ALABAMA ePCR

Administrators

Users Manual

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INTRODUCTION

About Alabama ePCR

Alabama ePCR is a desktop application used to collect, store, and transmit local incident data from an EMS provider to the state office. It also has extensive searching and reporting capabilities.   It can be installed on a local PC as a stand-alone configuration or it can be placed on a server in a networked setup.

Alabama ePCR receives incident data from one or more workstations at the Provider site. As incidents are entered, they are checked against the business rules defined at the State level. Incidents are eventually transmitted to the **State Database Server** and are checked for validity. Any incidents that do not fulfill State requirements are reported back to the agency for correction.

Alabama ePCR allows an EMS provider to maintain a copy of their data, to import from third parties such as CAD systems, and to export to third parties such as billing systems. **Alabama ePCR** will interface at the State level with any other EMS data collection system that adheres to **NEMSIS** standards.

About Grayco Systems & Consulting, Inc.

Grayco Systems is a software development business concentrating on data collection and management. We design and support software for a wide variety of clients, including Emergency Medical Service providers, state agencies, insurance companies, honor societies, and more.

Grayco develops and customizes software to fit our clients' specific needs. We specialize in providing systems to streamline information flow.

Our approach is to provide software the client needs, not to make the client conform to the software. We work closely with our clients to analyze their needs, provide a comprehensive solution, and support that solution as needs change.

Target Audience

Who should use this document?

- ➢ Personnel who will enter Incident data at their site

- ➢ Personnel who are expected to maintain administrator-level information (employees, vehicle lists, authorized medications, and so forth) in **Alabama ePCR**

- ➢ Personnel who want reports from **Alabama ePCR**

- ➢ Personnel who are staffed to provide support to the computer system and to the **Alabama ePCR** software

- ➢ Personnel with a general interest in **Alabama ePCR**

Installing Alabama ePCR

This section will describe:

- ➢ Hardware and Software Requirements

- ➢ How to use the navigational buttons during installation

- ➢ Specific steps in the installation process

Hardware and software requirements

This software is designed to run only on a Windows PC. The minimum acceptable client PC contains:

- ➢ Windows 2000 or Windows XP platform

- ➢ 1 GHz Pentium III or AMD Processor (or higher)

- ➢ 800 X 600 Graphics capability (or higher)

- ➢ 5 GB Free Hard Disk space (or more)

- ➢ 256 MB RAM (or more)

Installation of Alabama ePCR – The Navigational Buttons

While watching the **Alabama ePCR** installation, many of the installation screens will have **Browse**, **Back**, and **Cancel** buttons as an alternative to choosing **Next** to continue to the next stage of installation:

 ➢ **Browse** will allow viewing of the file names in the local disc folders. Navigate to the location desired for the program files.

 ➢ **Back** will safely send the process back one or more screens in case there is a need to modify or review prior entries.

 ➢ **Cancel** quits the entire installation process. A separate pop-up window asks for confirmation to cancel. If **Yes**, the exit from the Setup Wizard will complete.

Steps in the Installation process

Whether the installation method comes from a CD or a web download, open the **Alabama ePCR** file to start the installation. A pop-up window appears with a greeting from the Setup Wizard.
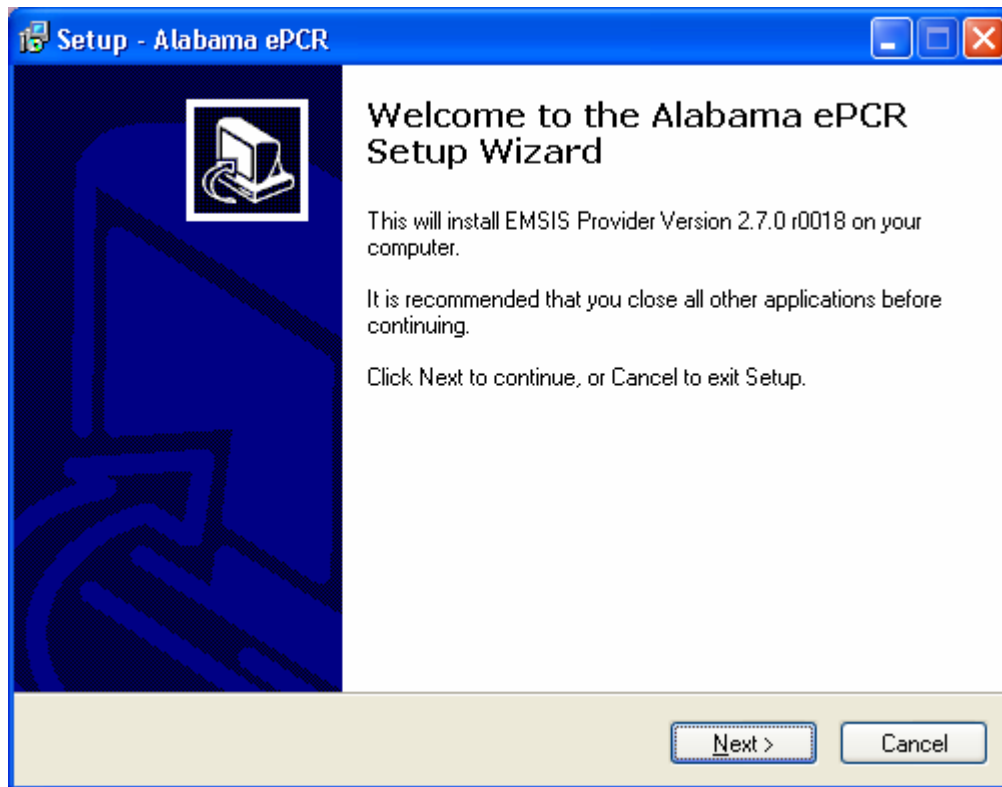
To continue with the Wizard, Press **Next**.

The next screen asks: Which Windows folder will house **Alabama ePCR**?
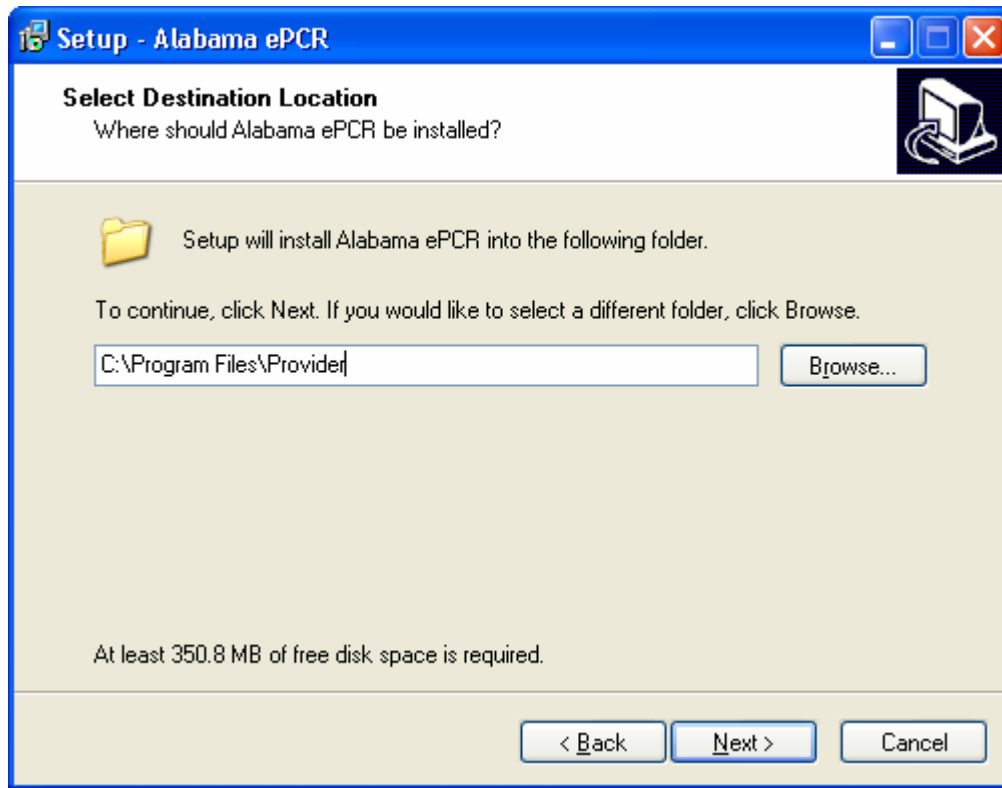
If there is adequate free disk space, leave the default folder as is and press **Next**.

Tip: One way to check for free disk space:
1) In Windows, go to **My Computer**
2) Select the drive that will house the **Alabama ePCR** application
3) Go to the lower left corner of the **My Computer** window to the **Details** area. The remaining free space for that drive will be displayed.

The next screen asks: What degree of installation is needed?
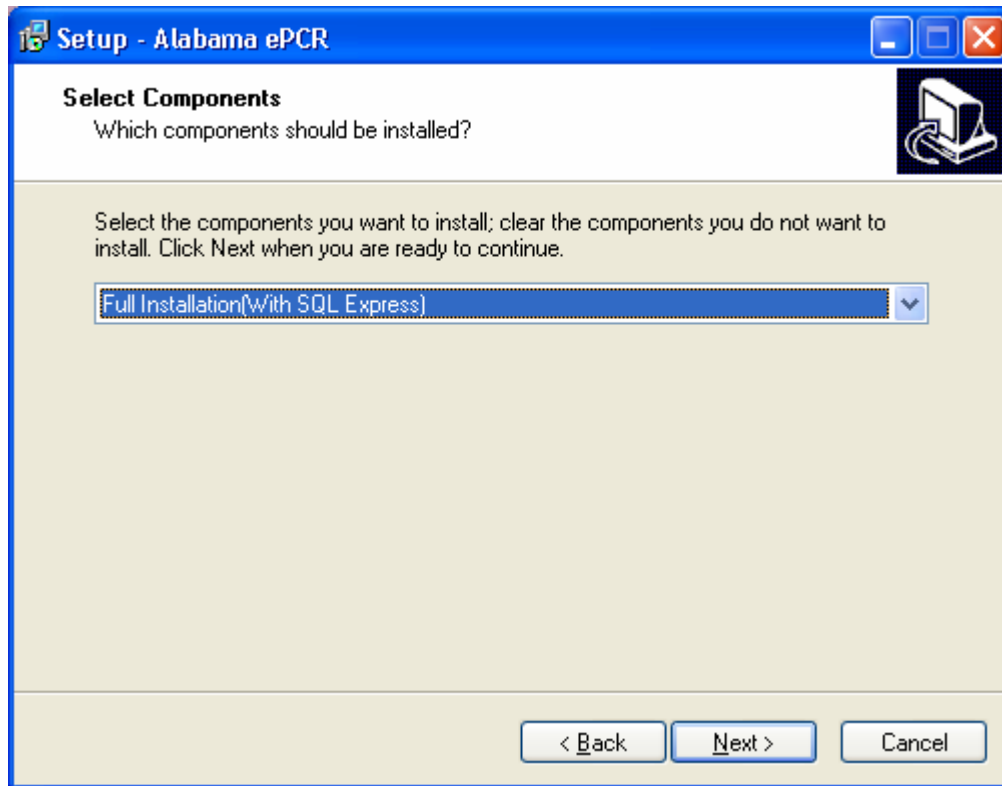
Leave the default (Full Installation) as is and press **Next**.

The next screen asks : Where do the program's shortcuts go?
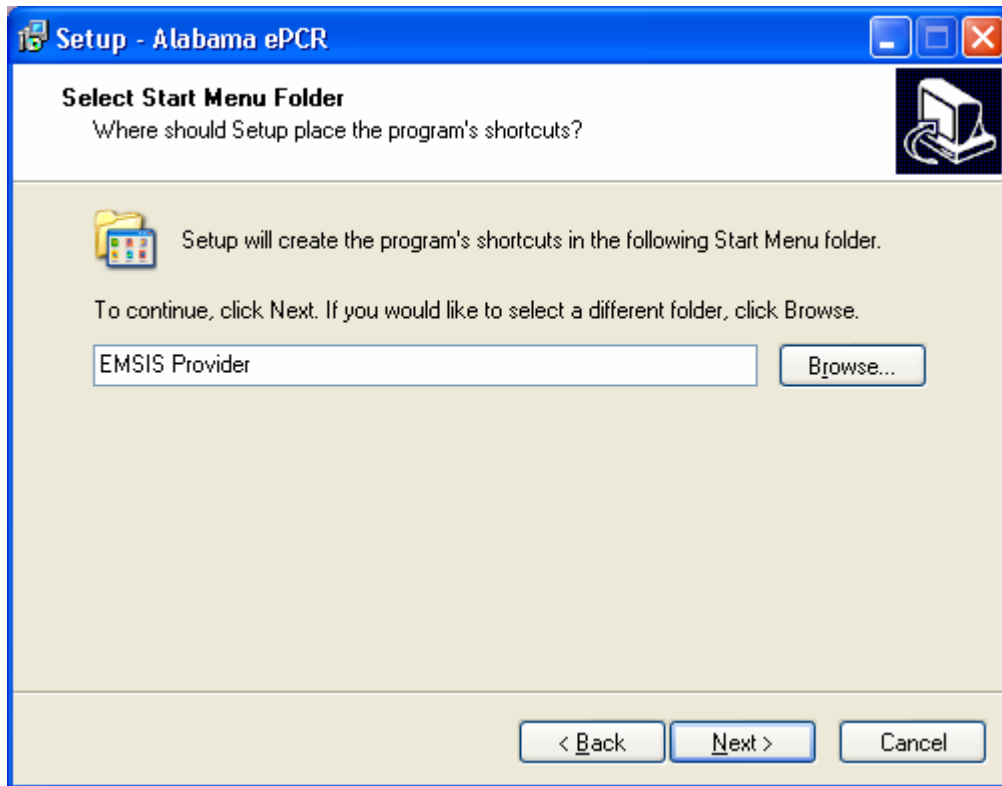
Choose the default (the **EMSIS Provider** folder) and press **Next**.

The next screen asks: Based on the choices made, is the Setup Wizard ready to begin the actual installation?
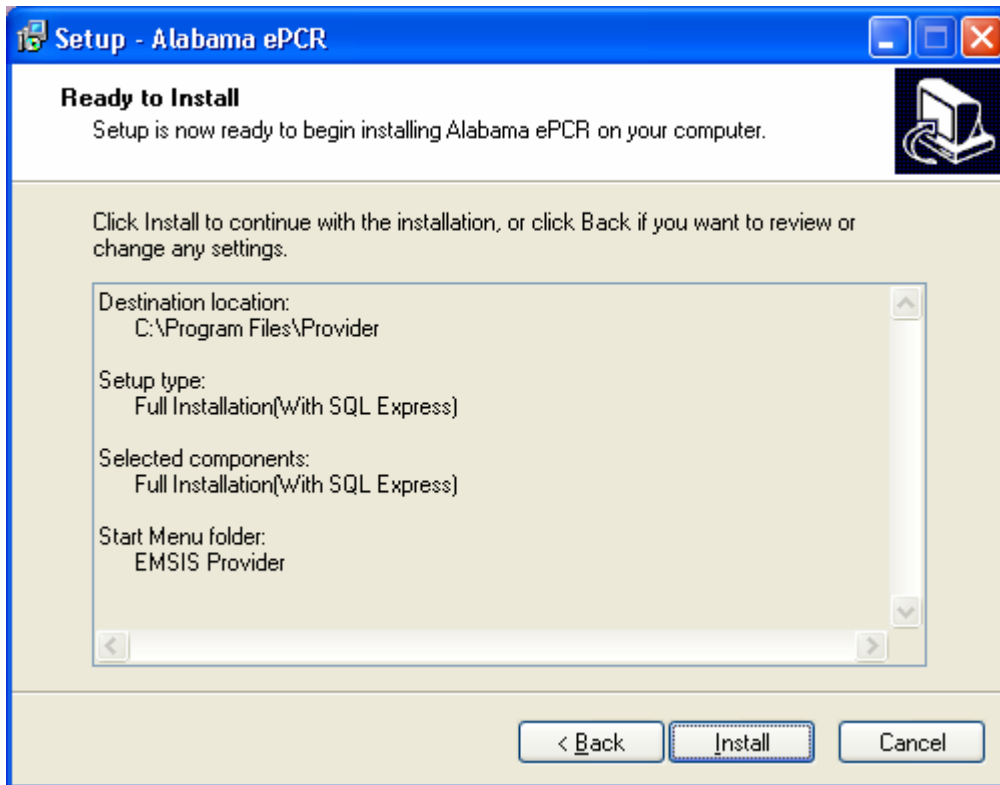
If changes need to be made to any of the previous choices, press **Back** as needed to modify any of the Install elements.

When all desired changes have been made, press **Install** to begin the local installation.

The installation will take a few minutes. A number of files will be extracted at a rapid rate of speed. The following screen is typical of the general look of the installation:
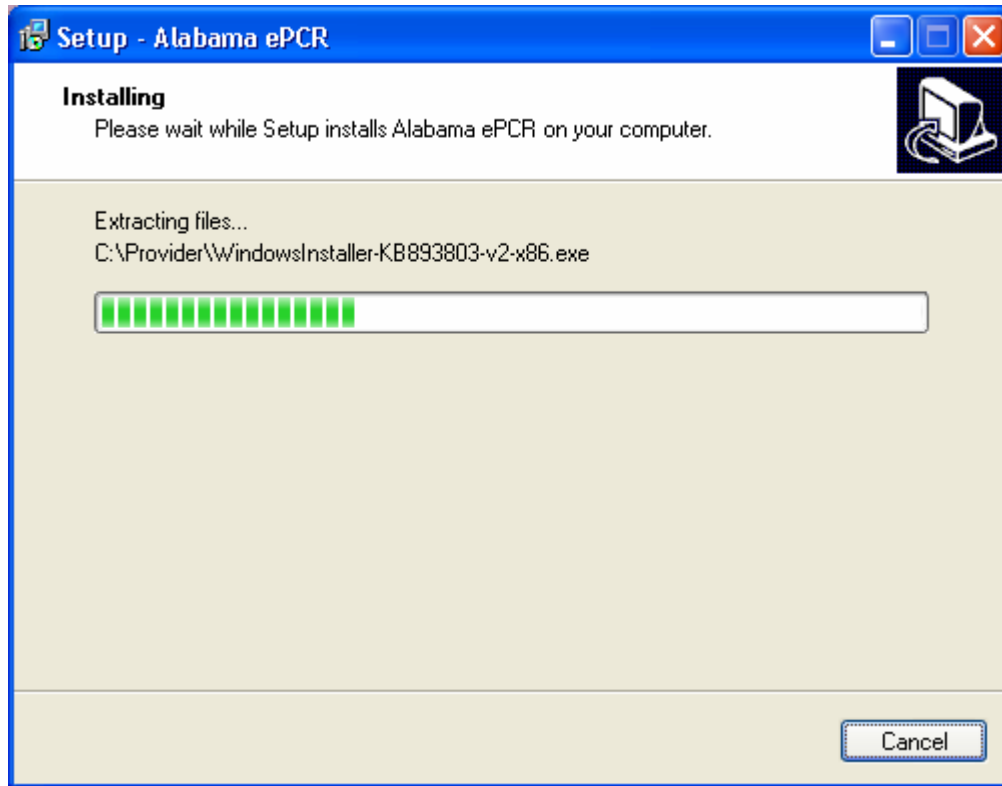
During the installation, the **Windows Installer 3.1** Wizard will appear:
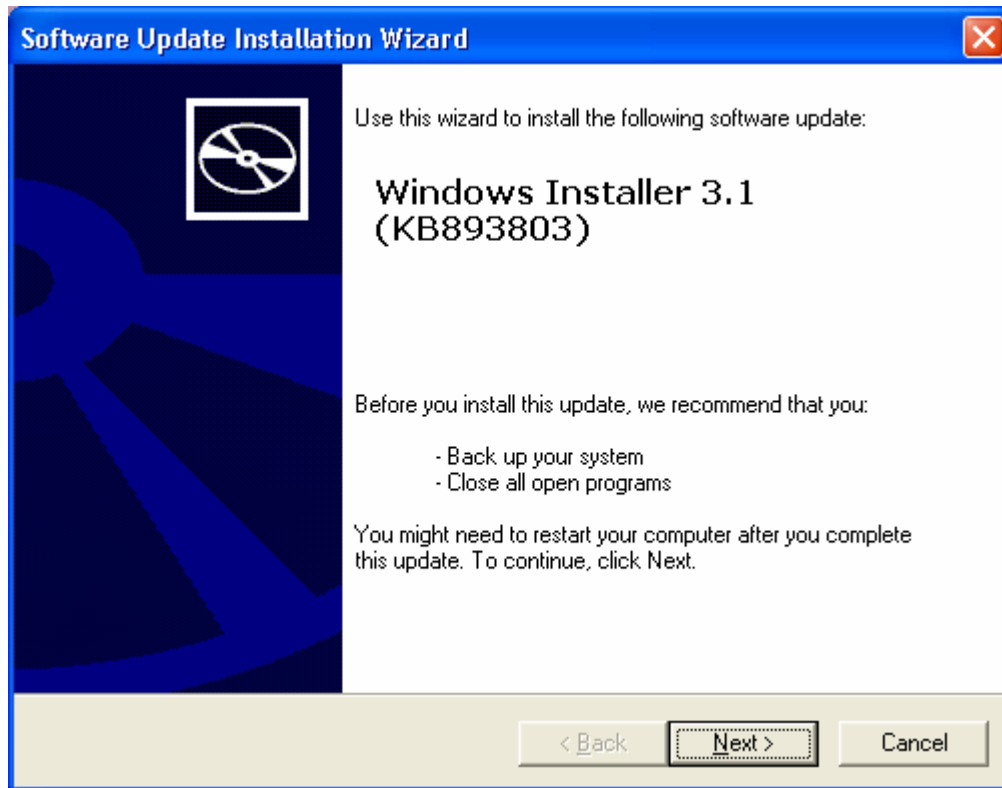
Select **Next** to continue.

If this product has not been previously installed on your computer, you may get a pop-up window for the License Agreement for Windows Installer 3.1:
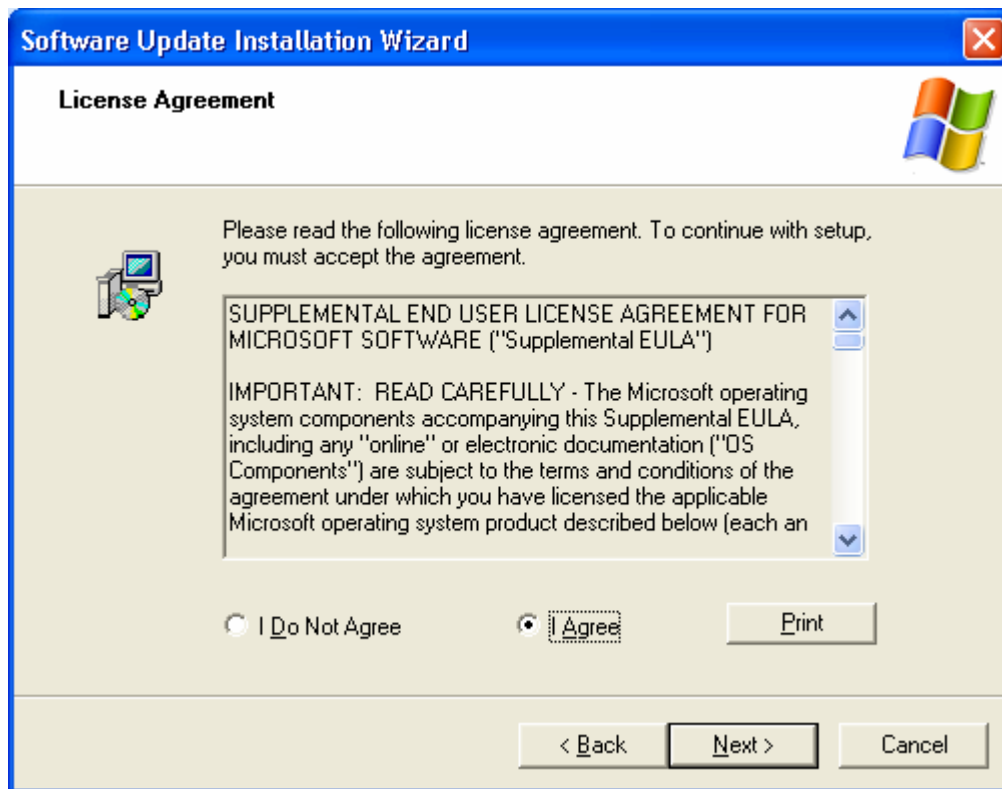
To get a copy of this agreement, select **Print**.   To continue, choose the **I Agree** radio button and then select **Next**.

When the Installer finishes, the wizard returns:
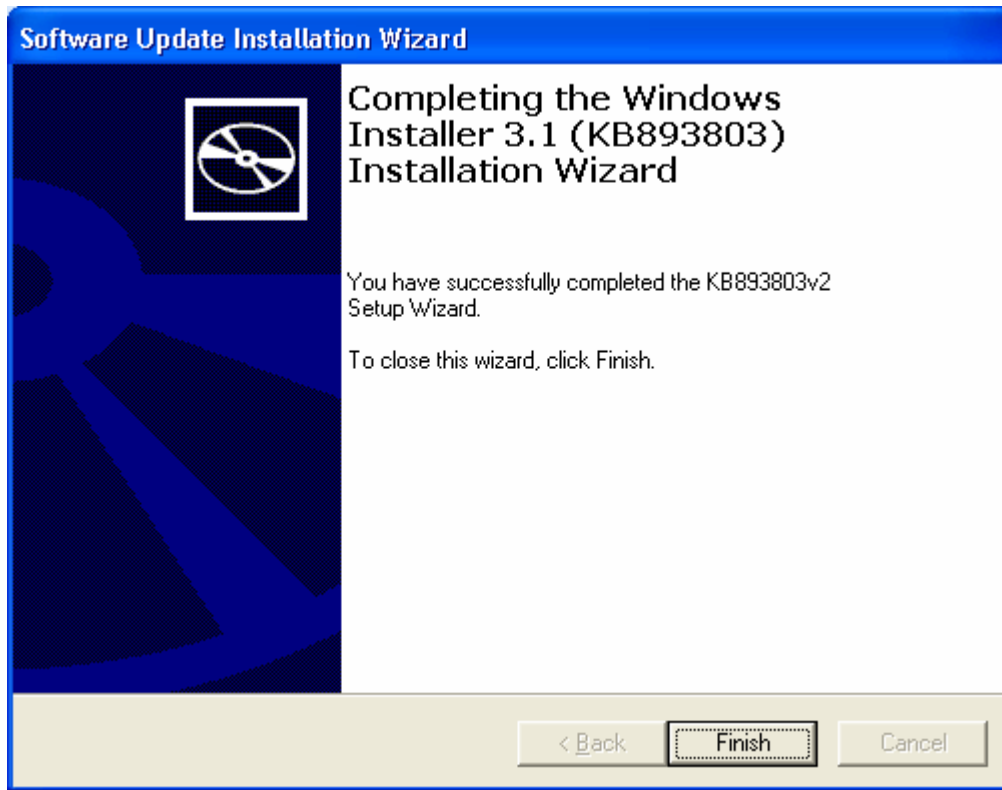
Select **Finish** to complete this phase of the installation.

The next phase will be using the Setup Wizard for **Microsoft .Net Framework**:
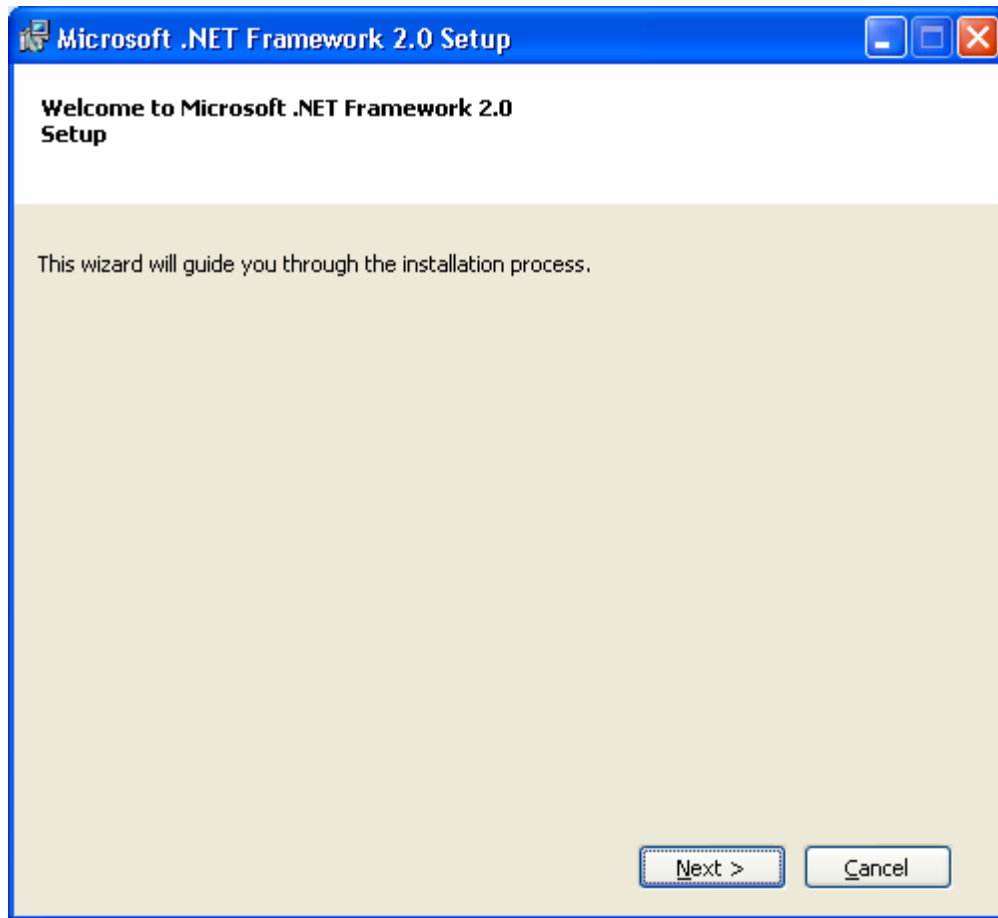
Select **Next** to continue.

An End-User License Agreement for the use of the product follows. To get a copy of this agreement, select **Print**:
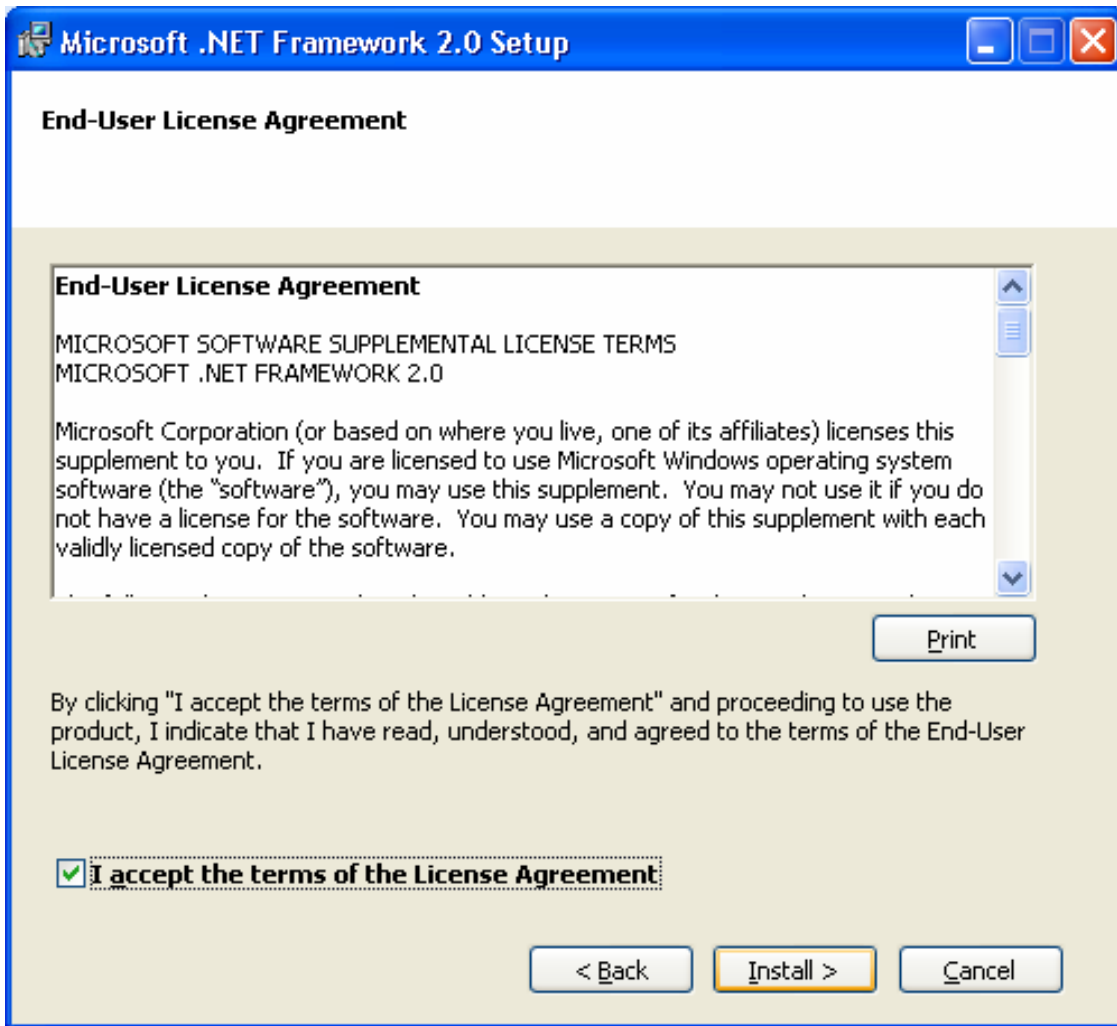
Please check the agreement box, then choose **Install** to continue.

