EMS User Guide

Cardiac Arrest Registry to Enhance Survival (CARES)

CARES
Cardiac Arrest Registry
to Enhance Survival

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CARES WEBSITE:

The CARES website hosts a number of useful documents for program stakeholders. A summary of the resources available under each tab is found below:

- **CARES Overview** – history of program, map of current participants, governance, letters of support.
- **States** – state model FAQs, state funding examples, state participation in action.
- **EMS Agencies –** EMS FAQs, sample reports, agency participation in action, data element PDFs, data dictionary, EMS User Guide.
- **Hospitals –** hospital FAQs, sample reports, data element PDFs, data dictionary, Hospital User Guide.
- **Data** – annual reports, Reports User Guide, legacy national reports, data sharing policy, publications.
- **Contact Us** – contact information for CARES staff and state coordinators.

If you've forgotten your CARES password, please click on the "**Forgot password**" link below the log-in box. You'll be prompted to answer your unique password question, and a new password will be e-mailed to you.

CARES CASE DEFINITION:

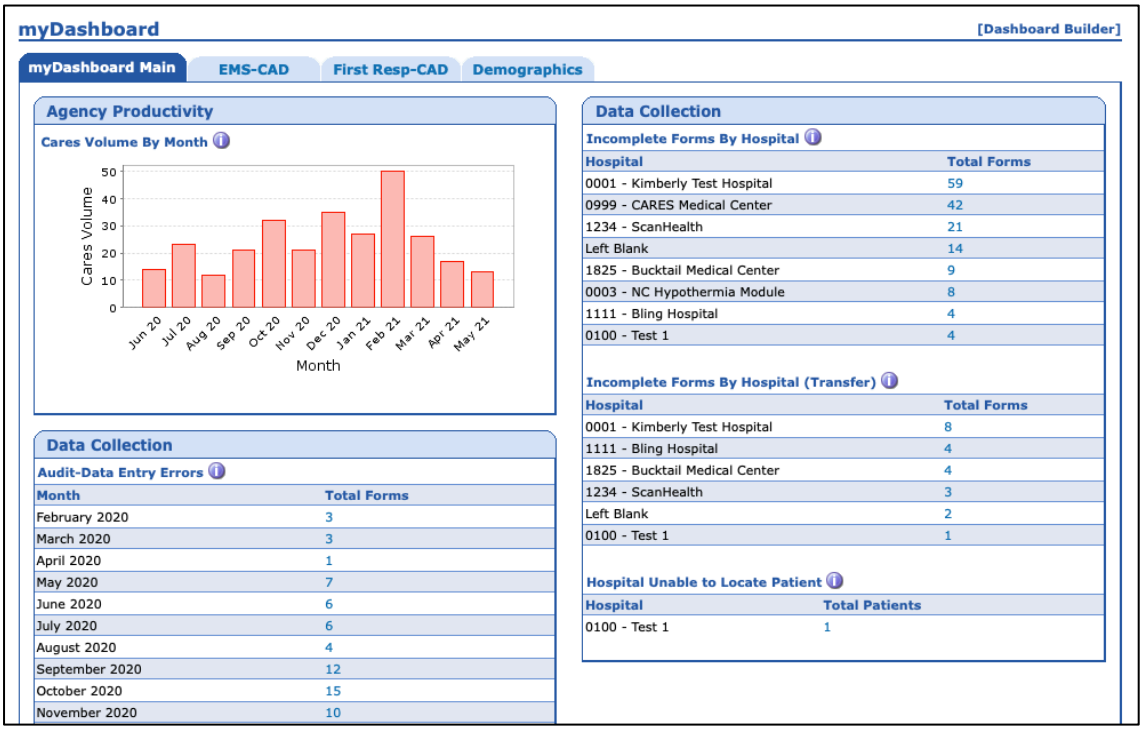
A CARES case is a non-traumatic out-of-hospital cardiac arrest event where resuscitation is attempted by a 911 responder (CPR and/or defibrillation). This includes patients that received an AED shock by a bystander prior to the arrival of 911 responders. Please note: CARES collected only arrests of presumed cardiac etiology from 2005-2012. In 2013, CARES expanded to include all non-traumatic arrests.

This User Guide includes a number of data definitions. For additional examples, please refer to the CARES Data Dictionary, available at https://mycares.net/sitepages/emsagencies.jsp.

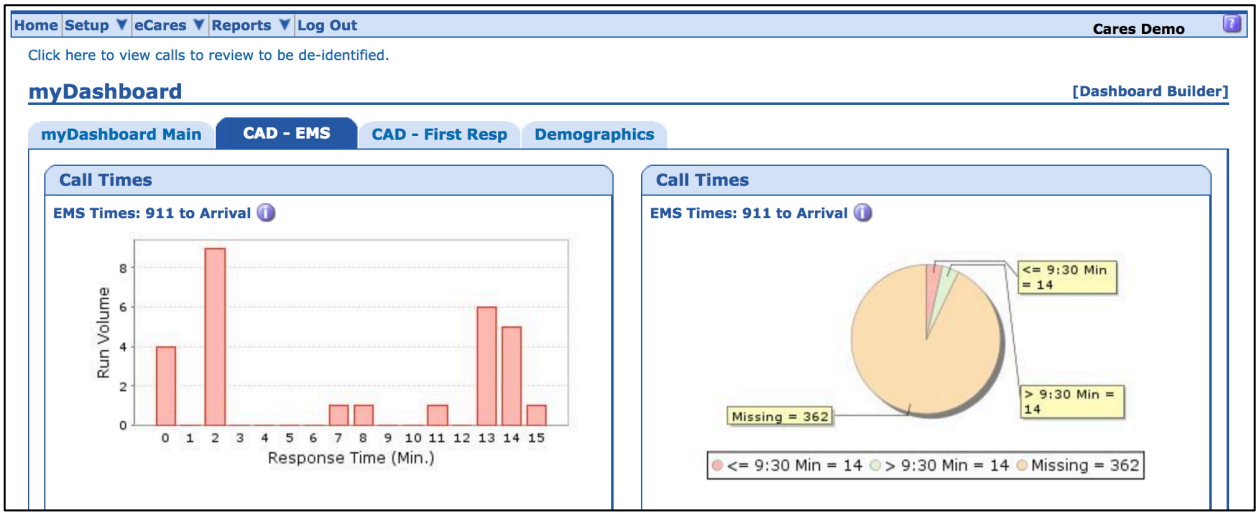
THE DASHBOARD:

Below is the screen you see immediately after logging in. This initial screen is your Dashboard and has several different tabs. Please keep in mind that all data on the Dashboard is dynamic and updated in real-time as data is entered, updated, or deleted.

