



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 data yet so the numbers cited here are underestimates. Counts will be updated on a quarterly basis.

Results

As in previous years, the Q1 2016 data indicates that there was the greatest number of suspected opioid overdose incidents among males aged 25-34 (27% of opioid-related incidents).

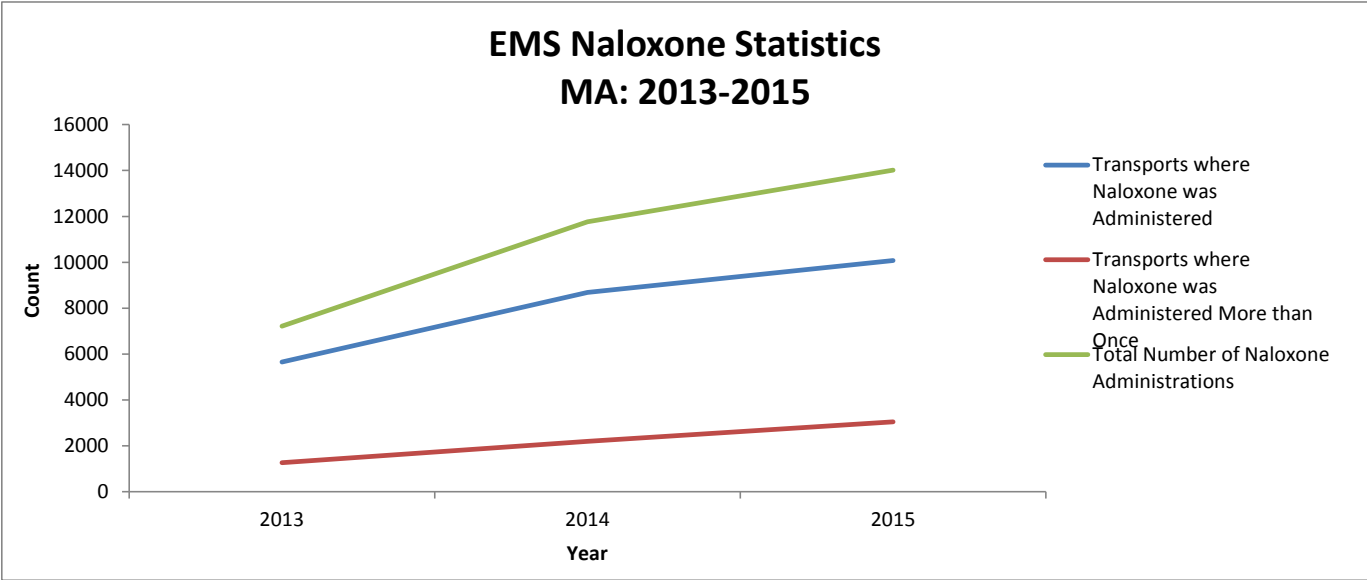
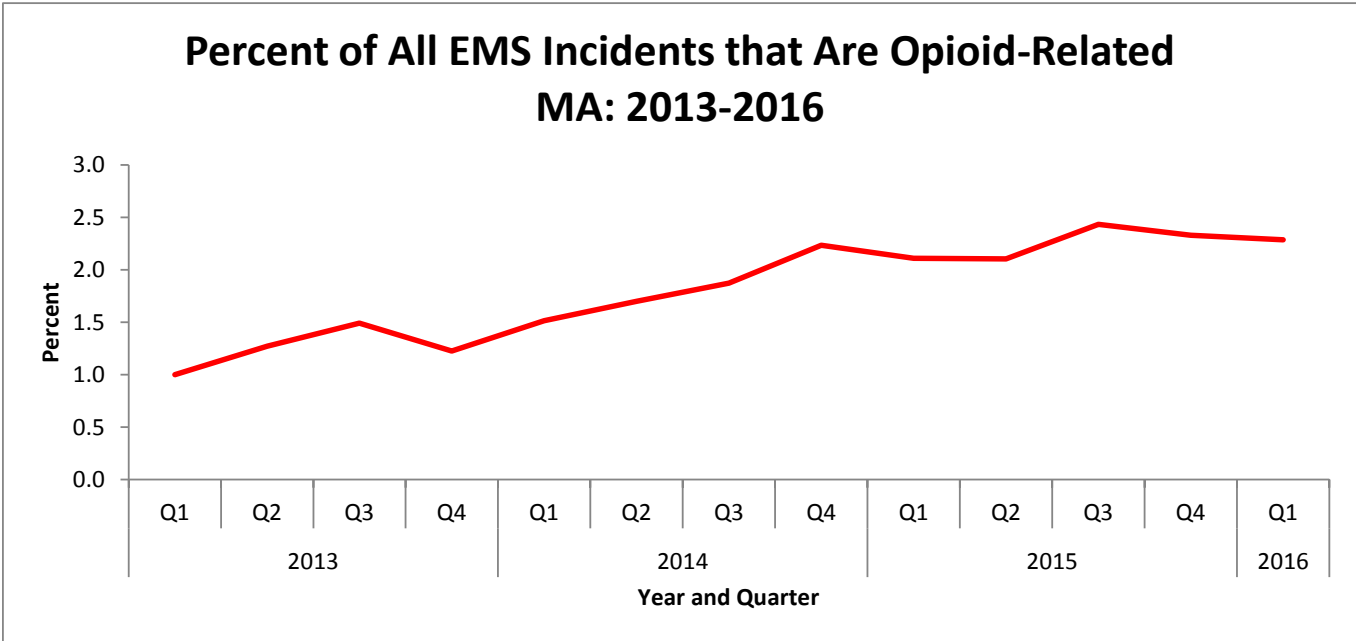
Since 2013, there has been an increasing trend in the percentage of all incidents that are considered opioid-related. The rate of 2.3% in the first quarter of 2016 is over twice what it was in the first quarter of 2013 (1.0%).

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

In the first quarter of 2016, of the EMS services reporting their data to DPH, responses to opioid-related incidents were in 199 of the 351 MA cities and towns (57%). Overall, the number of opioid-related EMS transport incidents nearly doubled between 2013 and 2015 and 81 cities/towns also saw at least a doubling of events during this time period. Of note, the death rate increased at a slower rate than opioid-related transports between 2013 and 2015 indicating that the proportion of overdoses that are fatal may be decreasing.

All Suspected Opioid Related Transports: 2016 (Quarter 1)								
	11-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male	<5	235	786	412	277	168	88	1967
Female	<5	139	332	176	156	93	63	960
Total	<5	374	1118	588	433	261	151	3520 ¹

¹ Includes an additional 593 incidents estimated from Boston EMS whose reporting differences do not fit into the algorithm used to identify cases and are not represented in the gender/age categories and whose 2016 NRI data we do not yet have.



Technical Notes

Suspected opioid related incidents are identified using an algorithm that DPH developed with CDC using multiple fields in the MATRIS system. Due to differences in reporting by EMS services, these numbers are likely an undercount of true opioid-related incidents.