Choosing **Install** begins the installation of the .NET component:
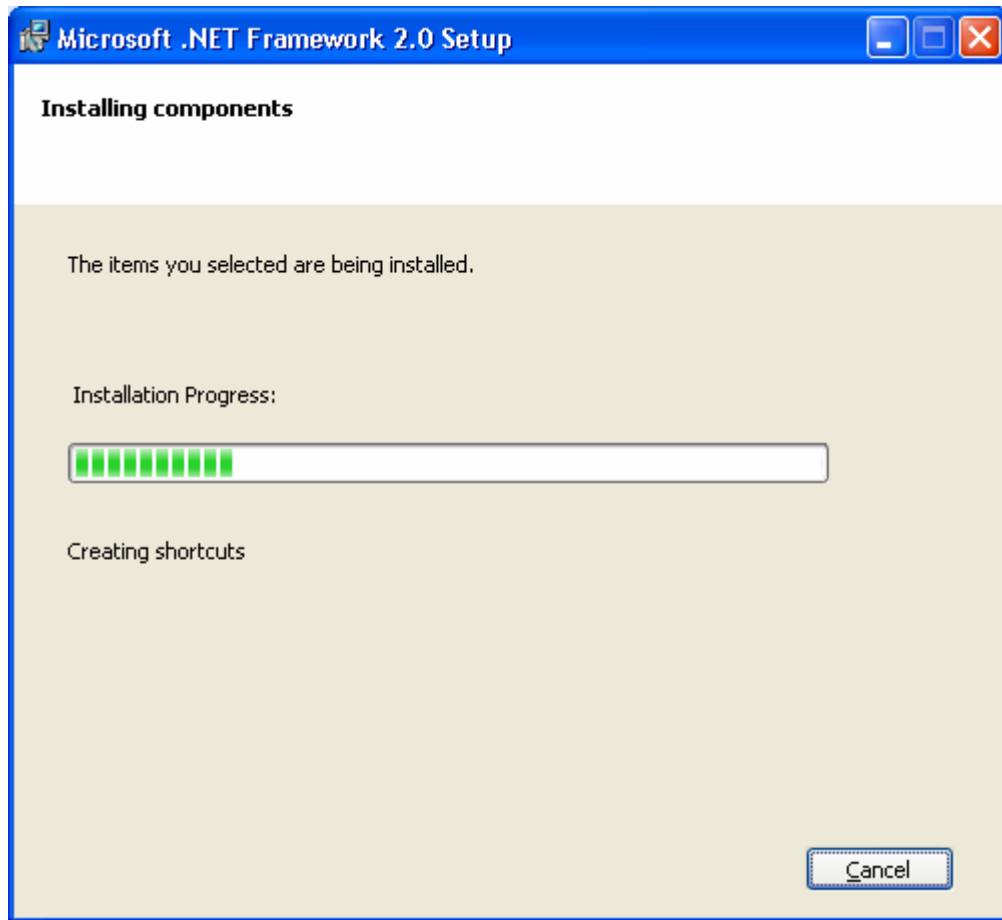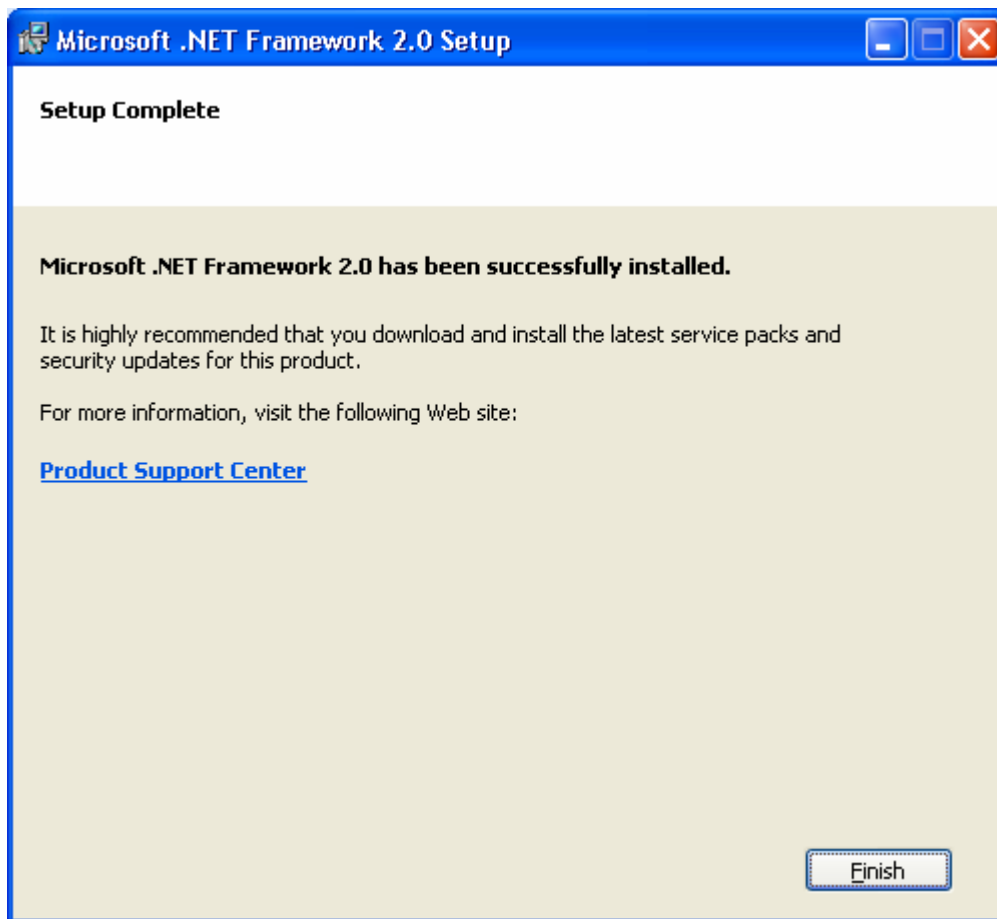
Eventually, the .NET installation finishes. Select **Finish** to continue.

The main installation continues, including the **SQL Server 2005 Setup**:
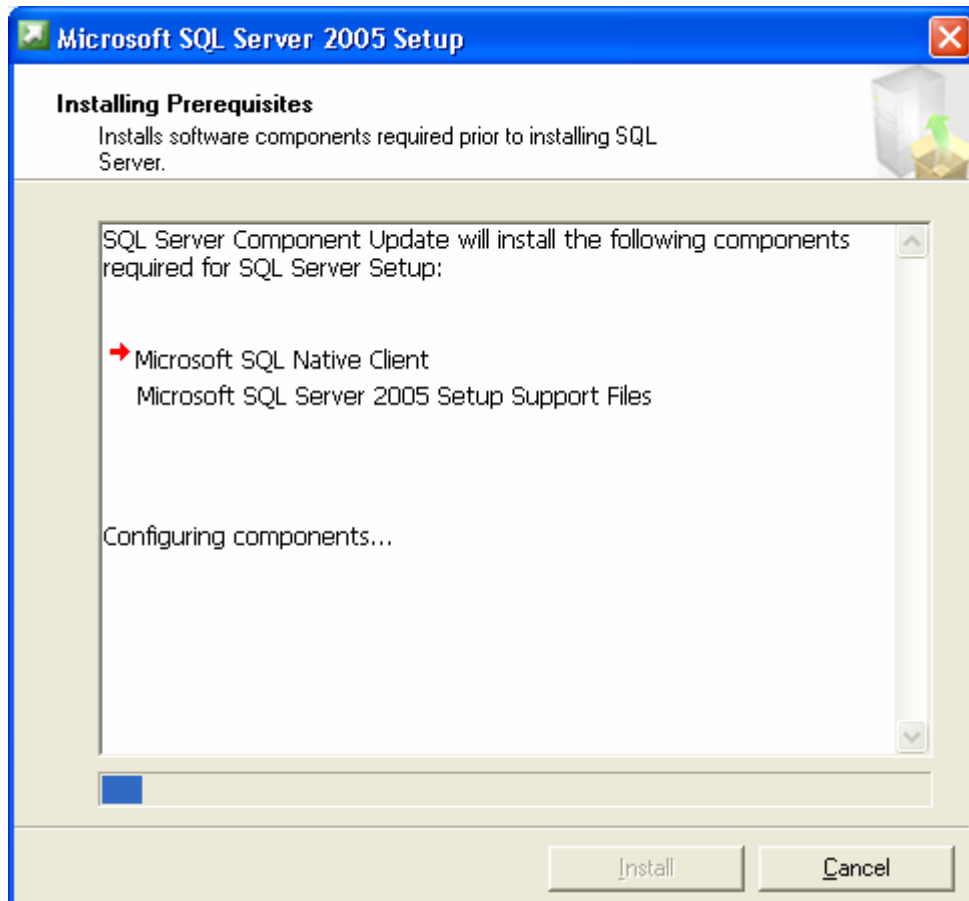
Eventually, the **Crystal Reports XI Runtime Setup Wizard** appears:
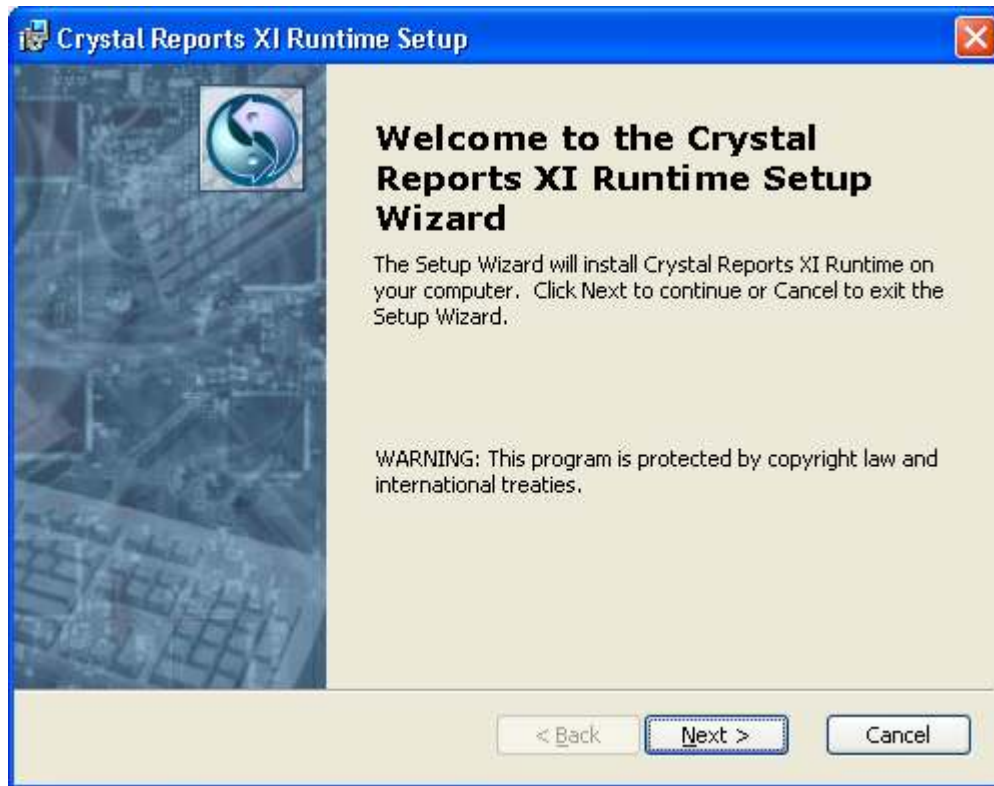
Select **Next** to continue.

The wizard asks to begin the installation:
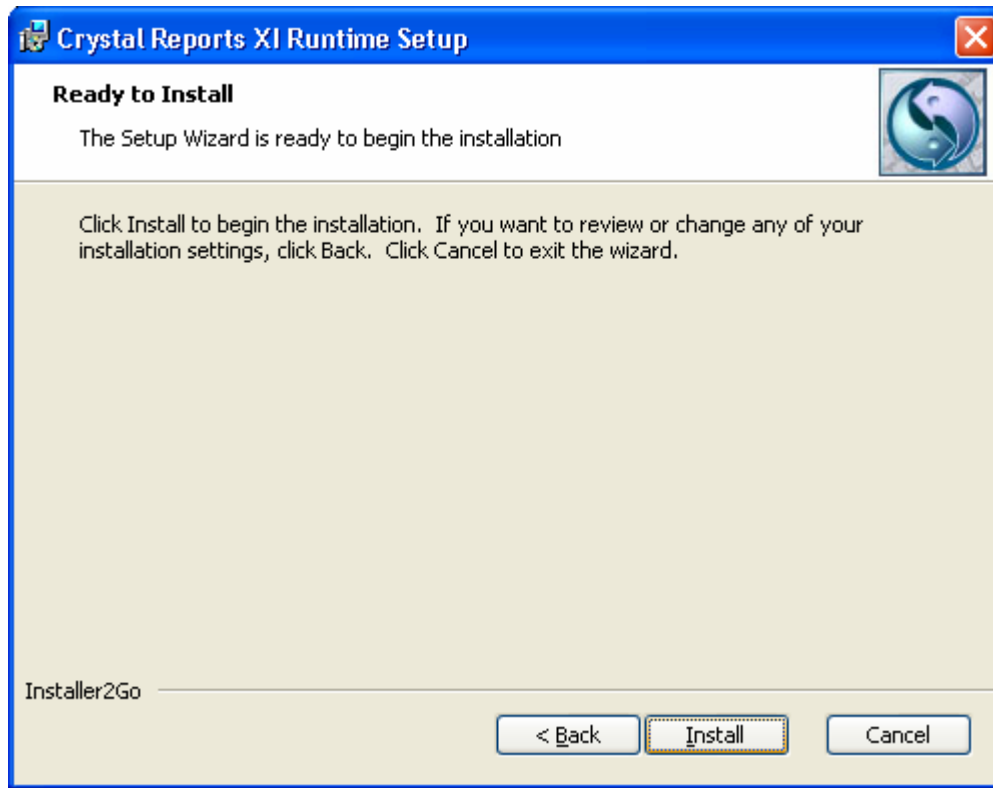
Select **Install** to continue.

This phase of the installation continues:
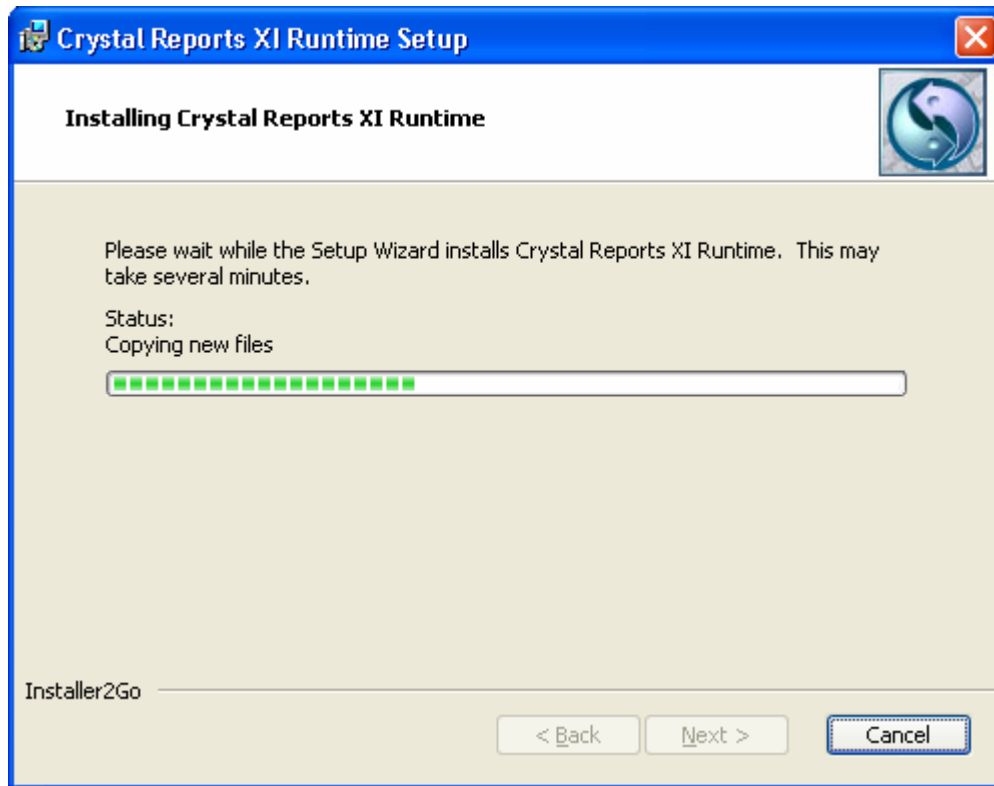
When this phase is completed, the wizard returns:

Select **Finish** to complete this phase.

After a few more items are loaded, the **Alabama ePCR** installation is finished. The Setup Wizard heralds the completion of the process:
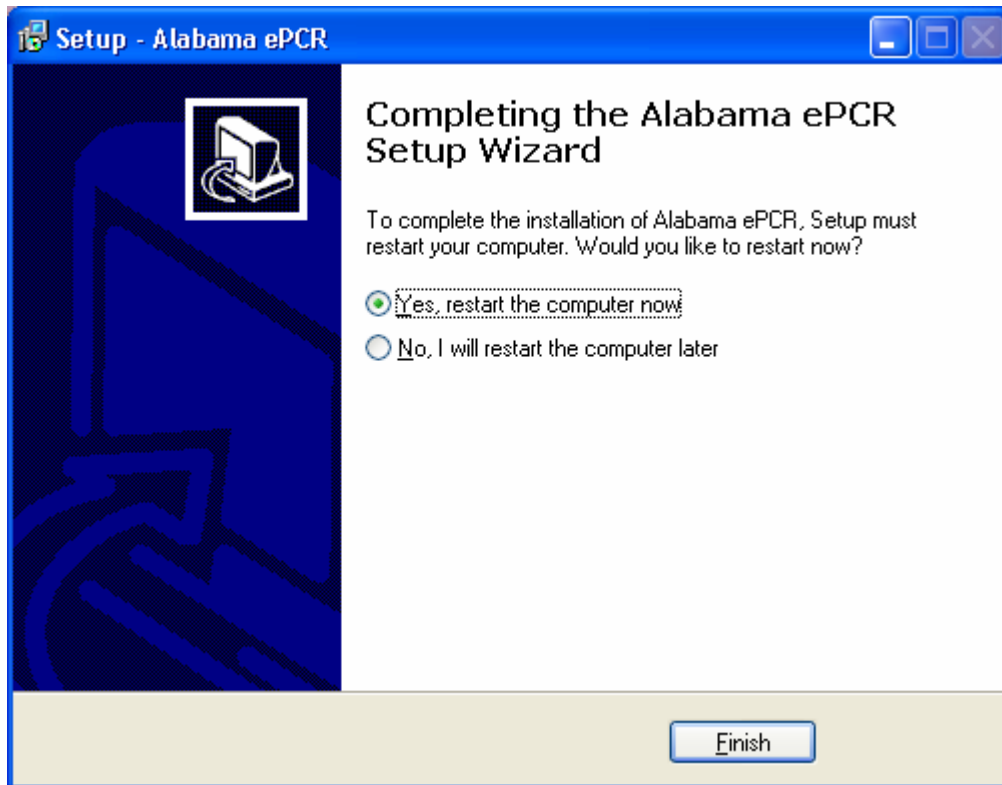
To use **Alabama ePCR**, select the **Yes, restart the computer now** option and press **Finish**. When the machine restarts, a shortcut to **Alabama ePCR** will now be located on the desktop as well as on the **Start Menu.** Both are under the name "**AL ePCR**".

Definitions

This section will include:

  ➢ Technical Definitions

  ➢ Navigational Definitions

  ➢ Typographical Definitions

Technical definitions

A **DEFAULT** is a "pre-loaded" screen with information that will be used time after time. It is used to save keystrokes when entering an Incident form. **Alabama ePCR** allows for default Incident records as well as numerous subsets of Incident data.

EMSIS stands for the Emergency Medical Services Information System.

To **EXPORT** is to electronically send incident and demographic data from **Alabama ePCR** to a third party (outside the **EMSIS** system).

FIPS, otherwise known as Federal Information Processing Standards, provides a table of all American geographic entities for use in **Alabama ePCR**.

To **IMPORT** is to electronically receive Incident data from a third party.

NEMSIS DEMOGRAPHICS are transmitted to the state office via the Agency record. This data can be exported to other entities as well.

A **QUERY** is a search of the records in a database for the set of records that match specific criteria. For instance, the Search option on the Incident menu allows queries of the Incident table.

A **RECORD** is a collection of information about one entity. A specific Incident record has numerous items relating to one event – that of the specific incident.

A **TABLE** is a two-dimensional storehouse of information arranged in rows and columns. An example is the Vehicle table, which lists each vehicle with their vehicle number, model year, etc.

A **SUBTABLE** has a look similar to a table. Subtable entries are entered differently than table entries in that the respective data items may occur more than once for each record. An example is a medical history's recording of multiple ailments for one patient.

TRANSMITTING is to send data (Agency and Incident) electronically from the local Provider to the State of Alabama's **EMSIS Database Server**.

Navigational definitions

To **click** is to press down once on the mouse's left button.

To **right-click** is to press down once on the mouse's right button.

To **double-click** is to quickly press the left mouse button twice without moving the mouse.

To drag a mouse refers to holding the left mouse button without releasing it as the cursor moves across the screen.

A **check box** is a box where clicking it switches the item's status to its opposite state. If the box is checked off (disabled - no mark shown), clicking it turns it on (enabled - a checkmark is displayed).

A **pull-down menu** is one that is displayed when a menu item is selected and the subsequent menu opens by dropping down from that location.

A **drop-down list** will display a list of options if the user clicks on the figure's triangular drop-down arrow. It does not allow data entry; the user can only select from the list of data items.

A **combination list** has the same look as drop-down list, but it allows the user to enter data as well as to choose from a list of data items.

A **directory tree** is a graphical representation of an entity that contains sub items within categories. An example is the Reporting tree, in which the sub items under Reports are the individual report names.

A **toggle button** is a button that alternates a user between two states in the way the Caps Lock works on a keyboard.

A **radio button** allows the user to choose one (and only one) selection from a list of options. It is a circular button which contains a dot inside if the button is selected. If not selected, the button's interior is made up of white space.

A **scroll bar** is used to move up and down within a display window too large to fit in the computer display. It is made up of a channel, a scroll box which moves within the channel, and two scroll arrows.

More navigational definitions

The standard **Date** format for **Alabama ePCR** is "12/12/1234 12:34". The user can type in a number of Windows-familiar formats and the string will be automatically converted to the "12/12/1234 12:34" format. If a date string with an unfamiliar format is entered, **Alabama ePCR** will delete the string.

The **Social Security Number** format is "123-45-6789". When searching, the dashes need to be manually entered for matches to occur. Elsewhere in the system, the dashes are automatically provided.

The **Phone Number** format is "(123) 456-7890". The parentheses and dash are automatically generated when typing.

Typographical conventions

This manual will use the following representations:

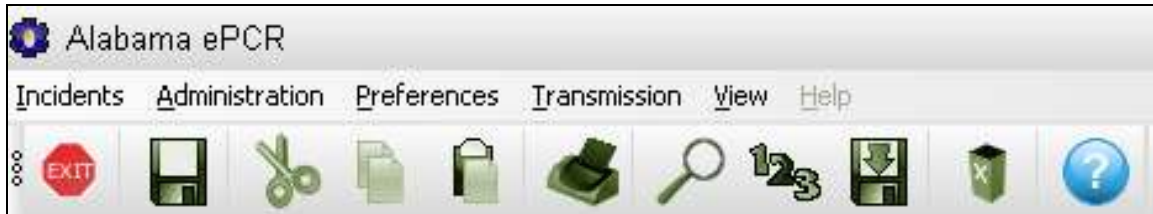| <u>Style</u>	<u>Usage</u>
Bold	Buttons/Icons Screen/Form names Commands Menu options Tables/Subtables
Capitalization	Field names
Italics	Windows files and folders
`Lucida Console Font`	User typing System-displayed text

USING ALABAMA ePCR FOR THE FIRST TIME

Opening Alabama ePCR
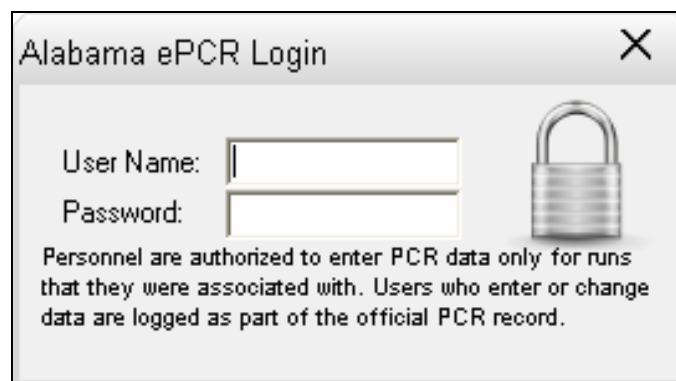
To start **Alabama ePCR**:

Double-click on the AL ePCR desktop icon:

Or, go to the Windows Start Menu, choose **All Programs** and single-click on *AL ePCR.*

In any event, control passes to an **Alabama ePCR** login screen:

Enter the User Name and Password and then hit Return. If abandoning the login process, select the **X** in the upper-right corner.

Beneath the Password field is a disclaimer from the state of Alabama. Note that the person entering the electronic Incident form must have been on the actual run.

If the User Name/Password sequence is correct, **Alabama ePCR** opens a screen with very little text displayed. It only contains a row of pull-down menus at the top and a special Toolbar just below the row of menus. The Title bar will include the user's name in parentheses based on how the name is entered in the Personnel record.
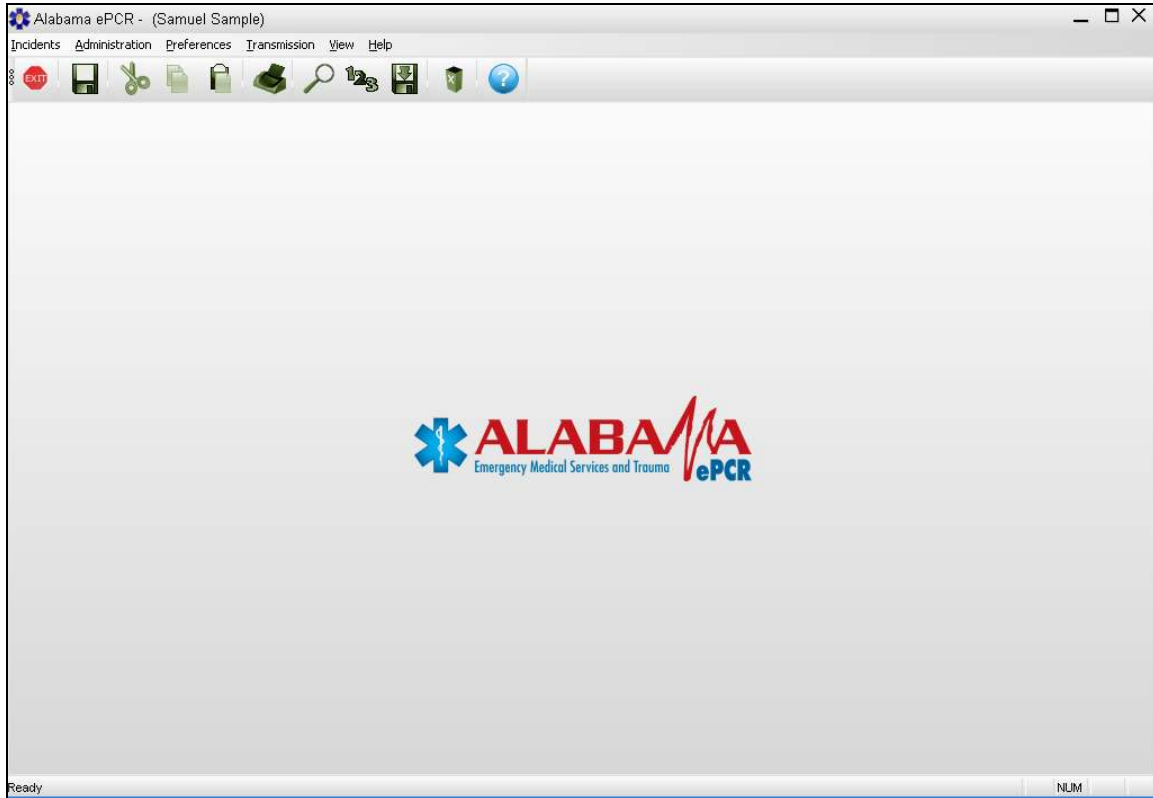
When the user tries to view any of the screens for the first time after the installation of **Alabama ePCR**, they may receive a message to choose a **Form Dialog.** This will determine which version of the **Incident** form will be displayed.

The default form can be updated later be selecting **Choose Forms** from the **Preferences** Menu.

Using the Menus and Toolbar

When **Alabama ePCR** is opened, a row of menus and a special Toolbar are displayed.

The primary menus in **Alabama ePCR** are:

> ➢ **Incidents**

> ➢ **Administration**

> ➢ **Preferences**

> ➢ **Transmission**

Items on the Toolbar

Moving from left to right, the **Toolbar** icons are:

	Exit	Close **Alabama ePCR**
	Save	Saves the information on the current form after starting error checking of **all** screens on the form. If errors occur, the user can either Save with errors, or else Exit without saving
	Cut	Captures text from the current field to paste elsewhere, then erases the field's contents
	Copy	Captures text from the current field to paste elsewhere; field contents not erased
	Paste	Enter captured text into the current field
	Print	Create printout of a report in the Reporting module
	Search	View Results of Query Builder Request
	Count	Count Records Matching Query Builder Request
	Export	Converts a table in **Alabama ePCR** to a .csv file (a text file delimited by commas) that in turn can be loaded into Microsoft Access, EXCEL, etc.
	Delete	Deletes the current record (if authorized to delete)
	About	Provides current version number of **Alabama ePCR**

Defining the Transmission Settings

There are situations in which information needs to be transferred into and out of **Alabama ePCR**:
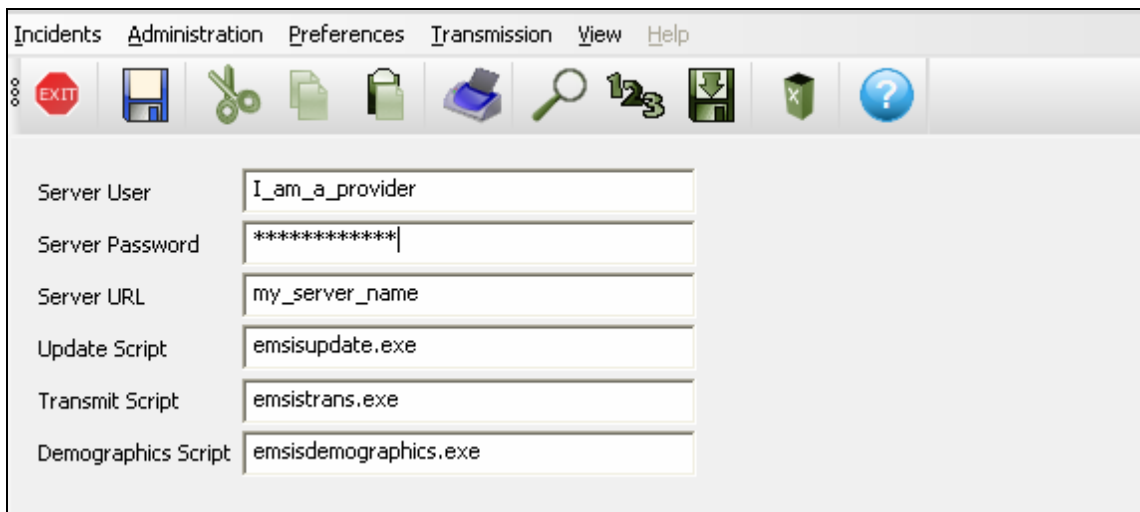
  ➢ When an Agency sends Incidents to the State office

  ➢ When an Agency receives software updates

Before either of these transmissions can take place, settings with the proper connectivity and transfer script information need to be put in place.
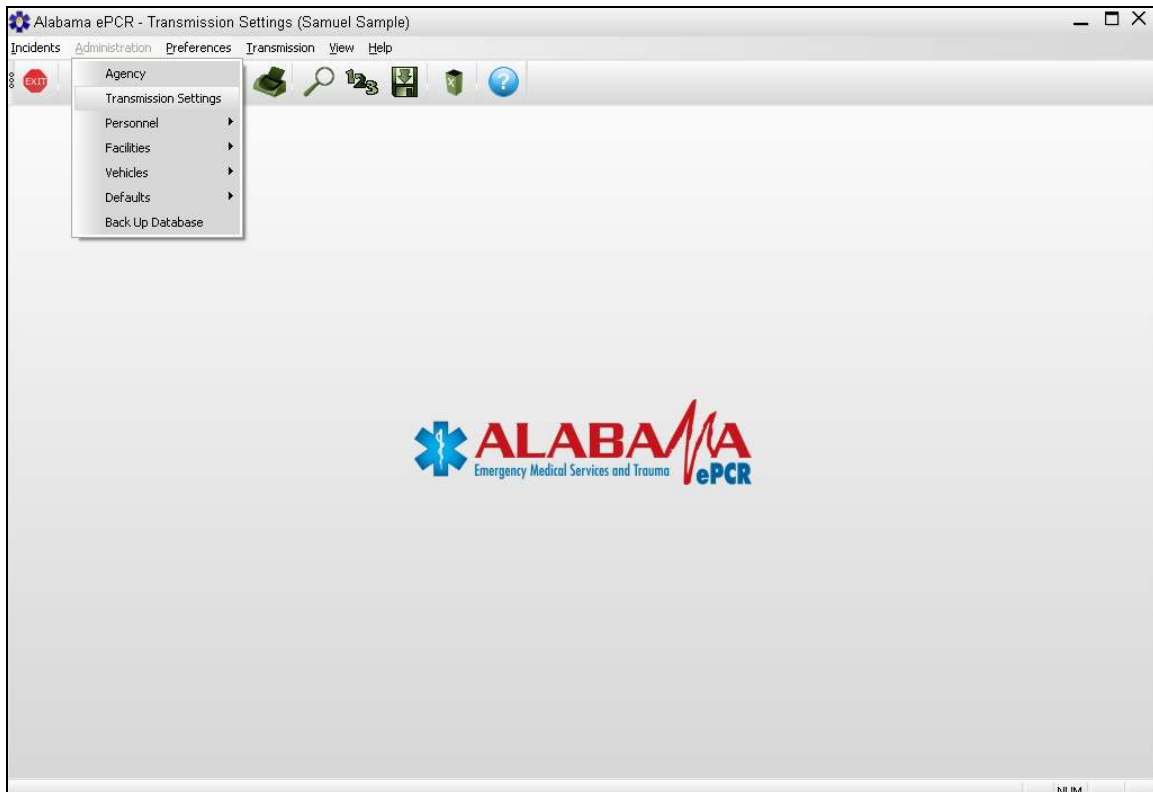
To load these fields, go to the **Administration Menu** and choose **Transmission Settings**.