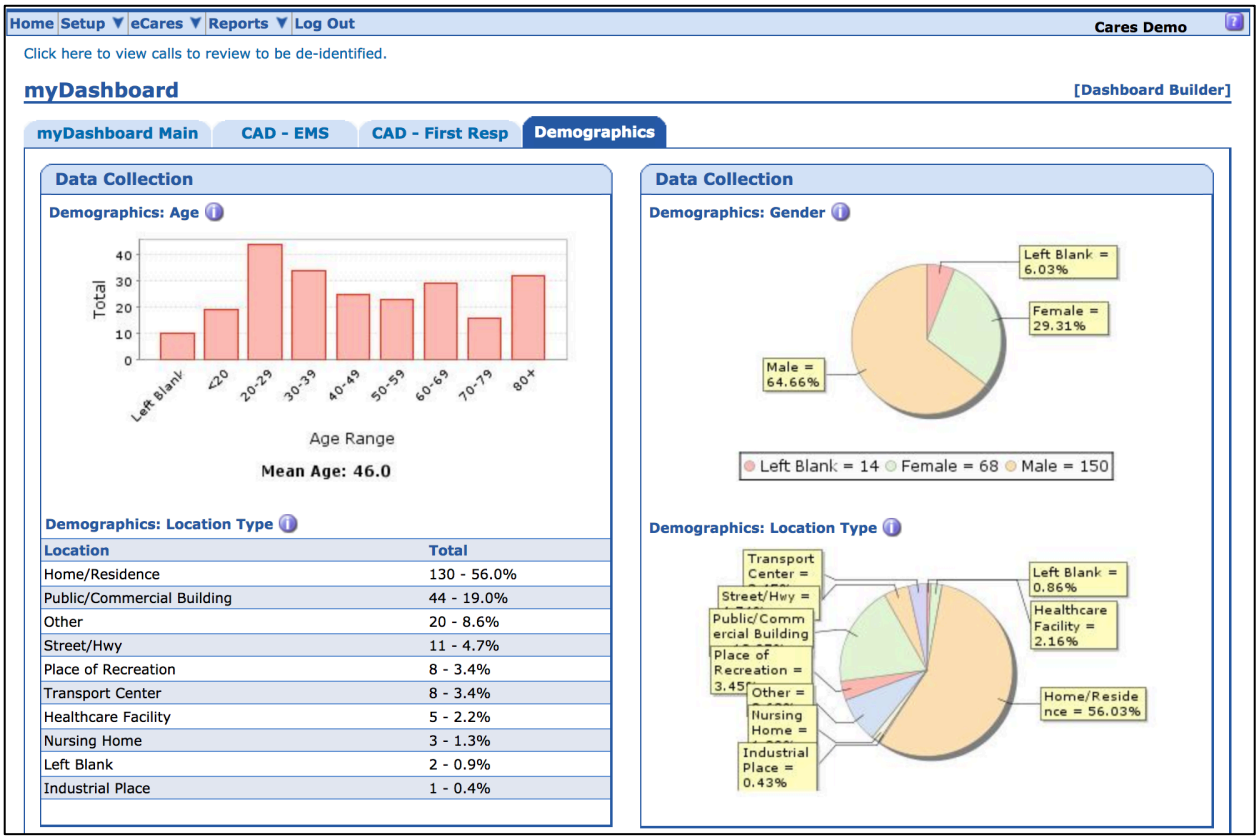
The **Agency Productivity** box shows call volume over the past 12 months. **Incomplete Forms by Hospital** shows all forms that have not been completed by local hospital contacts. The **Audit-Data Entry Errors** box displays records that are flagged for auditing issues. If you click on the number next to the Month or Hospital, the site will direct you to the respective records. Click the pen and paper icon to edit the record and 'Save' your updates.



The 2nd and 3rd Dashboard tabs, **CAD-EMS** and **CAD-First Responder**, display intervals for local response times in bar graph and pie chart format, if your EMS agency enters this supplemental data into CARES.

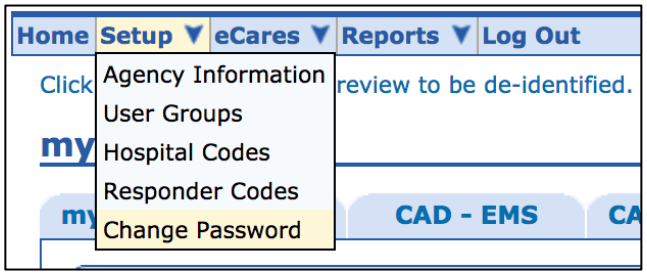


The **Demographics** tab displays your agency's arrests by Age, Gender, and Location Type.



CHANGING YOUR PASSWORD:

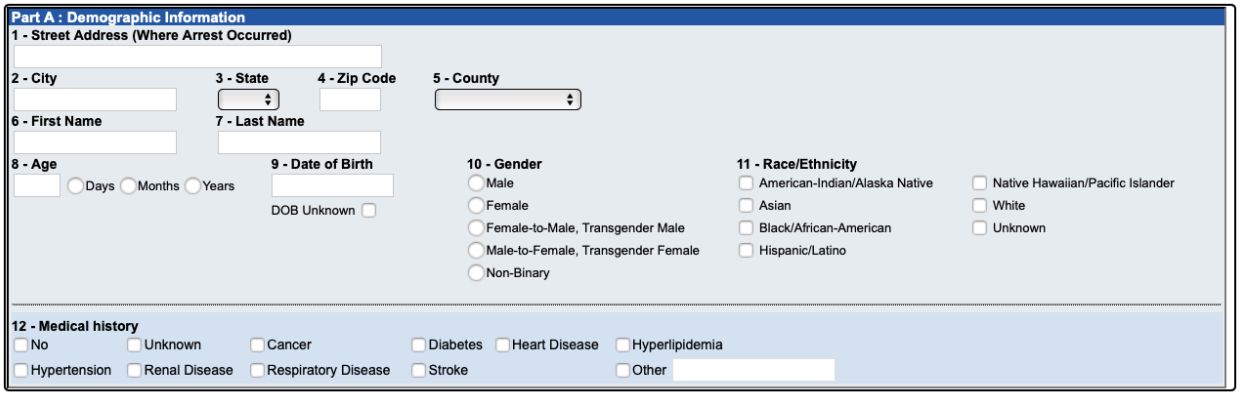
CARES passwords are case-sensitive. You can change your password at any time under the **Setup** tab once you are logged in.

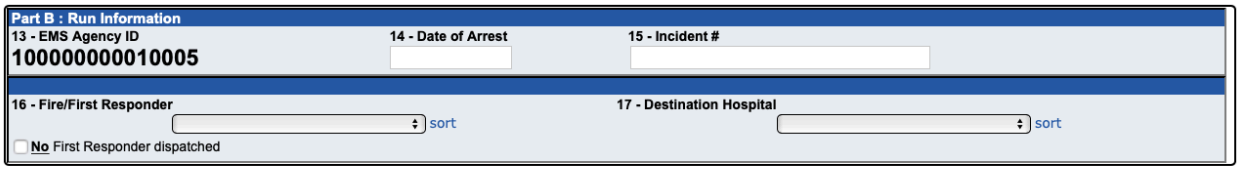


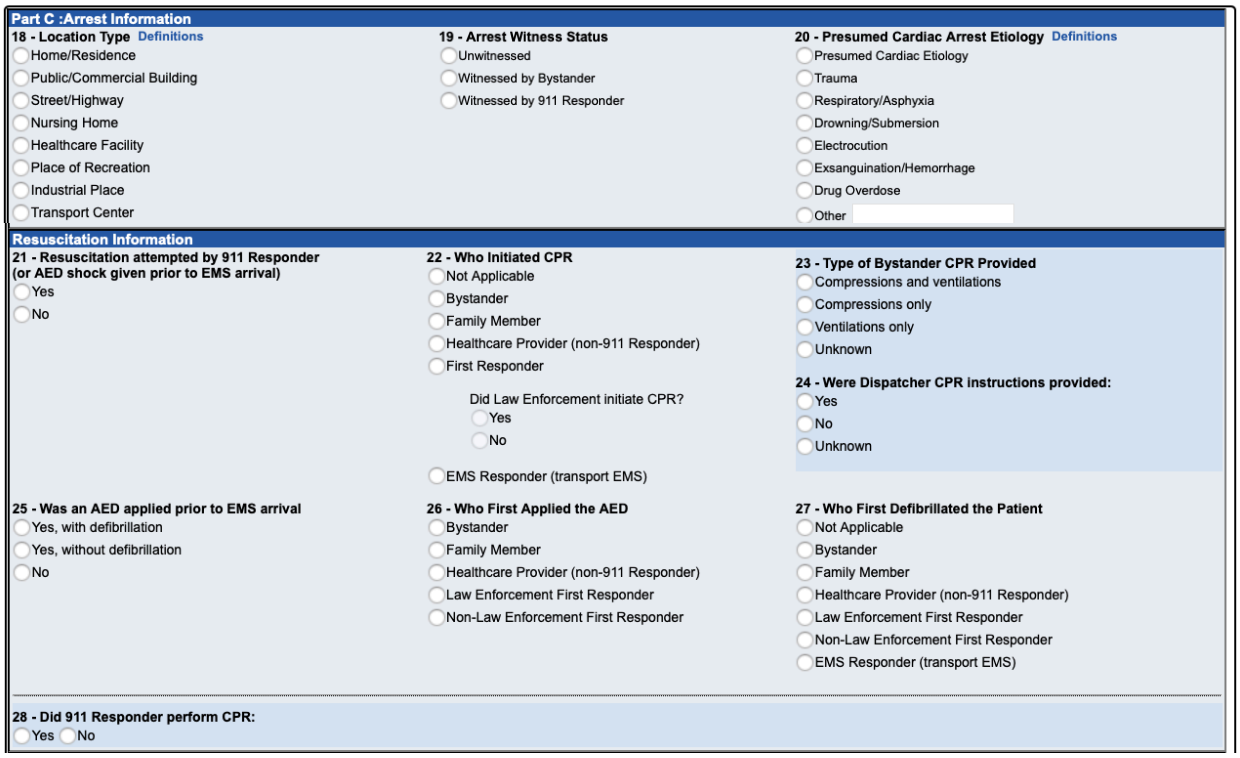
ADDING A NEW CASE:

If you are doing direct data entry, click **Add New** from the **eCares** tab to open a blank CARES form. Required elements are in a grey background (i.e. questions 1-11) and supplemental elements are in a blue background (i.e. question 12).

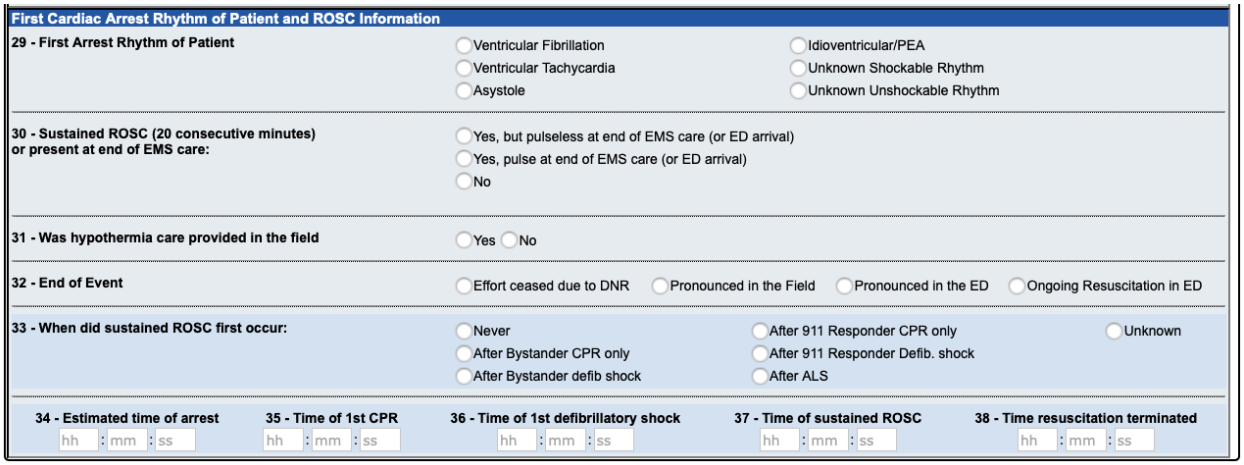
All patients meeting the CARES case definition (see page 3) must be entered into the registry. Patients that do not meet the case definition (i.e. DOAs, DNRs, traumatic arrests) may be entered; however, they will **not** be included on the Dashboard, in any CARES standard reports, or pushed to the hospitals for outcomes.





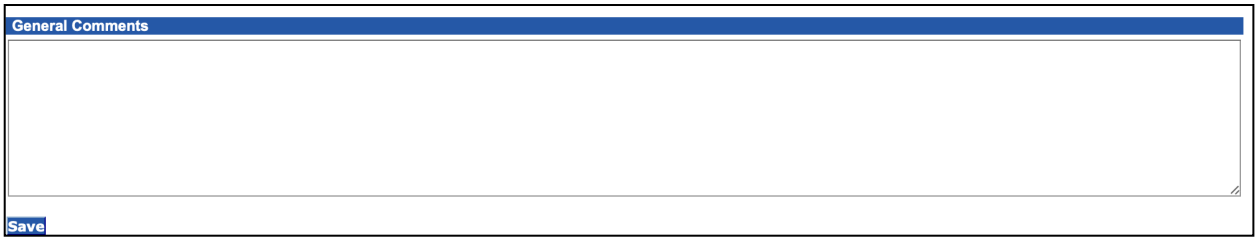


Question 32 is the last required question. When you select “Ongoing Resuscitation in ED” the hospital will automatically be notified that a patient outcome is required. If End of Event is “Pronounced in the ED”, the record is not routed to the hospital, decreasing the data entry burden for hospital personnel.



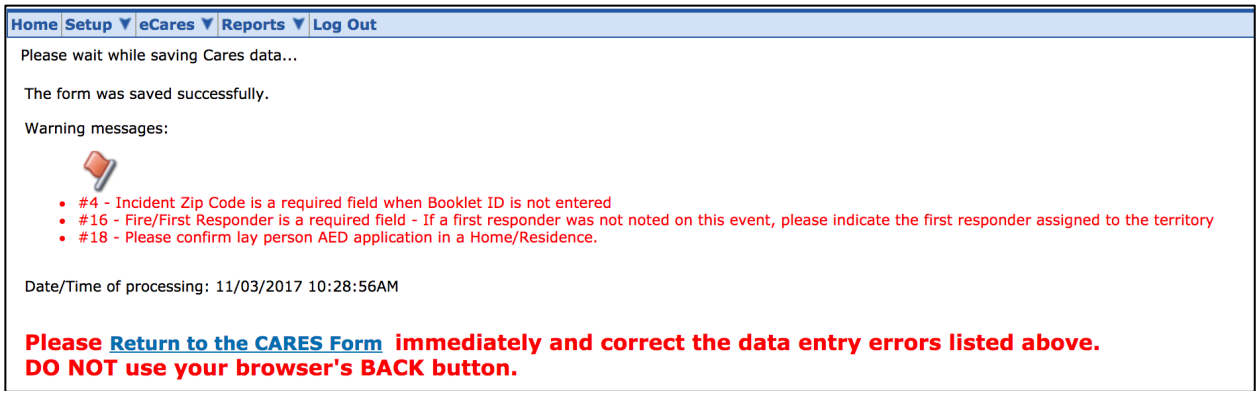
GENERAL COMMENTS BOX:

At the bottom of the form is a General Comments box for EMS agency users. Please enter any comments or additional information you think CARES staff or hospital contacts should know about the patient or event. Entering comments is also important if you input data that seems contradictory, but is correct (i.e. patient in VFib, but not defibrillated), so that CARES staff will manually override the audit flag.

