

Massachusetts Department of Public Health

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Enhancement of Opioid Overdose Surveillance

MATRIS, the Massachusetts Ambulance Trip Reporting Information System, is a statewide database for collecting emergency medical service data from licensed ambulance services. It was not specifically designed to track opioid overdose incidents. DPH is currently working with all Emergency Medical Services (EMS) providers to improve the quality and completeness of these data especially with respect to opioid overdose incidents. To more accurately identify ambulance trips that are opioid-related, several pieces of information from MATRIS are combined such as: a notation that a trip was listed as a poisoning, that there was an administration of naloxone, or that the patient admitted to drug use. In combination, this information allows DPH to more accurately count opioid overdose incidents. Data for Boston came from applying this algorithm to events identified by Boston EMS as "Narcotic Related Incidents" (NRI). Not all services have reported their 2016 Q1-Q3 data yet so the numbers cited here are underestimates. Counts will be updated on a quarterly basis.

Results

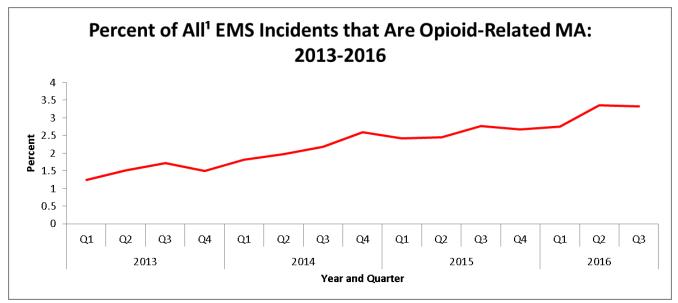
Since 2013, there has been an increasing trend in the percentage of EMS incidents that are considered opioid-related. In the first three quarters of 2016 EMS services reported an opioid-related incident in 280 of the 351 MA cities and towns (80%). Overall, there was a 37% increase in the number of opioid-related EMS transport incidents compared with the first three quarters of 2015.

In the first three quarters of 2016, the greatest number of suspected opioid overdose incidents was among males aged 25-34 (25% of opioid-related incidents). There is an increasing trend in the quantity of Naloxone being dispensed during each opioid-related incident. On average, EMS administered Naloxone 1.4 times per opioid-related incident in the first three quarters of 2016. Almost one third of opioid-related incidents required more than one dose of Naloxone.

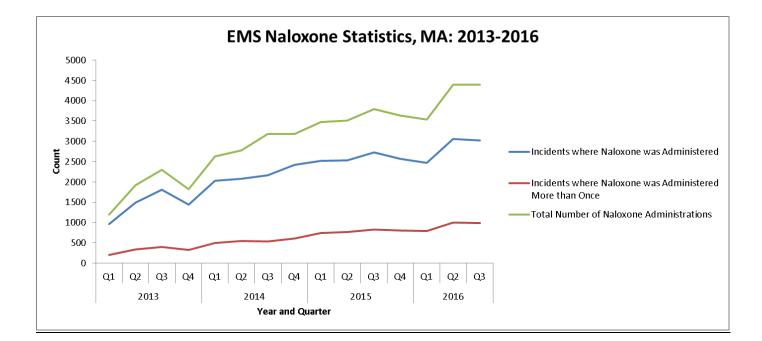
All Suspected Opioid Related Incidents: 2016 (Quarter 1)								
	11-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male	<7	384	1268	767	488	315	136	3359
Female	<7	235	560	313	239	156	107	1614
Total	<7	619	1828	1080	727	471	243	4973

All Suspected Opioid Related Incidents: 2016 (Quarter 2)								
	11-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male	<7	438	1603	904	724	401	178	4250
Female	<7	244	730	424	302	178	141	2024
Total	7	682	2333	1328	1026	579	319	6274

All Suspected Opioid Related Incidents: 2016 (Quarter 3)								
	11-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male	1	499	1553	948	610	389	186	4187
Female	0	278	838	441	295	189	118	2159
Total	1	777	2391	1389	905	578	304	6346



1. Includes all incidents where the patient was 11 years old or older.



Technical Notes

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