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BACKGROUND

The collapse of the World Trade Center and the subsequent persistent and complex health problems experienced by the emergency responders illustrated the need for improved health monitoring and surveillance of emergency responders. As a result, a multi-agency task force was created to address the problem. This task force worked with the U.S. National Response Team (NRT) to develop the Emergency Responder Health Monitoring and Surveillance™ (ERHMS™) Technical Assistance Document (TAD). The TAD details best practices and contains tools, examples, and forms that have been used by various agencies when responding to incidents. The TAD is available at https://www.cdc.gov/niosh/topics/erhms/.

ERHMS™ FRAMEWORK

ERHMS™ is a framework designed to help protect emergency responders throughout the pre-deployment, deployment, and post-deployment phases of a response as depicted in this diagram.

The intent of medical monitoring and surveillance of emergency response and recovery workers is to identify exposures and signs and symptoms early in the course of an emergency response to prevent or mitigate adverse physical and psychological outcomes and also to ensure workers maintain their ability to respond effectively and are not harmed in the course of their work. Monitoring and ongoing assessment can help determine whether protective measures are adequately being provided to the workforce and are sufficient to prevent or reduce harmful exposures to workers. Data collected during the pre-, during-, and post-
deployment phases will also help to identify which responders would benefit from medical referral and possible enrollment in a long-term health surveillance program. Key concepts identified within the ERHMS framework include:

- **Pre-deployment Phase**: Rostering and credentialing of emergency response and recovery workers, health screening for emergency responders, health and safety training, data management, and information security

- **Deployment Phase**: On-site responder in-processing, health monitoring and surveillance during response operations, integration of exposure assessment, responder activity documentation and controls, communications of exposure and health monitoring, and surveillance data during an emergency response

- **Post-Deployment Phase**: Responders out-processing assessment, post-event tracking of emergency responder health and function, lessons-learned, and after-action assessments

This framework builds on systems and practices currently in use and can be used in both small and large scale incidents depending on the needs of the organization and event.

**ERHMS Info Manager™** is a free software platform to track and monitor emergency response and recovery worker activities before, during, and after their deployment to an incident site. ERHMS Info Manager™ enables organizations to implement the ERHMS™ framework. For more information on how to implement the ERHMS™ framework, install ERHMS Info Manager™, online training courses, and additional resources, visit the ERHMS™ website at [https://www.cdc.gov/niosh/topics/erhms/](https://www.cdc.gov/niosh/topics/erhms/).

Using ERHMS Info Manager™, you can:
- Create responder profiles
- Record response incidents and map incident locations
- Assign responders to an incident roster
- Design forms and surveys using custom and pre-built templates
- Request information from responders by using forms and surveys
- View and analyze forms and survey responses

ERHMS Info Manager™ uses the free and publically-accessible software application, Epi Info™. ERHMS Info Manager™ uses Epi Info™ for creating forms, capturing data, and analyzing data. Epi Info™ is automatically installed with the installation of ERHMS Info Manager™. To efficiently utilize ERHMS Info Manager™, users should familiarize themselves with the functions and features of Epi Info™. The Epi Info™ User Guide, User Community Q & A, FAQs, and Tutorials are excellent resources available on the Epi Info™ website at [https://www.cdc.gov/epiinfo/index.html](https://www.cdc.gov/epiinfo/index.html).

**SETUP**

**ERHMS INFO MANAGER™ INSTALLATION**

To install ERHMS Info Manager™, go to the installation link on the ERHMS Info Manager™ web page at [http://www.cdc.gov/niosh/erhms/software](http://www.cdc.gov/niosh/erhms/software). Once you go to the link, the NIOSH
ERHMS Info Manager™ screen will appear. ERHMS Info Manager™ installation has some prerequisites, namely, Windows® XP or higher and Microsoft® .NET Framework 4.

Once the prerequisites are installed, you can proceed with the installation of ERHMS Info Manager™, as shown in the image below.

To uninstall ERHMS Info Manager™, go to the Uninstall section of this User Guide.

OPTIONAL COMPONENTS

ERHMS Info Manager™ includes some advanced features which require interaction with other software components. Installing these components is only necessary if you would like to make use of these features. To see more information on Microsoft SQL Server®, visit the Adding a New Data Source section of this Manual.

