Occupational Health Safety Network V2.0

USER MANUAL

National Institute for Occupational Safety and Health (NIOSH)

December 2016

OHSN USER MANUAL

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OHSN Software Usage Disclaimer:

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1 GENERAL INFORMATION

1.1 Introduction

The Occupational Health Safety Network (OHSN) is a voluntary and secure web-based occupational safety and health surveillance system developed by the National Institute for Occupational Safety and Health (NIOSH), part of the Centers for Disease Control and Prevention (CDC).

OHSN focuses on occupational safety and health issues among healthcare personnel (HCP). OHSN currently allows healthcare facilities to track five injury or exposure events among healthcare personnel:
1) Slips, trips, and falls;
2) Musculoskeletal disorders resulting from patient movement or handling events;
3) Workplace violence;
4) Blood and body fluid exposure; and
5) Sharps injuries

Purpose of OHSN

- Analyze and report workplace-specific and aggregated data to (1) illustrate the magnitude of injury and illness events among healthcare workers and (2) to monitor trends in these events
- Serve as a surveillance resource for U.S. workplaces

This User Manual is meant to provide users with a step-by-step process for using the OHSN System. Additional information and training guides can be found on the OHSN information web page at: https://www.cdc.gov/niosh/topics/ohsn/

OHSN can be used by single Healthcare Facilities, or a Healthcare System. A Healthcare System is made up of two or more healthcare facilities. Use of OHSN varies slightly for single and system users. This manual provides instruction for both.

1.2 Points of Contact

If you have questions, please email us at NIOSHOHSN@cdc.gov

2 ENROLLMENT

2.1 Enrollment Requirements

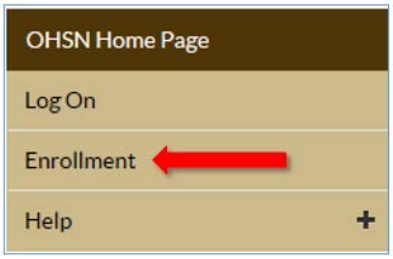
Only healthcare facilities or systems with an American Hospital Association number are eligible to join OHSN.

To maintain enrollment, the facility/system must

- Submit at least 6 months of data in each 12-month period.
- Agree to the OHSN Rules of Behavior: http://www.cdc.gov/niosh/topics/ohsn/pdfs/ohsnrulesofbehavior.pdf

2.2 Submitting Enrollment Request

To enroll in OHSN, click on the Enrollment option on the OHSN Home Page menu.
https://wwwn.cdc.gov/niosh-ohsn



You may also access the enrollment page directly through the OHSN information web page: http://www.cdc.gov/niosh/topics/ohsn/enrollment.html

The **Enrollment** web page will open, providing instructions for enrollment.

Click on the **Enrollment Web Form** link and the Enrollment Request form will be displayed to begin the enrollment process. All fields are required.

Providing National and World Leadership to Prevent Workplace Illnesses and Injuries NIOSH

NIOSH > Occupational Health Safety Network (OHSN) > Enrollment

OCCUPATIONAL HEALTH SAFETY NETWORK (OHSN)

Enrollment Request

Please send OHSN Enrollment Documents for my facility / system to join.

We plan to join as a:

○Single healthcare facility
○Healthcare system with multiple facilities

Healthcare Facility Name (if applicable):

City:

State:

Healthcare System Name (if applicable):

City:

State:

Point of Contact Name:

Point of Contact Email:

Point of Contact Phone Number:

Point of Contact Mailing Address
for receiving Federal Express documents.
Please no PO Box – physical address only:

How are you currently tracking occupational injury events?

○Commercial Software (please specify)
○Internally-developed Software
○Excel
○Hard copy
○Other (please specify)

Notes:

Please contact nioshohsn@cdc.gov or 513-841-4337 with any questions.

Contact information is collected by NIOSH for OHSN user support and account setup. NIOSH will not sell, exchange or otherwise make available information regarding OHSN accounts to anyone for any reason.

Submit

After submitting an enrollment request a message will appear on the screen confirming that NIOSH received the request. Additionally, an email will be sent to the email address provided in the enrollment form stating that NIOSH will contact the requestor within one week to begin the enrollment process.

NIOSH will send the requestor a Data Use Agreement to be signed by both parties via email and will help the requestor determine data conversion support needs, obtain information for user accounts, and discuss options for OHSN training.

NIOSH will set up the initial user account(s) based on information obtained during the enrollment process. Once NIOSH has set up the System/Facility account(s), the account users will receive two emails providing information about accessing the OHSN system.

- The first email sent will confirm that the OHSN account has been set up and will provide the user's log on name.
- The second email sent will provide a temporary password for the user's OHSN account. The user will be required to change this password at first logon. The temporary password is sent separately for security reasons.

2.3 OHSN Training

During the enrollment process, NIOSH will work with the facility to identify training needs.

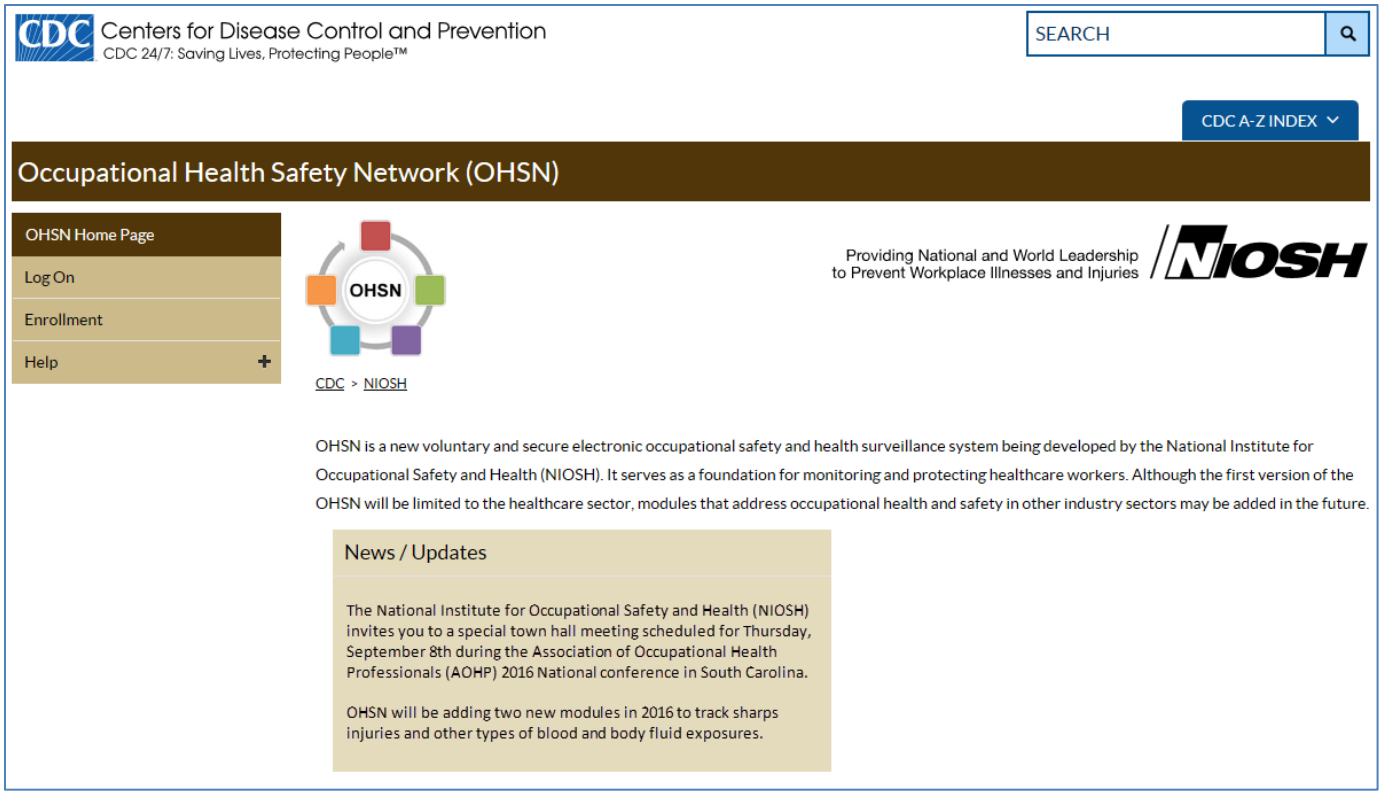
NIOSH provides OHSN training information on the OHSN information web page http://www.cdc.gov/niosh/topics/OHSN.

3 ACCESSING OHSN

The OHSN system can be directly accessed at: **http://wwwn.cdc.gov/NIOSH-OHSN/**

It can also be accessed through the OHSN information web page: http://www.cdc.gov/niosh/topics/OHSN.

As you can see from the screen shot below, when you visit the OHSN Home Page, the screen welcomes you, provides system menu options, and displays messages to the user as appropriate, such as recent updates, planned down times, etc.



3.1 User Access Levels

OHSN provides two user access levels: (1) Administrators (facility or system), and (2) Report Users. Your access level determines which OHSN features are available to you.

Facility Administrators have access rights to all data and user information within their healthcare *facility.*

System Administrators have access rights to all the data and user information of all facilities within their system.

If you are a single Facility:

1. Facility Administrators
    - Upload and update facility information (denominators and injury/illness data)
    - Add Administrators (up to five) and Report Users (unlimited) for the facility

- Modify roles or delete users within the facility
- Create and view reports for the facility

2. Facility Report Users
    - Can create and view reports for the facility
    - Cannot upload or edit information about the facility
    - Cannot add, modify or delete users

If you are part of a Healthcare System:

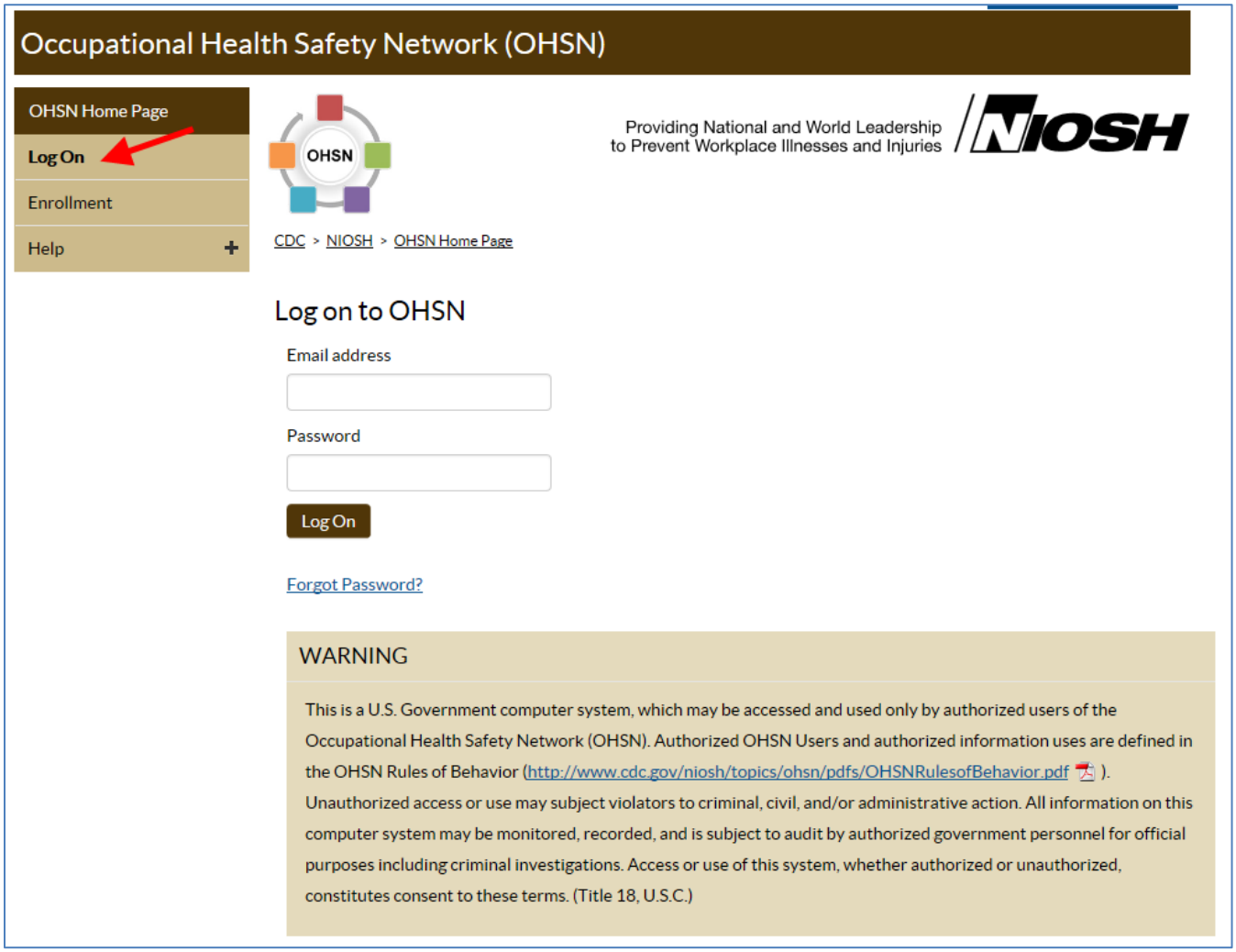
1. System Administrators:
    - Update information (denominators and injury/illness data) for facilities within the system
    - Add Administrators (up to five) and Report Users (unlimited) within the system
    - Allow Report Users to see reports for one or more facilities within the system
    - Create and view reports for the system

2. System Report Users
    - Create and view reports for one or more facilities within the system (based on permissions given by System Administrators)
    - Cannot upload or edit information
    - Cannot add, modify or delete users

3.2 Log On

From the **OHSN Home Page**, click the **Log On** menu item.

Enter your log on name (email address) and password, and then click the **Log On** button.



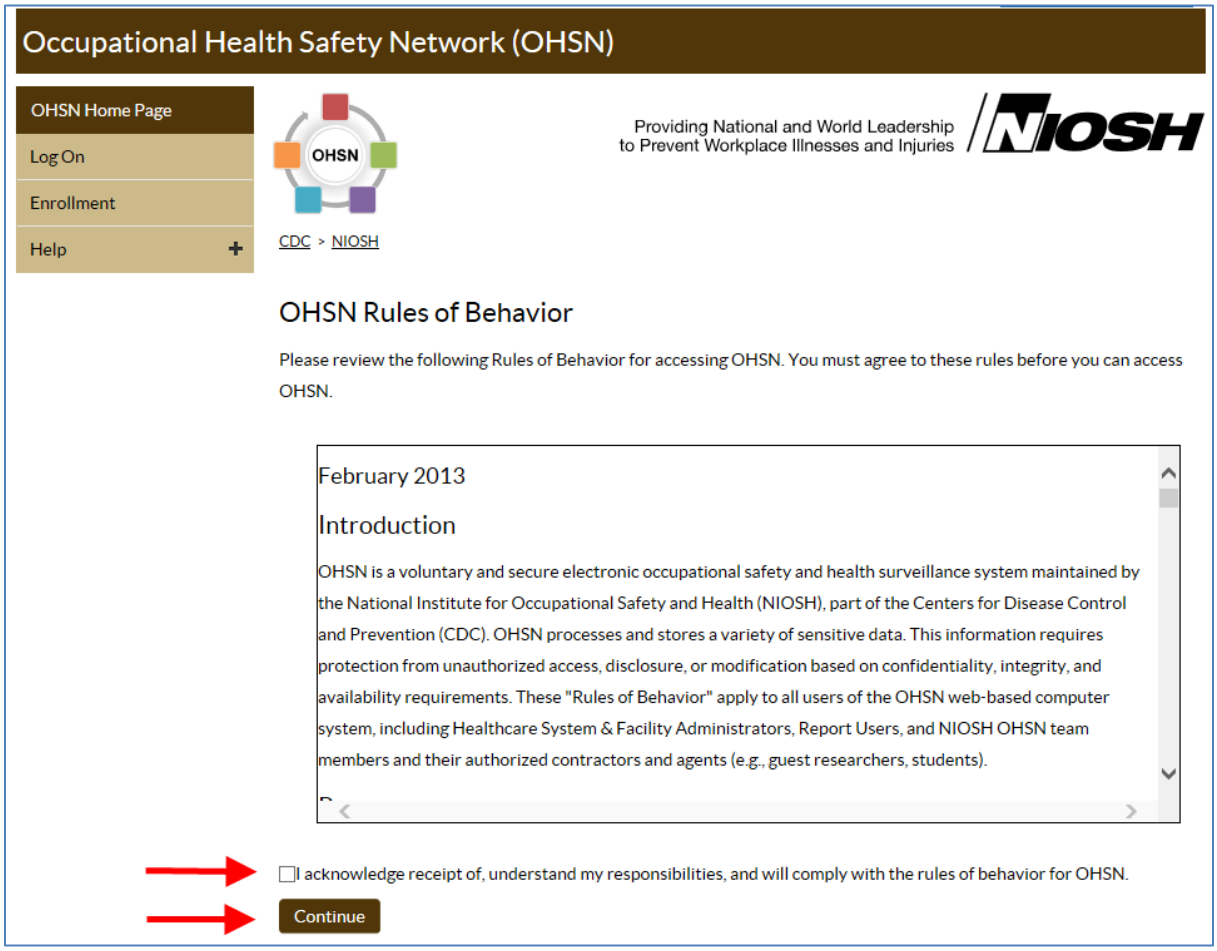
3.3 First Time Log On Requirements

The first time you log on to OHSN you will be required to do the following:

1. Read and acknowledge the OHSN Rules of Behavior
2. Change your password (See Section 6.2 for instructions)
3. Select the OHSN modules you plan to participate in and confirm your facility denominators (See Section 6.3.4 for instructions)

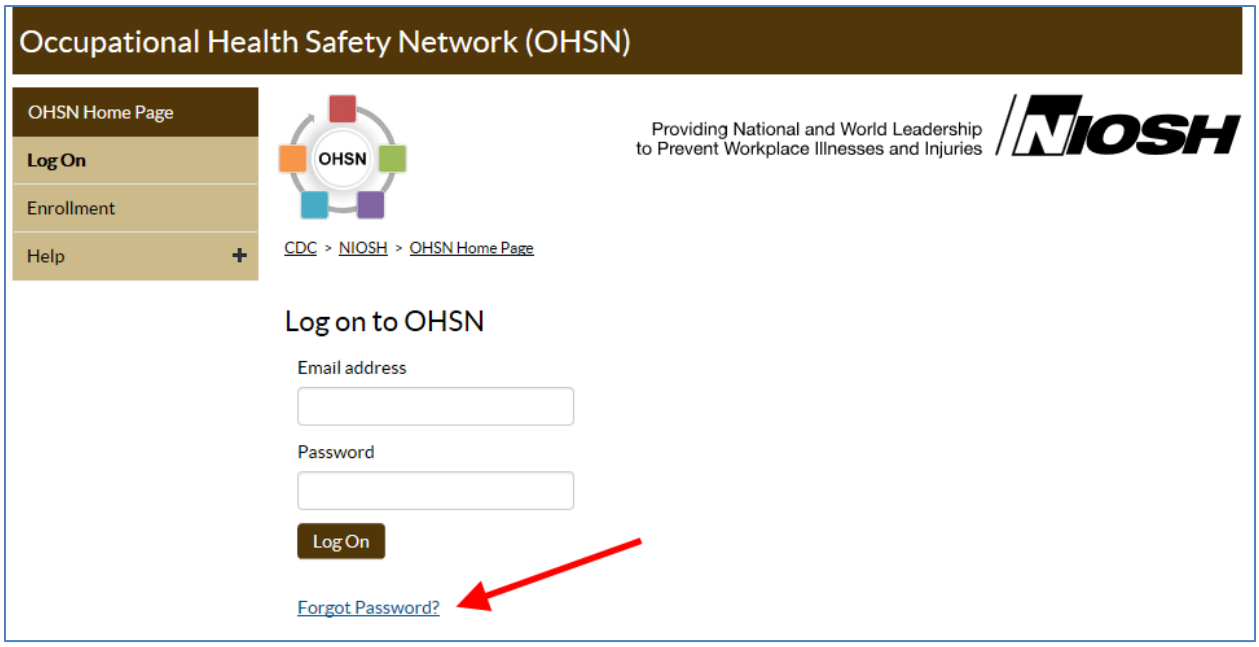
You must read and acknowledge agreement to comply to the OHSN Rules of Behavior in order to continue with the log on.

Click the **Continue** button at the bottom of the screen to continue the log on process**.**



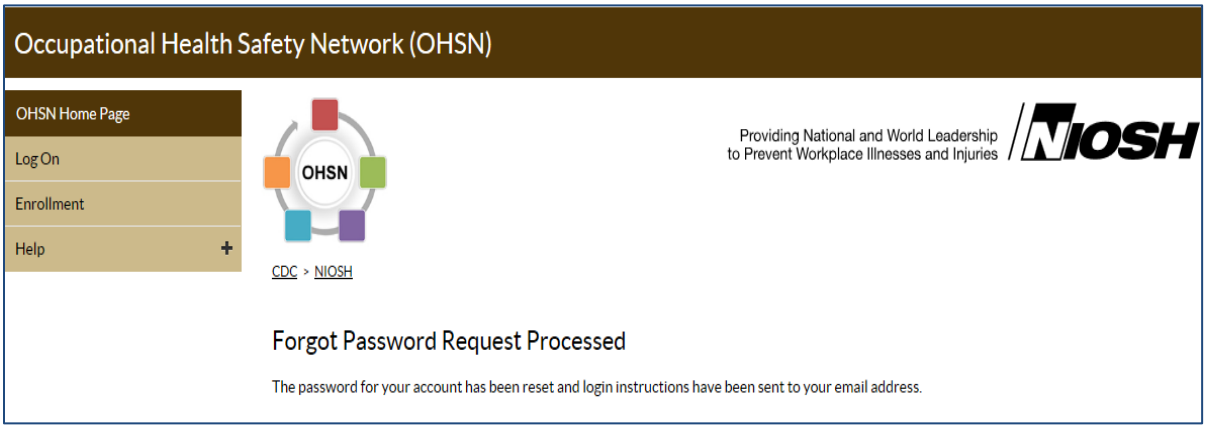
3.4 Forgot Password

If you forget your password, click the **Forgot Password** link on the Log On screen to request a new password from NIOSH.



On the Request New Password screen, enter the email used for your OHSN account. Then click the **Request Password** button.

Confirmation that the request was received and processed will be displayed on the screen as shown below.



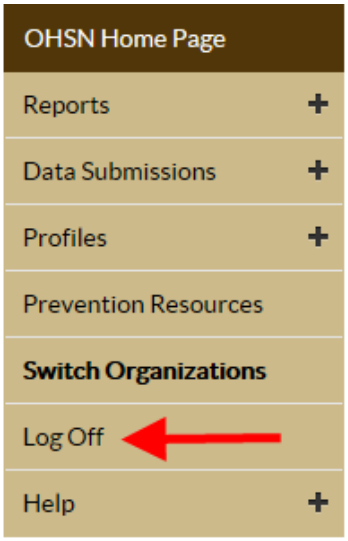
Once the **Request Password** button is clicked from the Request New Password screen, the system will generate a new temporary password and send it to the email address provided.

When you log on with the new temporary password you will be required to change it again. Note: The new password you create cannot be one that you have used within the past 20 times.

3.5 Logging Off

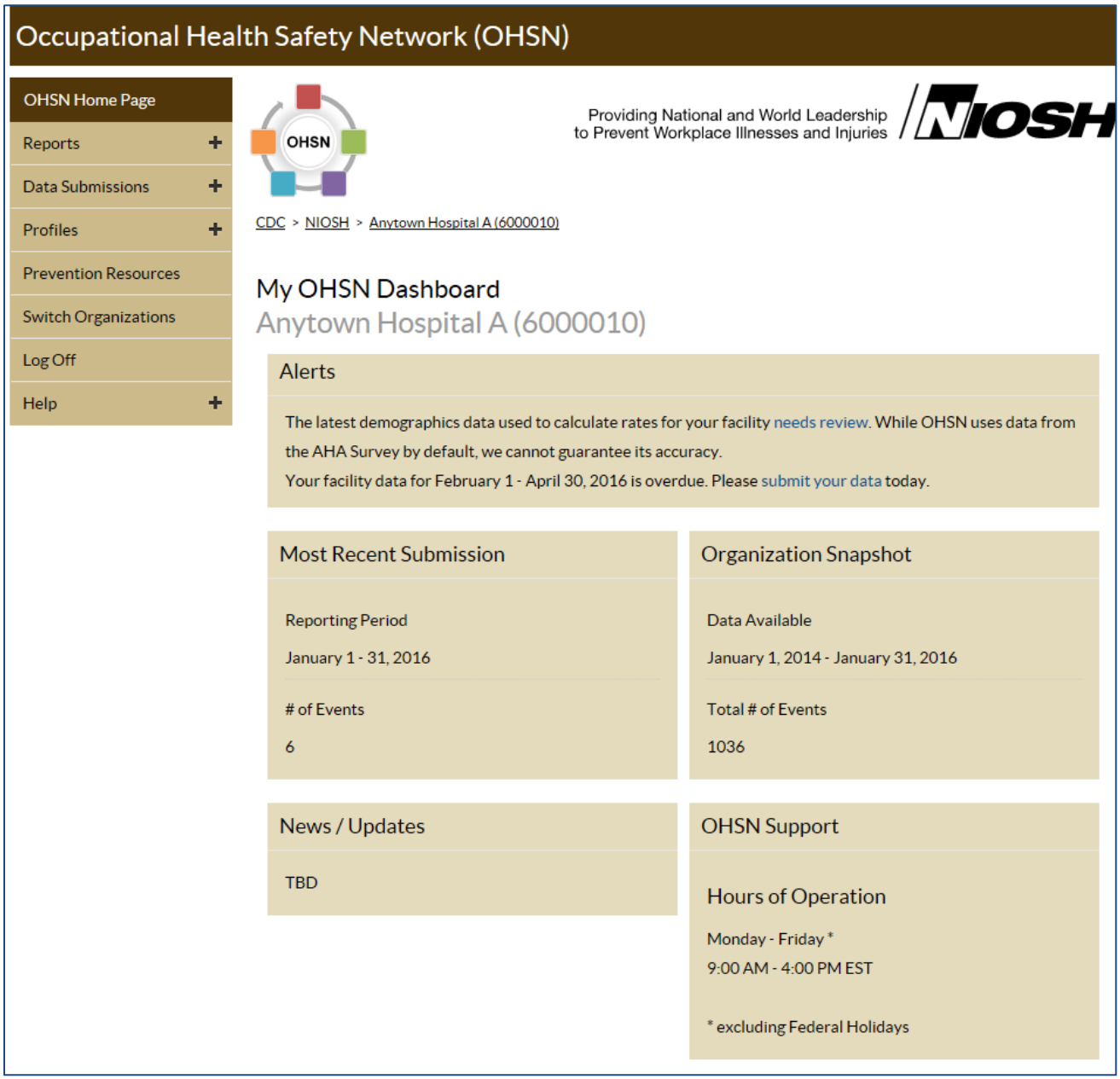
To log off OHSN, click the **Log Off** button from the menu item.

NOTE: The system will automatically log off a user after 20 minutes of inactivity.



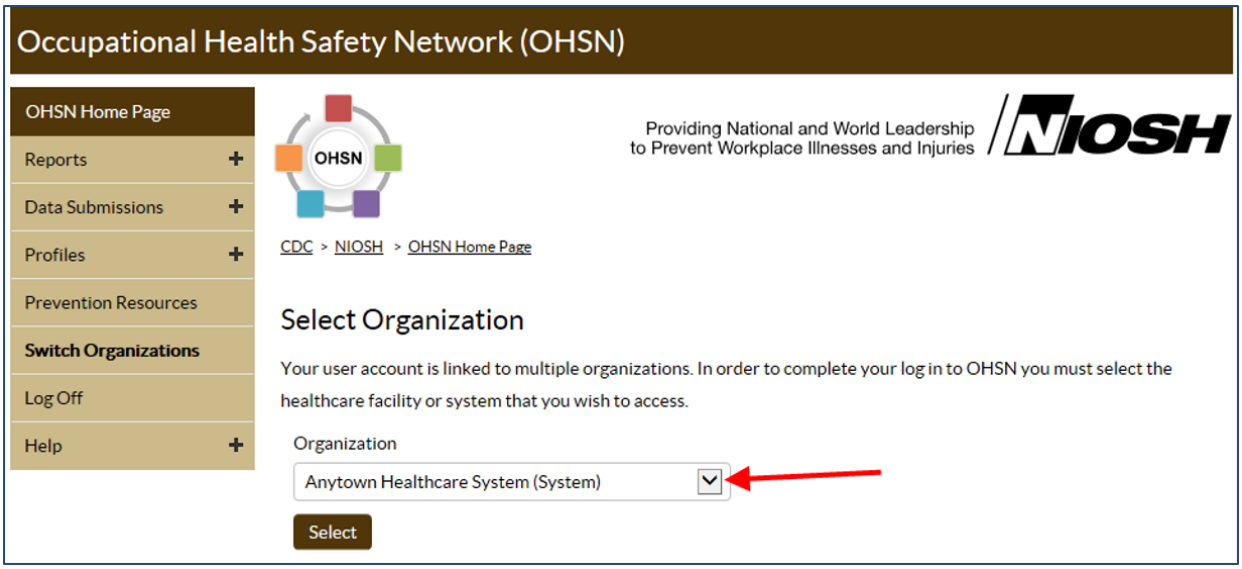
4 OHSN DASHBOARD

After successfully logging on to OHSN, a dashboard screen (see below) will appear providing a quick overview of the data submitted by the facility to date. The dashboard will display alerts that the user should be aware of concerning data submissions, such as past due submissions. **It is important that your facility or system submit at least six months of data per calendar year for your OHSN account to remain active.**



If you have access to more than one healthcare facility, for example if you are a System Administrator, the **OHSN Dashboard** screen will not appear until you have selected which organization you want to focus on.

The **Select Organization** screen will appear as shown below. Click on the down arrow of the Organization drop-down list to view the system and facilities to which you have access.

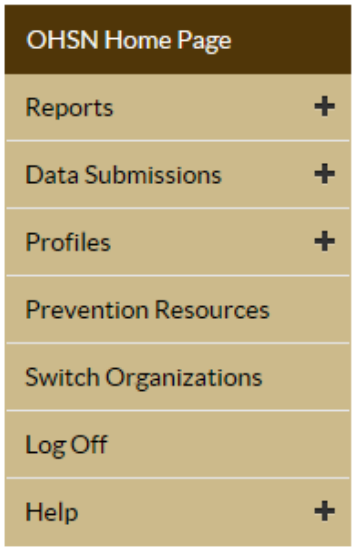


Once you select the organization (system or facility), the **My OHSN Dashboard** screen associated with the selected organization will appear.

5 OHSN MENU

The **OHSN Menu** appears on the left side of each screen. Menu items will be slightly different depending on user access rights. Many of the menu items contain additional submenu items. All menu and submenu items are described below.

OHSN Menu:



OHSN Menu and Submenu Items

Main Menu Item	Sub-Menu item	Description	Who Can Access
Report	My System	Create or view reports that summarize your healthcare system's data	• System Admin • System Report User
Report	My Facility	Create or view reports that summarize your healthcare facility's data	• System Admin • System Report User • Facility Admin • Facility Report User
Report	OHSN Averages & Percentiles	Create or view reports that summarize all of the data from OHSN-participating facilities (No facility/system names are displayed)	• System Admin • System Report User • Facility Admin • Facility Report User
Data Submissions	Upload New Data	Enter new data for your facility or system to OHSN	• System Admin • Facility Admin

Main Menu Item	Sub-Menu item	Description	Who Can Access
Data Submissions	Submission History	Provides a detailed listing of all data submissions to OHSN	• System Admin • Facility Admin
Data Submissions	Tools	Provides the following tools to aid users in preparing their data for submission to OHSN: - OHSN Conversion Tool - Excel Spreadsheet for Required Data - Excel Spreadsheet for Required and Optional Data	• System Admin • Facility Admin
Profiles	My Profile	View or modify your email address and password	All Users
Profiles	Facility Profile	View or modify the denominator data and settings for your facility (see section 6.3.4 for more)	• System Admin • Facility Admin
Profiles	System Profile	View or modify the denominator data and settings for facilities in your system	• System Admin
Prevention Resources	n/a	Link to NIOSH, CDC and other organizations' publications on approaches to dealing with slips, trips and falls; patient handling; workplace violence; sharps injuries; and blood/body fluid exposures	All Users
Switch Organizations	n/a	Allows users associated with a System to view and manage facilities within their system	System Admin or Facility Users who have access to multiple facilities
Help	OHSN User Manual	View or print OHSN User Manual	All Users
Help	FAQ	Read answers to frequently asked questions about OHSN	All Users
Help	Contact Us / Feedback	Provides mechanism for users to send NIOSH questions or feedback about the OHSN system	All Users
Help	OHSN Information Web page	Opens the OHSN information web page on the CDC/NIOSH Internet site	All Users
Help	About OHSN	Provides OHSN system version information and disclaimer	All Users

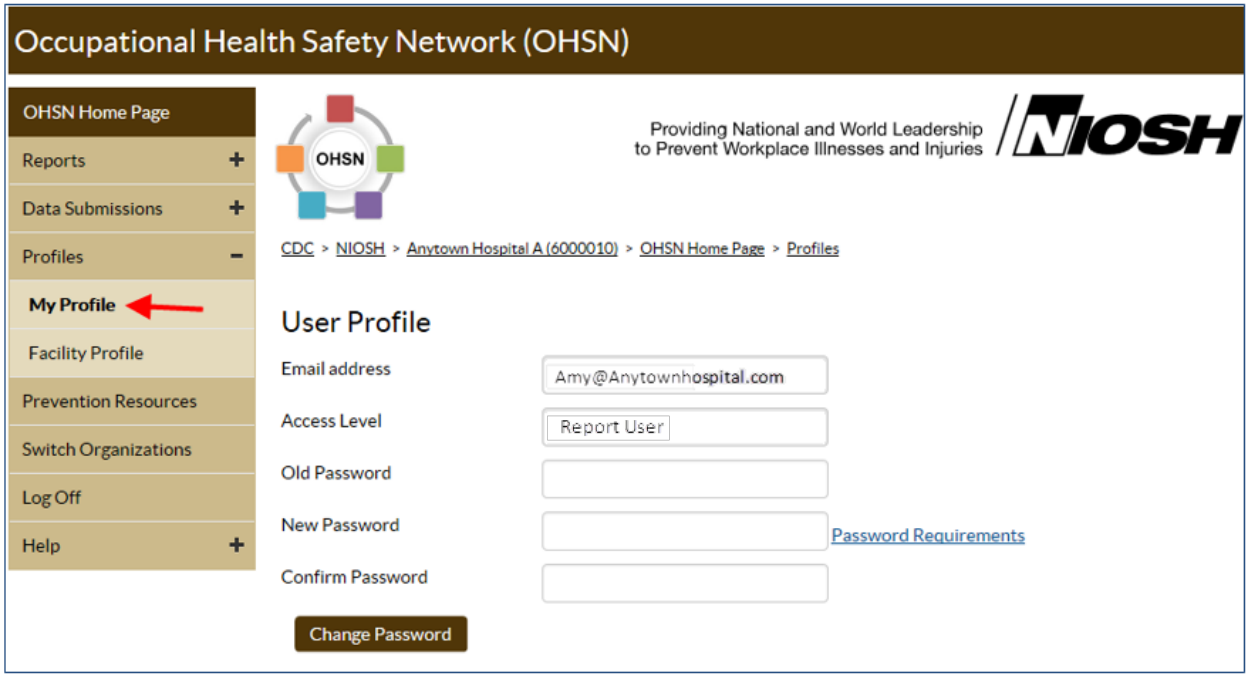
6 PROFILES

6.1 User Profiles

Each OHSN user has an individual user profile. The **User Profile** screen allows you to:

- Verify the email address you used to log on to and communicate with OHSN
- View the current user roles you are assigned for a given facility/system
- Change your account password

To access and manage information in your OHSN profile click the **Profiles** menu item from the OHSN Main menu then select **My Profile** as shown below.



