



Massachusetts Surveillance of Opioid-involved Morbidity and Mortality

Northeast Epidemiology Conference

Northampton, MA

October 20, 2017

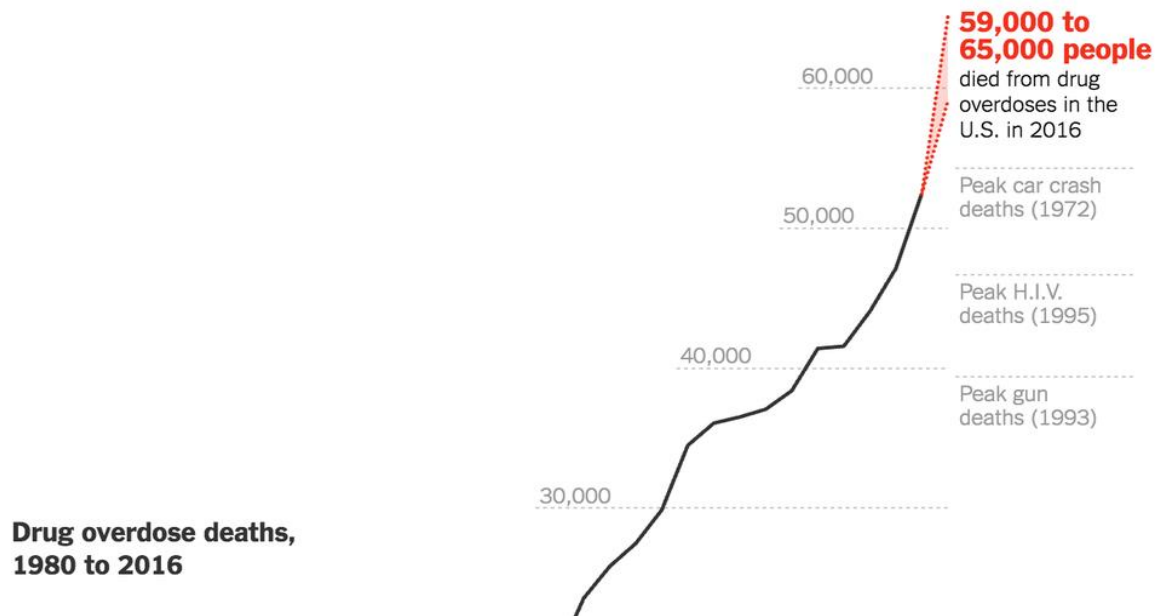
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Drug Deaths: A National Epidemic

