# BOSTON EMERGENCY MEDICAL SERVICES

## 2010 VITAL STATISTICS
www.cityofboston.gov/ems

Boston Emergency Medical Services (Boston EMS) is the primary emergency medical services provider for the City of Boston. As a nationally recognized leader and innovator in the field of pre-hospital emergency medicine, the Department leverages the latest advances in both medicine and technology to bring high-quality care to the streets of Boston. Boston EMS also plays an important role in the City's emergency preparedness efforts and provides enriching programming designed to educate the community about important public health and safety issues.

Boston Land Area: 45.7 sq. miles
Daytime Population: 1.2 million
Boston EMS Uniformed Staff: 358
Non-uniformed Staff: 44
Emergency Medical Technicians: 241
Paramedics: 70
Number of Ambulances: 50
Peak Staffing: 19 BLS & 5 ALS Units
Number of Stations: 17

| SYSTEM WIDE CALL VOLUME | | | |
|---|---|---|---|
| | 2010 | 2009* | Pct. Change |
| Total Clinical Incidents | 108,848 | 107,512 | 1% increase |
| Total ALS and BLS Responses | 136,653 | 135,665 | 1% increase |
| Total Transports | 79,443 | 78,458 | 1% increase |
| Total ALS Transports | 7,633 | 7,153 | 7% increase |
| Total BLS Transports | 71,810 | 71,305 | 1% increase |

* Previously published 2009 response and transport data is adjusted slightly (less than 1%) after reconciliation with other data sources.

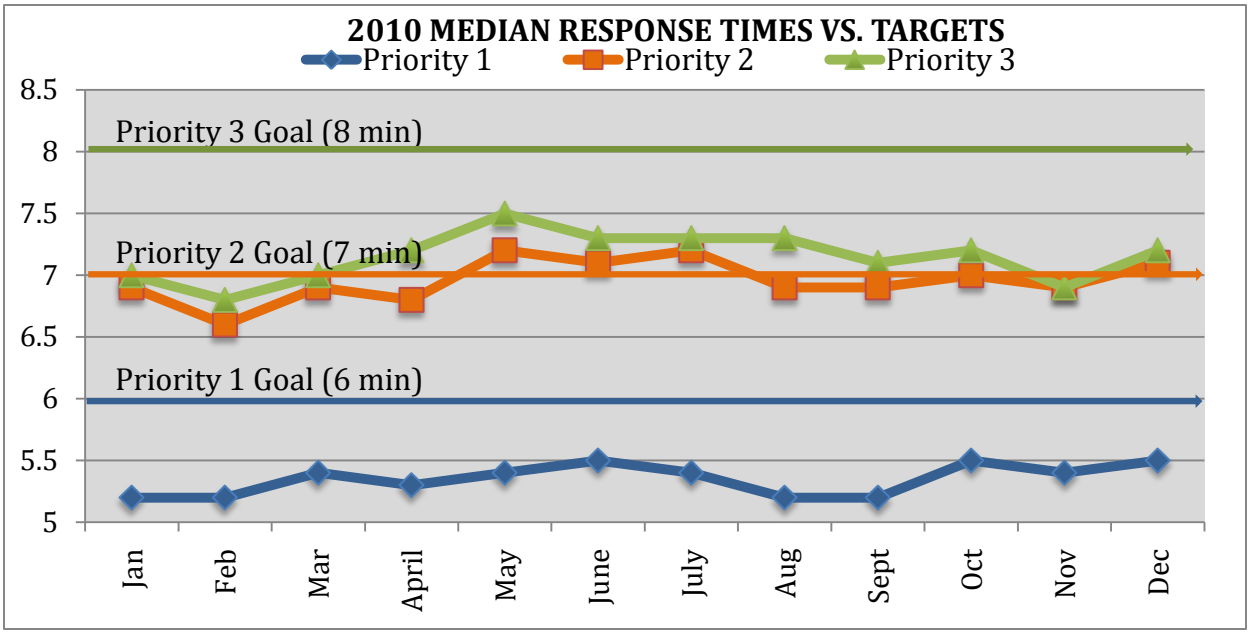
| MEDIAN RESPONSE TIMES | | | |
|---|---|---|---|
| | 2010 | 2009 | Goals |
| Priority 1 | 5.4 minutes | 5.5 minutes | 6.0 minutes |
| Priority 2 | 7.0 minutes | 6.9 minutes | 7.0 minutes |
| Priority 3 | 7.1 minutes | 7.1 minutes | 8.0 minutes |

| NEIGHBORHOOD | *CLINICAL INCIDENTS* | *PCT* |
|---|---|---|
| Allston/ Brighton | 6,473 | 6% |
| Back Bay | 8,371 | 8% |
| Beacon Hill/ West End | 2,866 | 3% |
| North End | 3,870 | 4% |
| Charlestown | 2,224 | 2% |
| East Boston | 7,080 | 7% |
| South Boston | 5,997 | 6% |
| South End | 12,290 | 11% |
| Roxbury | 15,705 | 14% |
| Dorchester North | 16,747 | 15% |
| Dorchester South | 7,290 | 7% |
| Roslindale | 4,389 | 4% |
| Jamaica Plain | 3,244 | 3% |
| West Roxbury | 2,927 | 3% |
| Hyde Park | 4,629 | 4% |
| Mattapan | 3,566 | 3% |
| Long Island | 355 | 0% |
| Other | 825 | 1% |
| Total | 108,848 | 100% |