If your role(s) is/are incorrect, you must contact your OHSN Facility or System Administrator to request a change in the system.

If your email address needs to be changed, contact OHSN User Support at: NIOSHOHSN@cdc.gov. *Since the user's email address is used as the OHSN account ID, only a NIOSH OHSN System Administrator can make this change.*

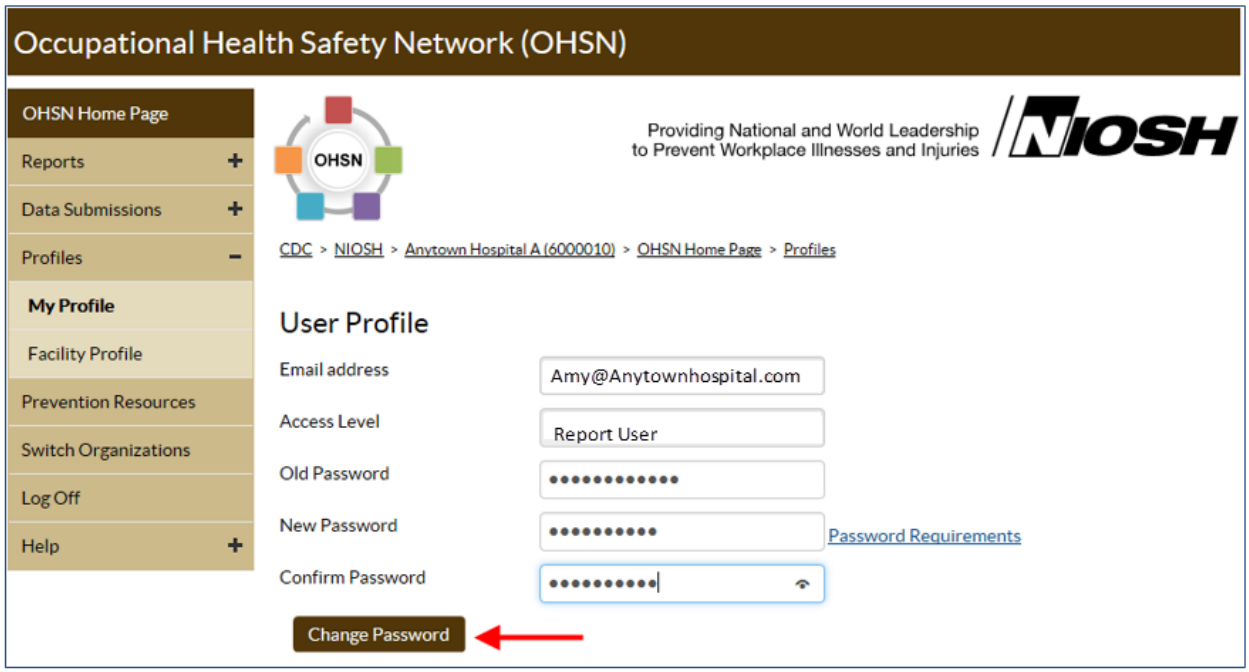
6.2 Change Password

You can change your password by going to the **My Profile** screen. Enter your existing password in the **Old Password** field, a new password in the **New Password** field, and the same new password value in the **Confirm Password** field. Then click the **Change Password** button.

Note: The new password you create cannot be one that you have used within the past 20 times. Click on **Password Requirements** to learn more.

Passwords must be 8-30 characters and include at least 3 of the following 4 characters:

- Uppercase
- Lowercase
- Numeric
- Punctuation (There are no limitations on punctuation.)



If the password was changed successfully, a message will be displayed stating that the password was changed.

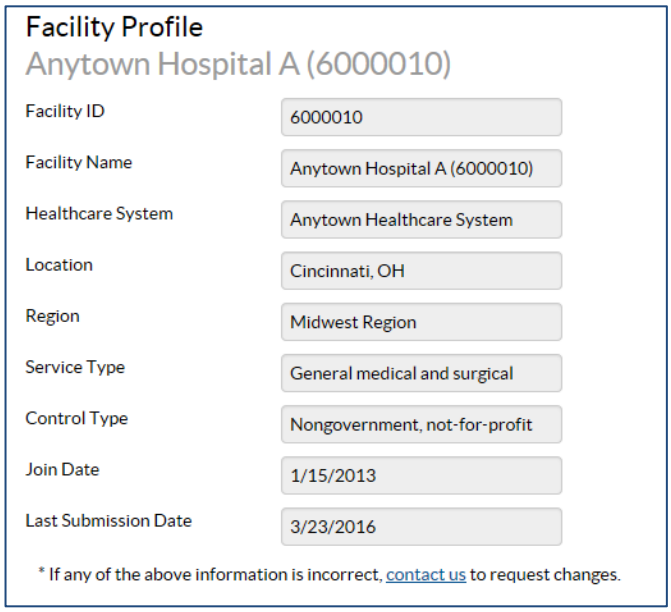
6.3 Profile Information for Single Healthcare Facilities

Facility Administrators have access to the **Facility Profile**. If the facility is also part of a Healthcare System, the System Administrator would also have access to the facility's profile information. The **Facility Profile** screen allows you to:

- Verify that the facility organizational information is correct
- Make requests to add, edit, or remove user accounts for the facility
- Verify and/or update the facility denominator data

This screen has three sections:

1. Facility Profile – (Read only) Provides detailed information about the facility and the last submission of data to OHSN.


Facility Profile
Anytown Hospital A (6000010)

Facility ID	6000010
Facility Name	Anytown Hospital A (6000010)
Healthcare System	Anytown Healthcare System
Location	Cincinnati, OH
Region	Midwest Region
Service Type	General medical and surgical
Control Type	Nongovernment, not-for-profit
Join Date	1/15/2013
Last Submission Date	3/23/2016

* If any of the above information is incorrect, contact us to request changes.

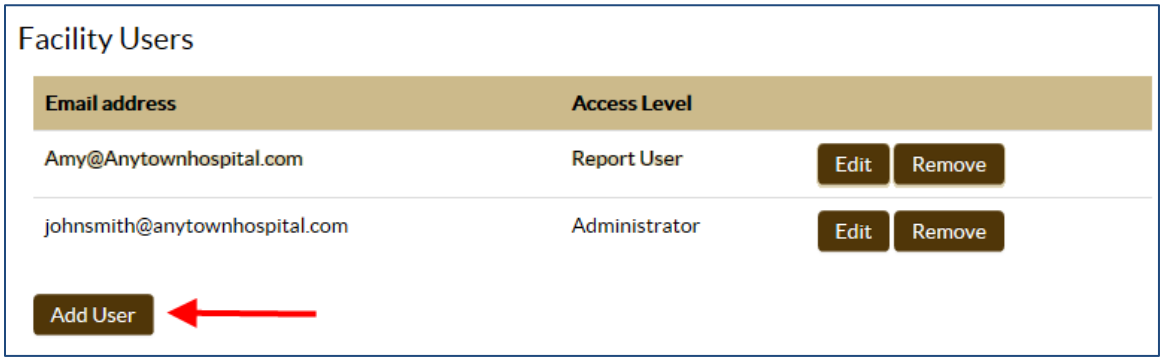
2. Facility Users – Provides information about current user access to facility data and the ability to add, delete or edit user accounts.

3. Current Denominator Data – Displays current facility denominator data (i.e., number of licensed beds, number of admissions, number of employees by occupation, etc.) used to calculate incidence rates for injuries.

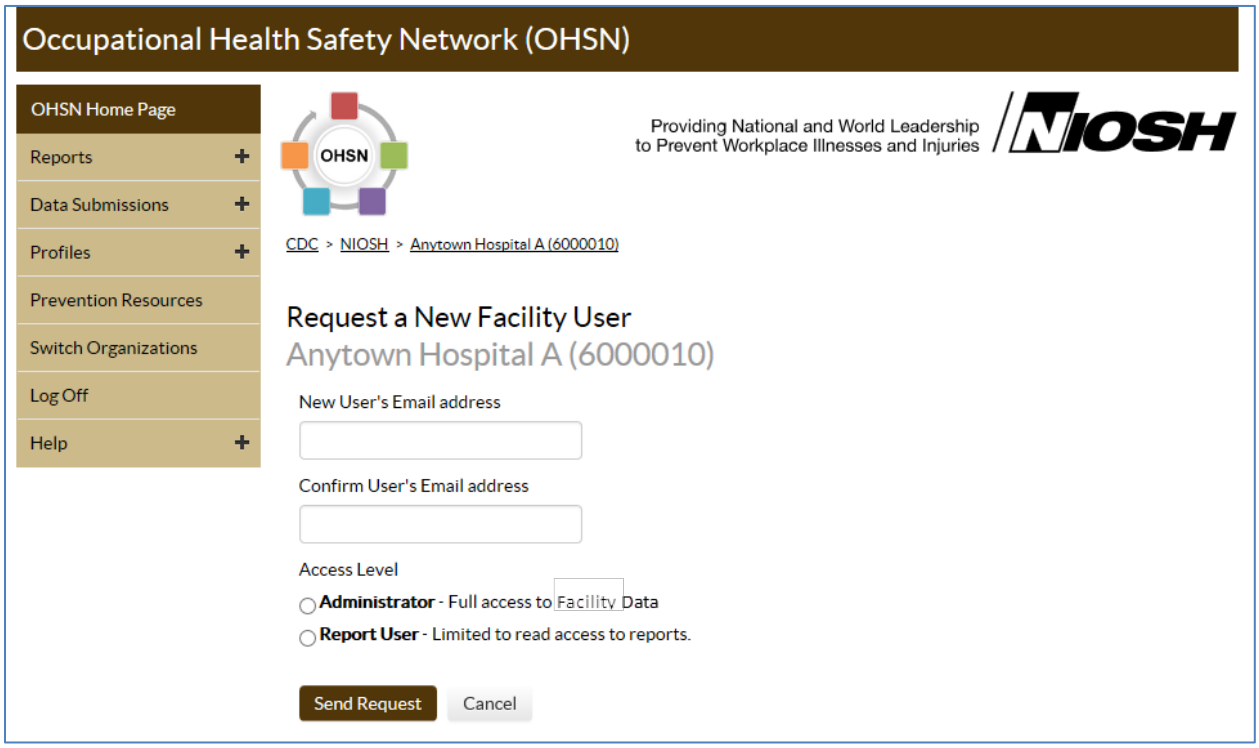
6.3.1 Adding New Users

The Facility Users section lists the users who have access to the facility data and what level of access each has.

Facility Administrators can make a request to NIOSH to add a person as a new user for their facility in OHSN. In the **Facility Users** section of the **Facility Profile** screen, click the **Add User** button to allow a new user to have access to the facility data.

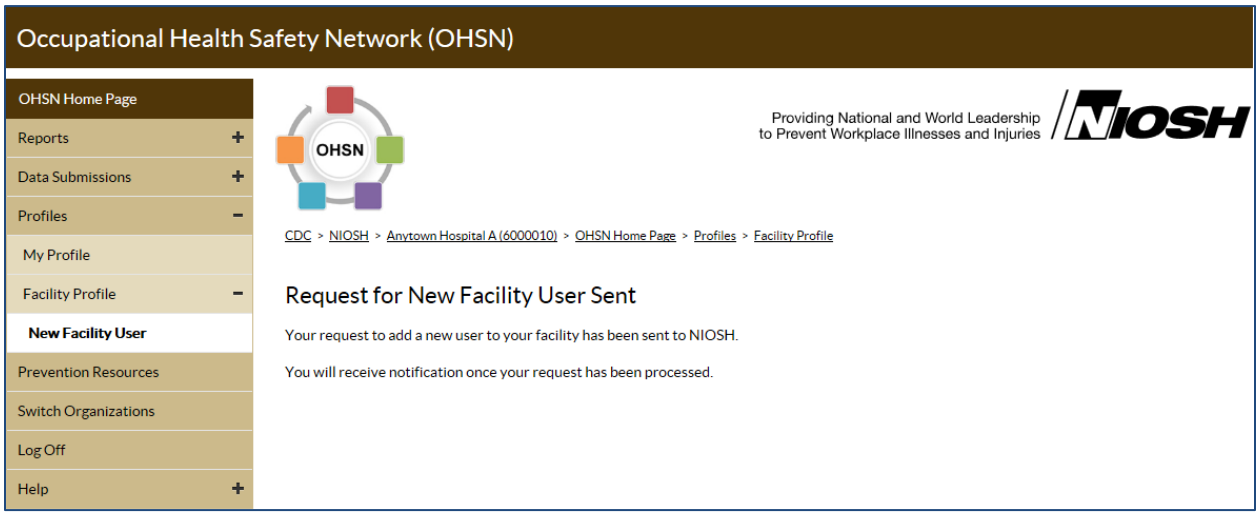


After clicking the **Add User** button, the **Request a New Facility User** screen will appear as shown below.



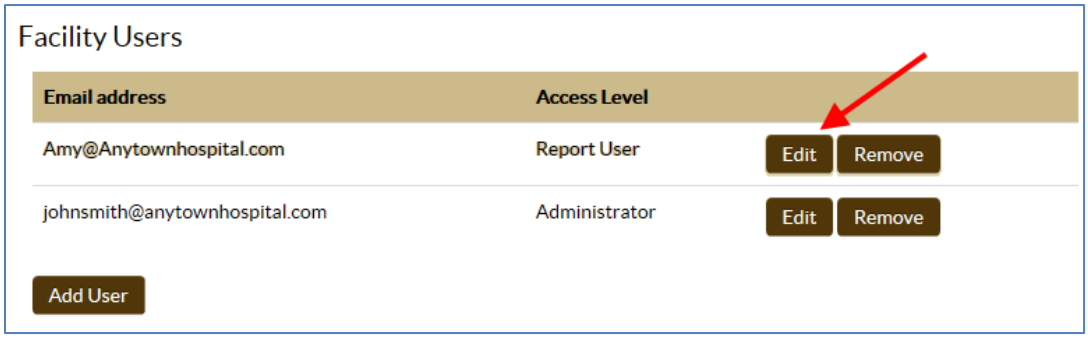
1. Enter a valid email address in the **New User's Email address** field and the **Confirm User's Email address** field.
2. Select whether the new user should have an **Administrator** or **Report User** access level. (See Section 3.1 for information on user access levels.)
3. Click the **Send Request** button.

After clicking **Send Request**, the screen shown below will appear as confirmation. An email will be sent to the new user with a cc to the Facility Administrator when the new user account has been set up.

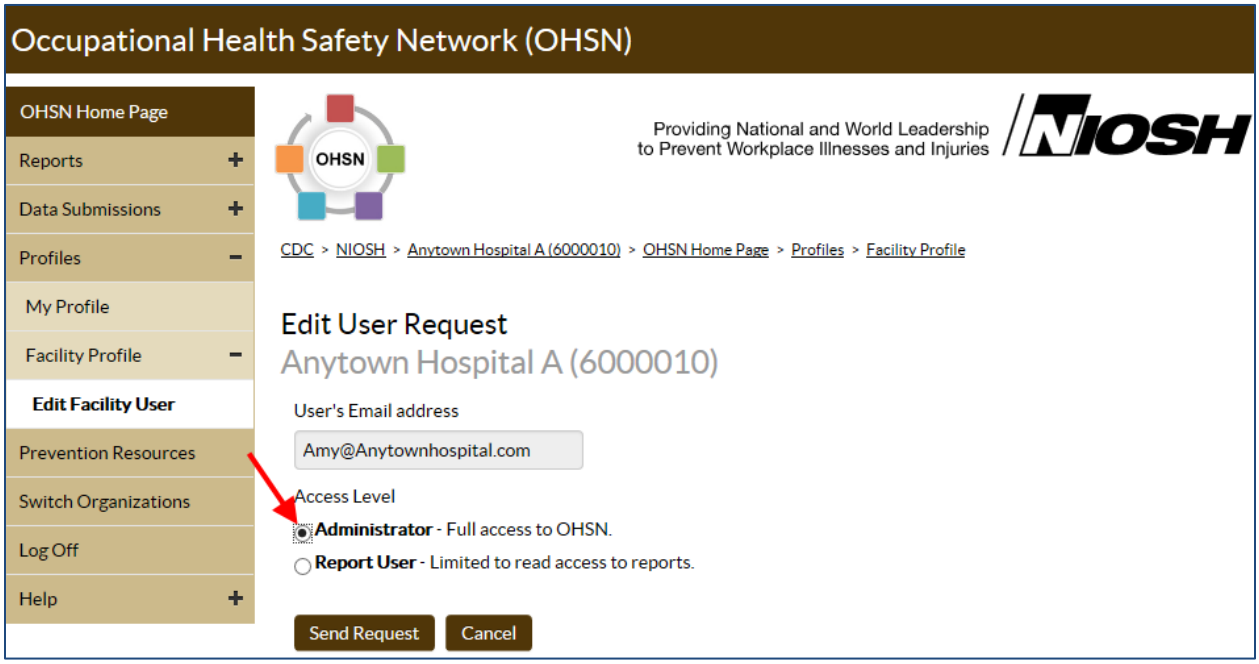


6.3.2 Editing a User's Access Level

Facility Administrators can make a request to NIOSH to change a user's access level for their facility in OHSN. (See Section 3.1 for information on user access levels.) In the **Facility Users** section of the **Facility Profile** screen, click the **Edit** button for the user you wish to update.

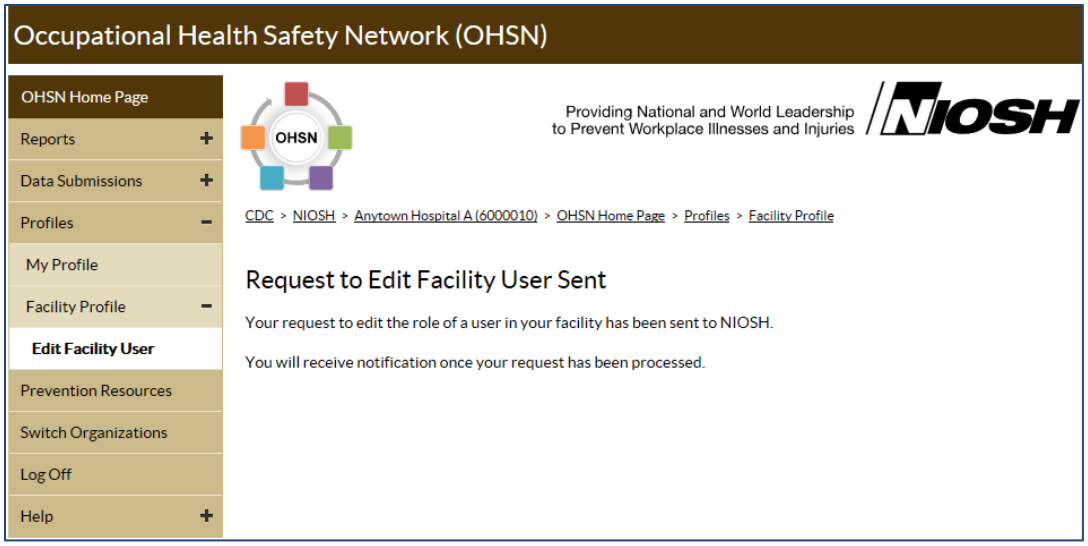


After clicking the **Edit** button, the **Edit User Request** screen will appear as shown below.



Change the user's access level by selecting either the **Administrator** or **Report User** buttons.

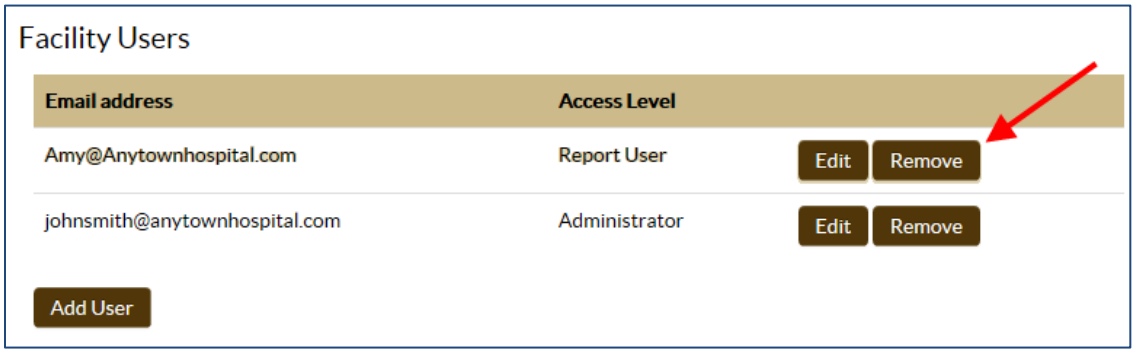
After selecting the appropriate access level for the user, click the **Send Request** button. After clicking **Send Request**, the following screen will appear as confirmation:



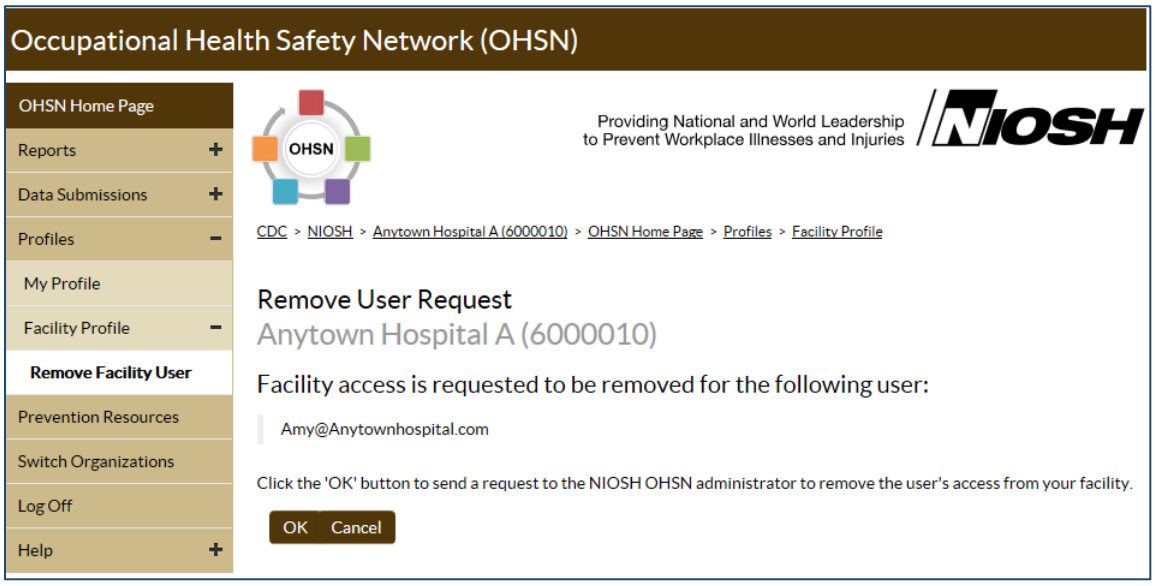
NIOSH will notify the Administrator and the User via email that the request is being processed.

6.3.3 Removing a User

Facility Administrators can make a request to NIOSH to remove a person as an OHSN user for their facility. In the **Facility Users** section of the **Facility Profile** screen, click the **Remove** button for the user you wish to remove.

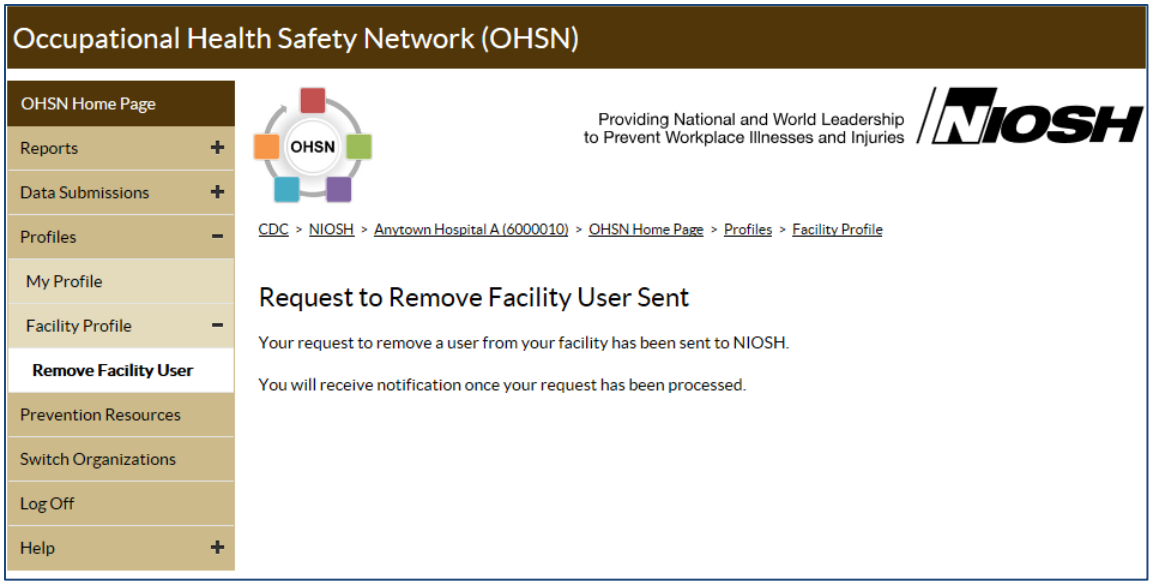


After clicking the **Remove** button, the **Remove User Request** screen will appear as shown below:



Click the **Cancel** button to cancel the request and return to the Facility Profile screen.

Click the **OK** button to send a request to NIOSH to remove the user's access from your facility. After clicking **OK**, a confirmation message will be displayed as shown below.



NIOSH will notify the Administrator and the User via email that the request is being processed.

6.3.4 Facility Denominator Data

Facility Administrators can review and update their current denominator data in the **Current Denominator Data** section of the **Facility Profile** screen. Each facility is required to do this when it first Log On to OHSN and at the start of every calendar year after that. The information should be updated when significant changes occur during the course of a year, such as adding a new hospital wing.

The denominator data is used to calculate incidence rates for injuries.

Current Denominator Data

Beginning: 1 / 2013

Total number of licensed beds: 161

Total number of admissions per month: 749

Total number of outpatient encounters per month: 6695

Do you record occupational health events that occur among contract staff?: No

FTE by Occupational Category

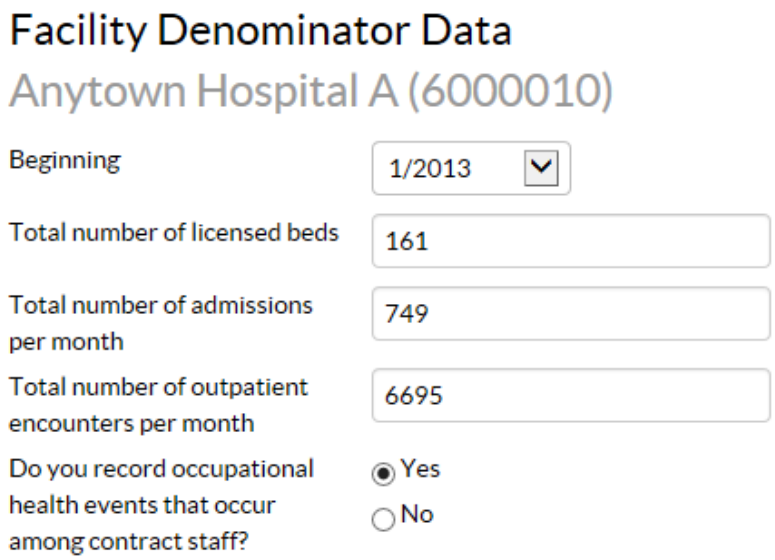
Occupational Category	Employee FTEs
a. Physicians & dentists	17
b. Medical & dental residents/interns	1
c. Other trainees	1
d. Registered nurses	291
e. Licensed practical (vocational) nurses	27
f. Nursing assistive personnel	35
g. Radiology technicians	41
h. Laboratory technicians	17
i. Pharmacists, licensed	9
j. Pharmacy technicians	10
k. Respiratory therapists	14
l. All other personnel	355
Total	818

Events reported

Slips, Trips, and Falls (STF)
Patient Handling and Movement (PHM)
Workplace Violence (WPV)
Exposure to Blood or Body Fluids
Needlestick/Sharps Injury

Edit Denominator Data

To update your facility's denominator data, click the **Edit Denominator Data** button at the bottom of the **Facility Profile** screen. The **Facility Denominator Data** screen will appear allowing you to edit the information.



Field	Description
Beginning:	You must select a date. When you change the selection to one of the existing month/year selections, the current denominator data for that reporting period will be displayed so you can edit the values. If you select **Add New** from the drop-down menu, the screen will prompt you to specify the month and year.
Total number of licensed beds:	Enter a whole number larger than 0.
Total number of admissions per month:	Enter a whole number larger than 0.
Total number of outpatient encounters per month:	Enter a whole number larger than 0.
Do you record occupational health events that occur among contractor staff?	Select **Yes** or **No**. If you select **Yes,** the **Contractor FTEs** column will appear in the **FTE by Occupation Category** table.

FTE by Occupational Category

Occupational Category	Employee FTEs	Contractor FTEs
a. Physicians & dentists	17	0
b. Medical & dental residents/interns	1	0
c. Other trainees	1	0
d. Registered nurses	291	0
e. Licensed practical (vocational) nurses	27	0
f. Nursing assistive personnel	35	0
g. Radiology technicians	41	0
h. Laboratory technicians	17	0
i. Pharmacists, licensed	9	0
j. Pharmacy technicians	10	0
k. Respiratory therapists	14	0
l. All other personnel	355	0

Field	Description
Full-Time Employees (FTE) by Occupation Category	**Employee FTEs** You can change the values for each occupation category. Enter whole numbers larger than 0. **Contractor FTEs** If your facility records occupational health events among contract staff, enter a whole number larger than 0.

Events Reported

Traumatic Injury Modules

- [x] Slips, Trips, and Falls (STF)
- [x] Patient Handling and Movement (PHM)
- [x] Workplace Violence (WPV)

Exposure Modules

- [x] Exposure to Blood or Body Fluids
- [x] Needlestick/Sharps Injury

Other Event Types

- [x] Contact with Objects and Equipment
- [x] MSD (not related to Patient Handling)
- [x] Transportation Injury
- [x] Other Traumatic Injury
- [x] Exposure to Other Biohazard
- [x] Exposure to Other Harmful Substance or Environment
- [x] Fire or Explosion
- [x] Exposure to Blood, Body Fluids, or Needlestick/Sharps Injury
- [x] Other Exposure
- [x] Other Event

Confirmation

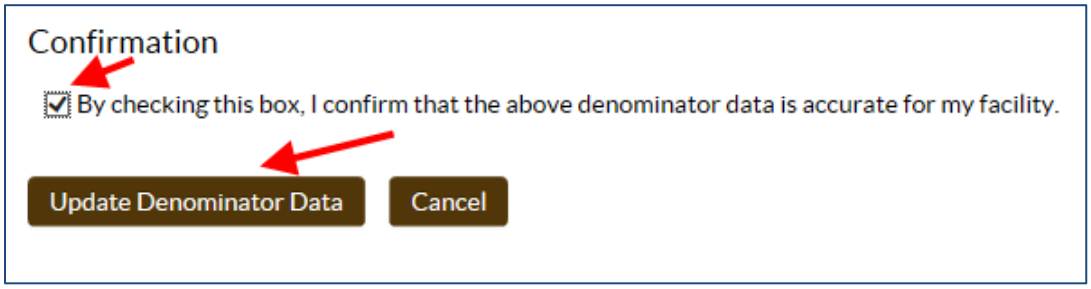
- [ ] By checking this box, I confirm that the above denominator data is accurate for my facility.

Update Denominator Data | Cancel

Field	Description
Event types reported – check boxes Choose *at least one* box. If you receive the error message "No event types were selected," you did not check at least one of the boxes above.	• Patient Handling and Movement • Slips, Trips and/or Falls • Workplace Violence • Exposure to Blood or Body Fluids • Needlestick/Sharps Injury
Confirm denominator check box	This box must be checked prior to updating any denominator data.
Update Denominator Data button	Click this button to apply any changes made to the facility denominator data.

Field	Description
Cancel button	Click this button to cancel any edits made and return to the Facility Profile screen.