Drug Deaths in America Are Rising Faster Than Ever

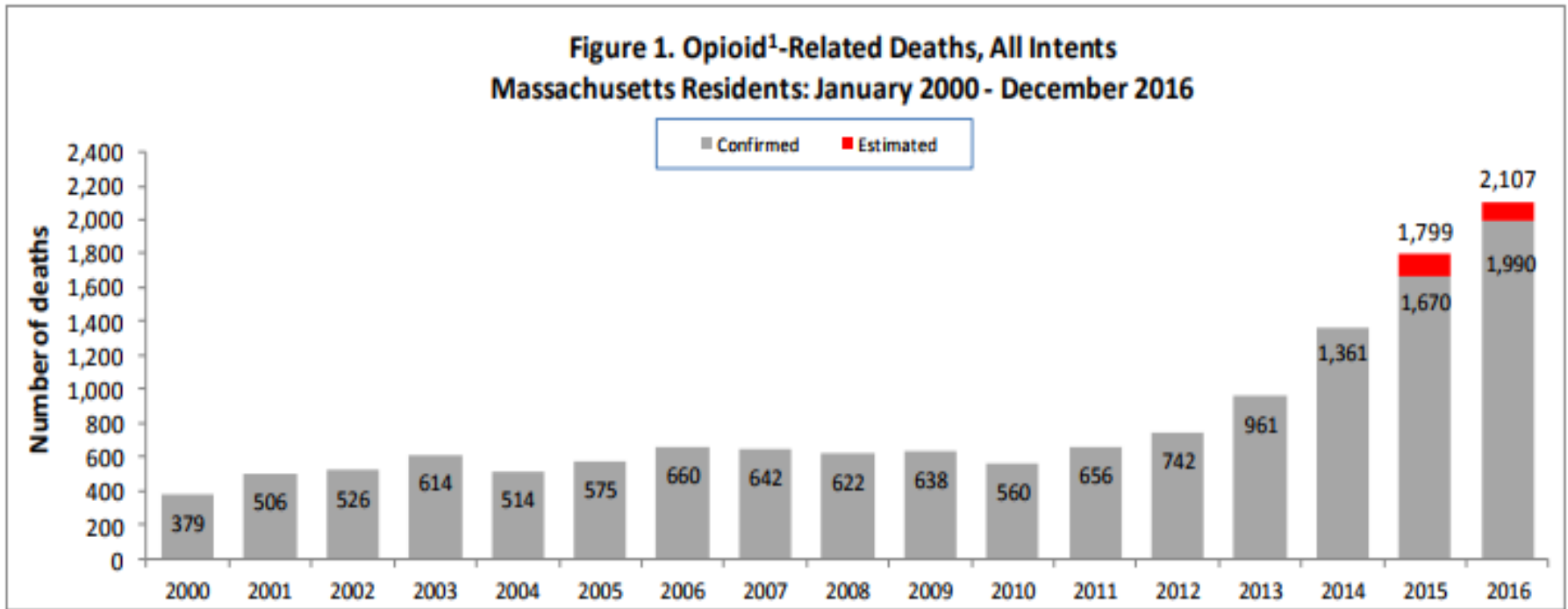
By **JOSH KATZ** JUNE 5, 2017



Source: The New York Times, 6/5/2017

Impact on Massachusetts

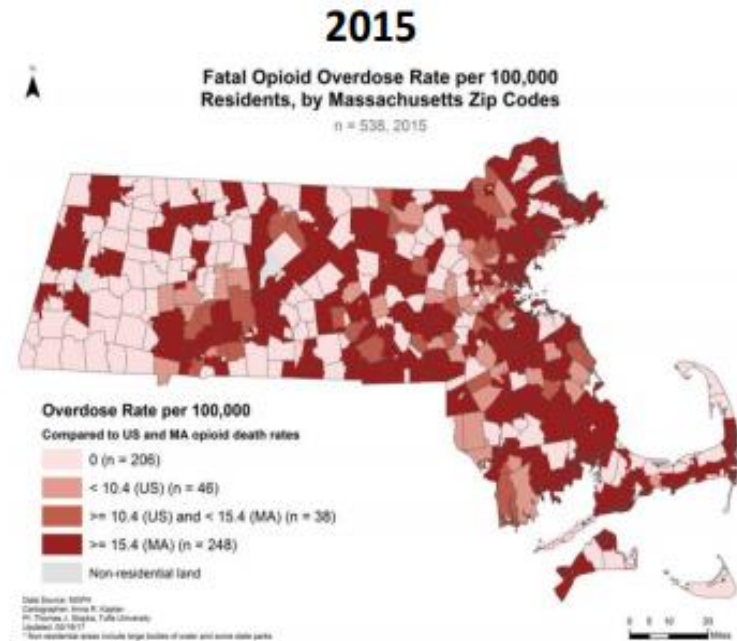
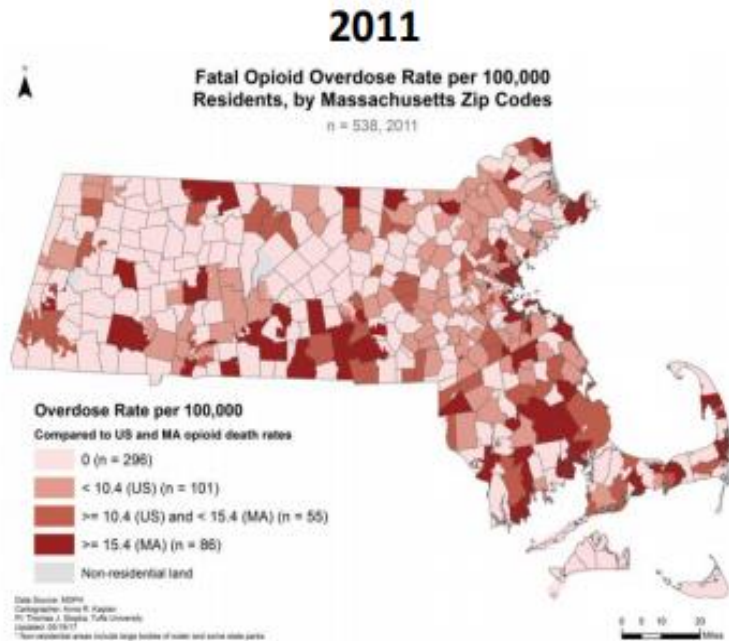
Figure 1. Opioid¹-Related Deaths, All Intent
Massachusetts Residents: January 2000 - December 2016