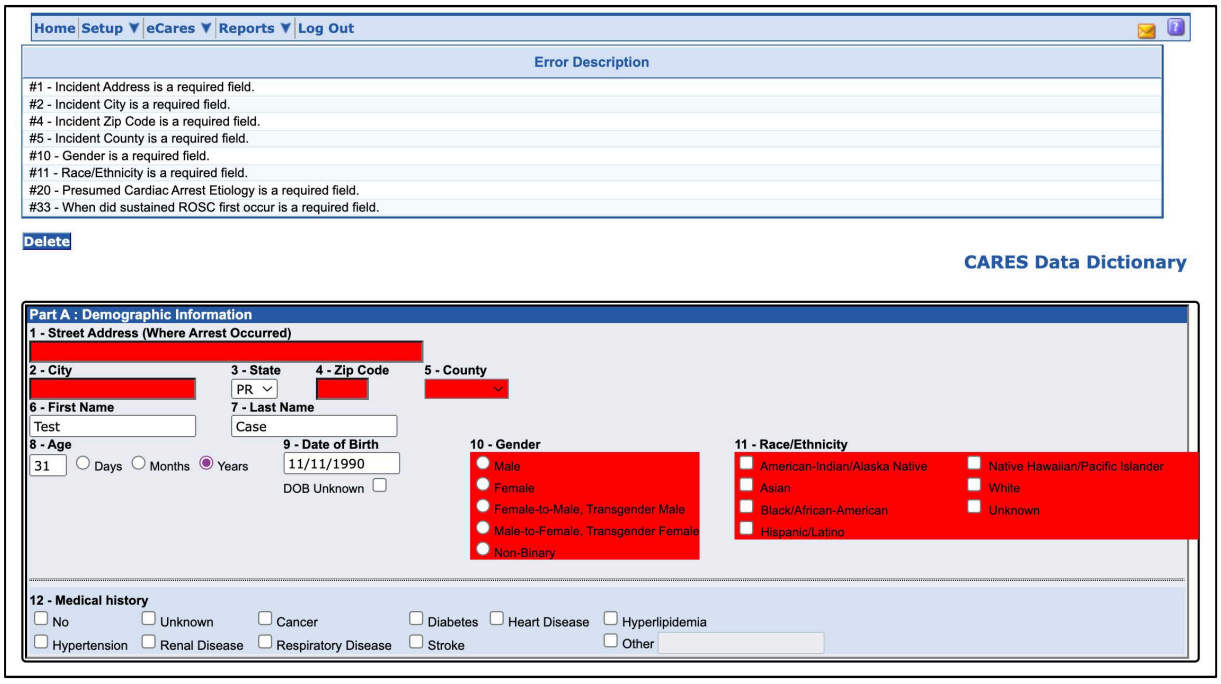


SAVING THE FORM:

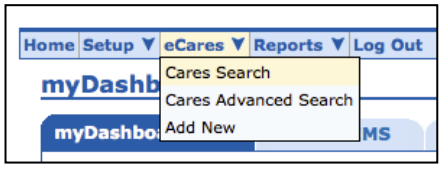
When you click “Save”, an automated audit algorithm is run on the record, checking for blank fields and potentially conflicting information. The associated audit flags will be listed on the Save page in red. Please click on the “Return to the CARES Form” link and address these audit flags. Do NOT use your browser’s Back button to return to the form.



The fields that require attention are listed at the top of the page and highlighted in red. Click “**Save**” after all edits have been completed.



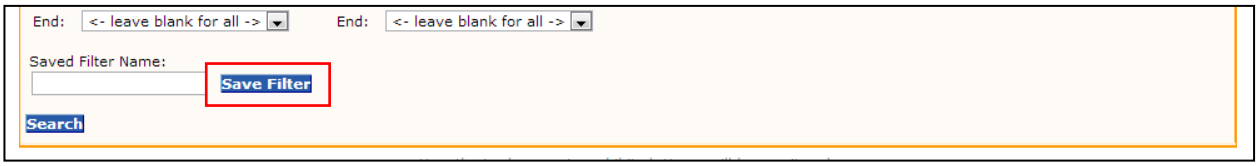
CONDUCTING A SEARCH:



The **CARES Search** page is limited to the required data elements, while the **CARES Advanced Search** page includes the supplemental data elements. You can search by any data element(s) on the CARES form.

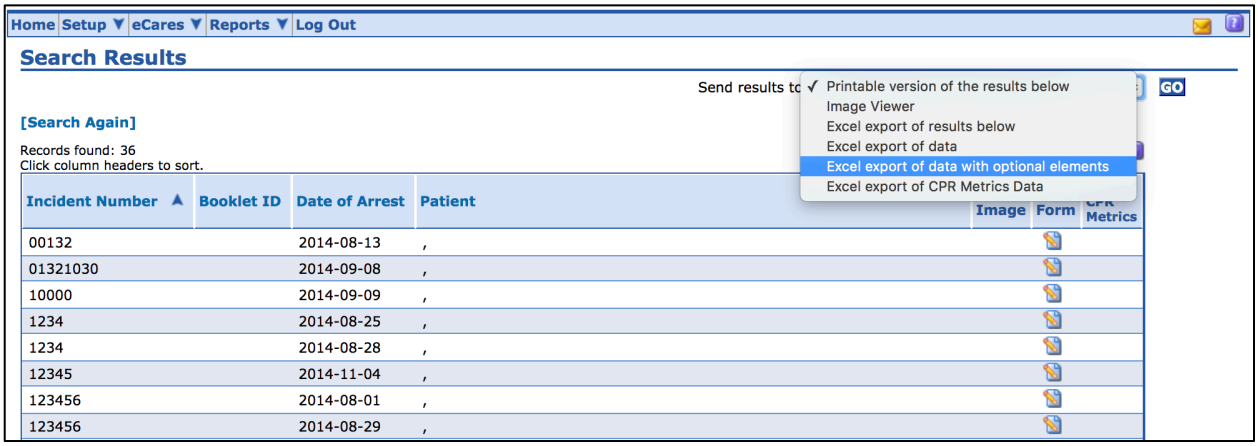
The **Filter** pull-down menu in the upper left-hand corner includes the following search filters: Presumed Cardiac CARES Cases, Non-Traumatic CARES Cases, Utstein Arrests, List of Survivors.

By clicking "**Save Filter**" at the bottom of the page, you can save search criteria to use at another time.



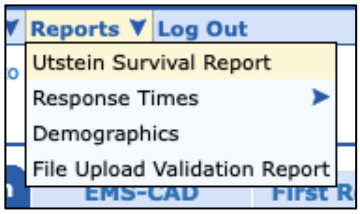
EXPORTING DATA:

Search results can be exported into Microsoft Excel for further review and analysis. On the search results page, in the upper right-hand corner is a "Send results to" drop down menu. Click the drop-down arrow and select "**Excel export of data**" or "**Excel export of data with optional elements.**" Click the "Go" button. Please be sure your browser's pop-up blocker is turned off or hold down the "Ctrl" key while going through the above steps until the Excel window opens.



REPORTS:

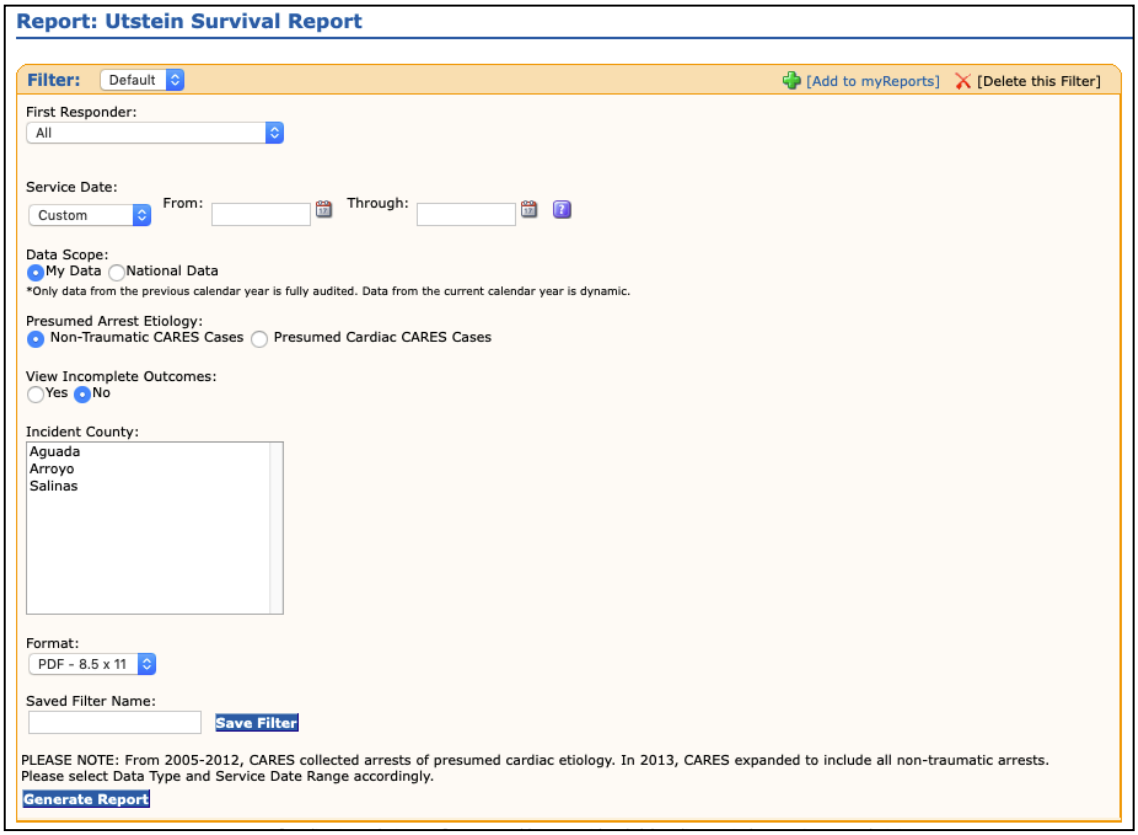
CARES users have 24/7 access to a number of reports, which can be found on the **Reports** drop down menu. For additional details, users may access the Reports User Guide at: https://mycares.net/sitepages/data.jsp.