After you have updated the denominator data, check the **box** to confirm it is accurate for your facility. Then click **Update Denominator Data.**

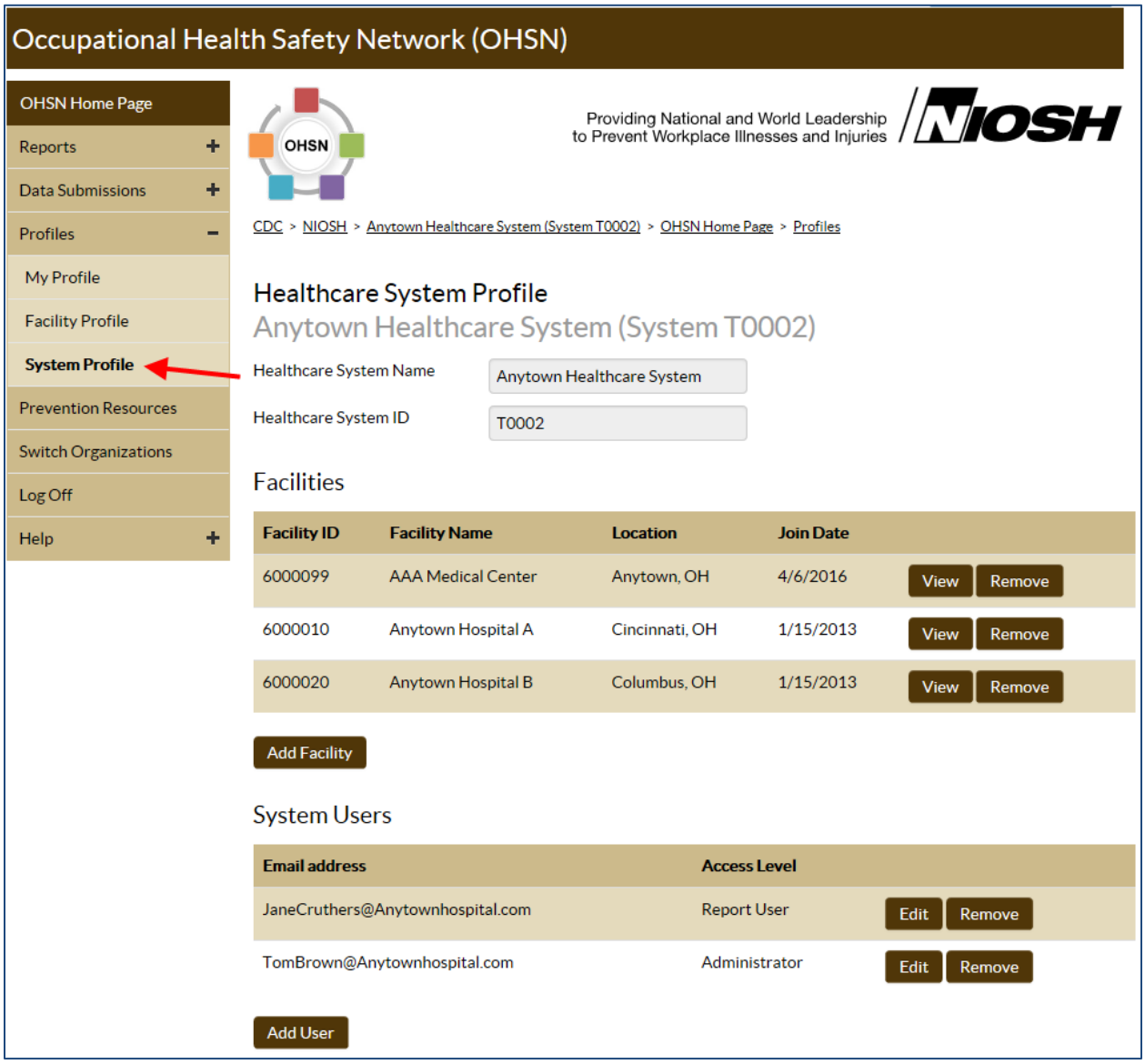


If the denominator data you have entered is not accurate, click **Cancel** and re-enter the data.

6.4 Profile Information for Healthcare Systems

Using the OHSN **System Profile** screen, System Administrators can manage the facilities within their system and the users who can view or manage system-level information.

To access this screen, click on the **Profiles** menu item from the OHSN main menu then click the **System Profile** menu option. An example Healthcare System Profile screen is shown below.



6.4.1 Managing Facilities within a Healthcare System

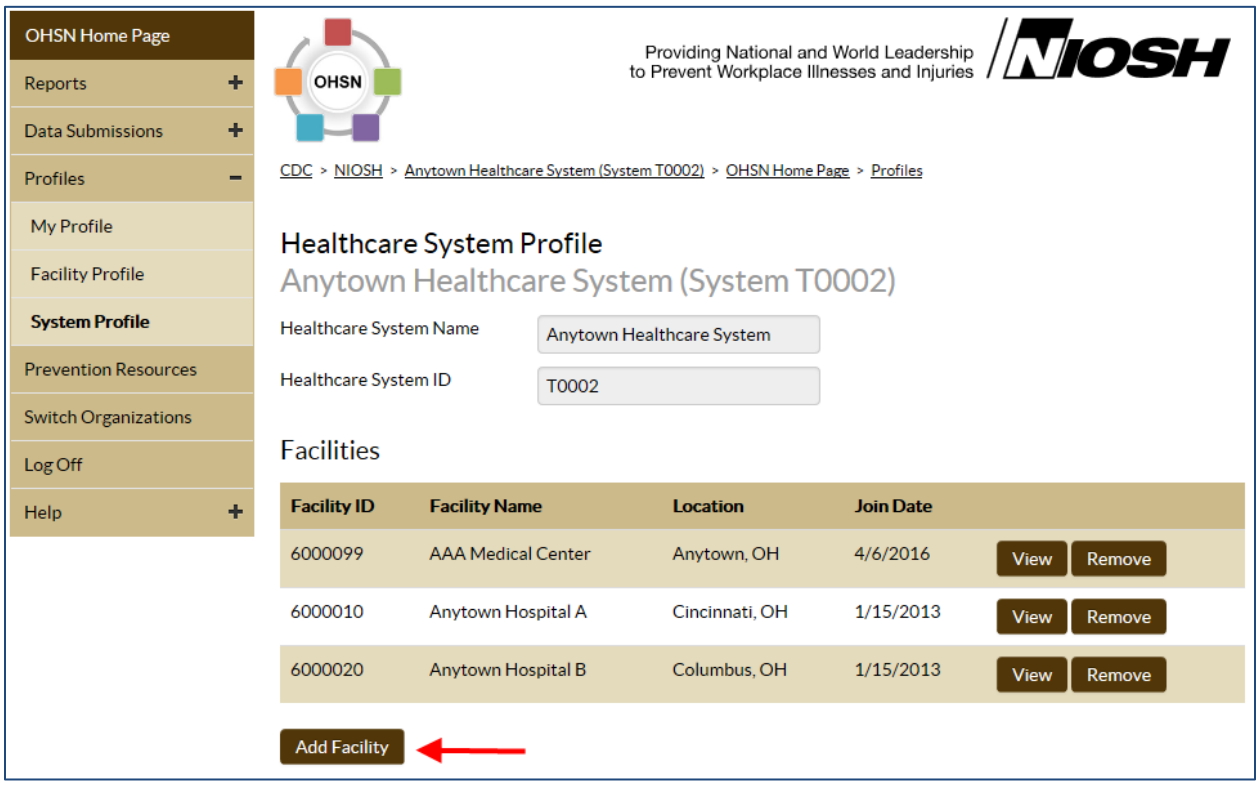
System Administrators have access rights to all the data and user information for each facility within their healthcare system.

System Administrators can:

- Add or remove facilities within their system
- Edit facility users and denominator data for facilities within their system
- Add additional System Administrators (up to five)
- Add or remove System Report Users (unlimited)
- Create and view reports for their system

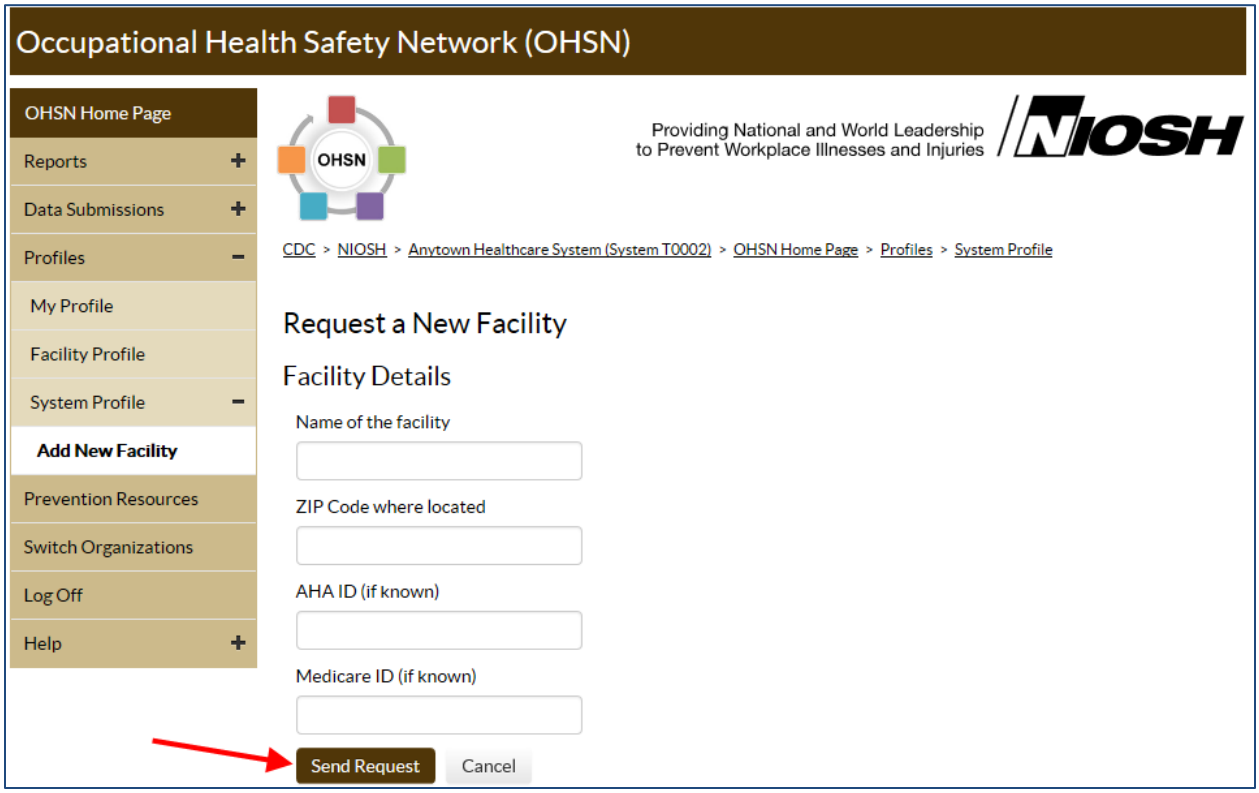
6.4.1.1 Adding a Facility to the Healthcare System

To add a facility to a healthcare system, click the **Add Facility** button in the Facilities section of the **Healthcare System Profile** screen as shown below.



A new screen will appear allowing the System Administrator to send a request to NIOSH to add a new facility to the healthcare system.

Enter the name of the facility to be added and the zip code. If the **AHA ID** and/or **Medicare ID** are known, please provide this information in the boxes provided. Click the **Send Request** button to submit the request.

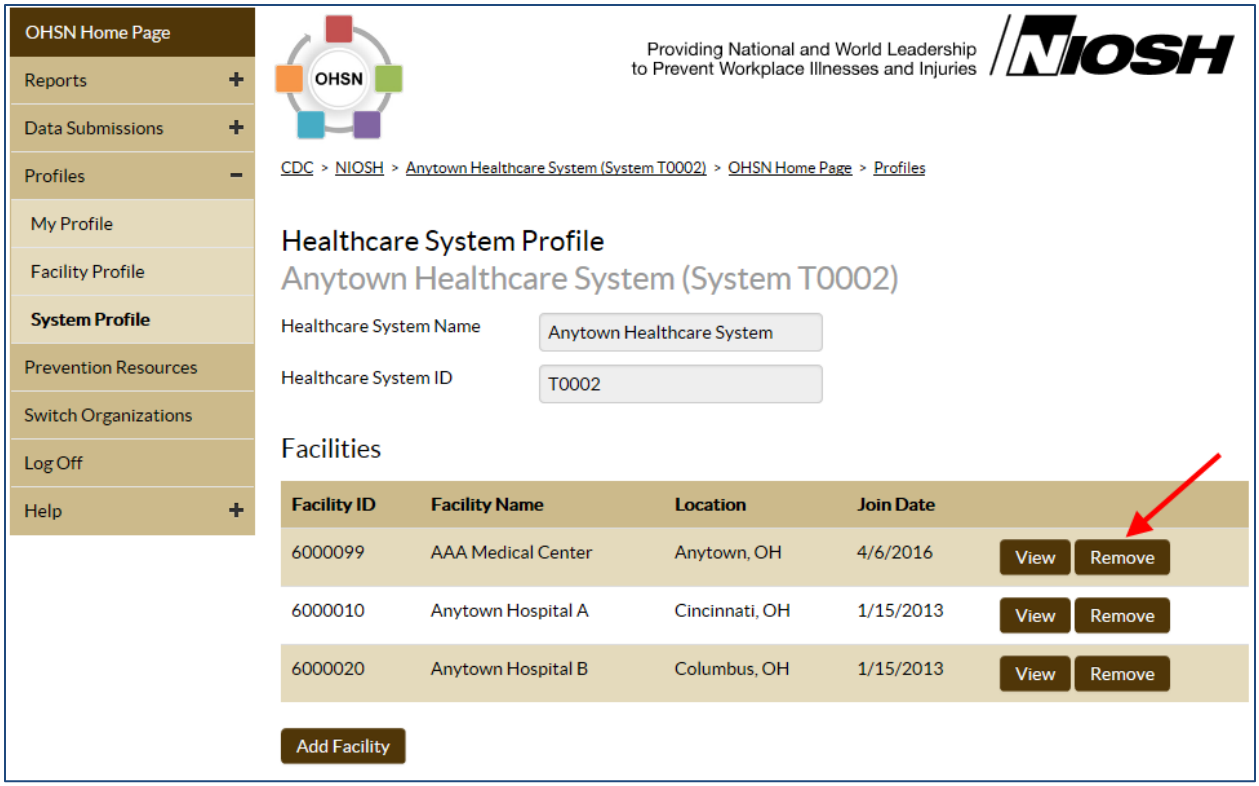


After clicking the **Send Request** button, a confirmation message will appear indicating that the request has been sent to NIOSH.

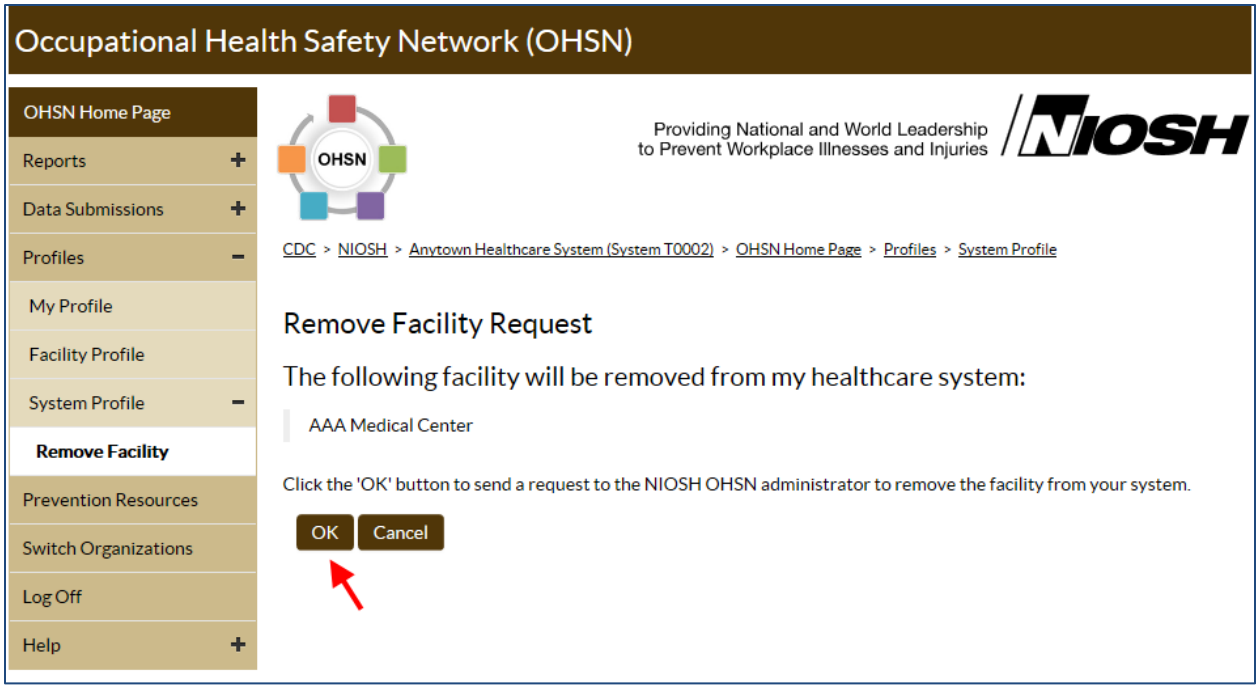
NIOSH will contact the requesting party to obtain additional information for the facility if needed and then add the facility to the healthcare system as soon as possible. If the facility is already enrolled in OHSN, NIOSH will send an invitation to the Facility Administrator to accept association with the requesting healthcare system.

6.4.1.2 Removing a Facility from a Healthcare System

To remove a facility from a healthcare system, click the **Remove** button for the facility to be removed in the Facilities section of the **Healthcare System Profile** screen as shown below.



A confirmation message will display in the next screen asking the System Administrator to confirm the removal of the facility from the system. Click **OK** to send the removal request to NIOSH. Click **Cancel** to cancel the request.



After clicking **OK,** the screen will indicate that the request to remove the facility from the system was sent to NIOSH.

Once the facility is removed, NIOSH/OHSN will disable all facility user accounts for the given facility. To regain access, the facility must either be added to another healthcare system or re-enrolled in OHSN. All data submitted prior to removal will be maintained.

6.4.2 Managing Healthcare System Users

System Administrators can make a request to NIOSH to:

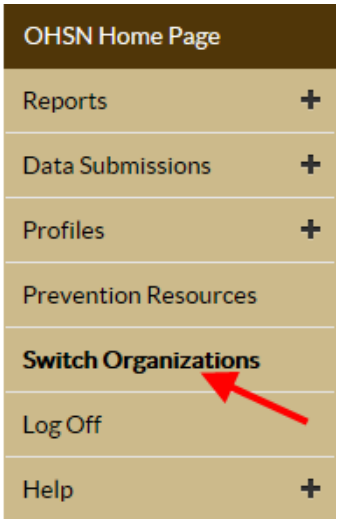
- Add a person as a new user for their healthcare system
- Remove a current user from their healthcare system
- Edit User access rights to their healthcare system

To perform these functions, go to the **System Profile** screen and follow the same instructions for adding, removing or editing a new user as described in the Single Healthcare Facility profiles Sections 6.3.1, 6.3.2, 6.3.3.

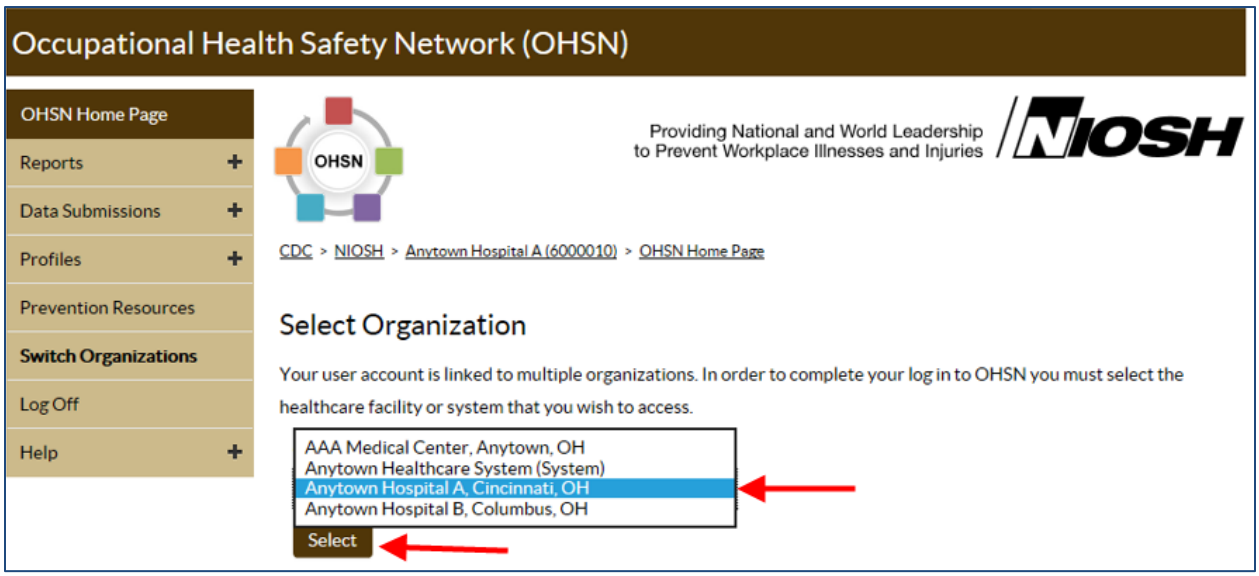
7 ACCESSING FACILITY DATA WITHIN A HEALTHCARE SYSTEM

System Administrators or users who have access to more than one facility must select the facility to view/manage prior to uploading data, generating reports, or editing profiles.

To change the focus on which facility or healthcare system you wish to view/manage, click the **Switch Organizations** menu item from the OHSN main menu as shown below:



The **Select Organization** screen will appear. Click the down arrow on the organization text box and a drop-down list of all the facilities and healthcare systems for which you have access will be displayed. Click on the facility or healthcare system you wish to view or manage. Then click the **Select** button to switch the focus to that facility or system.



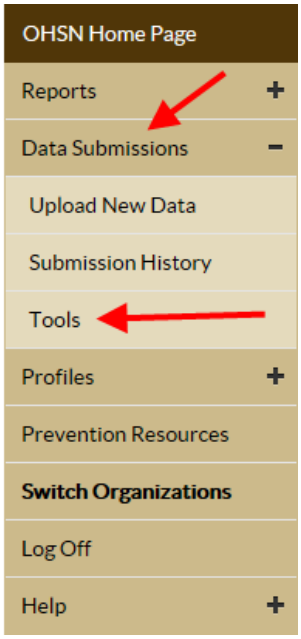
8 OHSN FACILITY TOOLS

Files uploaded to OHSN must be in the standard file format designed for the OHSN system. NIOSH offers tools to help users produce the standard data submission file.

If your facility/system is not currently using any software to track occupational injury events, you can use one of the NIOSH developed Microsoft **Excel Spreadsheets** to track this information. (see Section 8.2).

If you are currently using a software product (either commercially or custom developed) to track occupational injury events and have the ability to export your data from the software to Microsoft Excel, you can use the mapping function in the **OHSN Conversion Tool** to convert your data fields to the OHSN data fields and create the standard OHSN submission file (see Section 8.3).

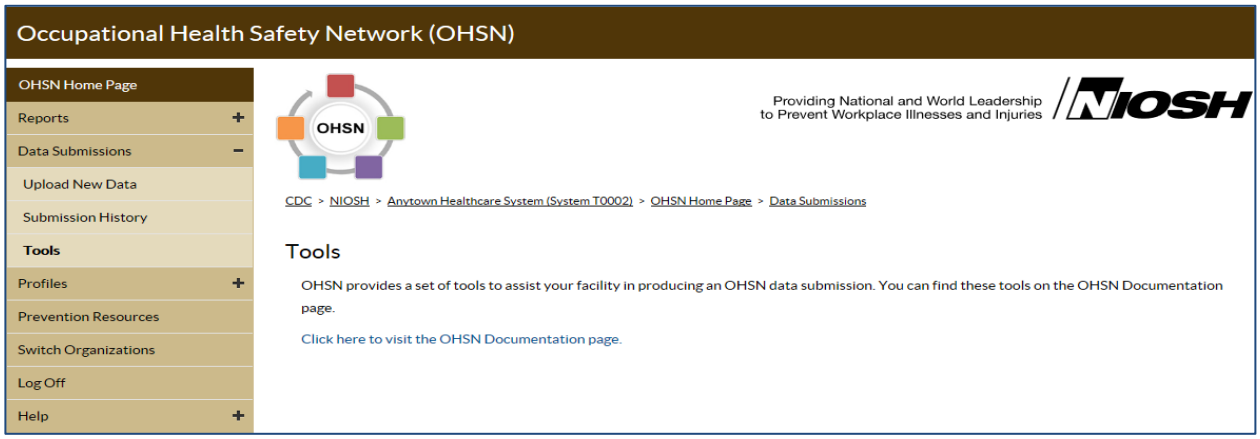
To access these tools, click on the **Data Submissions** item on the OHSN main menu, then click the **Tools** menu item as shown below.



Mapping Data – the "matching" between a source and a target database which contain the same data elements but call them by different names. This matching enables software and systems to meaningfully exchange information. OHSN provides a Mapping Tool to match data in a facility's value list to the OHSN value list.

*If you are interested in modifying your custom developed software to be directly compatible with OHSN, visit the **OHSN Software Compatibility Kit** section of the OHSN website at: http://www.cdc.gov/niosh/topics/ohsn/documentation.html. The NIOSH OHSN team can help guide you through this process.*

The **Tools** screen will appear, which provides a link to the OHSN information web page, where the tools reside. You will need to download the OHSN Facility Tool Package to create files that can be uploaded to the OHSN System.



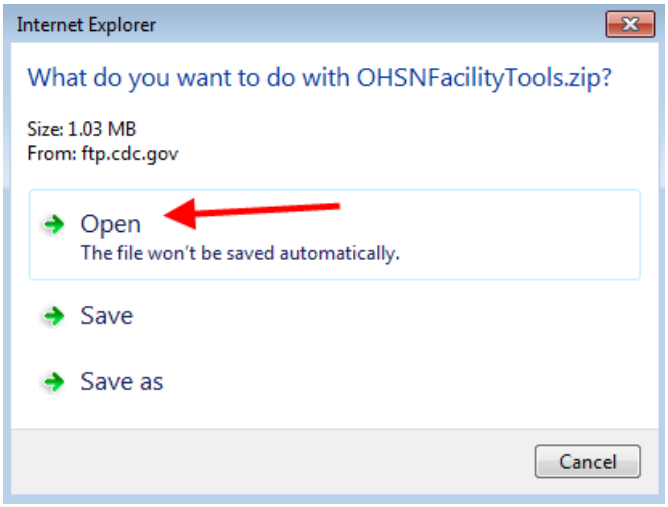
8.1 Downloading the OHSN Facility Tool Package

To download the OHSN facility tool package, click on the link on the **Tools** screen shown above.

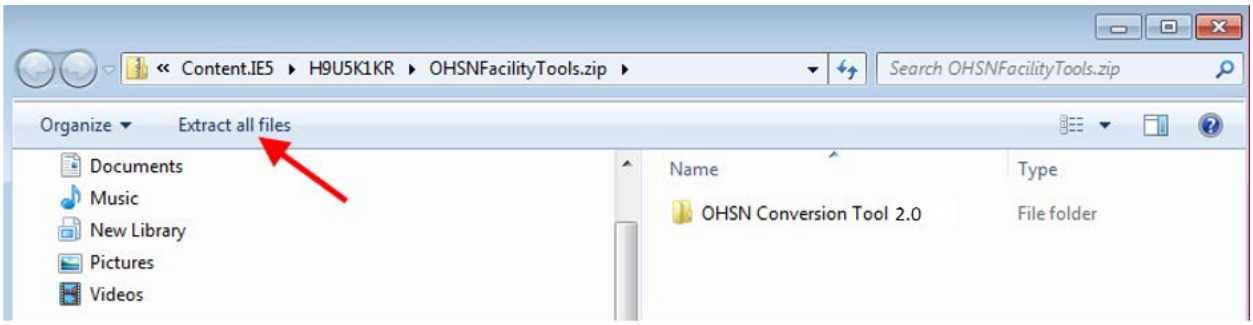
The OHSN Documentation page will display (http://www.cdc.gov/niosh/topics/ohsn/documentation.html). Scroll down to the **Facility Tools** section and click on **OHSN Data Conversion and Mapping Tool**.

Click the **OHSN Data Conversion and Mapping Tool** link**.**

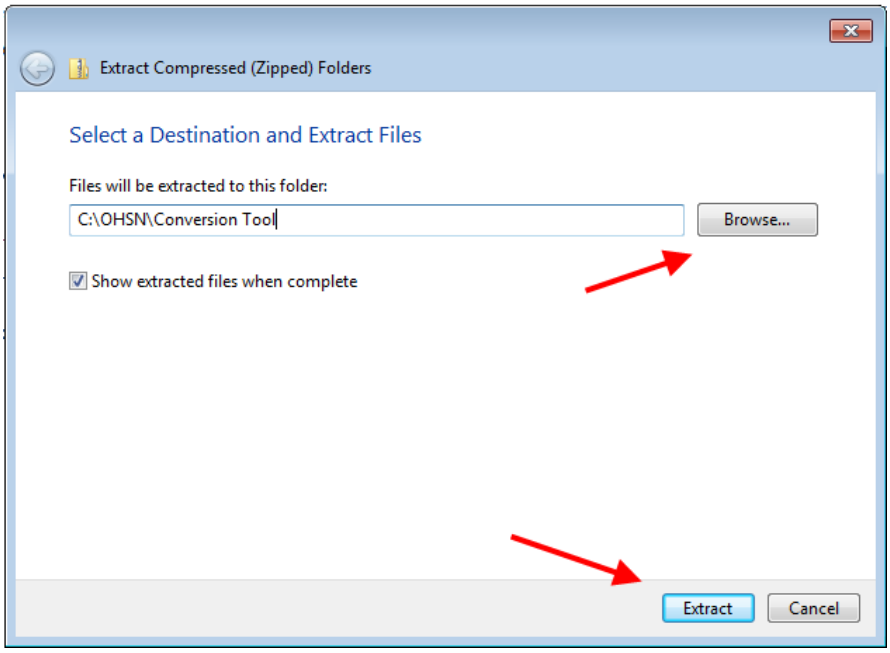
When the dialog box appears, click the **Open**.



Click the **Extract all files** link.



Select a location on your computer to save the Conversion Tool files using the **Browse** button, then click the **Extract** button.



If downloaded and extracted successfully, you should have the following list of the files in the OHSN Conversion Tools folder.

Name	Type	Compressed size	Password ...	Size	Ratio	Date modified
OHSN-2.0-ImportTemplate-AllFields	Microsoft Excel Macro-En...	43 KB	No	48 KB	11%	1/12/2016 12:08 PM
OHSN-2.0-ImportTemplate-Requir...	Microsoft Excel Macro-En...	49 KB	No	53 KB	9%	1/12/2016 12:06 PM
ReadMe	Microsoft Word 97 - 2003 ...	9 KB	No	31 KB	74%	4/15/2015 4:03 PM
setup	Application	193 KB	No	418 KB	54%	1/14/2016 7:31 AM
zpackage	Windows Installer Package	932 KB	No	1,269 KB	27%	1/14/2016 9:33 AM

8.2 Using the NIOSH Provided Excel Spreadsheet

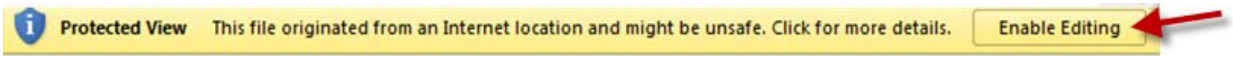
For facilities/systems not currently using any software to track occupational injury events, NIOSH has developed standard Microsoft Excel spreadsheets with the OHSN data elements and standard value sets for each element. Facilities may choose to download one of the Excel files and directly enter their event data using drop-down menus with the OHSN data elements.

There are two options for using the MS Excel spreadsheet:

1. Spreadsheet for Required Data Items Only
2. Spreadsheet for all OHSN Data Items (Required and Optional) – this version allows you to gather additional details if you are interested.

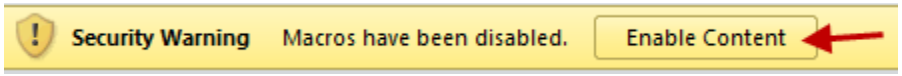
Copies of the two MS Excel spreadsheets can be found in the OHSN Facility Tools zip file. (See Section 8.1).

If the spreadsheet opens in 'Protected View' mode you will see a yellow bar at the top. Click the **Enable Editing** button in order to edit and save the file.



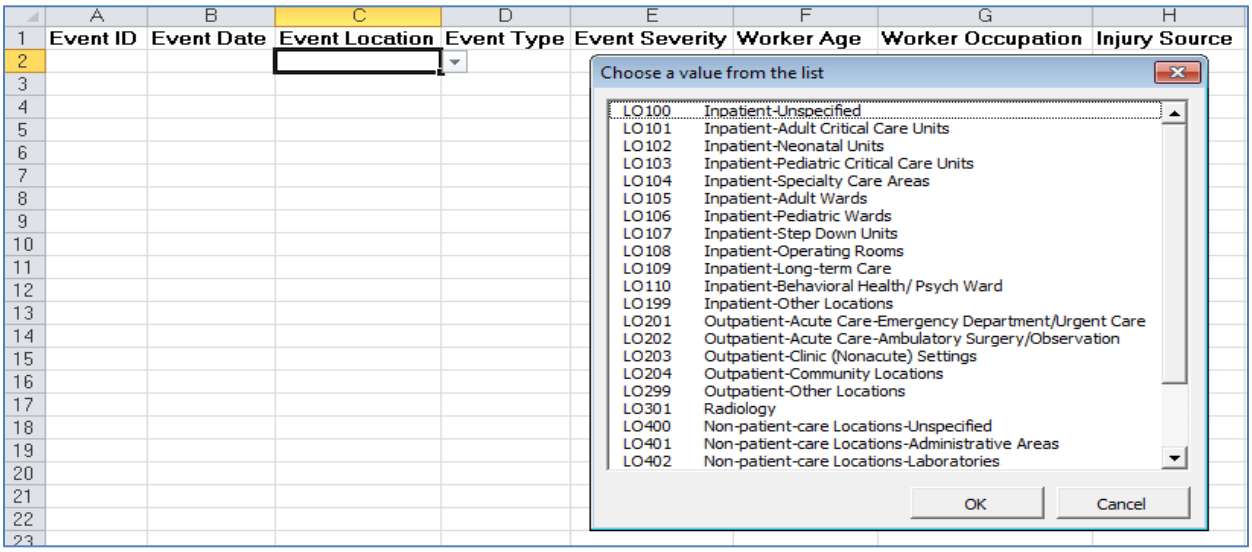
Save the spreadsheet to a location on your computer or network. We recommend saving the file with a name that includes the month of the data you are entering– for example, "OHSN_April_2016." You may choose to create a new OHSN folder to hold these files.

If you see the following warning about macros being disabled, you will need to click the **Enable Content** in order for the OHSN supplied drop down lists to work (as described below).



Within the Excel file, most cells offer dropdown arrows that provide a list of standard values acceptable for that data element (see example below).

Double clicking within the cell rather than on the arrow will open a help box containing descriptions of each of the standard values for the data element (see example below).