Source: MDPH Data Brief, August 2017

Impact on Massachusetts

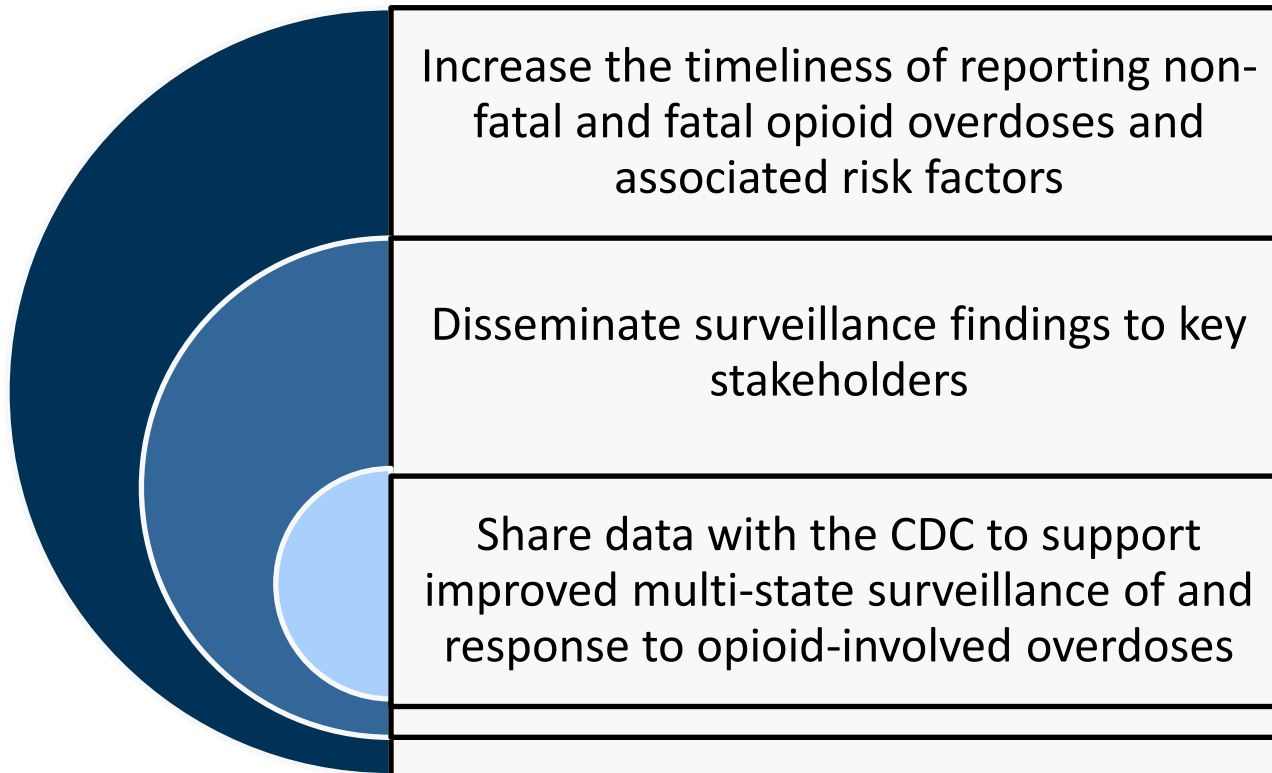
Increasing and Spreading Opioid-Related Overdose Death Rates in Massachusetts from 2011 to 2015¹