The Transmission Settings Form

Note: The above picture is only an example.   The local system administrator will provide the specific information for the local agency before installation of this product.

The **Transmission Settings** form defines the elements that allow for the software and data updates within the **Alabama ePCR** community. This information should be loaded the first time Alabama ePCR is used.

The Transmission Settings screen has the following elements:

➢ User ID and Password to gain access to state's EMSIS server

➢ URL of state's EMSIS server

➢ Location of the transfer script that allows download of latest version of **Alabama ePCR** to the user

➢ Location of the transfer script that allows upload of specific *incident* data to the state office

➢ Location of the transfer script that allows upload of the Agency's *demographic* data to the state office

Updating Alabama ePCR

As mentioned earlier, there is a menu option on **Alabama ePCR** which checks to see if the local version of the product is the most recent version.

When **Alabama ePCR** opens and the system determines that the user does not have the most up-to-date version of the product, the following appears:
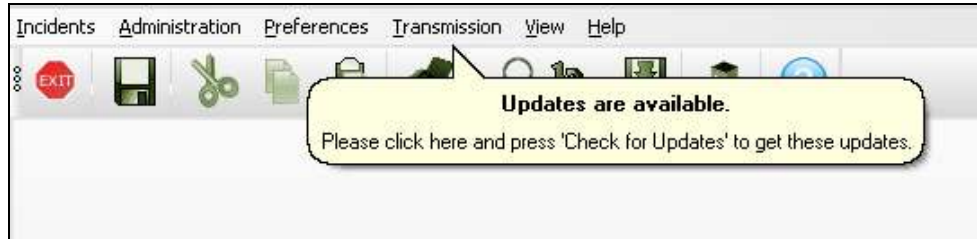
At any time during the user session, go to the **Transmission** Menu and select **Check for Updates** to get the latest version of **Alabama ePCR**.

Note: If this update is attempted and any **Alabama ePCR** windows are open, a message serves as a reminder that all windows need to be closed before the update can proceed.
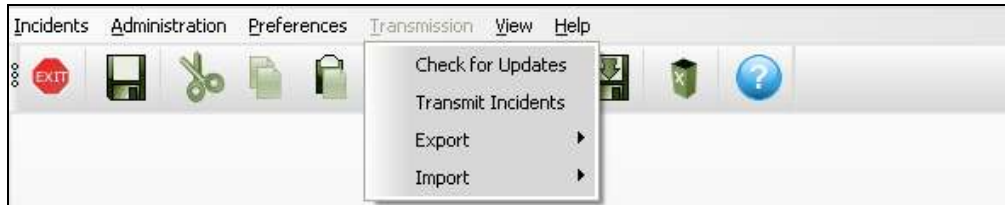
To start the updates, select **Begin**. To stop this process without updating, select **Close**.
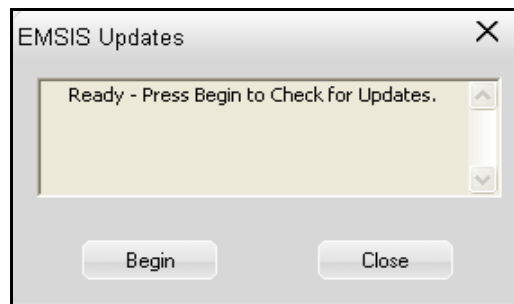
After **Alabama ePCR** compares the latest software to the local version, all new software is transferred automatically. The update window indicates the update progress by sending text messages and by displaying a progress bar.
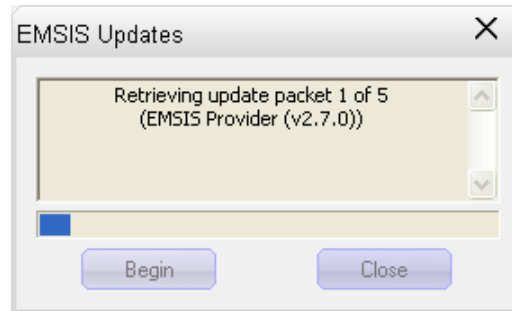
When the transfer is finished, the user will see **Update Successful** displayed. Once this occurs, select **Close** to complete this process.
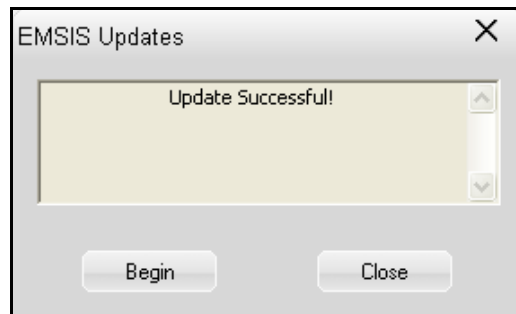
Creating a User ID and its Permission Levels

Maintenance of user IDs and permissions is done at the bottom of the **Personnel** form on the **Administration** menu. As seen above, the login information is listed on the left and the permission levels reside on the right.

Both the **System Username** and **System Password** must be between five and 30 characters in length. Selecting **Create User Login** after entering this info will allow the new employee to log into **Alabama ePCR**. All records subsequently created by the new employee will be stamped with that username.

After the userid is created, Alabama ePCR will prompt the user for the default Incident form for that user. After selecting a default form from the list of forms, the following screen appears:
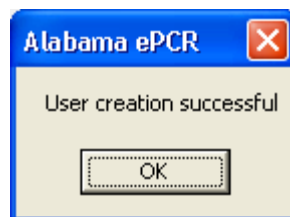
To change the System Password, overwrite the username and password information. This will automatically delete the old username/password combination and in turn create a new account. The Remove User Login is used to remove all user access.

The **Personnel** form allows for the creation of user permissions. The levels are listed as follows:

> ➢ **System Administrator**   Add/Update/Delete all functions

> ➢ **Incident Administrator**   Add/Update/Delete all Incidents

> ➢ **Incident Review**   View capability for all Incidents

> ➢ **Update User**   Can only Update one's own Incidents

> ➢ **Transmit User**   Can only Transmit one's own Incidents

> ➢ **Export User**   Can only Export one's own Incidents

One can turn on multiple permission-level check boxes. For instance, a typical set of user-level permissions would include **Update User**, **Transmit User**, and **Export User**.   When that user opened **Alabama ePCR**, they would get a limited set of menu options:

Notice that the **Administration** menu is missing. Also, the **Transmission** menu normally has four options, but this level of access will not allow importing of Incident data. This menu's other options are available, but each will only access Incidents that the user had entered themselves.

Beneath the user permissions, **Entry Time Frame** reflects the number of days a user can update a record after its creation date. After that, updates will have to be done from users at a higher access level.

If a user is logged into **Alabama ePCR** and the machine sits idle for more than ten minutes, the user will be prompted to log in again before continuing.

For instance, a user named Dean Taylor with a User Name of Dean is in the midst of entering an Incident record and they walk away from their workstation for 15 minutes. When they return, they will see an overlaid login window. Once they enter the proper User Name/Password sequence, they can continue entering an Incident. If another user tries to access **Alabama ePCR** without closing the current session, they will receive the following:
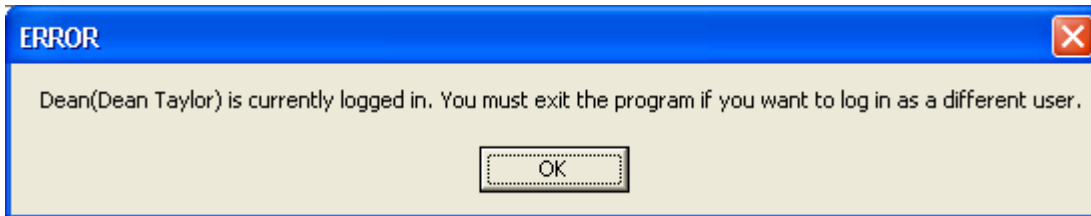
Any user who closes the current session in this way will lose all unsaved work. It is recommended for a user who leaves their machine idle for too long to log in a second time if only to save the current Incident record.

When a user without Administrative access selects the Save icon on the Toolbar when working on an incident, the crew list is checked. If the current user is not on the list of crew members, the following message occurs:
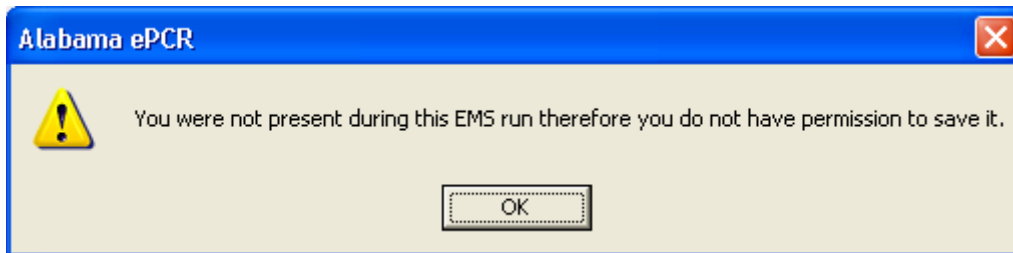
Navigation Tips and Techniques

This section will explain some ways to more easily operate within **Alabama ePCR.**

Included in this section is:

- ➢ **Definition tooltips**

- ➢ **Shortcuts when using a drop-down list**

- ➢ **Shortcuts when using a list of check boxes**

- ➢ **Editing the list of medication allergies**

- ➢ **Entering a date on the Incident Form**

- ➢ **Adjusting the time fields for Daylight Savings Time**

- ➢ **Some forms look different from one Incident to the next**

- ➢ **Using FIPS to populate address info**

- ➢ **Displaying a record from a table**

- ➢ **Sorting the records in a table**

- ➢ **Manipulating the look of a table's columns**

- ➢ **Adding and deleting subtable entries**

- ➢ **Refreshing an updated table of records**

Definition tooltips

Throughout **Alabama ePCR** are sections where **definition tooltips** are provided. When the user hovers over a field on a form, a small box appears which provides the user a definition of that field.

In this example, the cursor hovered over the **Hospital Disposition** field while on the **Patient** screen of the **Incident** form. This produced a small yellow box with the official **NEMSIS** definition of the field.

Note: These tooltips also appear in the **Search**, **Reporting**, and **Import** sections. When hovering over a field name, its definition appears.

Shortcuts when using a drop-down list

Sometimes one is faced with scrolling through a long list of items. Entering a letter of the alphabet in a drop-down list data field will cause **Alabama ePCR** to populate the field with the first element in the list that begins with that letter.

In the above example, the list of Primary Symptoms is a long one. As an alternative to scrolling, the savvy user who knows there is only one Primary Symptom beginning with an **S** can load Swelling by entering that letter.   If there are at least two Primary Symptoms that start with **P**, control moves to the first symptom. So, the field ends up with **Pain**.

Shortcuts when using a list of check boxes

When using a list of check boxes, the user can check one or more items in the list. An example is Other Associated Symptoms.

When accessing a list of check boxes, the user can check one or more items in the list. An example is Other Associated Symptoms.

Once the list is opened, entering the letter **W** will point the user to the first item beginning with **W**, such as **Weakness**. Entering the **W** again will transfer control to the next item beginning with a **W**, which is **Wound**.

Keystroke saver: Right-clicking a check box reverses the status of the item (from On to Off, for example) AND closes the window automatically.

Editing the list of medication allergies

On the Incident form, **Alabama ePCR** allows for the list of Medication Allergies for a patient to be expanded if needed.

For example, a patient is discovered to be allergic to Insulin. To add this field to the list of allergic medications, go to the Vitals/Assessments screen and open the Allergies list of check boxes to see the various medical allergies.

The first entry in the list of check boxes is "… `Double Click Here to Edit` …". If the user double-clicks on that entry, the first check box will be set to **On** and a Check Tree Option window appears:

Enter the name of the medical allergy (in this case, Insulin) to be inserted. Select **Continue** to add the drug, or else choose **Cancel** to end the process.

The result of adding the name is an Insulin check box set to **On**. The new item will be initially displayed just below the top entry.

The next time the list of check boxes is opened, the list will be re-ordered alphabetically.
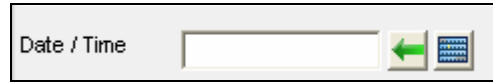
If the added item already exists in the list, it will not be duplicated. It will simply change that allergy's field to **On**.

The editing of the list is updated for only the current **Incident** record. It will not update the general list of medical allergies.

If the Insulin check box is ever checked to **Off** for that **Incident** record, the customized entry will be deleted from the list of check boxes.

Entering a date on the Incident form
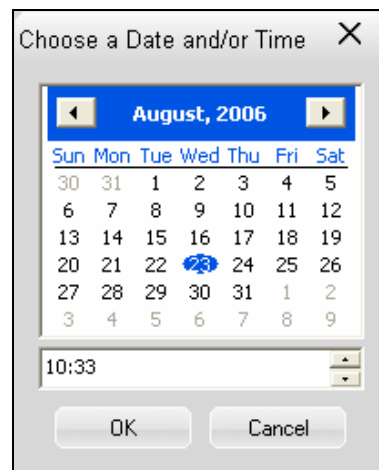
There are many places on the Incident form where a date will need to be entered. The following shows the basic look of a date field:

Date / Time

The user can enter the date in a variety of Windows-recognized formats. The string will be displayed and stored in the format **MM/DD/YYYY HH:MM**. For example, entering **04-MAR-07 12:10** produces **03/04/2007 12:10**.

If the field needs the current date and time, choose the icon. The current date and time will be placed in the corresponding date field.

An alternative is to use the calendar feature. A single-click on the calendar icon generates a calendar of the current month with the current date and time displayed:

Choose a Date and/or Time

	August, 2006	
Sun	Mon	Tue	Wed	Thu	Fri	Sat

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

10:33

OK   Cancel

Change the date and time to the one desired. Use the left and right arrow buttons to move to an earlier or later month. Click on the specific day of the month to change the date. Use either the up or down arrows to move the time forward or backward, or else overwrite the displayed time to achieved the desired result.

When the proper date and time is displayed, choose **OK** and it will be placed in the corresponding date field. Otherwise, press **Cancel** to quit the date process.

Adjusting the time fields for Daylight Savings Time

Federal law establishes the first Sunday in November as the last day of Daylight Savings Time. In the early morning of that Sunday, the effect of "falling back" is the clock will reflect an hour from 1AM to 2AM Central Daylight Time, followed by an hour from 1AM to 2AM Central Standard Time.

The first instance in which a time is entered between 1AM and 2AM will change the background of the date field to **blue** to indicate Daylight Time. To change the time to Standard Time, right-click on the date field:
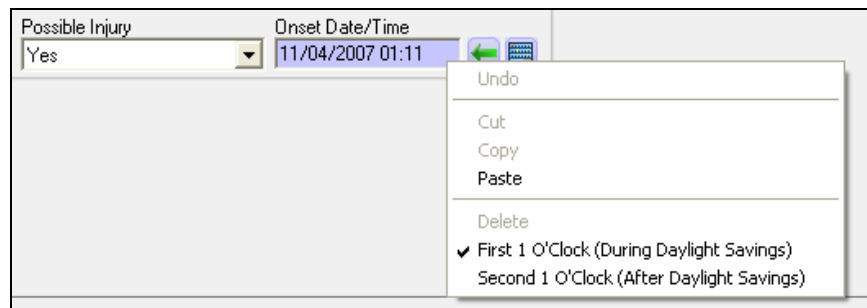
Click on **Second 1 O'Clock (After Daylight Savings)** to update the field to represent Standard Time and to trigger the changing of the date field's color from **blue** to **green**. A tooltip will appear declaring the change the next time the user references the time field:
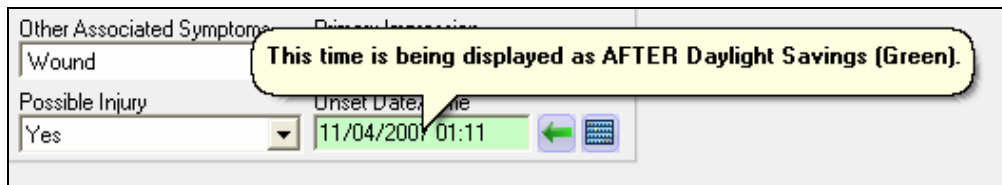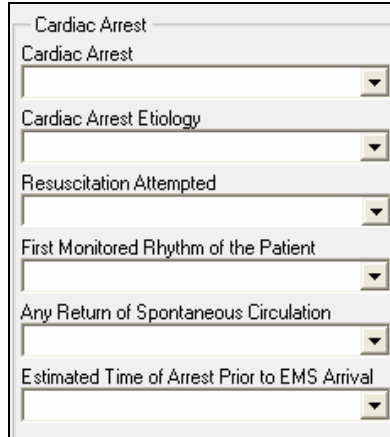
To change a field's representation from Standard Time to Daylight Time, right-click on the time field and choose **First 1 O'Clock (During Daylight Savings)**. The resulting tooltip will say:
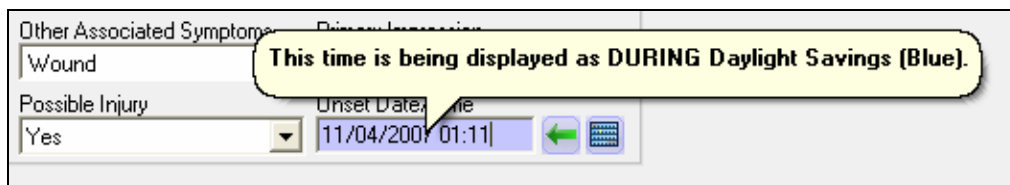
Conditional defaults
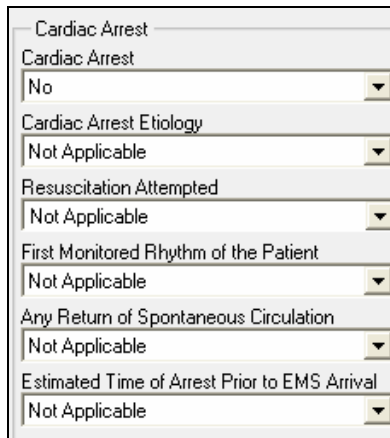
Whenever possible, **Alabama ePCR** will try to reduce the amount of data entry required to complete an Incident record.

The areas of data entry not pertinent to the specific Incident can be bypassed by the system.

An example is the Cardiac Arrest section. If the Incident is such where other data entry fields lead the system to conclude that Cardiac Arrest section's only valid entries are Cardiac Arrest = No and the other fields as Not Applicable, **Alabama ePCR** will autofill the section with those values when the user attempts to save the record. As a result, the section will look like this after saving:

Using FIPS to populate address Info

Alabama ePCR uses Federal Information Processing Standards (FIPS) to help validate geographic data. This will help whenever entering location data such as patient addresses, destination addresses, and so forth.

Since there is a relationship between cities, states, zip codes, and counties, let FIPS help fill geographic fields. The FIPS fields are displayed in combination lists.   If the city name is entered properly, the other address fields will populate associated information into their respective areas.

An example is processing the Physical Location section on the **Incident** screen. If HOKES BLUFF is entered for the City, the following occurs:

The only city called "Hokes Bluff" in the FIPS database is in Etowah County, Alabama. When the cursor moves to the State field, the program automatically populates the other address fields with the associated information.

If the entry is not a unique American city name (such as Florence), the State field will need to be entered or chosen from the City drop-down list. Once that occurs, the program should fill in the zip code and county automatically.

This concept works "in reverse" as well. If the exact spelling of the city is unknown, enter the county first. When doing so, the drop-down list for City will have a list of all the communities in that county. Select a city and single-click on either State or Zip Code and those two fields will be automatically populated.

Displaying a record from a table

When a request is made to look at a record or records, the result will normally be represented as an item in a table.

For example, when requesting a list of all personnel recognized by the Agency, the **Personnel** table is generated. To produce this type of list, go to the **Administration** menu, select **Personnel**, then **View All**.

Executing this sequence produces a table of employees, as promised:

EMS Personnel's Last Name	EMS Personnel's First Name	EMS Personnel's Mailing Address	EMS Personnel's City of Residence
Doe	John	100 North Main Street	Decatur
Johnson	Jim	300 Clover Lane	Arab
Clifton	Newton	2378 US 72	Rogersville
Brown	Danielle	1678 Millbrook	Decatur
Brown	Angie	1714 Magnolia	Tuscumbia
Yarnell	Patricia	1008 Washington	Hartselle
Green	Joseph	100 North Main Street	Hillsboro
Sneed	Mortimer	8078 Winstead	Decatur
Howard	Brian	901 Windsor Court, Apt 7B	Decatur

To highlight Brian Howard's record, single-click anywhere on the last Personnel record.

To generate the actual form with Brian Howard's Personnel data, double-click anywhere on the employee's record. Advance highlighting is not necessary.

Sorting the records in a table

Once a table is generated, it can be sorted by clicking on the header record of the field to be sorted. The first click will produce records in ascending order, with a subsequent click displaying the records in descending order.

Here again is the list of Insurance Providers from the last example:

EMS Personnel's Last Name	EMS Personnel's First Name	EMS Personnel's Mailing Address	EMS Personnel's City of Residence
Doe	John	100 North Main Street	Decatur
Johnson	Jim	300 Clover Lane	Arab
Clifton	Newton	2378 US 72	Rogersville
Brown	Danielle	1678 Millbrook	Decatur
Brown	Angie	1714 Magnolia	Tuscumbia
Yarnell	Patricia	1008 Washington	Hartselle
Green	Joseph	100 North Main Street	Hillsboro
Sneed	Mortimer	8078 Winstead	Decatur
Howard	Brian	901 Windsor Court, Apt 7B	Decatur

To change the look of this table so that the employees are in alphabetical order, click on the header record for the first column and the table will be sorted in **ascending** order by Last Name:

EMS Personnel's Last Name	EMS Personnel's First Name	EMS Personnel's Mailing Address	EMS Personnel's City of Residence
Brown	Danielle	1678 Millbrook	Decatur
Brown	Angie	1714 Magnolia	Tuscumbia
Clifton	Newton	2378 US 72	Rogersville
Doe	John	100 North Main Street	Decatur
Green	Joseph	100 North Main Street	Hillsboro
Howard	Brian	901 Windsor Court, Apt 7B	Decatur
Johnson	Jim	300 Clover Lane	Arab
Sneed	Mortimer	8078 Winstead	Decatur
Yarnell	Patricia	1008 Washington	Hartselle

Clicking a second time will reverse the data so that that the companies are now listed in **descending** order:

EMS Personnel's Last Name	EMS Personnel's First Name	EMS Personnel's Mailing Address	EMS Personnel's City of Residence
Yarnell	Patricia	1008 Washington	Hartselle
Sneed	Mortimer	8078 Winstead	Decatur
Johnson	Jim	300 Clover Lane	Arab
Howard	Brian	901 Windsor Court, Apt 7B	Decatur
Green	Joseph	100 North Main Street	Hillsboro
Doe	John	100 North Main Street	Decatur
Clifton	Newton	2378 US 72	Rogersville
Brown	Danielle	1678 Millbrook	Decatur
Brown	Angie	1714 Magnolia	Tuscumbia

Manipulating the look of a table's columns

A table's look can be manipulated to make it more user-friendly. Some of these techniques include turning columns on and off, changing the width of columns, and rearranging the column order.

To change the **number** of columns, right-click anywhere on the table to produce a check box list of available fields. Deleting a check mark removes the corresponding field's column from view.

Other Destinations	Destination Facility Number	Destination Type	Other Destination Status	Other Destination
Ozark Rest Home	234	Nursing Home	Y	09/13/2006
Living Will	1299	Morgue	Y	01/01/2006
Anchors A Way Station	1412	Other	Y	02/07/2006

In this example, the **Facilities** table has five fields and all are displayed above. Alter the look of the **Facilities** table by turning off the columns for Other Destination Status and Destination Facility Number by removing those check marks and then selecting **OK**. Select **Cancel** if quitting this procedure.

```
☑ Other Destinations
☐ Destination Facility Number
☑ Destination Type
☐ Other Destination Status
☑ Other Destination Date




            [  OK  ]              [ Cancel ]
```

The result is a **Facilities** table with only three fields displayed. If each field were turned off, one of them will be redisplayed when the form is re-opened to prevent a look that would lead a user to conclude that there were no records in the table.

Other Destinations	Destination Type	Other Destination Date
Ozark Rest Home	Nursing Home	09/13/2006
Living Will	Morgue	01/01/2006
Anchors A Way Station	Other	02/07/2006

To change the **width** of columns, point to the border of the title of a column and drag the mouse either inward or outward to make the column either narrower or wider.

Here again is the **Facilities** table adjusted at three columns:

Other Destinations	Destination Type	Other Destination Date
Ozark Rest Home	Nursing Home	09/13/2006
Living Will	Morgue	01/01/2006
Anchors A Way Station	Other	02/07/2006

After moving the cursor to the title row, widening the Other Destinations, and narrowing the Other Destination Date, the following view results:

Other Destinations	Destination Type	Other Destination Date
Ozark Rest Home	Nursing Home	09/13/2006
Living Will	Morgue	01/01/2006
Anchors A Way Station	Other	02/07/2006

Note: The column updates shown in this section are not temporary to the current user session. If any aspect of the column display format is altered, it will be saved in the program registry for future use.

To change the **order** of the columns in the table, drag columns around at will. In this example, the Personnel table is accessed:

EMS Personnel's Last Name	EMS Personnel's First Name	EMS Personnel's Mailing Address	EMS Personnel's City of Residence
Doe	John	100 North Main Street	Decatur
Johnson	Jim	300 Clover Lane	Arab
Clifton	Newton	2378 US 72	Rogersville
Brown	Danielle	1678 Millbrook	Decatur
Brown	Angie	1714 Magnolia	Tuscumbia
Yarnell	Patricia	1008 Washington	Hartselle
Green	Joseph	100 North Main Street	Hillsboro
Sneed	Mortimer	8078 Winstead	Decatur
Howard	Brian	901 Windsor Court, Apt 7B	Decatur

The Personnel table has numerous fields and would normally be viewed in its entirety only by using the scroll bar.

Q: Want to easily see the email addresses of various employees without having to use the scroll bar to slide over to that column of the Personnel table?

A: Move the cursor to the column title EMS Personnel's Email Address and then drag the item to the desired location.

EMS Personnel's Last Name	EMS Personnel's First Name	EMS Personnel's Email Address	EMS Personnel's Mailing Address
Doe	John	doe.man@decatursville.com	100 North Main Street
Johnson	Jim	jkjohnson@onestop.com	300 Clover Lane
Clifton	Newton	cliff.newton@hotmail.com	2378 US 72
Brown	Danielle	danielle.brown@decatursville.com	1678 Millbrook
Brown	Angie	angie_brown@aol.com	1714 Magnolia
Yarnell	Patricia	pat_yarnell@hotmail.com	1008 Washington
Green	Joseph	biggreenie@aol.com	100 North Main Street
Sneed	Mortimer	Mortimer.Snead@poppycock.com	8078 Winstead
Howard	Brian	brian.howard@decatursville.com	901 Windsor Court, Apt 7B

The result is the email address near the "front" of the table.

Summary: Altering the number of fields, the width of fields, and the order of fields will help make a table more readable, especially when the original table's width exceeds its windowed space. These techniques will be especially useful when accessing the Incident table.

Adding and deleting subtable entries

On some screens there may be a set of related items that are entered more than once for the same record.

For instance, when entering Incident data, a list of the members of a crew will be needed. Since there can be more than one crew member for the same Incident, this will be entered in a **subtable**.

In this example, the Crew screen has no data. The subtable area is active, but the fields are disabled so that no data can yet be entered:

To add Crew information, select ✚ in the upper right corner of the subtable. This creates an "empty" record to use for the first set of Crew info:

The fields on the screen will now accept data because ✚ was selected.

This screen reflects the entering of one set of Crew information. Notice that the subtable window shows the specific Crew entries as they are entered:

When a set of Crew info is completely entered, select to add another record. The first Crew member's three fields are completely displayed in the subtable box and the list of fields is cleared for a new set of data.

Is it wise to save immediately after the subtable entries have been completed?   It depends on the form:

1. If finishing the subtable is the last step in completing the form, save the form by choosing the **Save** icon on the Toolbar.

2. If there is additional data yet to be entered either on the current screen or elsewhere on the form, saving is not recommended until the rest of the form is completed. Choosing to save prematurely will generate error messages for all required missing data.

Another example of a subtable is Assessments. This example has two Assessments entered. The first of these is highlighted so that the individual entries can be seen above the list:

To **modify** a record in a subtable, go to the subtable window and highlight the record to display. Doing so will cause the list of fields to be populated with the elements of the record, such as the above example. The record can now be modified as needed.

To **delete** a record in a subtable, go to the subtable window and highlight the record to delete. Use the   button in the lower right corner of the window to remove the highlighted record from the subtable.

Note: The elements in the subtable can be manipulated in the same way previously described for the table views. It is possible to turn columns on and off, to expand/contract column widths, and to drag columns left and right. This manipulation will change the look of the subtable but will not affect the field layout itself.

Refreshing an updated table of records

If the user modifies an entry in a table of records, the table will be redisplayed after the modification is complete.

In this example, the user displays a list of **Facilities**:

Other Destinations	Destination Type	Other Destination Date	Destination Facility Number	Address 1
Ozark Rest Home	Nursing Home	09/13/2006	99001	134 Pecan Lane
Living Will	Morgue	01/01/2006	99002	1456 Dark Shadows Parkway
Anchors A Way Station	Nursing Home	02/07/2006	99003	3400 US 11
Jim Dandy Rest Home	Nursing Home	01/03/2007	99004	3433 Lincoln Highway

The user chooses the last entry and changes the name to Jim Dandy Home. After the user chooses the **Save** icon on the Toolbar, **Alabama ePCR** will redisplay the original list of records.

The information in this list may have changed. Click this banner to refresh.				
Other Destinations	Destination Type	Other Destination Date	Destination Facility Number	Address 1
Ozark Rest Home	Nursing Home	09/13/2006	99001	134 Pecan Lane
Living Will	Morgue	01/01/2006	99002	1456 Dark Shadows Parkway
Anchors A Way Station	Nursing Home	02/07/2006	99003	3400 US 11
Jim Dandy Rest Home	Nursing Home	01/03/2007	99004	3433 Lincoln Highway

THE INCIDENT MENU

Creating Incident Data

To create an Incident record, select the **Incidents** menu, then **New**, then **Incident**.   Over time, the list of choices under the **New** submenu may increase as variants of the default Incident record are added:
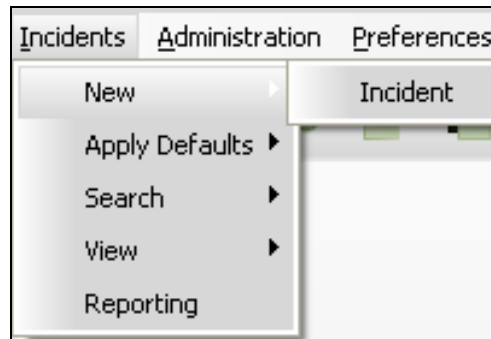
The Incident Form consists of eight tabbed screens. They are:

 ➢ **Dispatch**

 ➢ **Incident**

 ➢ **Patient**

 ➢ **Trauma / CA / MVC**

 ➢ **Vital Signs / Assessments**

 ➢ **Procedures**

 ➢ **Meds**

 ➢ **Narrative**

Dispatch

The **Dispatch** screen gives introductory information on the Incident. Included are sections for Transmission info, EMS Provider, Dispatch, Delays, Times, EMD, Delays, and Crew.

The Incident Date in the Transmission section is automatically generated and is based on the PSAP time entered in the Times section.

In the Times section, much of the pertinent date/time information for the Incident is in one place. Once the first date/time is entered, the next date/time assumes the date of the previous date entry. When the user tabs to the next time, the cursor will be positioned at the hours portion of the field for ease of data entry.

If the date portion of any field needs to be changed at some point during original data entry, overwrite the date and continue. The new date becomes the default date for the remainder of the Times section.

When a new Incident record is requested, the Crew information is automatically populated with the previous Incident record's crew. When adding crew members, the Crew Member Level is automatically populated with the highest level recorded in the demographics for that Personnel record.

When the entire Incident form has been filled out, saved without errors, and the request to be marked for transmission is answered with a **Yes**, the check box in the Transmission section will automatically be set to On.

Incident

The **Incident** screen gives details about the Incident location, the nature of the complaint, scene info, and prior aid.