Data Element Notes:

- **Event ID** (Column A): This is an ID that you select. It can be based on an ID in your existing tracking system or a random number. DO NOT include personal identifiers such as date of birth or social security number. Make the ID unique.
- **Event Date** (Column B): The date the event occurred, entered as MM-DD-YYYY.
- **Worker Age** (Column F): The age of the worker who was injured as a 2-digit number.
- All other Event/Injury Fields: Double click in the box for a list of options. Choose a value from the list and then click **OK**. There are options for Other or Unknown.
- The options for Column A through G remain consistent for each entry. The options for Column H through J vary according to the Event Type (Column D).

Using the Excel file for more than one facility:

To enter event data for more than one facility, you must put an additional column to the spreadsheet: **Facility ID** (see below). You must also **group the data by Facility ID**.

Your facility ID is the ID number you received from NIOSH with the instructions to log on to the system the first time. This is usually your American Hospital Association (AHA) number.

H	I	J	K
Injury Source	Injury Contributing Factor	Injury Activity	Facility ID

8.3 OHSN Conversion Tool 2.0

The OHSN Conversion Tool 2.0 is a Windows desktop application that can convert and validate Excel spreadsheet data into the standard OHSN (XML) format needed for uploading to OHSN. This tool includes functions for mapping facility-specific codes to OHSN values. (See Section 9.2)

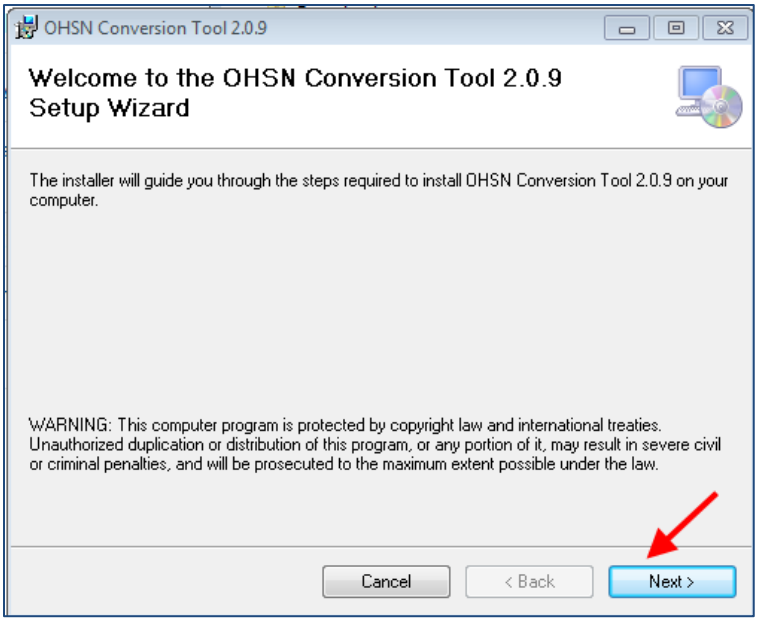
The OHSN tool requires your computer to have the .NET Framework 2.0, which is found on most systems. If you do not have that Framework, you may need administrative privileges to install it. If you have questions please contact your IT department for assistance, or contact us at nioshohsn@cdc.gov

8.3.1 Installing the OHSN Conversion Tool

To install the OHSN Conversion Tool, double-click on the **setup.exe** file in the Conversion Tools folder previously downloaded (see section 8.1).

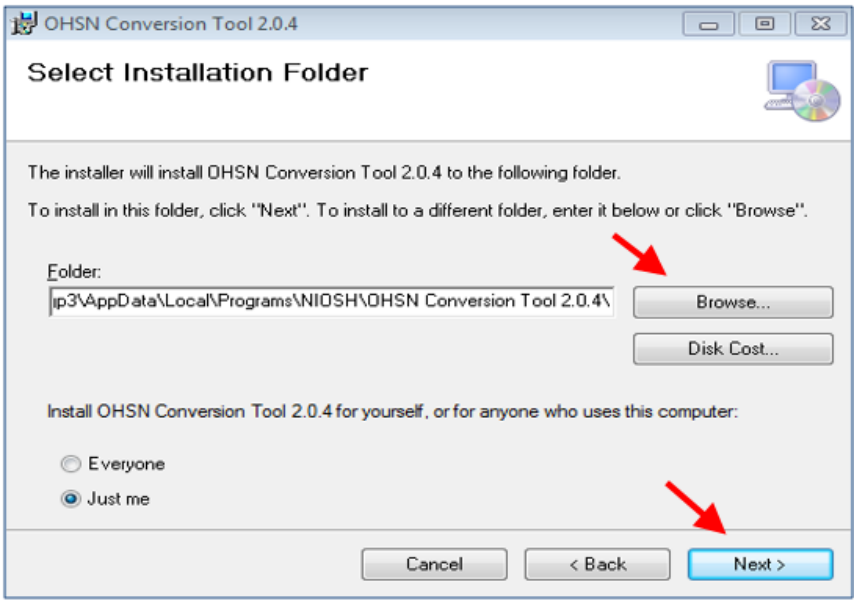
Name	Type	Compressed size	Password ...	Size	Ratio	Date modified
OHSN-2.0-ImportTemplate-AllFields	Microsoft Excel Macro-En...	43 KB	No	48 KB	11%	1/12/2016 12:08 PM
OHSN-2.0-ImportTemplate-Requir...	Microsoft Excel Macro-En...	49 KB	No	53 KB	9%	1/12/2016 12:06 PM
ReadMe	Microsoft Word 97 - 2003 ...	9 KB	No	31 KB	74%	4/15/2015 4:03 PM
setup	Application	193 KB	No	418 KB	54%	1/14/2016 7:31 AM
zpackage	Windows Installer Package	932 KB	No	1,269 KB	27%	1/14/2016 9:33 AM

Next, the **OHSN Conversion Tool Setup Wizard** will appear. Click the **Next** button to continue.

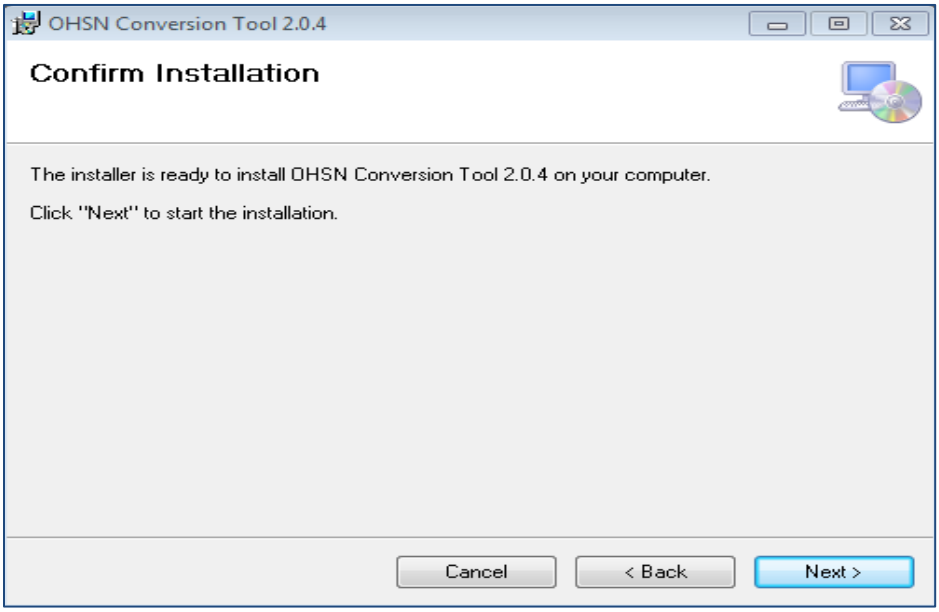


Read the license agreement and click the **I Agree** button then the **Next** button to continue.

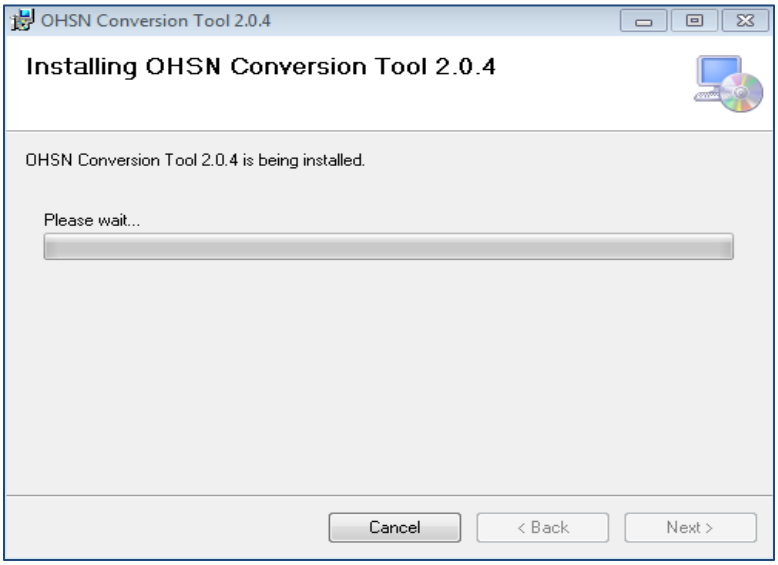
Select the Installation Folder where you wish to store the OHSN Conversion Tool using the **Browse** button, then click the **Next** button to continue.



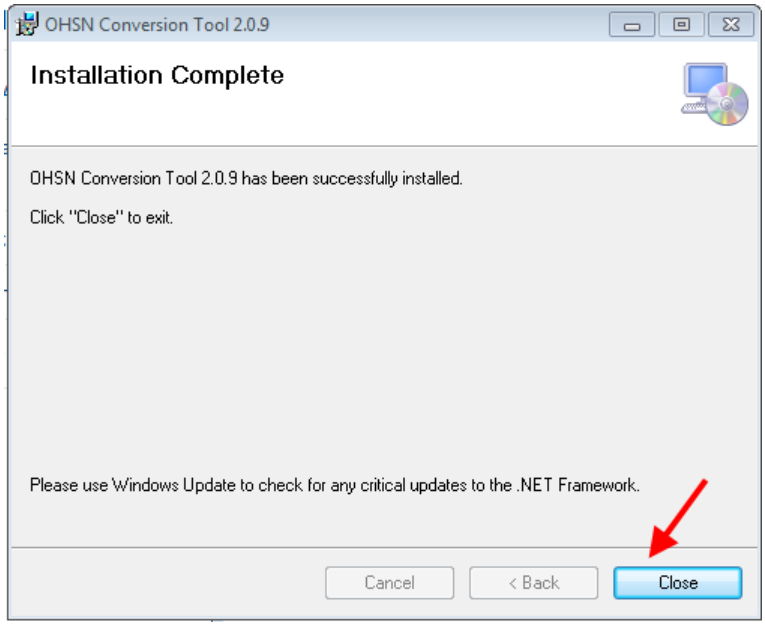
Click the **Next** button on the next screen to confirm the installation of the tool.



The next screen will notify you that the OHSN Conversion Tool is being installed.



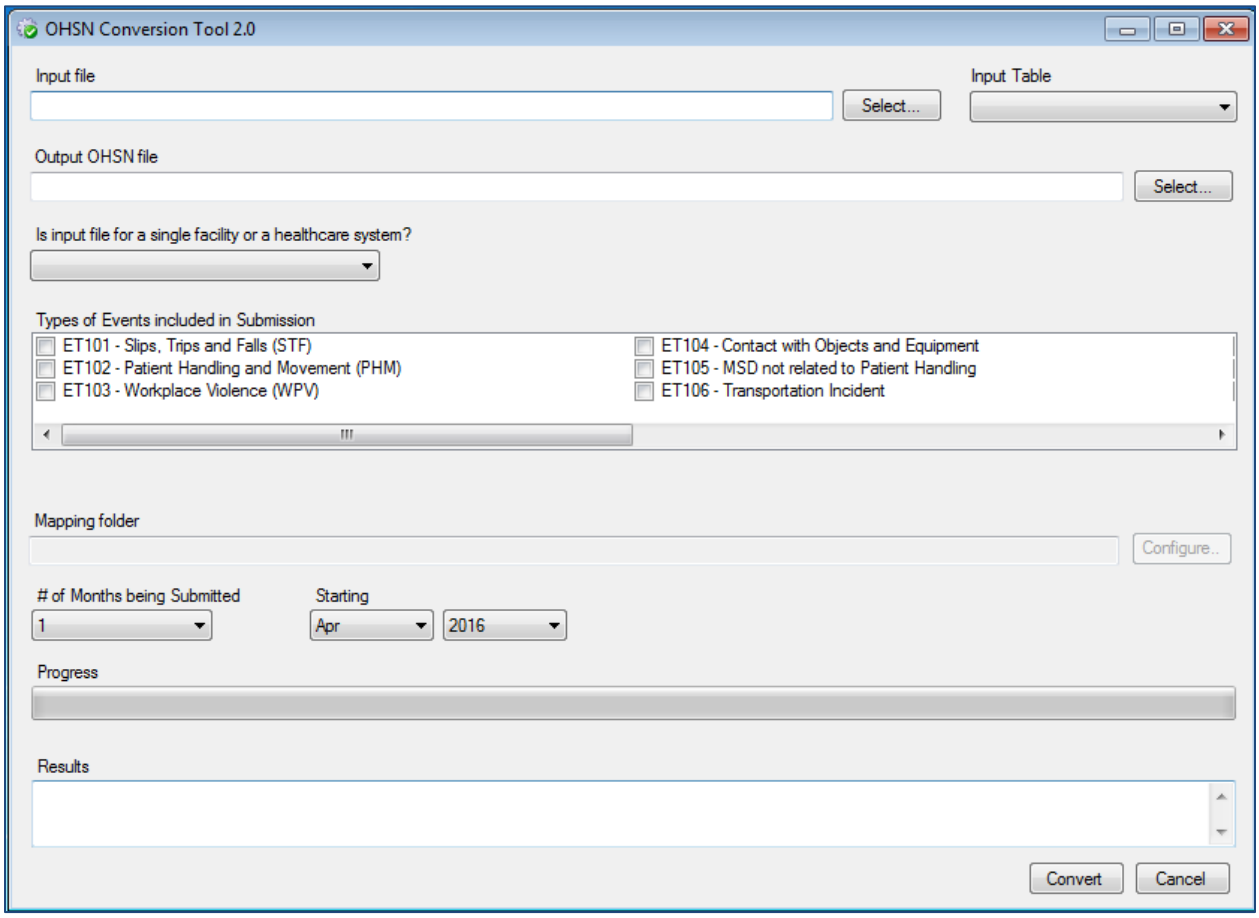
After a successful installation of the OHSN Conversion Tool, you should see the screen shown below and you can then click the **Close** button.



You can then open the OHSN Conversion Tool by navigating to the location you installed it, and click on “OHSN Conversion Tool”.

8.3.2 OHSN Conversion Tool Screen

When you open the OHSN Conversion Tool, a screen will appear as shown below. Each field of the OHSN Conversion Tool is described in the table following the screen image.



OHSN Conversion Tool Screen

Screen Item	Description
Input file	Use the **Select** button next to this field to select an input spreadsheet file from a dialog box or enter the full path and filename of the file to be converted to OHSN standard XML file.
Input Table	This is the name of the Excel File Sheet where the data resides. If the Excel file contains more than one sheet (tab) then the user will need to select which sheet to use as input.

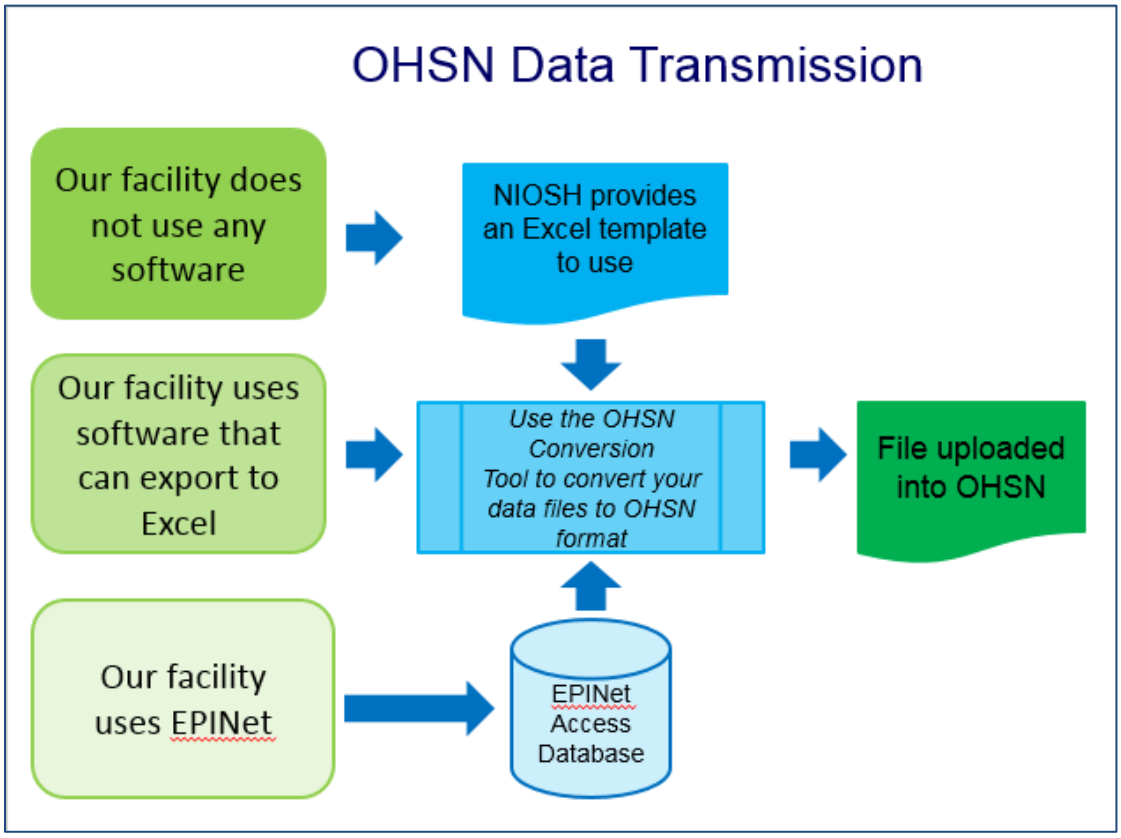
Screen Item	Description
Output OHSN file	This is the location where the converted file will be stored for use in uploading to OHSN. Use the **Select** button next to this field to select an existing file (if already created) from a dialog box or enter the full path and filename for the OHSN XML file to be created**.** ***The Tool will automatically suggest that the output file go in the same folder as the Input spreadsheet file, and add the word OHSN_ to the name: "OHSN_name of input file." Click Select to agree, or change as desired.***
Is input file for a Single Facility or a healthcare system?	Select from the drop down whether you are converting data for a single facility or for a healthcare system with multiple facilities.
OHSN Facility ID	Enter your facility ID. Your facility ID is included in the email you received from NIOSH with instructions to log on to the system the first time. This ID is usually your AHA ID. **Not used if file contains multiple facility's data (Healthcare system).**
Name of Facility	Enter the name of your facility. **Not used if file contains multiple facility's data (Healthcare system).**
Types of Events Included in Submission	Select the event type(s) included in this file submission. You can select more than one.
Mapping Folder	Folder where the mapping information will be stored. **NOT used for NIOSH provided Excel spreadsheets.**
# of Months being Submitted	Select from the drop down the number of months of data included in this file submission.
Starting	Select from the drop down the starting month of the data included in this file submission. Select from the drop-down the year of the starting month.
Progress	Bar that will show the progress of the conversion process once started.
Results	Displays messages about the results of the data conversion.

Screen Item	Description
Configure	Click this button to create or edit a map that converts facility-specific data to standard OHSN data elements and values. **NOT used for NIOSH provided Excel spreadsheets.**
Convert	Click this button to begin the conversion process to create the OHSN XML file.
Cancel	Click this button to cancel a conversion process.

9 PREPARING DATA FOR UPLOADING TO OHSN

Data uploaded to OHSN must be in the standard OHSN XML file format. The OHSN Conversion Tool will provide users the ability to convert their data to this standard format (see Section 8).

The steps for conversion depend on how the data is collected by the facility.

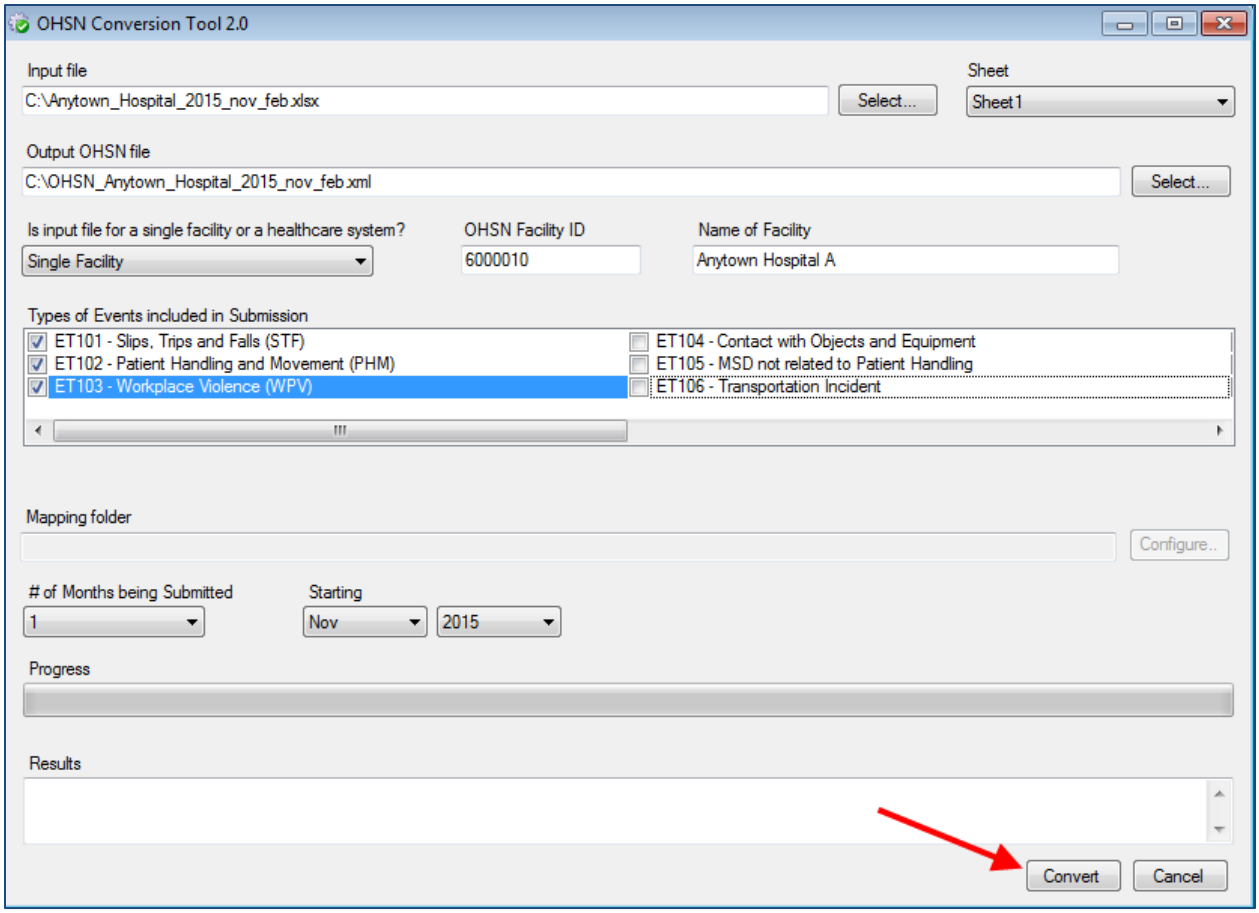


9.1 Converting Data Collected using a NIOSH Provided Excel Spreadsheet

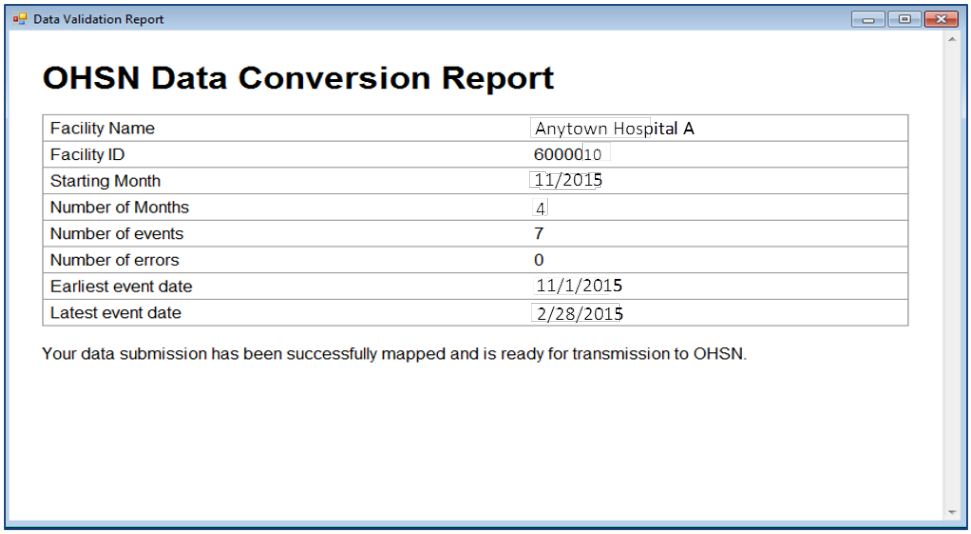
Facilities that chose to use one of the NIOSH developed Excel files to enter their facility event data can use the OHSN Conversion Tool to validate and convert their data to prepare for uploading to OHSN.

Data mapping is not required if using the NIOSH developed Excel files because the files already contain the standard OHSN data element values. NOTE: There will be no entry in the **Mapping folder** field on the conversion tool screen.

Open the OHSN Conversion Tool, enter all the required information (see Section 8.3.2), and then click the **Convert** button at the bottom of the screen.


OHSN Conversion Tool 2.0
Input file
C:\Anytown_Hospital_2015_nov_feb.xlsx
Select...
Sheet
Sheet1
Output OHSN file
C:\OHSN_Anytown_Hospital_2015_nov_feb.xml
Select...
Is input file for a single facility or a healthcare system?
Single Facility
OHSN Facility ID
6000010
Name of Facility
Anytown Hospital A
Types of Events included in Submission
ET101 - Slips, Trips and Falls (STF)
ET102 - Patient Handling and Movement (PHM)
ET103 - Workplace Violence (WPV)
ET104 - Contact with Objects and Equipment
ET105 - MSD not related to Patient Handling
ET106 - Transportation Incident
Mapping folder
Configure..
# of Months being Submitted
1
Starting
Nov
2015
Progress
Results
Convert
Cancel

If no errors are found, the following screen will appear:



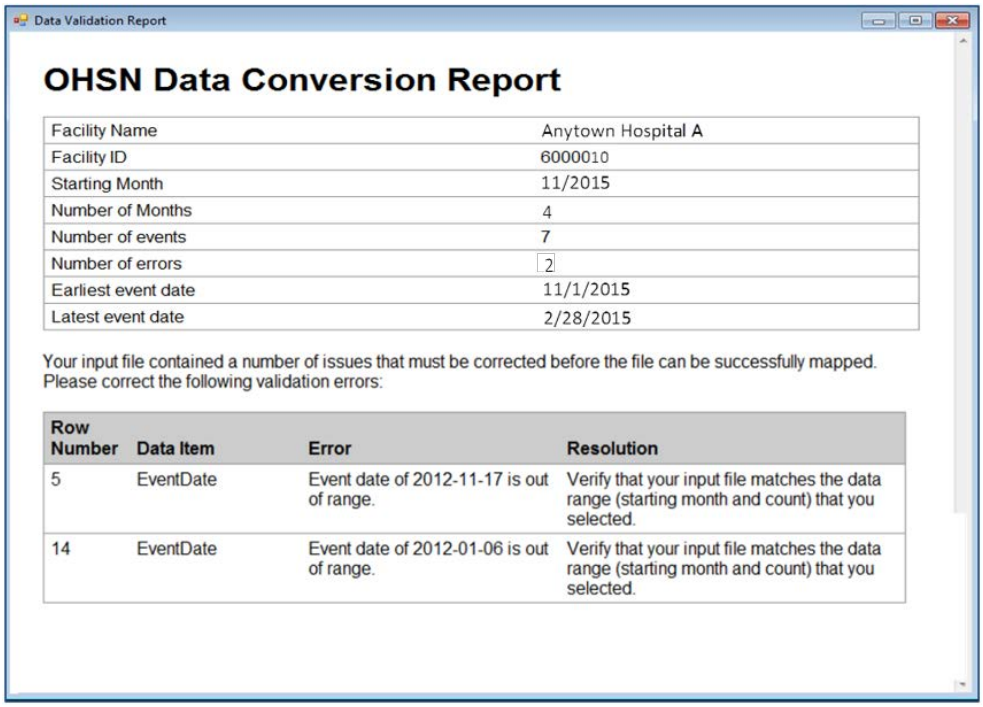
Data Validation Report

OHSN Data Conversion Report

Facility Name	Anytown Hospital A
Facility ID	6000010
Starting Month	11/2015
Number of Months	4
Number of events	7
Number of errors	0
Earliest event date	11/1/2015
Latest event date	2/28/2015

Your data submission has been successfully mapped and is ready for transmission to OHSN.

If errors are found in the data, the conversion tool will display a screen similar to the one below. Records with errors will be identified by row number so that you can make corrections in the input spreadsheet. Once the corrections are made, you can run the conversion tool again to validate and create the needed OHSN file format for uploading.



Data Validation Report

OHSN Data Conversion Report

Facility Name	Anytown Hospital A
Facility ID	6000010
Starting Month	11/2015
Number of Months	4
Number of events	7
Number of errors	2
Earliest event date	11/1/2015
Latest event date	2/28/2015

Your input file contained a number of issues that must be corrected before the file can be successfully mapped. Please correct the following validation errors:

Row Number	Data Item	Error	Resolution
5	EventDate	Event date of 2012-11-17 is out of range.	Verify that your input file matches the data range (starting month and count) that you selected.
14	EventDate	Event date of 2012-01-06 is out of range.	Verify that your input file matches the data range (starting month and count) that you selected.

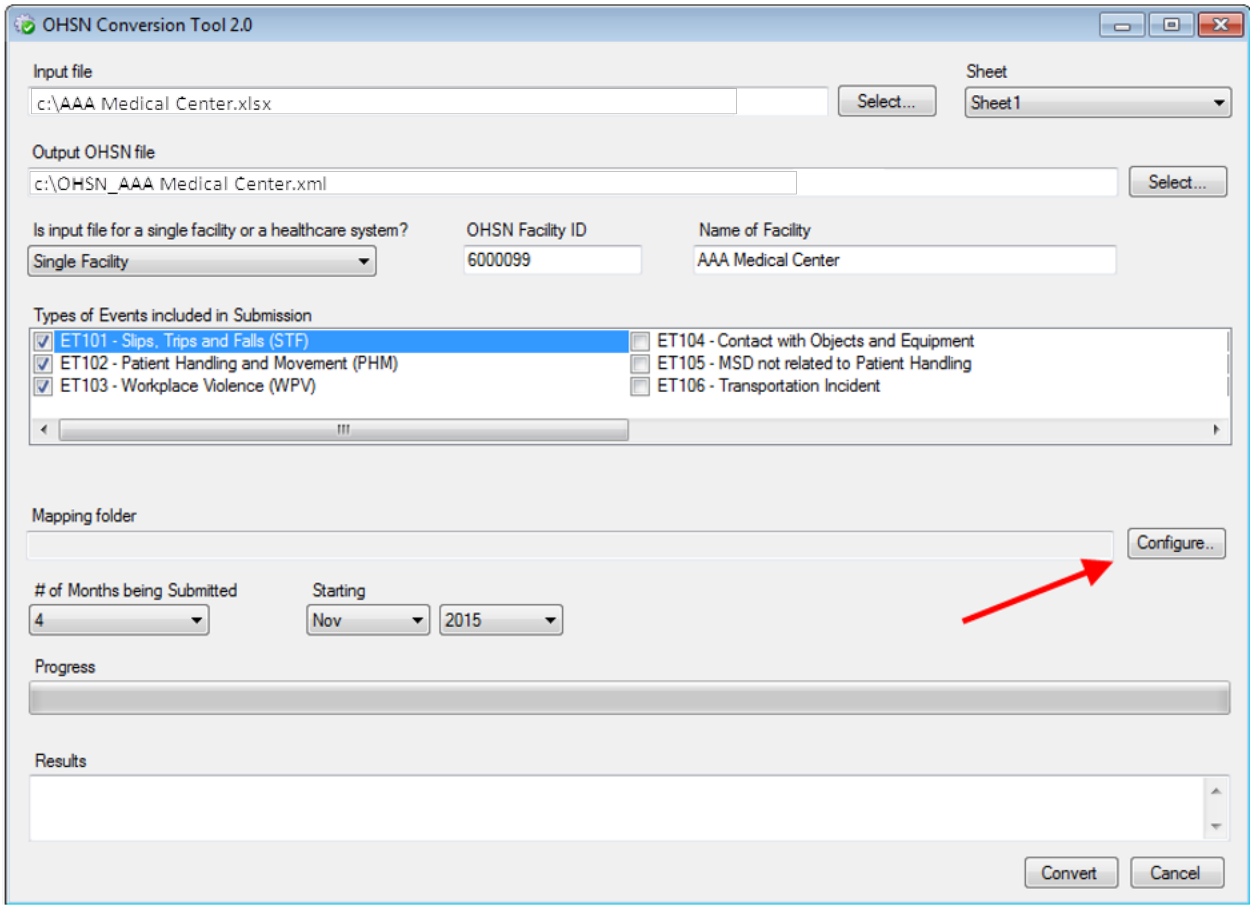
9.2 Converting Data from Facility Specific Software

Facilities that use their own software or commercially developed software to collect data can export their data to Excel then use the OHSN Conversion tool to map facility data to OHSN standard data elements and values.

The OHSN Conversion Tool creates the crosswalk between the facility's data and the standard OHSN data requirements. **The map creation only needs to be done once** because the results are stored and can be used again for the next month's data submission. If values change in the facility's data, the map can be updated as needed.

Healthcare Systems can convert multiple facility data in one spreadsheet however the data must be grouped by facility ID.

Start by opening the OHSN Conversion Tool. Enter or select the information required by the tool (see Section 8.3.2), then click the **Configure Mapping** button to begin the mapping process.