- Microsoft SQL Server® may be used as the underlying database management system for ERHMS Info Manager™.
- Epi Info™ Web Survey is a server-based software component that consists of a website and a database. It allows collection of information from responders through the internet by using a responsive web interface. Refer to the Epi Info™ website at https://www.cdc.gov/epiinfo/cloud.html for more instructions on downloading, installing, and configuring Epi Info™ Web Survey.

AUTOMATIC UPDATES

Each time you open ERHMS Info Manager™ the software will check with the NIOSH server to see if there is an update. If an update is available, a prompt will ask if you would like to install the update or proceed without updating.

FIRST-TIME SETUP

The software will be downloaded and installed under your user account. The first time the software is started, you will be prompted to select a location to store your application files. Browse your folders, select the location that you desire, and click OK. The software will create a folder named ERHMS Info Manager in that location to store your application files.
USER INTERFACE NAVIGATION

ERHMS Info Manager™ includes a tabbed user interface that allows simultaneous access to multiple modules. As modules are opened, new tabs appear at the top of the window just below the ribbon. Each tab may contain subsections that are listed along the left-hand side of the window. See the screenshot below for an example.

To navigate between modules or subsections using the mouse, simply select the desired heading. To navigate between modules using the keyboard, press and hold the Ctrl key, then press Tab. This brings up a dialog that lists the modules that are currently open (see below).
While continuing to hold Ctrl, press Tab until the desired module is selected, then release Ctrl to display it.

To navigate between subsections using the keyboard, press and hold the Ctrl key, then press Page Up or Page Down to cycle backward or forward through the available subsections.

To close a module using the mouse, select the close button on its corresponding tab, or select File – Close Tab from the ribbon. To close a module using the keyboard, press Ctrl+W.

ERHMS Info Manager™ also supports other standard mechanisms for keyboard navigation. For example, to cycle keyboard focus through the elements within a module, press Tab to move forward or Shift+Tab to move backward. Many elements are also directly accessible without having to cycle to them. Press and hold the Alt key to show any available shortcuts, which appear as underlined letters. While continuing to hold Alt, press the key corresponding to the underlined letter to activate the element.

**SETTINGS**

The first time using ERHMS Info Manager™, configure its settings by selecting, Tools – Settings from the Ribbon. This tab will give you the ability to configure your Email Settings, Mapping Settings, and Web Survey Settings, each of which will be described further below. The General Settings (Logging Level and Root Directory) should not be changed during the routine operation of ERHMS Info Manager™.
EMAIL SETTINGS

ERHMS Info Manager™ allows users to distribute surveys to responders via email. To configure this feature, enter the following in the Email Settings section (your System Administrator can provide you with this information):

- SMTP Host
- SMTP Port
- Use SSL
- Sender Address: A valid email address that will be used for ERHMS™ administration
- Sender Password: The password used to log in to the mail server (leave blank to instead use the default credentials of the currently logged in user)

When you have finished entering the Settings information, select the Save button.
MAPPING SETTINGS

ERHMS Info Manager™ uses Bing Maps to plot incident locations. The default Map Service Key should only be used for demo purposes. For optimal performance with mapping and geocoding, replace the default key with one retrieved from Microsoft’s Bing service Bing Maps Portal at https://www.bingmapsportal.com/. To request a key, you will need to create a Microsoft or Azure account, or log in using an existing account. When you have finished entering the Settings information, select the Save button.

WEB SURVEY SETTINGS

Epi Info™ Web Survey is a server-based software component (separate from ERHMS Info Manager™) that consists of a website and a database. If you are using Epi Info™ Web Survey, enter your connection information in the Web Survey settings section (sample values provided in the image below). Refer to the Epi InfoTM website at https://www.cdc.gov/epiinfo/index.html for more instructions on downloading, installing, and configuring Epi Info™ Web Survey. For information on completing the Web Survey fields, visit the Web Survey Section of the Epi Info™’s User Guide at https://wwwn.cdc.gov/epiinfo/user-guide/survey/initial-setup.html. When you have finished entering the Settings information, select the Save button.

A description of each field that appears in the Web Survey section of the Settings screen, is provided below:

- **Endpoint Address**: The URL that ERHMS Info Manager™ uses to connect to the Epi Info™ Web Survey server.
- **Windows Authentication**: Whether or not to pass your Windows credentials to the Epi Info™ Web Survey server for authentication.
- **Binding Protocol**: The protocol used to communicate with the Epi Info™ Web Survey server.
**Organization Name:** The name of your organization in the Epi Info™ Web Survey database.