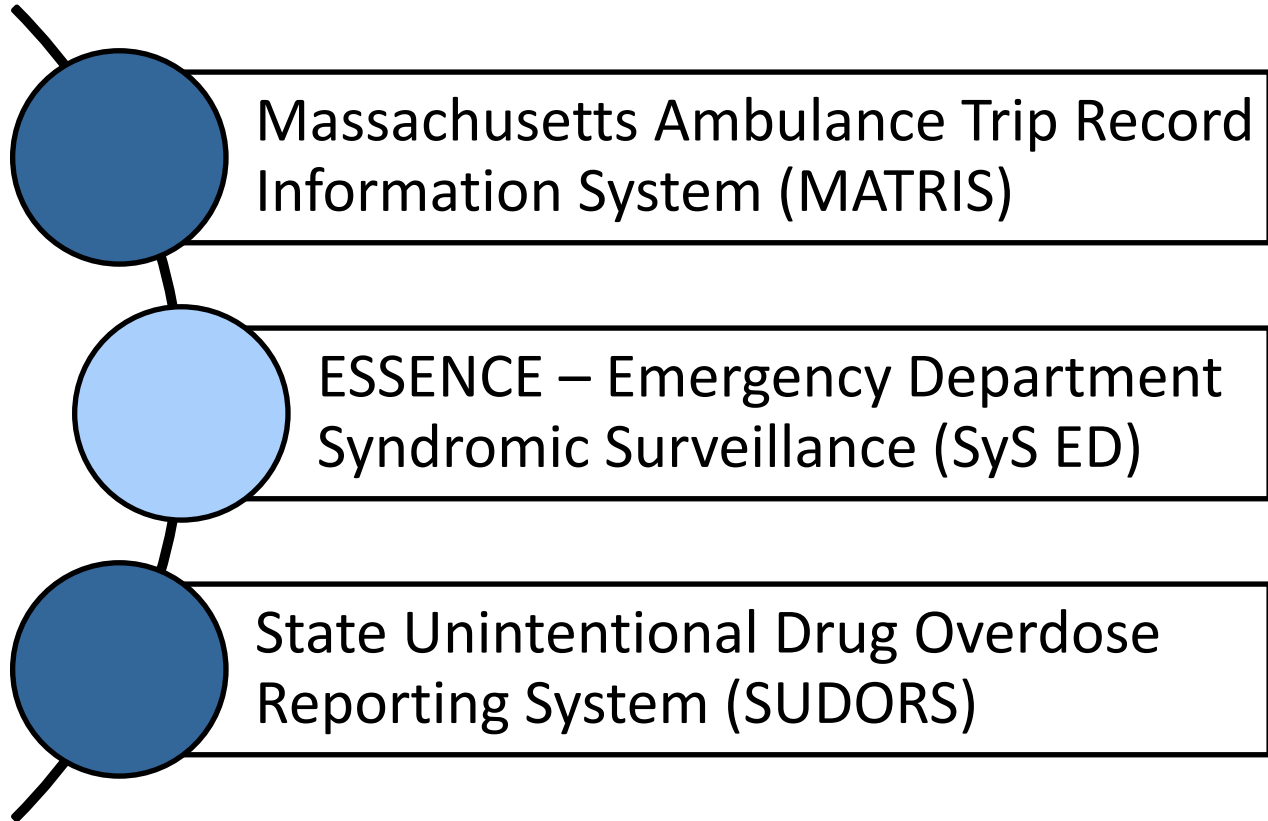
Source: MA Chapter 55 Overdose Report, August 2017

Enhanced State Opioid Overdose Surveillance (ESOOS) Grant

GOALS



ESOOS: Data Sources



ESOOs: Data Sources



MATRIS

- Ambulance services across all of the Commonwealth are reporting
- Opioid definition has several priority levels
- Available data includes patient demographics, clinical information, incident details such as narrative, location, date/time, disposition
- **Limitations:** timeliness of data submission



ESSENCE

- 63 facilities, ~85% of all MA ED visits
- Available data includes free-text and coded data on patient demographics and clinical information, encounter details such as patient stated chief complaint, disposition
- **Limitations:** geographic capture, variations in text and coded data



SUDORS

- Combines information from the death certificate, medical examiner records, law enforcement reports, past medical history, and toxicology reports for all deaths in Massachusetts
- Has capability be modified to address emerging issues
- **Limitations:** only six months of complete data

All 3 data sources: Date/time, location, demographics

ESOOS: SUDORS

Demographics

- Age
- Sex
- Race/ethnicity
- City and country of residence
- Marital status
- Education level
- Usual occupation