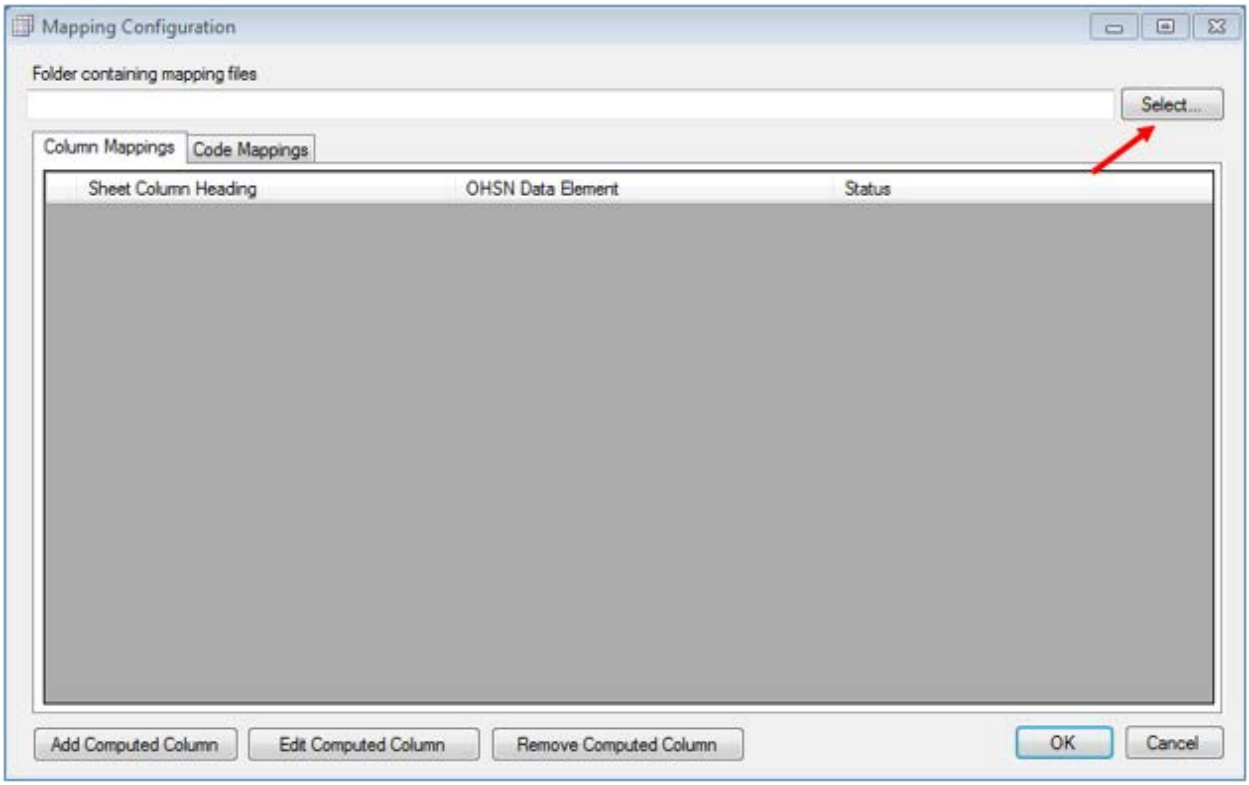


After clicking the **Configure** button, the following screen will appear requiring you to select the folder that stores the OHSN map to your data.

- If this is the first time converting your data you will need to select a new folder to store the OHSN maps of your data.

- If you have previously converted and submitted data to OHSN, then you will want to select the folder where the original OHSN maps of your data were stored.

Click the **Select** button to locate and create a folder.

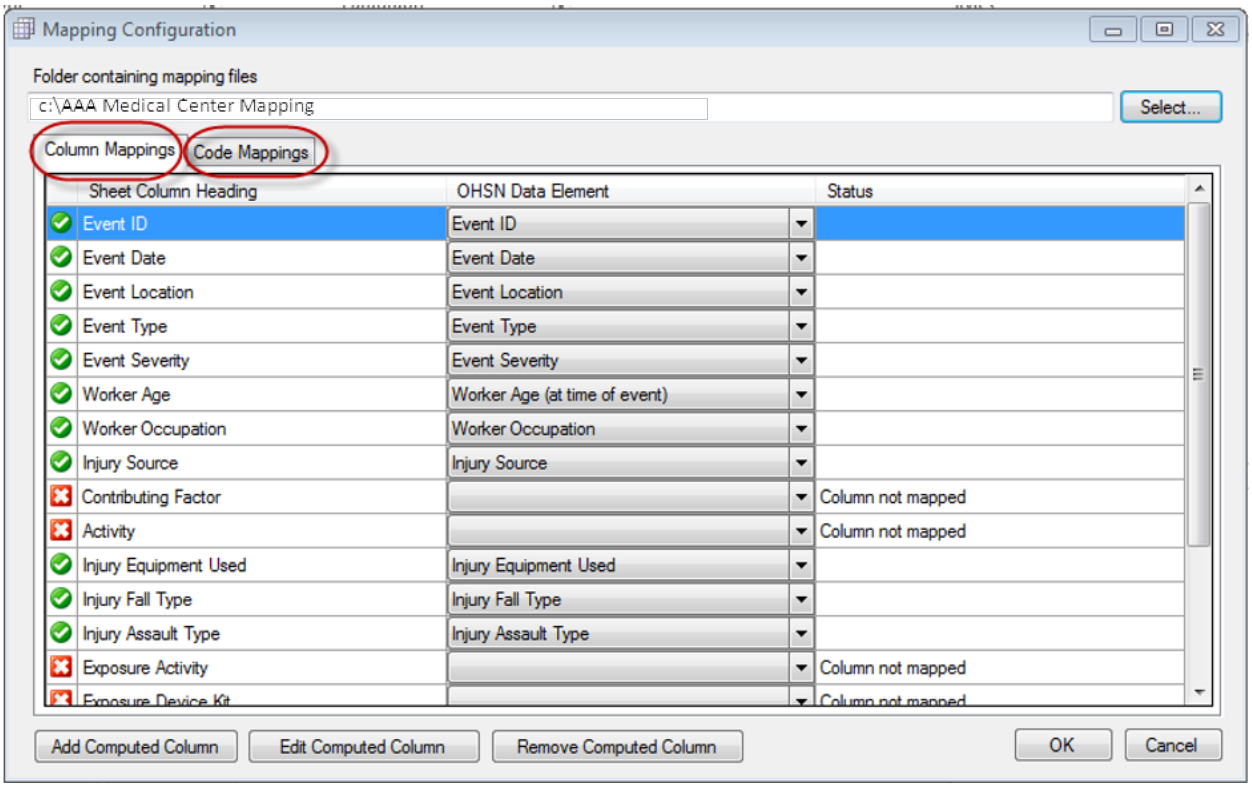


<u>IMPORTANT NOTE</u>: The mapping tool creates a CSV file for each data element. Each facility should only have one set of mapping files. If more than one user in the facility or system will be maintaining the mapping files, the Output OHSN file location selected should be on a shared network drive.

Once you select a folder to store the map, the tool will automatically attempt to map as many of the data elements and values as possible and provide you with a new **Mapping Configuration** screen to complete the process.

The **Mapping Configuration** screen has two tabs:

1. **Column Mappings** – used to identify which fields (data elements) from the input spreadsheet (facility data) should correspond to OHSN data elements.
2. **Code Mappings** – used to convert values for each field in the input spreadsheet to standard OHSN values for each OHSN data element.



9.2.1 Column Mappings

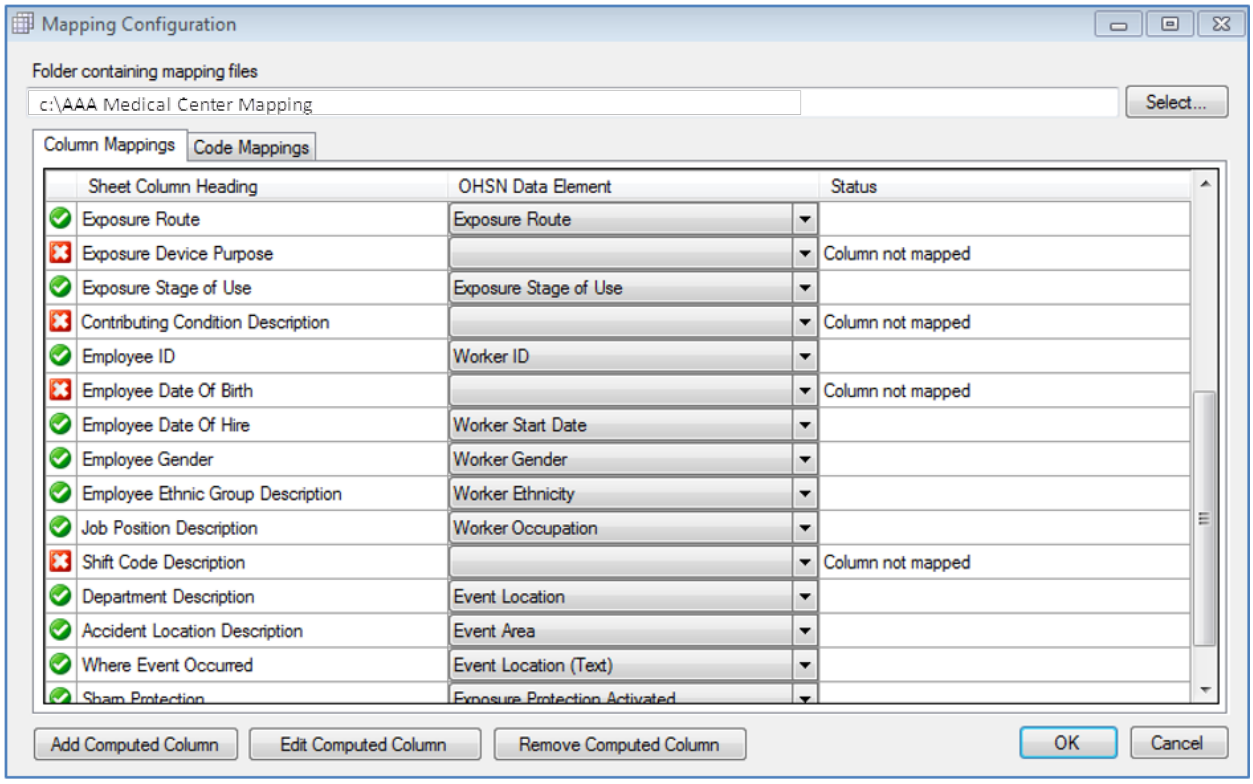
Columns must be mapped first. There are three columns on the Column Mapping Screen:

- **Sheet Column Heading**: These are the column headings pulled directly from <u>your</u> facility Excel worksheet. Column headings for your facility must be located in the first row of your worksheet.

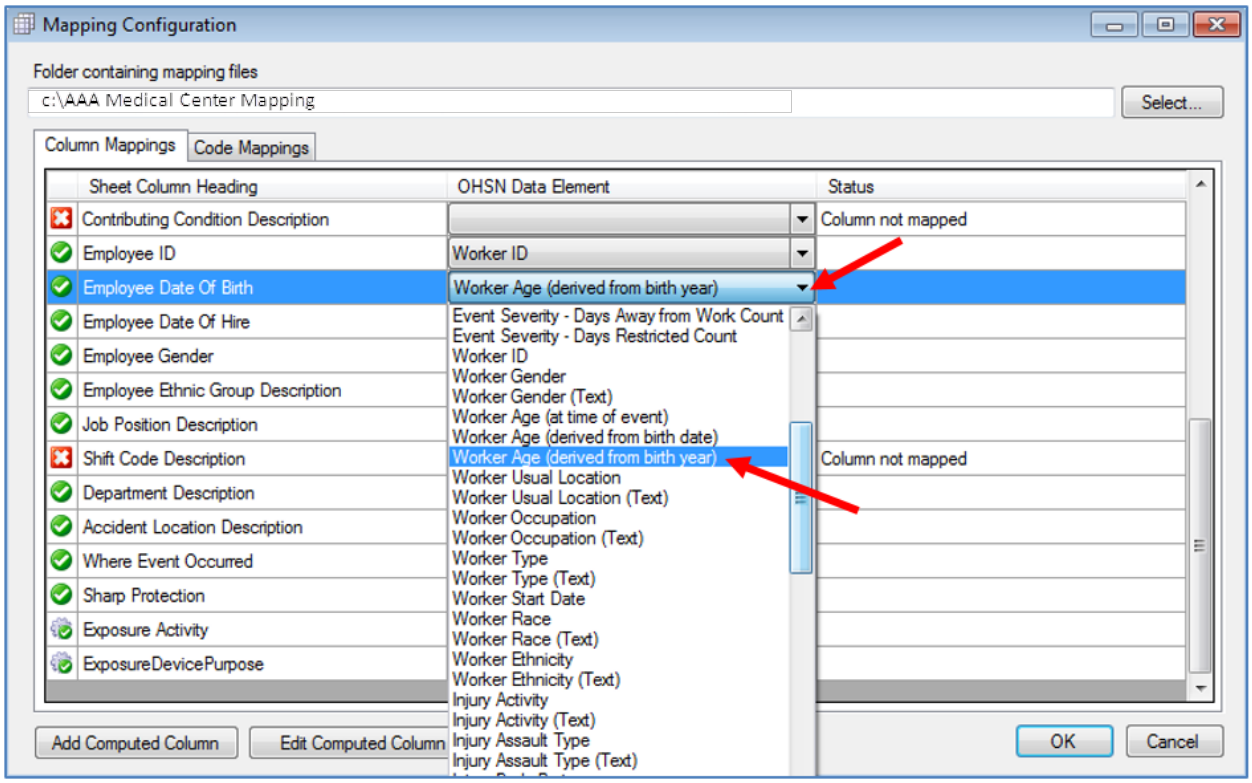
- **OHSN Data Element**: Drop-down menus with OHSN Standard Data Elements to choose from.
- **Status**: Indicates if the column has not yet been mapped.

In the example below, the OHSN Conversion Tool was able to automatically map several fields from the input spreadsheet to the correct corresponding OHSN data elements, such as Event ID, Event Date, Event Location, Event Type, Worker Age, etc. These fields will have a green check mark in the **Sheet Column Heading** column on the Column Mappings tab. If any of these mappings are incorrect, you can change it with the drop-down menu in the OHSN Data Element column.

Columns in the input spreadsheet that did not map automatically will have a red mark next to the field name. You will need to manually map these fields.



To map input spreadsheet fields to standard OHSN data elements, click the down arrow in the **OHSN Data Element** column for the field to be mapped. A drop-down list will display showing all OHSN data elements. Click on the data element that most closely corresponds to the input data field as shown below.



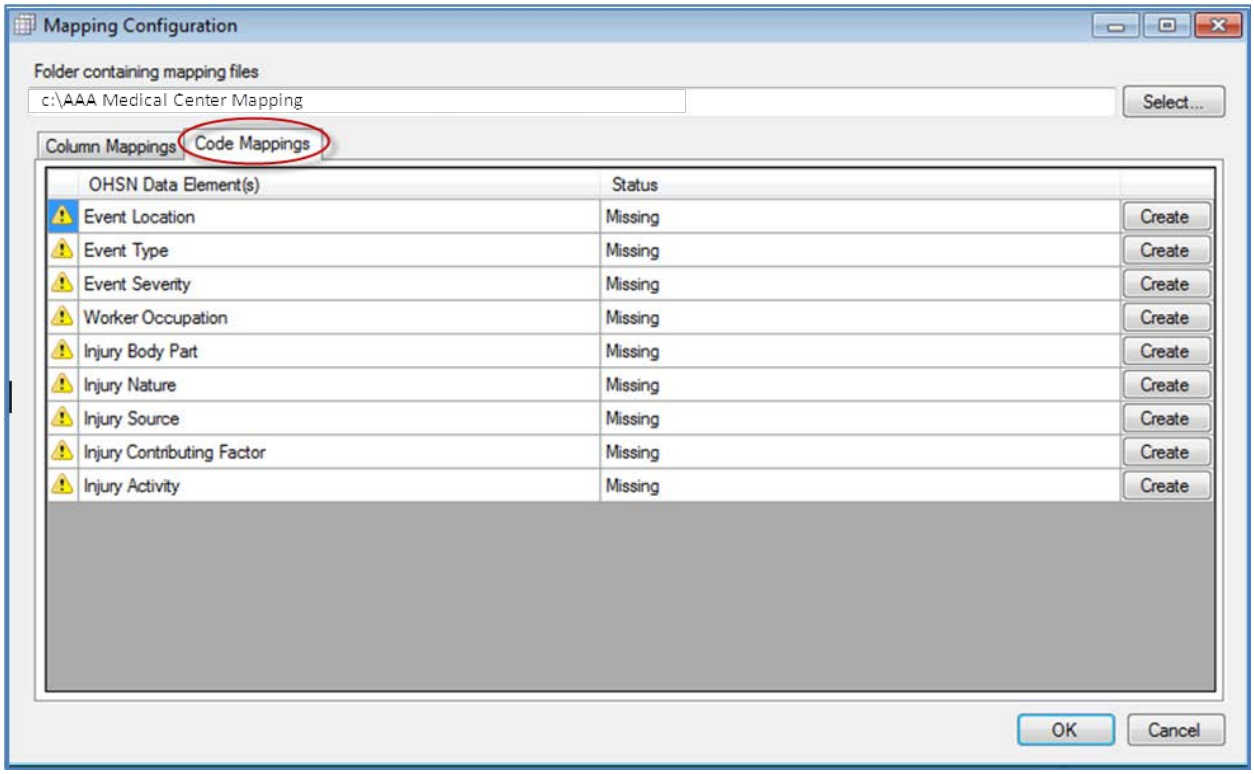
Once all input spreadsheet fields are mapped, click the **OK** button. It is possible that some fields on the input spreadsheet will not have a match to an OHSN data element. As long as all the required OHSN data elements have matched, then extra fields can simply remain with the red X next to them. You can also choose the option to **(ignore)** the field from the OHSN Data Elements drop-down menu.

Required OHSN data elements can be found in the in the OHSN Standard Occupational Data Architecture (SODA) document found at:
https://www.cdc.gov/niosh/topics/ohsn/documentation.html

See section 9.2.3 to learn how to add required OHSN data elements which are not included in the facility's input file.

9.2.2 Code Mappings

Next, each of the data element values from the input file will need to be mapped to OHSN standard data values. Click on the **Code Mappings** tab to begin mapping data element values.



There are three possible indicators for data element mappings on this screen:

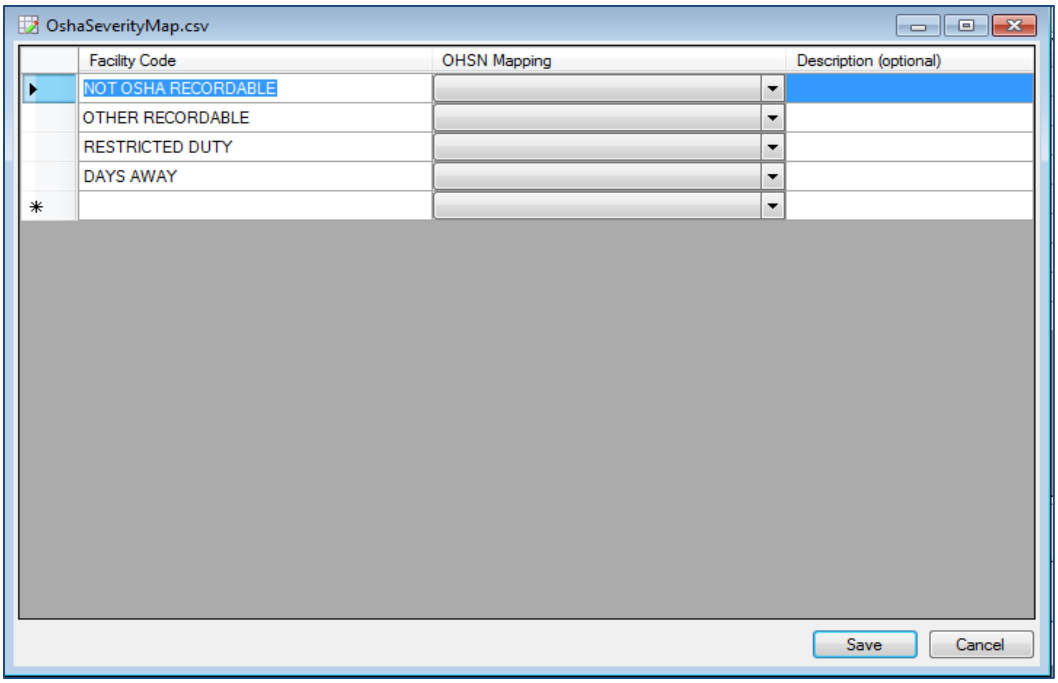
Indicates codes for the data element have not yet been mapped.

Indicates all codes for the data element have been mapped

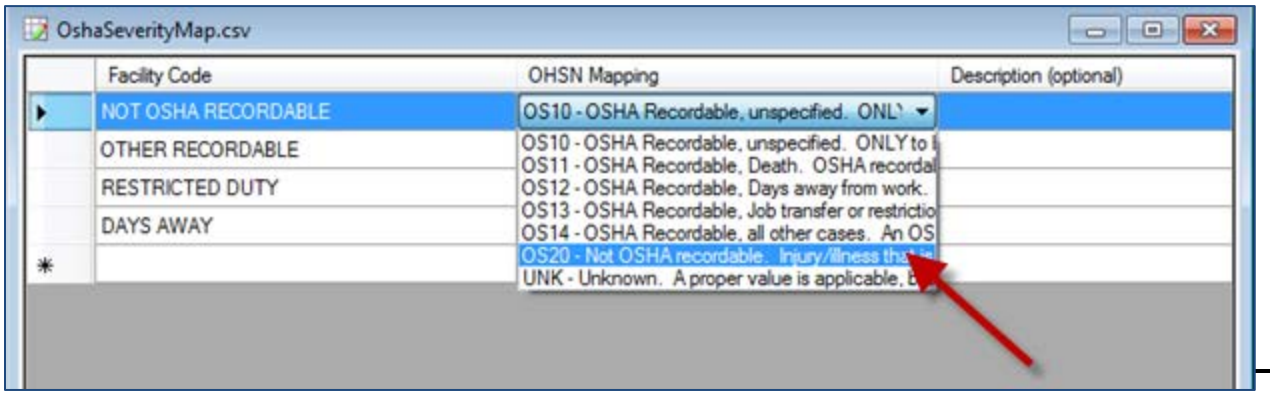
Indicates **<u>not</u>** all codes for the data element have been mapped.

Similar to the data element mapping, the input field values will need to be mapped to standard OHSN data element values. The OHSN Mapping Configuration screen for code mapping will display each OHSN data element that needs to be mapped.

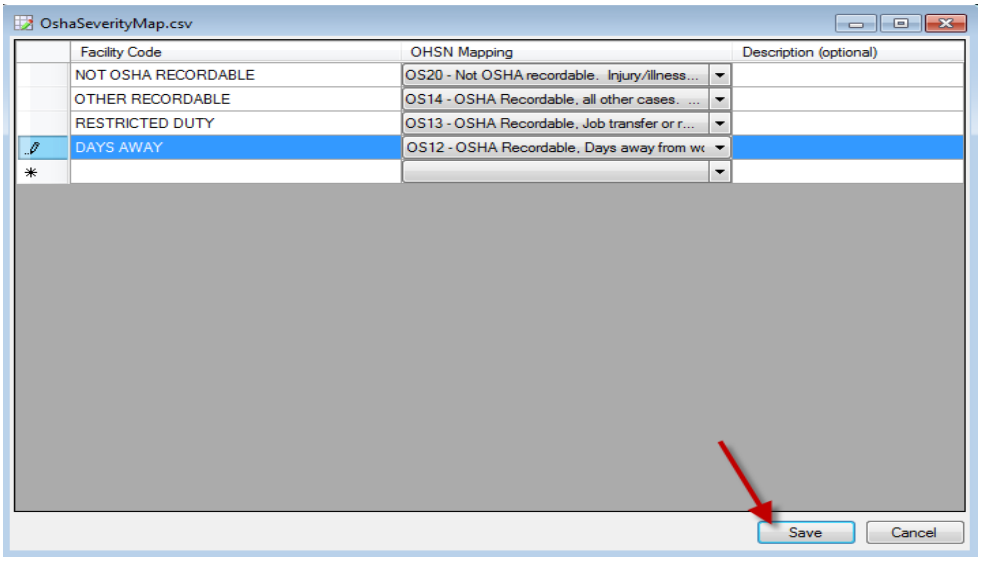
Click on a **Create** button for one of the data elements on the **Code Mappings** screen (see above) to begin the code mapping process. A screen will appear showing all the unique values for that data element from the input spreadsheet, as shown below for the Event Severity data element.



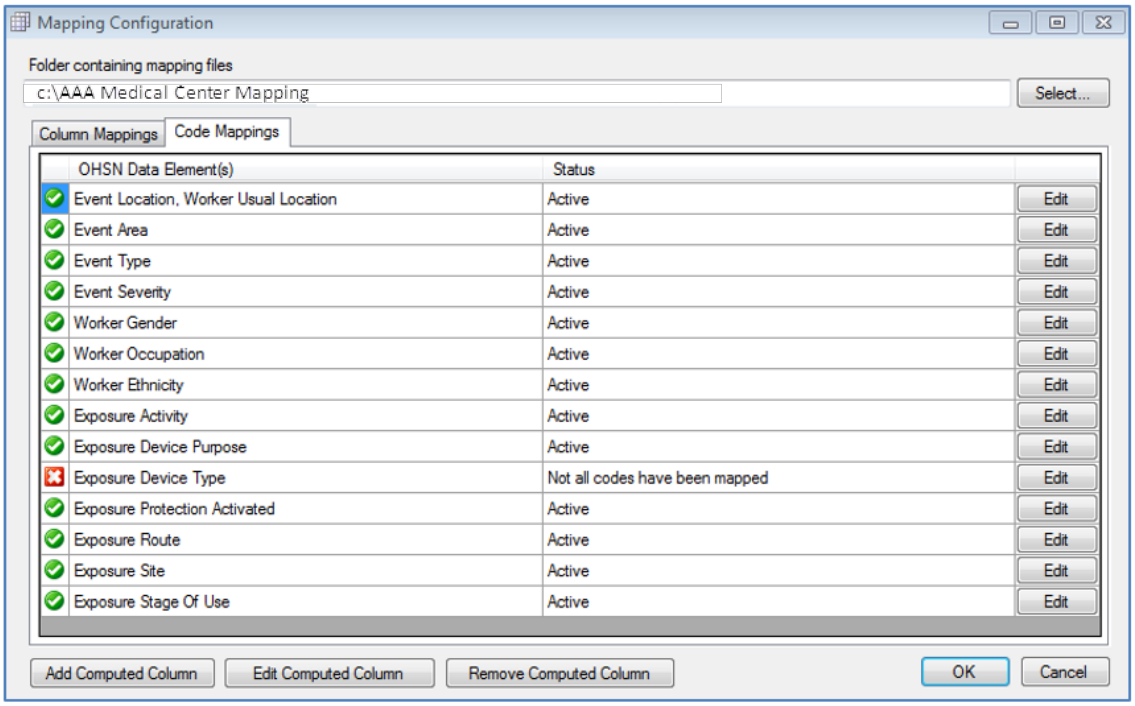
To assign (map) an OHSN value to each input value, click the down arrow in the OHSN Mapping column for each value and select the appropriate OHSN code. The example below shows that the OHSN value of **OS20 – Not OSHA recordable** was selected for the input value of 'NOT OSHA RECORDABLE.'



The example below shows the OHSN standard data value selections for each of the input facility codes for Event Severity. Once all codes for the data element are mapped, click the **SAVE** button.

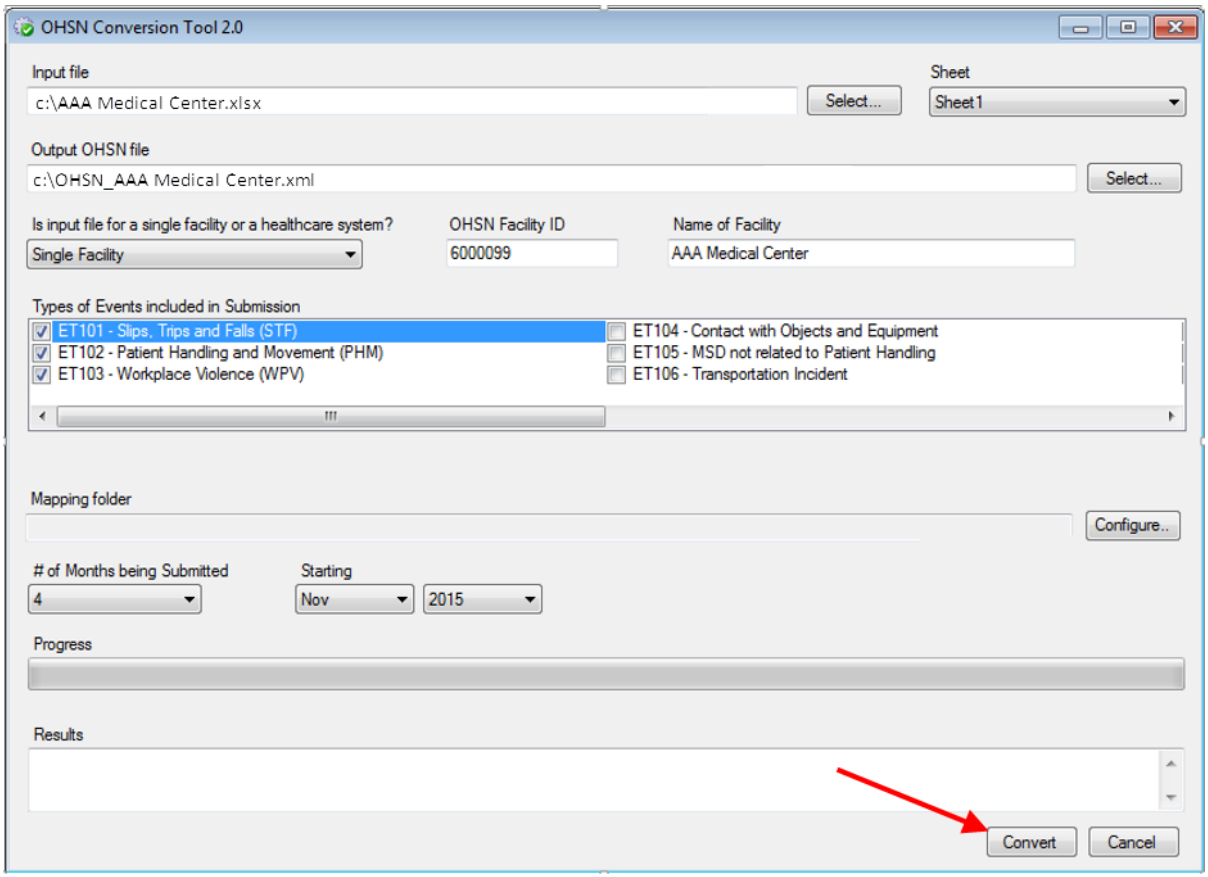


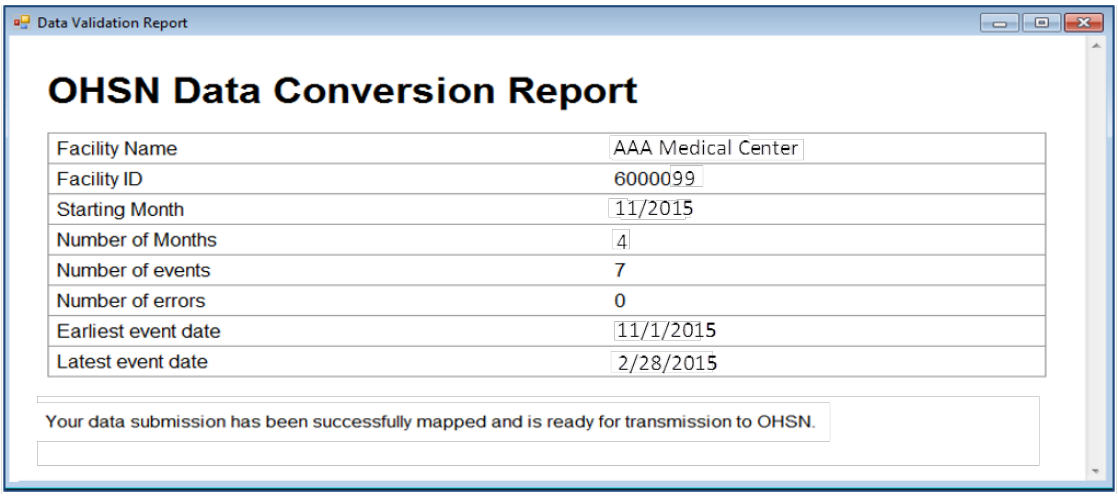
Continue with each data element to map their data values. As each data element is completed, a green check will appear next to it to indicate that a data value map has been created. Data element value maps can be edited as needed once created.



Once all data fields and field values have been mapped to the OHSN standard data element requirements, click **OK** to return to the OHSN Conversion Tool screen.

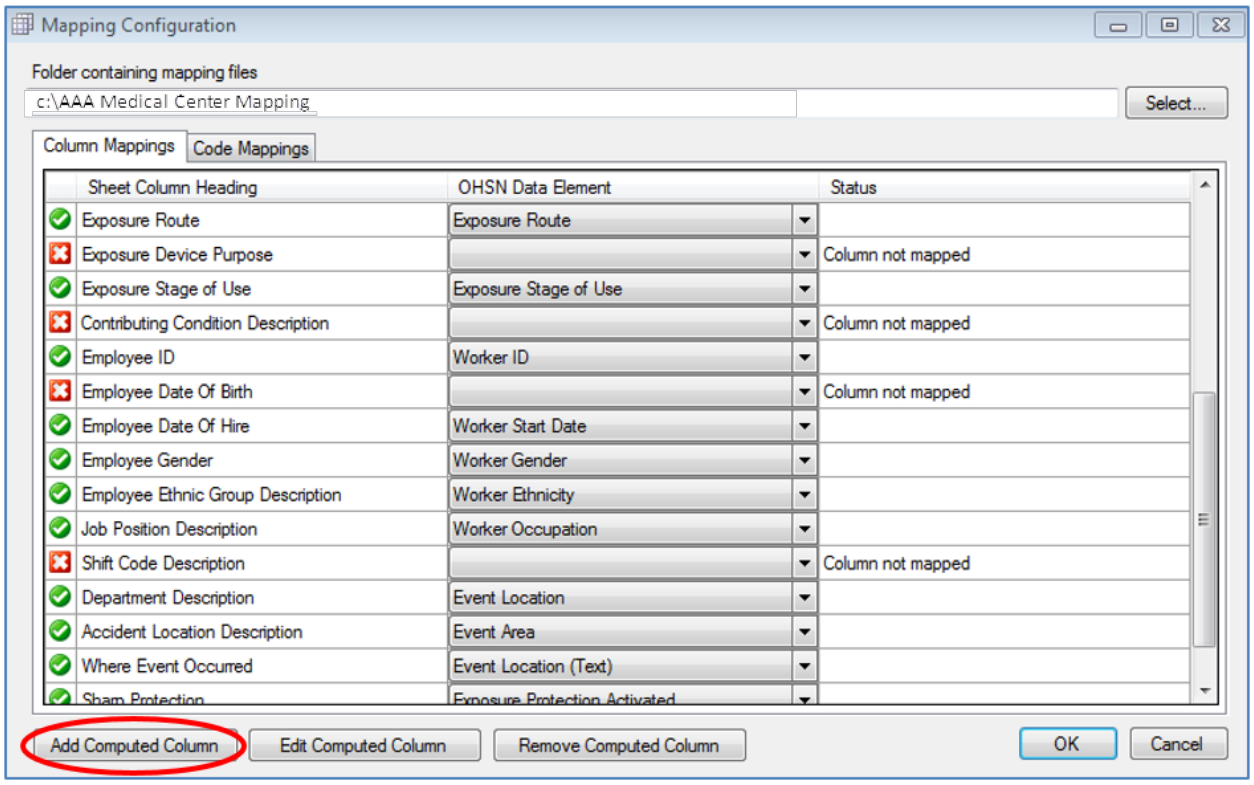
From the OHSN Conversion tool screen, click **Convert** to convert the input file to an OHSN file format (.xml) for uploading.



