



# Opioid-related EMS Transports Massachusetts Residents: 2013-2016

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. Data for Boston came directly through Boston EMS' estimates of Narcotic Related Incidents (NRI) and not from DPH's MATRIS algorithm. To more accurately identify ambulance trips that are opioid-related, several pieces of information from MATRIS are combined such 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. Not all services have reported their 2016 Q1/Q2 data yet so the numbers cited here are underestimates. Counts will be updated on a quarterly basis.

## Results

As in previous years, the data from the first two quarters of 2016 indicates that there was the greatest number of suspected opioid overdose incidents among males aged 25-34 (31% of opioid-related incidents).

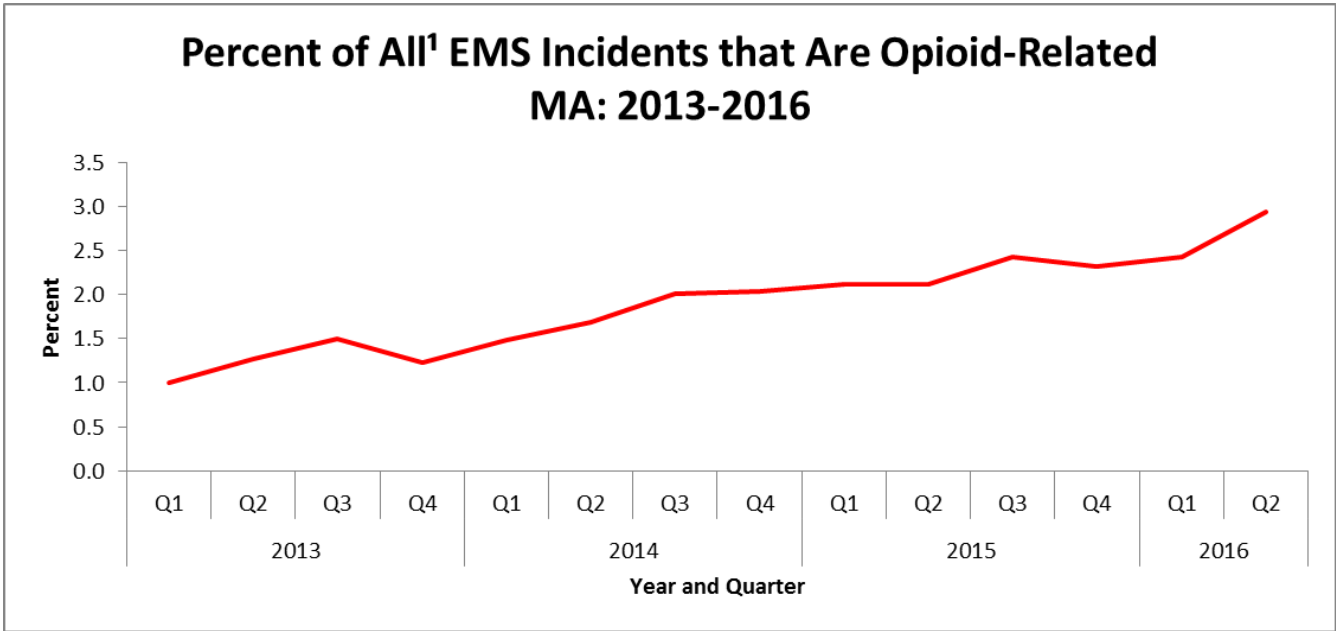
Since 2013, there has been an increasing trend in the percentage of all incidents that are considered opioid-related. The rate of 2.9% in the second quarter of 2016 is almost three times what it was in the first quarter of 2013 (1.0%).

On average, EMS administered Naloxone 1.4 times per opioid-related incident in the first two quarters of 2016.