**Organization Key:** The password for your Epi Info™ Web Survey.

**DATA SOURCES**

A Data Source is a repository that stores the information that is entered through the ERHMS Info Manager™ software. The first time you open Data Source, it prompts you to create a data source. When the software opens, it displays a list of the data sources available for use. Each data source represents a separate repository or workspace for ERHMS™ data, including responders, incidents, forms and surveys. A data source is typically maintained by a single emergency response organization. However, there are situations in which multiple Data Sources might be necessary. See the following list of options available on the Data Sources screen, which includes descriptions of when you might use each option:

- **Add a new data source**
  Use this option if you would like to create a new, empty data source. This data source will initially contain no responders, incidents, or custom forms, so you will need to add these items once the data source is created. You would typically choose this option when first starting to use ERHMS Info Manager™ in your organization.

- **Open an existing data source from the list**
  Use this option if you would like to open a previously created data source that already appears in the list of data sources.

- **Add an existing data source previously created in ERHMS Info Manager™**
  Use this option if you would like to open a previously created data source that does not appear in the list of data sources. You would typically choose this option when there are multiple users in your organization using ERHMS Info Manager™. In order to connect to a data source created by another user, first use this option to add the data source to your list. Then open the data source normally.

ERHMS Info Manager™ includes a “sample” data source that you may use to familiarize yourself with the software. We recommend that you create a separate data source to store your organization’s data. A typical organization will use a single data source to store all their responders, incidents, forms, and surveys. However, you may choose to create additional data sources for a variety of reasons:

- You may create a “test” data source in order to test the features of ERHMS Info Manager™ without modifying your organization’s actual data. You may also use the sample data source for this purpose.
- If you are managing data for multiple organizations, you may create a different data source for each organization.
- If you would like to keep data separate for organizational purposes, you could, for example, create a new data source every year, using it to store data related to the incidents that occur during that year. Note that the new data source would initially be empty, meaning that responders would need to be reentered. To avoid manual reentry, responders could be exported from the old data source and imported into the new data source. For more information on importing and exporting data, visit the Import/Export section of this manual.

**ADDING A NEW DATA SOURCE**

When ERHMS Info Manager™ opens, the Data Sources screen will appear. This screen will display a sample data source that you can use to familiarize yourself with the software. Note the Quick Filter that appears at the top of this screen and many other screens in ERHMS Info
You may use the Quick Filter to search through a list for items matching a given string of text.

Add a new data source by selecting **Add – New**. In the pop-up window, enter the **Name**, **Description**, and **Location** of the new Data Source. Specify the **Database Type** from the dropdown list of options:

- **Microsoft Access®**—Select this option when a single user will be accessing the data source. ERHMS Info Manager™ will create a new Access® database in the specified location. Note that the user does not need Microsoft Access® installed in order to use this option.
- **Microsoft SQL Server®**—Select this option when multiple users will be accessing the data source. Using a SQL Server® database requires server connection information from your database administrator. Each individual using a SQL Server® data source will need to install ERHMS Info Manager™ on their computer, and all users will use the same server connection information.

If a user would like to use the Microsoft Access® option, select it and go to **Create**. For Microsoft SQL Server®, additional options (such as the server and database names) must be provided before selecting **Create**. When the data source creation is complete, the user will select the new data source from the Data Sources list and select **Open**. The next time ERHMS Info Manager™ is opened, the new data source will be included in the list of previously opened data sources.
CHANGING DATA SOURCES

You may switch to another data source at any time. Select File – Data Sources from the ribbon, select the data source from the list, and select Open. ERHMS Info Manager™ will close the currently open data source before opening the selected one.

RESPONDERS

CREATING A RESPONDER PROFILE

To create a new responder profile, select Responders – Create New from the ribbon, which opens the responder detail screen. There are three sections of responder information to select from the subsection: 1) personal, 2) emergency contact, and 3) organization. The first name, last name, and email address fields are required. After entering the information, select Save. Note: The entire responder pool should be entered in order to track all responders who participated in an incident. This roster of responders can be used as a baseline contact mechanism to create a registry of affected workers if medical or legal follow-up is needed.
The responder data collected in ERHMS Info Manager™ is stored in an underlying Epi Info™ form. This means that you may use any of the form-related features provided by ERHMS Info Manager and Epi Info™ to manage your responder data. You may access these features by selecting Data – Forms from the ribbon, selecting the Responders form, and choosing one of the available options.