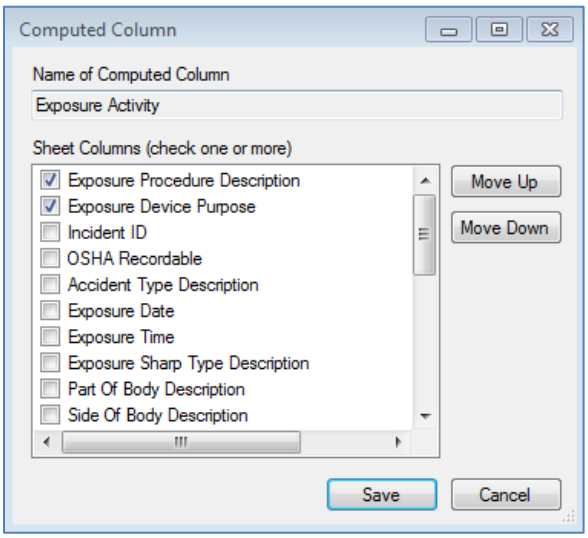


9.2.3 Adding Columns

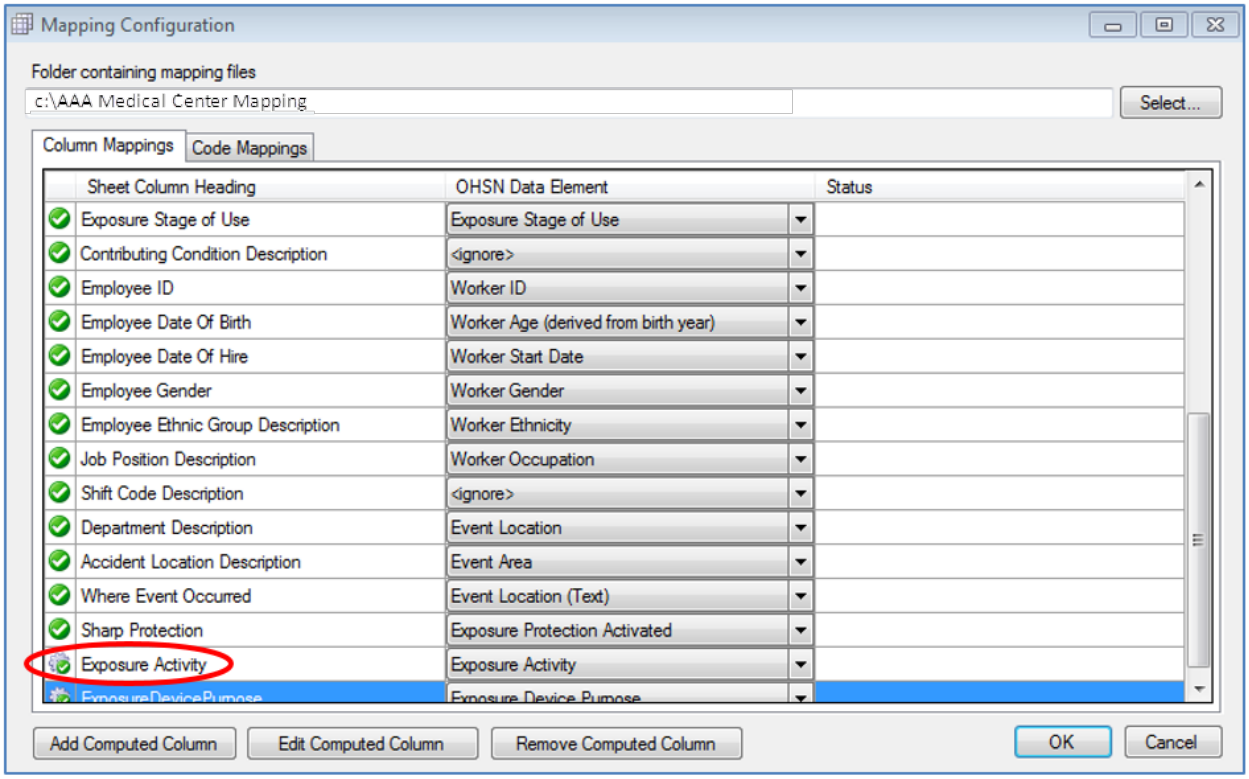
For required OHSN data elements that are not found in your input spreadsheet, you can add those data elements by clicking on the **Add Computed Column** button.



You will need to provide the name of the column by entering it into the **Name of Computed Column** field.



All computed columns that you create will appear towards the end of the Column Mappings tab and will show a green checked gear next to it in the **Sheet Column Heading** column.



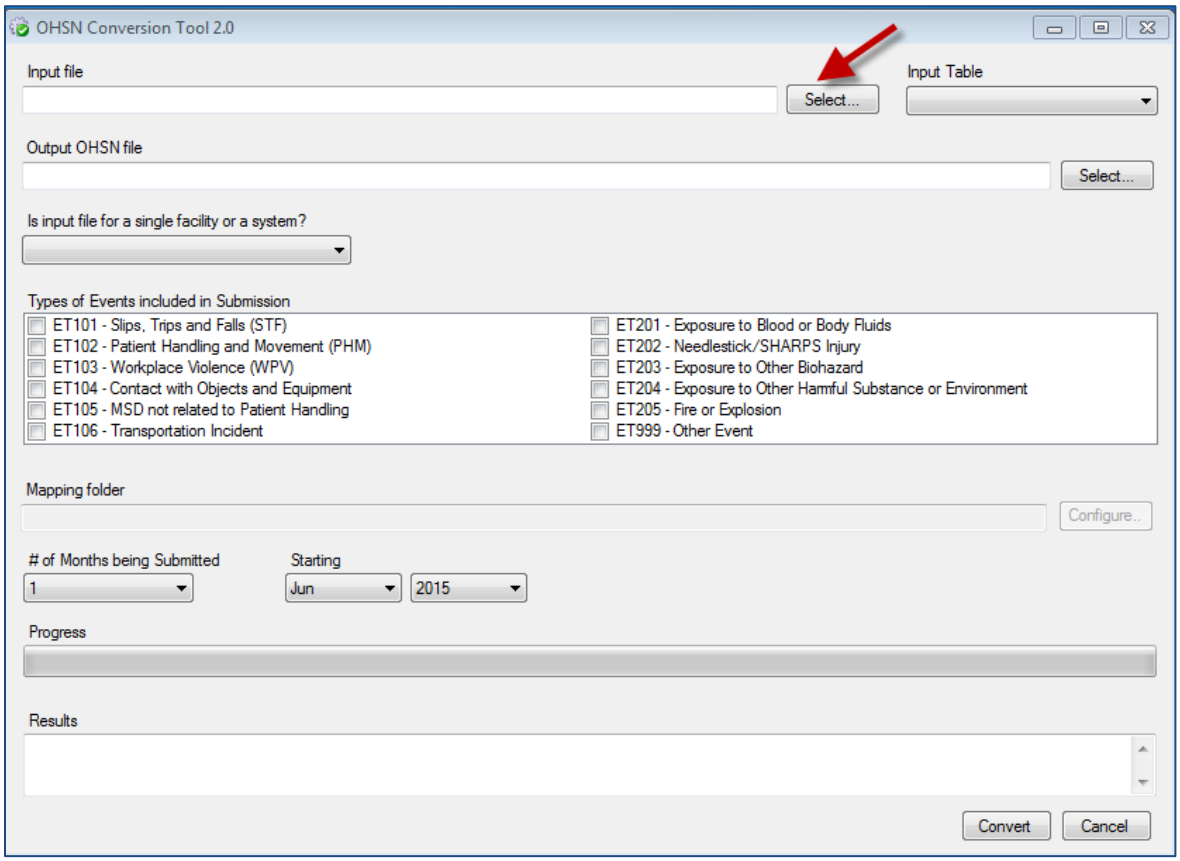
If you would like to re-select and/or re-order the Sheet Columns for your computed column, click on the **Edit Computed Column** button. If you would like to delete the computed column you created, click on the **Remove Computed Column** button.

9.3 Converting Data from EPINet Software

EPINet (Exposure Prevention information Network) is a sharps injury and blood exposure surveillance system that was developed at the University of Virginia using Microsoft Access software. EPINet software has been distributed to thousands of US hospitals over the past 15 years. The latest version of EPINet can be downloaded for free from the NIOSH OHSN website under the *Facility Tools* section at: http://www.cdc.gov/niosh/topics/ohsn/documentation.html

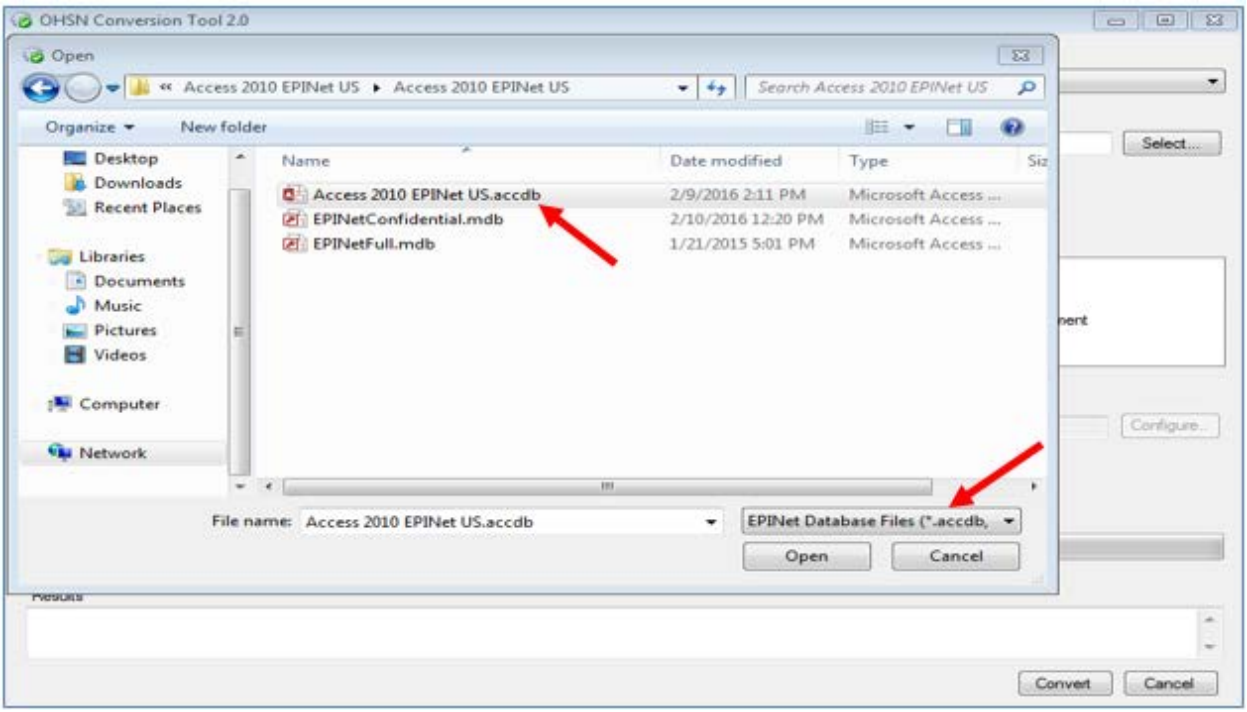
Facilities that are using EPINet software can use the OHSN Conversion Tool to map their data fields and values to the standard OHSN fields and values. The results of the mapping process are stored so that they can be used again for the next month's data submission. In essence, the tool creates the crosswalk between the facility's data and the standard OHSN data requirements. The map needs to be created only once and can be updated if values change in the facility's data.

Select the EPINet file to be converted by clicking the Select button next to the Input file box at the top of the screen.

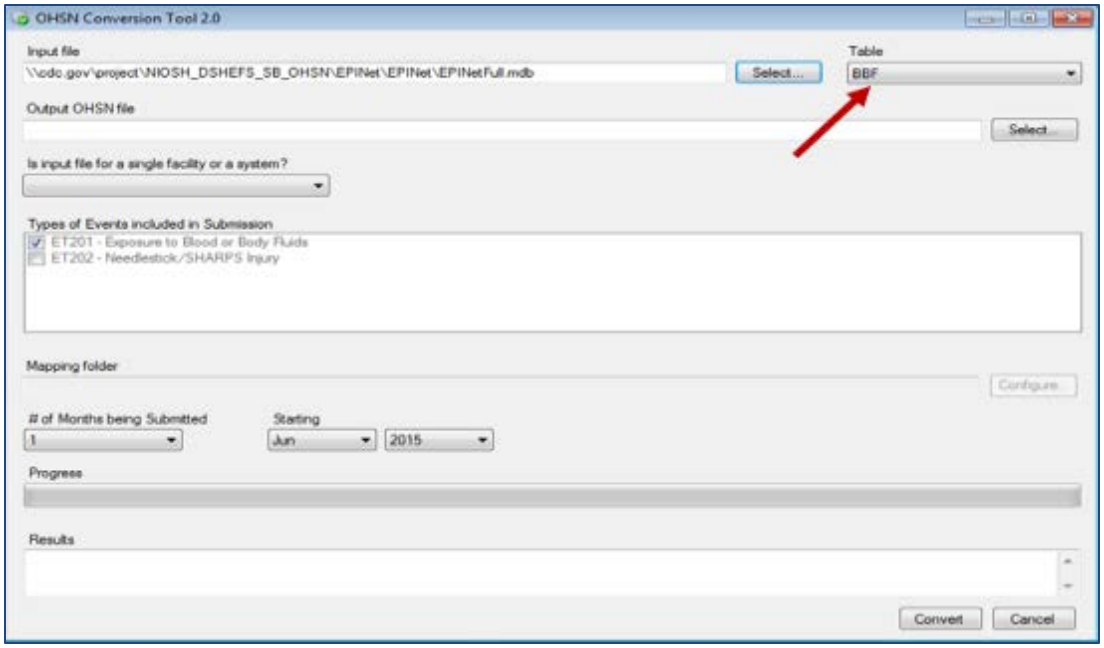


Select the Microsoft Access file containing your EPINet data. It is not necessary to export your data outside of EPINet. If the files have already been exported, please do not select the export .mdb files.

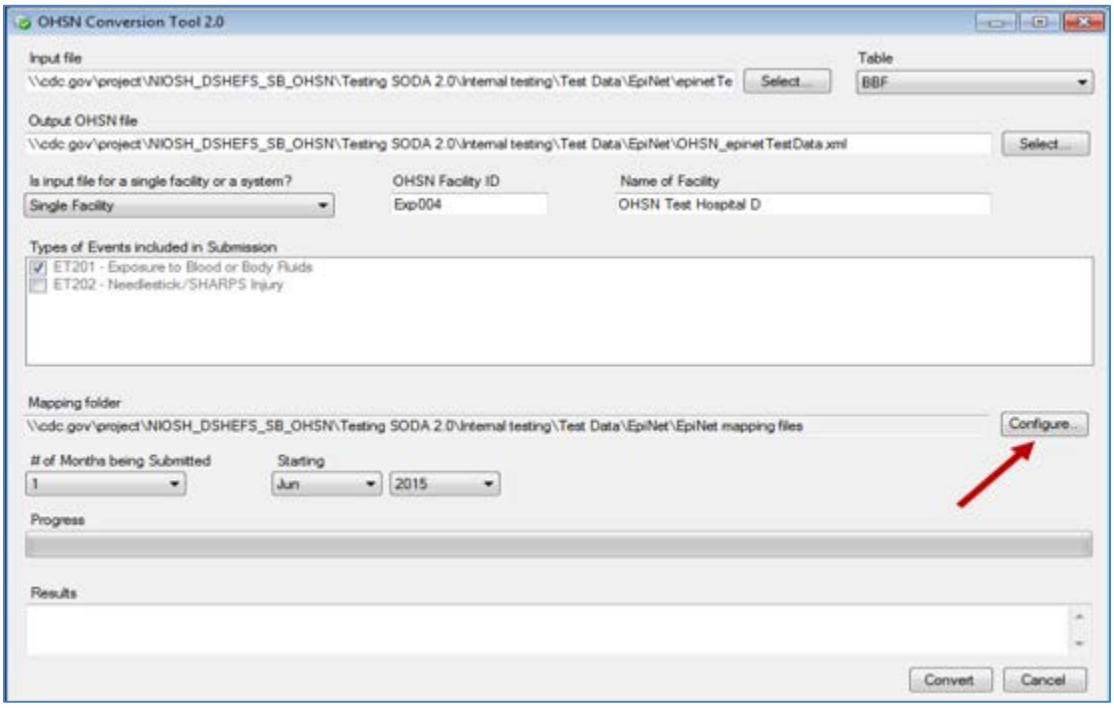
Select **EPINet Database Files** as your input file format.



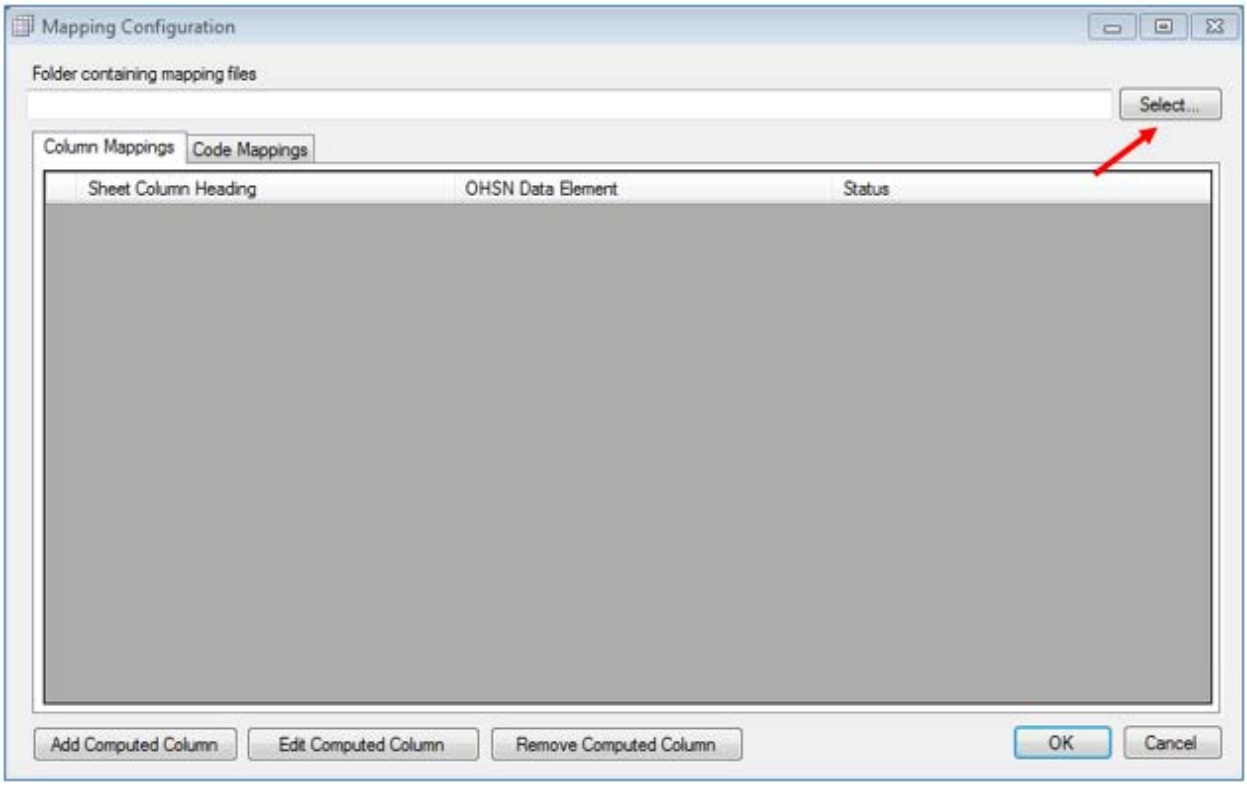
Data for Blood and Body Fluids (BBF) and Sharps/Needlesticks will need to be converted separately. In the example below, the BBF data is being converted first. **NOTE**: Repeat these conversion steps when ready to convert the Sharps/Needlesticks data but select **Needlestick** from the **Table** dropdown.



Click on the **Configure** button to open the Mapping Configuration window.



Click the **Select** button at the top of the Mapping Configuration screen to identify a folder to store the mapping information.

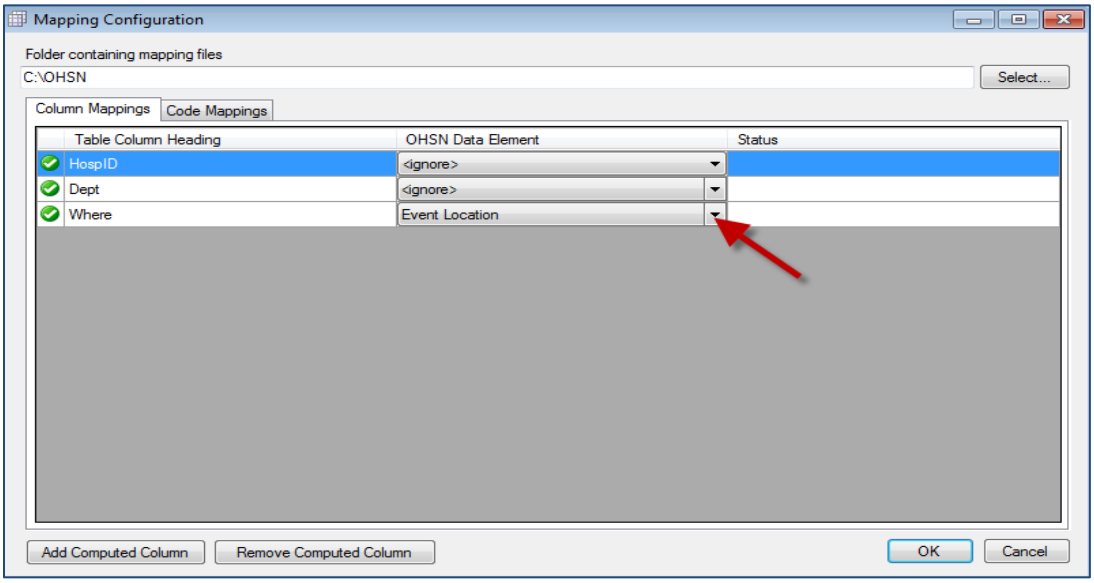


Once the mapping files folder is selected, three EPINet data items (Columns) will need to be mapped to OHSN data elements.

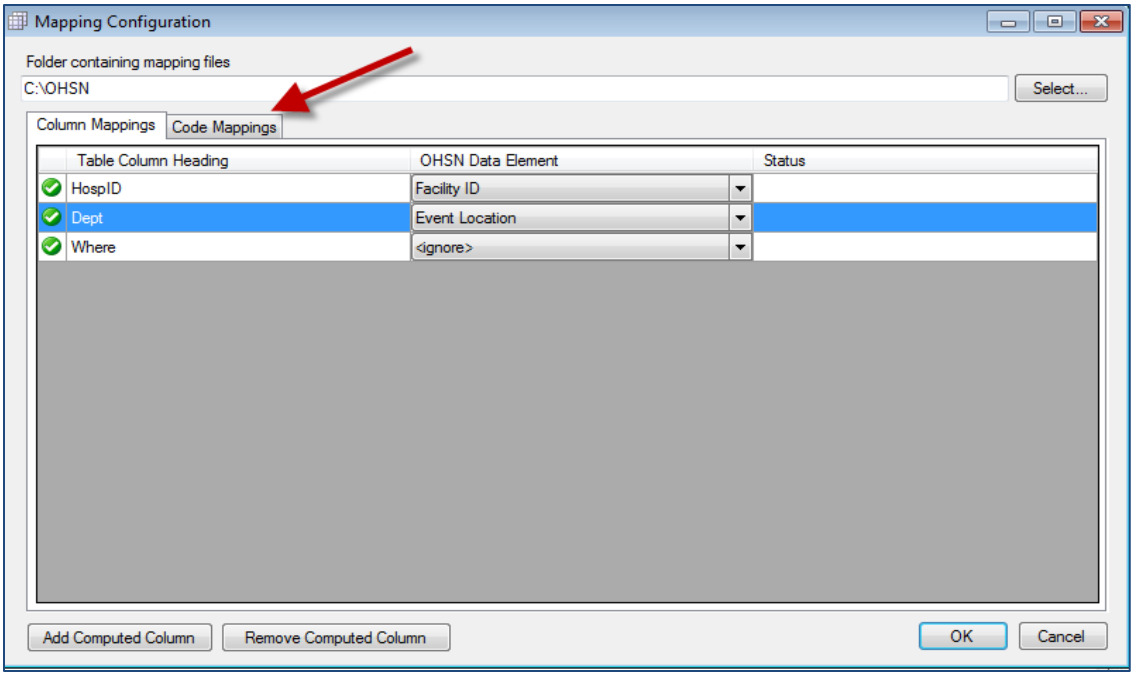
EPINet Data Item (Column)	**Map to OHSN Data Element**	**Notes**
HospID	Facility ID	Systems using non-OHSN/AHA IDs will need to map the system/facility unique IDs to OHSN/AHA IDs
Dept	Event Location or <ignore>	Choose to map either **Dept** or **Where** to Event Location. The other should be mapped to <ignore>. If Dept is mapped to Event Location, then the values in Dept will need to be mapped to OHSN Event Location values.

EPINet Data Item (Column)	Map to OHSN Data Element	Notes
Where	Event Location or <ignore>	

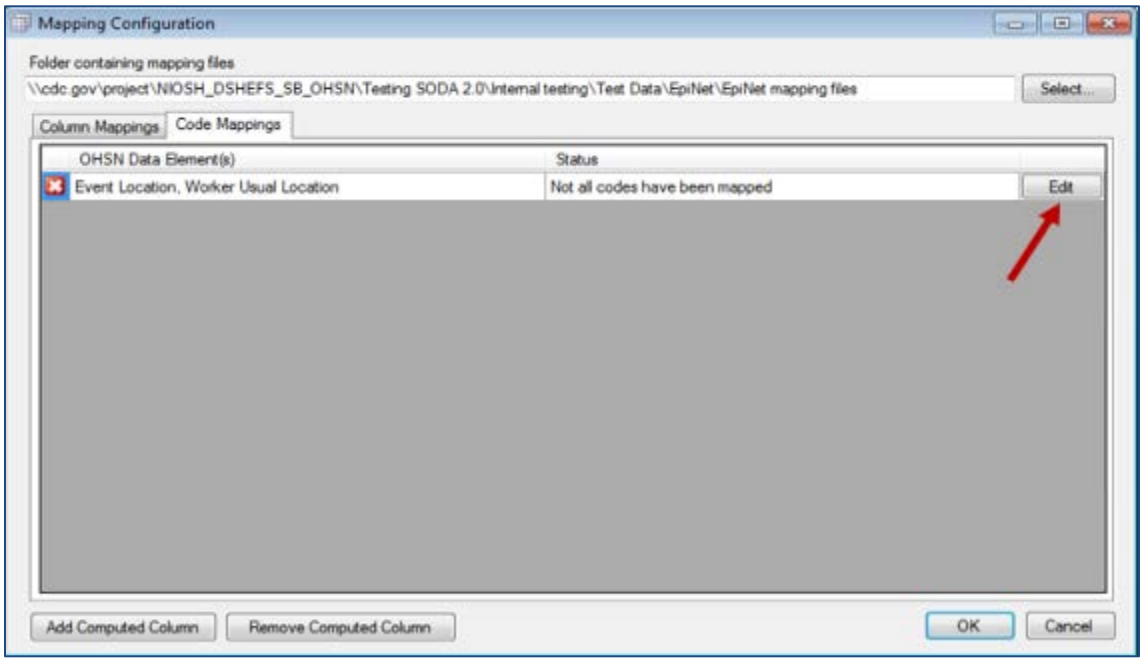
Click the down arrow on the OHSN Data Element column to map an EPINet column to an OHSN data element. After a column is mapped a green check mark should appear next to column heading. All three columns must have a green check before continuing.



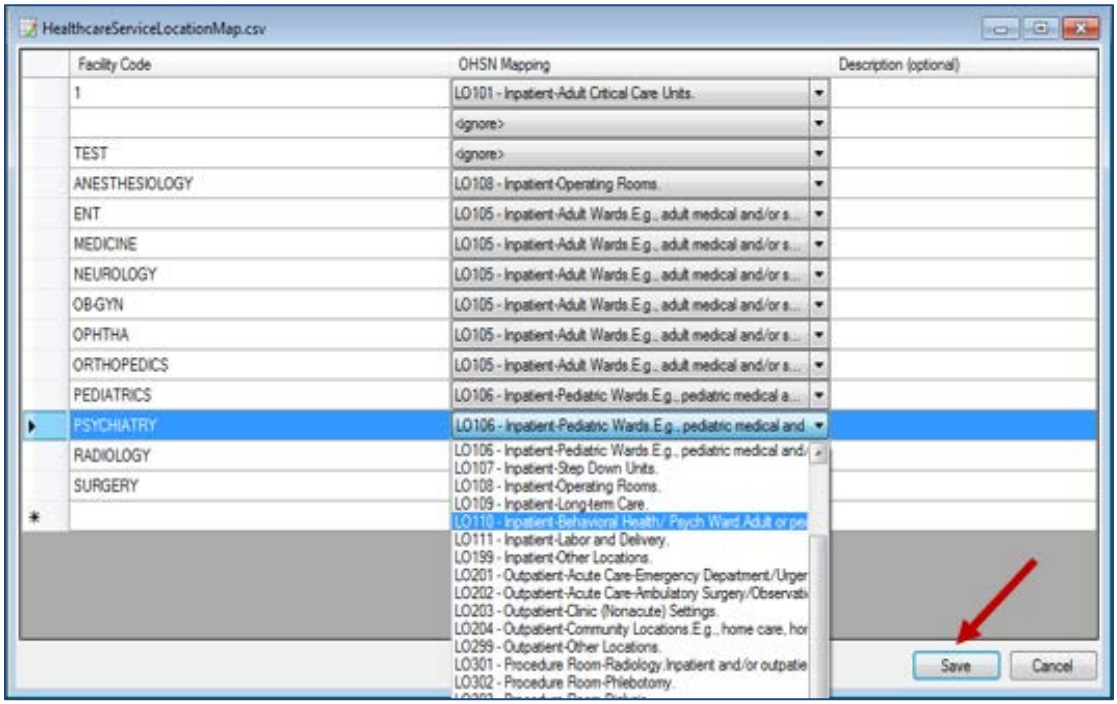
If **Dept** is mapped to the OHSN Event Location, click on "Code Mappings" to map unique facility department values.



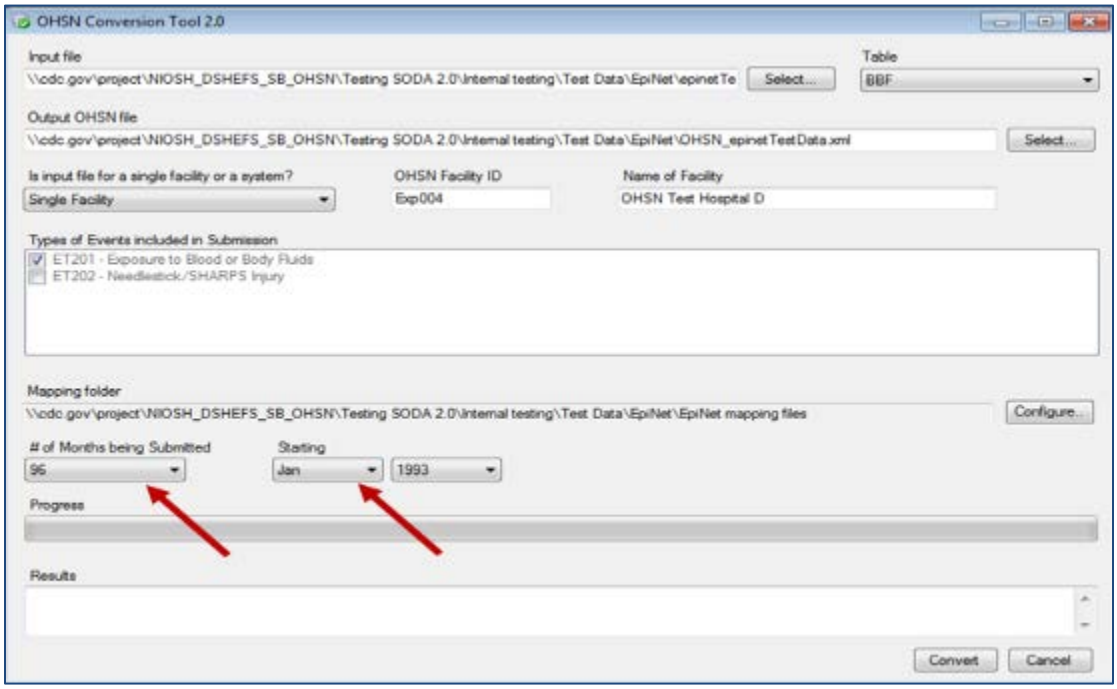
Click the **Edit** button.



