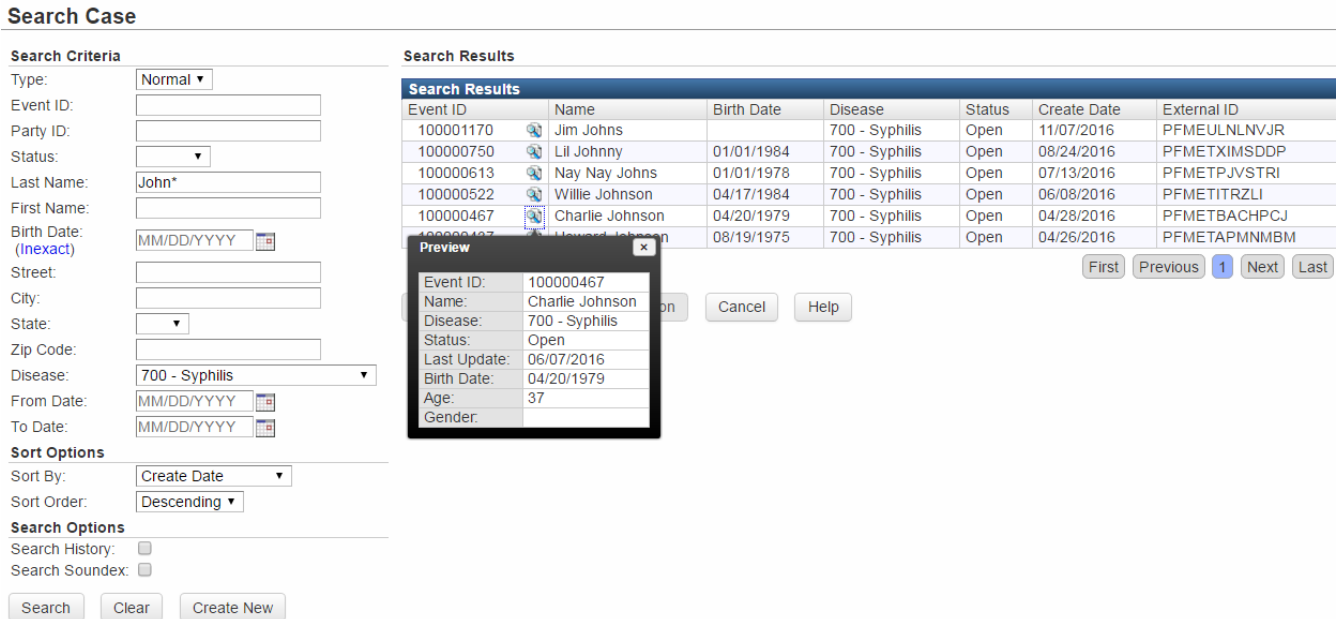


In addition to being able to search for events, users can also start the process of creating events from this screen. As discussed, the user may click **Select** if the proper event is located; however, if the person is found but not the event, (e.g. right person, wrong disease or different occurrence/date of the same disease) the user can begin the process of creating another event for this person. To do this, the user should select the event identified that is associated with the correct person but not the correct event on the Search Results table (the selected event will become highlighted), then click the **Create Record for Person** button. This will take the user back to the Create Event screen and will have populated the person information as it exists in THISIS. The user simply has to select the appropriate disease and click **Save**.



If using the Search Event button to start the process of creating a new event, pay attention to the Disease field in the Search Criteria section of the Search Case window. If a disease is selected in this field, only results associated with that disease will appear in the Search Results table. Therefore, before creating a new event using this method, make sure that either a disease is not specified in the search criteria or the disease for which the user needs to enter data for a person is the disease selected in the search criteria.

The Search Results list has a clickable **Preview** button  next to each found event, that brings up the Custom Search Inspector Screen, to show more detail about the person or event.




The screenshot displays the 'Search Case' interface. On the left, the 'Search Criteria' section includes fields for Type (Normal), Event ID, Party ID, Status, Last Name (John*), First Name, Birth Date (MM/DD/YYYY), Street, City, State, Zip Code, Disease (700 - Syphilis), From Date, and To Date. Below this are 'Sort Options' (Sort By: Create Date, Sort Order: Descending) and 'Search Options' (Search History, Search Soundex). At the bottom are Search, Clear, and Create New buttons. The 'Search Results' section on the right shows a table with columns: Event ID, Name, Birth Date, Disease, Status, Create Date, and External ID. The table lists several entries, including Charlie Johnson (Event ID: 10000467). A 'Preview' window is open over the Charlie Johnson entry, displaying details: Event ID: 10000467, Name: Charlie Johnson, Disease: 700 - Syphilis, Status: Open, Last Update: 06/07/2016, Birth Date: 04/20/1979, Age: 37, and Gender. Navigation buttons (First, Previous, 1, Next, Last) are visible at the bottom right of the search results area.



If the search doesn't locate the right person, click the **Create New** button to create a new person in the system. Again, as with the **Create Event for Person** button, you will be taken to the Create Event screen. In this case however, since the person wasn't located in the event search, this will create a new person within the system. The fields which were populated within the search screen and did not contain wildcards will be auto-populated in the create event screen. For example, if the user searches for last name "Jones" and first name "Ba*", and then clicks the **Create New** button, the Create Event screen will be auto-populated with the last name Jones and no first name. The first name will need to be entered manually.


Difference between Search Person and Search Event

In THISIS, all users have viewing access to all persons and events, regardless of their role and group(s). Users' role/group/permissions, however, will determine their ability to enter and edit data within the system.

If a user is conducting a search in THISIS for the sole purpose of viewing information for a person or to determine if a person already exists in the system (in other words, the user has *NO* intention of creating a new event), the steps described at the [beginning of this section](#) starting with the **Search Event**  button on the toolbar should be used, regardless of whether the user is searching for a person or a specific event. If searching within the system for a person and not a

specific event or the details of the event are unknown, be sure that the Disease field in the Search Criteria section of the Search Case window is left blank when conducting the search. This will allow all possible records for that person in the system to appear in the Search Results table.

If a user is conducting a search in THISIS to edit or input new information for an event s/he is *certain* already exists in the system, the user can search for and access the event either using the [Recent Events](#) button  on the toolbar if the desired event was recently viewed, or using the [Search Event](#)  button on the toolbar.

If a user is conducting a search in THISIS to determine if a person or event already exists in the system because *the user is uncertain if a new event needs to be created*, the user should always begin with a search for the person, beginning with the [Create Event](#)  button on the toolbar.



Using wildcards in searches: The search screens in THISIS support the use of wildcard characters. In THISIS, the wildcard character is an asterisk *. The asterisk can represent one or more characters. You must enter at least two standard characters in a search field in order to use a wildcard. For example, entering mi* in the First Name field would return search results where the person's first name is Michael, Mike, Minnie, Mickey, Millie etc. Note: Using a wildcard in a search field disables the Soundex search function.

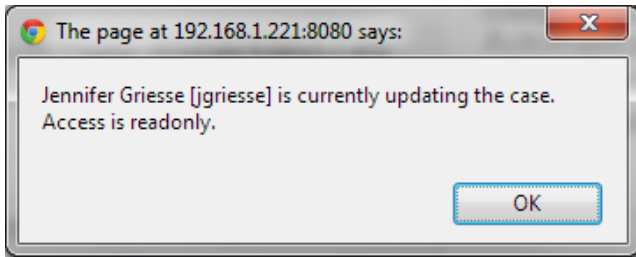
3.4.1 Search Event Fields

Name	Description
Type	Allows the user to search for normal events or clusters. All event types are listed in this dropdown. However, if the user only has permissions to see specific events and selects a type of event for which the user does not have permission, no results will be displayed due to the user's role.
Event/Record ID	Allows the user to search for a specific event if the Event ID is known.
Last Name	Allows the user to search by Last Name.
First name	Allows the user to search by First Name.

Birth Date	Allows the user to search by exact/inexact birth date using the mm/dd/yyyy search format. Using the toggle link, the user can switch between the default "Exact" birth date and an "Inexact" birth date range.
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 user to search by disease.
Event Date or Range	Allows the user to search using either an exact event date or a range of dates.
Sort By; Sort Order	Allows the user to choose how the search results are presented from two dropdown menus. The first dropdown menu specifies which field to sort results by and the second dropdown specifies the order in which the results will be presented – ascending (alphabetical or numeric) or descending (reverse alphabetical or numeric).
Search History	Allows the user to broaden the search to include historical event/party history. When this box is checked, historical demographic / address information is also compared against the search criteria (e.g., old address or old event/party ID, etc.).
Search Soundex	Allows the user to broaden the search beyond the literal spelling of the input search criteria; e.g., searching on "Tom" will also search on "Thom"; searching on "John" will also search on "Jack". <i>Note: Soundex is disabled if the user searches with wildcard(s).</i>

3.5 Locked Events

Only one user at a time can have an "editable" copy of an event open. When one user has an event open, other users are not able to work on that same event. THISIS places a temporary lock on all active (open) events. When a user attempts to open an event that another user is working in, THISIS displays a prompt about the locked event.



The user will still be able to open the event; however, access to the event is read-only. It is important to recognize that if a user is viewing an event in a read-only state, the question package still seems to be editable. However, the **Save** button is deactivated and the user will be unable to save data.

Chapter 4 Working with Party Information

Learning Objectives:

- Demonstrate the ability to update person information
- Explain the different types of person information and data.

4.1 Person Information

Recall that THISIS is an event based system, and that one person may have more than one event. It is important that information about a person is accurate across the system.

4.1.1 Modifying Person Information

Most person information needs to be modified in the Persons tab, but some may be modified in the disease specific question package. The information that is entered in the Persons tab is applicable to all events for the person. Please see below for the distinctions between the data that is entered in the Persons tab versus data that is entered in the question package, as well as information on how to enter/edit data in the Persons tab.

4.1.2 The Persons Tab

Editing information about a person is done using the Persons tab on the dashboard. Clicking the Persons tab displays three additional sub-tabs near the bottom of the screen where the user can update demographic information about the person in the event.

Event Data	Lab Results	Concerns	Persons	Tasks	Event Properties	Event History
------------	-------------	----------	----------------	-------	------------------	---------------

Persons		
Name	Birth Date	Ad
▶ Mary TB Testcase	03/02/1996	123

Edit Person

Basic Information	Address Information	Demographic History
-------------------	---------------------	---------------------

Basic Information	
Name:	Mary TB Testcase
Birth Date:	03/02/1996
Death Date:	
Vital Status:	Alive
Social Security Number:	123-45-8956
External ID:	PFMESQAPIRA
Name Type	Legal
Alternate First Name	Mags
Alternate Social Security Number (SSN)	

4.1.3 The Edit Person Screen

Clicking the **Edit Person** button or one of the address buttons below the Address Information tab takes the user to the Edit Person Screen. The user can make changes to nearly all person information. This includes changes to DOB, Social Security Number, address changes, address additions, name changes, etc.

The Edit Person screen is shown below. 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 add or edit the data.

Event Summary

Basic Information	
Event ID:	100000478
Disease:	700 - Syphilis
Person:	Thirsty Tuesday Birth Date: 12/04/1995
Investigation Status:	Open
Linked Events/Contacts:	1 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	Event is in workflows [View List]

[Party Information](#)

Event Data Lab Results Concerns **Persons** Tasks Ever

Persons

Name
▶ Thirsty Tuesday

Selecting the edit person screen displays:

Edit Person

First Name:	<input type="text" value="Mary"/>
Middle Name:	<input type="text" value="TB"/>
Last Name:	<input type="text" value="Testcase"/>
Suffix:	<input type="text"/>
Birth Date:	<input type="text" value="03/02/1996"/> <input type="button" value="Calendar"/>
Death Date:	<input type="text" value="MM/DD/YYYY"/> <input type="button" value="Calendar"/>
Vital Status:	<input type="text" value="Alive"/> ▼
Social Security Number:	<input type="text" value="123-45-8956"/>
Deduplication Status:	<input type="text" value="None"/>

Information can be edited and saved from this menu.

4.1.4 Using the Person Sub-Tabs

The three sub-tabs below the Person tab allow the user to update, edit, or view information about the person.

Basic Information

Address Information

Demographic History

Basic Information

Name:	Mary TB Testcase
Birth Date:	03/02/1996
Death Date:	

Basic Information

The **Basic Information** tab contains the most recently entered information about the person such as name, address, birth date, age, and gender. This information is available for viewing only. To make changes to the Basic Information, click the **Edit Person** button (referenced above). Saved changes will appear in the Basic Information table.

Basic Information

Address Information

Demographic History

Basic Information

Name:	Mary TB Testcase
Birth Date:	03/02/1996
Death Date:	
Vital Status:	Alive
Social Security Number:	123-45-8956
External ID:	PFMESQAPIRA
Name Type	Legal
Alternate First Name	Mags
Alternate Social Security Number (SSN)	
Alternate Date of Birth	
eHARS Case ID	
TDCJ Number (SID)	123456
Ethnicity	Not Hispanic or Not Latino
Race	Other
Sex at Birth	Female
Current Gender Identity	Female
Born in the US	Yes
Country of Birth	USA
Date of Arrival in the US	
English Speaking	Yes
Preferred Language	Albanian
Email Type	Home (individual)
Email Address	mags96@aol.com
Electronic Contact Type	Chatroom handle
Phone Number Type	
Address:	1234 Main Street Austin, TX 78709
County:	Travis County
Country:	USA
Home Phone:	(512) 123-7894
Residence Type:	Mobile home

Address Information

The **Address Information** tab contains information regarding the person's addresses. This is where information regarding both current and past addresses is accessible. The person's address information can be edited or updated. Clicking the **Add Address** or **Edit Address** buttons takes the user to the lower part of the Edit Person screen.

Basic Information | **Address Information** | Demographic History

Address Information	
Type	Address
Home * Primary	1234 Main Street, Austin, TX 78709
Home (Secondary)	TX

Add Address Type | Edit Address | Remove Address

Address History	
Effective Dates	Address
03/01/2016 - 03/03/2016	1234 Main Street, Austin, TX 78709

Selecting the **Add Address Type** displays the following screen:

Addresses		
Type	Address	Phone
Home	1234 Main Street, Austin, TX 78709	(H) (512) 123-7894
Home (Secondary)	TX	

Add Address Type | Remove Address

Edit Address	
Address Type:	Work
Start Date:	03/03/2016
End Date:	01/01/2030
Street:	
City:	
State:	TX
Zip Code:	
County:	
Country:	USA
Home Phone:	
Residence Type:	

Save | Cancel | Help

Updating or Changing an Address

The **Edit Address** button allows the user to update or change the person's address. For example: if the patient has recently moved, the user would click the **Edit Address** button to change their address.

The screenshot shows the 'Edit Address' form with the following fields and values:

Address Type:	Home
Start Date:	03/03/2016
End Date:	01/01/2030
Street:	1234 Main Street
City:	Austin
State:	TX
Zip Code:	78709
County:	Travis County
Country:	USA
Home Phone:	(512) 123-7894
Residence Type:	Mobile home

Buttons: Save, Cancel, Help

The Start Date and End Date fields allow the user to enter a date range for the address. When a new address is created, the Start Date defaults to the current date and the End Date defaults to 1/1/2030. When the user makes changes to the person's address in an existing event, the Start Date of the new address will default to the current date. Likewise, the End Date of the previous address defaults to the current date. Therefore, when an address is edited, it is not necessary for the user to either create a start date for the new address or create an end date for the previous address; THISIS will do this automatically. However, if the user would like the patient's new address to have an earlier start date, s/he may change the default date.

The screenshot shows the 'Edit Address' form with a callout box pointing to the Start Date field. The callout box contains the text: "Defaults to current date but can be edited".

Address Type:	Home
Start Date:	03/03/2016
End Date:	01/01/2030
Street:	1234 Main Street
City:	Austin
State:	TX
Zip Code:	78709
County:	Travis County
Country:	USA
Home Phone:	(512) 123-7894
Residence Type:	Mobile home

Buttons: Save, Cancel, Help

Address History

Once an address is modified, THISIS keeps track of the address history. The address history appears at the bottom of the screen. The most recent address information is at the top of the list, with the previous address information below it.

The screenshot shows a software interface with three tabs: "Basic Information", "Address Information", and "Demographic History". The "Address Information" tab is active, displaying a table with columns "Type" and "Address". The first row is highlighted in yellow and shows "Home * Primary" with the address "1234 Main Street, Austin, TX 78709". Below this table are three buttons: "Add Address Type", "Edit Address", and "Remove Address". Below the buttons is the "Address History" section, which is highlighted with a red box. It contains a table with columns "Effective Dates", "Address", and "County". The first row shows the date range "03/01/2016 - 03/03/2016", the address "1234 Main Street Austin, TX 78709", and the county "Travis County".

Adding Additional Addresses

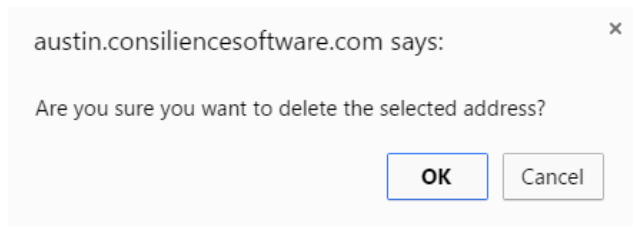
THISIS allows several types of addresses (home, work, etc.) to be simultaneously stored in the system. Clicking the **Add Address** button allows the user to add a *different type of address* for the person. For example, a user may need to add a work address or a vacation home address for a person who only has a primary home address in the system.

Use the Address Type dropdown menu to select the type of address being entered. The user is only able to enter one of each type of address for the person.

The screenshot shows the "Edit Address" form. The "Address Type" dropdown menu is open, showing options: "Work", "Work (Secondary)", "Company", "Guardian", "Mailing", "Vacation Home", and "Other". The "Work" option is selected and highlighted in blue. The form includes fields for "Start Date", "End Date", "Street", "City", "State" (set to "TX"), "Zip Code", "County", "Country" (set to "USA"), "Home Phone", and "Residence Type". At the bottom are "Save", "Cancel", and "Help" buttons.

Removing Addresses

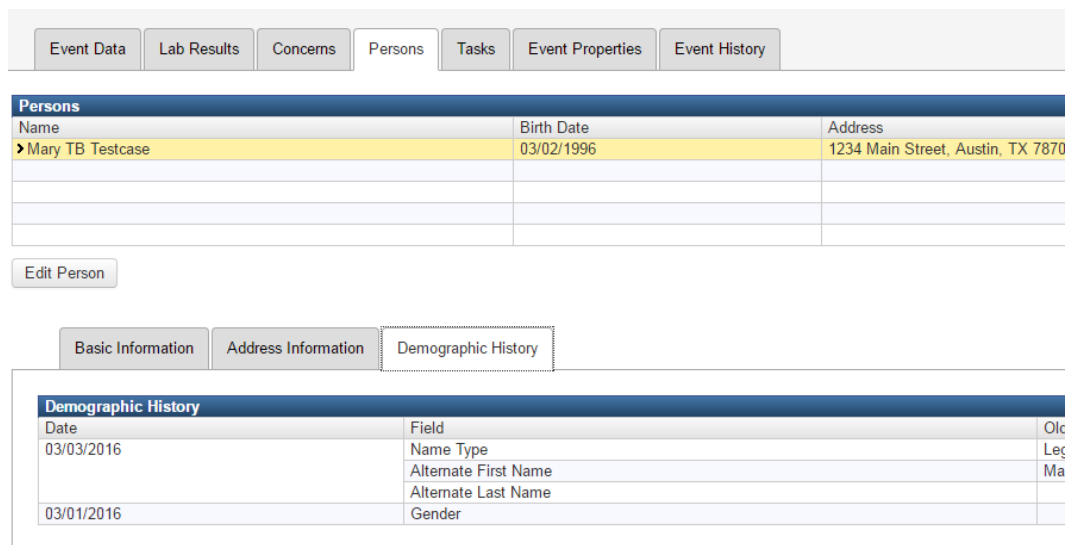
Clicking the **Remove Address** button will allow a user to delete an address that's no longer relevant. The user is prompted to be sure that s/he wants to remove the address(es).