When entering the address of the Incident, it is acceptable to enter the general location if a street address is unknown. For instance, "I-65 North near mile marker 84" is allowed.

Patient

The **Patient** information is entered here.   Included are the patient's contact info, demographic data, transport info, disposition, destination details, financial info, and condition codes.

If a patient has a previous incident in the database, the new incident's patient section is pre-filled by **Alabama ePCR**.

The patient's age is automatically calculated, based on the patient's birth date and the Incident date.

Trauma/CA/MVC

The **Trauma/CA/MVC** section contains the NHTSA Injury Matrix, motor vehicle info, and the cardiac arrest section.

Vitals/Assessments

The **Vitals/Assessments** screen shows the details of each series of Vital Signs and each set of Assessments for the patient. It prefaces that info with the patient history section.

Note the [icon] button among the set of Assessment buttons. If an Assessment has already been entered, this button will create a new record and will load the values of the previous Assessment into the new record. This feature is used when a second Assessment produces similar results as the first; the user may only have to amend the time to complete this record.
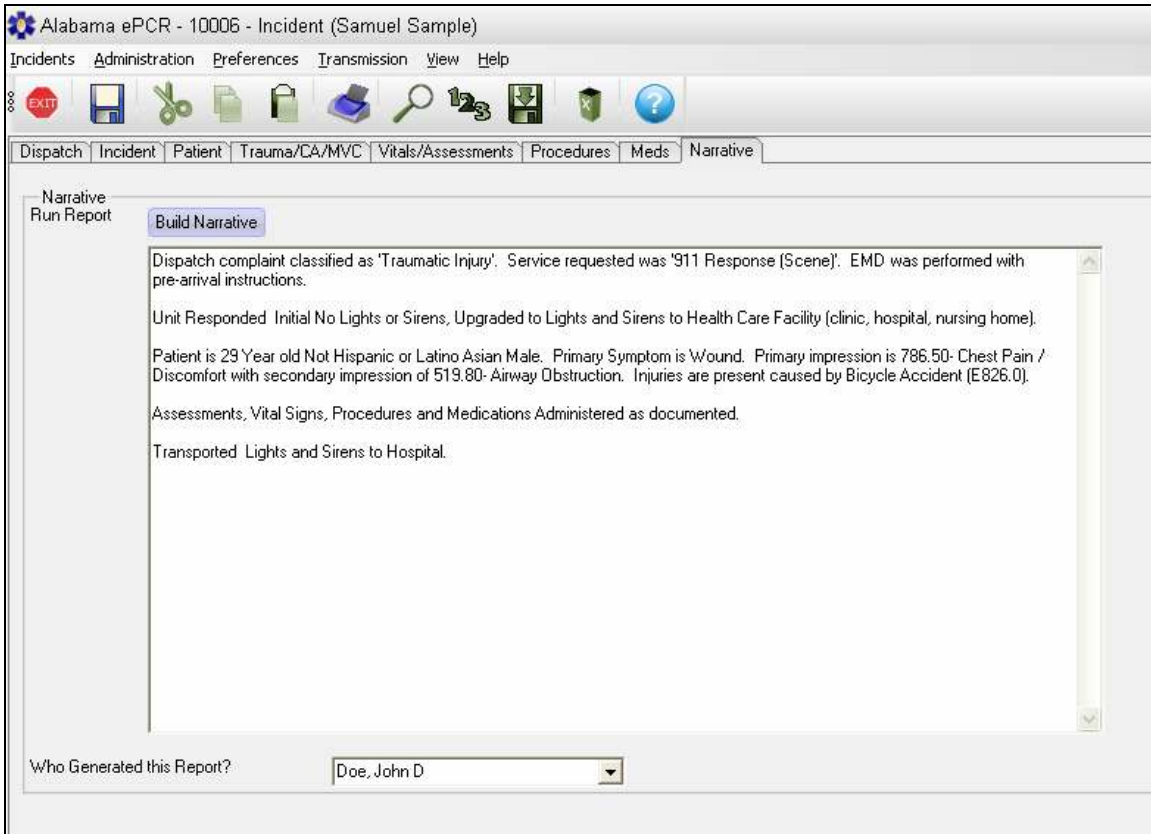
Procedures

The **Procedures** screen provides details on what procedures and protocols were used on the patient, as well as possible harmful contact or exposure.

Meds

The **Medications** screen gives details on each medication administered to the patient, the subsequent response of the patient, and on any given prior to this unit's arrival.

Narrative

The **Narrative** screen allows an opportunity to relate the story of the Incident in prose as opposed to answering specific requests on a form.

Before entering the name of the reporter, there are two possibilities. Either use the blank window to fill out a description of the Incident, or else pick **Build Narrative** to generate an automated version of the Incident narrative (such as the above example).

Note: The automated Narrative is not rebuilt automatically after other changes in the form are generated. The **Build Narrative** button must be chosen a second time before the narrative will be updated.

Saving the Incident

There are many screens that make up the Incident form. This form can be saved from any screen on the form, but the information from each of the screens will be validated.

Once the **Save** icon is selected from the Toolbar, **Alabama ePCR** will start error checking of Incident data on **all** Incident screens. If there are any errors, an Invalid Data window appears with a description of each error. Double-clicking on a specific error transfers control to the specific data field where the error occurred.
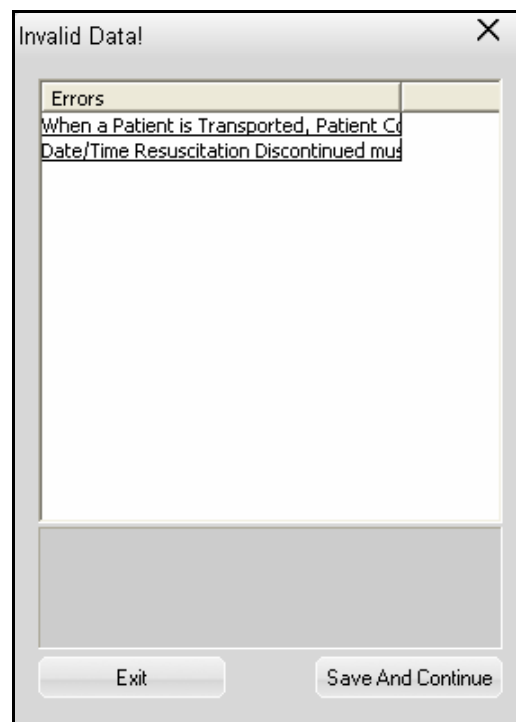
Before modifying the Incident form, select **Exit** from the Invalid Data window so the **Save** request is cancelled and control can return to the Incident form.

If there are errors, selecting the **Save and Continue** button will save the Incident data (including the errors).   These errors will need to be fixed before this Incident is ready for transfer.

Once an Incident form is completed and saved with no errors, it is ready to be marked **Ready For Transmission**.

Marking an Incident as Ready for Transmission

When an Incident has been completed, it needs to be designated so that the system knows to include it in the next transmission to the State.

When an Incident is completed with no errors, the following screen appears:
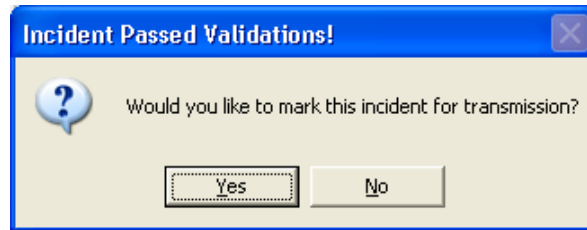
Select **Yes** to mark this Incident as ready for transmission. Select **No** if the Incident is free of errors but is not ready to be sent to the State server.

On the **Dispatch** screen, there is a section called **Transmission** with three fields. All of these fields are empty when the Incident is first opened.
After saying **Yes** above, the **Incident Needs Transmission** box on the Dispatch screen will automatically be checked **ON** and will allow the Incident record to be included in the next transmission.

When it is time to transmit, all checked Incidents (as well as all changes to the Agency information) will be uploaded to the State server. When the transfer is finished, each Incident's transmission check box will be turned off. Each record will have the time of the transmission loaded into its Last Transmission field.

If there is no problem uploading a specific Incident record, it will be reflected in its Transmission Status field by **Successful**.   If there was a problem with the record, its status will read **Rejected**, followed by an error message.

# Using Defaults to Populate Incident Data Fields

Filling out an Incident form can be time-consuming. If there are situations that occur frequently, a template can be built that can reduce time and keystrokes.

For existence, Amanda O'Keefe has to be transported from her home every week for dialysis. Her Incident forms tend to have repetitious information. A default Incident form can be constructed for her visits so that some data items (patient info, insurance info, and responsible party info, among others) can be "pre-loaded" into the system.

Note: A description on how to build the default form will be contained in the Administration Menu section.

Three ways of building an Incident record with defaults

Method 1: Access the default record (a sub-option after selecting **New** from the Incident menu) as shown below:
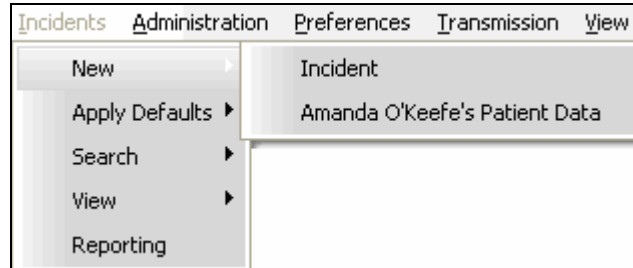
Now fill in the other fields. Choose the **Save** icon from the Toolbar to save the new Incident. This will not change the content of the default record.

Method 2: Create an empty Incident record by choosing **New** from the Incident menu, then choosing **Incident**. Enter Incident data until the default data is ready to be added. Select **Apply Defaults** from the Incident menu.
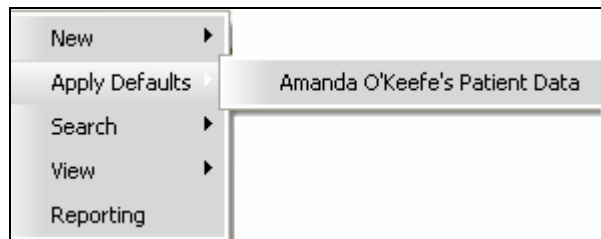

Choosing a default record from the available list will enable the Incident form to be further populated with the default record's fields. (The default record will not overwrite any data entered by the user.)   Continue adding data as needed. Choose the **Save** icon from the Toolbar to save the new Incident.

Note: It is possible to use multiple defaults layered on top of each other.   If another default had been created for a generic assessment in which the pre-loaded results were normal, it could be used in tandem with a default akin to the Amanda O'Keefe structure when the right conditions existed.

Method 3: Instead of using a default that could encompass the entire form, use a more specific type of default. In this example, Medication defaults have previously been generated for typical situations involving Epinephrine, Lidocaine, and Oxygen.

When the user arrives at the Meds screen, they have the option of entering medication information or of selecting a pre-set sequence by clicking on the black arrow situated below the green plus sign to the right of the subtable. Doing so reveals the available Medication defaults:
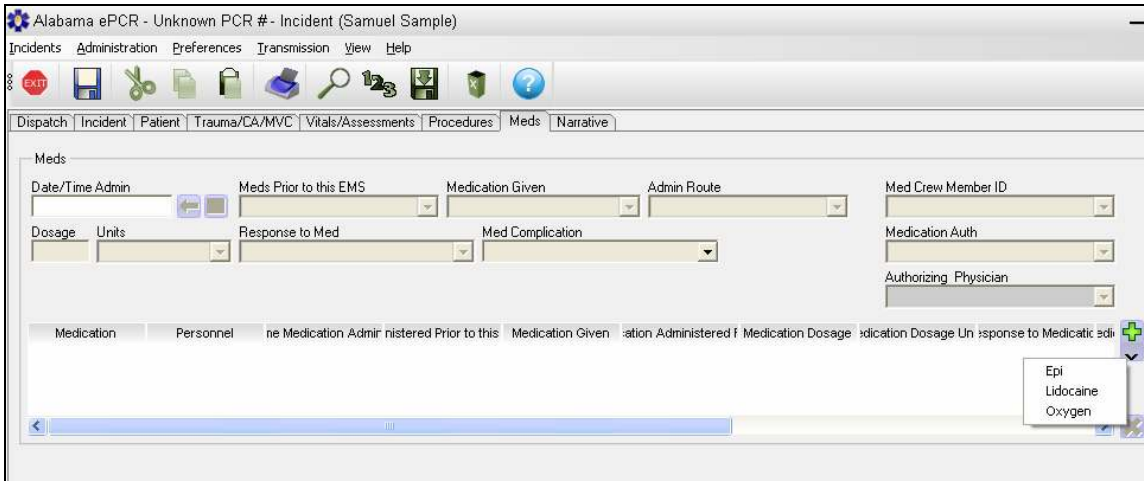
Clicking on Lidocaine loads a new record with the pre-set Lidocaine info:
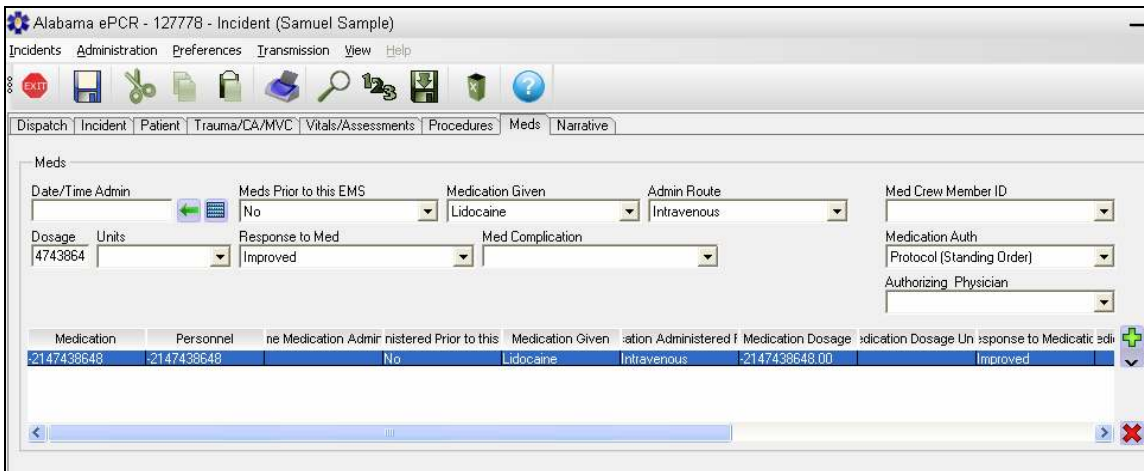
Now fill in the remaining medication information specific to the Incident.

Basic Searching of Incident Records

The **Search** option in the **Incidents** menu is used to find previously stored Incident records.

There are two types of Incident searches:

1. The **Basic** option provides a no-frills look with the most popular search choices.

2. The **Advanced** option brings up the **Incident Search** screen, which allows searching on any field collected by providers while using more sophisticated features.

One can query on a field and get dozens of Incident matches, query on multiple fields to limit the number of matches, or use a field with unique values (such as the Incident Number) to access a specific Incident.

To perform a basic search on an Incident record, go to the **Incidents** menu and choose **Search**, then **Basic**. The **Basic Search** screen appears:
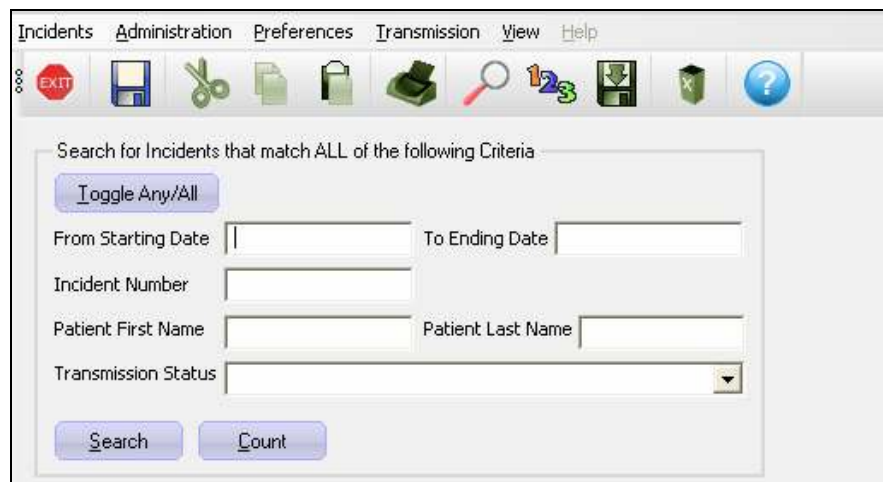
The user can query on the range of dates for the Incident Date, the Incident Number, and the patient's First Name and Last Name.

A drop-down list allows the user to further limit the query to only the incidents that need transmission, or to only the ones that don't.

The **Toggle Any/All** button allows the search to be against **any** of the entered elements versus having to match **all** elements.

The following example uses the **ALL** setting. The user wants to find all Incidents for patient Robert Scott.   Go to the **Basic** search screen and type in the patient's first and last name:
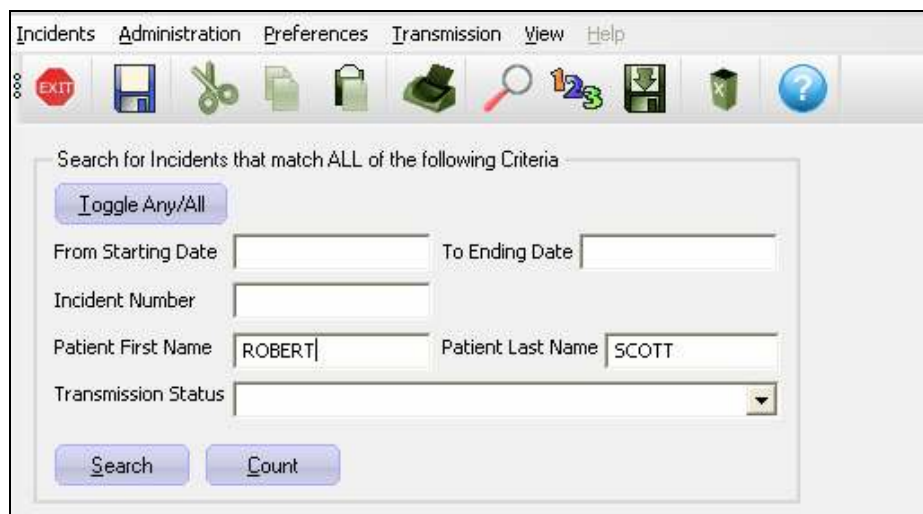
Once the fields have been entered, go to the Toolbar and choose the **Search** icon to access the record matches. Select the **Count** icon to only get a count of the number of matches.

PCR Number	Software Creator	Software Name	Software Version	EMS Agency Number	
789090	Grayco Systems and Consulting	EMSIS Provider	2.3.3	D01_01	SCOTT

There is only one record for Robert Scott in the database, so only one match appears. Double-click anywhere on the record and the Incident form appears with the information for the incident involving Mr. Scott.

Note: If the user had chosen the **ANY** toggle option, all patients with either the first name **Robert** or the last name **Scott** would be in the list of matches.
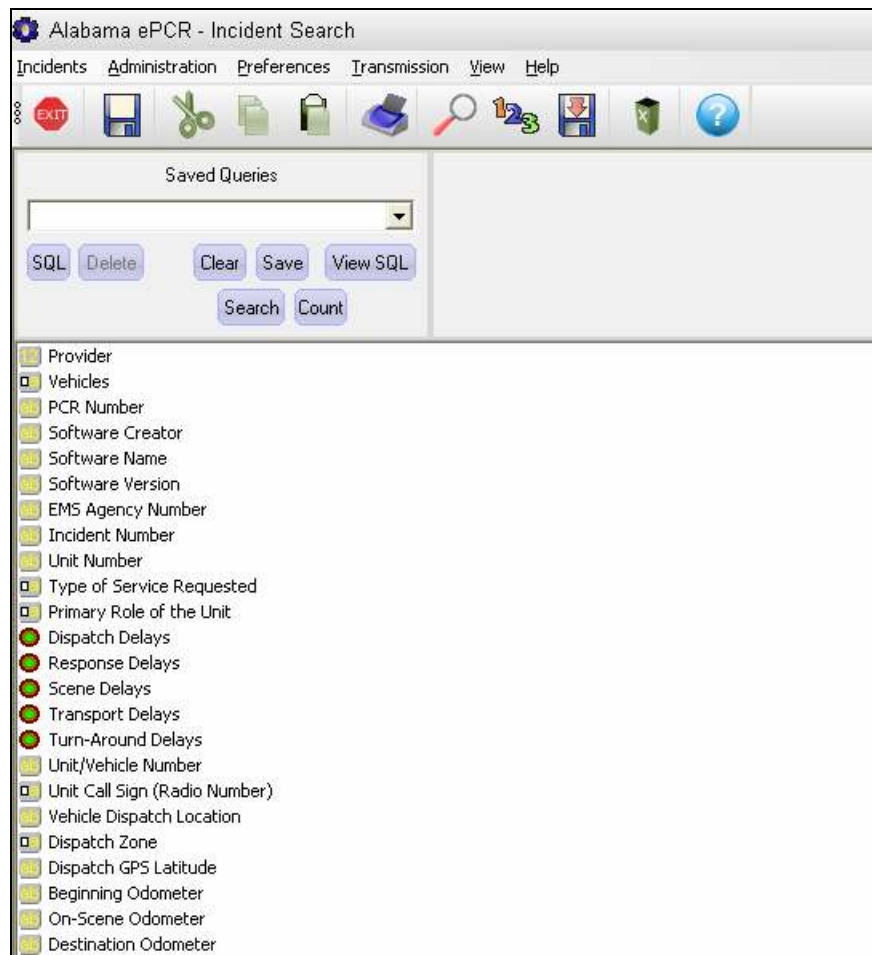
Advanced Searching for Incident Records

The **Basic Search** option is for simple searching of Incidents. **Alabama ePCR** also has an **Advanced Search** option, which allows querying of any field collected in an Incident.

To access the **Advanced Search** screen, go to the **Incidents** Menu and choose **Search**, then **Advanced.**
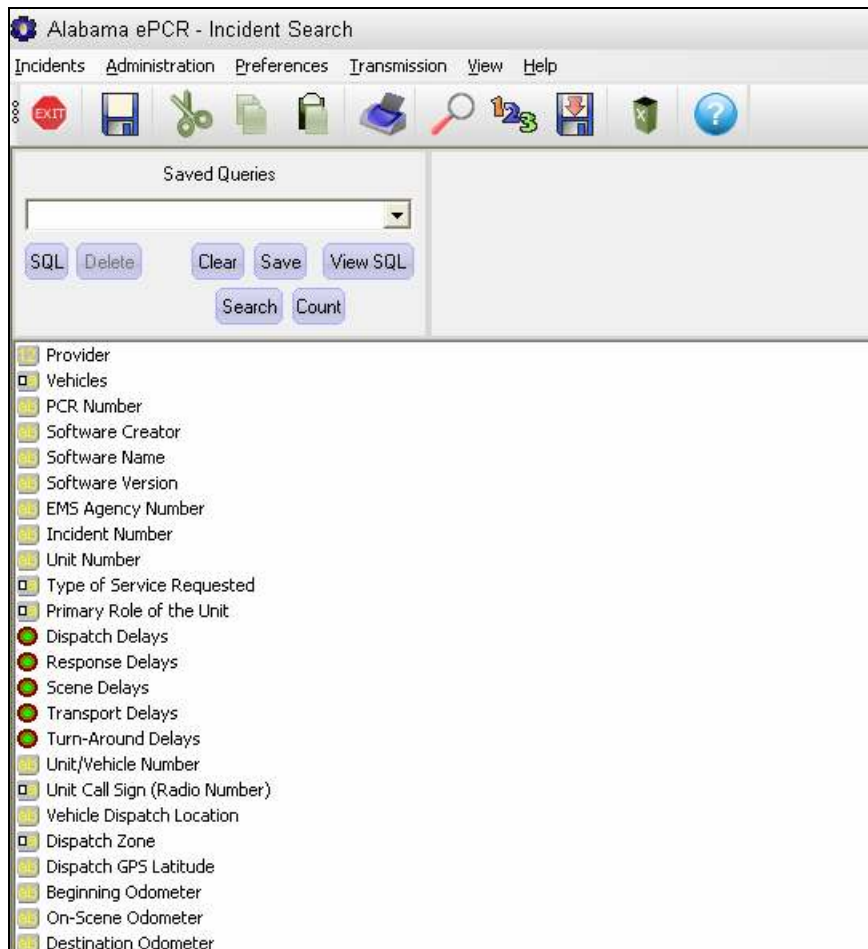
The **Advanced Search** screen has three major sections:

➢ The upper left corner contains the user buttons and the list of saved queries

➢ The lower left corner contains the Field List, which contains the fields used to query a type of incident. Hovering over a field with the cursor will generate a tooltip which gives the definition of that field.

➢ To the right of the saved query section are the search operators and the parameters used for the query. These are not displayed until a query field is chosen.

What do the Field List type icons represent?
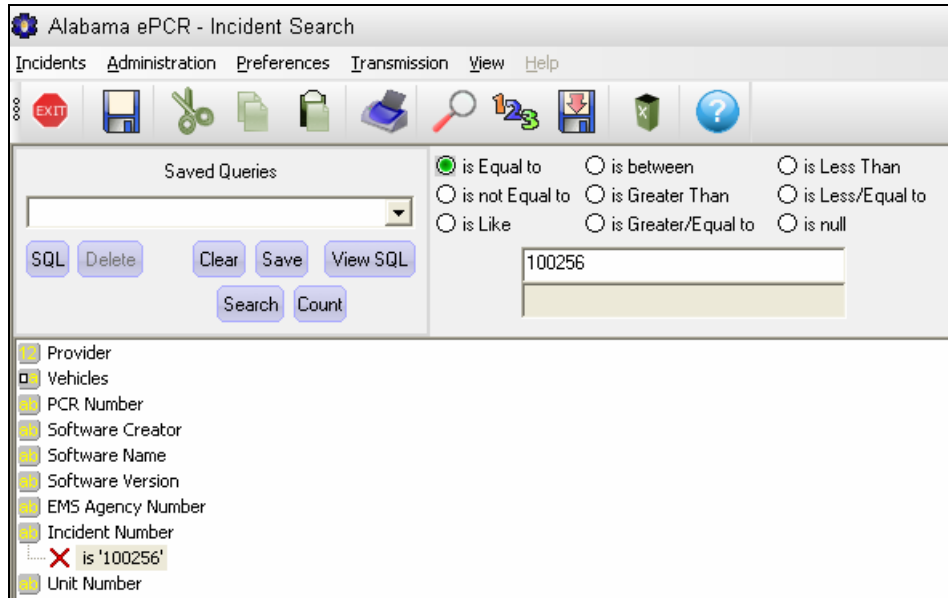
          Alphanumeric

          Numeric

          Date

          Check box list

          A One-to-Many relationship

Examples of Advanced Searching

**Example 1**: Let's look for an incident whose Incident Number is **100256**. Query on Incident Number as shown:

Click on the field desired. A red **X** appears below the field chosen to indicate the selection. (Clicking on the red **X** closes the request for that field.) Once the field is chosen, the list of pertinent search operators appears at the top of the screen. Choose the appropriate relational operator and enter the value to compare in the enabled rectangle. The queries are **not** case-sensitive.

In the above example, **Incident Number** was selected as the query field, **Is Equal To** as the search operator, and 100256 as the value to compare.

Once the string is entered, go to the Toolbar and choose **Search** (or use the Search button in the upper-left corner of the screen) to access the record matches. Select the **Count** icon on the Toolbar (or the **Count** button on the screen) to get only a count of the number of matches.

Note: Selecting **Search** without giving any search criteria will produce a table of all the Incident records in the system. Selecting **Count** will give the user a count of all Incident records.

For this example, **Search** was chosen. That generated a table of Incident matches:
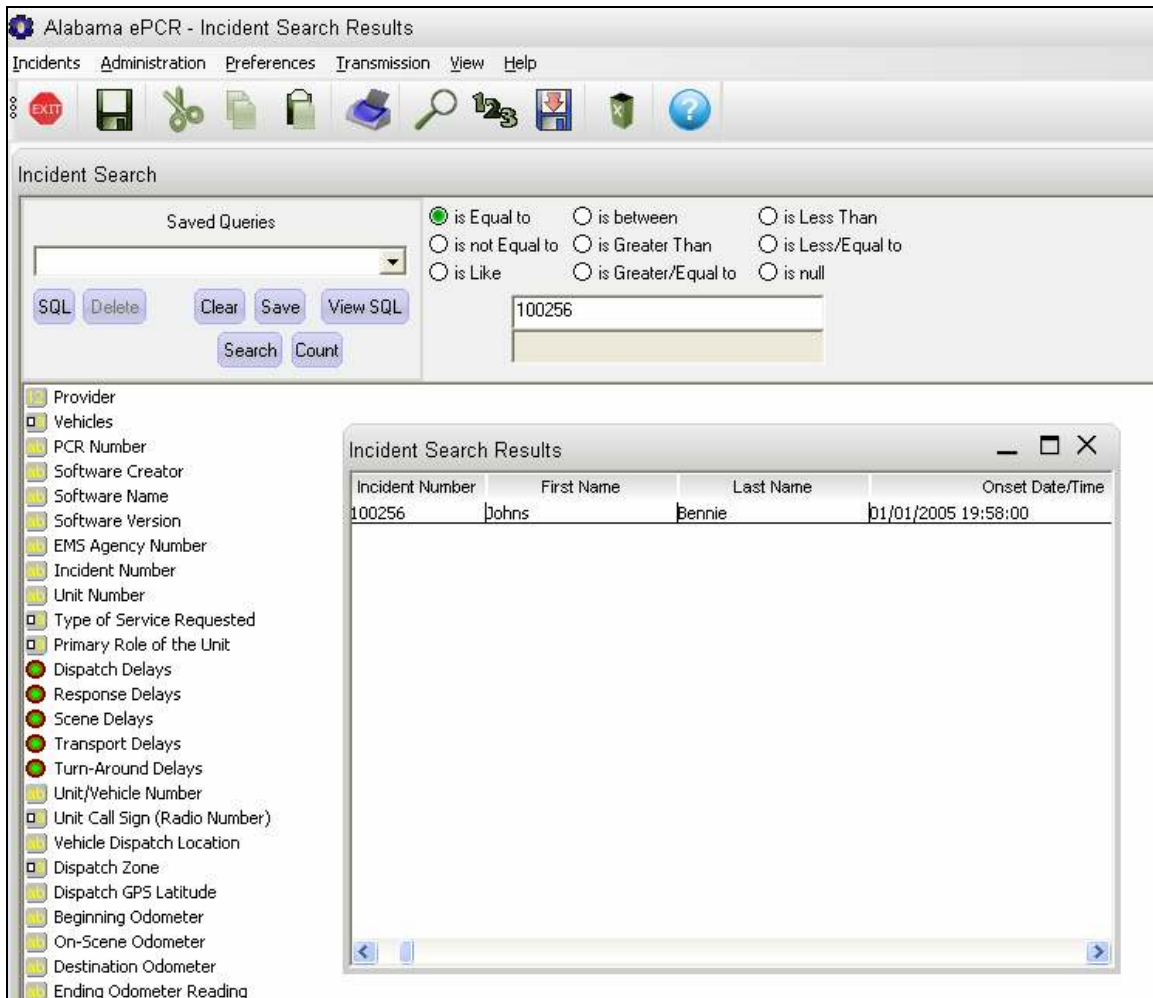

Since the Incident Number is unique, only one record was found. Double-click on the record and the **Incident** Form appears with the pertinent information for that record.

Example 2: How many Incidents reported as involving eye problems took place on December 12, 2006?