The **Utstein Survival Report** is the most commonly used report. Utstein is an internationally agreed upon cardiac arrest metric that considers all bystander-witnessed arrests that present in a shockable rhythm. To generate this report:

1. Enter the **Service Date** range of interest. Reports using recent data are not completely audited and therefore may be incomplete. Data by calendar year is not finalized mid-April of the following year. For example, reports including data from 2021 would not be considered final until April 2022.
2. Select the **Data Scope** of interest. "My Data" will generate a report using your EMS Agency's data, while "National Data" will generate a benchmarking report using the national dataset.
3. Select the **Etiology** of arrest, Presumed Cardiac or Non-Traumatic.
4. Indicate whether you want to include pages that list any **Incomplete Outcomes** (Yes or No).
5. Click "**Generate Report.**"

The Utstein Report can also be filtered by local First Responders or Incident Counties using the corresponding pull-down menu or selection box.

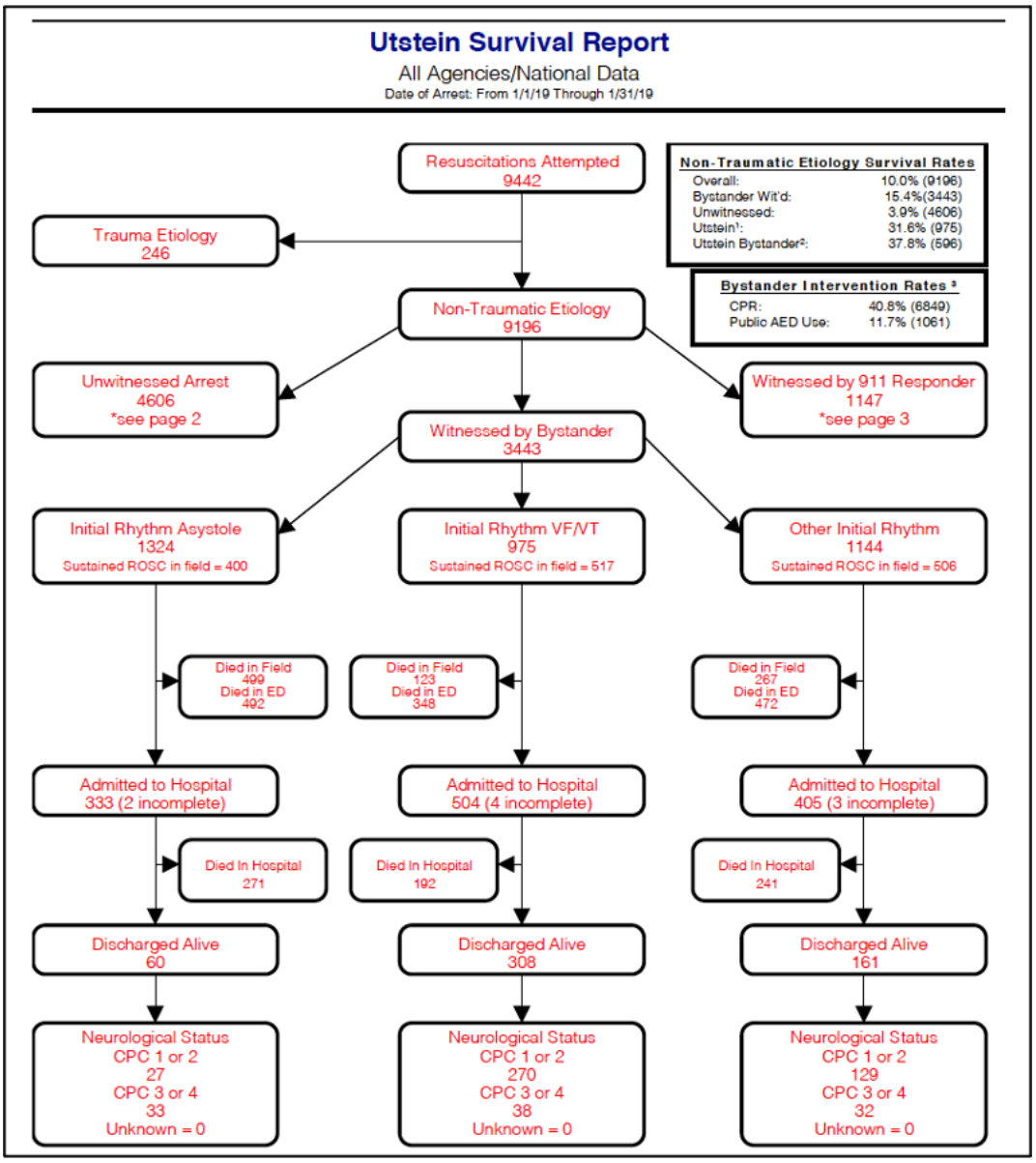


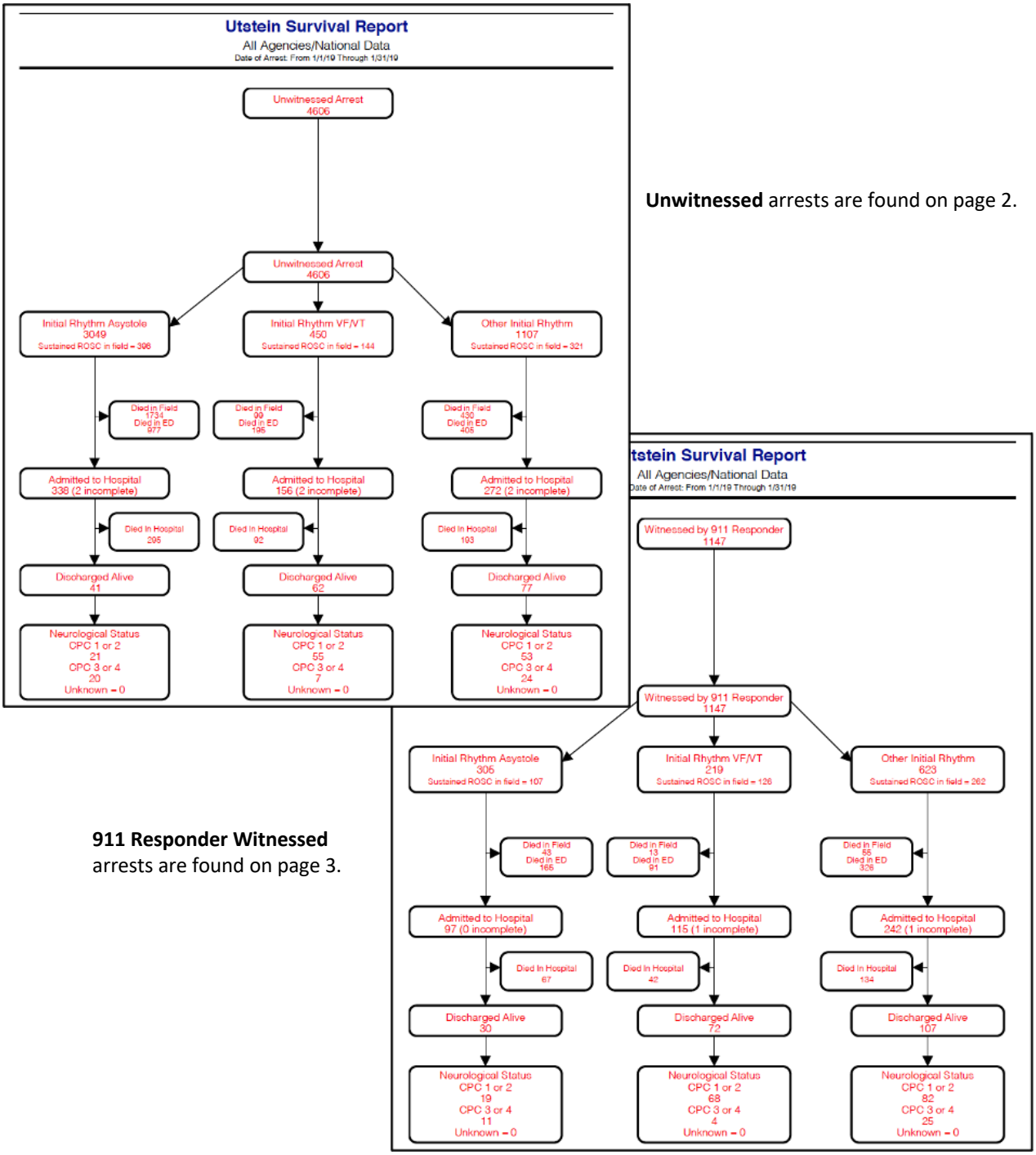
In the upper right-hand corner of the Utstein Report, you will see a box listing a number of survival rates.