Demographic History

The **Demographic History** tab is where information such as a person's last name can be tracked. If a person changes his/her name for any reason, the historical names are noted here.

Similar to the address history, the older information is located at the bottom of the screen.



The screenshot shows a software interface with several tabs: Event Data, Lab Results, Concerns, Persons, Tasks, Event Properties, and Event History. The 'Persons' tab is active, displaying a table with columns for Name, Birth Date, and Address. One entry is visible: Mary TB Testcase, born 03/02/1996, at 1234 Main Street, Austin, TX 7870. Below the table is an 'Edit Person' button.

Below the 'Persons' tab, there are three sub-tabs: Basic Information, Address Information, and Demographic History. The 'Demographic History' sub-tab is active, showing a table with columns for Date, Field, and Oldest. The table contains two entries:

Date	Field	Oldest
03/03/2016	Name Type	Lea
	Alternate First Name	Ma
	Alternate Last Name	
03/01/2016	Gender	

Chapter 5 Managing the Workflow Queue and Tasks

Learning Objectives:

- Explain the importance of the Workflow Queue.
- Demonstrate how to interact with the Workflow Queue.
- Explain the importance of tasks.
- Perform a task.
- Assign an existing task.
- Create and assign a new task.
- Assign an event.
- Share an event.

A note about cases and events: As noted earlier, an event is the occurrence of a disease. A verified existence of a person having a disease is often referred to as a case by field and program staff. In THISIS, the terms case and event are used interchangeably.

5.1 Workflow Queues


Workflow Queues are the mechanism within THISIS to identify events and tasks that require user attention. THISIS internally monitors new and updated events and tasks to determine what actions are required. Events satisfying monitored conditions are placed in queues, which are then made available to users with permissions to carry out those actions.

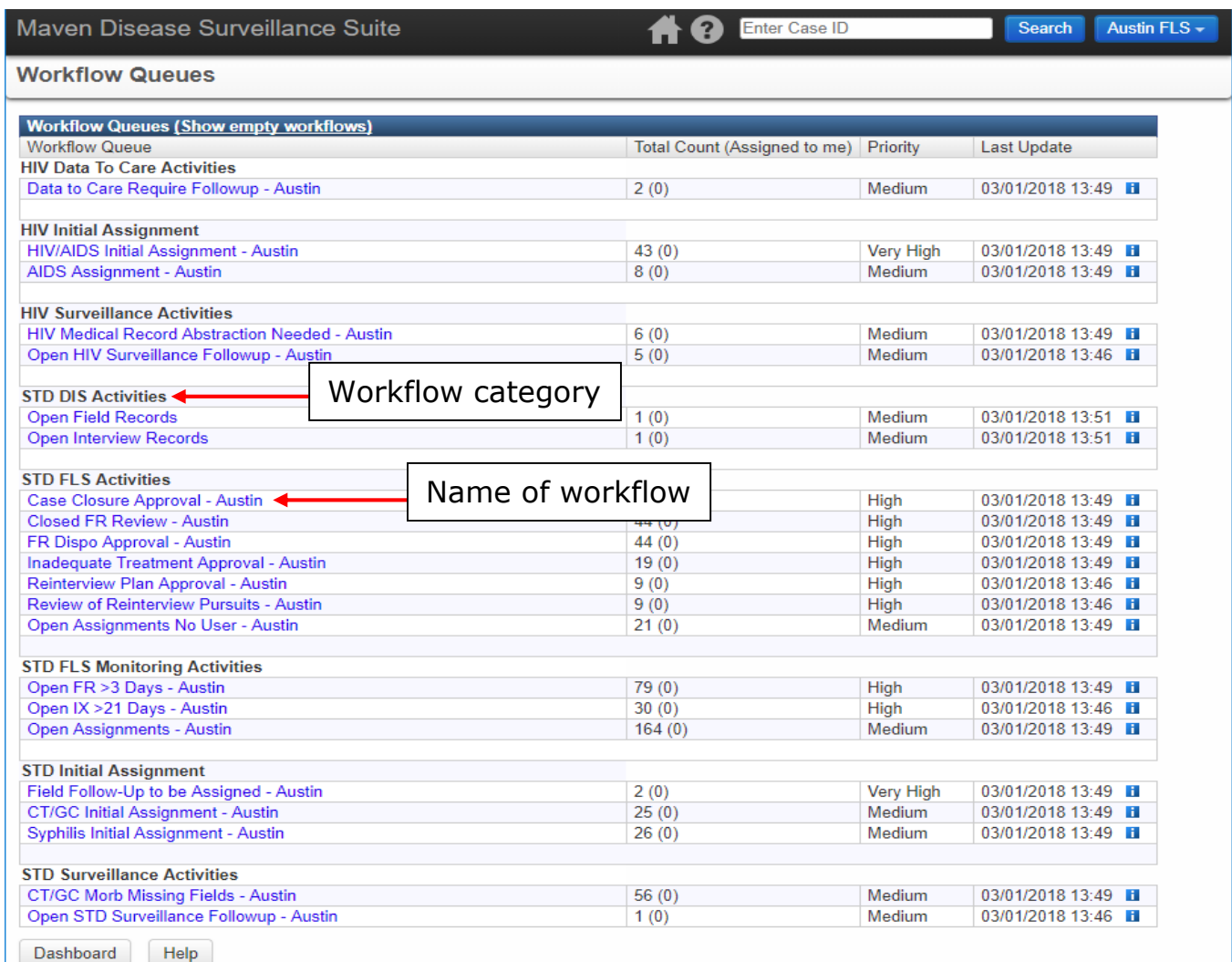
Workflow Queues are important in THISIS because they allow users to keep up with events and work that need to be addressed. Events appear in workflow queues

automatically based on what has happened or what has to happen with the event. For example, if data is missing from a specific field, the event may display in a "Missing Data" workflow queue. THISIS Workflow Queues and Tasks make it intuitive for users to keep track of events in the system. Referring to Workflows daily helps users prioritize and streamline their work.

There are two workflow screens: The Workflow Queues screen and the Workflow Details screen.

5.1.1 Workflow Queue Screen

The first time the user clicks on the workflow icon  on the toolbar, s/he will be brought to the Workflow Queues screen. This contains a list of all the workflow queues the user has access to see.



Maven Disease Surveillance Suite Enter Case ID Search Austin FLS

Workflow Queues

Workflow Queues (Show empty workflows)


Workflow Queue	Total Count (Assigned to me)	Priority	Last Update
HIV Data To Care Activities			
Data to Care Require Followup - Austin	2 (0)	Medium	03/01/2018 13:49
HIV Initial Assignment			
HIV/AIDS Initial Assignment - Austin	43 (0)	Very High	03/01/2018 13:49
AIDS Assignment - Austin	8 (0)	Medium	03/01/2018 13:49
HIV Surveillance Activities			
HIV Medical Record Abstraction Needed - Austin	6 (0)	Medium	03/01/2018 13:49
Open HIV Surveillance Followup - Austin	5 (0)	Medium	03/01/2018 13:46
STD DIS Activities			
Open Field Records	1 (0)	Medium	03/01/2018 13:51
Open Interview Records	1 (0)	Medium	03/01/2018 13:51
STD FLS Activities			
Case Closure Approval - Austin	1 (0)	High	03/01/2018 13:49
Closed FR Review - Austin	44 (0)	High	03/01/2018 13:49
FR Dispo Approval - Austin	44 (0)	High	03/01/2018 13:49
Inadequate Treatment Approval - Austin	19 (0)	High	03/01/2018 13:49
Reinterview Plan Approval - Austin	9 (0)	High	03/01/2018 13:46
Review of Reinterview Pursuits - Austin	9 (0)	High	03/01/2018 13:46
Open Assignments No User - Austin	21 (0)	Medium	03/01/2018 13:49
STD FLS Monitoring Activities			
Open FR >3 Days - Austin	79 (0)	High	03/01/2018 13:49
Open IX >21 Days - Austin	30 (0)	High	03/01/2018 13:46
Open Assignments - Austin	164 (0)	Medium	03/01/2018 13:49
STD Initial Assignment			
Field Follow-Up to be Assigned - Austin	2 (0)	Very High	03/01/2018 13:49
CT/GC Initial Assignment - Austin	25 (0)	Medium	03/01/2018 13:49
Syphilis Initial Assignment - Austin	26 (0)	Medium	03/01/2018 13:49
STD Surveillance Activities			
CT/GC Morb Missing Fields - Austin	56 (0)	Medium	03/01/2018 13:49
Open STD Surveillance Followup - Austin	1 (0)	Medium	03/01/2018 13:46

Workflow category (points to STD DIS Activities)

Name of workflow (points to Case Closure Approval - Austin)

Dashboard Help

Workflow Queue Fields

Field Name	Description
Workflow Queue	The name of the query which describes the condition of the event. Each line item is a clickable link which will open a new screen which lists the event(s) in the queue.
Total Count (Assigned to me)	The number of events that have been triggered by the specific monitor; the number within the parentheses () is the number of events that have specifically been assigned to the user. ***Note: The 'Assigned to me' function is not active in THISIS, so disregard this component because it will always read as 0. The number that appears in the Total Count will, in most cases, refer to the number of events assigned to or requiring attention from the user, so users should pay attention to this number
Priority	The priority assigned to the specific workflow.
Last Update	The date and time the workflow was last updated along with an information box  discussed below.

Workflow Assignment Types (user-based and jurisdiction-based)

Workflows are either assigned to specific individual users (user-based workflows) or to a group of users based on their jurisdiction and role (jurisdiction-based workflows).

For user-based workflows, a task or event enters a workflow assigned to a specific individual user and will only appear in that user's workflow queue. In order to remove the task or event from his/her workflow queue, that user must perform the required action(s) needed to complete the assigned task. In some cases, certain user-based workflows will also appear in the workflow queue of supervisors, but this occurs for supervisory and monitoring purposes, so the events or tasks in these workflows will not be removed from the supervisor's queue until the assigned user completes the required action(s).

An event that triggers a task to enter a jurisdiction-based workflow will appear in the workflow queue for all users who:

- a) hold the role necessary to complete the assigned action **AND**
- b) who work with the jurisdiction associated with that particular event.

For example, if a syphilis lab for an individual living in Austin is entered into the system and it triggers an initial status of field follow-up, the event will appear in the 'Field Follow-Up to be Assigned' workflow queue for all users who are STD First Line Supervisors (FLS) in Austin since FLS staff monitor this workflow in the Austin jurisdiction (note that in some jurisdictions, STD surveillance staff will monitor the Field Follow-Up to be Assigned workflow instead of the FLS).


Workflow Queues	
Workflow Queues (Show empty workflows)	
Workflow Queue	Total Count (As)
HIV Data To Care Activities	
Data to Care Require Followup - Austin	2 (0)
HIV Initial Assignment	
HIV/AIDS Initial Assignment - Austin	43 (0)
AIDS Assignment - Austin	8 (0)
HIV Surveillance Activities	
HIV Medical Record Abstraction Needed - Austin	6 (0)
Open HIV Surveillance Followup - Austin	5 (0)
STD DIS Activities	
Open Field Records	1 (0)
Open Interview Records	1 (0)
STD FLS Activities	
Case Closure Approval - Austin	12 (0)
Closed FR Review - Austin	44 (0)
FR Dispo Approval - Austin	44 (0)
Inadequate Treatment Approval - Austin	19 (0)
Reinterview Plan Approval - Austin	9 (0)
Review of Reinterview Pursuits - Austin	9 (0)
Open Assignments No User - Austin	21 (0)
STD FLS Monitoring Activities	
Open FR >3 Days - Austin	79 (0)
Open IX >21 Days - Austin	32 (0)
Open Assignments - Austin	164 (0)
STD Initial Assignment	
Field Follow-Up to be Assigned - Austin	2 (0)
CT/GC Initial Assignment - Austin	25 (0)
Syphilis Initial Assignment - Austin	26 (0)
STD Surveillance Activities	
CT/GC Morb Missing Fields - Austin	56 (0)
Open STD Surveillance Followup - Austin	1 (0)

This is a user-based workflow. Users who handle these types of workflows will be the only user assigned to the events or tasks that appear in this workflow seen in their queue.

Name of the jurisdiction appears at the end of most jurisdiction-based workflows. Events that appear in these types of workflows will often appear in the queues for more than one user. From the example above, an event will appear in this queue for all STD FLS in Austin.

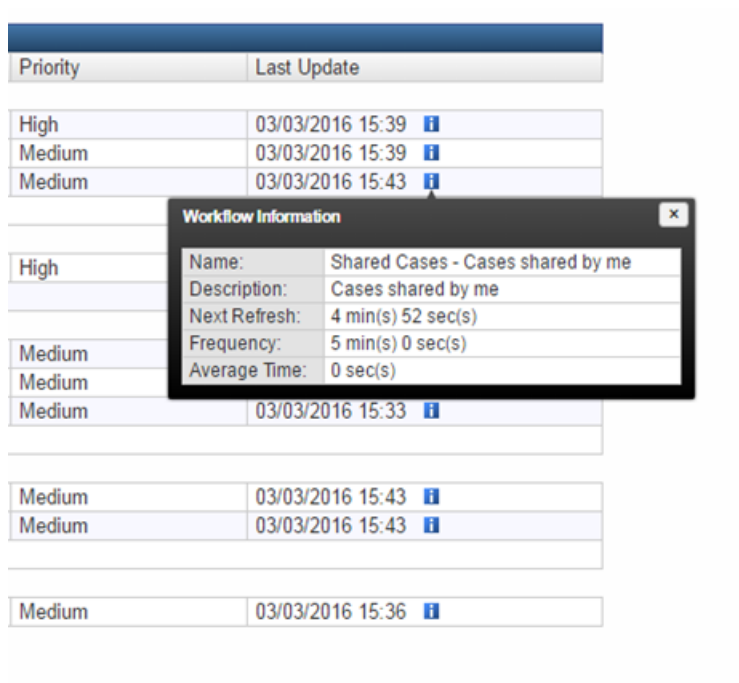
In most cases, workflows that are jurisdiction-based will have the name of the Jurisdiction at the end of the workflow name. Given that multiple users will see the same event in their queue for jurisdiction-based workflows, it will be each jurisdiction's duty to develop their own system for identifying which user within that

jurisdiction and role will be responsible for handling specific tasks or events to ensure that each one is addressed in a timely manner.

Because some workflows are set to refresh at different intervals, the Workflow Queues page lists the Last Update. Within that column is an information box . Clicking on this icon brings up an information box.

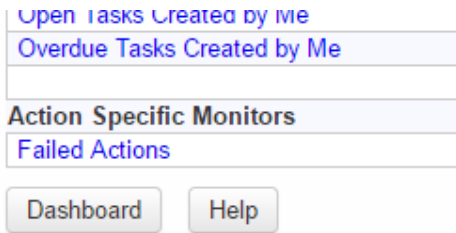
This box includes the following:

Name	Name of the workflow
Description	More descriptive details for the workflow.
Next Refresh	Amount of time left until this workflow is scheduled to refresh.
Frequency	Amount of time between refreshes.
Average Time	Average time it takes for the system to complete the workflow refresh.



At the bottom of the Workflow Queues screen are two navigational buttons including Dashboard and Help. The **Dashboard** button works differently depending upon where the user has been prior to clicking the button. If an event is loaded, which in many cases means the user accesses workflows by clicking the workflows icon on the toolbar from an Event Dashboard page, clicking the Dashboard button takes the user back to the Event Dashboard for a person. If no event is loaded,

which usually means that a user accesses workflows from the workflows section or workflows icon on the toolbar from the Splash Screen, clicking on the Dashboard button will take the user back to the Splash Screen (Main Dashboard). **Help** links to THISIS Online Help.



Note: There is a link next to the Workflow Queues table header that allows a user to show or hide the empty queues. Click the **Show Empty Workflows/Hide Empty Workflows** link to change the display.



5.1.2 Workflow Details Screen

To open a Workflow Queue, the user can simply click on the workflow name of any workflow queue that contains events. Doing this will take the user to the Workflow Details screen. Workflow Details contains a list of all events or tasks which meet the criteria of the workflow. For example, if the user were to click on the workflow **Open Cases - Assigned to Current User** and load the Workflow Details page, the user would see a list of all the cases assigned to him/her.

Workflow Details - Open Cases - Assigned to Current User

Open Cases - Assigned to Current User (Realtime)				
<input type="checkbox"/>	Event	Name	Status	C
<input type="checkbox"/>	100000864	Grey, Christian Harding	Open	0

Displaying 1...1 of 1 ([Export All](#))

Assign to user:   [\[Assign to n](#)

[Workflows](#)

[Dashboard](#)

[Help](#)

The columns that appear in the Workflow Details screen will vary depending on the particular workflow in which the user is working. This allows more workflow specific context to be displayed and allows the screen to be optimized if certain fields, such as assignments, are not applicable or useful for the workflow screen. The fields that are displayed will help the user in prioritizing the events within that workflow. All Workflow Details screens will include columns for Event and Name, but other columns that may be seen include: Disease, Birth Date, Assigned Date, Initial Date, and Test Result. The columns in the Workflow Queue screen are sortable. Clicking on the headers will allow the user to reorder the information in the table. An example of a Workflow Details screen can be seen below. You can see that the columns for this Open Field Records workflow differs than the Open Cases workflow seen above.

Workflow Details - Open Field Records					
Open Field Records (Realtime)					
Event	Disease	Name	DateAssignedFR	OPDiagnosis	ReferralBasis
200000979- Case Assignment / Field Record	900 - HIV	Partner Patient	10/24/2017		P1

Displaying 1...1 of 1 ([Export All](#)) << First < Prev 1 / 1 Next > Last >>

[Workflows](#) [Dashboard](#) [Help](#)


At the bottom of the Workflow Details screen are three navigational buttons. Selecting **Workflows** will take the user back to the Workflow Queue screen. Selecting **Dashboard** takes the user back to the Event Dashboard (if an event is loaded) or the Splash Screen (if no event is loaded). **Help** links to THISIS Online Help.

5.1.3 Event Workflows

A workflow is an event-specific assignment that is automatically "watching" for a specific set of conditions which will trigger it. These conditions may vary from one disease to another and from one user's role to another. For example, when an electronic lab result leads to the creation of a new event within THISIS, an event-specific monitor may appear to indicate there are new events in THISIS. A message would be displayed in the appropriate users' or groups' Workflow Queue. Usually these types of monitors can be cleared and the workflow queue emptied by filling in a field (or fields) in a question package.

THISIS runs queries intermittently throughout a 24-hour period. Some workflow queries run one time in 24 hours, others may run every time the event is saved. 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 require only one or two pieces of information.

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 THISIS, click the **Workflow** button  in the THISIS toolbar from the Splash Screen or an Event Dashboard. This will open the Workflow Queues page.
2. Observe that workflows for the specific user are listed on the Workflow Queues page. Workflows in THISIS are grouped by categories, so all workflows related to a certain topic are listed under one category. Many users will see several different workflow categories on this page.
3. Each workflow in THISIS is displayed by its workflow name, which appears as a link. *Click on the workflow name link for the desired workflow.* This will open a Workflow Details page that lists all the events in that workflow that the user needs to address. A screen similar to the one below will appear:

Workflow Details - Cases with Open Concerns

Cases with Open Concerns (Last Update: 09/14/2016 10:51)			
<input type="checkbox"/>	Event	Name	Status
<input type="checkbox"/>	100000864	Grey, Christian Harding	Open
<input type="checkbox"/>	100000860	Orange, Betty	Open
<input type="checkbox"/>	100000855	Assignment, Test Surveillance	Open
<input type="checkbox"/>	100000854	Approval, Testing	Open

4. Click the **Event** link if applicable. The Event is the unique number corresponding to the event. This will either open the appropriate question package or open to the appropriate event dashboard so the required action(s) may be performed.
5. Remember that in order to apply changes to question packages, you must click the **Save** button. This action returns the user to the Event Dashboard for the currently active event.

5.1.4 Filtering and Exporting Workflow Details

Workflows can be configured to include the ability to filter or export the results. These options are located under the list of Events displayed in the workflow.

