

Cardiac Arrest Elapsed Patient Care Times by Organization Type

National EMS Database Report Specification

Purpose

This report describes national EMS elapsed times for several common response intervals among patients presenting with (or experiencing) a cardiac arrest by type of EMS organization.

Definitions

- Type of EMS Organization:** Common EMS organizational types are divided into 3 groups based on reimbursement for EMS treatment rendered. The terms used are general in nature and are for National EMS Database Reports only. Terms do not reflect state or agency terminology. For more descriptive definitions, contact individual participating states or EMS agencies. The groups are divided as follows:
 - Volunteer:** A volunteer agency employs properly trained individuals and operates an emergency response vehicle to or from the scene of an emergency and/or renders emergency medical treatment on a volunteer basis.
 - Non-Volunteer:** A non-volunteer agency employs properly trained individuals and operates an emergency response vehicle to or from the scene of an emergency and/or renders emergency medical treatment and seeks reimbursement for services offered.
 - Mixed:** A mixed agency includes a core of compensated employees who are supported by true volunteer personnel.
- Average Value:** The average is the sum (total amount) of all of the numbers divided by the number of items for a specific measurement.
- 50% Fractile (Median) Value:** The number in the middle of the distribution of numbers. It is the point such that half of the numbers fall below and half above.
- 90% Fractile Value:** The value or measurement at which 90% of all events occur. This is typically used in time measurements to better standardize performance across systems.
- Lights and Sirens:** A lights and sirens, emergent response to or from an EMS event.
- No Lights and Sirens:** A normal traffic speed response (no lights and sirens) to or from an EMS event.
- Cardiac Arrest Event:** Indication of the presence of a cardiac arrest at any time prior to (or after) EMS arrival.

Required Data Elements

- * D01_09: Organization Status
- * E11_01: Cardiac Arrest
- * E02_04: Type of Service Requested
- * E02_20: Response Mode to Scene
- * E05_04: Unit Notified by Dispatch Date/Time
- * E05_06: Unit Arrived on Scene Date/Time
- * E05_09: Unit Left Scene Date/Time
- * E05_10: Patient Arrived at Destination Date/Time

1. The Unit Notified Date (E05_04) is used to select the records for the Date Range
2. Select only records with E11_01 = Yes, prior to (or after) EMS arrival
3. Select only records with E02_04 = 911 Response (Scene)
4. Select only records with E02_20 = Lights and Sirens

Formulas

Response Time = E05_06 – E05_04

Scene Time = E05_09 – E05_06

Transport Time = E05_10 – E05_09

Exclusions/Limitations

For the purposes of charting, all elapsed patient care times that were negative, zero, or greater than 24 hours were removed. These records were removed prior to stratification by cardiac arrest events. The actual number of excluded cases will vary based upon the date range specified for each chart (see specific chart footer for number of excluded cases).