First of all, click on **Complaint Reported by Dispatch,** which is a check box list field. The red **X** appears below the field and the check boxes appear in the upper right portion of the screen. Move the scroll bar to the right until the category **Eye Problem** appears. Click the check box for **Eye Problem** and a check mark will appear.
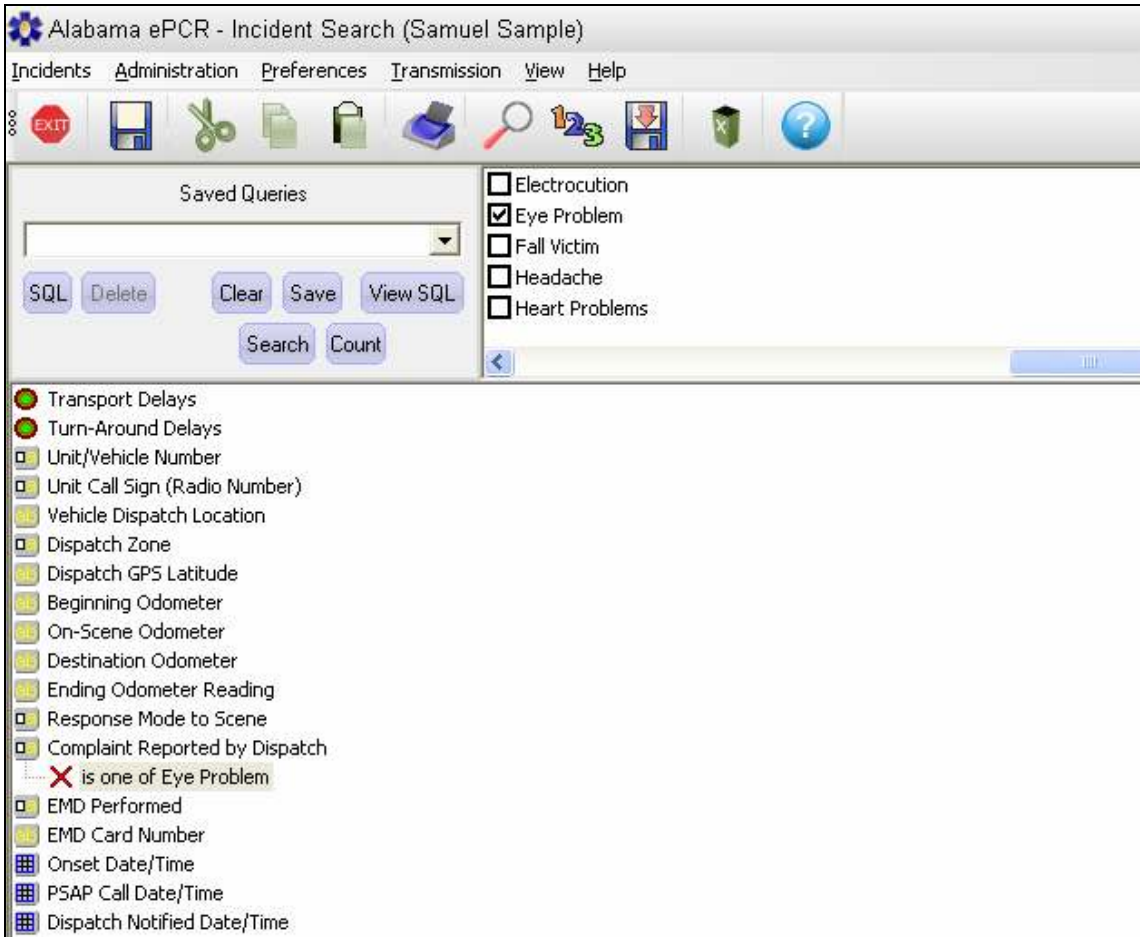
The next step queries against the date of December 12th. Search the Field List for **Incident Date** and click on that name. Choose the **Is Equal To** operator and enter the date in the format **99/99/99** or **99/99/9999**. The slashes will be provided as the date is entered. Finally, choosing the **Count** icon on the Toolbar produces the following:
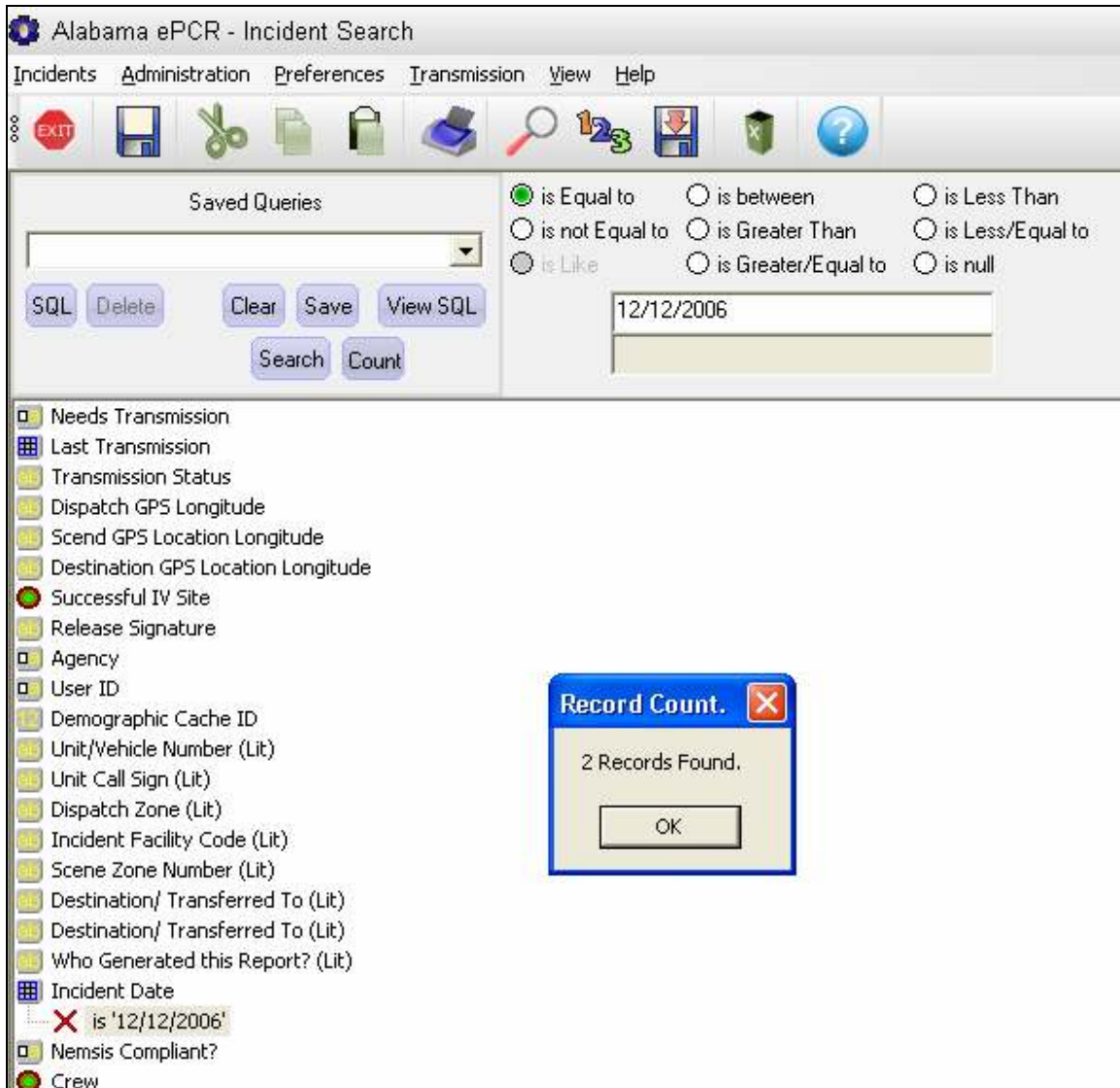
There are two Incidents that occurred on December 12th which match the criteria.

The original question asked how many Incidents matched the criteria. If the user wanted to examine the actual matches, selecting the **Search** icon on the Toolbar would list the specific records.

Example 3: How many incidents took place on July 25th, 2006 involving Cardiac Arrest witnessed by a lay person before EMS arrival, where the length of time of arrest before EMS arrived was between six and eight minutes?

First, query on the Cardiac Arrest field and select **Yes, Prior to EMS Arrival**:
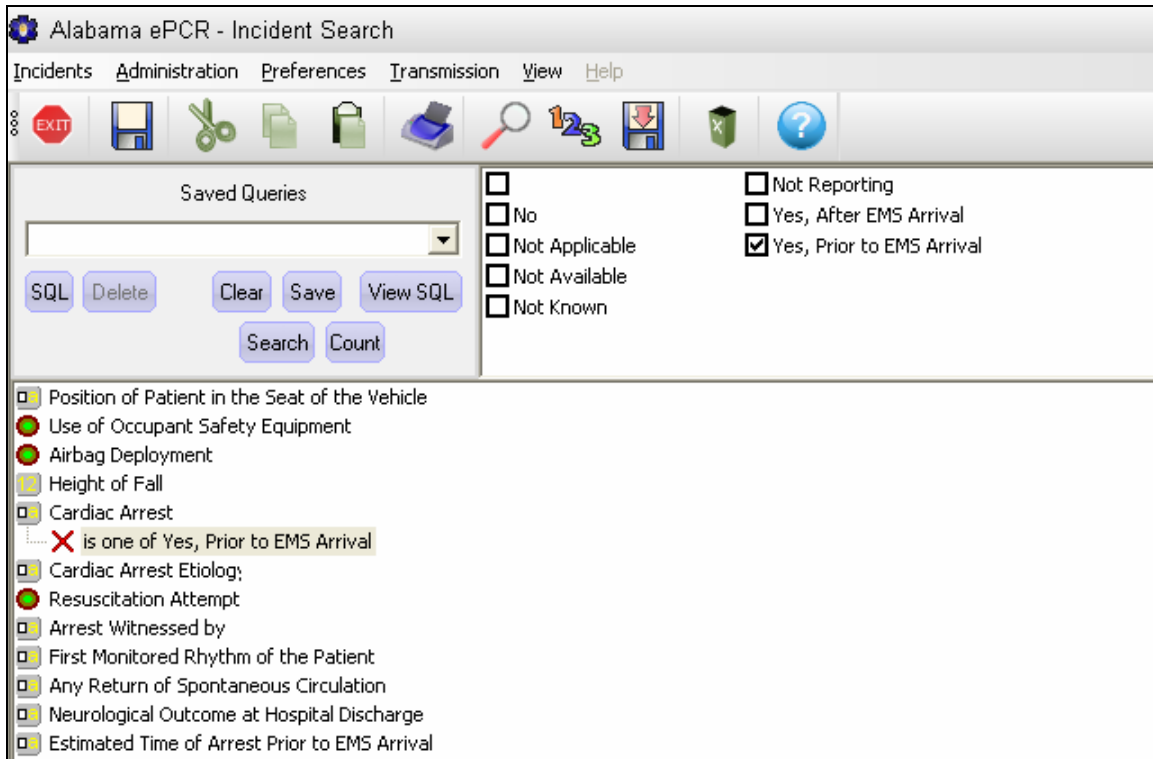
When the Cardiac Arrest field is chosen, expect a check box list at the top of the screen. Once the **Yes, Prior to EMS Arrival** box is chosen, it will be displayed beside the red X on the Field List.

This is followed by the Estimated Time of Arrest Prior to EMS Arrival, where the check box of **6-8 Minutes** is chosen:
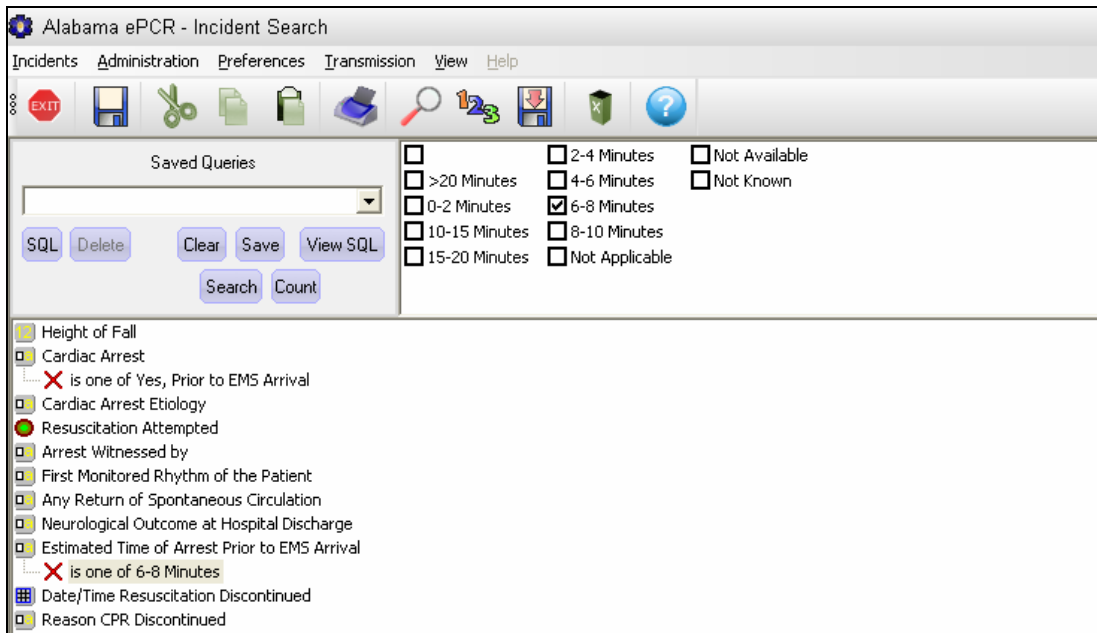
The next field is Arrest Witnessed By. Select the check box with **Witnessed by Lay Person**:

At this point, three fields have been readied for querying. Now the Incident date needs to be added. Go to the **PSAP Date/Time** field and enter the date.
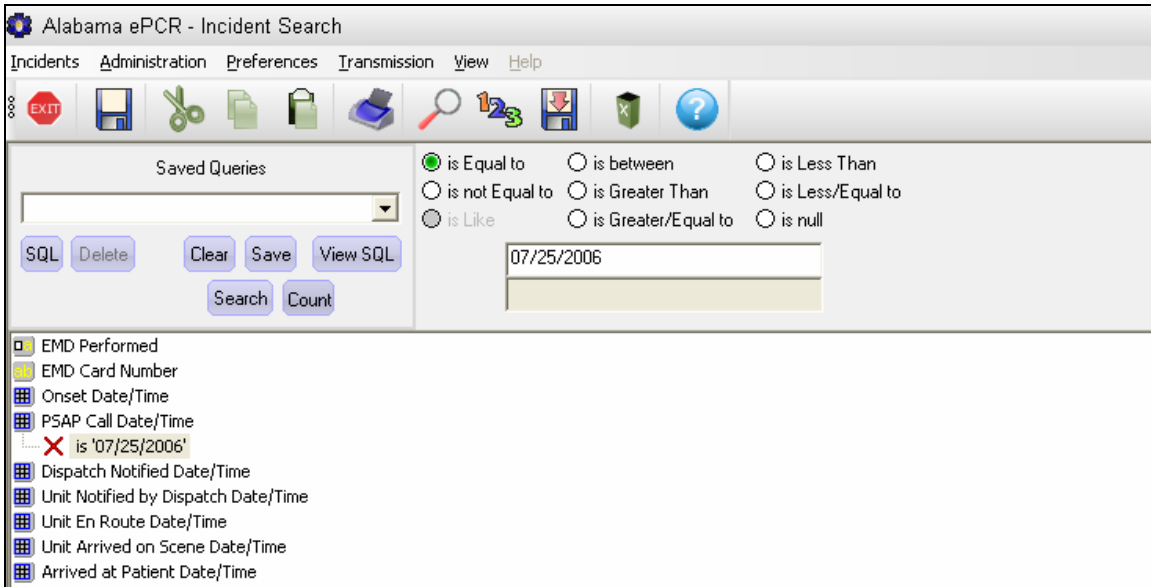
The four conditions needed for this query have been built. They are Cardiac Arrest as **Yes, Prior to EMS Arrival**, Estimated Time of Arrest Prior to EMS as **6-8 minutes**, Arrest Witnessed by a **Lay Person**, and the PSAP Date of **July 25, 2006**.

Now select the **Search** icon on the Toolbar:

A table of two matched records has been produced. Double-click on any part of a record to see its associated **Incident** form.

The LIKE operator

If the user chooses an alphanumeric field to query, the **LIKE** operator appears as one of the active relational operators. Using the **LIKE** radio button finds data even if the specific spelling is unknown.

Suppose there are incidents on a certain date involving a Procedure Authorizing Physician and one doesn't know the exact spelling. The **LIKE** button can help. Enter the part of the name that is not in doubt and add the wildcard **%** afterwards.

In the above example, the last name probably starts with *SLAUSS*. After entering the date, single-click on Procedure Authorizing Physician. In the parameter field, enter SLAUSS% to get all the records with all practitioners whose last names start with *SLAUSS.* From there it should be able to easily find Dr. Slaussberger.

One can choose to use two wildcards in one query if necessary. To find a first name with *QU* in the middle, enter %QU%.

Also, the **#** serves as a placeholder. If there is trouble remembering whether the person's name was *CANDACE* or *CANDYCE*, enter CAND#CE and either spelling is eligible to appear in the result.
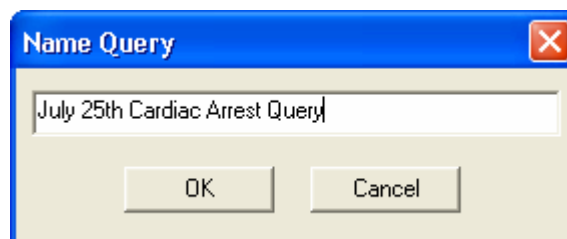
Saving a query

Remember Example 3, which determined how many incidents took place on July 25th, 2006 involving Cardiac Arrest witnessed by a lay person before EMS arrival, where the length of time of arrest before EMS arrived was between six and eight minutes?

What if the query were needed in the future? Rather than re-entering all that information later, save the query in advance.
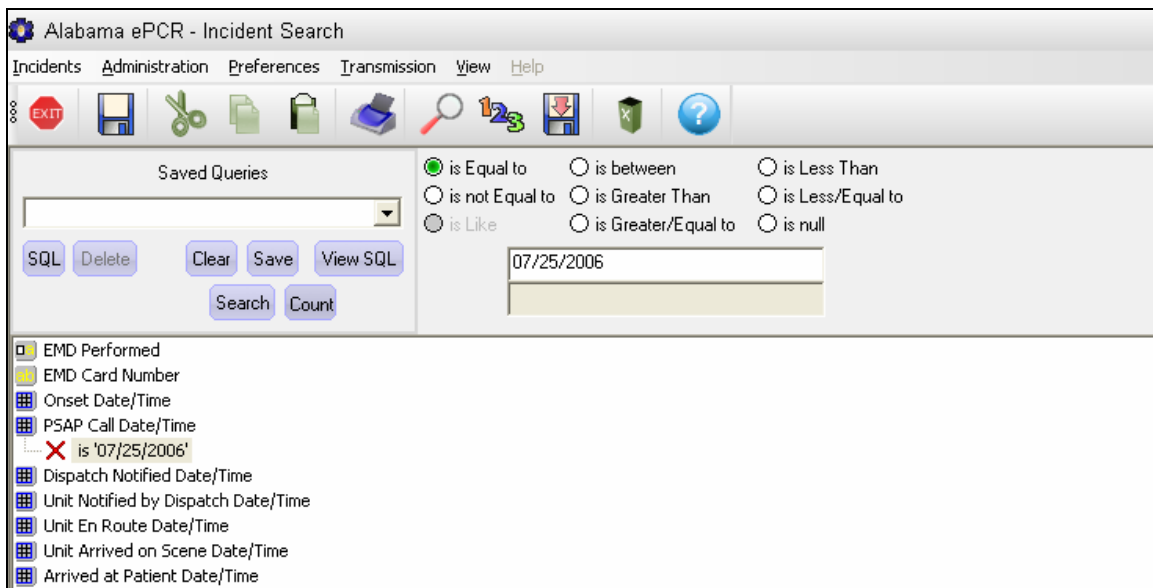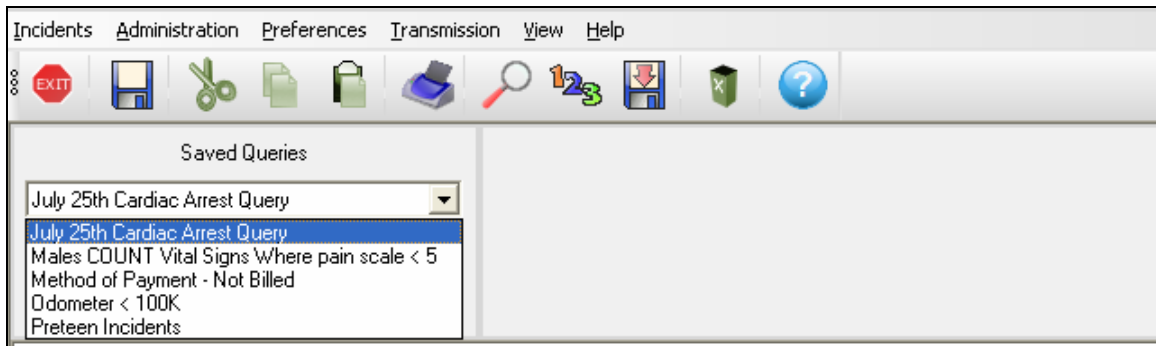

Here is the query from the last example.   Single-click on the **Save** button and a naming box will appear.

Enter a name to describe the new query and choose **OK** to accept the name, which will be added to the drop-down list of previously saved queries. Otherwise, choose **Cancel** to end without saving the query.

Accessing a previously saved query

To access an existing query, go to the drop-down list and select the query desired. Single-click on the **Search** icon to get the results.

Other query buttons

There are additional buttons in the Saved Queries area. They are:

CLEAR   To erase an existing query and start over

DELETE   To delete a previously saved query

SQL/ABC   Toggle button that displays in the list of fields an English-like description of the query if **ABC** is chosen or (when toggled) its **SQL** equivalent, which is a more technical wording

VIEW SQL   Text description of the entire query (similar to **SQL/ABC**)

If the user builds a query with three conditions and picks **View SQL**, a pop-up window appears with an English-like description of the query. When finished with this window, choose **OK**.

For the Cardiac Arrest example, the **View SQL** button would produce the following interpretation:

PSAP Call Date/Time is '07/25/2007'
and Cardiac Arrest is one of Yes, Prior to EMS Arrival
and Arrest Witnessed by is one of Witnessed by Lay Person
and Estimated Time of Arrest Prior to EMS Arrival is one of 6-8 Minutes

The **View SQL** pop-up window has a button in the lower left corner which would show the SQL translation of the same query:

NAT_INCIDENT.E05_02_PSAP_DATETIME='2007-07-25 00:00:00' and
NAT_INCIDENT.E11_01_CARDIAC_ARREST in (1485) and
NAT_INCIDENT.E11_04_CARD_ARR_WITNESSED in (1510) and
NAT_INCIDENT.E11_08_CARD_ARR_EST_TIME in (1542)

Other Types of Queries

To this point, the examples for querying have involved asking a question which anticipates one specific field in an Incident producing only one value.

The user can check against two different values in the same field. An example is looking for Incidents occurring in both Baldwin and Mobile counties. First, look for Incident County:
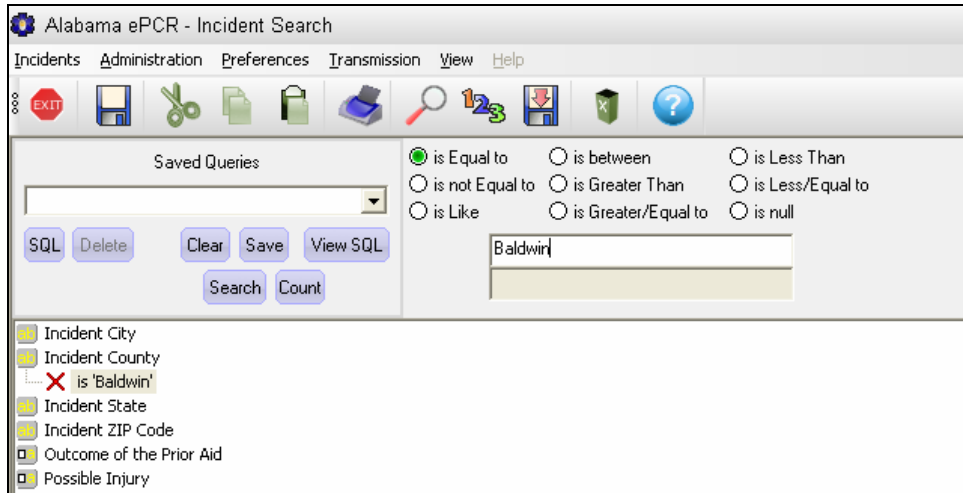
After the text is entered, click on the field name a second time and a new line appears. Enter the second county. The query result will contain all Incidents from either county.
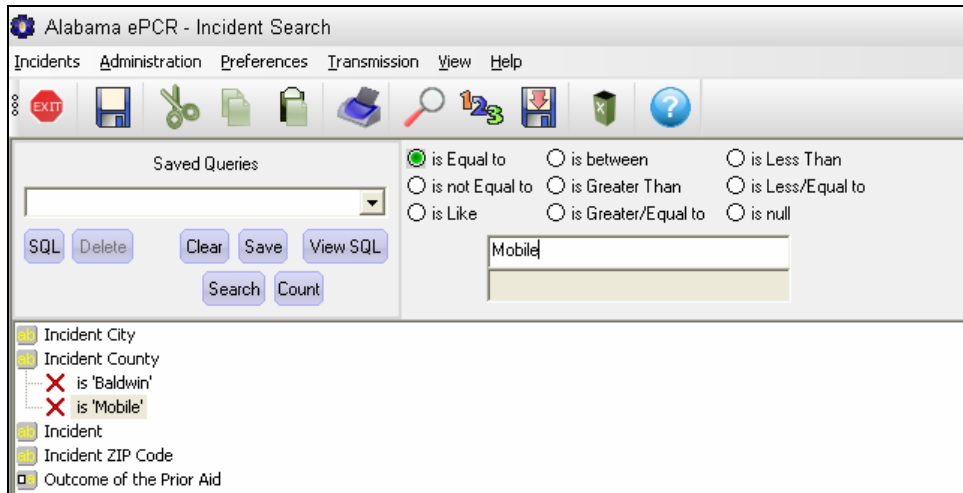
There are some fields on the Incident form that can have multiple "answers" to one "question". Fields that contain one-to-many relationships are designated with the symbol.
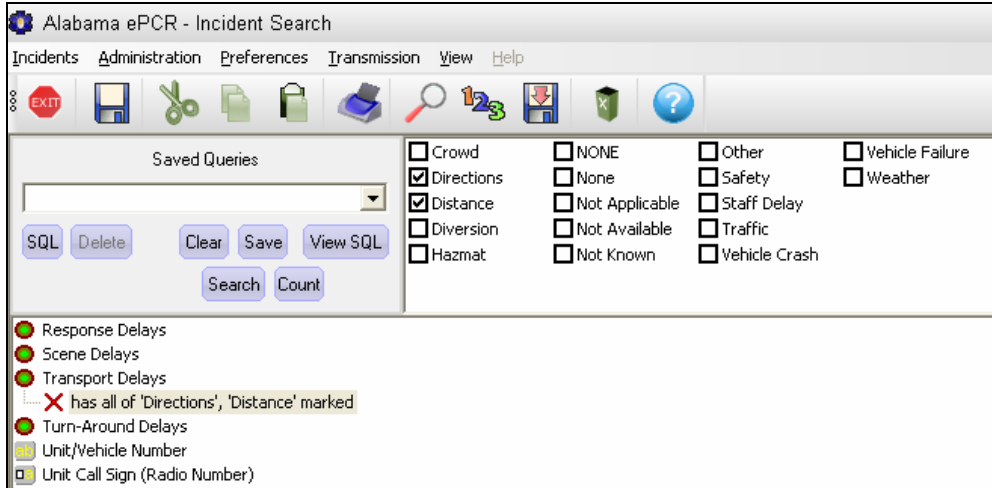
The above example looks for Incidents involving Transport Delays of Directions and Distance. Because Transport Delays has a bulls-eye icon, the user can anticipate the one-to-many relationship of this field's items.

Clicking on the field name produces a check box list. Unlike the previous example of Cardiac Arrest, this field will allow more than one box to be marked. In this case, Directions and Distance are chosen. As the field entry indicates, the query will look for all records where **all** of the checked items match those in the Incident.

Subqueries

There is another type of structure that is defined by the symbol.

There are instances where a set of related items is entered more than once for a specific record. This has been described elsewhere in the manual as a **subtable**. An example is Prior Aid info on the Incident form:
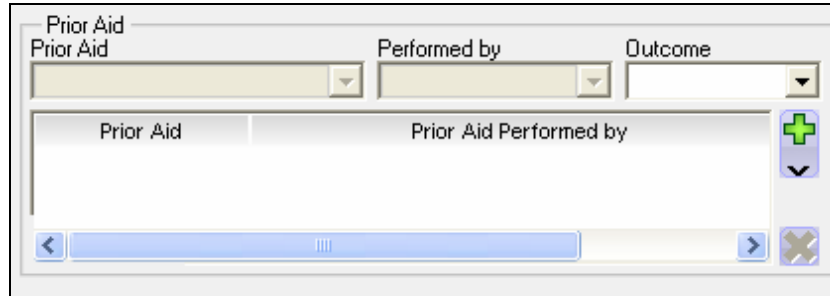
Each Prior Aid record has three fields. Because one record can have multiple Prior Aid subtable records within the same Incident, this is a one-to-many relationship. To access this information, a **subquery** is needed.

Subqueries can be executed based on: 1) a condition that exists; 2) counting the number of times a condition exits; or 3) a condition not existing at all.

Below is one way the Prior Aid fields can be displayed in the Query Builder. This is a subquery that is predicated on an existing condition:
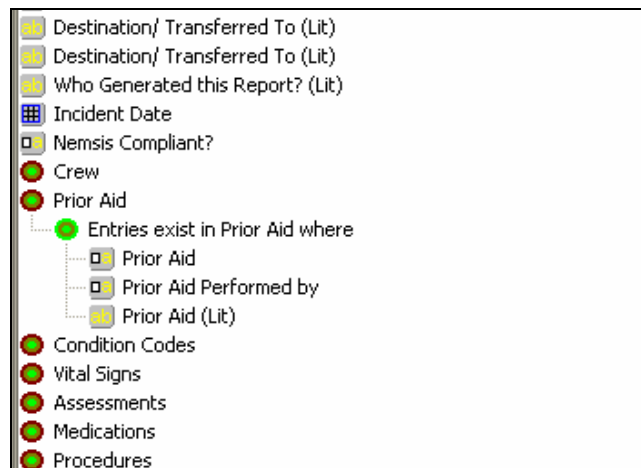
When the Advanced Search feature is first opened, the specific fields that make up Prior Aid are hidden from view:
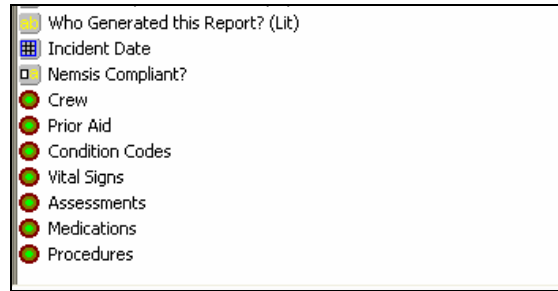
When Prior Aid is selected, a **Choose Subquery Type** screen appears:
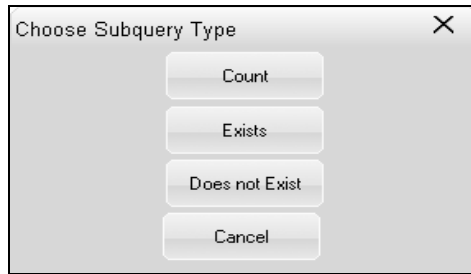
Selecting one of the first three options (**Exists** in the following example) will allow viewing of the elements of the Insurance table. To close the Insurance field list, click on the smaller bulls-eye to the left of the word **Entries**.
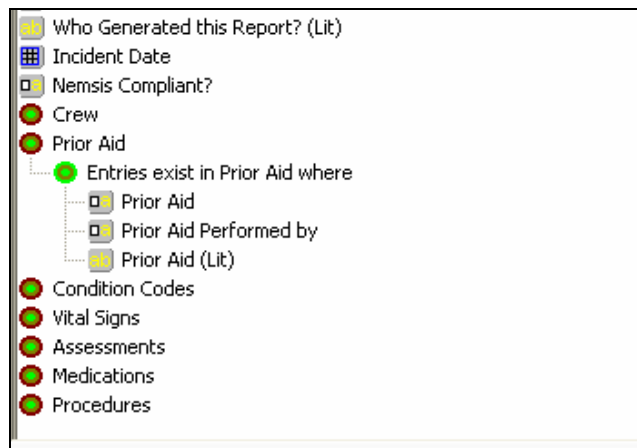
The four subquery buttons
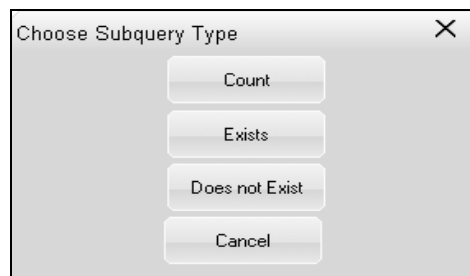
The **COUNT** button is needed for sub-queries for which the subquery element's result is based on a count of the number of instances which occurred.

For example, to determine the number of Males with more than one reading of Vital Signs and whose Pain Scale was less than a five:

1. Choose the Gender field and pick the Males check box
2. Choose the Vital Signs field, pick the **Count** button on the pop-up window, then compare with Greater than 1
3. Choose Pain Scale underneath Vital Signs, then compare with Less Than 5

To determine whether a complex query is built properly, the **View SQL** button in the **Saved Queries** area can be helpful. For the above query, using **View SQL** produces the following:
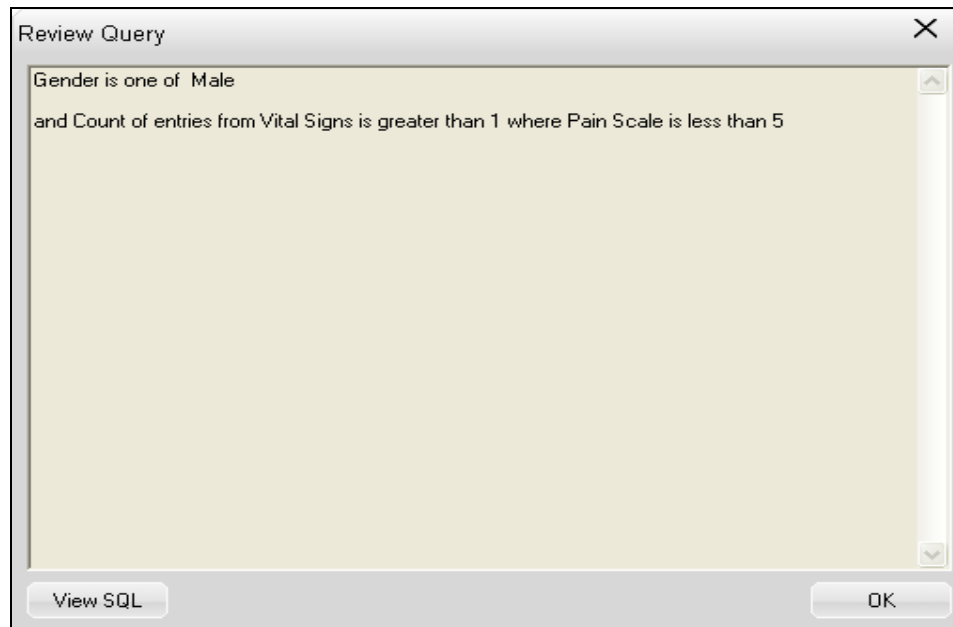
The **EXISTS** button is used when the subquery element's result is based on a determination that at least one instance of that type has been recorded.