Maven Disease Surveillance Suite

Workflow Details - Cases with Open Concerns

Cases with Open Concerns (Last Update: 03/04/2016 13:39)

Event	Name	Status	Create Date	Disease
100000039	Kent, Clark	Open	10/01/2014	Tuberculosis
100000028	twn_test	Open	10/01/2014	900 - HIV Case Report Form - Adul
100000008	Miller, Chris	Open	09/29/2014	Tuberculosis

Filter: [] Contains [] Apply Clear Displaying 301...303 of 303 (Export All)

Assign to user: [] [Assign to me] Assign to group: []

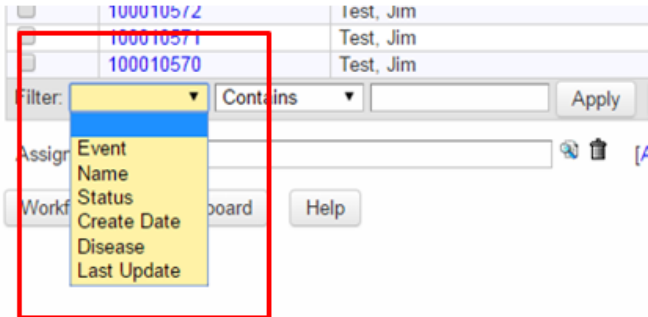
Workflows Dashboard Help

Filtering Workflow Details

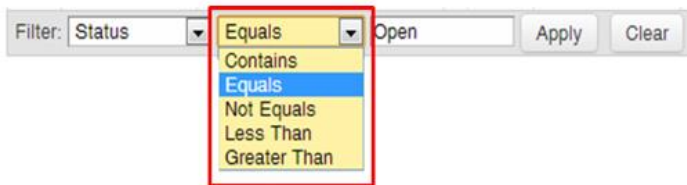
It may be useful to filter the workflow events for workflows with many events or tasks listed. THISIS allows for filtering based on column specific content. To set up a filter, follow these steps:

1. Identify the column to filter results. The **Filter** drop-down contains a list of all column headings. For example, if the user wanted to view only events with a certain Record Type, the Filter column would be "Record Type".

Note: This drop-down will vary as column headings and columns listed for Workflow Details vary from workflow to workflow and across different customizations.




2. Specify the filter operation. The operation will specify what criteria the value must meet. Continuing our previous example, if the user wanted only Open events, the Operation would be "Equals".



Workflow Filter Operations

Workflow Operation	Description
Contains	Results must contain the specified criteria. For example, to capture all events created in 2012, the user could specify that the Create Date must Contain "2012".
Equals	Only results in which the exact value is specified will be listed. For example, to specify Record Type Equals to "TB" would only include TB events and not the values for "LTBI".
Not Equals	All results which do not equal the exact value specified will be listed. For example, to specify Record Type Not Equals to "Record" would include all other values except "Record".

Less Than	For number or date fields, an Operation of Less Than will give all values that are less than (for number fields) or before (for date fields) the value specified.
Greater Than	For number or date fields, an Operation of Greater Than will give all values that are greater than (for number fields) or after (for date fields) the value specified.

3. Specify the criteria the operation must meet. Continuing our previous example, to get only events that are open, the Record Type will Equal **Open**. If the Filter column specified were a date field, a calendar picker would appear  allowing for easier data entry.

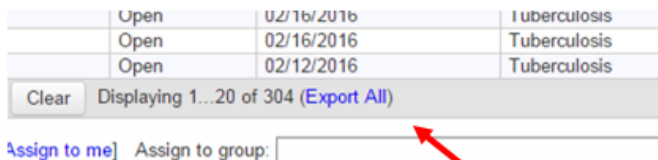
Note: Quotation marks around values are not necessary when specifying the value.

4. Click **Apply**.

5. To clear the filter results, click **Clear**.

Exporting Workflow Details

Sometimes it may be useful to export Workflow Details for future review. This can be done using the **Export All** link which will produce a csv file. When exporting, if no Filters have been applied to the workflow, all events within the workflow queue will be exported. If filters have been applied, only those events which meet the criteria of the filter will be exported. The column data displaying in the workflow will be exported for the relevant events.



5.1.5 Review Report Workflows

Depending on roles and permissions, some users will see workflows indicating that specific reports need to be reviewed. To clear this workflow, the user must first review the report(s). From the workflow queue, there is a bulk action which allows

the user to click the checkbox beside each of the events for which reports have been reviewed and click the button to indicate the review is complete. This automatically populates a field in the appropriate question package which says that reports have been reviewed and also specifies the date. If a new report comes in (or is entered) for the same event, the question about reports being reviewed in the question package gets reset to "No" until the workflow bulk action has occurred again. This will also overwrite the date field with the new date.


This workflow applies to reports generated by electronic feeds as well as manually entered data.



The headings on the Event Specific Monitors screens are clickable. Clicking one of them will reorder the data below alphabetically.

5.2 THISIS Tasks

Tasks within THISIS are a technique for users to delegate assignments or work to others. They are essentially a type of workflow that are manually assigned by THISIS users and can be given a due date, whereas the event workflows described above are automatically triggered and assigned to users and/or groups by the system itself based on pre-determined criteria. A few examples the task feature can be used for include communicating with other users about missing information, missing contacts, or errors in data. The task feature is a great way to improve inefficiencies through reducing paperwork and streamlining communication.

Tasks can be viewed and created in four places: from the Tasks tab in an event's dashboard, from the Tasks box on the THISIS Splash Screen (Main Dashboard), from the Workflow Queues page under the Task Specific Monitors category, or from the Tasks button  in the toolbar on the Splash Screen or Event Dashboard. All four provide similar information, but offer slightly different views and functionality.

Task creation can be different depending upon where the user initiates the create task action.

- If the user clicks the **Add Task** button under the Tasks tab in an event's dashboard, they can only create a task for that specific event.

Event Summary

Basic Information	
Event ID:	100000864
Disease:	700 - Syphilis
Person:	Christian Harding Grey Birth Date: 01/01/1980
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	Unable to make c Event is in workflo Congenital Syphilis Party Information

Edit Event Properties Copy Event

Event Data Lab Results Concerns Persons **Tasks**

Type	Status	Priority	Due Date
► Assignment	In Progress	Medium	09/22/2016

Add Task Update Task

Using the Add Task function in the Tasks tab of a specific event can only create a task specific to that event.

- If the user clicks on a task in the tasks box on the Splash Screen, they can view the task they have been assigned to for that specific event. By clicking on the 'More' link on the bottom right of the tasks box, users will be able to create general (non-event specific) tasks.

Maven Disease Surveillance Suite

Enter Case ID Search Betsy Cohn

Workflows

Workflow Queue	Events
Open Field Records	1 (0)
Open Interview Records	1 (0)

Tasks

Type	Priority	Name	Disease
Laboratory	High	Pickle, Mary	900 - HIV
Assignment	Medium	Targaryen, Rheagar	900 - HIV
Assignment	Medium	Smith, Josh	Tuberculosis

Recent Cases

Event ID	Name	Disease
100000094	Pickle, Mary	900 - HIV
100000772	Smith, Josh	900 - HIV
200001688	Smith, Josh	200 - Chlamydia
200001684	Smith, Walter	200 - Chlamydia
200001690	Smith, Josh	700 - Syphilis

Activity Summary as of 03/14/2018 12:01

Type	# Last Week	# Average Last 4 Weeks	# Last 52 Weeks
200 - Chlamydia	1	3	102
300 - Gonorrhea	1	0	91
700 - Syphilis	0	0	2
Provider	0	0	9

Help Desk

Clicking on the link under the Type column will open the Edit Task window for the task assigned to that specific event. This will only allow a user to view the assigned task

Clicking on the 'More' link will open the Tasks window. Users will be able to see all tasks assigned to them, and they are able to create general (non-event specific) tasks

Tasks

My tasks (specifically assigned to me)

Type	Priority	Due Date	Description	Status	Created By	Event	Assigned To	Assigned To Group	Action
Laboratory	High	03/22/2018	Testing	Pending	Marv VanWisse (mvanwisse)	100000094 - 900 - HIV - Marv Pickle	Betsy Cohn	[Start Task]	Edit Delete
Assignment	Med						Betsy Cohn	[Start Task]	Edit Delete
Assignment	Med						Betsy Cohn	[Start Task]	Edit Delete

Filter: Showing 1 to 3 of 3 entries

Add Task Dashboard Help

In the Tasks window that opens after clicking on the 'More' link in the tasks box on the splash screen, users can click the Add Task button to create non-event specific tasks

- If the user clicks the **Add Task** link from the Workflow Queues page (under Task Specific Monitors), they can only create a general (non-event-specific) task.

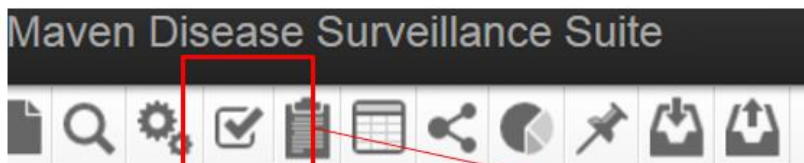
Task Specific Monitors (Add Task)

My Open Tasks

Open Tasks Created by Me

Creates a general (non-event-specific) task

- If the user clicks the **Tasks** button on the THISIS toolbar, they can create either a non-event specific task or, if an event has been loaded, an event-specific task.



Task button on toolbar on main Splash page

Tasks - Mary TB Testcase - Tuberculosis

Tasks for the selected event

Type	Priority	Due Date	Description
Assignment	Medium		Cases
Interstate Notification	Very High		contact
Laboratory	High	03/11/2016	correct

Filter: Showing 1 to 3 of 3 entries

My tasks (specifically assigned to me)

Type	Priority	Due Date	Description
Assignment	Medium		Cases wi
Assignment	Medium		Cases wi
Assignment	Medium		Cases wi
Other	Medium		review re
Assignment	Medium		review re
Interstate Notification	Very High		contact N
Assignment	Medium		Cases wi

Filter: Showing 1 to 7 of 7 entries


Task queues showing after task icon is selected on splash screen

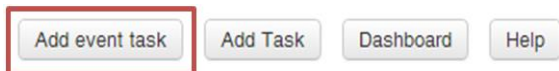
An example of a task that would be associated to a specific event is to ask a user to contact the patient for an interview. An example of a non-event specific task would be to ask a user (or group) to review lab results for all of the Syphilis events that have been recently received to check for similarities.

5.2.1 Creating and Assigning a New Task

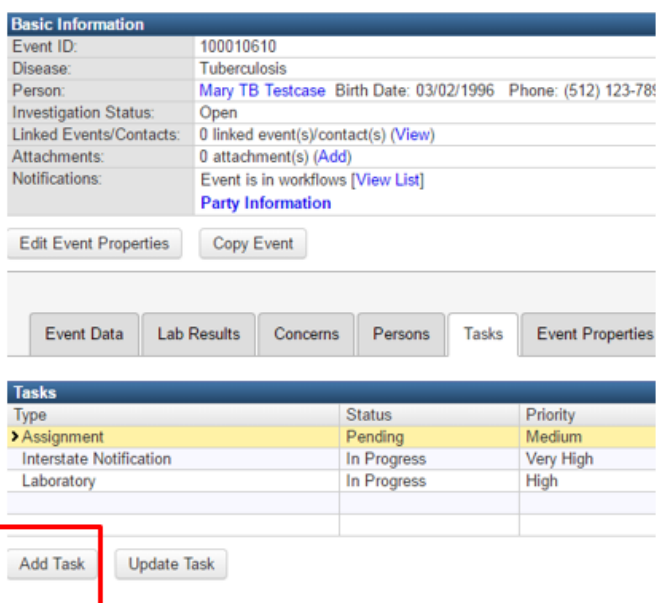
It is important to note that tasks can be associated or not be associated with a specific event. The steps to create either type of task are virtually the same. Follow the procedures outlined below, but first determine if the task you need to create is associated with a specific event.

Event Specific Tasks

1. If it is necessary to create a task specific to an event, first open the event in the THISIS dashboard.
2. Click the **Tasks** button  on the THISIS toolbar. Then click the **Add event** task button.



Or, the user can click the Tasks tab in the Event Information section, then click the Add Task button.



A screenshot of the Event Information section in the THISIS dashboard. The 'Basic Information' section is visible at the top, showing details for Event ID 100010610, Disease Tuberculosis, and Person Mary TB Testcase. Below this, there are buttons for 'Edit Event Properties' and 'Copy Event'. A navigation bar contains tabs for 'Event Data', 'Lab Results', 'Concerns', 'Persons', 'Tasks', and 'Event Properties'. The 'Tasks' tab is selected. Below the navigation bar, a table lists tasks with columns for Type, Status, and Priority. The 'Add Task' button is highlighted with a red box.

Type	Status	Priority
► Assignment	Pending	Medium
Interstate Notification	In Progress	Very High
Laboratory	In Progress	High

Selecting the **Add Task** button displays the following screen and drop down menu.

Add Task

Task Information

Event: 100010610 - Tuberculosis - Mary TB Testcase

Type: Assignment
Directly Observed Therapy
Outreach
Business Rule
Isolation and Quarantine
Investigation
Laboratory
Implement Control Measures
Outbreak
Interstate Notification
Other

Status:

Priority:

Due Date:

Start Date:

Complete Date:

Description:

Notes:

Task Attachment: No file chosen

Assign to user:

Assign to group:

3. Select the type of task from the dropdown list.
4. If necessary, select the appropriate task status from the list: Pending, In Progress, or Completed. In most cases, a newly assigned task should have a Pending status until the user assigned to the task has started working on it (in which case the user will change the status to 'In Progress') or has completed the task (in which case the user will change the status to 'Completed').
5. If necessary, select the priority of the task.
6. If necessary, set the due date of the task.
7. Enter a brief but concise description of the task to be done so the assignee clearly understands what must be done. Add notes to clarify if necessary.
8. Select the correct user or group from the appropriate dropdown list.
9. Click the **Save** button. (Repeat steps 1-9 to create and assign other tasks.)
10. Alternatively, another way to create an Event-Specific task is to click the Tasks tab in the Event Information section of the dashboard. Click the **Add Task** button and then follow the steps beginning at step 4 above.

Task Fields

Task Field Name	Description
Event	The Event ID, Full Name, and Product to which a task is to be associated. This will not appear if the task is not specific to an event; the user will see "Not specific to an event."
Type	The type of task: assignment, outreach, directly observed therapy, business rule, or other. This is a drop down menu.
Status	The status of the task: Pending, In Progress, or Completed. The status will be Pending by default when a task is first assigned. This is a drop down menu.
Priority	The specific priority of the event: Very High, High, Medium, Low, or Very Low.
Due Date	The date by which the task must be completed.
Start Date	The date that work on the task begins.
Complete Date	The date the task was completed.
Description	Describes briefly the task to be accomplished.
Notes	Further notes regarding the task to be completed.
Last Update	The date when the task was last updated.
Created By	The user who created the task.
Create Date	The date the task was created.
Assigned Date	The date the task was assigned.
Assign to user	A dropdown list of users on THISIS system.
Assign to group	A dropdown list of groups on THISIS system.

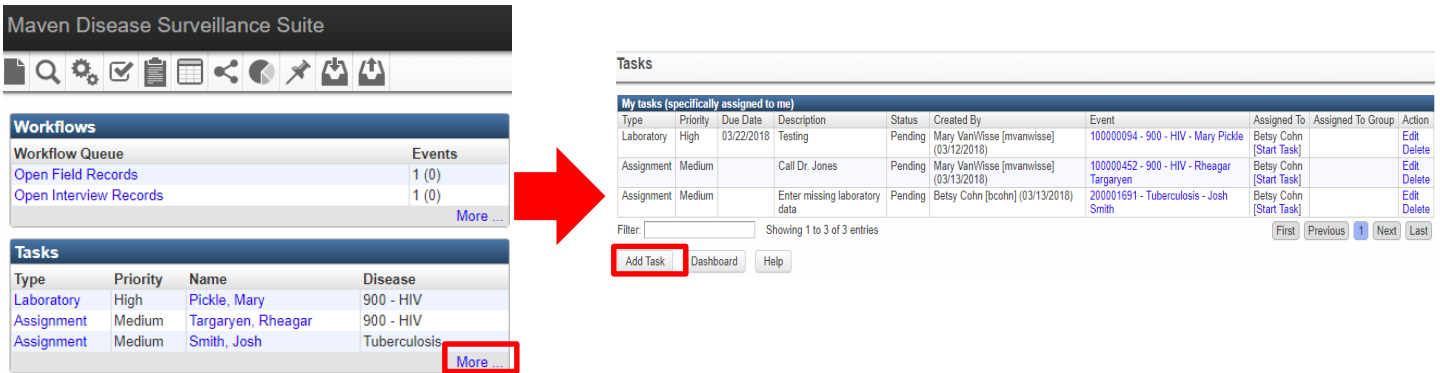
Non-Event-Specific Tasks

To create a task that is not specific to an event:


1. Click the **Tasks** button  on THISIS toolbar. Then click the **Add Task** button.

OR –

Click the 'More...' link at the bottom right of the Tasks box on the main splash screen to open the Tasks window, then click the **Add Task** button.



OR -

Click the **Workflow Queues** button  from THISIS toolbar. Then click the **Add Task** link beside "Task Specific Monitors."



Clicking the **Add Task** button or link brings up the following screen:

3. Follow the steps for event specific tasks, beginning with [Step 3](#).



From the Tasks screen, clicking the button "Add Task" will create a task which is non-specific to an event.

5.2.2 Performing a Task

Task information provided on the Tasks screen, which is accessed via the **Tasks** button on the Toolbar (either from the Splash Screen or an Event Dashboard), is different than the task information on the Workflow Queues screen. If a user has opened an event and clicks on the **Tasks** button on the toolbar from that Event Dashboard, a Tasks screen will open. This Tasks screen displays tasks that are specific to the event that is currently open in the Dashboard (in a table called Tasks for the selected event) – regardless of to whom the task is assigned. Additionally, this Tasks screen will also display all tasks which are assigned to the current user (in a table called My tasks) – regardless of which event they are assigned.



If accessing tasks via the tasks button on the toolbar in an Event Dashboard (which opens the Tasks screen), pay close attention to the event associated with the task on which you are working to ensure work is being completed for the correct event, and pay close attention to the user/group assigned to the task to ensure you are the appropriate user to complete the assigned task.

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 (*note: users with view-only privileges may not see these workflow fields*):


Task Specific Monitor Fields

Field Name	Description
My Open Tasks	All open tasks that have been specifically assigned to the user.
My Overdue Tasks	All the tasks which have been assigned to the user which are past due.





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 perform a task in both locations are discussed below.

From the Workflow Queue:

1. After logging into THISIS, click the **Workflows** button  on the Dashboard – in THISIS toolbar.
2. Observe the queues that are listed in the Task Specific Monitors.

