



# BOSTON EMERGENCY MEDICAL SERVICES



## 2021 VITAL STATISTICS

[www.boston.gov/ems](http://www.boston.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 leverages the latest advances in both medicine and technology to bring high-quality, compassionate care to the people of Boston. Boston EMS also plays a key role in the City's emergency preparedness efforts and provides community programming designed to educate the public about important health and safety topics.

**Boston Land Area:** 48 sq. miles      **Daytime Population:** 1.2 million      **Budgeted FTEs:** 426  
**Peak Staffing:** 21 Basic Life Support/5 Advanced Life Support Ambulances      **Stations:** 16

SYSTEM WIDE CALL VOLUME			
	2021	2020	Pct. Change
Total Clinical Incidents	126,790	115,537	9.74% increase
Total ALS and BLS Responses	160,577	143,189	12.14 % increase
Total Transports	79,210	75,800	4.50% increase

MEDIAN RESPONSE TIMES			
	2021	2020	Goals
Priority 1	6.3 min	6.0 min	6.0 min
Priority 2	8.3 min	8.1 min	7.0 min
Priority 3	8.1 min	7.7 min	8.0 min

INCIDENTS BY PRIORITY	NUMBER	PCT.
Priority 1	31,281	24.67%
Priority 2	56,619	44.66%
Priority 3	36,374	28.69%
Priority 4 & Other	2,516	1.98%
Total	126,790	100%

PERSONNEL	COUNT	PCT.
EMTs (Field/Dispatch)	300	75%
Paramedics	52	13%
Supervisor/Command	47	12%

INCIDENTS BY TYPE	NUMBER	PCT.
Illness (abdominal pain, fever, dizzy)	41,740	32.9%
Investigations (person down, alarm)	24,406	19.3%
Injury (lacerations, fractures, etc.)	14,019	11.1%
Cardiac Related (unconscious, CPR, etc.)	12,613	9.9%
Respiratory (Asthma, CHF, etc.)	8,574	6.8%
Psychological/Suicidal	10,741	8.5%
Motor Vehicle (MVA, pedestrian)	5,194	4.1%
Neurological (CVA, seizures)	4,356	3.4%
Fire/ Hazmat/ Standby/ Environ.	1,983	1.6%
Trauma (penetrating injury, long fall, etc.)	1,183	0.9%
Overdose	1,981	1.6%
Total	126,790	100%

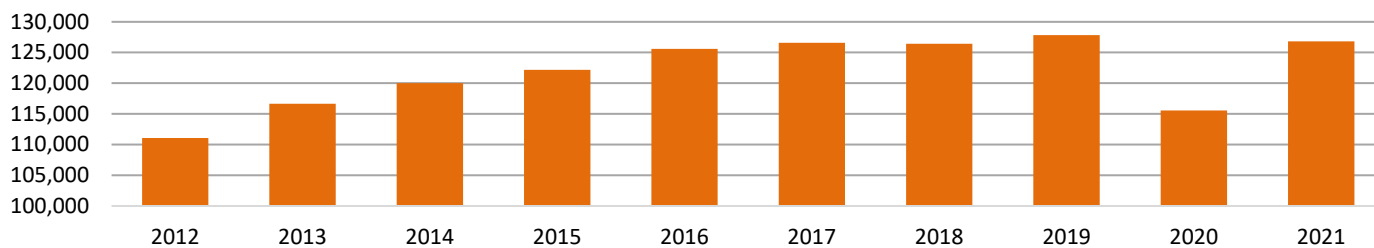
NEIGHBORHOOD	INCIDENTS	PCT.
Allston/ Brighton	7,337	5.79%
Boston Central	28,806	22.72%
Charlestown	2,364	1.86%
East Boston	7,372	5.81%
South Boston	6,868	5.42%
Roxbury	21,970	17.33%
Dorchester	28,108	22.17%
Roslindale	3,446	2.72%
Jamaica Plain	6,671	5.26%
West Roxbury	3,358	2.65%
Hyde Park	4,910	3.87%
Mattapan	4,791	3.78%
Other	789	0.62%
Total	126,790	100%