Injury and Death

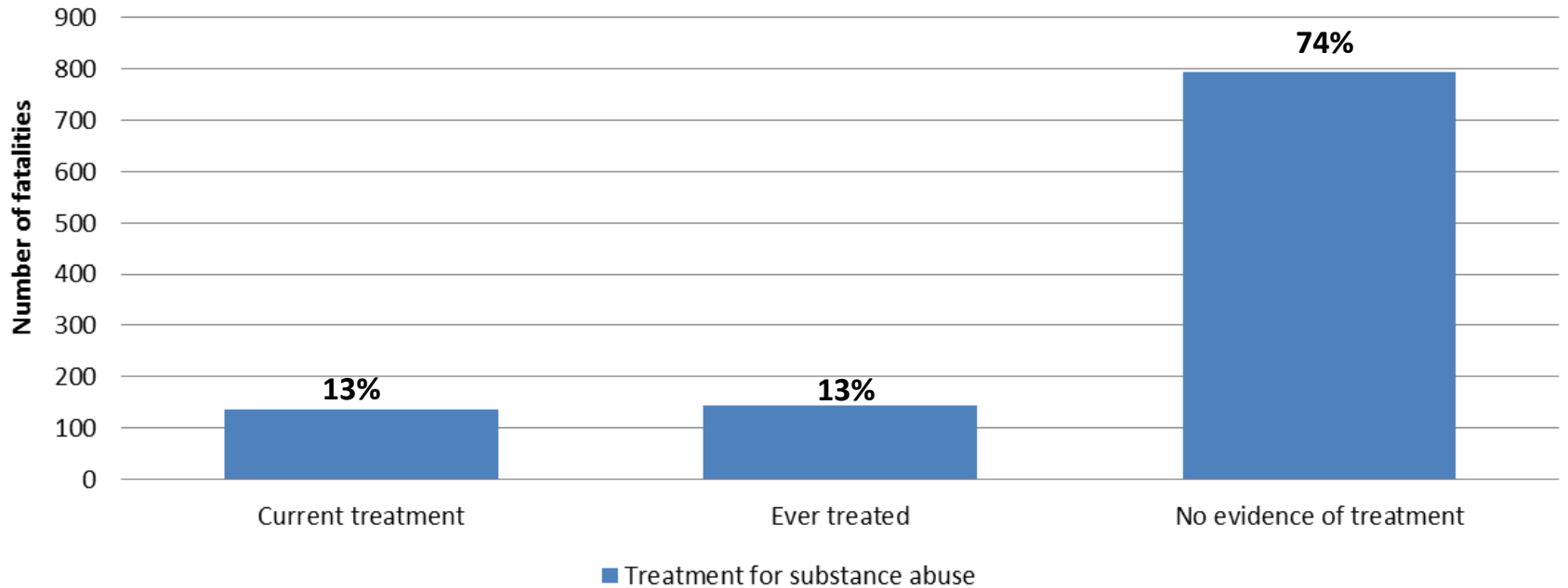
- Date
- Location
- Detailed toxicology
- Scene evidence
- Date/time last known alive
- Bystanders present
- Naloxone administration

Circumstances

- Mental health and substance abuse history
- Current/ever treated for substance abuse
- Recent release from an institution
- Pain treatment history