A user can edit the form in order to add fields that are not provided by ERHMS Info Manager™, such as a responder’s mother’s maiden name or an organization-specific ID. These custom fields would not be displayed in the ERHMS Info Manager™ responder detail screen, but they could be viewed and edited in the Epi Info™ form designer, data entry screen, and analysis tools. See the Forms section of this document or the Forms Section of the Epi Info™ User Guide at https://www.cdc.gov/epiinfo/pdfs/userguide/2_formdesigner.pdf for more information on working with forms.

Be careful not to delete the Responders form or any of the fields used by ERHMS Info Manager™, as this will cause system instability.

EDITING A RESPONDER PROFILE

Once a responder profile has been saved, their information will display in the list of responders, which can be accessed by selecting Responders – Show All from the ribbon. To edit a responder profile, select the profile from the list and go to Edit at the bottom of the screen. You may also use the Epi Info™ data entry screen to edit responder data by selecting Data – Forms from the ribbon, selecting the Responders form, and selecting the Data – Edit button from the ribbon. This should only be necessary if you have added custom fields to the responder data as described above.
INCIDENTS

An incident is an emergency event, such as a fire, oil spill, flood, tornado, or disease outbreak. To improve the effectiveness and management of responses to and recovery from incidents, use ERHMS Info Manager™ to:

- Document the incident
- Define and map incident locations
- Add responders to an incident roster
- Manage and update responder information
- Request and collect information from responders
- Analyze collected information

Before an incident can be created, you must open a Data Source. Open ERHMS Info Manager™, select a data source, and select Open. Be sure to check that the correct Data Source is open before creating your Incident. Remember that the Data Sources screen can be accessed at any time by selecting File – Data Sources from the ribbon.
CREATING INCIDENTS

To create a new incident, select **Incident – Create New** from the ribbon.

On the **New Incident** window, enter the following:

- **Name**
- Description
- Phase (Pre-Deployment, Deployment, Post-Deployment, or Closed)
- Start Date
- End Date (Estimated)
- End Date (Actual) – Leave blank until the incident is closed.

Select the Save button. If you would like to record additional information about the incident, you may do so by using the Notes functionality described below.

After clicking save, new incident options are displayed on the left sidebar, as shown in the figure below. The information provided by these options is incident-specific. For example, the Forms option displays only forms that have been assigned to the current incident. To view information that applies to any incident or that is non-incident-specific use the ribbon items (such as Data – Forms).

Note that forms, analyses, and dashboards that are created from the incident screen are automatically linked to that incident. Those that are created from screens opened via the Data ribbon item are not linked to any incident by default. To link a form, analysis, or dashboard to a different incident, first open the appropriate screen by selecting an option (Forms, Analyses, or Dashboards) under the Data ribbon item. Choose the desired item and select Incident. To associate the item with an incident, choose the desired incident and select Link, or select Unlink to remove an existing association with an incident.
VIEWING AND ADDING NOTES

Go to the Notes option to enter incident information. Whenever new notes are added, a date and timestamp are also added to each record. To effectively document responses, enter as many notes as needed.
MANAGING AN INCIDENT ROSTER

From the list of Incident Options, select Roster to create a list of responders assigned to the incident. The list at the top of the screen includes the entire responder pool (all responders that you have added to ERHMS Info Manager™). Use the Quick Filter option at the top of the module screen to locate individuals by name, or to find all members of a specific organization, occupation, or city. Select multiple responders by holding down Ctrl or Shift, or by clicking and dragging. To add responders to the roster for your active incident, select the responder to be added to the roster and click Add.

The individuals added to the incident roster disappears from the list of available responders and appears on the current roster list below. To remove a responder from the assignee list, select the responder from the list of assignees and select the Remove button. Note: In order to track all responders during an incident, no matter how long they have worked, it is strongly recommended to NOT remove a responder from the assignee list unless a mistake was made (e.g. an incorrect entry). Responders may be rostered to any number of incidents simultaneously.
LOCATIONS

To add incident locations, select Locations from the Incident Options then click Create at the bottom of the page.
Enter the Name and Description of the location. If the location’s Address is known, enter the address and select Locate (to the right of the Address entry box), which automatically plots the latitude and longitude of the location. Select Save.