For example, to determine how many times was CPR given (other than Prior Aid) during Incidents in Baldwin County:

1. Choose the Incident County field and compare with Is Equal `Baldwin`
2. Choose Procedures and pick the **Exists** button on the pop-up window
3. Once the Procedures fields are revealed, choose Procedure and pick the CPR check box:
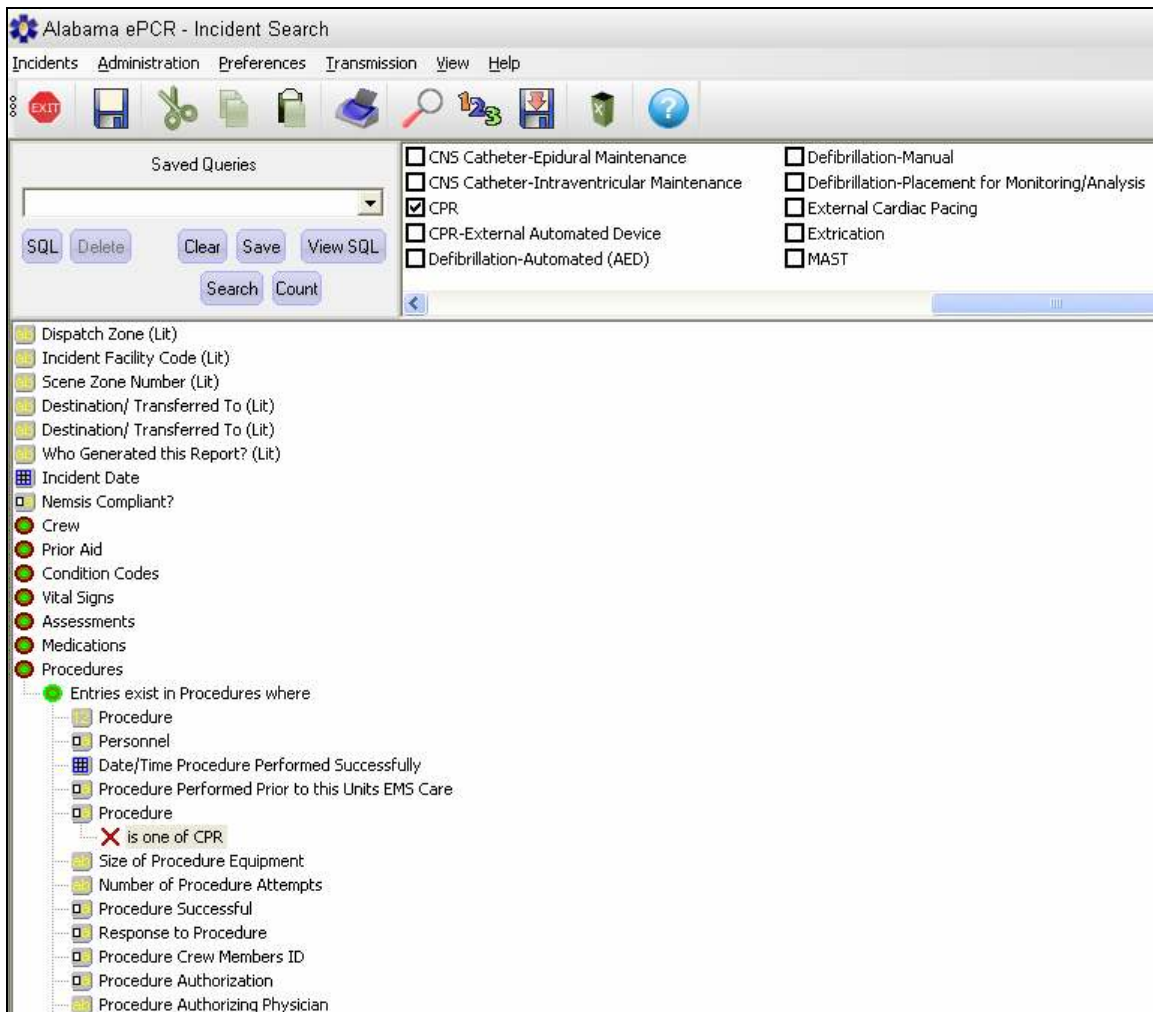
The **DOES NOT EXIST** button is for sub-queries for which the subquery element's result is based on a determination that an instance of that nature has never been recorded.

For example, to determine how many Incident records of those over fifty years of age have no Medication entries:

1. Choose the Age field and compare with > 50
2. Choose the Age Units field and pick check box of Years
3. Choose Medications, then pick the **Does Not Exist** button on the pop-up window:
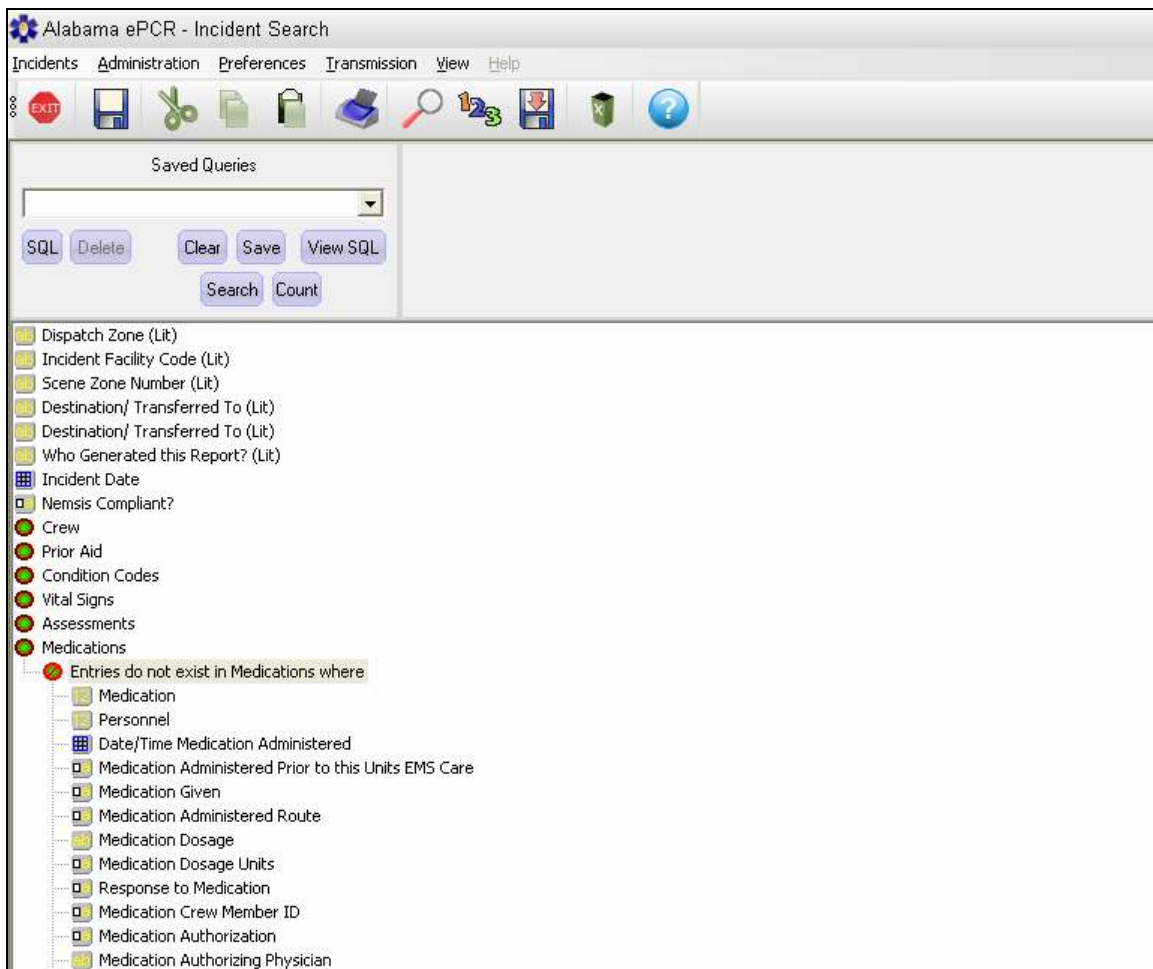
Note: Because the request specifies NO medication records for the patient, no individual medication field need be evaluated.

The **CANCEL** button is used if there a need to quit the subquery.

Modifying Incident records

After an incident is entered, it may come to pass that it will have to be modified.   There are two ways to modify a record:

1. Choose either **Basic Search** or **Advanced Search** from the **Incidents Menu** to build a query. The more detailed the query, the more likely it will produce a manageable list of records. Choose the record desired from among the results of the search query.

2. Choose **View** from the Incidents Menu, pick either **Needs Transmission** or **Needs Review**, and scroll through all the available records. Choose the record desired from the list.

Using the SEARCH option to modify records

When searching for an Incident record, use the **Search** option from the **Incidents** menu. Build a query, choose the **Search** icon from the Toolbar, use either a Basic or an Advanced search to produce a table of matching records, and pick the desired record.

Note: The generated table will contain all possible matches, regardless of whether those incidents are **not** ready for transmission, are **needing** to be transmitted, or are those that **have already been** transmitted.

Once the **Incident** form appears, any screen on that form can be updated. When finished updating, choose the **Save** icon on the Toolbar to save the record.

Using the VIEW option to modify records

The **View** option on the Incidents Menu creates two types of record lists.
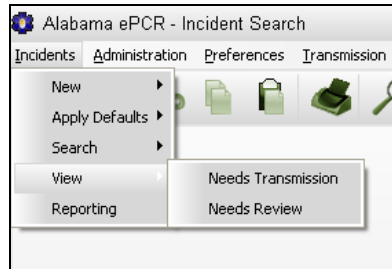
The **Needs Transmission** list contains a list of all records where the **Incident Needs Transmission** check box is checked **ON**. These records will be included in the next transmission to the State server.

The **Needs Review** list contains a list of all records which have been transmitted and have come back with a status other than Successful. These records will need to be corrected before resending.

Choose either option and a table will be produced containing Incident records. Double-click anywhere on a record and the corresponding Incident form will appear. At this point, one can modify any screen's contents. Choose the **Save** icon on the Toolbar and all the modifications throughout the form are saved.

THE ADMINISTRATION MENU

Defining an Agency

The Agency form has only one record. This record defines the environment of the Provider. It contains information about the Provider's location and geographic boundaries, its history, its contact info, and its scope of work performed. This record is built over eight screens in the Agency form.

The elements of the Agency form are **Agency Information, Other Agencies, Statistics, Agency Contact, State, Protocols, Procedures, and Medications.**

To access the Agency form, go to the **Administration** menu and choose **Agency**:
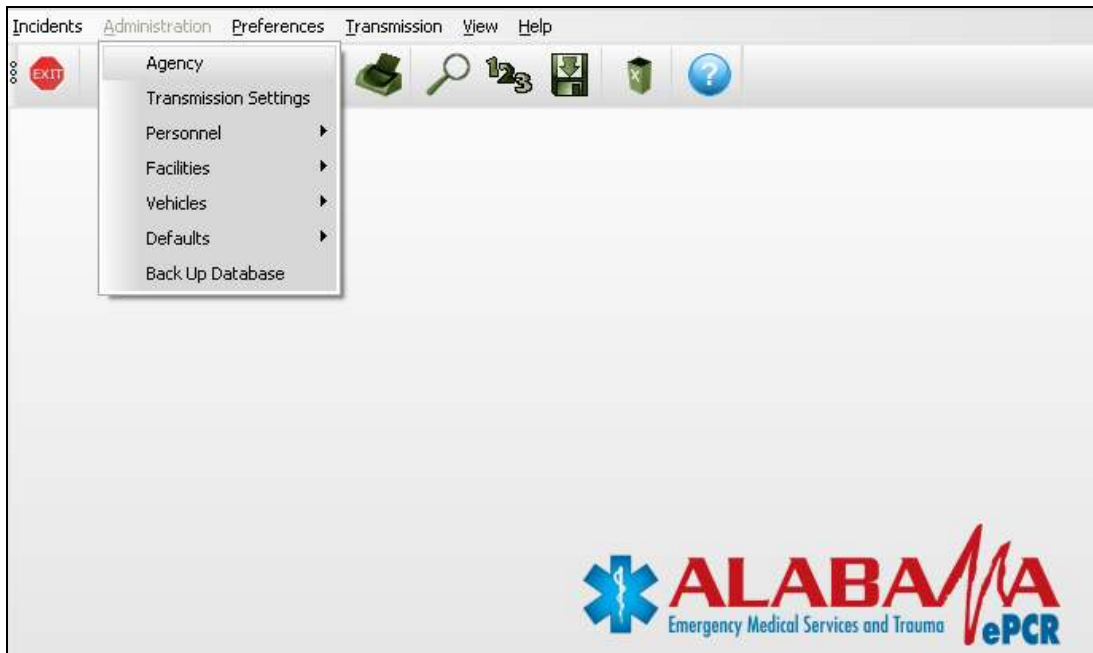
Note: The Administration records must be complete and accurate before any Incidents can be transferred, as tables containing information about Incident data with Vehicles, Personnel, etc. must be validated in advance via the Administration forms.

Agency Information
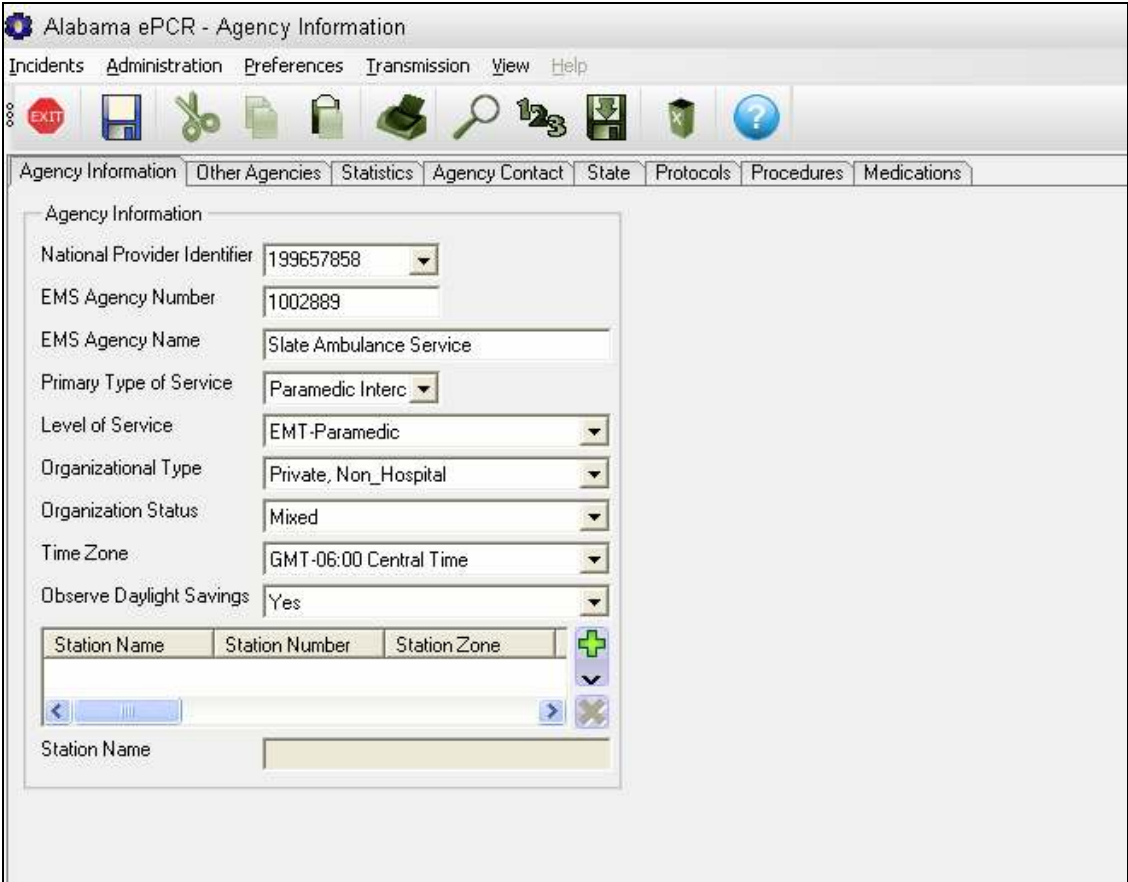
The **Agency Info** screen defines the general characteristics of the Agency.

Other Agencies
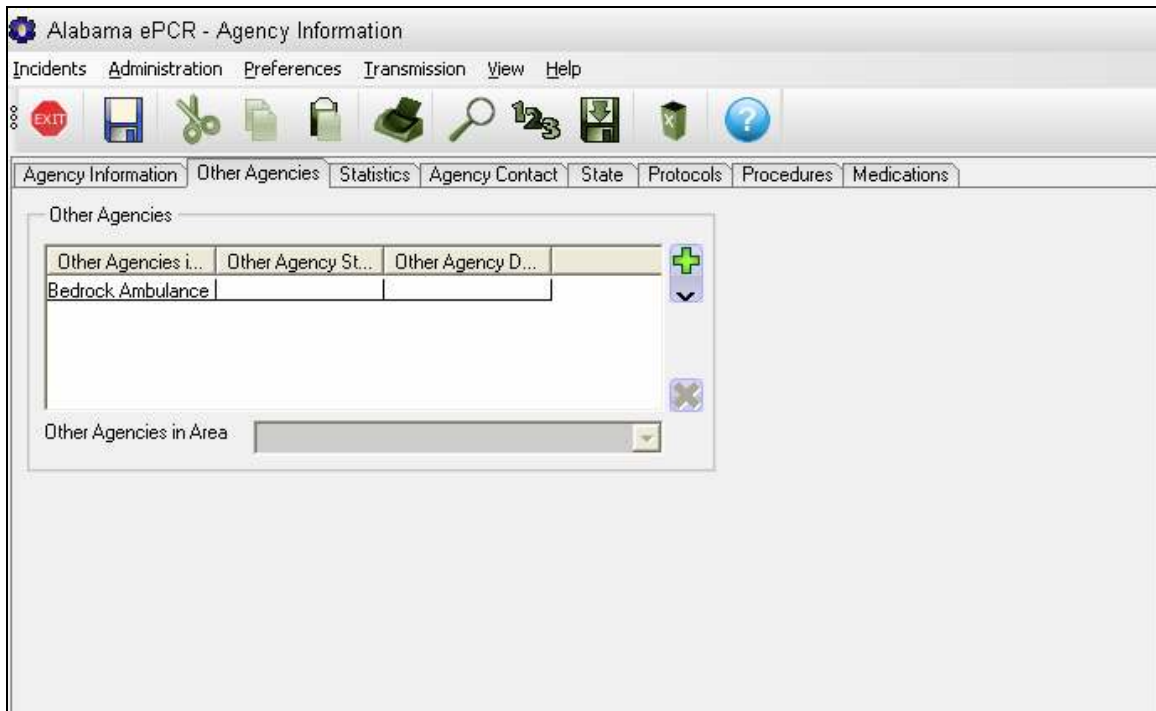
The **Other Agencies** screen lists other providers in the area.

Statistics
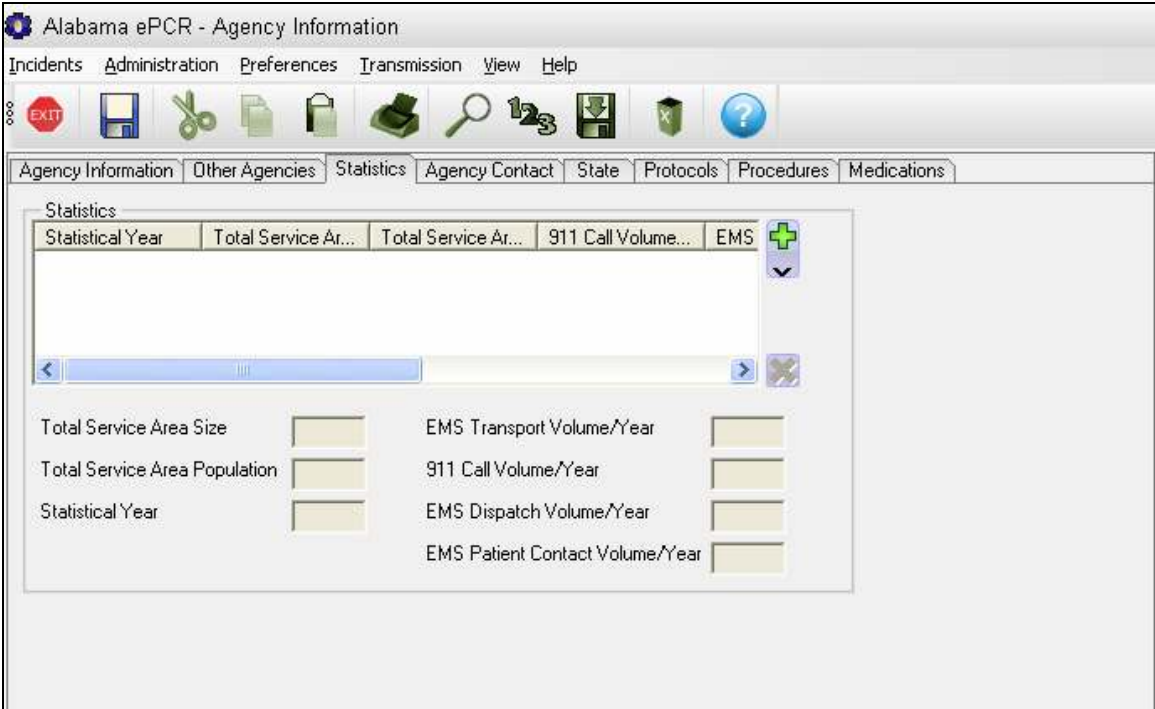
The **Statistics** screen contains information on the volume of activity coming through the Agency.

Agency Contact

The **Agency Contacts** screen contains information about the Agency's point of contact.

State
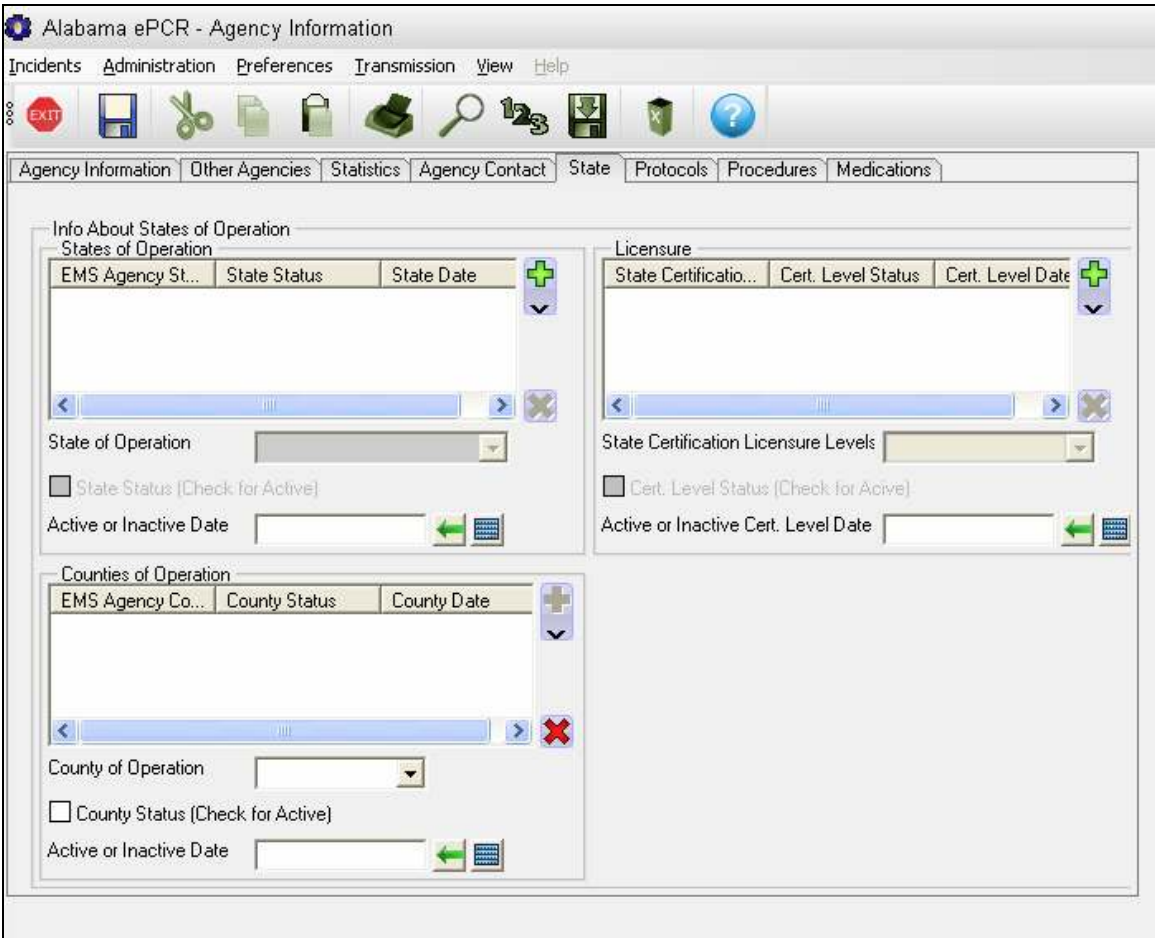
The **State** screen shows the coverage area and the level of certification for the Agency.

Protocols
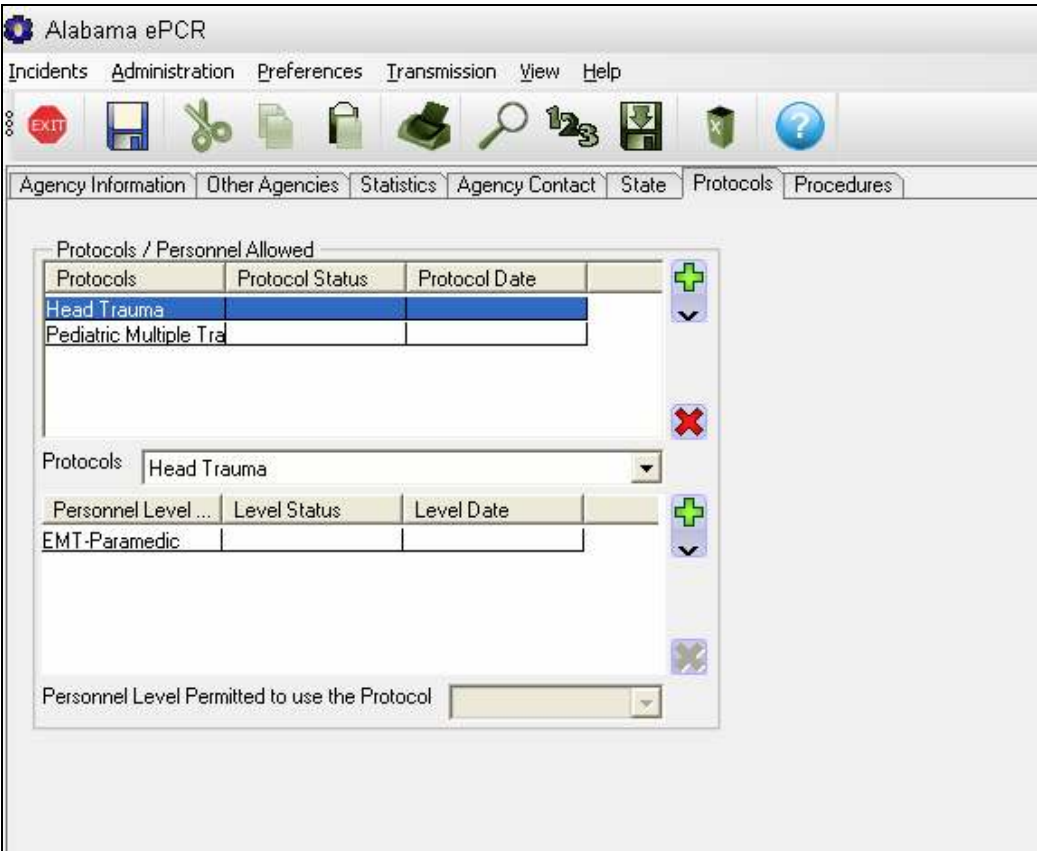
The **Protocols** screen creates a table of valid courses of medical treatment that can be executed and a table of the skill levels which can administer that particular protocol. The screen contains one subtable (Protocol Levels) dependent on another (Protocols).

Build a **Protocol** record by entering a type of protocol along with the protocol status and its date. Then go to the Protocol Level table and build a record with each skill level that can administer that course of action.

Procedures
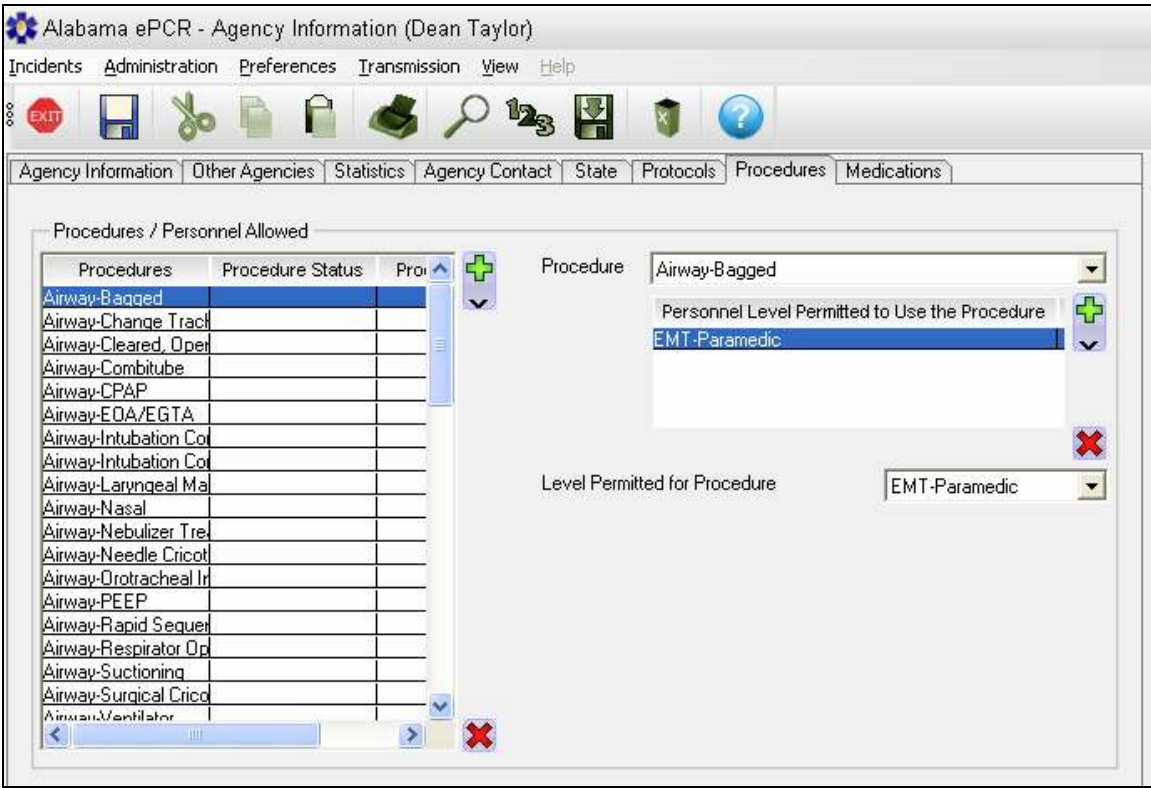
The **Procedures** screen lists the valid medical procedures the Agency is authorized to perform. Like the **Protocols** screen, this screen contains one subtable (Level Permitted for Procedure) dependent on another (Procedures).

Build a **Procedure** record by entering a type of procedure, then go to the Procedure Level table and build a record with each skill level that can perform the aforementioned technique.

Medications
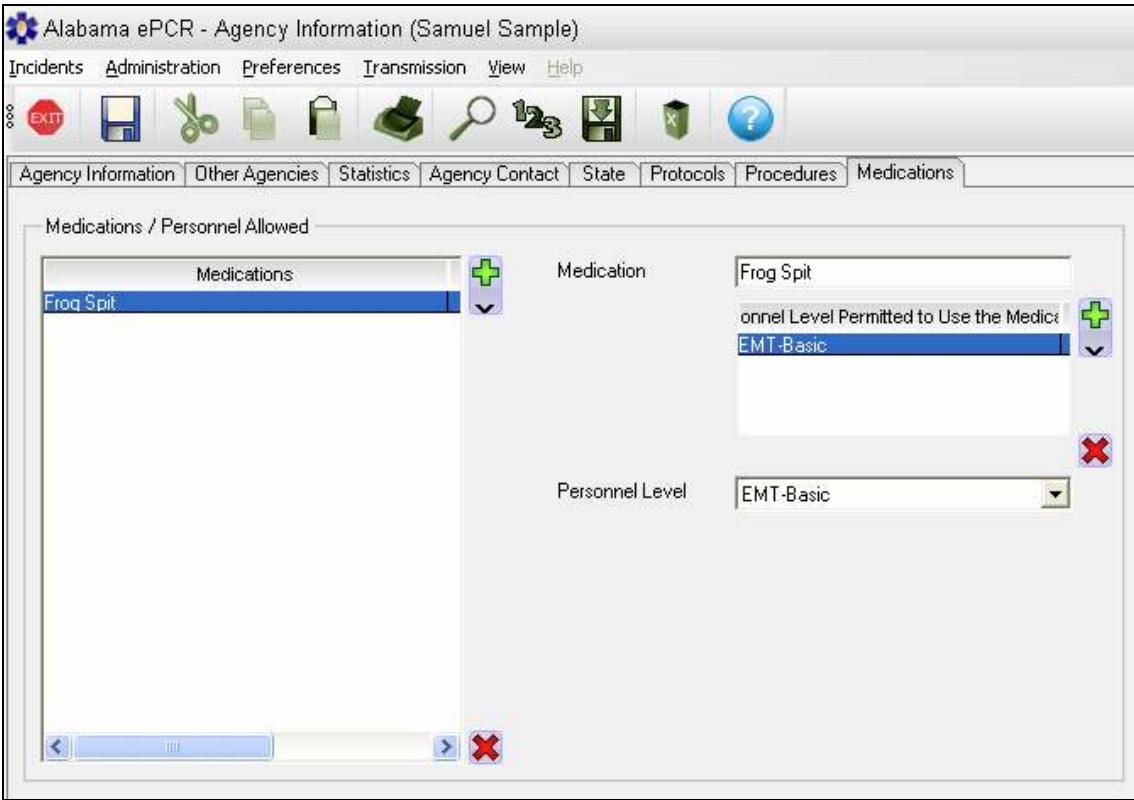
The **Medications** screen lists the valid medications the Agency is authorized to administer. Like the **Protocols** and **Procedures** screen, this screen contains one subtable (Personnel Level) dependent on another (Medications).