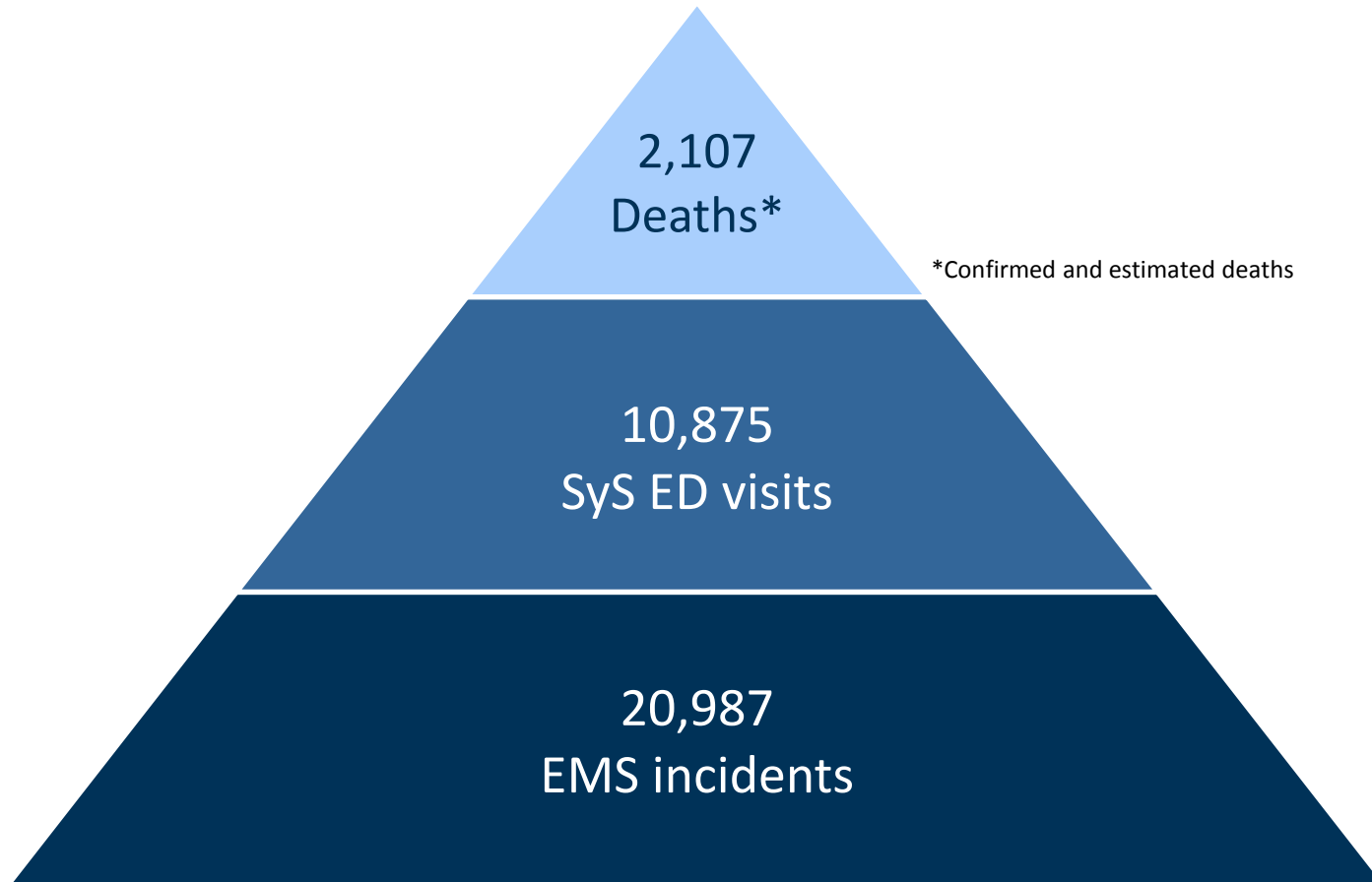
ESOOS: SUDORS

**Substance Abuse Treatment History Among
Opioid Overdose Fatalities in Massachusetts,