Use the Map feature when an address is unknown or unavailable. To get an approximate location of an unknown address, enter the nearest city or known address in the Address field and select the Locate button. Zoom by rolling the mouse wheel while hovering over the map or by selecting the plus and minus buttons. Double-click the spot corresponding to your location, which drops a pin on the spot and automatically plots the latitude and longitude. Select Save.
The locations option in the Incident tab will contain all locations associated with the incident. If a new location has been entered but is not displaying, select the Refresh button at the bottom of the screen.

**FORMS**

ERHMS Info Manager™ uses Epi Info™ for creating and editing forms, entering data into forms, viewing form responses, and analyzing the data. Visit the Form Designer Section of the
Epi Info™ User Guide for more information on Forms. Many forms have been included in ERHMS Info Manager™ as templates. To view these, select Data – Templates from the ribbon. You may also create forms from scratch if these templates do not meet your needs.

Many pre-deployment forms, such as those completed by potential responders during registration and credentialing, contain information that is not tied to a specific incident. It is strongly recommended that this information be updated at least annually, including in ERHMS Info Manager™.

Other forms are incident-specific and help us understand the impact of the incident on the responder. These can include check-in forms, exposure assessments, site specific training rosters, and sampling results.

CREATING A FORM

To manage incident-specific forms, select the Forms item from the incident subsections. To manage all forms, select Data – Forms from the ribbon. You may create a new form by selecting Create. In the Epi Info™ Form Designer, give the form a Name, then select OK. It is suggested that the name for an incident-specific form be prefixed by the name of the incident, but this is not a requirement. If the form that has been created meets your needs, select yes on the prompt that comes up asking whether Epi Info™ should be closed. If you intend to make changes, press no and proceed with making edits using the Epi Info™ Form Designer.

By default, forms created in ERHMS Info Manager™ contain a responder ID field. This field allows you to link form responses back to the responders who provided them. If you do not require this functionality, you may delete the responder ID field.

When you are done making changes to the form, close the Form Designer. Changes are saved automatically, and the new form will display in the Forms list.
COLLECTING DATA

To enter data into a form, select the form and go to Data - Enter at the bottom of the screen. If the form contains a responder ID field, you will be asked to select the responder to whom the entered data applies. Choose a responder from the list and select Continue. In the Epi Info™ data entry window, enter data into the form fields. Select Save when you are done. Use the New Record or arrow buttons to navigate between records. Close the data entry window when you are done.

PUBLISHING FORMS TO THE WEB

By using ERHMS Info Manager™, you can publish forms to the web that will serve as a questionnaire or signup/information gathering document that responders can complete online. With web publishing, you can:

- Create a web link for surveys
- Send the web link to multiple recipients by using email
- Allow users to complete the survey online by using responsive web pages
- Download the survey responses into ERHMS Info Manager™

Additionally, if your form contains a responder ID field, each web link sent via email will be unique to the recipient, allowing you to link form responses back to the responders who provided them. ERHMS Info Manager™ is integrated with the Epi Info™ Web Survey system. To utilize the web publishing feature, install Epi Info™ Web Survey, available at https://www.cdc.gov/epiinfo/pdfs/userguide/5_websurvey.pdf. To allow ERHMS Info Manager™ to send web survey links to responders, provide a sender email address in the Email section under Settings. For further detail, please see the Email Settings section of this user guide.
To publish a survey to the web, first choose a form to publish. To locate forms, select Data – Forms from the ribbon. Forms related to individual incidents are also found by selecting Forms in the subsection of the incident screen. Select the form and go to Publish - To Web.

You can customize the survey publication options listed below. For more information on customizing these options, visit Epi Info™’s User Guide, Publish Form to the Web Section at https://www.cdc.gov/epiinfo/user-guide/survey/publish-form-to-web.html.
- Title: The name of the survey that will be displayed to users.
- Start Date: The first date on which the survey is available to be filled out.
- End Date: The last date on which the survey is available to be filled out.
- Response Type: Whether multiple responses are accepted per person.
- Welcome Text: The text that is displayed when the user starts the survey.
- Completion Text: The text that is displayed when the user finishes the survey.

After entering the appropriate information in the Publish to Web window, select **Publish**.