Workflow Queues

Workflow Queues (Show empty workflows)			
Workflow Queue	Total Count (Assigned to me)	Priority	Last Update
STD DIS Activities			
Open Field Records	1 (0)	Medium	03/12/2018 17:07 
Open Interview Records	1 (0)	Medium	03/12/2018 17:07 
Task Specific Monitors (Add Task)			
My Open Tasks	2 (2)	Medium	03/12/2018 17:07 
Open Tasks Created by Me	1 (1)	Medium	03/12/2018 17:07 

Dashboard Help

3. Click on the name (link) of the desired queue. In most cases this will be the queue called "My Open Tasks."

My Open Tasks (Realtime)

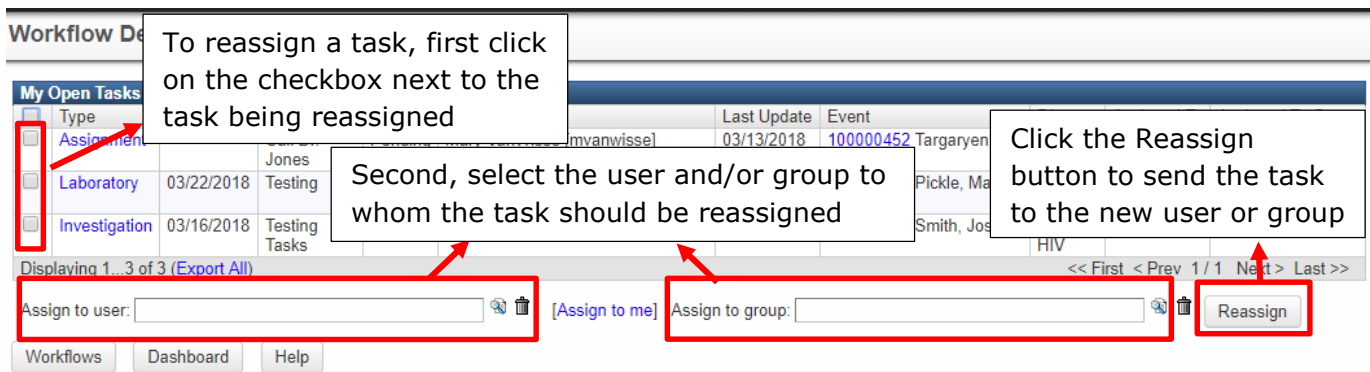
Type	Due Date	Description	Status	Created By	Last Update	Event	Disease	Assigned To	Assi
<input type="checkbox"/> Assignment	09/22/2016	Enter a short description of the task	In Progress	Mary VanWisse [mvanwisse] (09/13/2016)	09/13/2016	100000864 Grey, Christian Harding	700 - Syphilis	Mary VanWisse	

Displaying 1...1 of 1 (Export All) << First < Prev 1 / 1 N

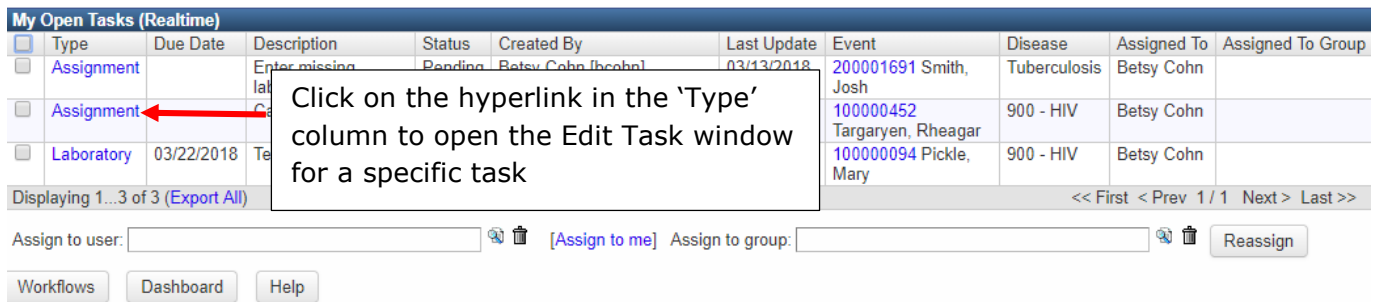
Assign to user:  [Assign to me] Assign to group:  Reassign

Workflows Dashboard Help

If it is necessary to reassign a task, click the checkbox in the leftmost column next to the specific task being reassigned, enter the appropriate user or group to whom the task should be reassigned in the boxes below the table, then click **Reassign**. The task will be removed from the user’s task list the next time the tasks are refreshed in the system (this may take a few minutes).



4. Click on hyperlink in the 'Type' column of a task to open the Edit Task window. This will display more information about the task including any notes about the task provided by the creator/assignee.



Fields in the Edit Task Window

Type	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.
Due Date	The date specified by the user who created the task for the date when the task should be complete.
Description	The short description of the task as written by the creator of the task.
Assigned to	The name of the user to whom the task is assigned.
Assigned to Group	The name of the group to which the task is assigned.

5. The user will need to perform the duties stated in the task. Unlike system-assigned event workflows, when addressing a task in THISIS, the user will have to navigate within the system on his/her own to locate information needed to complete the task or where information needs to be entered or updated within the system in order to complete the task. For example, if the task assigned tells

the user to call the laboratory that performed a certain lab test and the person who assigns the task does not include a phone number, the user performing the task will need to know to go into the proper lab report for that specific event and locate the phone number for the performing laboratory.

- Anytime a user addresses a task, the status should be updated. When working with tasks via workflow queues, the system will not automatically update the status of the task, so the user will have to manually make these changes.

To manually change the status from the workflow details screen, the user can click on the hyperlink in the 'Type' column of the desired task to open the Edit Task window. Locate the status field and select the appropriate option from the dropdown menu.

The screenshot shows the 'Edit Task' window with the following fields and options:

- Event: 10000094 - 900 - HIV - Mary Pickle
- Type: Laboratory
- Status: Pending (dropdown menu is open showing options: Pending, In Progress, Completed)
- Created By: [mvanwisse]
- Create Date: [empty]
- Last Update: [empty]
- Priority: High
- Due Date: 03/22/2018
- Start Date: MM/DD/YYYY
- Complete Date: MM/DD/YYYY
- Description: Testing
- Notes: [empty text area]
- Task Attachment: Choose File | No file chosen
- Assign to user: Betsy Cohn [bcohn]
- Assign to group: [empty]
- Buttons: Save, Cancel, Help

If the user has begun working on the task, but did not fulfill the requirements to complete the task, the user should change the status to '**In Progress.**' If the user has fulfilled all of the requirements and nothing else needs to be done, the user should change the status to '**Completed.**'


Note: If the Completed Date on a task is set without changing the task status to Completed, THISIS displays an error message.

- Click **Save**. This action saves the new status so the user who assigned the task will see that it's been started or completed.

From the Splash Screen (THISIS home page): Using the Tasks Button in the Toolbar or the Tasks box:

The screenshot shows the Maven Disease Surveillance Suite interface. The top navigation bar includes a search box and the user name 'Betsy Cohn'. The toolbar contains several icons, with the 'Tasks' icon (a checkmark) highlighted in red. Below the toolbar, there are several sections: 'Workflows', 'Tasks', 'Recent Cases', 'Welcome To Maven Disease Surveillance Suite', 'Activity', and 'Help Desk'. The 'Tasks' section is highlighted with a red border and contains the following table:

Type	Priority	Name	Disease
Laboratory	High	Pickle, Mary	900 - HIV
Assignment	Medium	Targaryen, Rheagar	900 - HIV
Assignment	Medium	Smith, Josh	Tuberculosis

1. To perform a task from the splash screen/THISIS home page, first click the **Tasks**  button on THISIS toolbar or select the 'More' hyperlink on the bottom right of the Tasks box to open the My Tasks window.

The following chart describes the fields/columns included in the tables seen in the My Tasks window.

Task Table Fields

Type	Description of the type of task selected by the creator of the task.
Priority	The priority that was assigned to the event.
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: Pending, In Progress, or Completed.
Created by	The user who created the task.
Event	The Event ID of a specific event (displayed as a link). If the task is not tied to a specific Event, "Not specific to an event" will display.

Assigned to	The person to whom the task is assigned. (May be blank if not assigned to an individual.) Also includes the "Start Task" flags for tasks that have not been started.
Assigned to group	The group to whom the task is assigned. (May be blank if not assigned to a group.)
Action	The specific actions for the task, including Edit and Delete functions.

2. Review the tasks included in the tasks table(s) and locate the task on which you plan to work.

My tasks (specifically assigned to me)

Type	Priority	Due Date	Description	Status	Created By	Event	Assigned To	Assigned To Group	Action
				Pending	Mary VanWise (03/12/2018)				Edit Delete
				Pending	Mary VanWise (03/13/2018)				Edit Delete
			laboratory data	Pending	Betsy Cohn [bcohn] (03/13/2018)	200001691 - Tuberculosis - Josh Smith	Betsy Cohn		Edit Delete
Investigation	Medium	03/16/2018	Testing Tasks	In Progress	Betsy Cohn [bcohn] (03/12/2018)	100000772 - 900 - HIV - Josh Smith	Betsy Cohn		Edit Delete

Filter: Showing 1 to 4 of 4 entries

Buttons: Add event task, Add Task, Dashboard, Help

Navigation: First, Previous, 1, Next, Last

Callout 1: Status changes from 'pending' to 'in progress' once the 'start task' hyperlink has been selected

Callout 2: Clicking Edit opens the Edit Task box where users can verify the status of a task as well as see other details about the task

Callout 3: [Start Task] link

If the task has not yet been started, there will be a "Start Task" link under the Assigned To person's name.

3. Clicking the 'Start Task' link makes that link disappear, acknowledging that the task has been started. When this happens, the status of the task will automatically change from 'Pending' to 'In Progress' and the start date field will be entered with the current date. This can be verified by clicking on the **Edit** link in the Action column to view the updated task.

Task Information

Event: 100010610 - Tuberculosis - Mary TB Testcase

Type: Directly Observed Therapy

Status: In Progress

Created By: Mary VanWise [mvanwisse]

Create Date: 03/07/2016

Last Update: 03/07/2016

Priority: Medium

Due Date: 03/09/2016

Start Date: 03/07/2016

Complete Date: MM/DD/YYYY

Description: DOT

Notes:

Task Attachment: Choose File No file chosen

Assign to user: Mary VanWise [mvanwisse] Assign to me

Assign to group:

Buttons: Save, Cancel, Help

Callout 1: Status changed automatically to In Progress

Callout 2: Start date

4. After performing the task required, reopen the task list and click **Edit** on the appropriate task to change the status of the task to Completed.

Remember, if the work is not yet completed, choose **In Progress**; if the task is complete, select **Completed** and the Complete Date will automatically be entered.


5. Click **Save**. This action saves the new status so the user who assigned the task will see that it's been started or completed.

From an Event Dashboard/Event Summary Screen: Using the Tasks Button on the Event Dashboard Toolbar or the Tasks Tab

If you have opened a specific event and are on the Event Dashboard/Event summary screen, there are two ways to view and perform tasks associated with that event: using the Tasks button in the toolbar or working in the Tasks tab.

Type	Status	Priority	Due Date	Description	Assigned To	Assigned To Group
Assignment	Pending	Medium		Call Dr. Jones	Betsy Cohn [bcohn]	

Performing a Task using the Task Button from the Event Dashboard Toolbar

1. From the Event Dashboard/Event Summary screen of a specific event, click the **Tasks**  button on the toolbar at the top of the screen.
2. Review the tasks listed in the table labeled 'Tasks for the selected event.' Remember that this Tasks screen will display two tables—the first table (Tasks for the selected event) will include all tasks created for this event regardless of the person assigned to complete the task, and the second table (My tasks) will include all tasks assigned to the THISIS user, even if they are for another event.
3. Identify the task(s) in the 'Tasks for the selected event' table that are assigned to you (the user).
4. Click on the **Edit** link in the Action column to view additional details about the task.

Tasks - Mary Pickle - 900 - HIV

Tasks for the selected event									
Type	Priority	Due Date	Description	Status	Created By	Event	Assigned To	Assigned To Group	Action
Laboratory	High	03/22/2018	Testing	Pending	Mary VanWisse [mvanwisse] (03/12/2018)	100000094 - 900 - HIV - Mary Pickle	Betsy Cohn [Start Task]		Edit Delete

Filter: Showing 1 to 1 of 1 entries First Previous 1 Next Last

My tasks (specifically assigned to me)									
Type	Priority	Due Date	Description	Status	Created By	Event	Assigned To	Assigned To Group	Action
Laboratory	High	03/22/2018	Testing	Pending	Mary VanWisse [mvanwisse] (03/12/2018)	100000094 - 900 - HIV - Mary Pickle	Betsy Cohn [Start Task]		Edit Delete
Assignment	Medium		Call Dr. Jones	Pending	Mary VanWisse [mvanwisse] (03/13/2018)	100000452 - 900 - HIV - Rheagar Targaryen	Betsy Cohn [Start Task]		Edit Delete
Assignment	Medium		Enter missing laboratory data	Pending	Betsy Cohn [bcohn] (03/13/2018)	200001691 - Tuberculosis - Josh Smith	Betsy Cohn [Start Task]		Edit Delete

Filter: Showing 1 to 3 of 3 entries First Previous 1 Next Last

[Add event task](#) [Add Task](#) [Dashboard](#) [Help](#)

If the task has not been started, there will be a "**Start Task**" link under the Assigned To person's name.

5. Follow the steps for Performing a Task from the Splash Screen (THISIS home page) using the Tasks Button in the Toolbar or the Tasks box from above, beginning with [Step 3](#).

Performing a Task using the Tasks Tab on the Event Summary/Event Dashboard Page

1. From the Event Dashboard/Event Summary screen of a specific event, click the **Tasks Tab** on the Detailed Events Tabs table towards the bottom of the screen.

The screenshot shows the 'Event Summary' page. At the top, there is a toolbar with various icons. Below it is the 'Event Summary' section with a 'Basic Information' table. The table contains the following data:

Event ID:	100000452
Disease:	900 - HIV
Person:	Rheagar Targaryen Birth Date: 08/05/1970
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	HIV Stage Code: Party Information

Below the table are two buttons: 'Edit Event Properties' and 'Copy Event'. At the bottom of the page, there is a horizontal navigation bar with tabs: 'Event Data', 'Lab Results', 'Concerns', 'Persons', 'Tasks', 'Event Properties', and 'Event History'. The 'Tasks' tab is highlighted with a red box.

Below the navigation bar is a 'Tasks' table with the following data:

Type	Status	Priority	Due Date	Description	Assigned To	Assigned To Group
Assignment	Pending	Medium		Call Dr. Jones	Betsy Cohn [bcohn]	

2. Select the task you will be working on. The selected task will highlight in yellow.

The screenshot shows the 'Event Summary' page with the 'Tasks' tab selected. The 'Tasks' table is expanded to show details for a specific task. The task is highlighted in yellow. The table contains the following data:

Type	Status	Priority	Due Date	Description	Assigned To	Assigned To Group
Laboratory	Pending	High	03/16/2018	Check laboratory results to rule out false positive	Betsy Cohn [bcohn]	
Assignment	Pending	Medium		Call Dr. Jones	Betsy Cohn [bcohn]	

Below the table are two buttons: 'Add Task' and 'Update Task'. Below the buttons is a 'Details' section with the following data:

Type:	Laboratory
Status:	Pending
Priority:	High
Description:	Check laboratory results to rule out false positive
Assigned To:	Betsy Cohn [bcohn]
Assigned To Group:	
Create Date:	03/14/2018
Created By:	Betsy Cohn [bcohn]
Last Update:	03/14/2018
Updated By:	Betsy Cohn [bcohn]
Due Date:	03/16/2018
Start Date:	
Complete Date:	
Notes:	

3. Read the information about the task in the Details section (located below the Tasks table). Double-clicking on the task in the Tasks table will open the **Edit Task** screen where information about the task can also be viewed.
4. After performing the task, return to the **Tasks Tab** in the event dashboard, select the task you just completed so that it becomes highlighted, then click the **Update Task** button or double click on the highlighted task.
5. Change the **status** of the task to Completed (or In Progress if all requirements have not been fulfilled).
6. Click **Save**. This action saves the new status so the user who assigned the task will see that it's been started or completed.

Chapter 6 Managing Deduplication

Learning Objectives:

- Explain what deduplication is and why it's necessary.
- Learn to deduplicate persons.
- Learn to deduplicate events.
- Demonstrate the ability to manually invoke deduplication

6.1 Deduplication

Deduplication helps ensure data integrity. While it is better to avoid getting duplicate records (people or events) into the system to begin with, sometimes human error and the multiple ways that data is input into THISIS create unavoidable record duplication. Deduplication is a process that is followed after duplicates have been created in the system, in order to identify the duplicate records that should be merged into unique records.

Deduplication provides the following benefits:

- Reduces the chances of duplicate processing of the same event.
- Allows a single person record in the database to be linked and shared across all related events.
- Improves the accuracy of the data.

Both person and event information are automatically checked for deduplication when:


- A new person/event is created through THISIS user interface by a user.
- An event or laboratory result (ELR) is imported into THISIS database through an electronic feed.

When demographic information used in deduplication is updated, THISIS uses a combination of name, date of birth, social security number, and address to compute a similarity score with other persons in the database. A potential match is either chosen automatically (in the case of a full match) or routed to a user with deduplication permissions (in the case of an ambiguous or "partial" match) for resolution. Please see Appendix B Deduplication Scoring for additional details about matching algorithms.

6.2 Avoid Creating Duplicate Persons

Duplication of a person in THISIS typically occurs when a user does not conduct a careful search for a person in the system before entering new information.

Using the Create Event Button

The best way to avoid creating duplicate persons in the system is to conduct a search for the person you are entering information for using the **Create Event** button on the THISIS toolbar  (this is also discussed in the create event section of this manual). After clicking the **Create Event** button, the Create Event – Person Information window will open. The user must choose a disease, then click the **Select Person** button at the bottom of the screen. The **Select Person** button allows the user to see ALL of the PERSONS in the database – regardless of jurisdiction or disease (Select Person only displays person information).

Create Event - Person Information

Event Information
Disease: Tuberculosis

Add Person
First Name: Middle Name: Last Name:
Suffix:
Birth Date: Social Security Number:

Additional Demographics
Name Type: Add New
Alternate Social Security Number (SSN): Add New
Estimated Age: Add New
Alternate Date of Birth: Add New
eHARS Case ID: Add New TDCJ Number (SID):
Ethnicity:
Race:
Sex at Birth: Current Gender Identity:
Born in the US: Country of Birth:
Date of Arrival in the US:
English Speaking: Preferred Language:
Email Type: Add New
Electronic Contact Type: Add New
Phone Number Type: Add New

Contact Information
Address Type: Home Street:
City: State: Zip Code:
County: Country: USA
Home Phone:
Residence Type:

Select Person... **Clear**

After clicking Select Person, The Search Party window will appear—the user should enter the first and last name and DOB for the person, then click **Search**.

Search Party

Search Criteria
Party ID:
Last Name: Pickle
First Name:
Birth Date: MM/DD/YYYY (Inexact)
Social Security Number:
City:
State:
Zip Code:
Phone:
Street:
Alternate First Name:
Alternate Middle Name:
Alternate Last Name:
Alternate Suffix:
Estimated Age:
eHARS Case ID:
Sex at Birth:
Sort Options
Sort By: Name
Sort Order: Ascending
Search Options
Search History:
Search Soundex:

Search Results

Name	Birth Date	Street Address
Pickle, Maria		
Pickle, Mary	02/28/1965	1234 Juniper Street
Pickle, Mary		
Pickle, Mary		

Showing 1 to 4 of 4 entries

Select **Cancel** **Help**

Search **Clear** **Create New**

Persons who exist in the system and match the search criteria entered will be displayed in the **Search Results** table on the right side of the page. Before entering an additional, potentially redundant person into the THISIS database, view


the results in the table and determine if the person already exists. *Keep in mind that a person might already exist in the system as a result of having another disease or event, so it may be appropriate to create a new event for a person, but an entirely new person record should NOT be created in this circumstance.*


If the person is found, click the **Select** button and continue to create your event. If demographic data has changed since the person was entered – (e.g. the county of residence), update the information in the Persons tab – on the Edit Person screen.

If the person is not found, the user knows that manually entering the information will not result in a duplicate person within the system.

The screenshot shows a web application window titled "Search Party". It is divided into two main sections: "Search Criteria" on the left and "Search Results" on the right. The "Search Criteria" section contains several input fields: "Party ID:" (empty), "Last Name:" (filled with "Davis"), "First Name:" (filled with "Lisa"), "Birth Date:" (filled with "05/18/1992" and a calendar icon), "Social Security Number:" (empty), "City:" (empty), and "State:" (a dropdown menu). The "Search Results" section features a table with columns: "Name", "Birth Date", "Street Address", "City", "State", "Zip Code", and "E". Below the table, it displays "Showing 0 to 0 of 0 entries" and "No results found". At the bottom of the results section are three buttons: "Select", "Cancel", and "Help".