TRANSPORTS BY AGE	NUMBER	PCT.
Under 15	3,339	3.94%
15-24	7,733	9.13%
25-44	23,831	28.13%
45-64	26,719	31.54%
65-74	10,694	12.62%
75+	12,944	15.28%

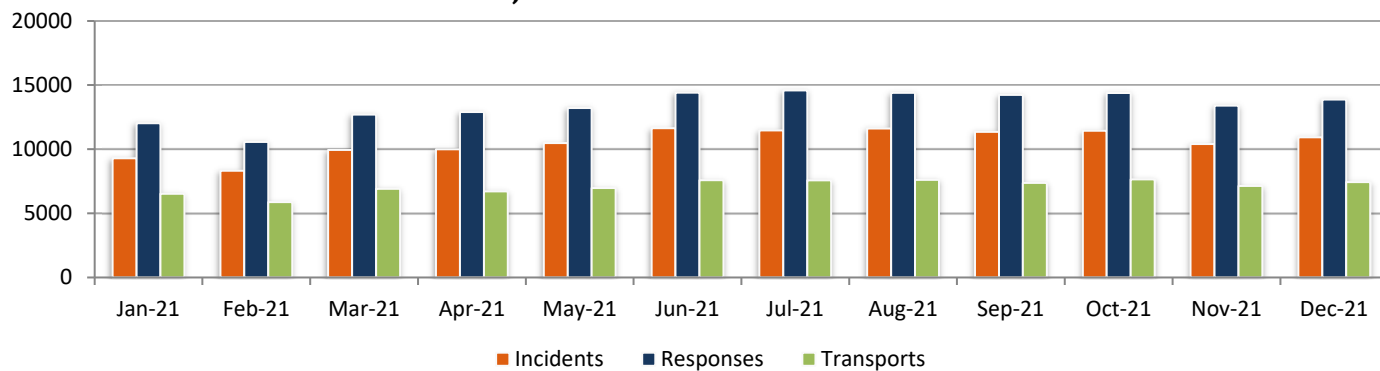
OTHER SYSTEM HIGHLIGHTS			
COVID-19 Global Pandemic			
# of Confirmed Positive Patient Encounters	2,598	# of COVID-19 Vaccinations Administered	1,840
Specialized Clinical Care			
# of Intubations	784	# of Patients Treated with CPAP	235
Community Initiatives / Training / Special Events			
% Patients Rated Service as Excellent or Good	97%	# Special Events Provided Medical Coverage	523
# Individuals Taught CPR	120	# EMTs who Graduated from the Academy	26
# Families Served at Car Seat Checks	346	# Completed Boston EMS EMT Course	58

- ### SIGNIFICANT EVENTS
- Members of Boston EMS remained at the forefront of the city's COVID-19 response and recovery efforts throughout 2021, caring for thousands of COVID-19 confirmed positive patients and coordinating over 40 vaccination clinics, including partnerships with the Boston Housing Association, Immigrant Family Services Institute, Boston Public Schools, and the Red Cross Food Bank.
  - Boston EMS contracted with CORTI and worked on system development to prepare for incorporation of artificial intelligence in the 9-1-1 call-taking process. This is intended to support early identification of critical illnesses during a 9-1-1 emergency medical call.
  - Clinical incident call volume returned to historic numbers in 2021, after the decline seen during the first year of the pandemic.
  - Boston EMS supported the Central Emergency Medical Direction (CMED) for 61 cities and towns, through our EMS 9-1-1 Dispatch Center.
  - In December of 2021, the department issued automated chest compression devices to all ALS ambulances to support care for patients in cardiac arrest.

### BOSTON EMS CLINICAL INCIDENTS BY YEAR



### CLINICAL INCIDENTS, RESPONSES & TRANSPORTS BY MONTH



**Incident:** Any request for 9-1-1 emergency medical service, which generates a distinct entry in the Boston public safety Computer Aided Dispatch system. One incident may have multiple patients and/or yield multiple unit responses.

**Response:** A response is generated for each EMS ambulance (ALS & BLS) assigned to an incident.

**Transport:** Count of patient trips to hospital emergency departments via ambulance.