

**Data Brief**

**Trends in Stimulant-Related Overdose Deaths**

**Massachusetts Department of Public Health**

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# Background

Overdose deaths that involve both opioids and stimulants can represent individuals who knowingly consumed both opioids and stimulants, or individuals who consumed a stimulant that unknowingly contained an opioid. Polysubstance use is a common risk factor we have been aware of and educating people on for many years.

* Knowingly using both opioids and stimulants is not new. Cocaine, in particular, has been consistently present in opioid-related overdose deaths.
* The lethality of fentanyl is driving the increase in all opioid-related overdose deaths including those involving stimulants. The presence of fentanyl in stimulants, especially cocaine, is a more recent phenomenon that we are concerned about and beginning to understand more through the use of drug checking technologies.

# Stimulant-Related Overdose Deaths

The figures on stimulant-related overdose deaths include confirmed data through 2018.

***Key Finding #1:*** *Counts of deaths involving stimulants have increased significantly since 2010 as a result of the presence of opioids. The red line shows that since 2014, almost nine out of every ten deaths involving stimulants also involve opioids. In 2018, 86% of deaths involving stimulants also involved opioids. The count of deaths involving stimulants without opioids (green line) declined by 4% per year between 2000 and 2015 and has remained relatively stable since.*

900

**Count of Stimulant-Related Deaths**

**MA Residents: 2000-2018**

800 766

700

600

Deaths Involving Stimulants

Stimulants in Combination with Any Opioid Stimulants Without Opioids (But Other Drugs)

500

400

300

200

176

100

0

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Notes: These deaths may include substances in addition to stimulants or opioids Source: MDPH Registry of Vital Records and Statistics

**Why is this important?** While stimulant related deaths have been increasing since 2010, this increase is closely linked to the opioid overdose epidemic, specifically fentanyl. These data suggest that interventions that address stimulant use alone will not be sufficient to reduce stimulant-related deaths.

***Key Finding #2:*** *The rate of overdose deaths involving stimulants and opioids is higher among males than females. The rate rose by 28% per year for males and 27% per year for females from 2010 to 2018.*

**Rate of Stimulant-Related Overdose Deaths in Combination**

**with Any Opioid by Gender, MA Residents: 2000-2018**

14.9

14.0

12.0

10.0

8.0

6.0

5.2

4.0

2.0

0.0

2.0

0.9

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Male Female

**Rate per 100,000**

Note: These deaths may include substances in addition to stimulants and opioids Source: MDPH Registry of Vital Records and Statistics

**Why is this important?** Understanding the gender break down, and the risk that males experience, is important to inform gender-specific strategies to engage individuals who use both opioids and cocaine, and those who primarily use cocaine.

***Key Finding #3:*** *The rate of overdose deaths involving stimulants and opioids is currently highest among Hispanic residents (12.3 per 100,000). The rate among Hispanics increased by 36% per year from 2012 to 2018. The rate among*

*non-Hispanic whites increased 35% per year from 2010-2015 and the rate among non-Hispanic blacks increased 31% per year from 2012-2018.*

14.0

**Rate of Stimulant-Related Overdose Deaths in Combination**

**with Any Opioid by Race/Ethnicity, MA Residents: 2000-2018**

12.0

12.3

11.0

10.0

8.0

6.6

6.0

4.0

2.4

2.0 2.0

1.4

0.0

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

non-Hispanic White non-Hispanic Black Hispanic

**Rate per 100,000**

Notes: These deaths may include substances in addition to stimulants and opioids

Non-Hispanic Asian/Pacific Islander and non-Hispanic Other are not displayed due to small counts Source: MDPH Registry of Vital Records and Statistics

**Why is this Important?** Understanding who is at greatest risk by race and Hispanic ethnicity over time allows us to best focus prevention programs and treatment resources to address population-specific needs.

**Technical Notes:** Drug overdose deaths are identified using underlying cause-of-death codes from the Tenth Revision of ICD (ICD–10): X40–X44 (unintentional), X60–X64 (suicide), X85 (homicide), and Y10–Y14 (undetermined). Drug overdose deaths involving a stimulant are identified by specific multiple cause-of-death codes for cocaine (T40.5) and psychostimulants with abuse potential, which include substances such as amphetamine, MDMA, and methamphetamine (T43.6).