Using the Search Event Button

Note that the **Select Person** button in the Create Event window is different than the **Search Event** button  on the toolbar. Using the Search Event button is a useful way for users to create a new event or open an event to update information for a person they are certain already exists in THISIS, but it can also be used to search for a person in the process of avoiding duplication.

To use the Search Event button in determining if a person already exists in THISIS before entering an additional, potentially redundant person into the system, click the  button on the toolbar to bring up the search event (search case) window. Use the search parameters in the left column to enter the person data to determine if the person is already in the system. When using this method to determine if a person already exists in the system, it is very important that the user does NOT select a disease when entering search criteria—this could prevent persons from appearing in the search results when the person does already exist in the system.

Search Case

The screenshot displays the 'Search Case' interface. On the left, the 'Search Criteria' section includes fields for Type (Normal), Event ID, Party ID, Status, Last Name (Pickle), First Name (Mary), Birth Date (02/28/1965), Street, City, State, Zip Code, Disease (with a dropdown arrow highlighted by a red arrow), From Date, To Date, Sort Options (Sort By: Create Date, Sort Order: Descending), and Search Options (Search History, Search Soundex). On the right, the 'Search Results' section shows a table with two entries for 'Mary Pickle' with Event IDs 200001875 and 100000094. Below the table are buttons for 'Select', 'Create Record for Person', 'Cancel', and 'Help'. A text box with a red arrow pointing to the Disease dropdown contains the instruction: 'If using the Search Event button to determine if a person already exists in the system, do not enter a disease when conducting the search.'

Event ID	Name	Birth Date	Disease	Status	Create Date	External ID
200001875	Mary Pickle	02/28/1965	Tuberculosis	Open	03/20/2018	PBEWBGOJGK
100000094	Mary Pickle	02/28/1965	900 - HIV	Open	06/16/2017	PBEWBGOJGK

If the person is found, click on the appropriate result so it becomes highlighted. If the user is certain that none of the events that appear in the search results are the same as the event associated with the new data being entered, the user should click on the **Create Record for Person** button to create a new event for this existing person.

If the user is not certain whether an event that appears in the results is the same as the event for which s/he is planning to enter new information, the user should click on **Select** to open the Event Dashboard and look at details of the event to make the determination. If it is the same event, the user can update the event from the Event Dashboard. If it is not the same event, the user should conduct the search again following the same process described above, then click on the 'Create Record for Person' button to create the new event and enter information.

If the user is not aware of any existing events for the person and no search results are found when conducting a search using the **Search Event** button (and a disease was not selected in the Search Case window when entering person data for the search), the user will know that the person does not already exist in the system and creating a new person record will not result with a duplicate person within the system.

6.2.1 Potential Matches

When a user creates a new person/event, and then selects the **Save** button in the Create Event - Person Information screen, THISIS runs a search in the background against the party records. The search returns potential matches based on name, date of birth, address, social security number, and other fields (the fields and

weightings are configurable for each installation of THISIS). The user must decide whether or not the persons or events are matches.

For example, suppose a record for Mary Testcase is created. Mary already has an existing record in the system of the same record type. The potential matches screen will alert the user that there is an existing person in the system with the same name and birthday. The user will then need to determine if this is, in fact, the same person.

1. Create a new event in THISIS. As can be seen below, the last name and birthdate are similar enough that the case will be checked for deduplication. Here, the cases are the same except there is no middle name for the second case.

The screenshot shows a web browser window titled "Search - Google Chrome" with the URL <https://austin.consiliencesoftware.com/thisis/searchParty.do?topPage=createCase.do%3FallowOrganization%3Dtrue%26productCo>. The page is titled "Search Party" and is divided into two main sections: "Search Criteria" and "Search Results".

Search Criteria:

- Party ID:
- Last Name:
- First Name:
- Birth Date: (Inexact)
- Social Security Number:
- City:
- State:
- Zip Code:
- Phone:
- Street:
- Alternate First Name:
- Alternate Middle Name:
- Alternate Last Name:
- Alternate Suffix:
- eHARS Case ID:
- Sex at Birth:

Search Options:

- Search History:
- Search Soundex:
- Sort By:
- Sort Order:

Buttons: Search, Clear, Create New

Search Results:

Name	Birth Date	Street Address	City	State	Zip Code	External ID
Testcases, Mary TB	03/02/1996			TX		PFMESRFFBEO

Showing 1 to 1 of 1 entries

Buttons: First, Previous, 1, Next, Last

Buttons: Select, Cancel, Help

2. Rather than searching on the person to avoid a duplicate party, instead click the **Save** button. If THISIS detects a person match, the system prompts the user with the Potential Matches screen (shown below) – in an attempt to avoid creating a duplicate person or event. The screen is only displayed for users with deduplication permissions.

Potential matches

The following people seem to match the information you have entered. Please review the information below and either select an existing person to use or simply choose to proceed to create a new person in the system.

Entered Information:	
Name:	Mary Testcases
Birth Date:	03/02/1997
Social Security Number:	
Name Type	
Alternate Social Security Number (SSN)	
Alternate Date of Birth	
eHARS Case ID	
TDCJ Number (SID)	
Ethnicity	
Race	
Sex at Birth	
Current Gender Identity	
Born in the US	
Country of Birth	
Date of Arrival in the US	
English Speaking	
Preferred Language	
Email Type	
Electronic Contact Type	
Phone Number Type	
Address:	TX
Country:	USA
Phone:	

Create new person

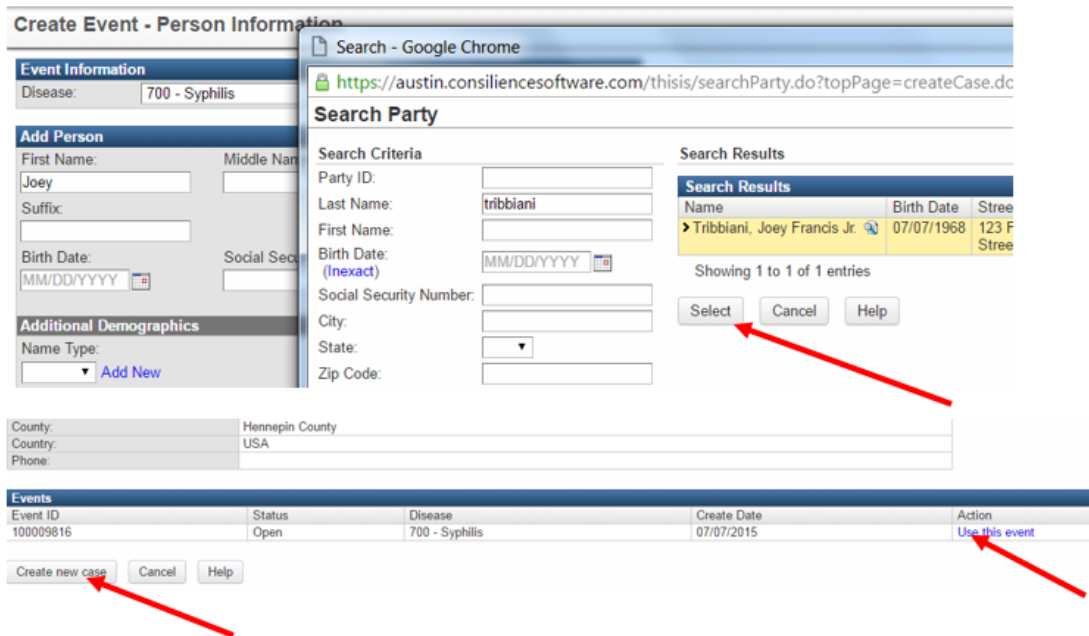
Create new case and person

Mark as pending deduplication

Mark as pending de-duplication

Matches	
Matched Record 1	
Name:	Mary TB Testcase [Details]
External ID:	PFMESQAPIRA
Birth Date:	03/02/1996
Social Security Number:	123-45-8956
Name Type	Alias
Alternate First Name	Mary

3. The Potential Matches screen shows the data originally entered, the prospective matches, and other useful information, including address history and the create date of the party. If there is a match for the person but a new event needs to be created, select **Choose Person** (creates new event).
4. If there is a match on the person and on the event, and the user wants to select the event, click the **Use this event** link. To verify data about the event before choosing it, the user can click on the **Print Event** link to bring up a printable summary of the event.



5. If this is not a match, click **Create New Case and Person** to create a new person and event in the system.

6. There is the option to leave the new party as pending deduplication if the user is not sure and wants to postpone the decision as to whether this is a duplicate party - simply click the **Mark as pending deduplication** checkbox.

7. There is an option to keep the information entered from the Create Event screen if an existing person is chosen and a new event is created - simply click the **Use entered information** checkbox. Any previously entered person related fields will populate blank fields without overwriting existing values. The entered address consisting of street address, city, state, postal code, county, country, and official place, (if deemed fully qualified), will become the existing person's address.

Note: In the rare scenario where the entered information could not be merged, a message will display after the event is successfully created indicating that the person information will need to be updated manually.

Note: A new event should NOT be created if a person is re-infected with gonorrhea, syphilis or chlamydia within 30 days. A new event should NOT be created for TB if a person is re-infected within 3 years.

6.3 The Deduplication Process

When duplicate persons or events show up in the system, deduplication will be necessary. Proper deduplication begins with deduplicating parties (persons), then deduplicating events. The reason is that it is impossible to identify duplicate events until duplicate persons have been reduced to unique records, since an event is defined as the pairing of a unique person with a disease. If two event records are not associated with the same person, they cannot be the same event.

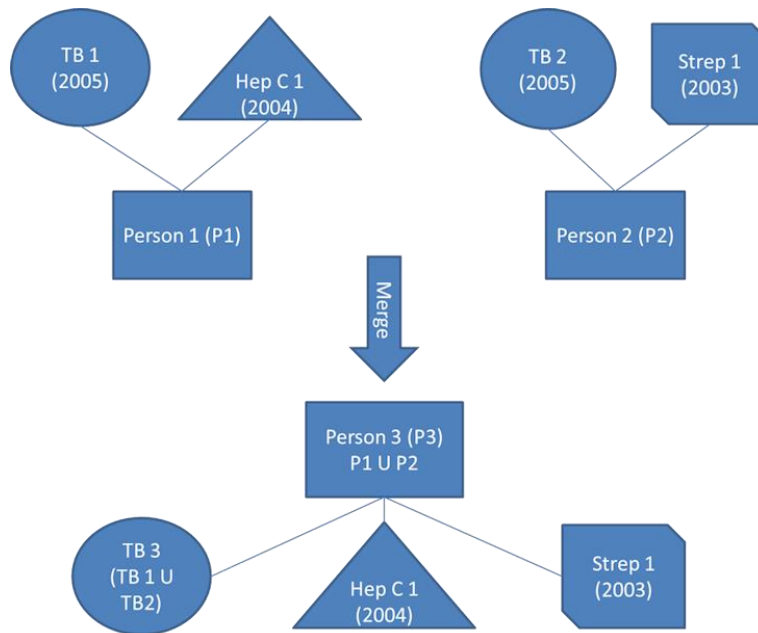
The final step to deduplicating persons and events will be limited to a few users.

6.3.1 Person Deduplication

Person deduplication helps to ensure persons are not saved in the system more than once. A person might be referenced more than once because s/he might have more than one event over time, but events should always reference back to the same specific person.

The following picture shows how persons will be merged within THISIS.

- The square boxes are persons within THISIS while the other shapes shown are unique events.
- In the example below, there are two unique persons or parties each with two events associated with them. If the person is determined to be the same, the user must deduplicate them.
- Person 1 is associated with a Hepatitis C event from 2004 and a Tuberculosis event from 2005. Person 2 is associated with Strep event from 2003 and also associated with a Tuberculosis event from 2005. To deduplicate them,
- Person 2 Person 1 and Person 2 become merged as Person 3 (P3). Additionally, the two Tuberculosis events from 2005 have also been identified as duplicates and are merged in this diagram – this is a secondary process (event deduplication) after deduplicating the persons.



6.3.2 Deduplicate Persons

Follow the process described below to deduplicate persons:

1. The user with deduplication permissions will notice that there is action required for deduplication within the workflow monitor. If it's an event to be deduplicated, as it is in this example, the first step in deduplication is person deduplication. First the system will need to be notified that the person is indeed the same person.

The user will see the following in the workflow monitor:

Deduplication/Import Monitors				
Failed Imports	0	Medium	02/25/2013 10:40 AM	i
Person Deduplication	2	Medium	02/25/2013 10:40 AM	i
Event deduplication	0	Medium	02/25/2013 10:40 AM	i
Organization Deduplication	0	Medium	02/25/2013 10:40 AM	i

Or alternatively on the Dashboard screen:

Basic Information	
Event ID:	100010626
Disease:	200 - Chlamydia
Person:	Mary TB Testcases Birth Date: 03/02/1996 Deduplication Status: Pending Deduplicate
Investigation Status:	Open
Linked Events/Contacts:	0 linked event(s)/contact(s) (View)
Attachments:	0 attachment(s) (Add)
Notifications:	Party Information

2. Click the Person Deduplication Workflow link on the workflow screen to view the person(s) who need(s) to be deduplicated.
3. Click the **Select** button beside the person to be deduplicated.
4. Decide which record you would like to use as Primary for Merge and select that record's radio button. Then select the **Select Record for Merge** button to select the correct Matched Record based on accuracy and the amount of data in each. Only one Matched Record can be merged at a time. If neither of the Party records contain complete or accurate data, the user can do a side-by-side analysis of the data elements completed for both parties being merged and select which fields to maintain by selecting the **Merge Fields** button (see next step). Data that does not match the primary record will be listed in red and data that is new to the primary record will be listed in green.

Person Deduplication

Source Record	Matched Record 1 [Score: 80.00] ⓘ	Matched Record 2 [Score: 70.10] ⓘ
First Name:	Mary	Mary
Middle Name:	TB	TB
Last Name:	Testcases	Testcases
View Summary:	Details	Details
External ID:	PFMESRFFBEO	PFMESQAPIRA
Create Date:	03/07/2016	03/01/2016
Gender:		Female
Birth Date:	03/02/1996	03/02/1996
Social Security Number:		123-45-8956
Name Type		Alias
Alternate First Name		Mags
Alternate Middle Name		
Alternate Last Name		Malone
Alternate Suffix		
Name Type		Maiden
Alternate First Name		Margaret
Alternate Middle Name		
Alternate Last Name		Baloney
Alternate Suffix		
Alternate Social Security Number (SSN)		
Alternate Date of Birth		
eHARS Case ID		
TDCJ Number (SID)		123456
ethnicity:		Multi-Ethnicity or Multi-Race

Bottom of screen:

The screenshot shows the bottom of the interface with the following elements:

- Home Phone: [input field]
- Use as Primary for Merge: (radio button)
- Select Record for Merge: (radio button) ← **Radio button** (highlighted with a red arrow)
- Selected: 0 / 2
- Buttons: Keep separate, Merge Type: [Select], Merge selected, Merge fields
- Navigation: Workflow, Dashboard, Help

The Person Deduplication screen shows the data for the source record, the prospective matches, and other useful information, including address history and the create date of the party. There is also a weighted "score" shown so that if there are multiple matches, the user can tell which of the matches is the most likely candidate to choose.

Person Deduplication Buttons

Button name	Description
Keep separate	Does not merge records. Clicking this button tells the system that this is not the same person and that the new person record should be used.
Merge Type	When this is rendered, the user must provide a selection for the Merge Type. However, this is configurable so it will not be rendered and required, depending on the installation.
Merge Selected	Merges records based on which is selected as the "Use as Primary for Merge" and the "Select Record for Merge".
Merge Fields	Gives the user the option to choose individual values to keep from each Person record when merging.

Merge Fields

If neither Person record contains the most accurate data or if the records contain conflicting data, the user can choose to keep data elements from each Party Record by selecting the **Merge Fields** button. The Party Field Merge screen appears with Primary Party and Secondary Party fields and responses listed. A radio button next to each field allows the user to determine which response to keep in the merged Person record.

Party Fields			
Fields	Primary Party (Select All)	Secondary Party (Select All)	
First Name	Mary	<input checked="" type="radio"/>	<input type="radio"/> Mary
Middle Name	TB	<input checked="" type="radio"/>	<input type="radio"/> TB
Last Name	Testcase	<input checked="" type="radio"/>	<input type="radio"/> Testcases
Suffix		<input type="radio"/>	<input type="radio"/>
Birth Date	03/02/1996	<input checked="" type="radio"/>	<input type="radio"/> 03/02/1996
Death Date		<input type="radio"/>	<input type="radio"/>
Social Security Number	123-45-8956	<input checked="" type="radio"/>	<input type="radio"/>
Living Status	Alive	<input checked="" type="radio"/>	<input type="radio"/> Alive
Name Type	Alias	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alternate First Name	Mags		
Alternate Middle Name			
Alternate Last Name	Malone		
Alternate Suffix			
Name Type	Maiden	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alternate First Name	Margaret		
Alternate Middle Name			
Alternate Last Name	Baloney		
Alternate Suffix			
Alternate Social Security Number (SSN)		<input type="radio"/>	<input type="radio"/>
Alternate Date of Birth		<input type="radio"/>	<input type="radio"/>
eHARS Case ID		<input type="radio"/>	<input type="radio"/>
TDCJ Number (SID)	123456	<input checked="" type="radio"/>	<input type="radio"/>
Ethnicity	Not Hispanic or Not Latino	<input checked="" type="radio"/>	<input type="radio"/>
Race	Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sex at Birth	Female	<input checked="" type="radio"/>	<input type="radio"/>
Current Gender Identity	Female	<input checked="" type="radio"/>	<input type="radio"/>
Born in the US	Yes	<input checked="" type="radio"/>	<input type="radio"/>
Country of Birth	USA	<input checked="" type="radio"/>	<input type="radio"/>
Date of Arrival in the US		<input type="radio"/>	<input type="radio"/>
English Speaking	Yes	<input checked="" type="radio"/>	<input type="radio"/>
Preferred Language	Albanian	<input checked="" type="radio"/>	<input type="radio"/>
Email Type	Home (individual)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Email Address	mags96@aol.com		
Electronic Contact Type	Chatroom handle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electronic Contact			
Phone Number Type		<input type="radio"/>	<input type="radio"/>
Phone Number			

When all values have been selected, click **Save** to merge the Person records.

Residence Type	<input type="radio"/>	<input type="radio"/>	N/A
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6.3.3 Event Deduplication

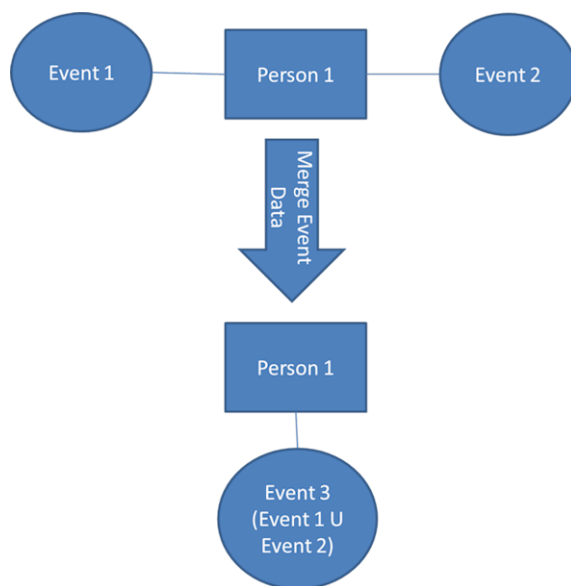
After deduplicating persons, **Events** may need to be deduplicated. Event deduplication is the process of merging events which seem to be duplicated, in order to prevent duplicate and potentially contradictory data entry.

When two events are merged, there is a method to unmerge (described in the [Unmerging Parties and Events](#) page). However, it is important that the user who has deduplication privileges has a comprehensive understanding of the overall business process to make effective decisions. THISIS also provides a thorough audit

trail of the original events in the form of event printouts that are attached to the merged case in the form of attachments (generally .pdf files).


The following picture shows how events will be merged within THISIS.

The rectangular box is a person and the circles are associated events within THISIS. Event 3 which displays at the bottom of the diagram is the merged event. All attachments, labs, and links will be copied from Event 1 and 2 into Event 3.