- **Overall**: Includes all CARES cases.
- **Bystander Witnessed**: Includes all bystander witnessed arrests (those found on page 1 of the report).
- **Unwitnessed**: Includes all unwitnessed arrests (those found on page 2 of the report).
- **Utstein**: Witnessed by bystander and found in shockable rhythm.
- **Utstein Bystander**: Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR and/or AED application).

Below, you'll find a box that provides rates of critical **Bystander Interventions**, including CPR and AED use. Bystander CPR rate *excludes* 911 Responder Witnessed, Nursing Home, and Healthcare Facility arrests. Public AED Use rate *excludes* 911 Responder Witnessed, Home/Residence, Nursing Home, and Healthcare Facility arrests.

The Utstein Report follows a flow diagram format, categorizing arrests by witness status, initial rhythm, and patient outcome. **Bystander Witnessed** arrests are found on page 1.





Unwitnessed arrests are found on page 2.

911 Responder Witnessed arrests are found on page 3.

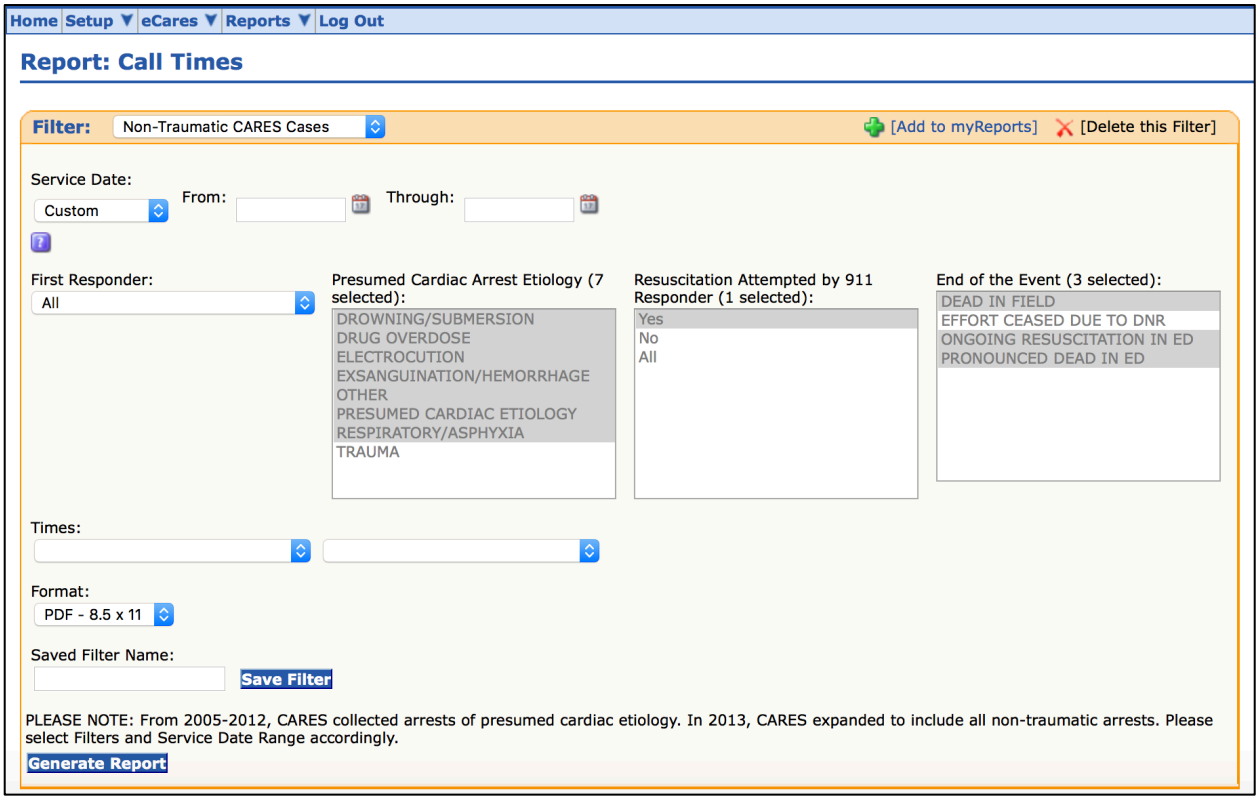
Page 4 lists any records that have an outstanding hospital outcome.

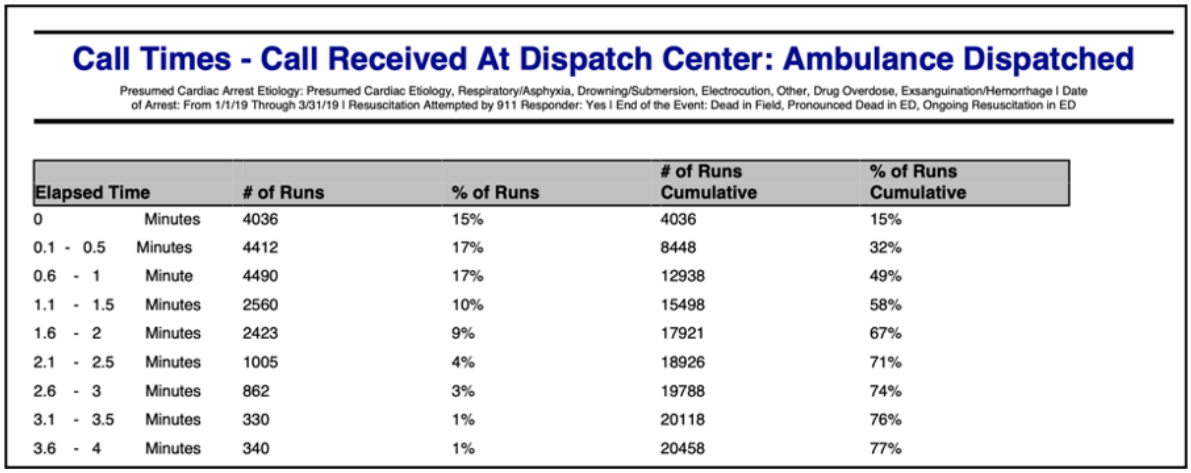
Incomplete Data

Incident #	Service Date	Dest. Hospital	Transfer Hospital	ER Outcome	Hosp Outcome	Neuro Outcome
20144587	2014-12-17	0100 - Test 1	Left Blank	Left Blank	Left Blank	Left Blank
12358er	2014-02-03	0100 - Test 1	Left Blank	Admitted to hospital	Not yet determined	Left Blank

The CARES **Call Times Report** shows the number of runs in a given 30 second response time interval, if your agency enters this supplemental information into CARES. Enter the Service Date range of interest and select the two times you wish to analyze from the Times pull-down menus. Click “Generate Report.”