Build a **Medications** record by entering a type of medication, then go to the Medication Level table and build a record with each personnel level that can administer the designated medication.

Other Administration Menu Options
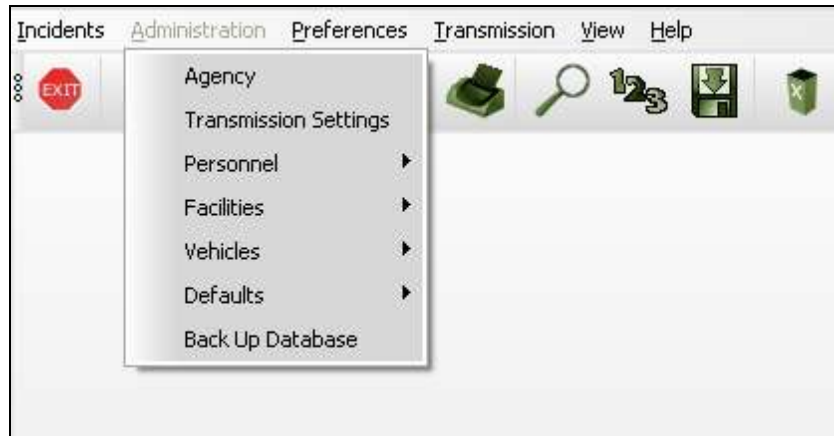
In addition to the **Agency** form, there are many additional options on the **Administration** menu:

- ➢ **Transmission Settings**

- ➢ **Personnel**

- ➢ **Facilities**

- ➢ **Vehicles**

- ➢ **Defaults**

- ➢ **Back Up Database**

Maintaining Transmission Settings

From the **Administration Menu**, choose **Transmission Settings**:

The **Transmission Settings** form defines the elements that allow for the software and data updates within the **Alabama ePCR** community. This information should be loaded the first time **Alabama ePCR** is used.

The above picture is only an example. The local system administrator will provide the specific information for the local Provider before installation of this product.

Note: See **Defining the Transmission Settings** in the Introduction for more details about this form.

Maintaining Personnel

From the **Administration Menu**, choose **Personnel,** then **New** to create a new employee or **View All** to access the entries in the Personnel table.
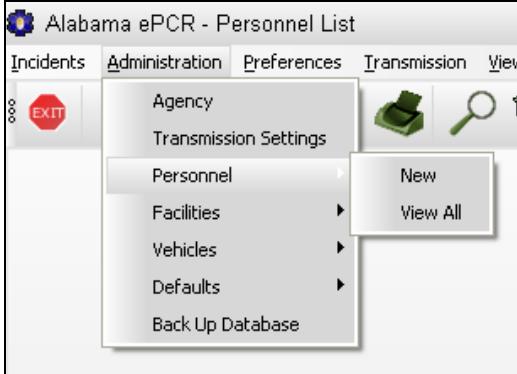
The **Personnel** form contains each employee's personal information as well as employment status, certifications, and system user information.

Maintaining Facilities

From the **Administration Menu**, choose **Facilities**, then **New** to create a new facility or **View All** to access the entries in the Facility table.

The **Facilities** form contains information about the various facilities used by the agency.   Enter the Facility Name, Facility Type, Address info, Status Date, and Facility Status.

Maintaining Vehicles

From the **Administration Menu**, choose **Vehicle**, then **New** to create a new Vehicle record or **View All** to access the entries in the **Vehicle** table.
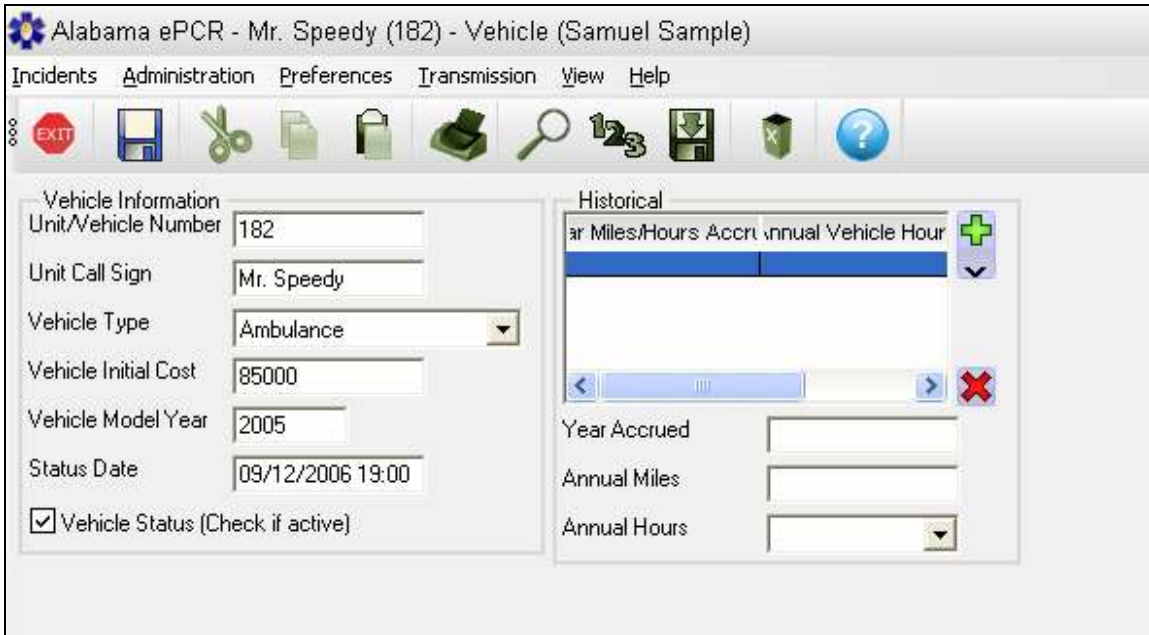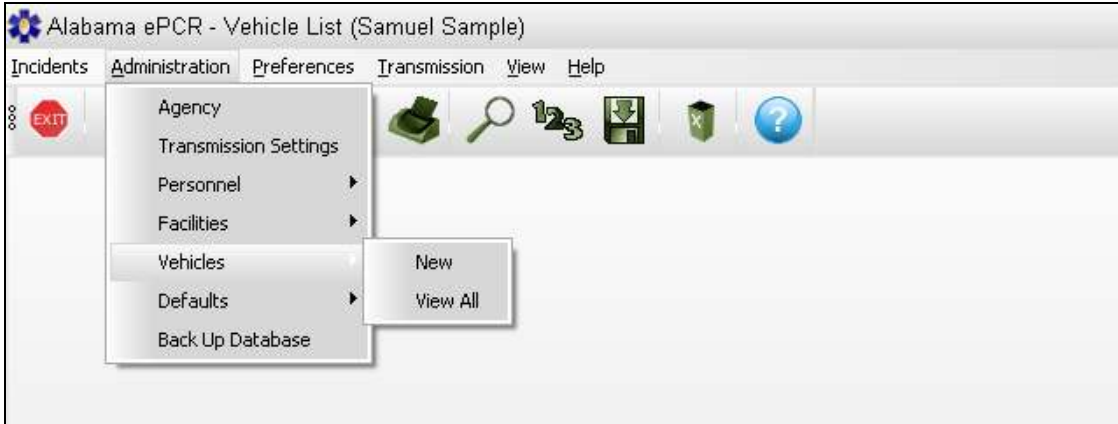

The **Vehicle** form contains information about the vehicles used by the Agency. Enter the vehicle's current information as well as its historical information.

Maintaining a Form's Default Information

Creating and maintaining default information on forms is an administrative function. From the **Administration Menu**, choose **Defaults.** A submenu will ask for the type of default to add or to view.
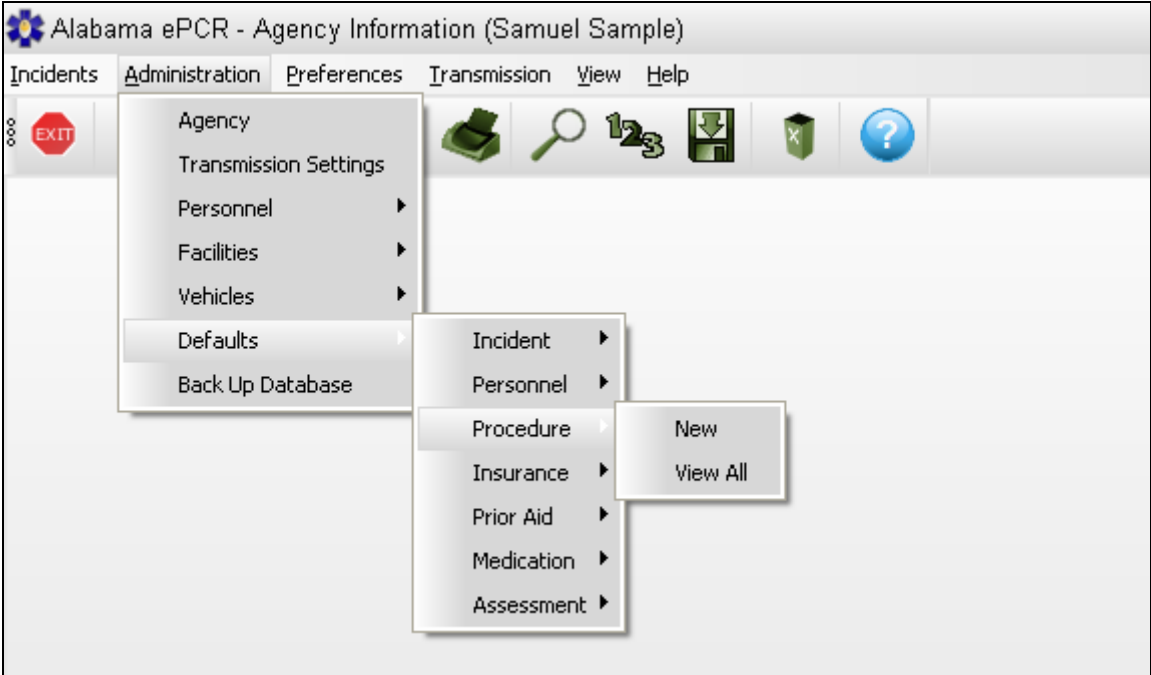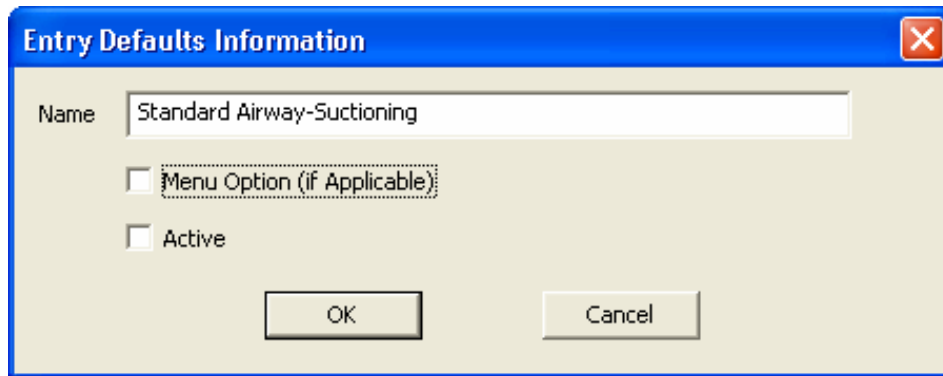

There are numerous Default forms. In this example, **Procedure** is selected. All the default types have the same two submenu options.
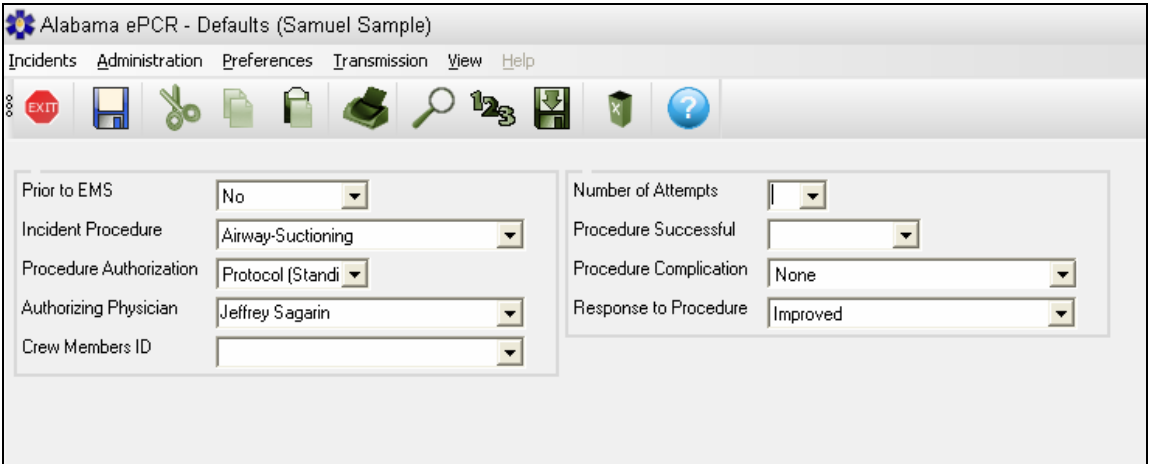
Building a new Procedure default record (*Defaults* ➔ *Procedure* ➔ *New*) helps users who have to input the same grouping of data frequently. Creating a template with common information that can be pulled into an Incident form can be a keystroke saver.

If modifying an existing Procedure default record, start by looking at a table of existing defaults. This selection (*Defaults* ➔ *Procedure* ➔ *View All*) will collect all the previously generated defaults. Double-clicking on the desired record will open the Procedure default for modification.

Whether creating a new default or modifying an existing one, enter the fields to be defaulted. Next, choose the **Save** icon on the Toolbar. If successfully saved, an Entry Defaults window will appear:


In the above example, the default known as Standard Airway-Suctioning Assessment was modified. (If building a default for the first time, the Name field will be blank and the user creates an appropriate name for the default.)

If the default being addressed is an Incident default and the user wants it added to the list of defaults under *Incident* ➔ *Apply Defaults*, the **Menu Option** check box should be checked on. Otherwise, leave it blank.

When finished with the default, select **OK**. To end the process without saving, choose **Cancel**.

Backing Up Data
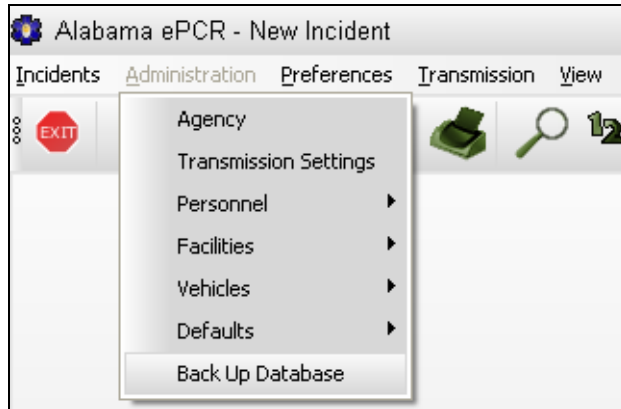
Local sites have the option of creating a backup of their Incident data. Select **Back Up Database** from the **Administration** Menu.

The backup is designed to run on the PC where the application resides. As a result, users who access **Alabama ePCR** from a different machine from their own will get this pop-up screen when they attempt to perform the backup:
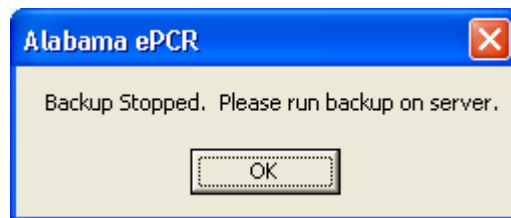
Otherwise, a pop-up screen will ask what to name the file that results from the backup. Select **OK** and the backup will finish.

MISCELLANEOUS FEATURES
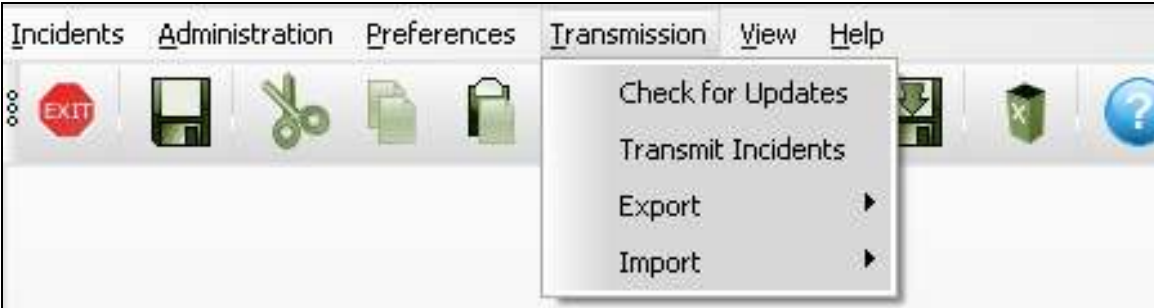
Exporting Alabama ePCR Tables

A user can create a table of records, and then copy the records to a file outside of **Alabama ePCR** to use them in another application such as **EXCEL** or **Access**. The table can be the result of a search (such as all burn victims), or it can be the output of a menu option (such as the list all the Vehicles in an Agency).

In the following example, a user wants to take all the current information on Facilities and move the results to an **EXCEL** spreadsheet.

First, create a table of all the Insurance Providers by choosing the **Administration Menu**, then **Facilities**, then **View All**. The result is:

Other Destinations	Destination Type	Other Destination Date	Destination Facility Number	Address 1	ddress	City
Ozark Rest Home	Nursing Home	09/13/2006	99001	134 Pecan Lane		Guntersvil
Living Will	Morgue	01/01/2006	99002	1456 Dark Shadows Parkway		Tuscumbia
Anchors A Way Station	Nursing Home	02/07/2006	99003	3400 US 11		Gadsden
Jim Dandy Rest Home	Nursing Home	01/03/2007	99004	3431 Lincoln Highway		Auburn

Setting up the Export

Once the table is built, selecting the **Export** icon on the Toolbar will produce the File Export pop-up window with a check box for each possible field in the table its left side as well as a number of user buttons on its right:
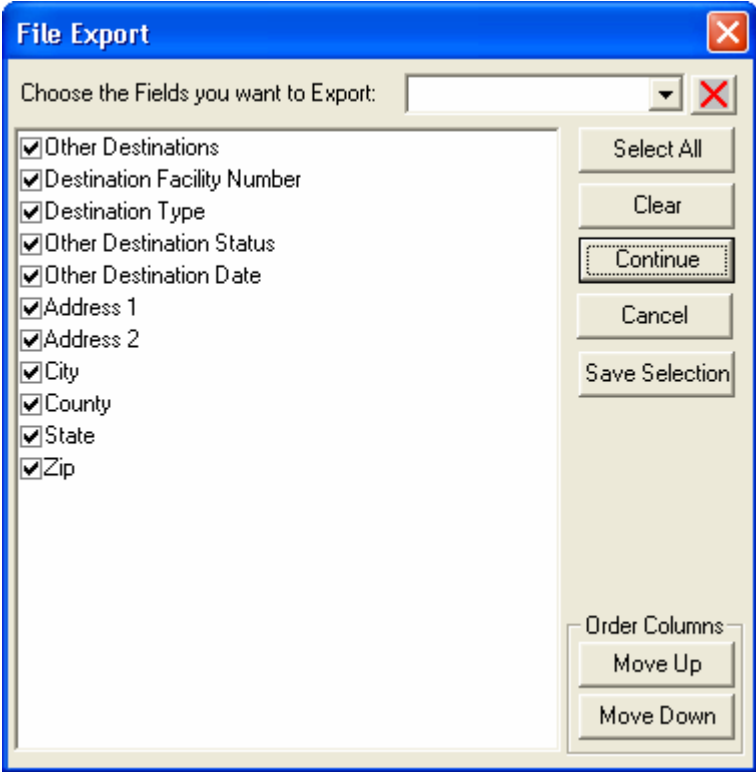

Select **Cancel** at any point in the process to end without exporting data.

Notice that all the check boxes are preset to **On**. In this example the user does not need the fields for **Destination Type, Other Destination Status, Address1, Address2, and Zip.** Turn off the fields that aren't going to be part of the output file by unchecking them.

Note: The **Clear** button sets all fields to **Off**. The **Select All** button sets all fields to **On.**

When a field is checked on, it rises to the top of the list; unchecked fields fall to the bottom.

As a result of checking off the five fields, they fall to the bottom of the list and the screen now looks like this:
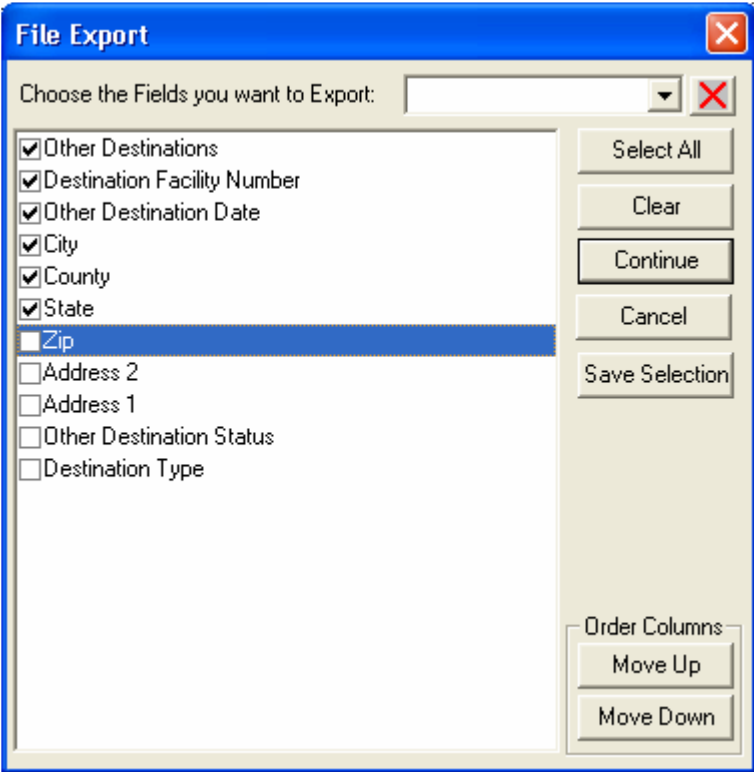
The user now decides that they want the Destination Type as the first field in the record. The **Move Up** and **Move Down** buttons will rearrange the order of the checked fields. After highlighting the Destination Type field and selecting the **Move Up** button, the result is the following:
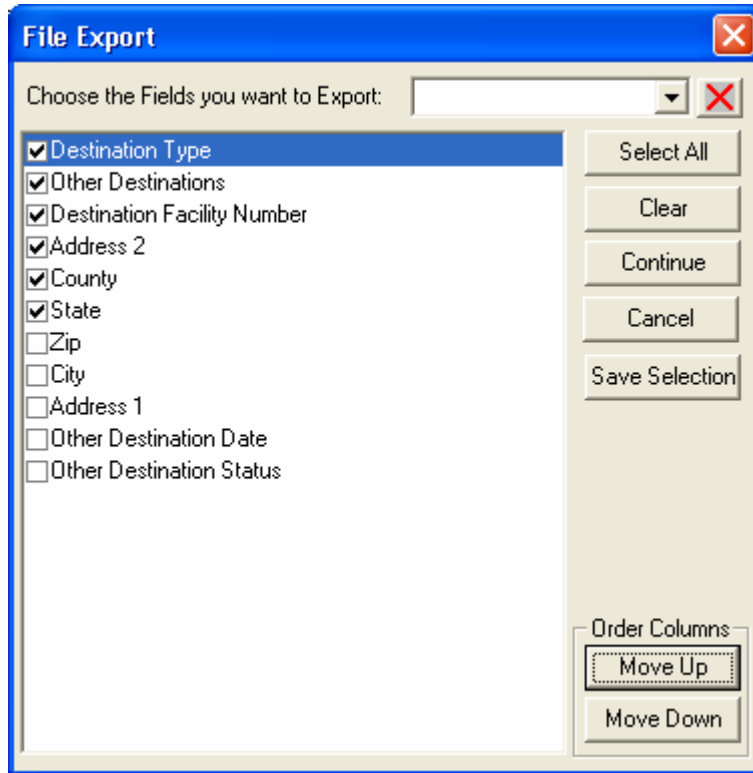

When the File Export window selections are correct, select **Continue** to proceed.

Selecting an Output File and Folder

When selecting **Continue** after building an export, a Windows pop-up appears that asks for a file name and destination folder. This user decided on the folder *Importing and Exporting Files* and the file *Facility List – April 20.*
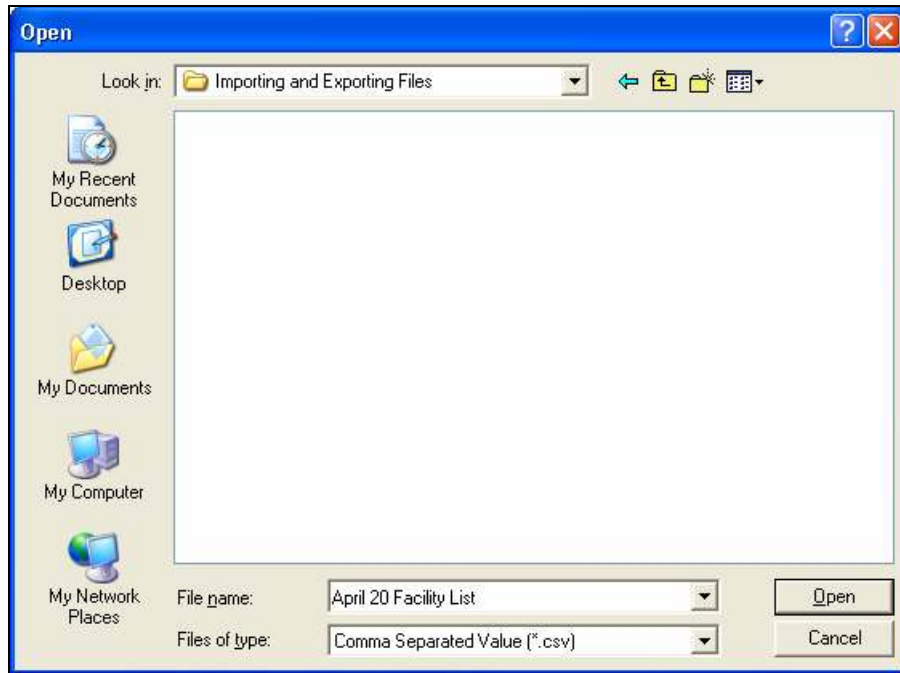
Select **Open** to create the Export file or **Cancel** to abort the process. After the file is created, **Alabama ePCR** will generate a confirmation:
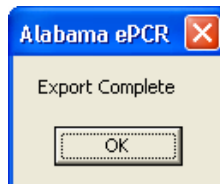

The output is a .CSV file of five lines – a header record followed by the four entries. Each field is in double quotes and is separated by commas:

"Other Destinations","Destination Facility Number","Destination Type","City","County","State"
"Ozark Rest Home","99001","Nursing Home","Guntersville","Marshall","AL"
"Living Will","99002","Morgue","Tuscumbia","Colbert","AL"
"Anchors A Way Station","99003","Nursing Home","Gadsden","Etowah","AL"
"Jim Dandy Rest Home","99004","Nursing Home","Auburn","Lee","AL"

Saving an Export selection for future use

If the user needs to generate this export frequently, the File Export choices can be saved for future use.
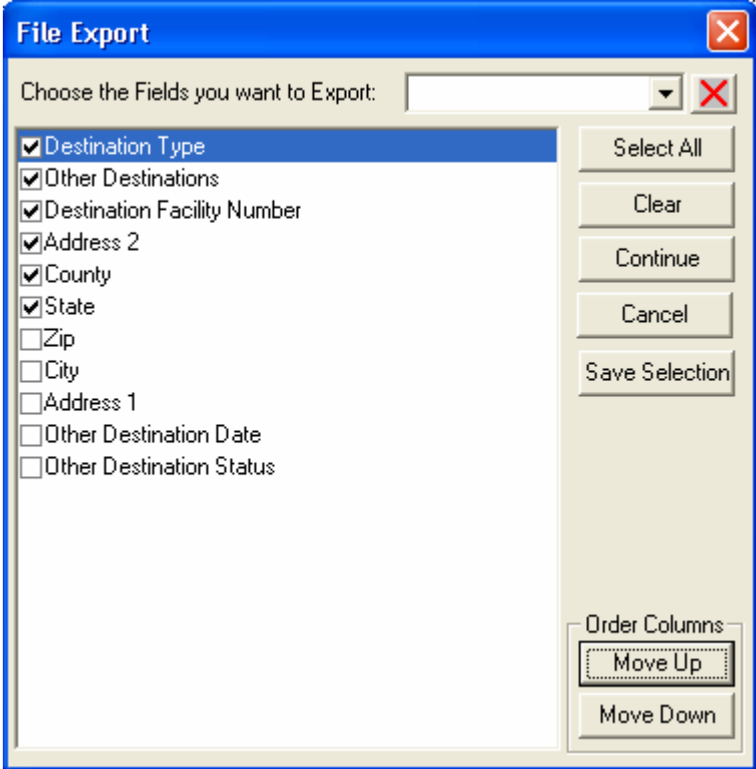

Return to the example. If the Facilities request is a recurring one, choose **Save Selection**. A naming pop-up window will appear:
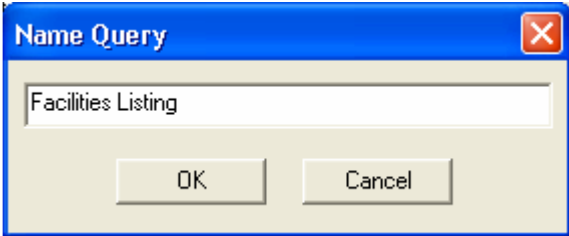

Select **OK** to save, or else **Cancel** to end the process without saving.

Next time the user chooses the **Export** icon on the Toolbar, they can opt to choose from a menu of saved selections. Click on the drop-down list at the top of the window to display the previously saved items. Highlighting the requested field will load the specific fields in the specific order.

This feature is especially helpful with Incident data because of the very large number of fields in that table.
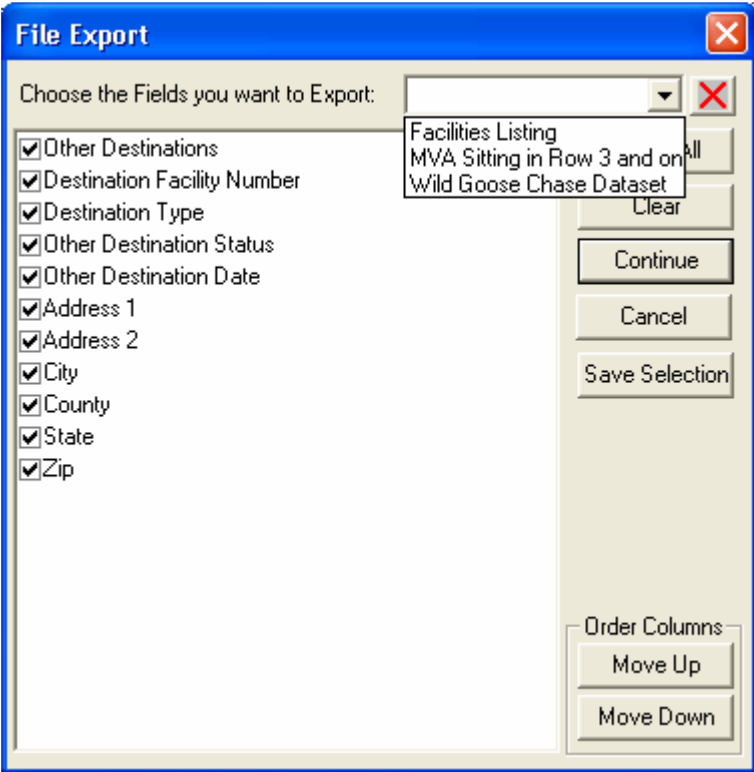

To delete an entry in the list, highlight the item and select the red X in the upper-right corner of the window. The result is the following:
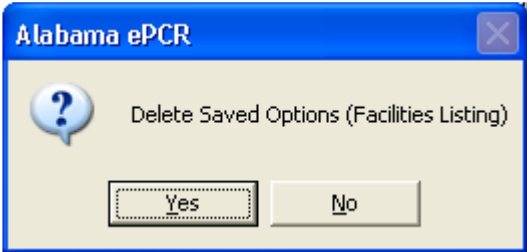

Select **Yes** to delete the item or else **No** to cancel the request to delete.