6.3.4 Deduplicate Events

Events that need to be deduplicated will appear in the Event Deduplication workflow. The user will likely find that after a few rounds of deduplicating persons, the number of cases in the Event Deduplication workflow begins to increase. This is because once redundant persons are merged into unique records, events with the same product that are associated with the freshly merged person records can become suspected duplicates.

1. In the Workflows  screen, the user can click the **Details** link to display the events which need to be deduplicated.

Deduplication/Import Monitors

[Failed Imports](#)

[Person Deduplication](#)

[Case Deduplication](#)

Select the record to be deduplicated:

Case Deduplication							
Event ID	Create Date	Disease	Name	Gender	Birth Date	Address	Action
100001034	10/13/2016	700 - Syphilis	Eva Longoria	Female	11/19/1981	1212 English Rd, Hou	Select
100000748	08/24/2016	700 - Syphilis	Alan Jones				Select
100000694	08/09/2016	Tuberculosis	jan jan		08/01/2016		Select
100000663	07/27/2016	200 - Chlamydia	Steve Jobs	Male	09/21/1974	1 Main Street, Temple,	Select
100000412	04/15/2016	700 - Syphilis	Scooby Doo		05/10/1976	TX	Select
100000379	04/01/2016	900 - HIV	Test dedup	Female	01/01/2005	TX	Select
100000378	04/01/2016	900 - HIV	Test dedup	Female	01/01/2005	TX	Select

Displaying 1...7 of 7 :t > Last >>

Workflows Dashboard

- Decide which record you would like to Use as Primary for Merge and select that record's radio button. Then, click the **Select Record for Merge** button to select the correct Matched Record based on accuracy and the amount of data in each. Only one Matched Record can be merged at a time. If neither of the Event records contain complete or accurate data, the user can do a side-by-side analysis of the data elements completed for both parties being merged and select which fields to maintain by selecting the **Merge Fields** button (see next step). Data that does not match the primary record will be listed in red and data that is new to the primary record will be listed in green.

Source Record	Matched Record 1 [Score: 100.00]	Matched Record 2 [Score: 100.00]	Matched Record 3 [Score: 100.00]
First Name: Joey Middle Name: Francis Last Name: Tribbiani External ID: PFMEQWCZDGI Create Date: 07/02/2015 Gender: Male Birth Date: 07/07/1968 Social Security Number: Street: 123 Friend Street Apt 233 City: Minneapolis State: MN Zip Code: 55454 Country: Hennepin County Home Phone: Event ID: 100009857 Disease: 700 - Syphilis Create Date: 07/13/2015 Question Packages: Demographic: 5 Answers Reporting / Morbidity: 3 Answers Case Assignment / Field Record: 0 Answers Follow-up Activity: 0 Answers Clinical: 0 Answers Venues: 0 Answers Create new Providers or Location/Venues: 0 Answers Use as Primary for Merge: <input checked="" type="radio"/> Select Record for Merge: <input type="checkbox"/>	Joey Francis Tribbiani PFMEQWCZDGI 07/02/2015 Male 07/07/1968 123 Friend Street Apt 233 Minneapolis MN 55454 Hennepin County USA 100009797 700 - Syphilis 07/07/2015 Demographic: 5 Answers Reporting / Morbidity: 13 Answers Case Assignment / Field Record: 6 Answers Follow-up Activity: 0 Answers Clinical: 0 Answers Venues: 0 Answers Create new Providers or Location/Venues: 0 Answers <input type="checkbox"/>	Joey Francis Tribbiani PFMEQWCZDGI 07/02/2015 Male 07/07/1968 123 Friend Street Apt 233 Minneapolis MN 55454 Hennepin County USA 100009798 700 - Syphilis 07/07/2015 Demographic: 5 Answers Reporting / Morbidity: 3 Answers Case Assignment / Field Record: 3 Answers Follow-up Activity: 0 Answers Clinical: 0 Answers Venues: 0 Answers Create new Providers or Location/Venues: 0 Answers <input type="checkbox"/>	Joey Francis Tribbiani PFMEQWCZDGI 07/02/2015 Male 07/07/1968 123 Friend Street Apt 233 Minneapolis MN 55454 Hennepin County USA 100009816 700 - Syphilis 07/07/2015 Demographic: 5 Answers Reporting / Morbidity: 3 Answers Case Assignment / Field Record: 0 Answers Follow-up Activity: 0 Answers Clinical: 0 Answers Venues: 0 Answers Create new Providers or Location/Venues: 0 Answers <input type="checkbox"/>

Selected: 0 / 3


Keep separate Merge selected Merge fields

Workflow Dashboard Help

If neither event record contains the most accurate data or if the records contain conflicting data, the user can choose which data elements to keep from each event record by selecting the **Merge Fields** button. The **Event Field Merge** screen appears with Primary Case and Secondary Case fields and responses listed. A radio button next to each field allows the user to determine which response to keep in the merged event record.

	Primary Case	Secondary Case
Demographic		
Sex at birth	<input checked="" type="radio"/> Male	<input type="radio"/> Male
Current gender identity	<input checked="" type="radio"/> Male	<input type="radio"/> Male
Party specified birth date	<input checked="" type="radio"/> 07/07/1968	<input type="radio"/> 07/07/1968
Event date	<input checked="" type="radio"/> 10/28/2015	<input type="radio"/> 11/18/2015
Age	<input checked="" type="radio"/> 47	<input type="radio"/> 47
Reporting / Morbidity		
Disease	<input checked="" type="radio"/> Syphilis	<input type="radio"/> Syphilis
Main disease list	<input checked="" type="radio"/> YES	<input type="radio"/> YES
Non-HIV diseases	<input checked="" type="radio"/> YES	<input type="radio"/> YES
Diagnosis code	<input type="radio"/> Not Answered	<input checked="" type="radio"/> 710 - Primary Syphilis
Date patient first examined by provider	<input type="radio"/> Not Answered	<input checked="" type="radio"/> 08/03/2015
Case classification	<input type="radio"/> Not Answered	<input checked="" type="radio"/> Confirmed case
Date of first report to public health	<input type="radio"/> Not Answered	<input checked="" type="radio"/> 08/03/2015
Is this a new case?	<input type="radio"/> Not Answered	<input checked="" type="radio"/> Yes
Case address source	<input type="radio"/> Not Answered	<input checked="" type="radio"/> 2 - Provider
Case number	<input type="radio"/> Not Answered	<input checked="" type="radio"/> JJ-15-500014
Diagnosis date	<input type="radio"/> Not Answered	<input checked="" type="radio"/> 08/13/2015
Method of Case detection	<input type="radio"/> Not Answered	<input checked="" type="radio"/> Screening
Where was this infection acquired?	<input type="radio"/> Not Answered	<input checked="" type="radio"/> N - Acquired in USA in reporting state
Case Assignment / Field Record		
Initial assignment outcome	<input type="radio"/> Not Answered	<input checked="" type="radio"/> Insufficient Information
Completed by	<input type="radio"/> Not Answered	<input checked="" type="radio"/> Julie Hanson Perez
Date of outcome	<input type="radio"/> Not Answered	<input checked="" type="radio"/> 07/21/2015
Case assignment type	<input type="checkbox"/> Not Answered	<input checked="" type="checkbox"/> FR
Save info (from other event)?	<input type="checkbox"/>	<input checked="" type="checkbox"/> Yes
Case assignment type	<input type="checkbox"/> Not Answered	<input checked="" type="checkbox"/> FR

When all data elements have been chosen, select **Save** to merge records.

3. After the deduplication is complete, find the primary record (try selecting the **Recent Events**  button on the dashboard). The primary record should show two new attachments, which are event printouts generated for the two source cases. They are added to provide a detailed audit trail to the resulting merged case.

4. Selecting the **View** link shows the list of the six attachments:

Basic Information	
Event ID:	100009816
Disease:	700 - Syphilis
Person:	Joey Francis Tribbiani Jr. Birth Date: 07/07/1968
Investigation Status:	Open
Linked Events/Contacts:	2 linked event(s)/contact(s) (View)
Attachments:	6 attachment(s) (Add) (View)
Notifications:	300 - Gonorrhea 100009817, dated 07/07/2015 (View) 900 - HIV 100009778, dated 07/02/2015 (View) 900 - HIV 100009956, dated 08/07/2015 (View) Party Information

Attachments after merge

5. Clicking the **View** link brings up the event printout for one of the source cases.

Attachments			
Create Date	Person	File	Description
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009797.zip	XML export of
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009798.zip	XML export of
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009816.zip	XML export MI
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009816.zip	XML export MI
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009816.zip	XML export MI
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009857.zip	XML export of

Filter: Showing 1 to 6 of 6 entries

Note: The format of these .xml attachments is determined by the Event Print template.

6.4 Question Package Merging - Event Deduplication

During deduplication, the user selects one event to be the primary event and the other event becomes the secondary event. Any data that exists in the secondary event **that does not conflict** with the data in primary event will be copied over into the primary event. The system then discards the secondary event.

Note: *Specific questions and question packages can be configured to be excluded from case merges.*



Click the Print Event link on the deduplication screen to print out all the information about both events before merging. Use the printed information to help clean up the data in the primary question package after the merge.

If an answer exists in the primary event but does not exist in the secondary event, the answer from the primary event is kept. If an answer exists in the secondary event, but does not exist in the primary event, it will be copied to the primary event.

Example 1: Question - What is your favorite color?

Event A (primary) Answer – Yellow	Event B (secondary) Answer – No Answer (field is blank)
After merge: Event A (primary) Answer – Yellow	

Example 2: Question - What is your favorite color?

Event A (primary) Answer – No Answer (field is blank)	Event B (secondary) Answer – Blue
After merge: Event A (primary) Answer – Blue	

If the answers in the two questions packages conflict, then the answer from the primary event is kept.

Example 3: Question - What is your favorite color?

Event A (primary) Answer – Yellow	Event B (secondary) Answer – Green
After merge: Event A (primary) Answer – Yellow	

6.4.1 Multi-select and Repeatable Questions

For multi-select questions, the answer on the primary event will contain all the values selected on both the primary and the secondary events.

Example 4: Question - What are your three favorite colors?

Event A (primary) Answer – Yellow, Blue, Green	Event B (secondary) Answer – Red, Green, Purple
After merge: Event A (primary) Answer – Yellow, Blue, Green, Red, Purple	

The logic for repeatable questions is a bit more complex. THISIS compares each repeatable block (and all of its child, or additional, questions) on the secondary event to those on the primary event. If there is a repeatable block with all of the same values (for the repeatable question and its children) then the data from the secondary event is **not** copied over. However, if the answers to any of the child questions do not exactly match between the two events, all of the children questions from the secondary event are copied over into the merged event.



After merging takes place, it is critical for the user to read through the question packages on the primary (merged) event and perform any "cleanup" of the data that is needed.

Example: The demographic question package contains a question that asks for the patient's race. This is often a repeating question. If for event A (primary) the Race is entered as White and for event B (secondary) the Race is entered as Asian, then after the merge, the answer will list BOTH White and Asian. The user must decide if both White and Asian are correct (i.e. the person is bi-racial), or if the race entered in one of the original events was incorrect and should be deleted in the merged event.

6.5 Manually Invoking Deduplication

As discussed, most deduplication issues within THISIS are caught by the system and displayed in the workflow queues. Occasionally, however, deduplication may need to be forced manually by the user because initially it was thought that the person or event were not matches but later it is determined that they were a match.

To deduplicate a person, open an event for the person to be deduplicated and then click the **Persons** tab on the dashboard. Click the **Edit Person** button.

Change the Deduplication Status to pending.

Middle Name: TB
Last Name: Testcase
Suffix:
Birth Date: 03/02/1996
Death Date: MM/DD/YYYY
Vital Status: Alive
Social Security Number: 123-45-8956
Deduplication Status: Pending
Additional Demographics
Name Type:
Alternate First Name: Mags
Alternate Middle Name:

To deduplicate an event, open the event to be deduplicated and then click the **Edit Event Properties** button on the dashboard. Change the Deduplication Status to pending.

Edit Event Properties - Mary TB Testcase - 200 - Chk

Event Information
Event ID: 100010626
Change Disease To:
Person: Mary TB Testcase **Select Person...**
Status: Open
Change Status To:
Deduplication Status: Pending
Save Cancel
Pending
Done
Merged

Important information regarding resetting deduplication status:

- Resetting the deduplication status on an event (or a person) to "pending" does not propagate to all potential matches, it only affects that particular event (or person). It might be necessary to perform this action on the other suspected duplicate persons/events as well.
- Resetting the deduplication status on an event (or a person) to "pending" does not unmerge records that have already been deduplicated.
- Access to reset the deduplication status on an event (or a person) requires the user to have deduplication permissions.

Once you change the status of the person or event (to be deduplicated) to pending, the workflow queue page should display that there are either persons or events to be deduplicated. Follow the procedure as explained above to deduplicate the persons or events.

The deduplication process can be iterative; when person deduplication is complete it may require further event deduplication. Follow the procedures outlined previously in this chapter to complete this process. If there are no event matches, the message "No matches found" will display on the Case Deduplication screen.

6.6 Unmerging Parties and Events

Authorized users can unmerge cases and parties directly from the THISIS user interface.

Note: *If both Party and Case were erroneously deduplicated, the user must first unmerge the cases followed by the party. This ability will be limited to a small number of users.*

6.6.1 Unmerging Cases

If two cases are merged accidentally, the cases can be unmerged from the Event History tab on the event Dashboard. The Event History tab, in the Event History section, will include an entry for when the cases were merged.

At the top of the Event Unmerge screen, you will see a Party Deduplication History with the following information:

Field	Description
Date	Date/time parties were merged; "Current" signifies the merged Party.
Party ID	Displaying the ID for the Party helps identify which Party to Unmerge and associate with which merged event in the Case Deduplication History section discussed below.
Details	Lists details for each party prior to merge for Party 2 and 3 and post-merge for Party 1.

There will be (at least) three Parties listed with Party 2 and Party 3 being the two parties which were merged to create Party 1 (Note: If the party had been deduplicated more than once, there may be more Parties listed). Below is a Case Deduplication History section which shows the following information:

Field	Description
Date	Date/time events were merged; "Current" signifies the merged Event
Event ID	Displays the ID for all Events including the original Record ID's and the resulting merged Record ID
Person	Lists the Person associated with the event
Status	Lists the system event status at time of merge
Record Type	Lists the Product or Record Type associated with the event
Event Date	Lists the Event Date associated with the event
Selected Party	Displays a drop-down of the possible parties to associate with the event during unmerge

In the Case Deduplication History section, the **Current** record will have a **Select Party** defaulted to Party #1. During the deduplication process, two records (and possibly 2 parties) were merged into one. To unmerge, the user must specify which Party should be associated with which Event. This is done by using the drop-downs in the **Select Party** field.

Unmerge - Carmine M Mundy

Party Deduplication History		
Date	Party ID	Details
Current	Party #1	Name: Carmine M Mundy Create Date: 02/25/2013 External ID: PBEKQBDVVC Birth Date: 03/08/1950 Gender: Female Address (Home): 234 Main St, Austin, TX 78751 Home Phone: (512) 555-5555
02/25/2013 02:37 PM	Party #2	Name: Carmine M Mundy Create Date: 02/25/2013 External ID: PBEKQBDVVC Birth Date: 03/08/1950 Address (Home): 234 Main St, Austin, TX 78751 Home Phone: (512) 555-5555
02/25/2013 02:37 PM	Party #3	Name: Carmine Mundy Create Date: 02/25/2013 External ID: PBEKQBDJCB Birth Date: 03/08/1950 Gender: Female Address (Home): 234 Main St, Austin, TX 78751

Case Deduplication History							
Date	Record ID	Person	Status	Record Type	Event Date	Info	Selected Party
Current	300000012	Carmine M Mundy	Open	Record	02/25/2013		Party #1
02/25/2013 04:14 PM	300000011	Carmine M Mundy	Open	Record	02/25/2013		Party #2
02/25/2013 04:14 PM	300000012	Carmine M Mundy	Open	Record	02/25/2013		Party #3

Process Dashboard Help

Party #1
Party #2
Party #3

Once the user has determined which party/parties goes with which event(s), click **Process** to complete the event unmerge.


Unmerge -

Unmerge operation processed successfully. Please proceed to the dashboard to resume work.

Process Dashboard Help

Note about Attachments: Any attachments can be restored to the cases by copying them from the merged event before that is deleted; unmerging only restores the case information without attachment data. Note that the user is also able to remap an existing case to a different party using the Edit Case Properties page.

6.6.2 Unmerging Parties

If two parties are merged accidentally, the user can unmerge them by accessing the Person Summary page either through the **Manage People and Facilities** button  the toolbar or, if an event is loaded, by clicking on the Party's name on the Dashboard. From the Person Summary screen, click on the **View History** link located in the Demographic Information header.

The screenshot displays a 'Person Summary' window for Carmine M Mundy. The 'Demographic Information' section shows details like Name, Gender (Female), Birth Date (03/08/1950), and Party ID (PBEKQBDVVC). A red arrow points from the '(View History)' link in this section to the 'Person History - Carmine M Mundy' window. This window contains three main sections: 'Demographic History' with a table of changes; 'Address History' with a table of addresses and phone numbers; and 'Deduplication History' with a table of merge events. The 'Deduplication History' table has three rows, each with a date and time, and a link to '(Unmerge)'. The first row is highlighted, showing details for a merge between two party records.

Date	Primary	Secondary
02/26/2013 06:24 PM	Name: Carmine M Mundy Create Date: 02/26/2013 External ID: PBEKQBDVVC Birth Date: 03/08/1950 Gender: Female Address (Home): 234 Main St, Austin, TX 78751 Home Phone: (512) 555-5555	Name: Carmine Mundy Create Date: 02/26/2013 External ID: PBEKQBDJCB Birth Date: 03/08/1950 Gender: Female Address (Home): 234 Main St, Austin, TX 78751
02/26/2013 06:24 PM	Name: Carmine M Mundy Create Date: 02/26/2013 External ID: PBEKQBDVVC Birth Date: 03/08/1950 Gender: Female Address (Home): 234 Main St, Austin, TX 78751 Home Phone: (512) 555-5555	Name: Carmine M Mundy Create Date: 02/26/2013 External ID: PBEKQHSRHA Birth Date: 03/08/1950 Address (Home): 234 Main St, Austin, TX 78751 Home Phone: (512) 555-5555
02/26/2013 02:37 PM	Name: Carmine M Mundy Create Date: 02/26/2013 External ID: PBEKQBDVVC Birth Date: 03/08/1950 Address (Home): 234 Main St, Austin, TX 78751 Home Phone: (512) 555-5555	Name: Carmine Mundy Create Date: 02/26/2013 External ID: PBEKQBDJCB Birth Date: 03/08/1950 Gender: Female Address (Home): 234 Main St, Austin, TX 78751

This will take you to the Person History screen. If the Party had been merged, the section Deduplication History will have an **Unmerge** link along with information for the Primary and Secondary parties which existed separately prior to the merge.

Select the link to get to the Unmerge screen. Similar to the Event Unmerge screen, the Party Unmerge screen has a Party Deduplication History section, but instead of an Event Deduplication History section, this screen shows Available Cases which displays all events associated with the Party being unmerged. If the party has been deduplicated multiple times, there may be multiple Party entries. The example shown above has seven possible Party entries because the Party has been deduplicated or merged multiple times over the history of the Party record. To unmerge, simply check the **Restore** checkbox next to the Party which needs to be unmerged. To associate that party with an event, specify the Party in the **Selected Party** field for the necessary event in the Available Cases section below.

Note: *It is possible to unmerge a party and not associate it to any event through this process.*


Chapter 7 Printing, Reporting, and Adding Attachments

Learning Objectives:

- Demonstrate the ability to view and print letters.
- Demonstrate the ability to open and view existing reports.
- Demonstrate the ability to add an attachment to an existing event.

