

## BOSTON EMERGENCY MEDICAL SERVICES

## 2013 VITAL STATISTICS www.cityofboston.gov/ems



Boston Emergency Medical Services (Boston EMS), the primary emergency medical services provider for the City of Boston, is a nationally recognized leader in the field of pre-hospital emergency medicine. The Department strives to leverage the latest advances in both medicine and technology to bring high-quality, compassionate care to the people of Boston. Boston EMS also plays a vital role in the City's emergency preparedness efforts and provides community programming designed to educate the public on life-saving health and safety topics.

Boston Land Area: 48 sq. miles Daytime Population: ~1 Million Budgeted FTEs: 378

EMTs (field/dispatch): 244 Paramedics: 64 Supervisors/Command: 44 Frontline Ambulances: 24 Peak Staffing: 19 BLS & 5 ALS Units Ambulance Stations: 16

SYSTEM WIDE CALL VOLUME			
	2013	2012	Pct. Change
Total Clinical Incidents	116,637	111,074	4.77 % increase
Total ALS and BLS Responses	142,341	138,352	2.80% increase
Total Transports	83,144	81,442	2.05 % increase
Total ALS Transports	7,379	7,295	1.14 % decrease
Total BLS Transports	75,761	74,136	2.14 % increase

MEDIAN RESPONSE TIMES			
	2013	2012	Goals
Priority 1	5.9 min	5.7 min	6.0 min
Priority 2	7.4 min	7.2 min	7.0 min
Priority 3	8.0 min	7.6 min	8.0 min

INCIDENTS BY PRIORITY	NUMBER	PCT.
Priority 1	31,348	26.9%
Priority 2	50,721	43.5%
Priority 3	32,519	27.9%
Priority 4	2,047	1.7%
Total	116,637	100%

NEIGHBORHOOD	INCIDENTS	PCT.
Allston/Brighton	6,771	5.8%
Back Bay	9,002	7.7%
Beacon Hill/ West End	3,384	2.9%
North End	4,175	3.6%
Charlestown	2,603	2.2%
East Boston	7,570	6.5%
South Boston	6,308	5.4%
South End	13,339	11.4%
Roxbury	17,367	14.9%
Dorchester North	17,785	15.2%
Dorchester South	7,849	6.73%
Roslindale	4,258	3.7%
Jamaica Plain	3,422	2.9%
West Roxbury	3,113	2.7%
Hyde Park	4,693	4.0%
Mattapan	3,798	3.3%
Long Island	536	0.5%
Other	664	0.6%
Total	116,637	100%

INCIDENTS BY TYPE	NUMBER	PCT.
Illness (abdominal pain, fever, dizzy)	34,438	29.5%
Investigations ("man down", alarm)	23,619	20.3%
Injury (lacerations, fractures, etc.)	16,044	13.7%
Cardiac Related (unconscious, CPR, etc.)	11,396	9.8%
Respiratory (Asthma, CHF, etc.)	8,626	7.4%
Psychological/Suicidal	7,455	6.4%
Motor Vehicle (MVA, pedestrian)	5,768	4.9%
Neurological (CVA, seizures)	4,561	3.9%
Fire/ Hazmat/ Standby/ Environ.	2,280	2.0%
Trauma (penetrating injury, long fall, etc.)	1,243	1.1%
Overdose	1,207	1.0%
Total	116637	100%
TRANSPORTS BY AGE	NUMBER	PCT.
Under 15	5,308	6.4%
15-24	10,880	13.1%
25-44	21,870	26.3%
45-64	27,554	33.1%
65-74	7,409	8.9%
75+	10,115	12.1%



OTHER SYSTEM HIGHLIGHTS			
Specialized Clinical Care		Community Initiatives / Training / Patient Satisfaction	
# of Naloxone Uses by Boston EMS BLS Providers1	458	Car Seat Checks Program Families Served	295
# of STEMIs Identified <sup>2</sup>	75	Individuals Taught CPR	1,682
# of Pts. Treated with Therapeutic Hypothermia <sup>3</sup>	93	Boston EMS DelValle Institute Course Participants	2,074
Overall Intubation Success Rate	96.5%	New EMTs who Graduated from the Academy	0
# of Pts. Treated with CPAP <sup>4</sup>	317	Students who Completed Boston EMS EMT Course	63
Public Access AEDs in Database <sup>5</sup>	1200	% Patients who Rated Service Good/Excellent	97%

## **SIGNIFICANT EVENTS IN 2013**

- Enhanced emergency medical coverage was provided throughout Winter Storm Nemo in February.
- Boston EMS was recognized nationally for the rapid and effective response, triage, transport and coordination of EMS resources and patient distribution after the bombings on April 15, 2013. Thousands of calls, letters, visits and well-wishes for our personnel were received from across the globe in the days, weeks and months that followed.
- Boston EMS contributed to the City's three year retrospective cyclist safety report posted on May 21st.
- In celebration of EMS week, in May, Boston EMS hosted our 3<sup>rd</sup> Command Staff Cooks event providing a brief respite for our frontline providers and a chance to say thanks. Other events included a community event on the Boston Common and our agency received the original EMS Week Proclamation, signed by President Obama.
- Boston EMS hosted visitors from across the country and around the world, including DHS Secretary Janet Napolitano, FEMA Deputy Administrator Rich Serino, FEMA Future Leaders, the Abu Dhabi Public Safety Group, and representatives from the Ottawa Paramedic Service.
- In September, Boston EMS received Emergency Management's 2013Disaster Preparedness Humanitarian Award.
- September 11, for the 10th time, Boston EMS co-sponsored the 9-11 Memorial Blood Drive held at Fenway Park.
- Boston EMS and 12 EMS mutual aid partners received the President's Award at the 12<sup>th</sup> Annual Metro Boston EMS Council Region IV Awards in October, in addition to three awards given to individual department members.
- Boston EMS provided field medical consequence coverage for over 500 special events, including the Boston Red Sox World Series championship parade, drawing hundreds of thousands into the City.
- In November, Boston EMS personnel were recognized at the 21st Annual Awards and Retirement Banquet.
- Six Boston EMTs with Paramedic certifications were selected for the Paramedic Internship process, in November.
- While responding to an incident at an assisted living facility for the elderly, Boston EMS crews were alerted of high carbon monoxide levels (using a newly assigned grant funded detector), resulting in prompt action prior to any residents becoming ill from exposure.
- Utilizing DHS grant funding; Boston EMS purchased and received the region's first medical ambulance bus (MAB) to support pre-hospital care during special events and mass casualty incidents.

<sup>&</sup>lt;sup>1</sup> Boston EMS BLS personnel provide Naloxone to patients with known or suspected narcotic overdose.

<sup>&</sup>lt;sup>2</sup> Boston EMS Paramedics are trained to identify various cardiac incidents, including STEMIs (ST – Segment Elevation Myocardial Infarction), allowing them to improve survival rates by alerting and transporting patients to designated specialty cardiac centers.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> 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.

<sup>&</sup>lt;sup>5</sup> The Boston EMS "AED Alert" allows call takers to identify the location of public AEDs throughout the City.