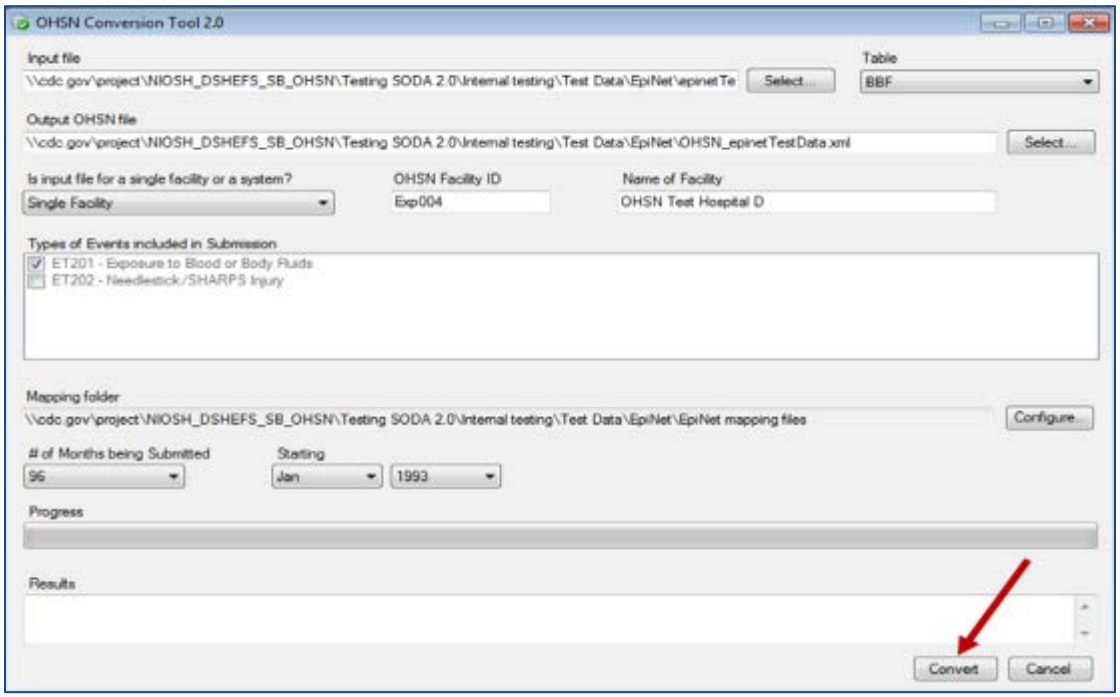
Map the unique facility department values to OHSN standard department codes by selecting from the dropdown menu under the OHSN Mapping column. Click the Save button when finished.



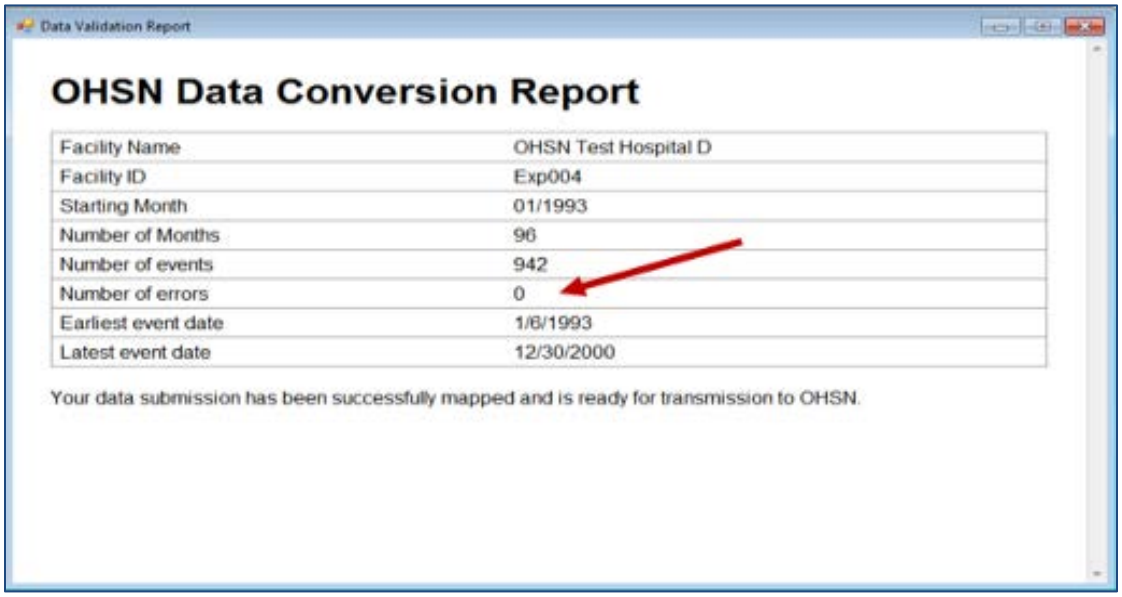
Select the number of months of data being submitted and the starting date.



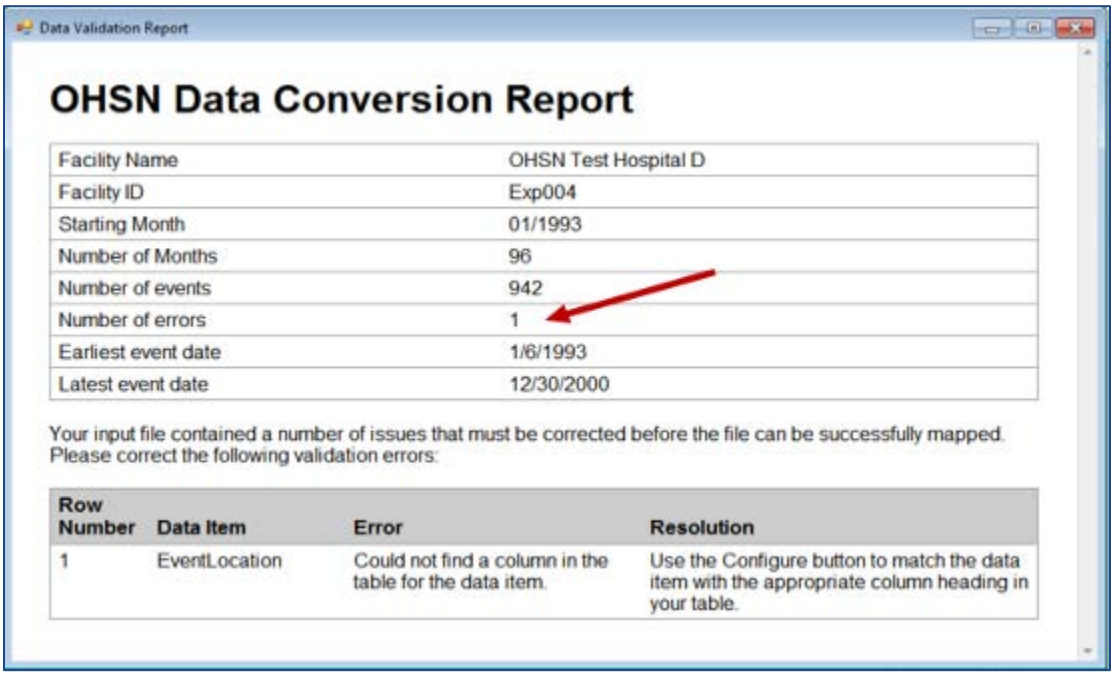
To begin the conversion process, click the **Convert** button.



If there are no errors in data mapping, then a Data Validation Report will appear next.

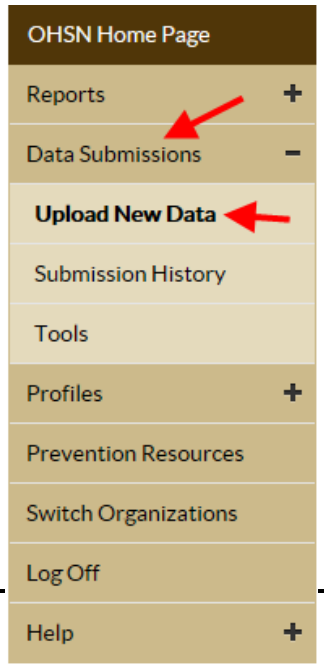


If there are errors in data mapping, the Data Validation Report will provide you a list of errors that need to be addressed.

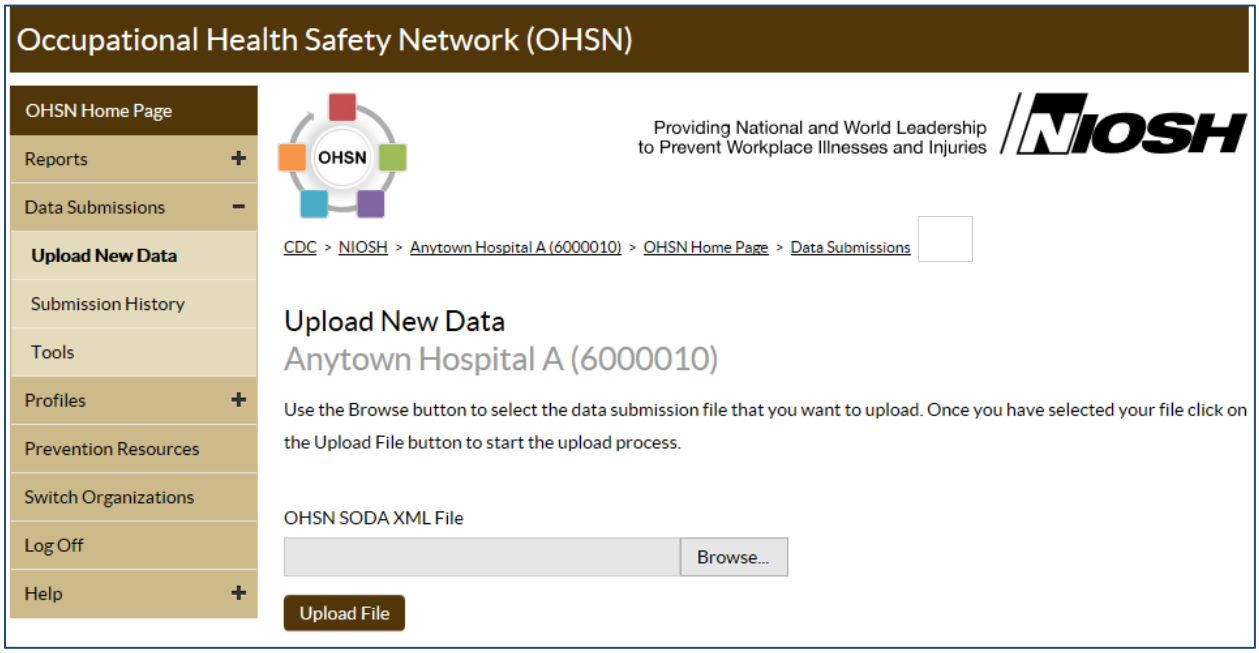


10 DATA SUBMISSIONS

Once a standard OHSN .xml file has been created it can be uploaded to the OHSN system. To upload a file, click the **Data Submissions** menu item on the OHSN main menu, then click the **Upload New Data** menu item.

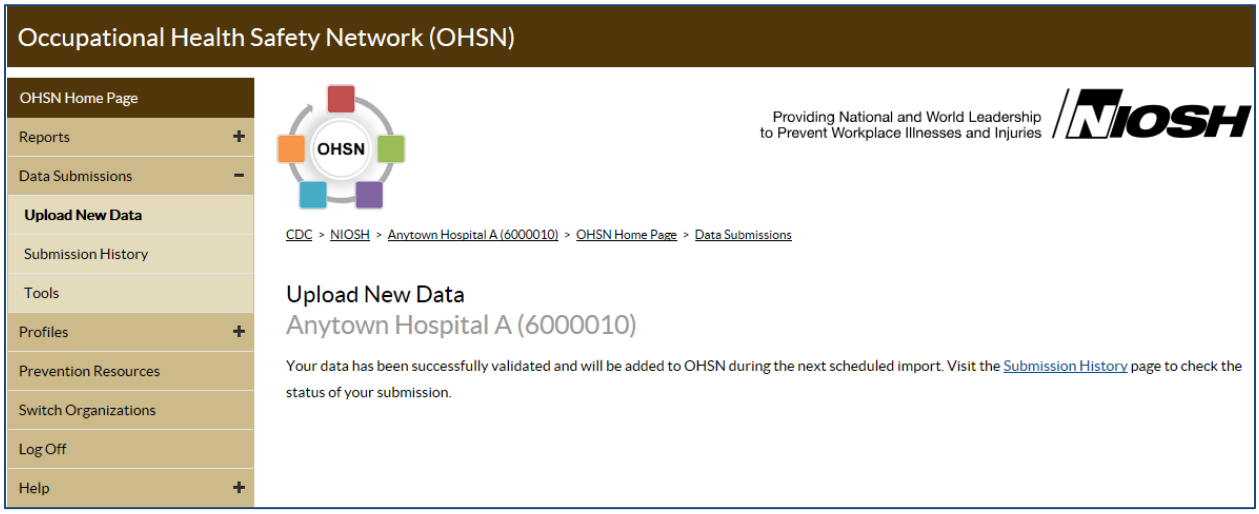


The **Upload New Data** screen will appear as shown below.

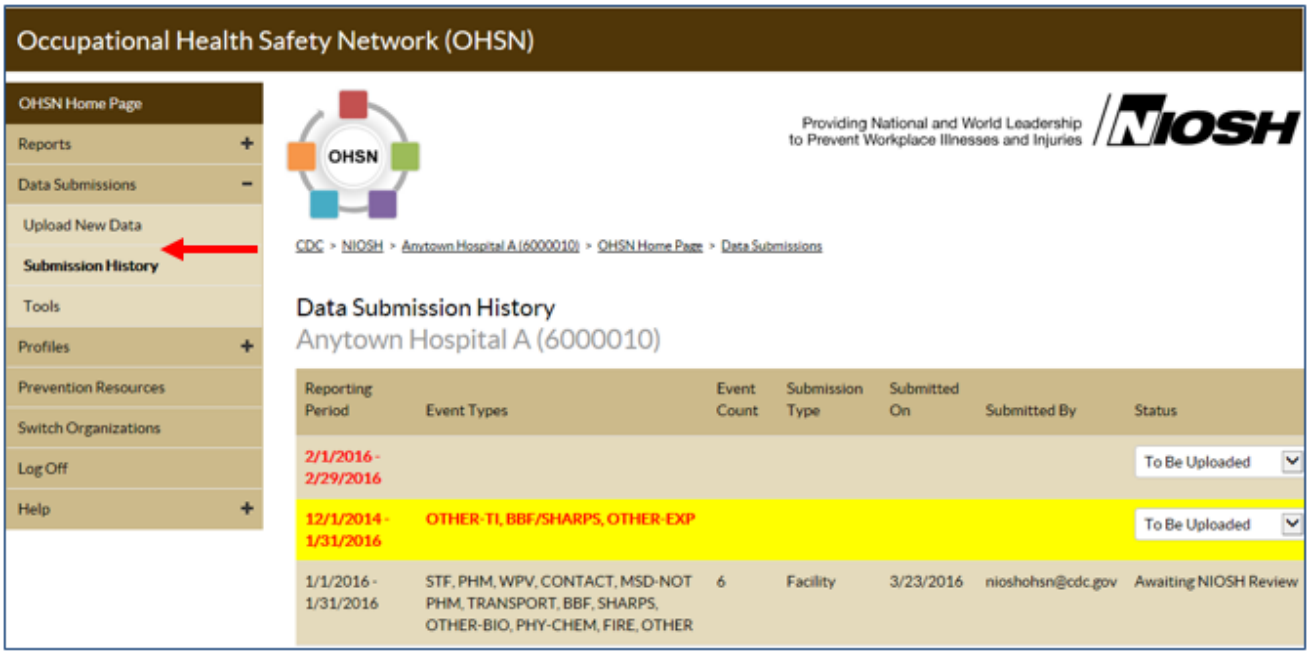


Use the **Browse** button to locate and select the file to be uploaded. The default name for your output file will have *OHSN_ (original file name)*, and will be listed as an XML document. Once the file is selected, click the **Upload File** button to upload the file to OHSN.

After clicking the **Upload File** button, the following screen will appear:



Click the **Submission History** page to confirm the file was uploaded and is awaiting NIOSH quality control. You can also check **Submission History** in the OHSN menu to view a history of all submissions to OHSN.



If you are not submitting data for a particular time period

OHSN requires at least 6 months of data to be submitted during a 12 month period to be considered an active module participants. There are two situations in which you may not be submitting data in a given time period:

1. If you had no injury events during that period: The Drop Down box under the Status Bar includes an option for **No Events Occurred**. ***It is important to document that no events occurred at your facility(s) because it could be an indication that your interventions are working.***

2. If you cannot submit data in that period: The Drop Down box under the Status column includes an option for **Not Participating**.

11 REPORTS

One of the major benefits of OHSN is its ability to give you real-time feedback on your facility's or healthcare system's occupational injury and illness data. OHSN is based on continuous data translation – as data are submitted monthly, they become part of your facility's ongoing confidential record. For this reason, it's important that you upload your facility or system data monthly to better monitor injuries and illnesses. You can look at the data by event type, event location, job category, severity, and other factors. And you can obtain this information 24 hours a day and generate the information in a variety of ways to better assess your injury and illness rates, both current and historical.

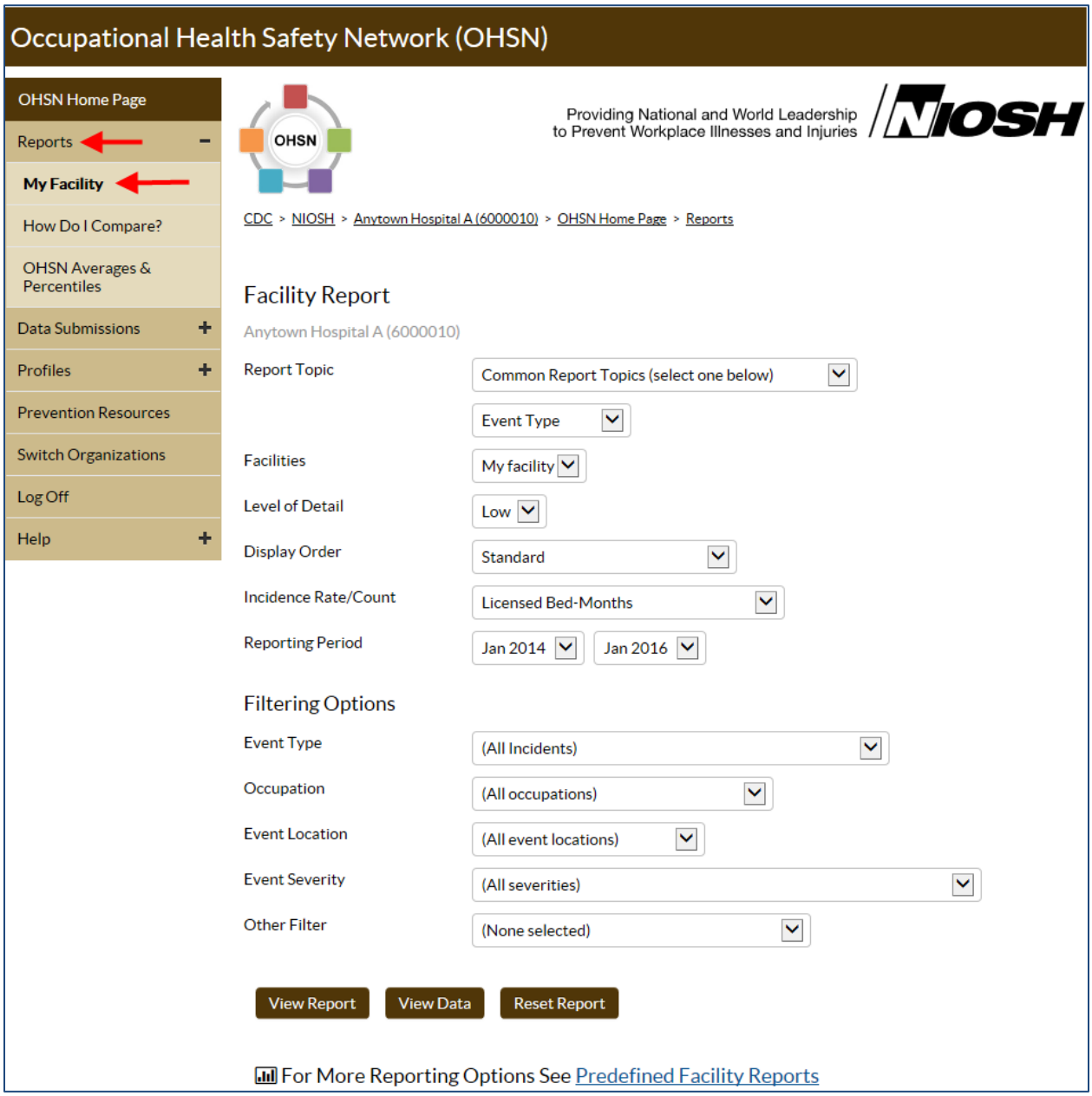
Four types of reports are available in OHSN.

Report Type	Description	Accessible by
My Facility Reports	Display the data you have uploaded for your facility.	• Facility Admins • Facility Report Users *If facility is part of a healthcare system:* • System Admins • System Report Users
My System Reports	Display aggregate data uploaded for your system.	• System Admins • System Report Users
OHSN Averages & Percentiles	Display aggregate data only for all OHSN participants, including rate, pooled mean, and percentile rates.	• Facility Admins • Facility Report Users *If facility is part of a healthcare system:* • System Admins • System Report Users

11.1 Reports for a Single Facility

Facility Administrators and Facility Report Users have access to reports that summarize facility-level data. Once you have uploaded data and it's ready to analyze, you can run a report. To access the reports, click on the **Reports** menu item from the OHSN main menu and then click

the **My Facility** option to view reports. Doing so prompts a selection menu where the user can create a custom report.



11.1.1 Facility Reports

The **My Facility** reports screen contains the option to create customized reports about your facility. The custom reports provide graphic output for any selection you choose.

Overview Reports by

- Event Type
- Occupation
- Event Location
- Event Severity
- Worker Age
- Events by Year
- Events by Month
- Facility

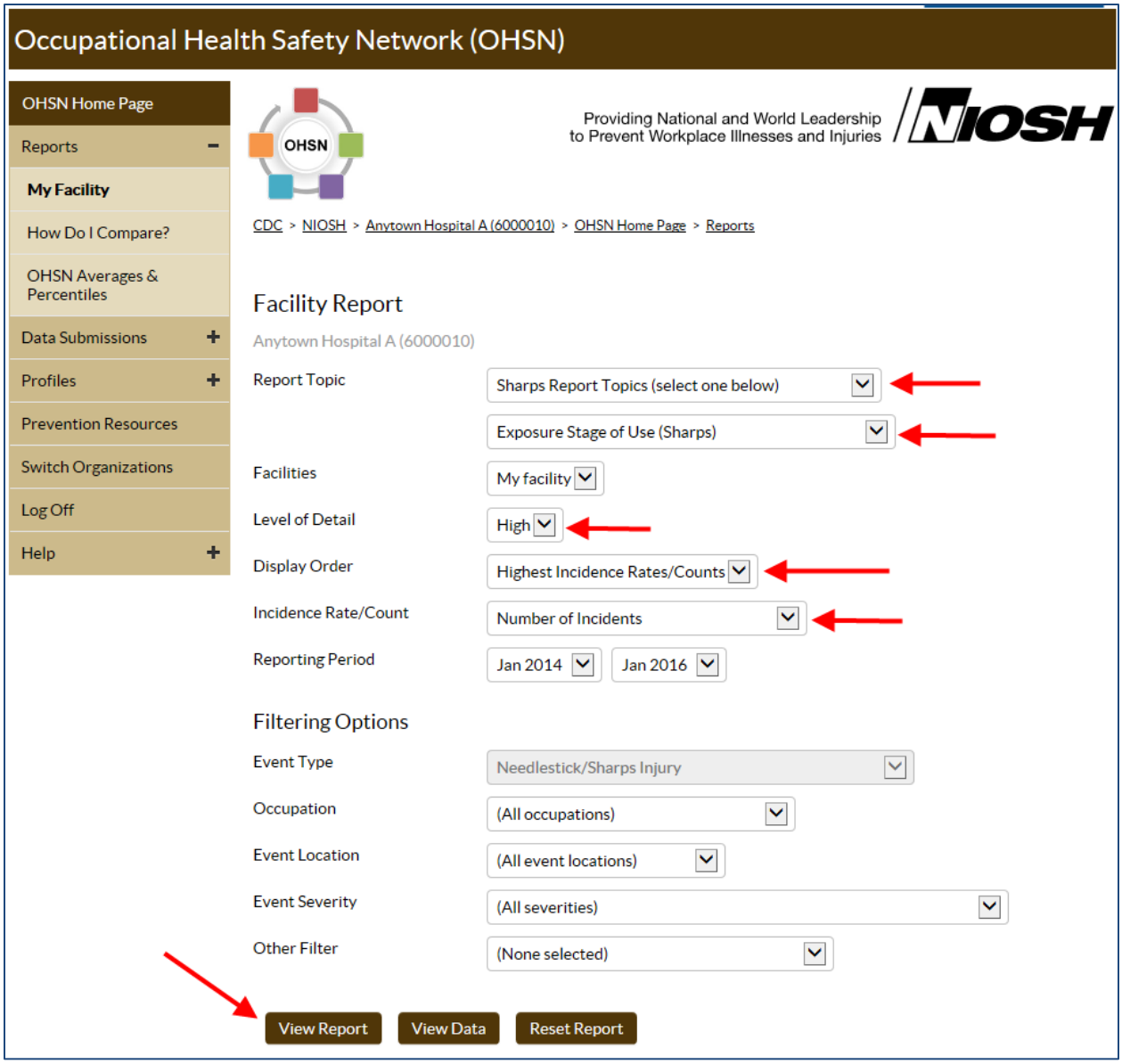
Module-Specific Reports by

- Injury Source for Slip, Trip and/or Fall events
- Activity for Patient Handling events
- Contributing Factors for Workplace Violence events
- Exposure Stage of Use for Sharps events
- Exposure Route for Blood and Body Fluid Exposure
-

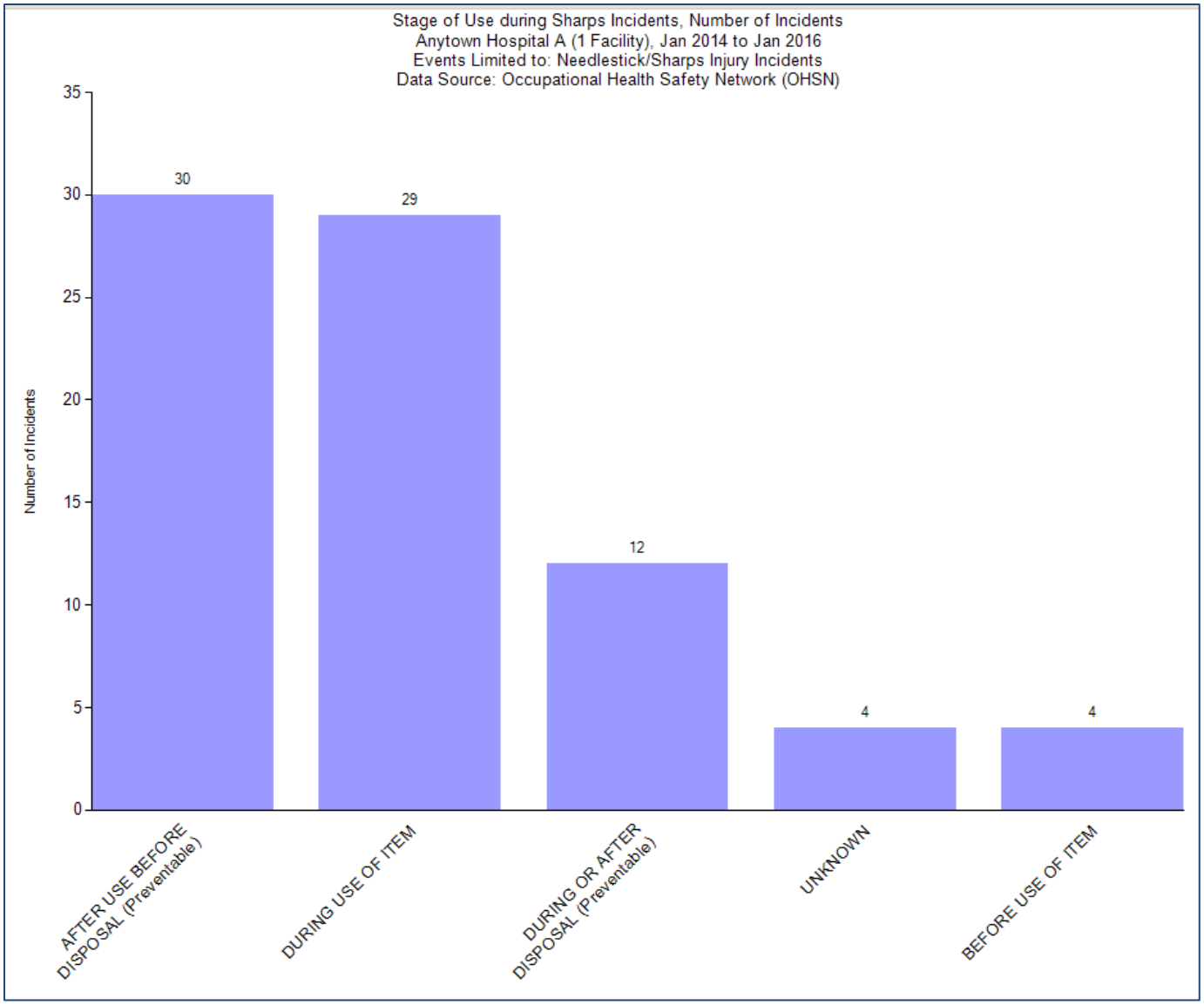
You can customize the graphs to meet your individual facility needs:

- By hospital type (including children's, general medical and surgical, acute long-term care, psychiatric, rehabilitation, surgical, other adult specialty, a hospital unit of an institution, and alcohol or other chemical dependency facilities)
- By hospital size
- By occupation category (including 15 direct patient care job titles and three non-direct patient care job titles)
- By contributing factors (such as common activities related to patient handling/ movement events and activities related to specific injuries)
- By department where the event took place
- By severity of injury

Below is an example of a request for a report that depicts the activity when needlesticks/sharps injuries occurred as reported between Jan 2014 and Dec 2015.



Click the **View Report** button at the bottom of the Facility Report screen to see the report (example below).


Stage of Use during Sharps Incidents, Number of Incidents
Anytown Hospital A (1 Facility), Jan 2014 to Jan 2016
Events Limited to: Needlestick/Sharps Injury Incidents
Data Source: Occupational Health Safety Network (OHSN)
Number of Incidents
35
30
25
20
15
10
5
0
30
29
12
4
4
AFTER USE BEFORE DISPOSAL (Preventable)
DURING USE OF ITEM
DURING OR AFTER DISPOSAL (Preventable)
UNKNOWN
BEFORE USE OF ITEM

Click the **View Data** button to view a table of the data entered into the graph (example below)

Export Data

Title: Stage of Use during Sharps Incidents
Facility Group: Anytown Hospital A (1 facilities)
Denominator: Number of Incidents
Reporting Period: Jan 2014 to Jan 2016
Filter: Needlestick/Sharps Injury Incidents

Description	Code	Number of Incidents	Denominator	Rate/Count/Etc.
AFTER USE BEFORE DISPOSAL (Preventable)	XSU30	30	1.00	30.00
DURING USE OF ITEM	XSU20	29	1.00	29.00
DURING OR AFTER DISPOSAL (Preventable)	XSU40	12	1.00	12.00
UNKNOWN	UNK	4	1.00	4.00
BEFORE USE OF ITEM	XSU10	4	1.00	4.00

Select **Export Data** in the upper left hand corner to begin export of your data into Excel Format.

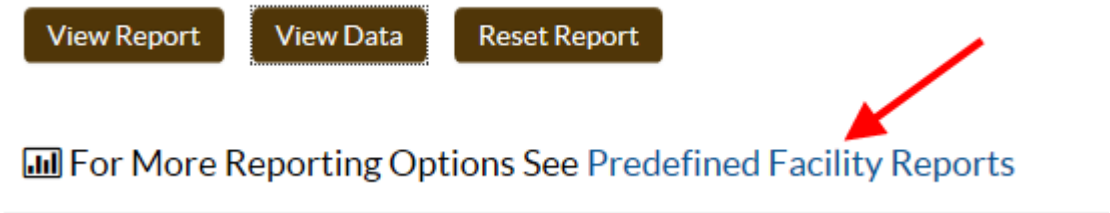
Upon clicking the Export Data button, the download of a .csv file will begin. Select “Open” to view your data in an Excel sheet as shown below:

	A	B	C	D	E	F
1	Title: Stage of Use during Sharps Incidents					
2	Facility Group: Anytown Hospital A(1 facilities)					
3	Denominator: Number of Incidents					
4	Reporting Period: Jan 2014 to Jan 2016					
5	Filter: Needlestick/Sharps Injury Incidents					
6						
7	Descriptic	Code	Number o	Denomina	Rate/Count/Etc.	
8	AFTER USE	XSU30	30	1.00	30.00	
9	DURING U	XSU20	29	1.00	29.00	
10	DURING O	XSU40	12	1.00	12.00	
11	UNKNOW	UNK	4	1.00	4.00	
12	BEFORE U	XSU10	4	1.00	4.00	
13						

Click the **Reset Report** button at the bottom of the Facility Reports screen to reset all fields to their default values.

11.1.2 Predefined Facility Reports

The OHSN system provides several predefined reports that can be easily accessed by clicking the **Predefined Facility Reports** link at the bottom of the **My Facility** reports screen.



Each of the predefined facility reports can be viewed in one of four different time periods. Data for the time period is composed of the last x number of months the facility submitted data:

- 1 month
- 3 months
- 12 months
- All months

Note that the facility may not have submitted data for *consecutive* months.

You may select either Overview Reports or Module Specific reports based on your needs.