7.1 Printing Documents

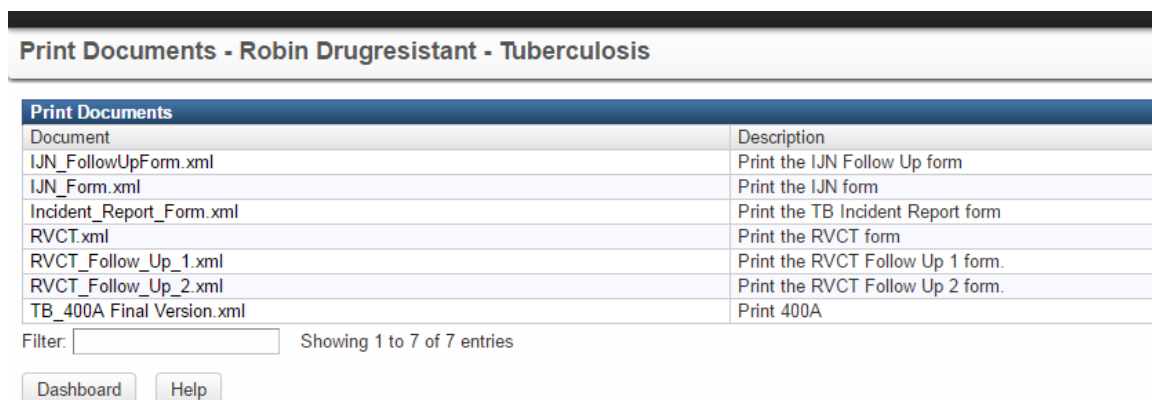
THISIS allows common letters, forms, and other documentation to be printed with pre-populated information about an event.

To print a document the user must first select an event to be referenced and then click the **Print Event**  button

1. Open the event for which a document needs to be printed.

2. Click the **Print Event**  button.

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.



The screenshot shows a web interface titled "Print Documents - Robin Drugresistant - Tuberculosis". Below the title is a table with two columns: "Document" and "Description". The table lists seven documents available for printing. Below the table is a filter input field, a "Showing 1 to 7 of 7 entries" indicator, and two buttons: "Dashboard" and "Help".

Document	Description
IJN_FollowUpForm.xml	Print the IJN Follow Up form
IJN_Form.xml	Print the IJN form
Incident_Report_Form.xml	Print the TB Incident Report form
RVCT.xml	Print the RVCT form
RVCT_Follow_Up_1.xml	Print the RVCT Follow Up 1 form.
RVCT_Follow_Up_2.xml	Print the RVCT Follow Up 2 form.
TB_400A Final Version.xml	Print 400A

Filter: Showing 1 to 7 of 7 entries

[Dashboard](#) [Help](#)

4. Locate the necessary document from the list displayed.

5. Click the name of the template, or click the link to the right (in the Action column) that says Open.

Document	Description	Person	Action
LIN_FollowUpForm.xml	Print the LIN Follow Up form	Robin Drugresistant	Open
LIN_Form.xml	Print the LIN form	Robin Drugresistant	Open
Incident_Report_Form.xml	Print the TB Incident Report form	Robin Drugresistant	Open
RVCT.xml	Print the RVCT form	Robin Drugresistant	Open
RVCT_Follow_Up_1.xml	Print the RVCT Follow Up 1 form	Robin Drugresistant	Open
RVCT_Follow_Up_2.xml	Print the RVCT Follow Up 2 form	Robin Drugresistant	Open
TB_800A_Final_Version.xml	Print 800A	Robin Drugresistant	Open

6. A screen similar to the one below will display prompting the user to Open or Save the document. (These steps may vary slightly depending on the user's version of the software.)

Note: If you are using Microsoft Word 2000, the document must first be saved locally and then opened from where it was saved.
It is preferable to use the most recent version of Internet Explorer (or your browser of choice) if the user experiences problems with opening Word documents.

7. Click **Open** to immediately open the document, or **Save** to save it before opening. If the user clicks **Save**, a **Save As** prompt displays; the user must designate a location in which to save the document.

8. A document opens in a new window.

NOTE: If there is pre-populated data that is missing or incorrect in the print document, the user **MUST** go back into **THISIS** to make the updates. Or the changes made to the document will not be retained in **THISIS**. After making changes in **THISIS**, click on the **print template** again from the **Print Documents** screen and the information will be updated.

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 **THISIS** Print Documents screen, click the **Dashboard** button to return to **THISIS** Dashboard.

7.1.1 Event Print

THISIS 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 MS Word.

Note: *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. 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.

7.1.2 Bulk Actions

There are some workflows which display events for which a document should be printed and sent to the person. If you come across a workflow such as this, there will be a button that allows the user to perform a "bulk action". If the user checks the box beside all the events that should be have letters printed, the letters will all print out in one batch rather than the user having to open each individually. Check boxes will only appear next to events in workflows eligible for bulk actions.


7.2 THISIS Reporting

Reports in THISIS can be used to view and analyze data. The purpose of this module is to explain how to run reports; *however, the images in this guide are only representative sample reports. Results generated may appear different.*

Some reports can be displayed in two ways: In a non-editable format within the browser window or exported to an external application such as Excel. Exporting the data allows for the data to be manipulated, formatted, or even graphed.

7.2.1 Viewing Reports

Note: *It is not necessary to have an event selected before running a report. To run a report, follow the instructions below:*

1. From THISIS Dashboard, click the Reports button .

2. Click the **Category** dropdown list and select the desired report category.
3. Click the **Select Report** dropdown list and select the desired report.

Maven Reporting

Maven Reporting

Category:

Select Report:

Run Report

- Audit Reports
- Case Management Reports
- Custom
- Custom Reports
- Financial Reports
- GIS Reports
- Metadata Management Reports
- NTIP
- Resource Management Reports
- System Management Reports
- TB Aggregate Reports
- Testing Gender

Maven Reporting

Maven Reporting

Category:

Select Report:

Run Report

- Audit Trail by Case
- Audit Trail by User, Type and/or Date
- Email Activity Report
- Financial Activity Audit
- Party Merge Details
- Processing Module Execution Log
- Security Access Log
- Security Configuration Report
- View Action Log
- View Case Attributes
- View Import Log

4. If there is a description entered to describe what the report is used for and how it works, the description field will display showing that text. The description field will be suppressed if empty. Depending on the report, different options will exist to format the report.

Maven Reporting

Maven Reporting

Category: Audit Reports

Select Report: Security Access Log

Description: Shows aggregate login statistics along with specific login attempt details for a given timeframe

Report Period*: 1 Week Start Date: MM/DD/YYYY End Date: MM/DD/YYYY

User: A B [atemp], Aasa Schmit [aschmit], Adusha Boddapati [aboddapati], Alan Heinzke [aheinzke]

UserGroup: All Users - View Only System Wide, Citizen Portal Users, Emergency Access Users, Group Test

Run Report Export Results Dashboard Help

5. Enter the appropriate parameters for the report, including dates for the Start Date and End Date of the data to be reported.

Note: If the user needs to see data for the current day, End Date should be set to the next date.

Maven Reporting

Maven Reporting

Category: NTIP

Select Report: NTIP Missing RVCT - Jurisdiction

Description: NTIP Missing RVCT Data - Jurisdiction

From Date*: 03/01/2016

To Date*: 03/11/2016

status*: strict

Jurisdiction*: strict

Output Type:

Run Report

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Today Close

Some reports will also give the option to select a preset date range for the report. This is a quick ad hoc way of choosing a period of time such as the prior week, prior month, year to date, etc. This functionality is enabled by default for new ad hoc reports.

Maven Reporting

Maven Reporting

Category: Ad Hoc Reports

Select Report: Ad Hoc Crosstab

Record Type:

- Amebiasis
- Anthrax
- Arbovirus (other)
- Avian Influenza

Report Period*: 1 Week

Start Date: 12/20/2012 End Date: 12/20/2012

Run Report Ex Dashboard Help

- To view the report in a browser window, click the **Run Report** button. This will display the results but the user will be unable to change the format of the data.

Aggregate Reports for Tuberculosis Program Evaluation

Follow-up and Treatment for Contact to Tuberculosis Cases

Cohort Year: 2014

Generated on: April 06, 2017

Closure Date Year: 8/15/2015

Reporting Area: Austin-Travis County Health

Total TB Cases Reported: 48

Part I. Cases and Contacts

Types of Cases for Investigation:

	Sputum Smear +	Sputum Smear-Culture +	Other
Cases for Investigation	21	6	
Cases with no Contacts	0	0	
Number of Contacts	506	369	205
Evaluated	450	316	180
TB Disease	2	0	0
Latent TB Infection	3	5	0
Started Treatment	3	2	0
Completed Treatment	2	0	0

Reasons Treatment Not

Death	0	0	0
Patient Moved (follow-up)	0	0	0
Active TB Developed	0	0	0
Adverse Effect of Medicine	0	0	0
Patient Chose to Stop	0	0	0
Patient is Lost to Follow-up	0	0	0
Provider Decision	0	0	0

7.2.2 Exporting Report Results

In addition to "Run Report," which opens the results as HTML in a new browser tab, the following types of reports offer the corresponding export (download) format options.

Report Type	Export Format Options
Ad Hoc, Aggregate	Excel
Audit	HTML, CSV, Excel
Case Management	CSV, Excel
Custom	Agreed upon with developer (typically CSV, XML, Excel, PDF)
Financial	Excel
GIS	Google Earth
Jasper	PDF, Excel, HTML, CSV, XML
Line List	HTML, CSV, Excel
Metadata Management	Excel
Resource Management	Excel

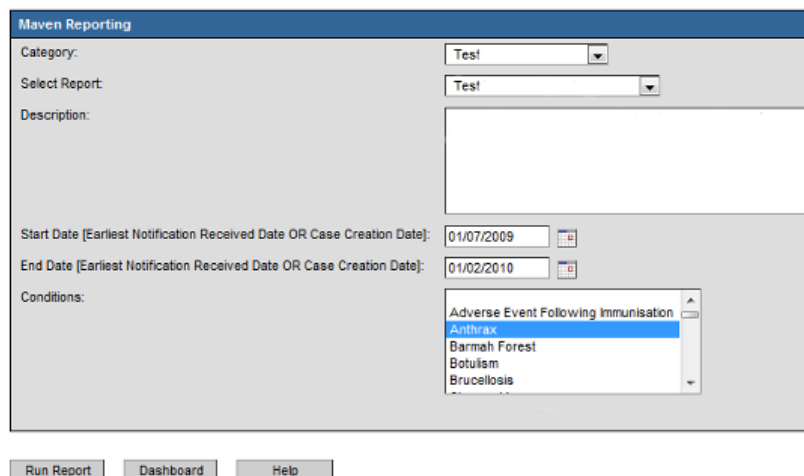
The following image is a report that has been exported and opened in Excel.

	A	B	C	D	E	F	G	H	I
1	CaseID	Effective Date	Create Date	First Name	Last Name	Full Name	Party Extern	Birth Date	Tax ID
2									
3	100000011	2/28/2017	2/28/2017	bob	jon		PFMEVGVRD		
4	100000013	2/28/2017	2/28/2017	Tester	Workflow		PFMEVGRXV	2/1/1997	
5	100000015	2/28/2017	2/28/2017	First	HIV		PFMEVGWVF	5/5/1988	050-50-51
6	100000016	2/28/2017	2/28/2017	Second	HIV		PFMEVGWVF	3/3/1989	
7	100000017	2/28/2017	2/28/2017	First	HIV		PFMEVGWVF	5/5/1988	050-50-51
8	100000023	3/1/2017	3/1/2017	Babie	Jones		PFMEVHBMC	1/1/1987	
9	100000040	3/3/2017	3/3/2017	Mug	Presentati		PFMEVGXDO	1/1/1990	
10	100000043	3/3/2017	3/3/2017	Josh	Kroesch		PFMEVHLPF	1/1/1988	
11	100000044	3/3/2017	3/3/2017	Britt	Ely		PFMEVHLPF	3/1/1980	
12	100000045	3/3/2017	3/3/2017	Chris	Barklow		PFMEVHLPW	1/1/1982	
13	100000060	3/6/2017	3/6/2017	Test	900		PFMEVIAESN		
14	100000092	3/9/2017	3/9/2017	New	TestHIV		PFMEVIOULN	3/3/2008	
15	100000094	3/13/2017	3/13/2017	Michelle	Brazel		PFMEVJHNEA	#####	
16	100000120	3/20/2017	3/20/2017	Dispo	Test		PFMEVKQKQ	#####	
17	100000122	3/20/2017	3/20/2017	Bob	Jenkins		PFMEVKQUN		
18	100000136	3/22/2017	3/22/2017	Some	Bloke		PFMEVKZZIP	3/1/1969	123-45-67
19	100000152	3/23/2017	3/23/2017	I	I		PFMEVLFYHF		
20	100000153	3/23/2017	3/23/2017	not	interview		PFMEVLGBYC		

7.2.3 Queued Reports

Sometimes reports take a while to run and have been configured to queue rather than run while the user waits. This enables the user to get back to other tasks while waiting.

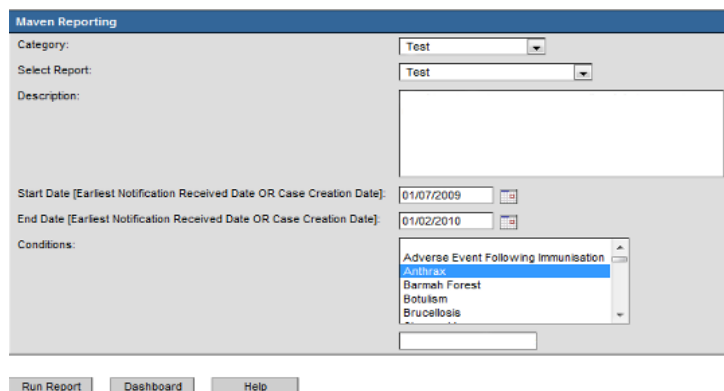
In the case of a report that queues, the user runs the report as they normally would by selecting desired parameters:



The screenshot shows the 'Maven Reporting' interface. It includes a 'Category' dropdown set to 'Test', a 'Select Report' dropdown also set to 'Test', and a large empty 'Description' text area. Below these are 'Start Date' and 'End Date' fields, both set to '01/07/2009' and '01/02/2010' respectively. A 'Conditions' dropdown menu is open, showing a list of conditions: 'Adverse Event Following Immunisation', 'Anthrax', 'Barmah Forest', 'Botulism', and 'Brucellosis'. At the bottom of the form are three buttons: 'Run Report', 'Dashboard', and 'Help'.

After selecting the **Run Report** button, the user will see a message indicating that the report has been queued and that the status is **Pending** (as shown below).

The **Refresh** link is provided for the user to click after having waited for a period of time (which varies depending on the report). The user is able to go back to business as usual within THISIS: when some time has passed, the user can go back to the reports screen and select the same report again and click the **Refresh** link. If the report is ready to be downloaded at that point, the user will see a link which says **Download** and s/he can click that to download the report results.

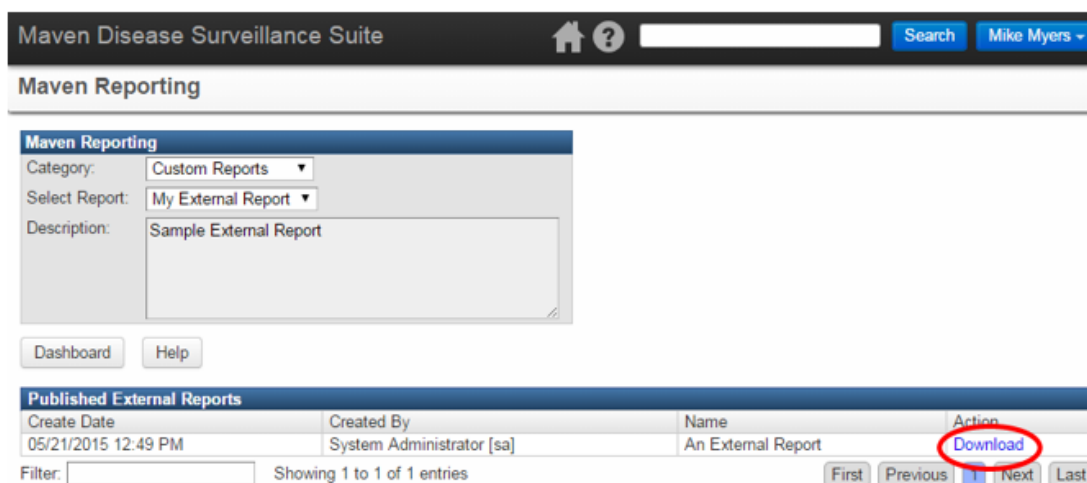


This screenshot is identical to the previous one, showing the 'Maven Reporting' configuration form. The 'Run Report' button has been clicked, and the report is now in a 'Pending' state. A 'Refresh' link is visible in the 'Action' column of the 'Report Schedule' table below the form.

Scheduled Time	Frequency	Created By	Status	Action
23/02/2010 08:38	Queued	sa [System Administrator]	Pending	Refresh

7.2.4 Viewing Published External Reports

If a report administrator or super administrator has published a report created outside THISIS (for example, a report created with SAS, Business Objects, Crystal), and the administrator has given you permission to view the report, you can gain access to the report by selecting the External Reports category on the View Reports page in the THISIS Main application. Clicking the **Download** link next to the report name saves the report to your Downloads folder (if the report is a static file that the administrator has uploaded to THISIS) or directs you to a URL (if the administrator has published the report outside THISIS, in which case the report opens in a new browser tab or window).



The screenshot shows the Maven Disease Surveillance Suite interface. At the top, there is a navigation bar with the text "Maven Disease Surveillance Suite", a home icon, a search bar, and a user profile "Mike Myers". Below this is the "Maven Reporting" section, which includes a "Maven Reporting" sub-section with a "Category" dropdown set to "Custom Reports", a "Select Report" dropdown set to "My External Report", and a "Description" text area containing "Sample External Report". There are "Dashboard" and "Help" buttons below this section. At the bottom, there is a table titled "Published External Reports" with columns for "Create Date", "Created By", "Name", and "Action". The table contains one entry: "05/21/2015 12:49 PM", "System Administrator [sa]", "An External Report", and "Download". The "Download" link is circled in red. Below the table, there is a "Filter:" input field, "Showing 1 to 1 of 1 entries", and navigation buttons for "First", "Previous", "Next", and "Last".

7.3 Attaching Files

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.

Note: THISIS can be configured so that attachments can be saved into individual folders and directories. This feature helps organize attachments, particularly when the number of attachments per case is large.

Note: The file size limit for case attachments in THISIS is 7.63 MB. If this limit is exceeded, the user will see an error message that reads, "Attachment is too large".

To attach a file to an event:

1. Open the event to which an attachment will be added. **Note:** *It is not possible to attach a file to an event without first having the event displayed in the Dashboard.*
2. From within the Event Summary section, on the line specifying Attachments, click the link that says **Add**. The following screen will appear.

Add Attachment - Joey Francis Tribbiani Jr. - 700 - Syphilis

Attachment Information

File: sexual network.jpg

Description:

Status: ▾

Type: ▾

Security Level: ▾

Notes:

Attachment Information Fields

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.
Type	The type of file being attached-- this can include photographs, hospital discharge reports, correspondence, etc.
Security Level	Similar to security levels on question packages, allows the user to associate the attachment to a security level. Ability to view is determined by user permissions.
Notes	Notes about the attachment.

3. Click the **Browse** button and locate the file to be added on your file system.
4. Click **Open** to add the file to the Add Attachment Screen.
5. Enter an appropriate description of the file (required).
6. Set the status and the type of file.

- Add a note if necessary.
- Click **Save**. This action opens the Manage Attachments screen.