A number of filters can be applied to this report, using the Filter pull-down menu in the upper left-hand corner (Presumed Cardiac CARES Cases, Non-Traumatic CARES Cases, Utstein Arrests) or First Responder pull-down menu.



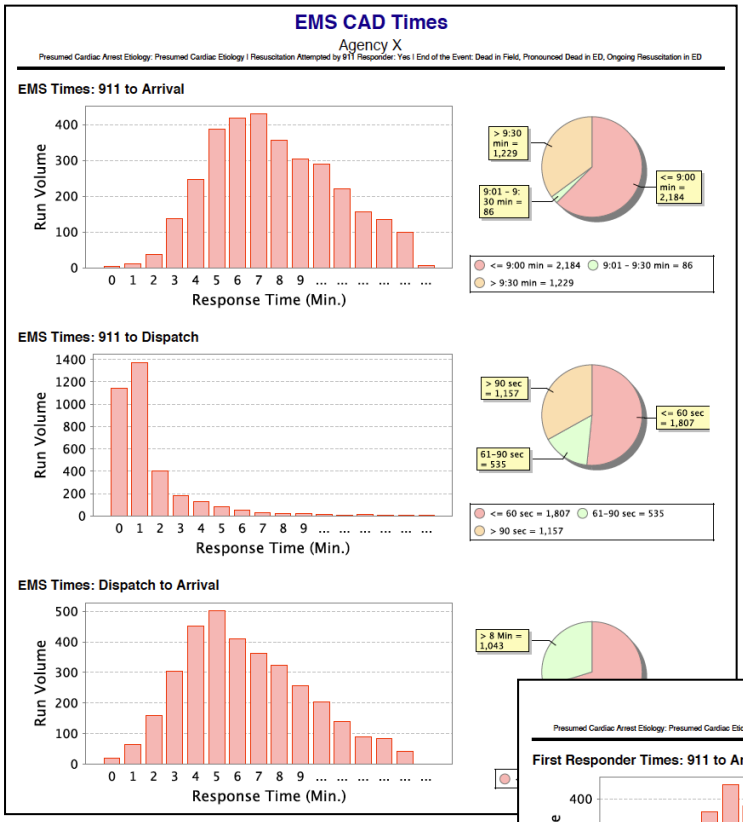


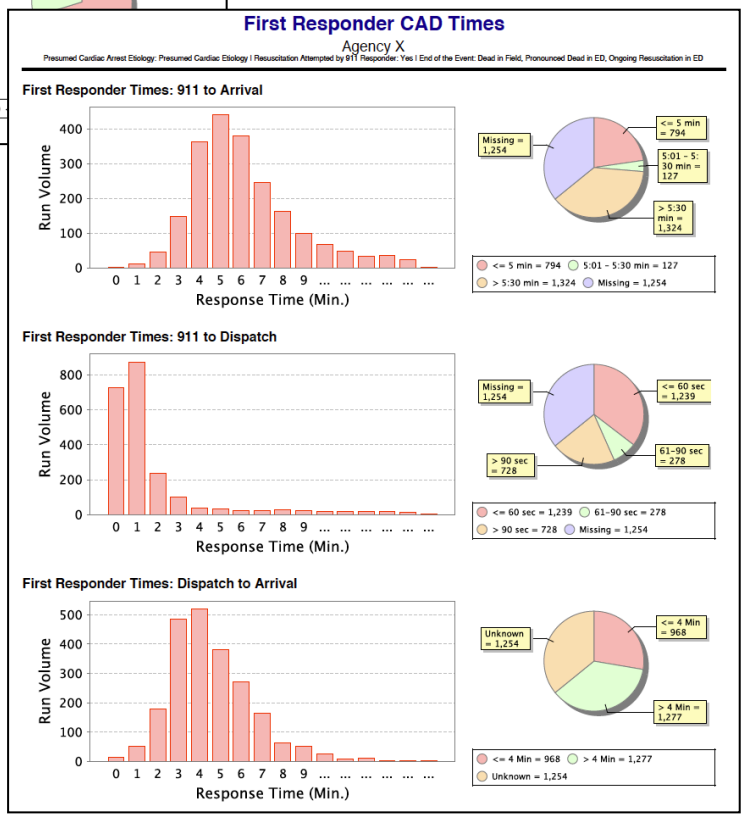
Call Times - Call Received At Dispatch Center: Ambulance Dispatched

Presumed Cardiac Arrest Etiology: Presumed Cardiac Etiology, Respiratory/Asphyxia, Drowning/Submersion, Electrocution, Other, Drug Overdose, Exsanguination/Hemorrhage | Date of Arrest: From 1/1/19 Through 3/31/19 | Resuscitation Attempted by 911 Responder: Yes | End of the Event: Dead in Field, Pronounced Dead in ED, Ongoing Resuscitation in ED

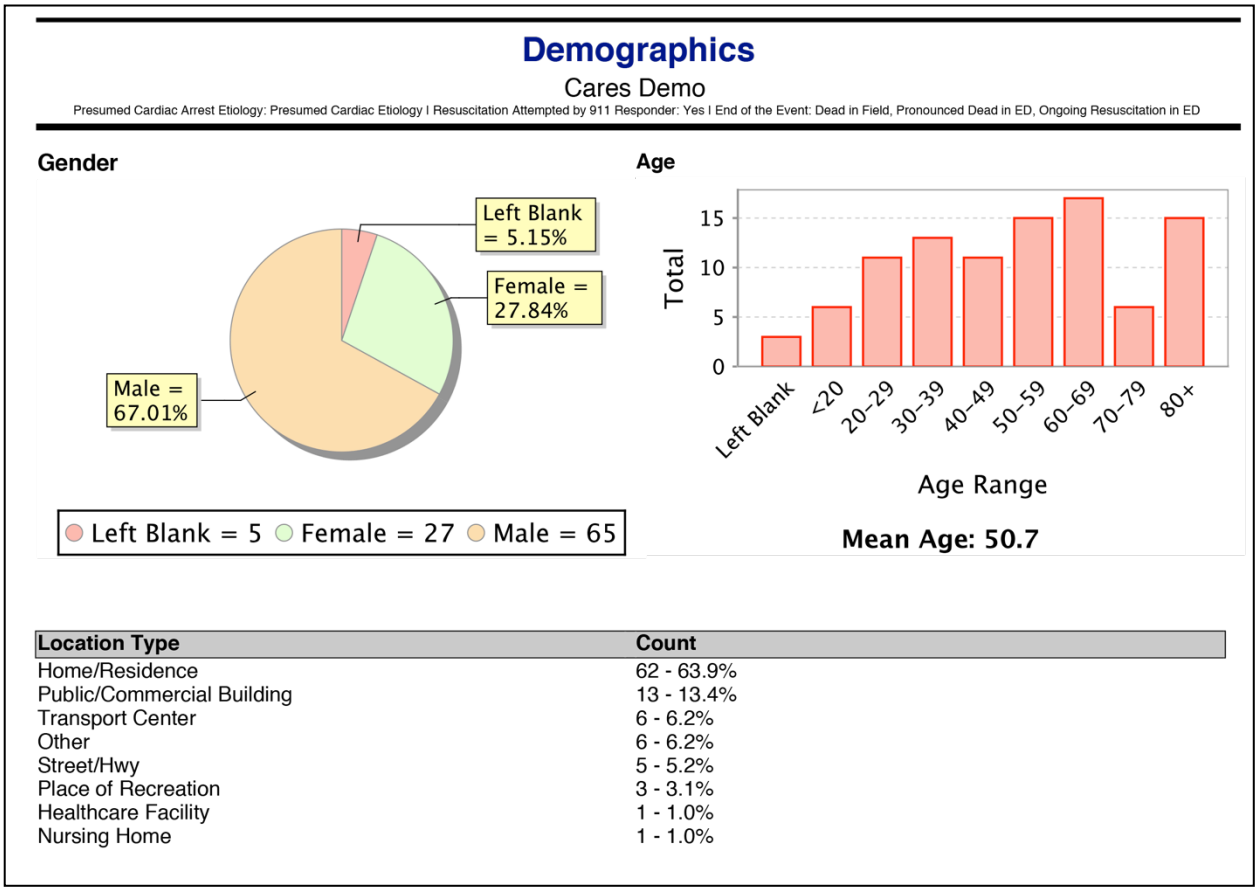
Elapsed Time	# of Runs	% of Runs	# of Runs Cumulative	% of Runs Cumulative
0 Minutes	4036	15%	4036	15%
0.1 - 0.5 Minutes	4412	17%	8448	32%
0.6 - 1 Minute	4490	17%	12938	49%
1.1 - 1.5 Minutes	2560	10%	15498	58%
1.6 - 2 Minutes	2423	9%	17921	67%
2.1 - 2.5 Minutes	1005	4%	18926	71%
2.6 - 3 Minutes	862	3%	19788	74%
3.1 - 3.5 Minutes	330	1%	20118	76%
3.6 - 4 Minutes	340	1%	20458	77%