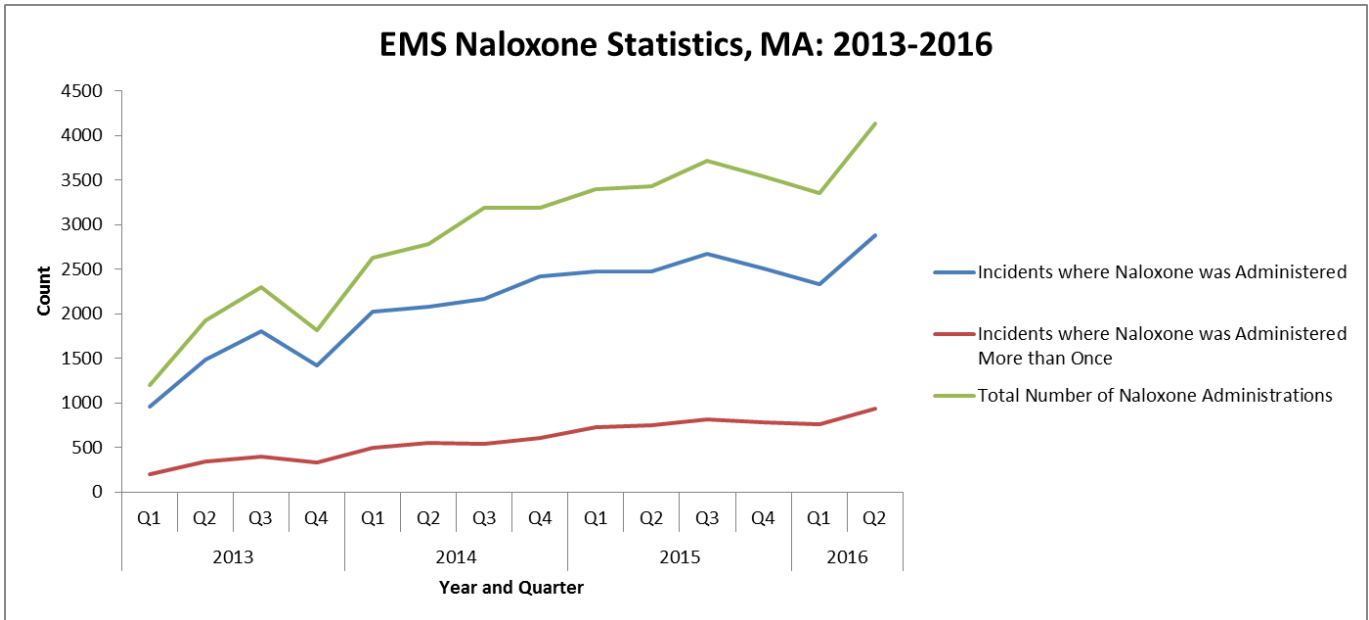
In the first two quarters of 2016, of the EMS services reporting their data to DPH, responses to opioid-related incidents were in 256 of the 351 MA cities and towns (73%). Overall, there was an 18% increase in the number of opioid-related EMS transport incidents in the first two quarters of 2016 compared with the first two quarters of 2015. Of note, the death rate increased at a slower rate than opioid-related EMS transports between 2013 and 2015 indicating that the proportion of overdoses that are fatal may be decreasing.

All Suspected Opioid Related Incidents: 2016 (Quarter 1)								
	11-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male	<7	290	999	552	365	223	103	2533
Female	<7	199	546	336	251	153	84	1570
<b>Total</b>	<b>&lt;7</b>	<b>489</b>	<b>1545</b>	<b>888</b>	<b>616</b>	<b>376</b>	<b>187</b>	<b>4103</b>

All Suspected Opioid Related Incidents: 2016 (Quarter 2)								
	11-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male	<7	336	1231	649	530	278	129	3154
Female	<7	209	655	473	323	183	101	1947
<b>Total</b>	<b>&lt;7</b>	<b>545</b>	<b>1886</b>	<b>1122</b>	<b>853</b>	<b>461</b>	<b>230</b>	<b>5101</b>



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



**Technical Notes**

Suspected opioid related incidents for all cities/towns except for Boston are identified using an algorithm that DPH developed with CDC using multiple fields in the MATRIS system. Data for Boston came directly through Boston EMS' estimates of Narcotic Related Incidents (NRI) and not from DPH's MATRIS algorithm. Due to differences in reporting by EMS services, these numbers are likely an undercount of true opioid-related incidents.

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