Overview Reports

Event Type	Event Type for Traumatic Injury Modules Incidents	1 month	3 months	12 months	All months
	Event Type for Exposure Modules Incidents	1 month	3 months	12 months	All months
Occupation	Occupation for Patient Handling and Movement (PHM) Incidents	1 month	3 months	12 months	All months
	Occupation for Slips, Trips, and Falls (STF) Incidents	1 month	3 months	12 months	All months
	Occupation for Workplace Violence (WPV) Incidents	1 month	3 months	12 months	All months
	Occupation for Exposure to Blood or Body Fluids Incidents	1 month	3 months	12 months	All months
	Occupation for Needlestick/Sharps Injury Incidents	1 month	3 months	12 months	All months
Event Location	Event Location for Patient Handling and Movement (PHM) Incidents	1 month	3 months	12 months	All months
	Event Location for Slips, Trips, and Falls (STF) Incidents	1 month	3 months	12 months	All months
	Event Location for Workplace Violence (WPV) Incidents	1 month	3 months	12 months	All months
	Event Location for Exposure to Blood or Body Fluids Incidents	1 month	3 months	12 months	All months
	Event Location for Needlestick/Sharps Injury Incidents	1 month	3 months	12 months	All months
OSHA Severity	Event Severity for Patient Handling and Movement (PHM) Incidents	1 month	3 months	12 months	All months
	Event Severity for Slips, Trips, and Falls (STF) Incidents	1 month	3 months	12 months	All months
	Event Severity for Workplace Violence (WPV) Incidents	1 month	3 months	12 months	All months
	Event Severity for Exposure to Blood or Body Fluids Incidents	1 month	3 months	12 months	All months
	Event Severity for Needlestick/Sharps Injury Incidents	1 month	3 months	12 months	All months

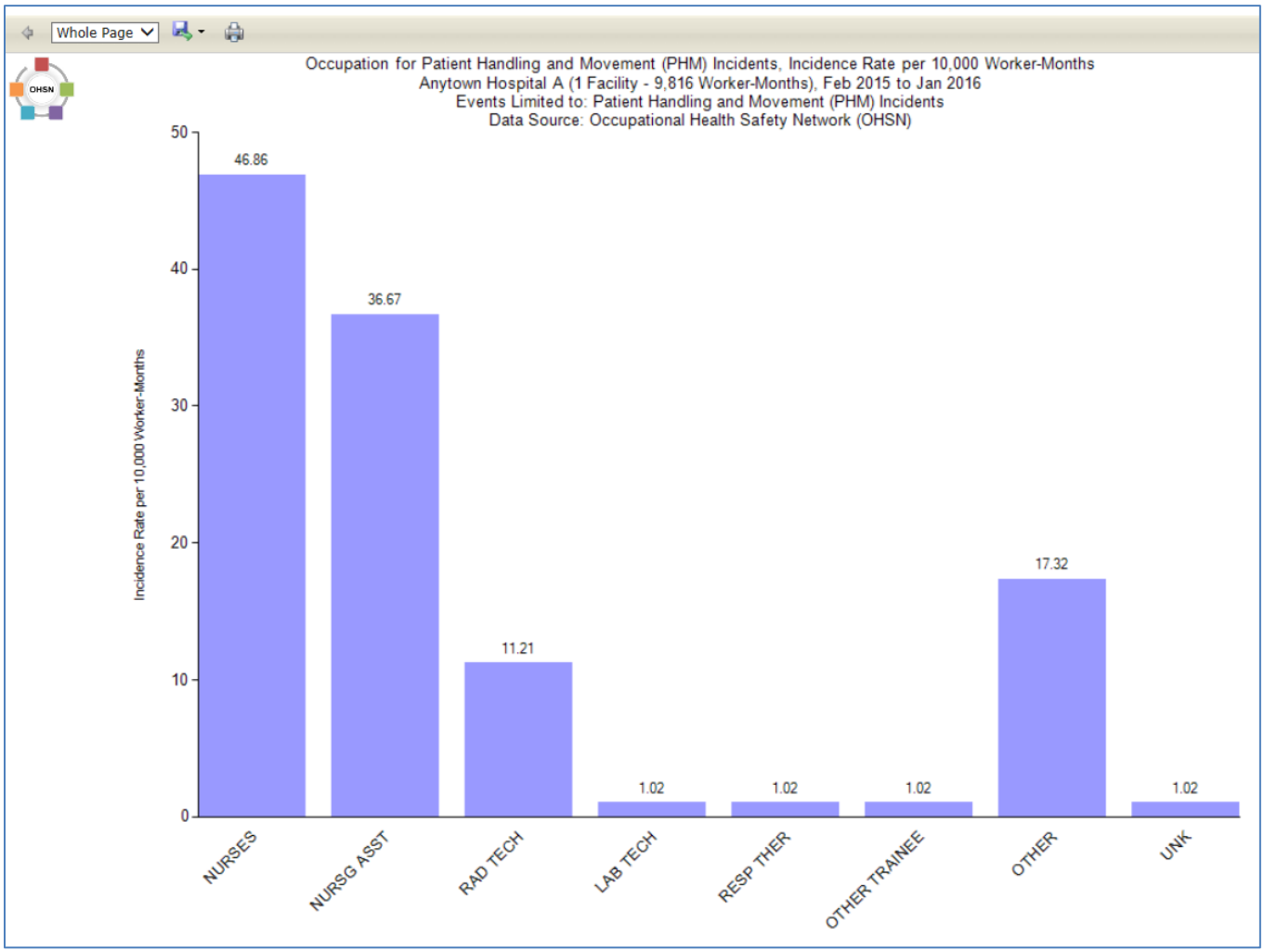
Click on any of the report links (1 month, 3 months, 12 months, All months) to display the associated report, see example below.

Module-Specific Reports

Activity for Patient Handling and Movement (PHM) Incidents	1 month	3 months	12 months	All months
Injury Source for Slips, Trips, and Falls (STF) Incidents	1 month	3 months	12 months	All months
Contributing Factor for Workplace Violence (WPV) Incidents	1 month	3 months	12 months	All months
Exposure Stage of Use for Needlestick/Sharps Injury Incidents	1 month	3 months	12 months	All months
Exposure Device Type for Needlestick/Sharps Injury Incidents	1 month	3 months	12 months	All months
Exposure Activity for Needlestick/Sharps Injury Incidents	1 month	3 months	12 months	All months
Sharps Exposure Preventability for Needlestick/Sharps Injury Incidents	1 month	3 months	12 months	All months
Exposure Route for Exposure to Blood or Body Fluids Incidents	1 month	3 months	12 months	All months
Exposure Contributing Factor for Exposure to Blood or Body Fluids Incidents	1 month	3 months	12 months	All months
Exposure Source for Exposure to Blood or Body Fluids Incidents	1 month	3 months	12 months	All months
BBF Exposure Preventability for Exposure to Blood or Body Fluids Incidents	1 month	3 months	12 months	All months

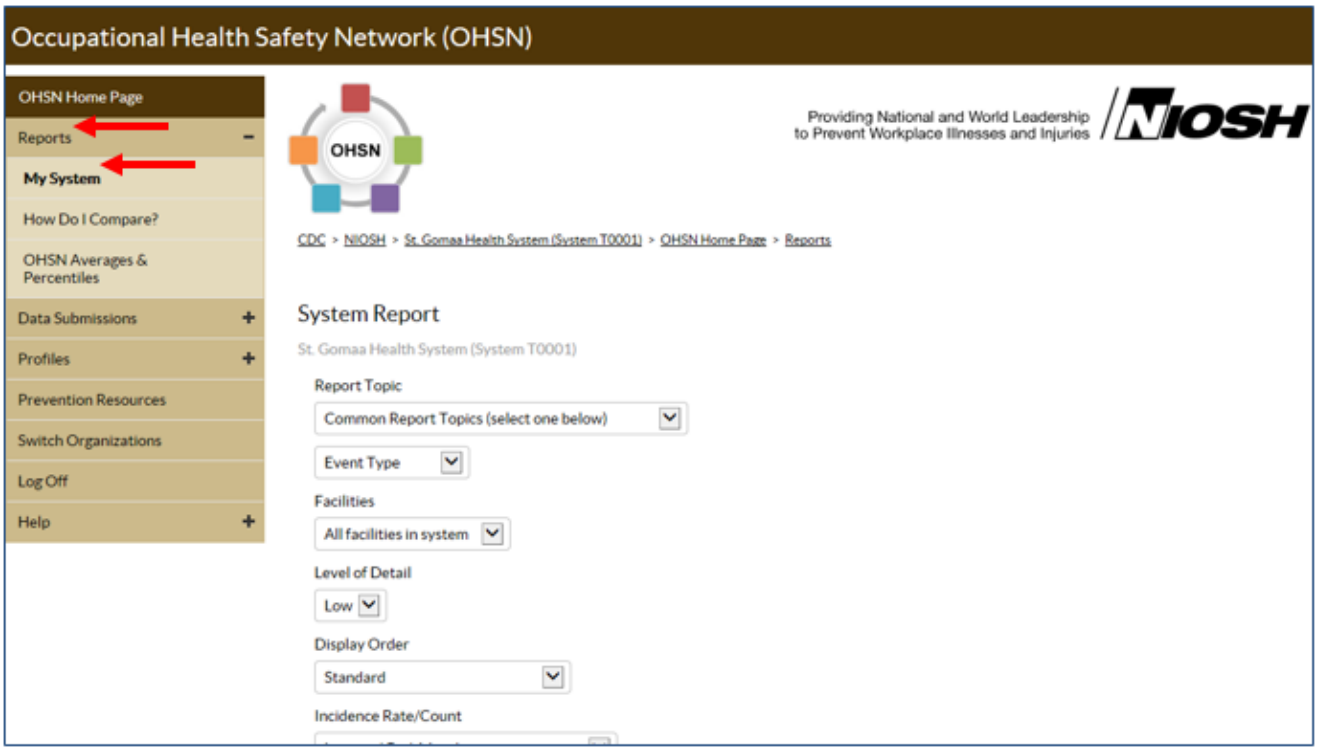
Example of a Predefined Facility Report

Selection: Occupation for Patient Handling and Movement (PHM) 12 Months



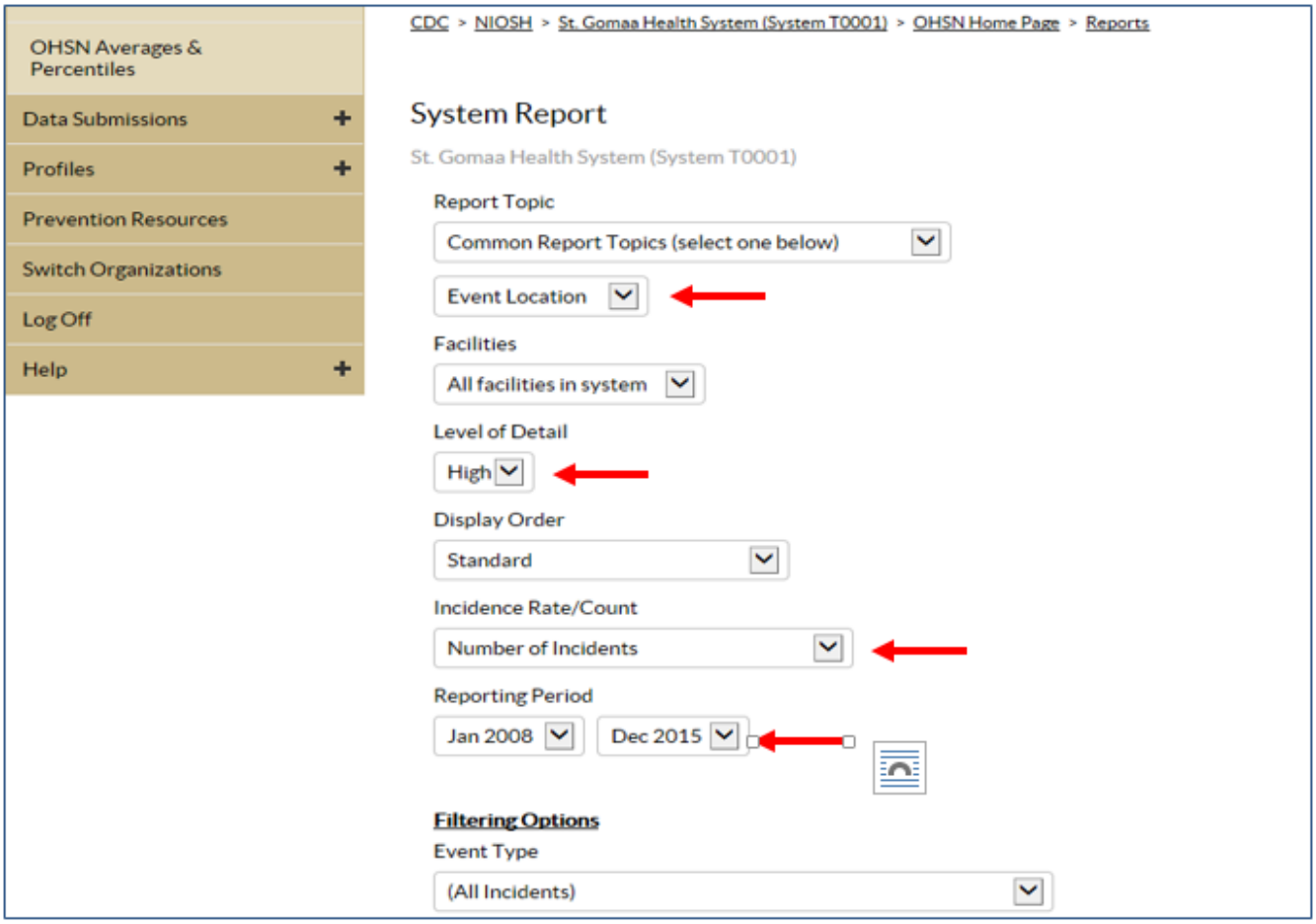
11.2 Reports for Healthcare Systems

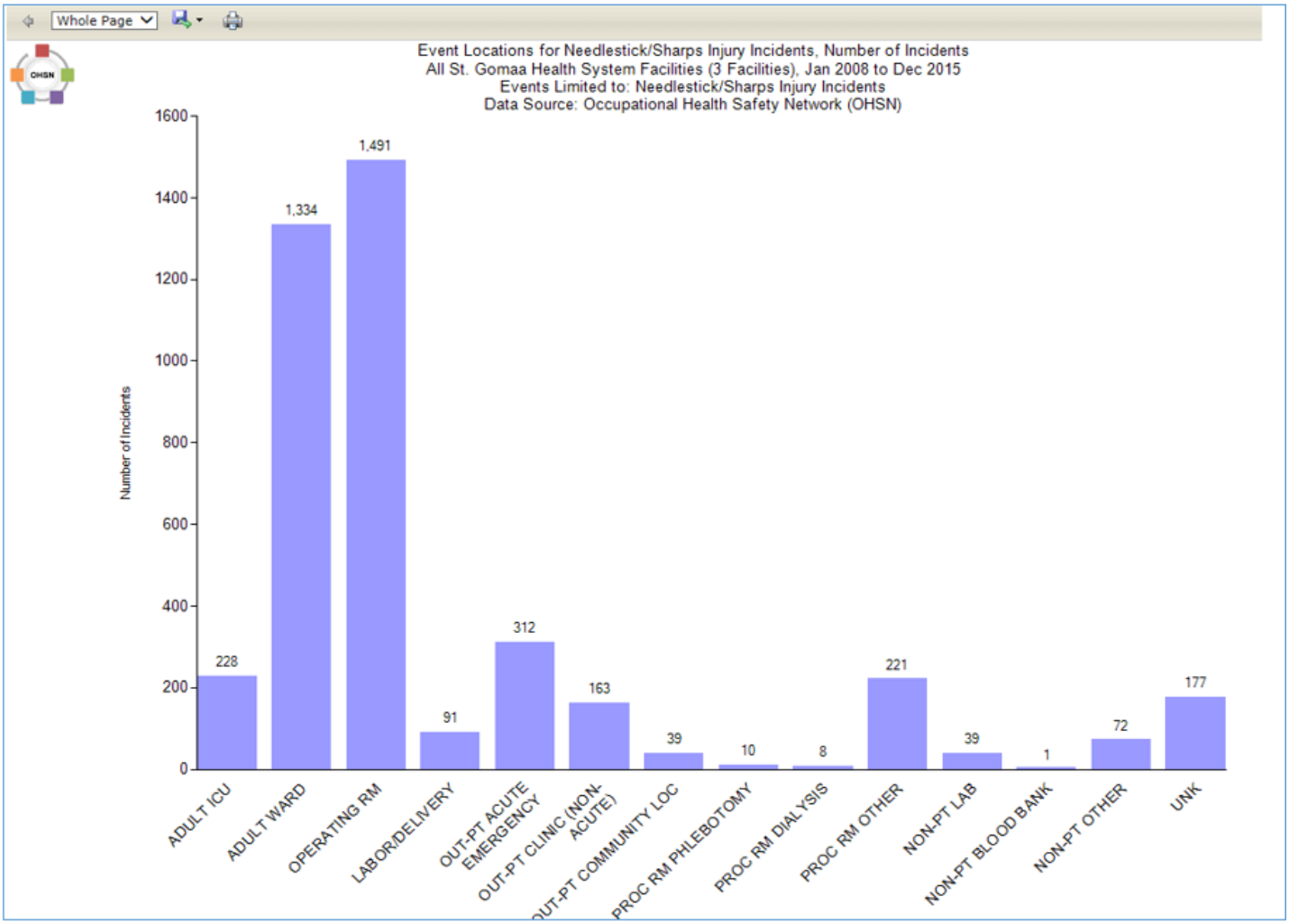
System Administrators and System Report Users have access to reports that summarize the healthcare system level data. To access the reports, click on the **Reports** menu item from the OHSN main menu, then click the **My System** option.



The **My System** reports screen provides several options to view the healthcare system level data. Click on any of the drop-down lists to view the detailed options for each reporting variable. System Administrators and Report Users can also use the advanced reporting option built-in to this page to generate more detailed reports about their healthcare system.

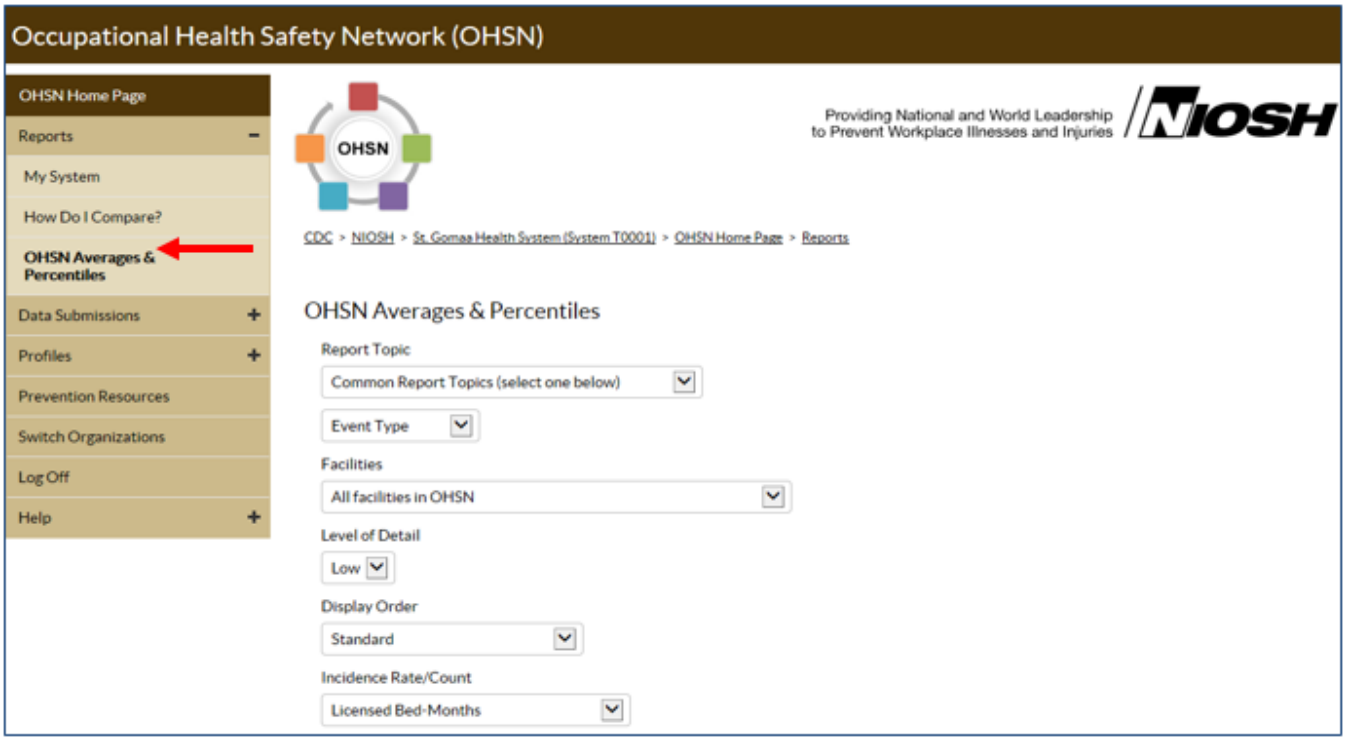
The system report below is an example showing the total number of Needlestick/Sharps incidents by event location for all the facilities within a sample health system:


OHSN Averages & Percentiles
Data Submissions
Profiles
Prevention Resources
Switch Organizations
Log Off
Help
CDC > NIOSH > St. Gomaa Health System (System T0001) > OHSN Home Page > Reports
System Report
St. Gomaa Health System (System T0001)
Report Topic
Common Report Topics (select one below)
Event Location
Facilities
All facilities in system
Level of Detail
High
Display Order
Standard
Incidence Rate/Count
Number of Incidents
Reporting Period
Jan 2008
Dec 2015
Filtering Options
Event Type
(All Incidents)


Whole Page
Event Locations for Needlestick/Sharps Injury Incidents, Number of Incidents
All St. Gomaa Health System Facilities (3 Facilities), Jan 2008 to Dec 2015
Events Limited to: Needlestick/Sharps Injury Incidents
Data Source: Occupational Health Safety Network (OHSN)
Number of Incidents
1600
1400
1200
1000
800
600
400
200
0
228
1,334
1,491
91
312
163
39
10
8
221
39
1
72
177
ADULT ICU
ADULT WARD
OPERATING RM
LABOR/DELIVERY
OUT-PT ACUTE EMERGENCY
OUT-PT CLINIC (NON-ACUTE)
OUT-PT COMMUNITY LOC
PROC RM PHLEBOTOMY
PROC RM DIALYSIS
PROC RM OTHER
NON-PT LAB
NON-PT BLOOD BANK
NON-PT OTHER
UNK

11.3 OHSN Averages & Percentiles Reports

Click the **OHSN Averages & Percentiles** option from the OHSN **Reports** menu to view report options that show summaries of all the data in OHSN.



Similar to the **My System,** reporting options can be selected based on your facility or system's need.

The OHSN Averages & Percentiles reporting options also allow for selection from a set of standard reports for the data submissions for 1 month, 3 month, 12 months or all months.

Below is an example of one standard report selecting 12 months of averages and percentiles for all OHSN participating facilities on Event Location of Patient Handling and Movement, All OSHA-Recordable:

Whole Page

Pooled means and key percentiles of the distribution of Incidence Rate per 10,000 Worker-Months among healthcare personnel, by Event Location for Exposure to Blood, Body Fluids, or Needlestick/Sharps Injury Incidents, Jan 1993 to Dec 2015

All OHSN Facilities

Exposure to Blood, Body Fluids, or Needlestick/Sharps Injury Incidents; OSHA Recordable Incidents

Incidence Rate per 10,000 Worker-Months*					Percentile		
Event Locations	No. of Hospitals***	No. of Incidents	Worker-Months**	Pooled Mean	25%	50%	75%
Inpatient Locations	59	1,174	1,767,510	6.64	0.00	4.97	10.18
Outpatient Locations	48	302	1,767,510	1.71	0.00	1.60	2.69
Procedure Room Locations	27	56	1,767,510	0.32	0.00	0.00	0.44
Non-patient-care Locations	41	182	1,767,510	1.03	0.00	0.00	1.76
Unknown	46	238	1,767,510	1.35	0.00	0.86	2.55
All	*68*	*1,952*		*11.04*	*4.40*	*10.82*	*16.91*

FTE=full-time equivalent (e.g., 1 FTE = 1 full-time employee or 2 half-time employees)

$$\text{*Incidence Rate} = \frac{\text{Number of Incidents}}{\text{Worker-Months}} \times 10{,}000$$

**'Worker-Months' may either be derived from the annual American Hospital Association survey or provided directly by participating facilities to OHSN.

***Number of locations meeting minimum requirements for percentile distributions. For values with a number <10, percentile distributions are not calculated.

- Worker-months refer to the number of full-time equivalent workers at a facility (or group of facilities) multiplied by the number of months worked within the reporting period. For example, a facility with 1,000 full-time equivalent workers has 12,000 worker-months in a 12-month reporting period.

- Pooled Mean refers to the number of incidences divided by 10,000 worker-months. Using the above example, if the incidence rate for inpatient locations in your facility is 6.00 and the pooled mean value is 6.64, then that means your incidence rate is less than for all OHSN facilities on average.

- Percentile is way of evaluating of where your facility stands when compared to all OHSN participating facilities. Using the above example, if the incidence rate for inpatient locations in your facility is 6.00 and the 50% percentile value is 4.97, then that means at least half of all OHSN facilities have an incidence rate less than your facility.

12 HELP AND USER SUPPORT

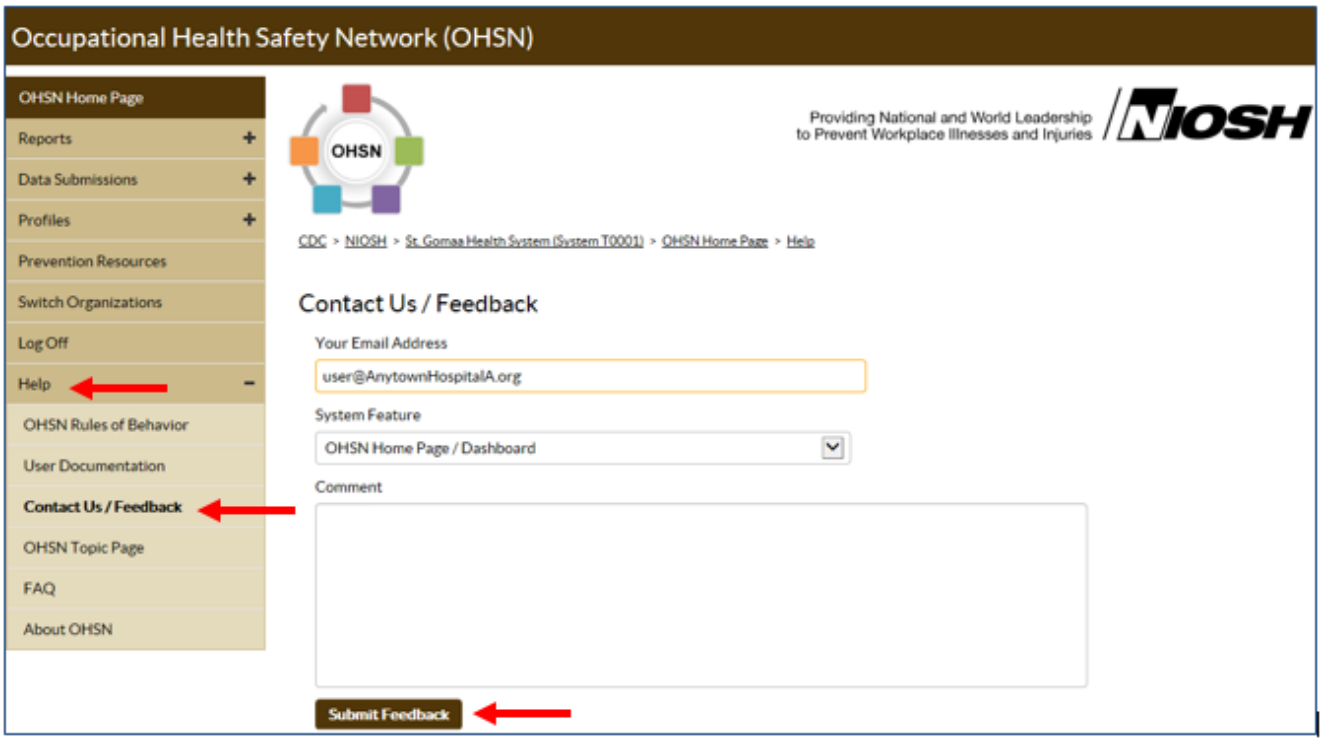
OHSN provides several resources for users to obtain help and support. Click on the **Help** menu item on the OHSN menu to view these resources.

12.1 OHSN User Documentation

In addition to this OHSN User Manual, the OHSN website contains training guides and other tools to aid users of the OHSN system: http://www.cdc.gov/niosh/topics/ohsn/documentation.html

12.2 Contact Us / Providing Feedback

To provide feedback on OHSN system performance and/or ask questions regarding the system functionality, click on the **Contact Us / Feedback** item under the **Help** menu item of the OHSN menu. The screen below will appear, allowing you to send a comment or question to NIOSH.



To submit a question or comment to OHSN support

1. In the drop-down list under **System Feature**, select the appropriate feature that applies to your comment.
2. Enter the question or comment. (Required)

3. Click **Submit Feedback** button.

After you click the **Submit Feedback** button, your comment/question will be sent to the NIOSH OHSN System Administrators who will respond as soon as possible.

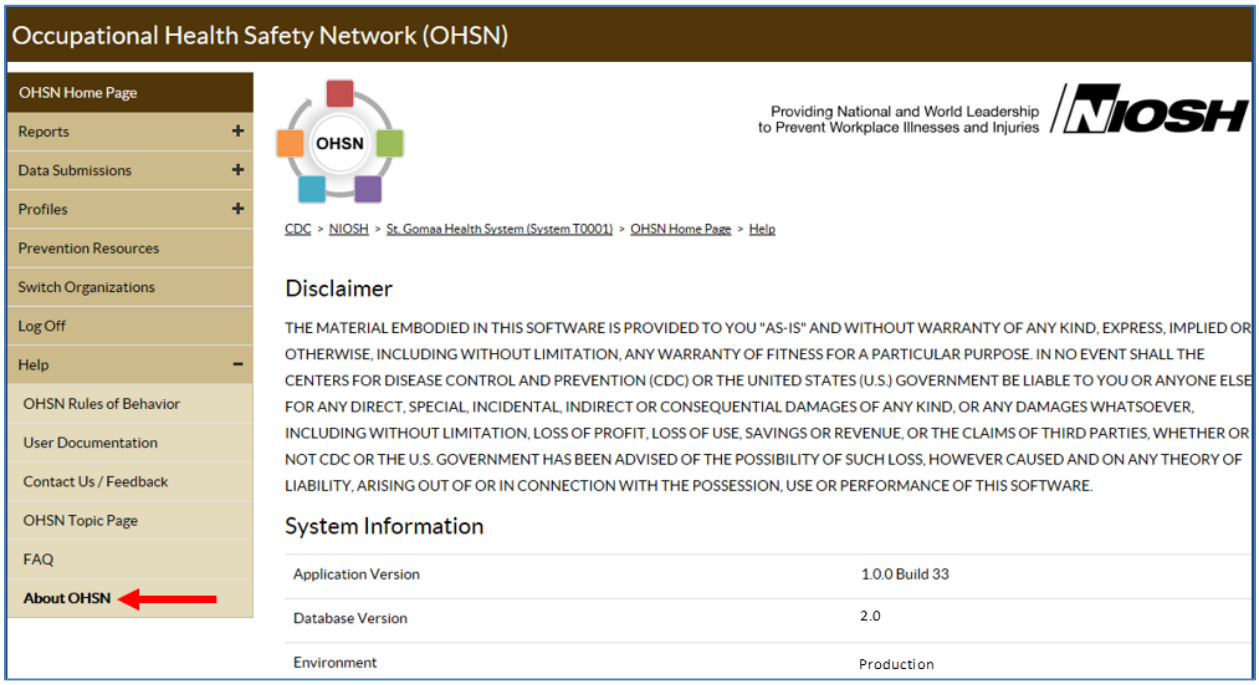
12.3 Frequently Asked Questions (FAQ)

NIOSH provides a list of frequently asked questions (FAQ) to help communicate resolutions to common issues. To view the FAQ page, click on the **FAQ** menu item under the **Help** menu.

12.4 About OHSN

This screen provides the OHSN system version number and date of current release and the CDC disclaimer for using the product.

Click the **About OHSN** option from the **Help** menu to view the contents of this screen.



APPENDIX A – GLOSSARY

AHA – the American Hospital Association

AHA Number – the ID assigned by the American Hospital Association

Aggregate – collected from different sources and considered as a whole

Bed-months – calculated by multiplying the number of facility beds by the number of months that the facility participates in OHSN during the selected period.

BLS – Bureau of Labor Statistics

CDC – Centers for Disease Control and Prevention

Dashboard – a visual display of important information

Denominator data – information on healthcare facilities, including number of licensed beds, admissions per month, outpatient encounters per month, and full-time employees by occupational category

Event – in OHSN Data Elements, refers to the incident. Event types fall into three categories: Slips, Trips and Falls; Patient Handling/Movement; and Workplace Violence

Facility ID – a unique identifier for the facility; American Hospital Association IDs are preferred

FAQ – Frequently Asked Questions

FTE – Full Time Equivalent

Healthcare System – an organization made up of two or more healthcare facilities

Healthcare Facility -- an individual hospital or other entity providing health services

Home Page – the primary web page of a website or application

Incidence Rate – a measure of the speed or frequency with which an event or circumstance occurs per unit of time, population, or other standard of comparison

Mapping Data – the "matching" between a source and a target database which contain the same data elements but call them by different names. This matching enables software and systems to meaningfully exchange information. OHSN provides a Mapping Tool to match data in a facility's value list to the OHSN value list.

NIOSH – National Institute for Occupational Safety and Health

NHSN – National Healthcare Safety Network (CDC)

OHSN – Occupational Health Safety Network

OHSN Module – a unit in OHSN; OHSN includes three Traumatic Injury modules: Slips, Trips, and Falls; Patient Handling and Movement; and Workplace Violence, and two Exposure modules: Blood and Body Fluid Exposures; and Sharps Injuries Exposures

Report User – one of the roles assigned to OHSN users by a System/Facility Administrator. Facility Report users can create and view reports for the facility. They cannot upload or edit information about the facility or add, modify or delete users. System Report Users can create and view reports for one or more facilities within the system based on permissions given by the System Administrators. System Report Users cannot upload or edit information, or add, modify or delete users.

System Administrator - one of the user roles in OHSN. System Administrators have all access rights to the data and user information within their facility and/or system (if part of a system).

NIOSH System Administrator – NIOSH staff who oversee and manager the OHSN system

Upload - sending data from a local system to a remote system such as a server or another client with the intent that the remote system should store a copy of the data being transferred.

User – a person who will interact with a system (directly or indirectly); also called end user

User Account – the mechanism used to authenticate a user to a system. It allows the user to have authorized access to a system and to control access to that system's features

User Interface – all of the ways by which users interact with a system, machine, device, computer program or other complex tool

XML – Extensible Markup Language, a web programming language

APPENDIX B – REFERENCES

1. NIOSH Occupational Health Safety Network (OHSN), http://www.cdc.gov/niosh/topics/ohsn/ , last viewed 5/1/2016
2. The National Occupational Research Agenda (NORA), National Healthcare and Social Assistance Agenda, http://www.cdc.gov/niosh/nora/comment/agendas/hlthcaresocassist/, last viewed 5/1/2016
3. CDC National Healthcare Safety Network (NHSN), http://www.cdc.gov/nhsn/ , last viewed 5/1/2016