July-December 2016
(n=1,074)**

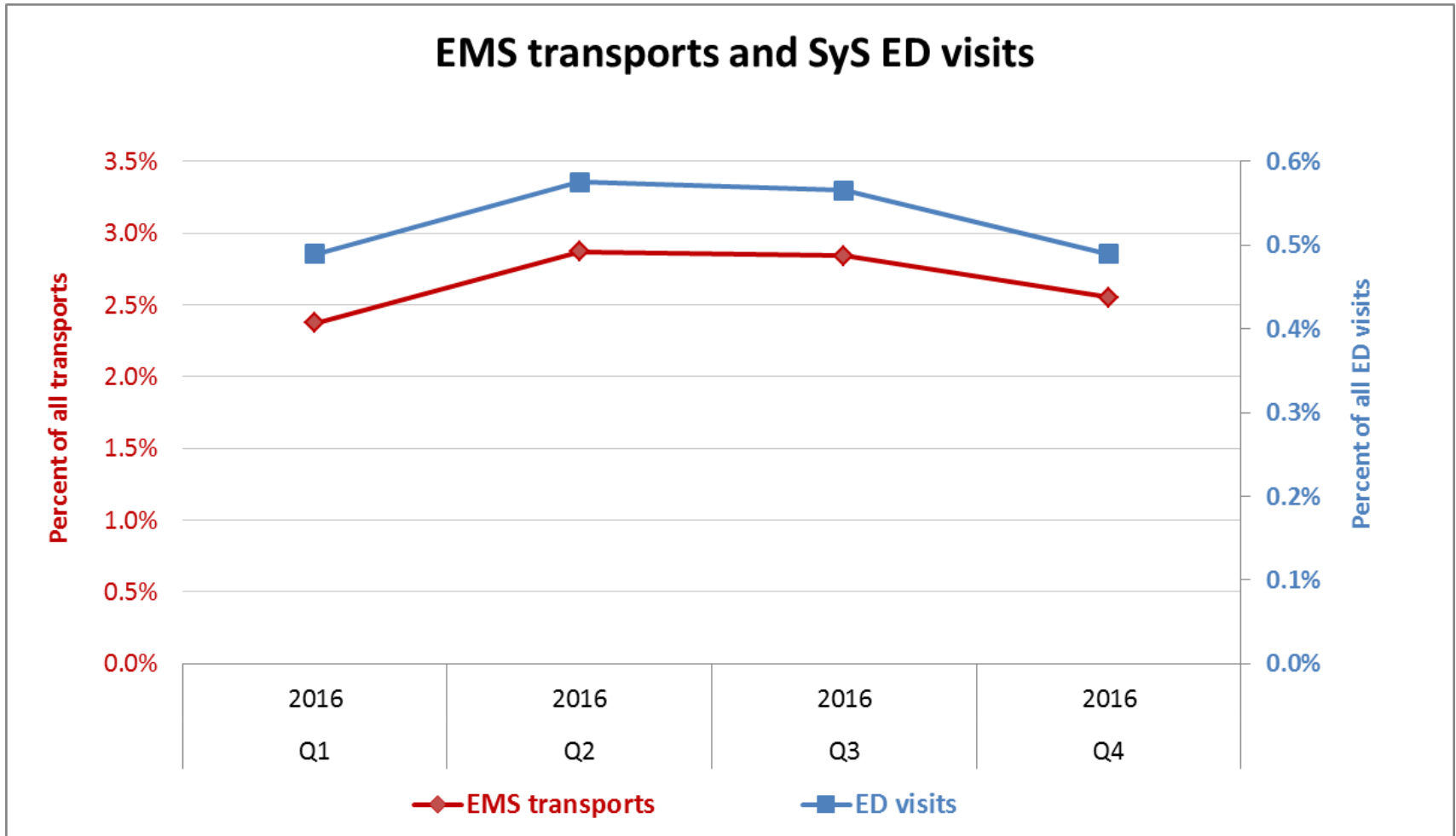


Source: MA SUDORS, September 2017 (Preliminary Data)