---

**TEMPLATES**

There are various standardized form templates in the ERHMS Info Manager™ Templates tab, including forms from Federal Emergency Management Agency (FEMA), The American Red Cross, Occupational Safety and Health Administration (OSHA), and other organizations that frequently send emergency responders to incident sites. These are just a few examples of forms that are available. You can use these form templates unchanged, edit them for your purposes, or create an original form to meet the needs of your organization. Information that could be collected when responders report for duty at the incident, include: exposures, work activities, personal protective equipment (PPE) use, contact information, and other pertinent information from the incident. This information can allow for prompt recognition of risks, understanding the health effects of ongoing or new exposures, setting up medical surveillance, or performing follow-up related to work at an incident.
CREATING A FORM FROM A TEMPLATE

A template can accelerate the creation of a form. To create a form that is not linked to a specific incident, begin by selecting Data - Templates from the ribbon. To create an incident-linked form, begin by opening the incident and navigate to the Templates subsection. Then choose the template that fits your needs and select Create.
Once you press the Create button, the Epi Info™ Form Designer window opens up. A pop-up prompts for the name of the template. After you enter a name and select OK, Epi Info™ creates a form using the template selected. It may take a few moments for Epi Info™ to add all the template fields to the new form.

If the form that has been created meets your needs, select yes on the prompt that comes up asking whether Epi Info™ should be closed.
If you intend to make changes, press no and proceed with making edits by using the Epi Info™ Form Designer. Once the changes are finalized, close the Epi Info™ Form Designer window. Changes will be saved automatically.

CREATING A TEMPLATE FROM A FORM

Existing forms may also be converted into templates. You would typically do this if you have an incident-specific form that you would like to reuse for future incidents. Start by selecting the desired Form. Press the Publish button and choose the To Template option.

The Epi Info™ Screen opens up the newly created template with the option to rename the template. Also, the user is able to provide a more detailed description within the template if necessary. Once the template has been created, select yes when prompted to close Epi Info™. Note that templates cannot be edited. In order to make changes to a template, you must create a form using the template, edit that form, and republish it to a new template.
DATA IMPORT/ EXPORT

If you would like to import data, go to Data – Forms and select the desired form. Press the Import button to see the multiple options available.
To import data from an Epi Info project, select **From Project** and take the following steps:

- Note: this procedure requires an Epi Info™ project file (.prj) and a data file (.mdb – if data tables were created in Microsoft Access®).

- Browse for the Epi Info™ project file by clicking the **Browse** button next to the **Project containing the data to import** field. Select the .prj file.
- Select the **Form** from the **Form data to import** drop-down list.
- Select the manner in which you would like the data imported from the **Type of Import** list.
  - **Update and append records** – Records in the destination form containing the same GlobalRecordId values as the source form will be updated (overwritten) if there is new information. However, values in the destination table will never be overwritten with a null or missing value. All other records will be appended (added) to the end of the table.
  - **Update records only** – Records in the destination form containing the same GlobalRecordId values as the source form will be updated (overwritten) if there is new information. However, values in the destination table will never be overwritten with a null or missing value. All other records will be ignored.
  - **Append records only** – All records in the source form will be appended (added) to the end of the table. No records will be updated (overwritten).
- Click **Import**. **Import Complete** will appear at the bottom of the dialog box upon successful completion of the import.
- Click **Close**. The data is imported into the form.

To import data from a file (such as a CSV file, Excel spreadsheet, or Access database), select From File. An Epi Info™ Classic Analysis window will open. Step through the dialogs for selecting the file and mapping its variables to the fields of the selected form.

To import data from the web, select From Web and reference the Distributing Surveys Section of this User Guide. Note that this will only work for forms that have been previously published to the web.

To import data from a mobile device, select From Mobile and reference the Companion for Android section of the Epi Info User guide at https://www.cdc.gov/epiinfo/pdfs/userguide/6_android.pdf.

If you would like to export data, go to Data – Forms and select the desired form. Press the Export button to see the multiple options available.

To export data, press the Export button to see the multiple options available.

To package and export data, select To Package and take the following steps:
The **Project path** and **Form to package** textboxes automatically populate with the project and form information. Click **Browse** and select a **Package Path**. The package path designates where the data package will be saved. Click **OK**.

- Enter a name for the data package in the **Package Name** field.
- Check the **Append Timestamp to File Name** checkbox if you wish to add a timestamp to the file name. The default setting is unselected.
- Enter **Password** if you wish to encrypt the data package. This increases the security of your data transmission. Save your password in a safe location as this password will be required to access the data package. If you do not wish to encrypt your data, leave the **Password** field blank and proceed to step eight.
- To **Verify Password**, re-enter the password from the step above.
- Click the **Remove Data in Fields** button to omit specific fields from the data package.
- Click the **Remove Data in Grids** button to remove data from columns in the selected grid.
- Click the **Select Records** button to select specific records to include in the data package.
- The **Package data for Transport** dialog box appears.
- Click the **Package** button. When complete, the **Package Creation Complete** verbiage will appear at the bottom of the dialog box.
- Click **Close** to exit.
- The data package appears at the location (**Package Path**) specified in step three.