Manage Attachments - Joey Francis Tribbiani Jr. - 700 - Syphilis

Attachments			
Create Date	Person	File	Description
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009797.zip	XML export of the Secondary deduplication source 100009797
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009798.zip	XML export of the Secondary deduplication source 100009798
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009816.zip	XML export MIF of the Primary deduplication source 100009816
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009816.zip	XML export MIF of the Primary deduplication source 100009816
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009816.zip	XML export MIF of the Primary deduplication source 100009816
03/08/2016	Joey Francis Tribbiani Jr.	CaseXML100009857.zip	XML export of the Secondary deduplication source 100009857
03/10/2016	Joey Francis Tribbiani Jr.	sexual network.jpg	possible sexual network

Filter: Showing 1 to 7 of 7 entries

[Add Attachment](#) [Dashboard](#) [Help](#)

9. From the Manage Attachments screen, click **Add Attachment** to add another file to the event. (Repeat steps 3-7.)

10. Click **View** in the Actions column to view the attachment (if desired). The Actions column also gives users the ability to edit or delete the path to the attachment.

XML export of the Secondary deduplication source 100009857	Requires Review	Case Export	Mary VanWisse [mvanwisse]	Very High	View Delete
possible sexual network	Requires Review	Photograph	Mary VanWisse [mvanwisse]	None	View Edit Delete

Navigation: [First](#) [Previous](#) [1](#) [Next](#) [Last](#)

11. Select **Back** to return to THISIS Dashboard. Observe that in the Summary Information section, Attachments now lists the number of attachments. Select **Add** to add another attachment or **View** to view the existing attachment(s).

The **Delete** button will allow the user to delete the attachment (not affecting any data in the event itself) and if desired, reattach it. This is useful if a mistake was made in the process of adding the attachment and the wrong attachment was added.

Event Summary

Basic Information	
Event ID:	100009816
Disease:	700 - Syphilis
Person:	Joey Francis Tribbiani Jr. Birth Date: 07/07/1968
Investigation Status:	Open
Linked Events/Contacts:	2 linked event(s)/contact(s) (View)
Attachments:	7 attachment(s) (Add) (View)
Notifications:	300 - Gonorrhoea 100009817, dated 07/07/2015 (View) 900 - HIV 100009778, dated 07/02/2015 (View) 900 - HIV 100009956, dated 08/07/2015 (View) Party Information

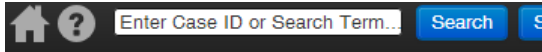
[Edit Event Properties](#) [Copy Event](#)

File now contains 7

Appendix A – Advanced Searches

A1 Free-Text Advanced Search

THISIS's advanced free-text search allows the user to search selected THISIS event fields in the same way a user might use a search engine to find things on the Web.



A1.1 Overview

The advanced search feature of THISIS allows you to perform freeform queries on a number of fields within the system. By default, THISIS will look through all searchable fields for the text provided. A query language is available, which allows you to build complex queries to filter the results down to exactly the cases that you are interested in.

Performing a Search

To perform a basic search, just type the terms into the search box and click 'Search'. For example:

John Smith Boston

... will search for the words "John", "Smith", and "Boston" within searchable fields of accessible cases.

A1.2 Operators

A number of operators exist to help you build complex queries. These include the OR, AND, and NOT operators. By default, a case matches any of the words in the search term. So typing in the query:

John Smith Boston

... is the same as typing in the query

John OR Smith OR Boston

If all of the words must match, you can use the AND operator. To search only for cases including the words "John" and "Boston", type the query as:

John AND Boston

If you know that a certain word should not exist, you can use the NOT operator. If you want cases with the word "John" but not the word "Georgia", you would type

John NOT Georgia

A1.3 Fields

THISIS is configured to search for a wide number of fields. System Administrators also have the ability to configure additional questions and investigations as searchable. The fields configured by default are:

- EventID
- Disease
- FirstName
- LastName
- Alias
- MiddleName
- MaidenName
- Suffix
- TaxID
- BirthDate
- Gender
- Street1
- Street2
- City
- OfficialPlace

- State
- PostalCode
- ZipCode
- Zip
- County
- HomePhone
- WorkPhone
- MobilePhone
- Pager
- Fax
- Email
- County
- Note - only 'Public' notes are searchable
- Answer (searches through all textual answer values)
- DateAnswer (searches through all date answer values)
- Investigation (searches through all textual investigation values)
- InvestigationDate (searches through all date investigation values)

In addition to the fields above, System Administrators can set additional tokens to refer to particular question or investigation fields. To search for a specific field, enter the field name followed by a colon ':'. *Be careful, as the field names are case-sensitive, so capital and lowercase letters are important.* For example, to query for all people named John Smith in Boston, you can enter:

FirstName=John AND LastName=Smith AND City:Boston

Also note that multiple word phrases must be surrounded by quotes. To search for all people named John Smith in New York, you can enter:

FirstName=John AND LastName=Smith AND City:"New York"

A1.4 Wildcard Searches

THISIS supports single and multiple character wildcard searches within single terms (not within phrase queries).

To perform a single character wildcard search use the "?" symbol.

To perform a multiple character wildcard search use the "*" symbol.

The single character wildcard search looks for terms that match that with the single character replaced. For example, to search for "text" or "test" you can use the search:

```
te?t
```

Multiple character wildcard searches look for 0 or more characters.

For example, to search for test, tests or tester, you can use the search:

```
test*
```

You can also use the wildcard searches in the middle of a term.

```
te*t
```

Note: You cannot use a * or ? symbol as the first character of a search.

A1.5 Fuzzy Searches

THISIS supports fuzzy searches based on the Levenshtein Distance, or Edit Distance algorithm. To do a fuzzy search, use the tilde, "~", symbol at the end of a Single word Term.

For example, to search for a term similar in spelling to "roam" use the fuzzy search:

```
roam~
```

This search will find terms like foam and roams.

As an additional (optional) parameter, you can specify the required similarity. The value is between 0 and 1, with a value closer to 1 only terms with a higher similarity will be matched.

For example:

```
roam~0.8
```

The default that is used if the parameter is not given is 0.5.

Proximity Searches

THISIS supports finding words that are within a specific distance away. To do a proximity search, use the tilde, "~", symbol at the end of a Phrase. For example, to search for a "concrete" and "building" within 10 words of each other in a document use the search:

```
"concrete building"~10
```

Range Searches

Range Queries allow one to match documents whose field(s) values are between the lower and upper bound specified by the Range Query. Range Queries can be inclusive or exclusive of the upper and lower bounds. Sorting is done lexicographically.

```
mod_date:[MichelleTemp:01/01/2002 TO 01/01/2003]
```

This will find documents whose mod_date fields have values between 01/01/2002 and 01/01/2003, inclusive. Range Queries are not reserved for date fields. You could also use range queries with non-date fields:

```
title:{Aida TO Carmen}
```

This will find all documents whose titles are between Aida and Carmen, but not including Aida and Carmen.

Note: *Inclusive range queries are denoted by square brackets. Exclusive range queries are denoted by curly brackets.*

Grouping

THISIS supports using parentheses to group clauses to form sub queries. This can be very useful if you want to control the boolean logic for a query.

To search for either "digital" or "circuit" and "website" use the query:

```
(digital OR circuit) AND website
```

This eliminates any confusion and makes sure that website must exist and either term digital or circuit may exist.

Field Grouping

THISIS supports using parentheses to group multiple clauses to a single field.

To search for a title that contains both the word "return" and the phrase "pink panther" use the query:

```
title:( +return +"pink panther")
```

THISIS Special Characters

THISIS supports escaping special characters that are part of the query syntax. The current list of special characters are:

```
+ - && || ! ( ) { } [MichelleTemp: ] ^ " ~ * ? : \
```

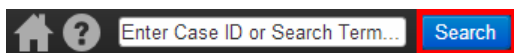
To escape these character use the \ before the character. For example to search for (1+1):2 use the query:

```
\ (1\ +1\ )\ :2
```

A2 Advanced Search Query Builder

THISIS allows the user to dynamically build an advanced search query for common search structures (AND/OR/NOT for discrete values and ranges for dates). This screen allows you to build complex queries to filter search results to the cases you are interested in.

Select the **Search** button to access the advanced search query builder.



A2.1 Query Builder

The query builder allows you to add up to 8 filter criteria for searching.

Advanced Search

Search Criteria						
Field	Operator	Value	From Range	To Range		
Search Any Field	Equals					

Add another

Full Query

Zip
County
HomePhone
WorkPhone
MobilePhone
Pager
Fax
Email
Country

[AdultLeadModel]
(Adult Lead)
NIOSH ID
Collection date
Age (in years)
Medicaid Number
Chip Number

[Childhood Lead - Child Model]
(Demographics)
Medicaid Number:
CHIP Number:

Model fields

Edit Query

Search

Searchable criteria includes:

- Event ID
- Disease
- CaseStatus
- CaseNotes
- CreateDate
- EffectiveDate
- EffectiveFromDate
- EffectiveToDate
- FirstName
- LastName
- FullName
- Alias
- MiddleName
- MaidenName

- Suffix
- TaxID
- BirthDate
- Gender
- Street1
- Street2
- City
- OfficialPlace
- State
- Zip
- County
- HomePhone
- WorkPhone
- MobilePhone
- Pager
- Fax
- Email
- Country
- Model fields (configured using the model manager)

Criteria can be combined using AND, OR, and NOT operations. Date fields include less than, greater than, and range operations. Features available in the free-text advanced search, such as wildcard and fuzzy searches, may be utilized in the query builder.

The generated query will be displayed after the search criteria is selected. You have the option to modify the query before performing the search by selecting **Edit Query**.

Search Criteria						
	Field	Operator	Value	From Range	To Range	
	NIOSH ID	Equals	12*			Remove
AND	Collection date	Range		12/01/2013	04/08/2014	Remove

Add another field

Full Query

```
"NIOSH ID"=12* AND "Collection date"=[12/01/2013 TO 04/08/2014]
```

Edit Query

Search Reset Dashboard

A2.2 Search Results

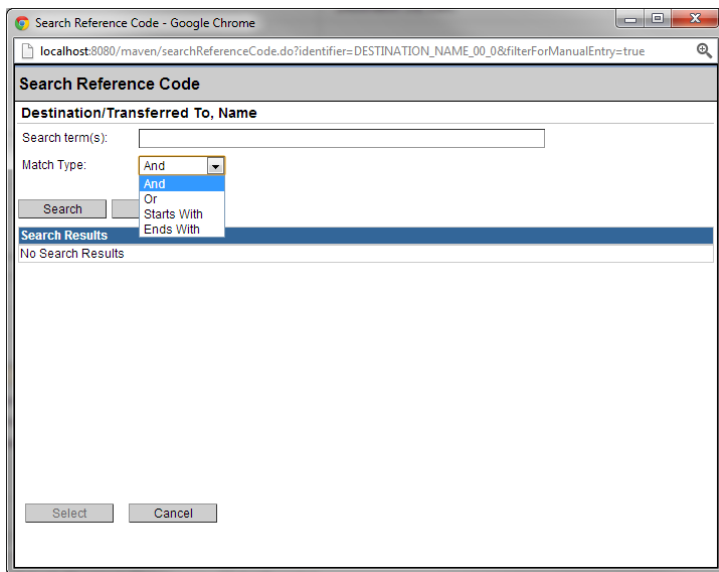
Cases matching the search criteria are shown in the Search Results table. Matching values from model fields appear in the Answers column.

Case Matches - Results 1...5 of 5

Search Results									
Event ID	Event Type	Name	Address	Birth Date	Status	Create Date	External ID	Answers	
100007418	Blood Lead - Adult	Harry Henderson	678 Main Street Austin, TX 77777	06/21/1988	Open	12/04/2013	100007418	Collection date: 12/04/2013 NIOSH ID: 129988	
100007421	Blood Lead - Adult	Tracy DeMers	8467 Lamar Blvd Austin, TX 78787	04/07/1971	Open	12/04/2013	100007421	Collection date: 12/04/2013 NIOSH ID: 123456	
100007419	Blood Lead - Adult	Sally Mae	212 Center Road San Marcos, TX 78787	01/17/1963	Open	12/04/2013	100007419	Collection date: 12/04/2013 NIOSH ID: 125874	
100007417	Blood Lead - Adult	Minnie Mouse	987 Disney Lane Pflugerville, TX 78753	07/04/1966	Open	12/04/2013	100007417	Collection date: 12/01/2013 NIOSH ID: 126584	
100007626	Blood Lead - Adult	Hunky Dorus	123 Yates Lane Austin, TX 78645	05/16/1994	Open	02/27/2014	100007626	Collection date: 02/04/2014 NIOSH ID: 127775	

A3 Advanced Searches in the Reference Code Search Screen

This screen allows the user to specify the search criteria and to search for existing reference codes in the system.



Selecting the **Search** button with a blank search form will return the maximum number of results for the reference code group you are searching.

If you know the entire name of the reference code you want to search for, you can enter it within double quotes, for example: "Alamance" will match Alamance County, but would not match Alamancer county.

If your search is within double quotes, the results will return only entire word matches, for example: "Alamance" will return Alamance County, and so will "Alamance County"; however, searching for "Alama" will not result in a match of Alamance County. Likewise, "Alamance Coun" will not result in a match for Alamance County either. *Searches in double quotes will match entire words only.*

Performing a search with an unquoted string will match the characters searched within any name, for example: searching al will return Alamance County as well as Halifax County.

A3.1 Searching Using Regular Expressions

More specifically, all unquoted strings are treated as regular expressions. A regular expression is essentially a compact way to describe character patterns.

The reference code search field supports all regular expressions valid in Java EE 5. Some of the most commonly used expressions are:

- * - Matches zero or more occurrences of the symbols preceding it. abc* will match ab, abc, abcc, abccc and so on.
- + - Will match one or more occurrences of the symbols preceding it. abc+ will match abc, abcc, abcd, abccc, and so on, but not ab.
- ? - Matches zero or one occurrences of the symbols preceding it. abc? will match ab or abc.
- . - Matches any character. a. will match ab, ac, ao, al, ax, and so on.
- | - Describes an or condition ab | abc will match ab or abc only.
- () - Parentheses are used to group expressions together (abc*) will have the same effect as shown above. - These are used mainly for ordering and grouping, similar to algebra.
- [] - Square brackets denote character classes. The characters in between the brackets will match only one character. [MichelleTemp:absdf] will match a, b, s, d, or f. For convenience you can use the construct [MichelleTemp:a-z] for any lowercase letter, [MichelleTemp:A-Z] for any uppercase letter, and [MichelleTemp:0-9] for a digit.
- To match two characters you would use [MichelleTemp:a-z][MichelleTemp:a-z]

These constructs can be used together to make more meaningful expressions:

(a|b)+[MichelleTemp:a-z]+[MichelleTemp:0-9] matches a word beginning with a or b, of arbitrary length, but at least two characters long, and ending with a number.

These are just some of the possible expressions supported by regular expressions.

For a more in depth description of regular expressions see Wikipedia

(http://en.wikipedia.org/wiki/Regular_expression).

Appendix B Deduplication Scoring

B1 Person Deduplication Scoring

THISIS uses a combination of name, date of birth, and address to compute a similarity score. The similarity score is based on the following:

- Name match - returns a score N1 between 0 and 100
- Address match - returns a score N2 between 0 and 100
- Date of birth match - returns a score N3 between 0 and 100
- Social Security Number (SSN) match – Full match if SSNs match

A similarity score SS is calculated as follows:

$$SS = X * N1 + Y * N2 + Z * N3 \text{ where } X + Y + Z = 1$$

In cases where the deduplication candidate has SSN information and a single existing record with the same SSN is found, the persons are defined to be a match. If multiple existing people with the same SSN are found in the database, these people are defined to be indeterminate.

For the purposes of matching, two thresholds are defined, T1 which is a match threshold and T2 which is an indeterminate threshold. Both T1 and T2 are between 0 and 100 and $T1 \geq T2$.

- If $SS \geq T1$, the persons are defined to be a full match.
- If $SS \geq T2$, the persons are defined to be an indeterminate, or partial match.
- If $SS < T2$ the persons are defined to be non-matches.

All thresholds and similarity score adjustments based on heuristic matching are configurable.

B1.1 Name Match Process

All names within THISIS are "normalized" according to a standard normalization specification. Two names will be considered a match if their normalized names match (normalized first and last names). If names match, a score of 100 is returned for the name match criteria.

A Soundex name is defined as an encoded version of a name to describe its "sound." For instance, the letters "t" and "d" encode to the same number, because the pronunciation of the two letters is similar. Soundex allows THISIS to match two persons if their names are entered with common spelling errors, such as entering "Kristin" instead of "Kristan. If the "Soundex" of normalized names match, then a score of 100 - Ps is returned.

In addition to Soundex normalized name matching, multi-part last names separated by white spaces or hyphens are treated separately to adjust for Hispanic names. For example, given a two-part last name P1-P2, this last name will be considered to match both P1-P2 and P2-P1.

B1.2 Date of Birth Match Process

Two dates of birth will be considered a match if their months, days, and years match. They will be considered a partial match under the following criteria:

- If DOB does not match because the day and the months are transposed, then DOB matches partially and the penalty would be P1, i.e., DOB match will return a number that's 100-P1.
- If DOB does not match because the year is 1 off or 100 off, DOB matches partially and the penalty would be P2, i.e., DOB match will return a number that's 100 - P2.

Combination of the criteria resulting in P1 and P2 is not allowed. A complete match results in a score of 100. A partial match either results in a score of 100-P1 or 100-P2.

B1.3 Address Match Process

Two addresses will be considered a match if the numerical portions of their street address, apartment number, and zip codes match. Two addresses will be considered a partial match under the following criteria:

- If street number and apartment number matches but zip code is a permutation of the compared zip code, the addresses partially match. However, the address matching scheme will return a score of 100 - P3 (as opposed to 100 for a complete match).
- If street number and zip codes match but apartment number does not match (or is missing), the addresses are treated as a partial match. However, the address matching scheme will return a score of 100 - P4 (as opposed to 100 for a complete match).
- If two street addresses are not entered exactly the same way (e.g., they contain differing amounts of data), the deduplication algorithm will result in a partial match. For example, if one says 123 Main St. and the other says 123 Main St. Apt. 5 this results in a partial match.

Note: When an address validation service is used prior to deduplication, the Zip Code permutation can be skipped.

B2 Deduplication of Events

Every disease report has a time-frame (TF) and grace period (GP). The time-frame and grace period can be defined to be different for each disease and all disease reports for the same disease will share these settings.

Assume a person P1 has a disease report DR1 for disease D1. Also assume that the timeframe and grace period defined for D1 is TF1 and GP1. Any information for person P1 that comes in for disease D1 within the specified timeframe TF1 will be associated with the existing disease report DR1. If the status of DR1 is marked closed when a new piece of information comes in, the information will be routed to a workflow for a human to decide whether the existing case should be opened and updated, or whether the new information can be ignored. If the information comes in within the grace period (TF1+GP1), it is routed to the workflow for determination on whether this should be a new disease report. Otherwise a new disease report is created (information comes in after TF1+GP1).

B2.1 Automated Data Imports (ELR import)

During an automated disease report or laboratory result (ELR) import, the following deduplication process will occur:

- Parties will be matched according to party matching criteria.
- If the deduplication module returns 0 potential person matches, a new party will be created (P1).
- If the deduplication module returns one potential person match (100% match), the existing party will be chosen (P2).
- If the deduplication module returns N potential person matches ($n > 1$), the ELR will be routed to a workflow for manual resolution

If manual resolution is not required (a new person is created or an existing person is selected), the disease report matching criteria will be executed. It will either create a new disease event or select an existing disease event to associate the new information in one of the following ways:

- If the deduplication module returns 0 disease report matches, a new disease report will be created.
- If the deduplication module returns 1 disease report match, the information will be automatically appended to the existing disease report.
- If the deduplication module returns indeterminate disease report matches, the ELR will again be routed to workflow ELR.

B2.2 Manual Entry Process (New Disease Reports)

The new disease report process will take in the following information:

- First name
- Last name
- DOB
- Address
- Disease

THISIS will first search the database for an existing party that matches the criteria, according to the person matching criteria and show a list of potentially matching persons. The user can then select an existing person or decide to create a new one. The user will also be able to see existing disease reports for potentially matching persons (assuming the user is allowed to see such disease reports).

Deduplication will only be available to authorized users. If the user entering a duplicate case or person does not have required permissions and potential duplicates exist in the database, the new case/person will be flagged and routed to a deduplication workflow for a user that is authorized to do the deduplication if deduplication is required.