ESOOS: Non-Fatal and Fatal Opioid Overdoses in Massachusetts, 2016

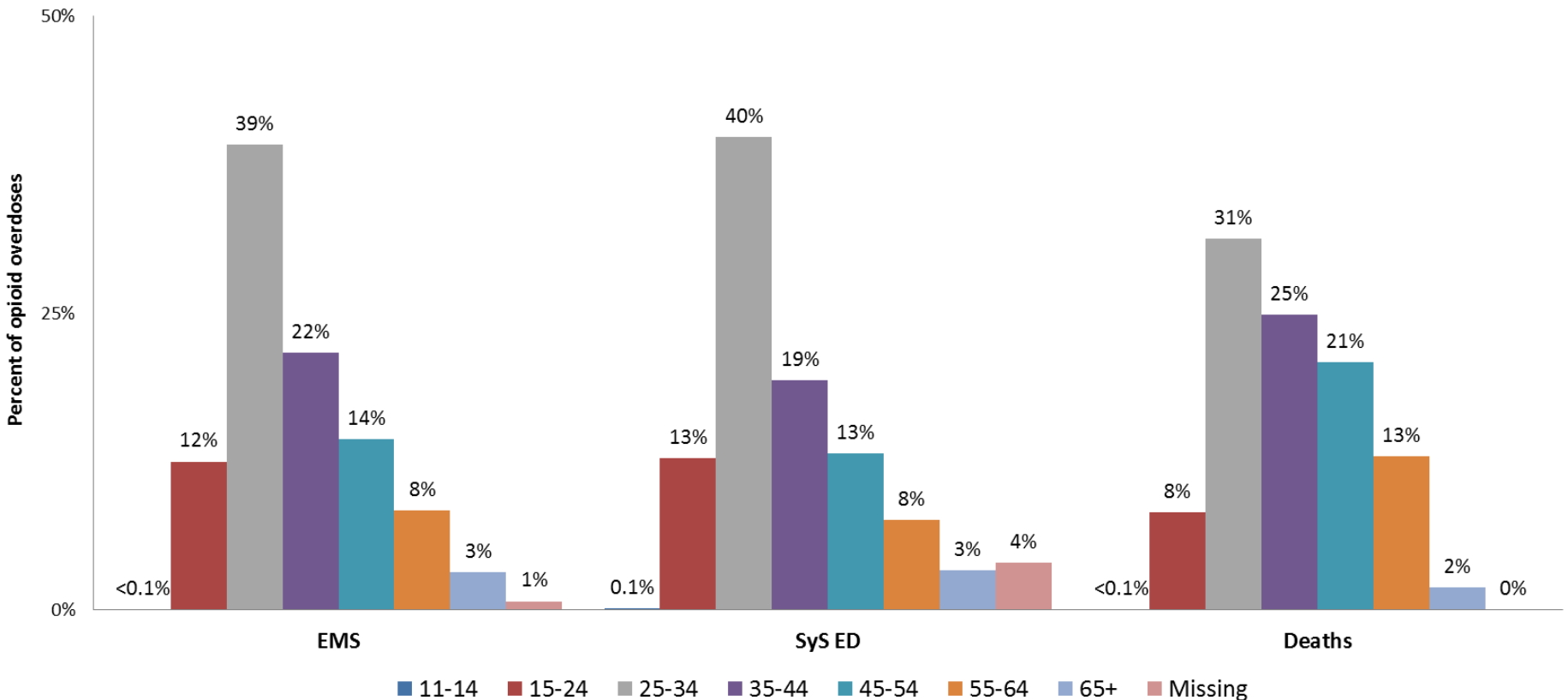


ESOOS: Non-Fatal and Fatal Opioid Overdoses in Massachusetts, 2016



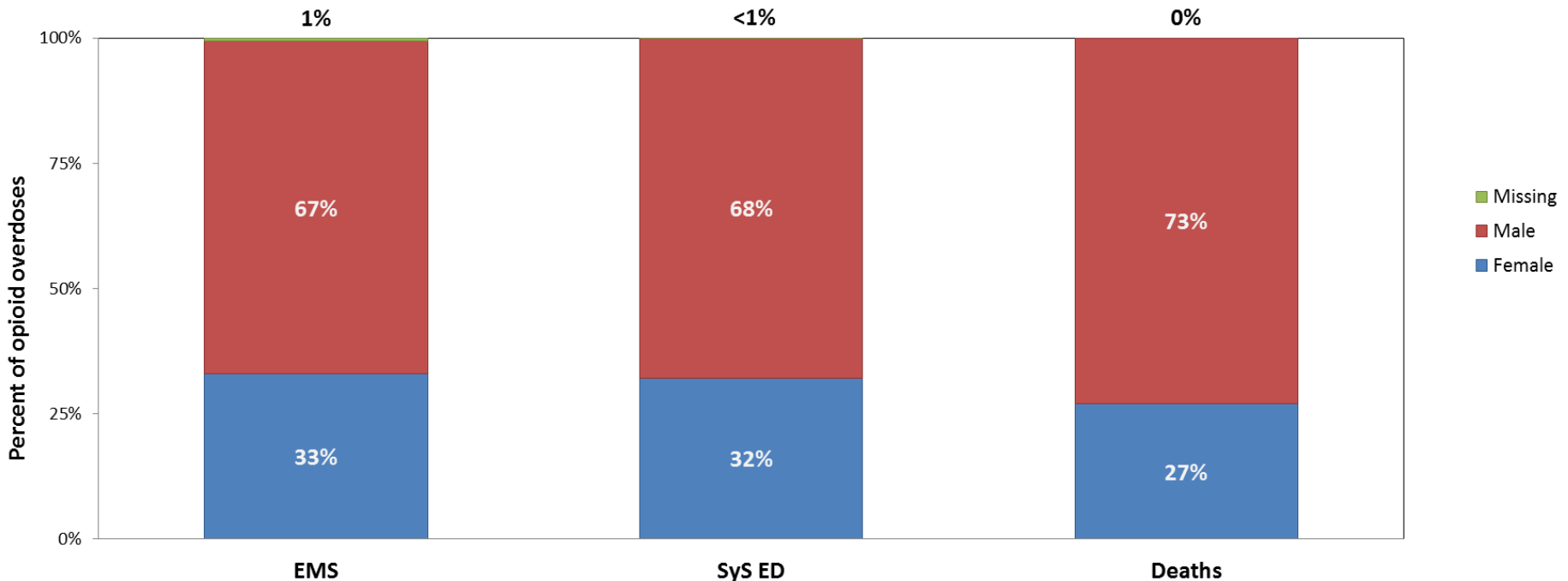
ESOOs: Non-Fatal and Fatal Opioid Overdoses in Massachusetts, 2016

Non-Fatal and Fatal Opioid Overdoses by Age Group Massachusetts, 2016



ESOOS: Non-Fatal and Fatal Opioid Overdoses in Massachusetts, 2016

Non-Fatal and Fatal Opioid Overdoses by Sex Massachusetts, 2016



Acknowledgements and Contact Information

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