For more information on importing or exporting data, visit the Entering and Editing Data Section of the Epi Info™ User Guide at [https://www.cdc.gov/epiinfo/pdfs/userguide/4_enter.pdf](https://www.cdc.gov/epiinfo/pdfs/userguide/4_enter.pdf).
ASSIGNMENTS

DISTRIBUTING SURVEYS

If you have previously published a form as a web survey, you can distribute the survey to your responders by first assigning the survey to them, and then sending the assigned responders an email that contains a web link to the survey. To assign pre-deployment forms, select Data – Assignments in the ribbon. To assign deployment and post-deployment forms, select the Assignments in the Incident Options sidebar in the incident module. First, select a Form from the dropdown box at the top of the screen, then select the responders you wish to give the survey to. To select multiple responders, hold down the Ctrl or Shift key while clicking. To quickly select all responders, select any responder in the list then press Ctrl+A. Select Add to confirm the responders you wish to provide the survey to, who are then added to the list at the bottom of the screen. To notify responders of their pending surveys via email, select the desired surveys and go to Email.

The email will display all of the selected recipients. To send a survey to individuals who are not in your list of responders, click the Add button in the Recipients section and enter each of their email addresses manually by choosing the Email address option in the Add a Recipient pop-up window. Note: You will not be able to link form responses back to a responder record for those responders with a manually added email address. This option is not recommended. It is best to add the individual to the list of responders and assign them to an incident first.

Enter the Subject and Body of your email. When sending an assignment email for a web survey, the box labeled Append web survey URL should be automatically checked, and the assigned form will already be selected. Only forms that have been published to the web will
appear in this dropdown. If your form contains a responder ID field, you may wish to check the box labeled Prepopulate responder ID field. This will allow you to link your responders to their data later. Note: You will not be able to check this box if the form you have selected does not contain a responder ID field. You can also attach documents to the email if desired by using the Add button in the Attachments section. When you are finished, send the email by selecting Send.

DOWNLOADING FORMS FROM WEB SURVEY

As recipients complete the form, Epi Info™ Web Survey will automatically save responses to a separate database. To download Web Survey responses into the main ERHMS Info Manager™ database for a given form, navigate to the Forms tab, select the form and select Import - From Web.
To display all imported survey responses (any data already in selected form prior to the import procedure), select the form again, and select Data – View.

Epi Info™’s Classic Analysis and Visual Dashboard modules may be used to analyze data collected through forms. Start by opening the list of forms either on the desired incident’s Forms subsection or by selecting Data – Forms from the ribbon. Select the form, then go to...
Analyse - Classic or Analyse - Visual. Provide a Name for the analysis or the dashboard in the resulting pop-up window and select Create.

In Classic Analysis:
- Add commands by selecting from the Command Explorer on the left-hand side of the window.
- When prompted, specify the desired options, which vary depending on the selected command.
- Save the analysis using the Save button in the Program Editor on the bottom of the window.

In Visual Dashboard:
- Add text and images by right-clicking on the dashboard background and selecting an option under Add Report gadget.
- Conduct analyses and add tables, charts, and graphs by right-clicking on the dashboard background and selecting an option under Add Analysis gadget.
- Move existing gadgets around the dashboard by dragging them with the mouse.
- Save the analysis by clicking the Save or Save as button represented by an image of a floppy disk(s) on the top left of the dashboard window, or by right-clicking on the dashboard background and selecting Save canvas.

HELP

ERHMS INFO MANAGER™ SUPPORT

Submit all questions and comments about ERHMS Info Manager™ to the Epi Info™ Help Desk at http://www.cdc.gov/epiinfo/support/helpdesk.htm. The Epi Info™ Help Desk is monitored from 8:00 a.m. until 5:00 p.m. ET. Monday through Friday and is not available on weekends or federal holidays. Users should expect to receive a response back to their inquiries within 48 hours.

LOGS

During the course of normal operation, ERHMS Info Manager™ creates log files that track user activity and record debugging information. To manage these files, select Tools – Logs from the modules ribbon.