The **EMS and First Responder CAD Times Reports** show CAD time intervals in bar graph and pie chart format, if your agency enters this supplemental information into CARES. The Setup page includes 2 Data Scope options: My Data will generate a report with your agency's data, while National Data will generate a benchmarking report using the national CARES dataset. Both report setup pages also include the Filter pull-down menu in the upper left-hand corner, allowing you to filter the report by Presumed Cardiac CARES Cases, Non-Traumatic CARES Case, or Utstein Arrests. The First Responder CAD Times Report can also be filtered by your local First Responders. After selecting the report criteria, enter the Service Date range of interest, and click "Generate Report."





The **Demographics Report** generates the same information as the Demographics Dashboard tab, but allows you to select a Service Date range of interest. A number of filters can be applied to this report, using the Filter pull-down menu in the upper left-hand corner (Presumed Cardiac CARES Cases, Non-Traumatic CARES Cases, Utstein Arrests).



Demographics

Cares Demo

Presumed Cardiac Arrest Etiology: Presumed Cardiac Etiology I Resuscitation Attempted by 911 Responder: Yes I End of the Event: Dead in Field, Pronounced Dead in ED, Ongoing Resuscitation in ED

Gender

Age

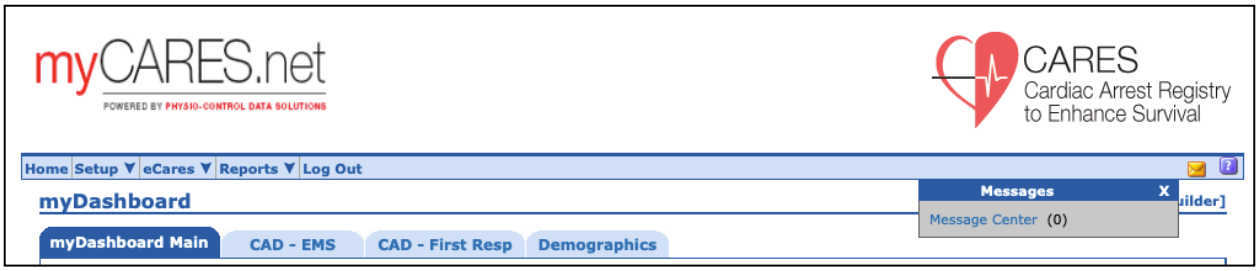
Mean Age: 50.7

Location Type	Count
Home/Residence	62 - 63.9%
Public/Commercial Building	13 - 13.4%
Transport Center	6 - 6.2%
Other	6 - 6.2%
Street/Hwy	5 - 5.2%
Place of Recreation	3 - 3.1%
Healthcare Facility	1 - 1.0%
Nursing Home	1 - 1.0%

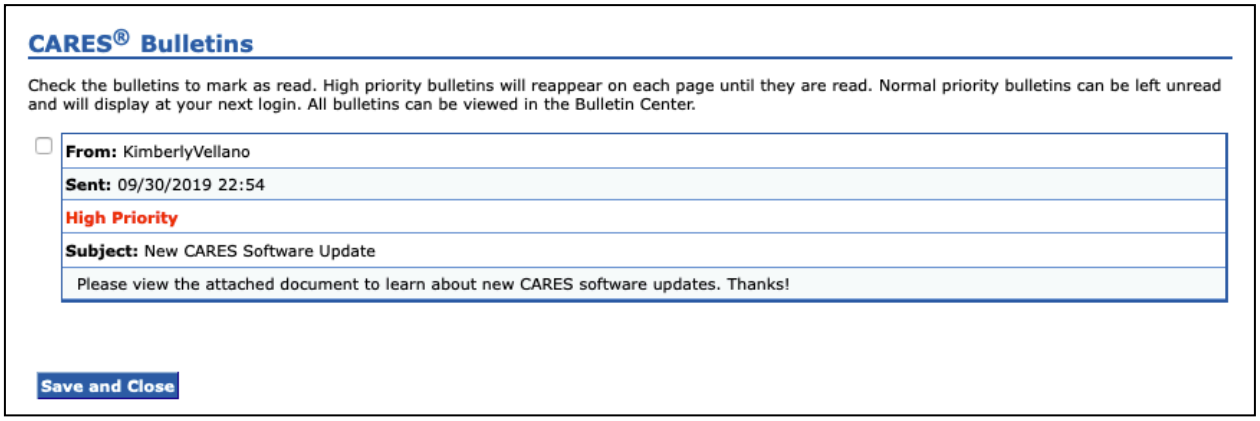
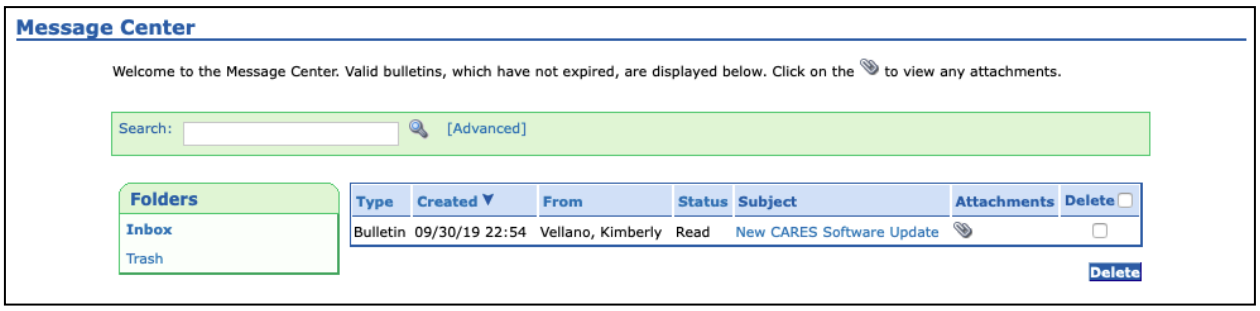
MASS COMMUNICATION:

Occasionally, CARES will send updates to our end users and stakeholders. These messages may include information about software upgrades and changes, training and education opportunities, or data entry deadlines. You will receive these messages via e-mail, and they will also be accessible in your CARES Message Center upon log-in.

Once you enter the site, a blinking, yellow envelope will indicate a new message in your inbox. You may access your Message Center at the top right-hand corner of the page.



High Priority messages will require your acknowledgment before navigating away from the page by checking the box and choosing “Save and Close.”



You will be able to save any attachments that are included in the message for future reference by accessing your Message Center inbox and clicking on the paper clip icon under the “Attachments” column.