| *CLINCIAL INCIDENTS BY TYPE* | *NUMBER* | *PCT.* |
|---|---|---|
| Illness (abdominal pain, fever, dizzy) | 31,191 | 29% |
| Investigations ("man down", alarm) | 20,309 | 19% |
| Injury (lacerations, fractures, etc.) | 15,504 | 14% |
| Cardiac Related (unconscious, CPR, etc.) | 10,586 | 10% |
| Respiratory (Asthma, CHF, etc.) | 8,560 | 8% |
| Psychological/Suicidal/ Overdose | 8,336 | 8% |
| Motor Vehicle (MVA, pedestrian) | 5,824 | 5% |
| Neurological (CVA, seizures) | 4,871 | 4% |
| Fire/ Hazmat/ Standby/ Environ. | 2,331 | 2% |
| Trauma (penetrating injury, long fall, etc.) | 1,336 | 1% |
| Total | 108,848 | 100% |

| *CLINICAL INCIDENTS BY PRIORITY* | *NUMBER* | *PCT.* |
|---|---|---|
| Priority 1 | 30,487 | 28% |
| Priority 2 | 54,030 | 50% |
| Priority 3 | 22,276 | 20% |
| Priority 4 | 2,055 | 2% |
| Total | 108,848 | 100% |

*2010 Median Response Times vs. Targets*




| OTHER SYSTEM HIGHLIGHTS | | | |
|---|---|---|---|
| Specialized Clinical Care | | Community Initiatives / Training / Patient Satisfaction | |
| # of Naloxone Uses by Boston EMS BLS Providers[1] | 116 | Car Seat Checks Performed | 1,027 |
| # of STEMIs Identified[2] | 92 | Individuals Taught CPR | 4,341 |
| # of Pts. Treated with Therapeutic Hypothermia[3] | 90 | Individuals Trained through DelValle Institute | 1,996 |
| Overall Intubation Success Rate | 95.7% | New EMTs who Graduated from the Academy | 13 |
| # of Pts. Treated with CPAP[4] | 175 | Students who Completed Boston EMS EMT Course | 73 |
| Public Access AEDs in Database (55% increase from '09)[5] | 876 | Pct. of Patients Rating Service as Excellent or Good | 93% |

*Significant Events*

- On 1/25/10, Mayor Menino and Dr. Barbara Ferrer, executive director of the Boston Public Health Commission, appointed 32-year veteran James W. Hooley as Chief of Boston Emergency Medical Services.
- EMT Mike Vojak, Paramedic Greg Bond, Boston EMS Fellow Dr. David Hirsch and Communications Specialist Phil Balboni, all volunteers with disaster medical organizations, were deployed to Haiti in response to January's earthquake.
- Brendan Kearney, 26-year veteran of Boston EMS, was named Superintendent-in-Chief on 6/7/10.
- In July, the City of Boston, Tufts Medical Center and Boston EMS open a new ambulance station in Chinatown.
- In August, Boston EMS celebrated the promotions of 3 Captains, 4 Lieutenants, and 10 Paramedics as well as the graduation of 13 new EMTs.
- Boston EMS' DelValle Institute for Emergency Preparedness held the conference "Beyond Capacity: Medical Surge and Catastrophes", in October which focused on best practices in medical surge and catastrophes.
- EMTs John Cotter and James McCabe were recognized as BLS provider of the year, and Paramedic Juli Nichols was named ALS provider of the year at the 10th Annual Metro Boston EMS Council Region IV Awards in October.
- In December, Boston EMS launched a new bleeding control protocol intended to stop life-threatening bleeding through the use of a hemostatic bandage.

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[1] BLS Nasal Naloxone (Narcan®) – a Special Project Waiver allowing Boston EMS BLS providers to provide Naloxone to patients with known or suspected narcotic overdose.

[2] Boston EMS Paramedics are trained to read 12-lead ECGs and can identify various types of cardiac incidents including STEMIs (ST – Segment Elevation Myocardial Infarction). As a result, Boston EMS ALS units notify and transport these patients to specialty designated cardiac centers with the goal of improving survival rates.

[3] The process of cooling the body and maintaining mild hypothermia (32-34°C) in the first 12 - 24 hours after cardiac arrest. Boston is among the first services in the nation and second in Massachusetts to utilize this advanced treatment in the pre-hospital arena.

[4] Typically used in the hospital setting, Boston EMS began applying Continued Positive Airway Pressure (CPAP) in 2007. CPAP, a non-invasive procedure that forces oxygen into the lungs, is applied to patients in severe respiratory distress.

[5] In 2009 Boston EMS launched "AED Alert", allowing call takers to identify the location of public AEDs throughout the City.