VIEWING LOGS

To view a log file, select it from the list of available files within the Logs module (Tools – Logs) in the Logs tab and go to Open. The file will open in your default text editor.

DELETING LOGS

If you would like to reclaim the hard drive space used by a log file, you may delete it by selecting it from the list of available files and going to Delete. The file will be recreated the next time ERHMS Info Manager™ attempts to write logging information.

PACKAGING LOGS

Logging information may be easily shared with software support staff by packaging log files into a zip file. To package one or more log files, select them from the list of available files and go to Package. ERHMS Info Manager™ will create a zip file that contains all the selected log files. You may then save this file to its default location (usually the desktop) or another location of your choice.
ERHMS INFO MANAGER™ UNINSTALL

To uninstall ERHMS Info Manager™, follow the steps below:

- Go to the Control Panel of your computer
- Open Programs and Features in the Control Panel
- Select ERHMS Info Manager from the list of installed software
- Select **Uninstall/Change** from the ribbon above the list of installed software
- In the popup that appears, select **Remove the application from this computer.**
- Select **OK**

ABOUT

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# Appendix A: Key Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Epi Info™</td>
<td>A software application created by CDC and available to the public via the internet. It is used by physicians, nurses, epidemiologists, and other public health workers who might lack a background in information technology who often have a need for simple tools that allow the rapid creation of data collection instruments and data analysis, visualization, and reporting using epidemiologic methods. Epi Info™, a suite of easy to use software tools, delivers epidemiologic functionality without the complexity or expense of large, enterprise applications.</td>
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<tr>
<td>Emergency Responder Health Monitoring and Surveillance™ (ERHMS™)</td>
<td>A framework of activities designed to allow for the monitoring and surveillance of emergency response and recovery safety and health during all phases of emergency response: pre-deployment, deployment, and post-deployment.</td>
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<tr>
<td>Term</td>
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<tr>
<td>Incident Command System (ICS)</td>
<td>A standardized on-scene incident management construct specifically designed to provide an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procurements, and communications operating within a common organizational structure and designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small, as well as large and complex, incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations. For more information visit <a href="https://training.fema.gov/EMIWeb/IS/ICSResource/index.htm">https://training.fema.gov/EMIWeb/IS/ICSResource/index.htm</a></td>
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<tr>
<td>Term</td>
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<td>Medical Screening</td>
<td>Medically assessing individual workers for the presence (or absence) of specific physical or mental health conditions at a specific time, with the express purpose of early diagnosis and, if appropriate, treatment. Medical screening focuses on assessment of fitness and ability to safely and effectively deploy on a response and may entail history taking, examination, and/or testing procedures.</td>
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<tr>
<td>Medical Surveillance</td>
<td>Systematic and ongoing collection and evaluation of population-level clinical data (e.g., physical and mental health, work histories, medical/psychiatric examination, laboratory and imaging studies or other clinical testing) that is used to identify hazards, to eliminate ongoing hazardous exposure, and to evaluate exposure–health outcome relationships.</td>
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<td>Responders</td>
<td>Includes paid affiliated personnel, contractors, subcontractors, and volunteer workers involved in incident operations. Responders include police, fire, and emergency medical personnel, as well as other responder groups such as public health personnel, cleanup, and repair/restoration workers.</td>
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<tr>
<td>Response</td>
<td>Immediate actions to save lives, protect property and the environment, and meet basic human needs. Response also includes the execution of emergency plans and actions to support short-term recovery.</td>
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<tr>
<td>Roster</td>
<td>A roster is a list of response workers who have been or continue to be participating in any capacity during a response event, or who are available and ready to respond before an event. The purpose of maintaining such a roster is to provide a formal record of all those who have participated in response and cleanup activities. It functions as a mechanism to contact workers about possible work-related symptoms of illness or injury, as needed, and serves as the basis for determining which workers may require post-event tracking of their health.</td>
</tr>
</tbody>
</table>
APPENDIX B: REFERENCES

NIOSH Emergency Responder Health Monitoring and Surveillance™ topic page:
https://www.cdc.gov/niosh/topics/erhms/

Emergency Responder Health Monitoring and Surveillance™ National Response Team Technical Assistance Document (TAD):
https://www.nrt.org/sites/2/files/ERHMS_Final_060512.pdf

Epi Info™
https://www.cdc.gov/epiinfo/index.html
To receive NIOSH documents or more information about occupational safety and health topics, contact NIOSH at

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