

# National Elapsed Patient Care Times by Level of Service

## National EMS Database Report Specification

### Purpose

This report details national information regarding the EMS elapsed time to patient care for several common levels of EMS service.

### Definitions

1. **Level of EMS Service:** For purposes of this chart, level of EMS service is characterized using the level of training completed by the EMS providers on the call. Level of training for Emergency Medical Technicians (EMTs) is classified into three groups; EMT-Basic, EMT-Intermediate and EMT-Paramedic. An EMT is defined as a person trained and certified to appraise and initiate the administration of emergency care for victims of trauma or acute illness before or during transportation of the victim to a health care facility via ambulance or aircraft. Educational and skill qualifications differentiating the three levels of EMT training are described below. These descriptions are based upon information contained in the National EMS Scope of Practice Model document, which can be downloaded at: <http://www.soundrock.com/sop/index.html>. The terms used in this report 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. EMS levels of service are defined as follows:

**EMT-Basic:** where medically necessary, provides basic life support services and transportation for critical and emergent patients as defined in the National EMS Scope of Practice Model (NHTSA, 2005) document. Educational requirements are limited to approximately 40 hours of training.

**EMT-Intermediate:** where medically necessary, provides basic and limited advanced emergency medical care and transportation for critical and emergent patients as defined in the National EMS Scope of Practice Model (NHTSA, 2005) document. Educational requirements are approximately 200-400 hours of training.

**EMT-Paramedic:** where medically necessary, provides advanced emergency medical care and transportation for critical and emergent patients as defined in the National EMS Scope of Practice Model (NHTSA, 2005) document. Educational requirements exceed 1,000 hours of training.

2. **Average Value:** The average is the sum (total amount) of all of the values or measurements divided by the total number of values or measurements.
3. **Standard Deviation:** A measure of how far the values are spread out. If the values or measurements are normally distributed (form a bell shape distribution), about 68% of all values will fall within one standard deviation.

4. **50% Fractile (Median) Value:** The value or measurement at which 50% of all events occur. It is the point such that half of the numbers fall below and half above.
5. **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.
6. **Lights and Sirens:** A lights and sirens, emergent response to or from an EMS event.
7. **No Lights and Sirens:** A normal traffic speed response (no lights and sirens) to or from an EMS event.

### Required Data Elements

- \* D01\_07: Level of Service
- \* 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 E02\_04 = 911 Response (Scene)
3. 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. 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).