Choosing a Form Preference

If there are multiple representations of the same Incident form, choose the best form for the situation. Go to the Preferences Menu and select Choose Forms.
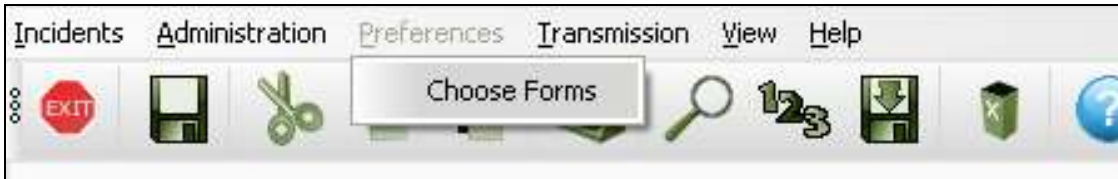
Selecting this option brings up a screen with a drop-down list of various Incident form names. Choose the correct form name, press **OK**, and that form will become the current form layout. To reconsider changing the Incident form, press **Cancel**.
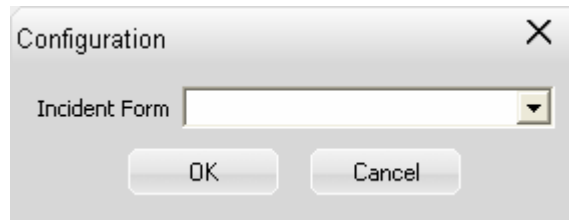
The new form layout will be displayed the next time an Incident is opened.

Note: When **Alabama ePCR** is used for the first time, it may prompt the user for the preferred Incident form if more than one version is available.

Generating Reports

To look at the reporting capability of **Alabama ePCR,** go to the **Incidents** Menu and choose **Reporting.**

This will produce a directory tree labeled **Incident** which enables the user to select from either graphical or numerical representations of the Incident data.

The Reporting Toolbar

Notice that a new Reporting Toolbar has been added. Moving left to right, the Reporting Toolbar icons are as follows:

Print the current report

Create a new ad-hoc report

Edit ad-hoc report

Rename ad-hoc report

Delete an-hoc report

Copy ad-hoc report

Save ad-hoc report

Import a Crystal Reports format report

Export a report

Navigating the Reporting Tree

In the tree structure, there may be items that include a small box to the left of the item name containing either a plus or minus sign inside of the box. These items are categories that have subcategories underneath them. To expand the directory tree, click on a "plus-sign" box and the sub-categories for that entry appear. To contract the tree, click on a "minus-sign" box and the subcategories for that entry disappear.

To select an item in a directory tree format, go to the item and select the associated check box by clicking the box.

In this example, the user is selecting the report category My AdHoc Reports. There are no subcategories as in the category System.
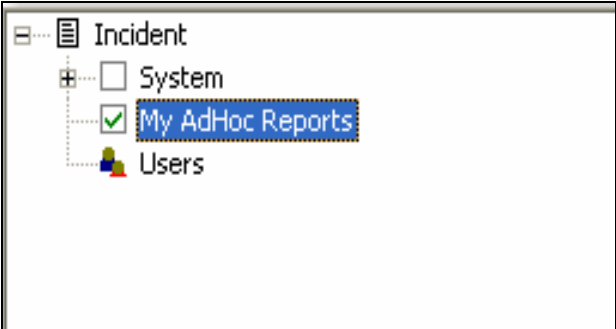
Clicking on a check box of a category with subcategories underneath will set each subcategory box to **On** as well.

In the next case, the user is selecting the report category System. The small plus-sign indicates there are subcategories beneath System and the check mark indicates all of the reports underneath have been chosen with one click.
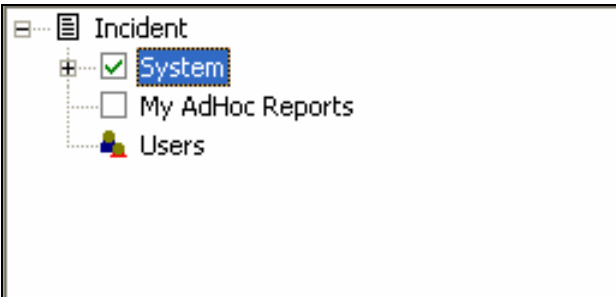
Transmitting Records

There are two ways that Incident records are transmitted to the State. The user can either use the **Transmission Menu** to send Incidents at a time of the user's choosing, or else let **Alabama ePCR** send the Incidents via an automated process.

The process of transmitting Incidents will result in the updating of the following fields on the **Dispatch** screen:

 ➢ The **Incident Needs Transmission** check box will be checked off, as that record has just been sent to the State server and will be only checked on if it is amended

 ➢ The **Last Transmission** field will reflect the time stamp of the transmission

 ➢ The **Transmission Status** field will display **Successful** if the data transfer works properly. Otherwise, an error message is shown.

Here is an example of an Incident that was transmitted with no errors:

Transmission			
☐ Incident Needs Transmission	Trans Status	Successful	Last Transmission	03/01/2007 09:04

The next example is of an Incident that had previously been transmitted successfully. At some point afterwards, the **Incident Needs Transmission** check box is mistakenly reset to **On**. This will create an error when this record is re-sent because the PCR number will already exist at the State level.

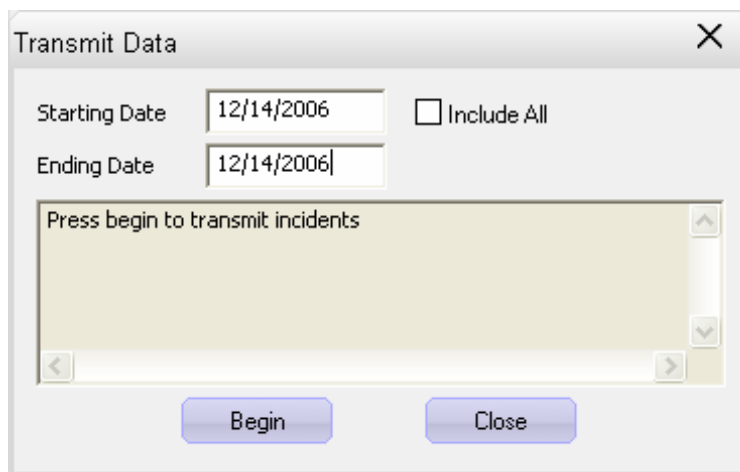| Transmission			
☐ Incident Needs Transmission	Trans Status	REJECTED: PCR Num	Last Transmission	12/13/2006 10:36

Sending Incidents via the Transmission Menu

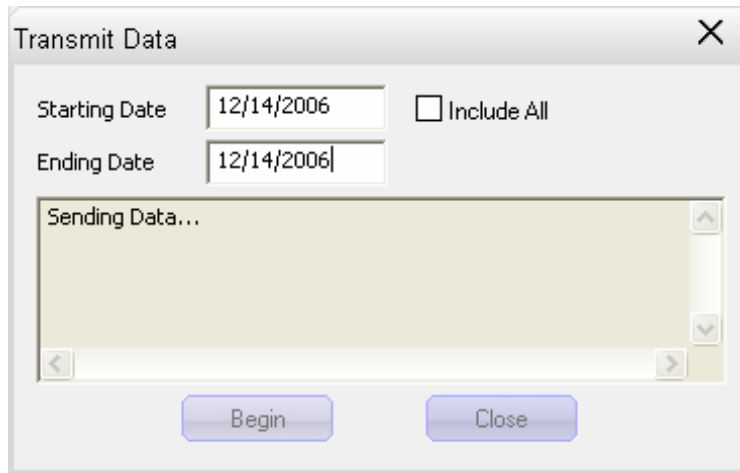Go to the **Transmission** menu and select **Transmit Incidents**.
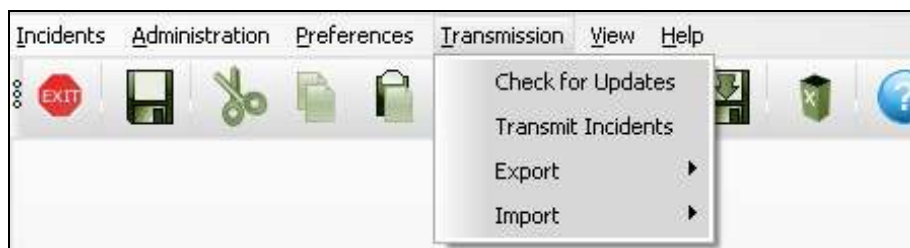
Selecting this option will generate a pop-up window which will prompt for a date range. Alternatively, it includes all incidents marked **Ready For Transmission** when using the **Include All** check box.
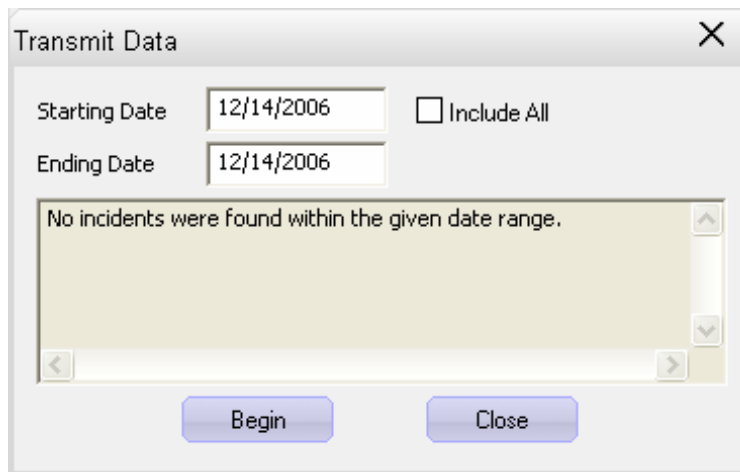
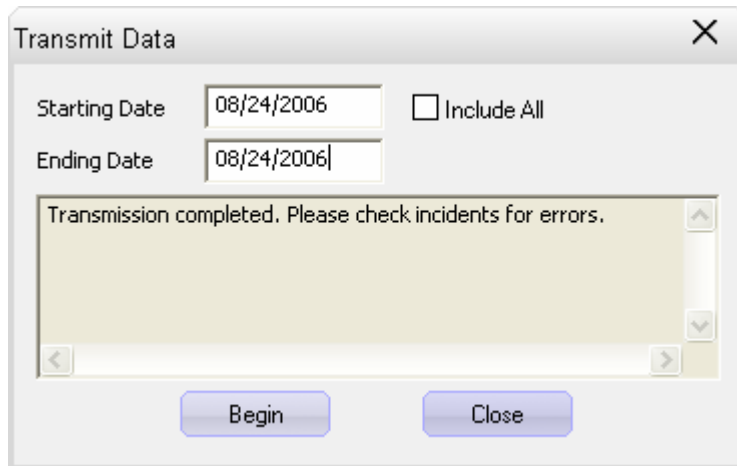In this example, a date range is given:

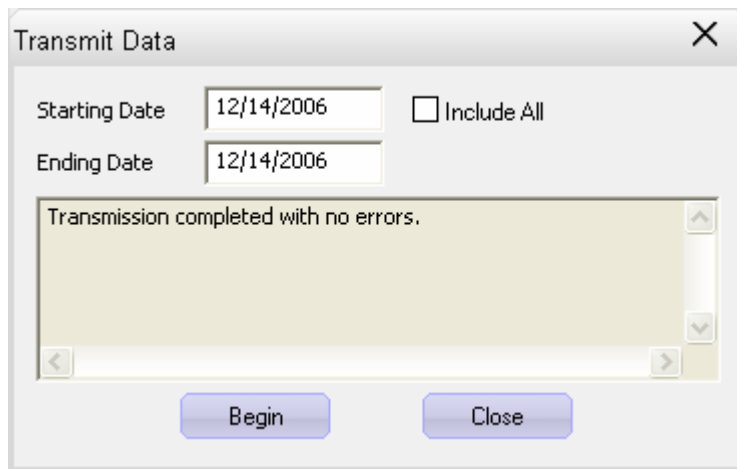When the date range is selected, press **Begin** to start the transmission:

If a transmission's date range is entered so that no data is found, this appears:

If a transmission contains some Incidents that cannot be transmitted, it returns this message:

If the data transfer is successful, the following message is generated:

After reading the output messages in the above window, select **Close** to finish the process.

Automatic Transmission of Incidents

An alternative to manually sending Incident data is for **Alabama ePCR** to send the data automatically.

Alabama ePCR will attempt to start an automatic data transfer:

> ➢ Twenty seconds after startup

> ➢ Every eight hours while the program is running

The system will check for Incidents that are marked for transmission. A data transfer will immediately follow if there are eligible records.
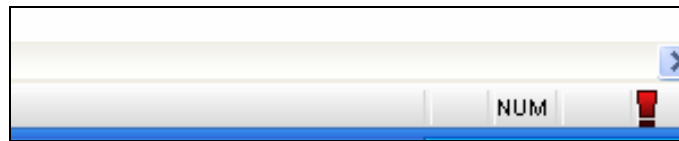
If the transmission is begun, the user will briefly see a message in the right corner of the Status Bar:
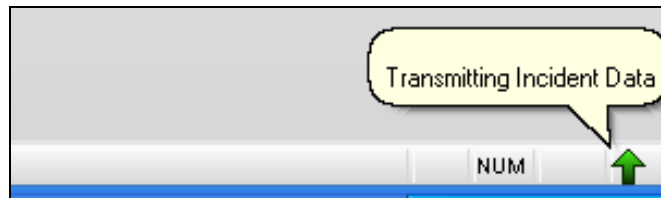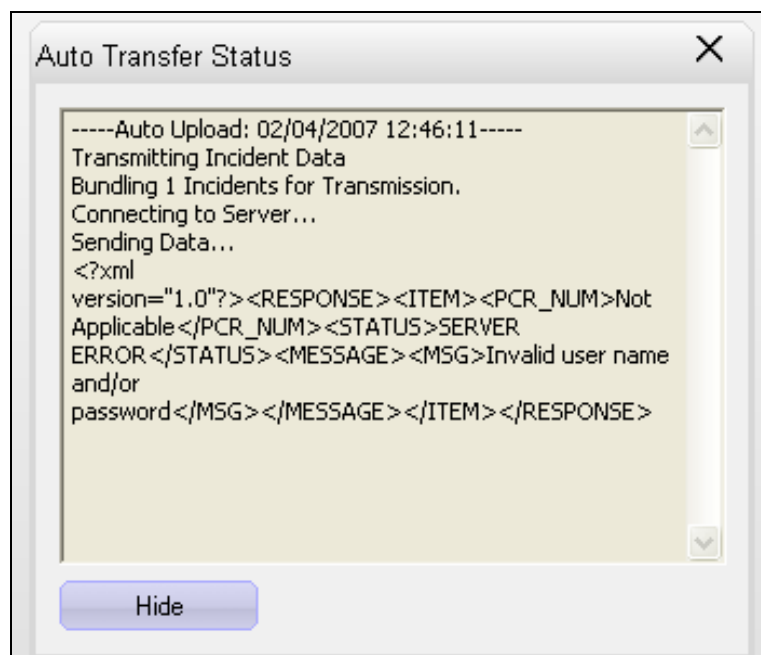

If the transmission finishes cleanly, another message appears briefly:

If there are errors in the transmission, a red icon will appear in the right corner of the Status Bar.
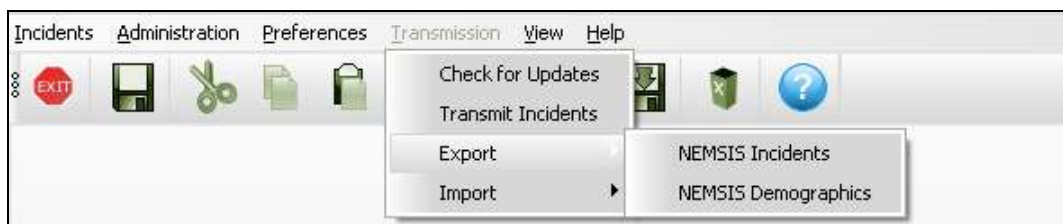

Clicking on the ▌ icon produces this pop-up window which displays a summary of the automatic transfer:
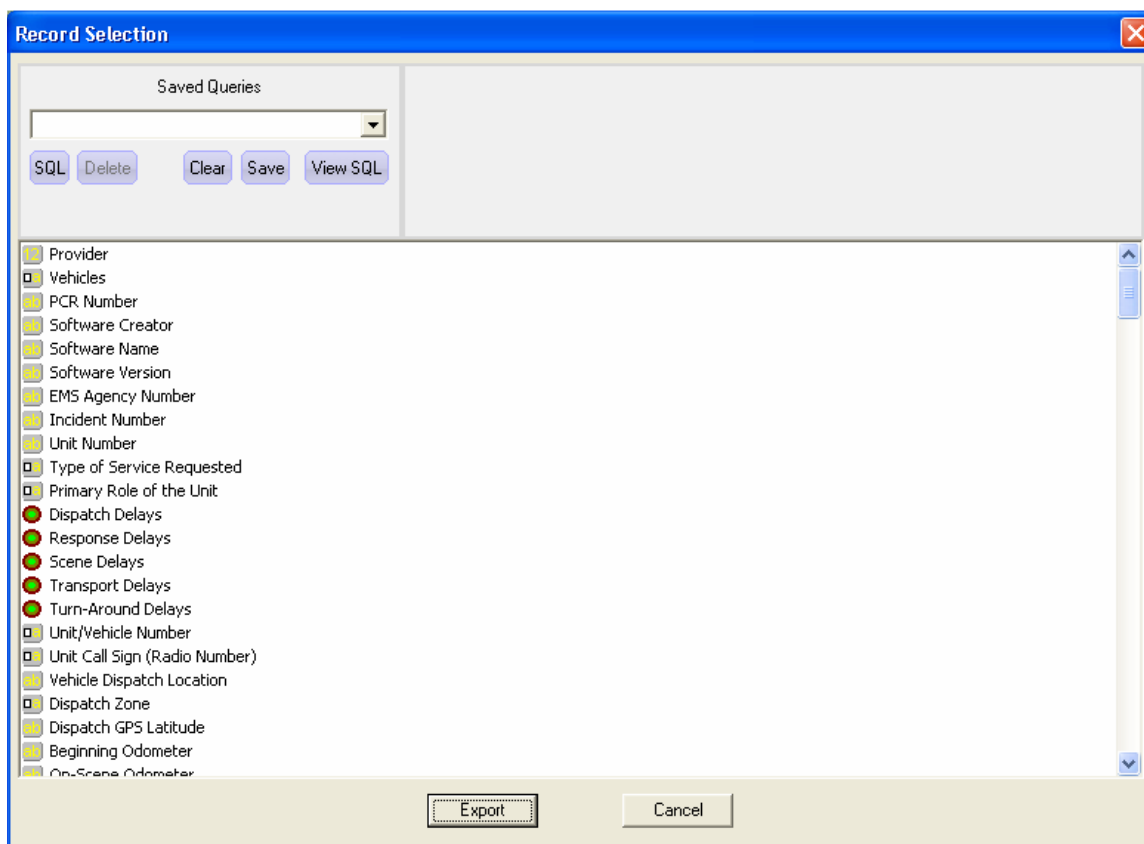

Choose **Hide** to close the window.

Exporting NEMSIS Data

To export **Incident** data, go to the **Transmission** menu, select **Export**, then select **NEMSIS Incidents.** A query builder screen with the same look as the Advanced Search screen will appear:

Enter the search criteria as when searching for Incidents. Choose **Cancel** to end the process at any time, else choose **Export** when the query is built.

Note: The ability to save queries for future use is not available here.

Once the temporary query is built, **Alabama ePCR** will prompt for an output file name and a folder location to save the exported data. The resulting file will be in an XML format.
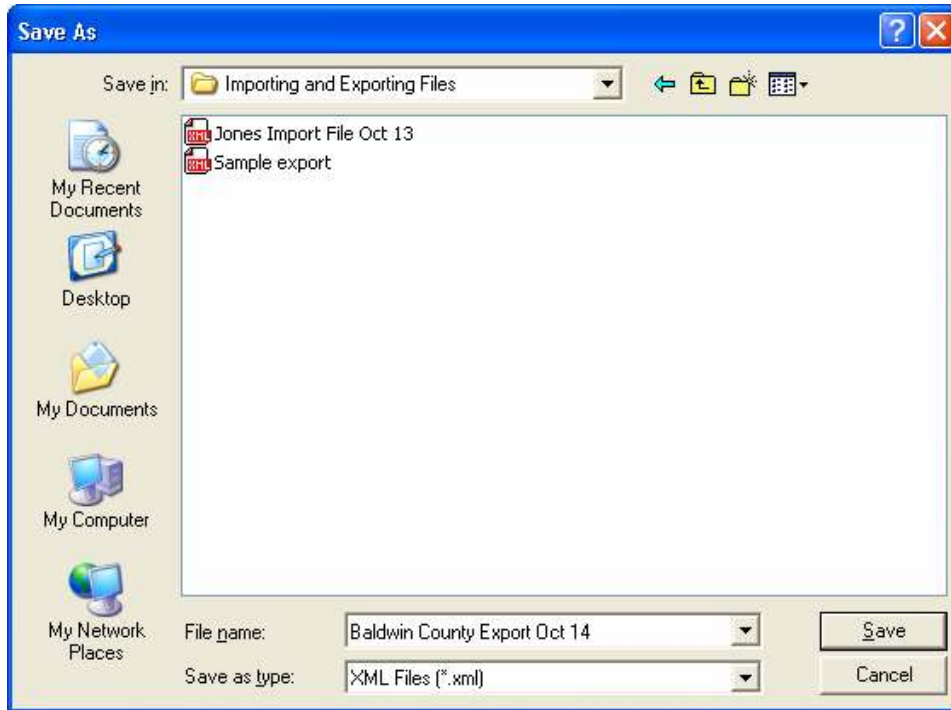
After choosing the file destination, the export takes place. When finished, **Alabama ePCR** will display the following:
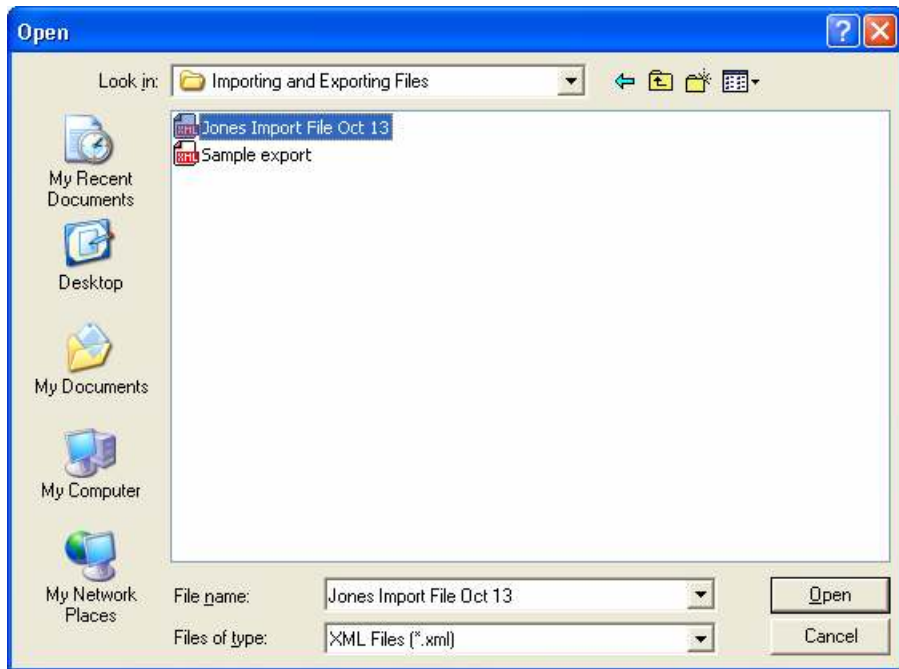

Press **OK** to finish the process.

Exporting **Demographic** data is more streamlined, since no querying for a subset of data is needed. Go to the **Transmission** menu, select **Export**, and then select **NEMSIS Demographics.** This time, **Alabama ePCR** immediately prompts for an output file name and a folder location to save the XML file. When finished, the "NEMSIS Export has completed" message will be displayed, as above.

Importing NEMSIS Data

To import Incident data from a third-party source, go to the **Transmission** menu, select **Import**, and select **NEMSIS Incidents**. **Alabama ePCR** will prompt the user for an input file and a destination folder location. Select the file and folder desired, followed by **Open** to import or **Cancel** to stop the process.
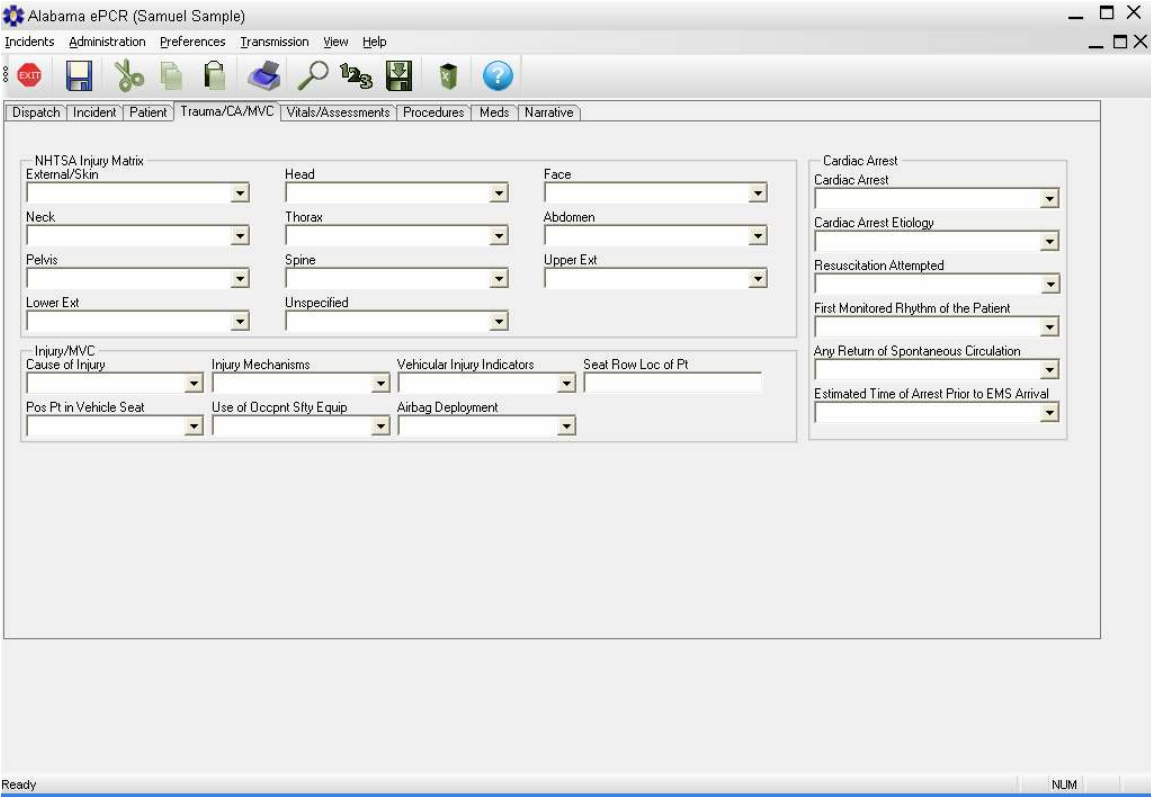

After the import is finished, the **Alabama ePCR** system will confirm the process is successful. Select **OK** to finish:
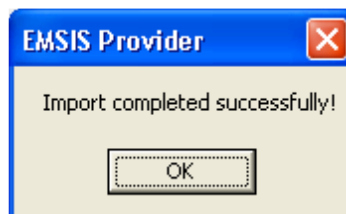
The View Menu

The **View** Menu gives the user some flexibility in changing the display.

In this example, the user has two **Alabama ePCR** windows open in addition to those of the Toolbar and the Status Bar:


Here is what appears on the **View** menu. The check marks are for views that are currently displayed. The **Facility List** screen is hidden by the **New Incident** screen for the time being.
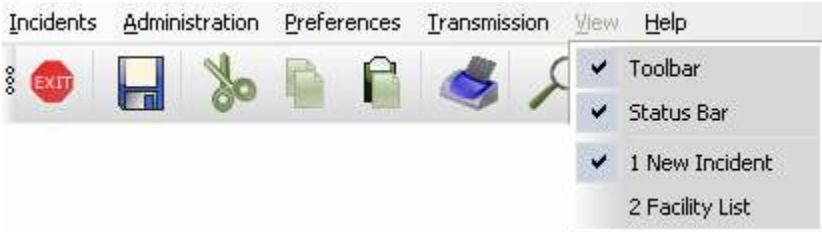
If the Toolbar and Status Bar are turned off and the Facility List is checked on, they will be hidden until this feature checks them back on:
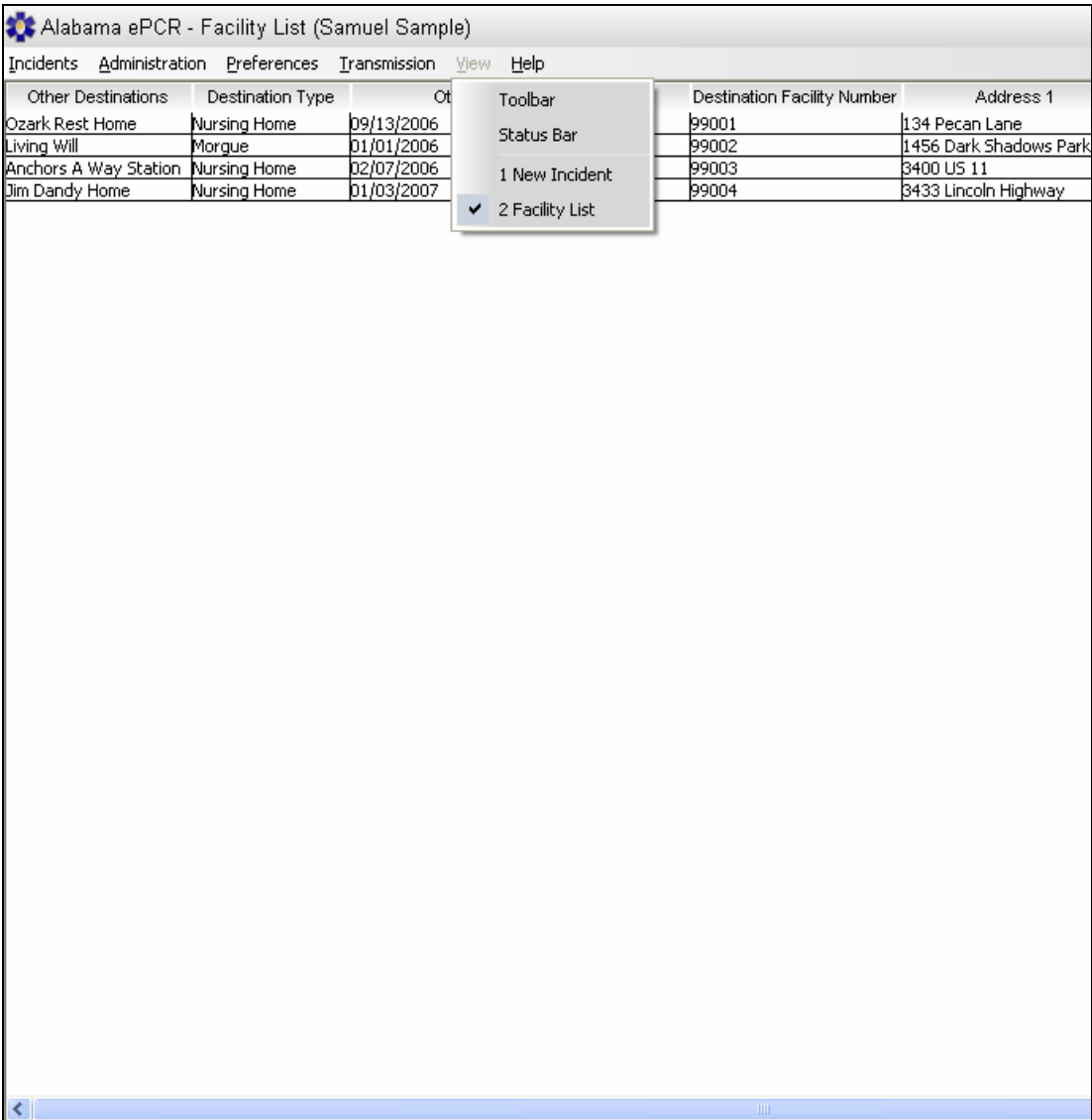
The user also has the option of reducing and expanding viewing windows by using the Windows-like buttons in the upper-right corner:
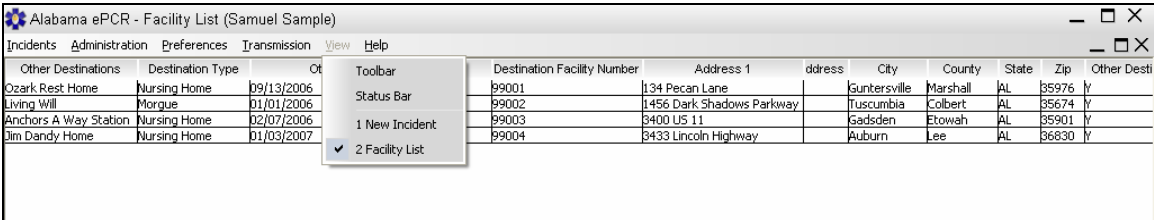
The Help Menu

The **Help** Menu allows access to this Users Manual and to background information on the product.

Selecting **Users Manual** allows the user to view this manual in a PDF format. Selecting **About EMSIS Provider...** produces the following:

Choose **OK** to close this window.

Note: The background information is also displayed when selecting the icon on the Toolbar.