



# Fatal Opioid-related Overdoses among MA Residents, 2000-2013

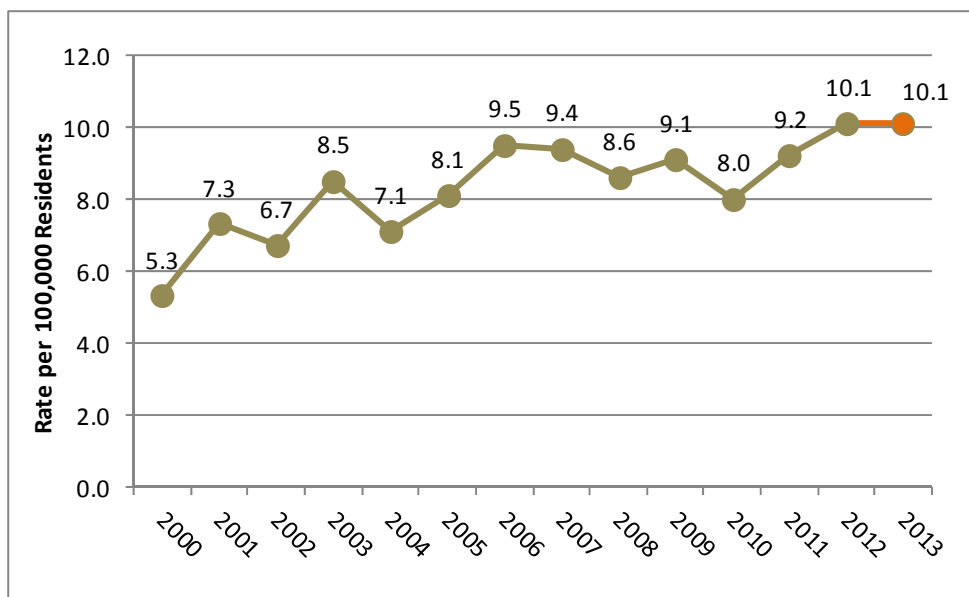
Massachusetts Department of Public Health

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The rate of unintentional opioid-related<sup>1</sup> overdose deaths, which includes deaths related to heroin, reached levels in 2012 previously unseen in Massachusetts. The rate of 10.1 deaths per 100,000 residents for 2012 (the most recent full year of data available) was the highest ever for unintentional opioid overdoses and represents a 90% increase from the rate of 5.3 deaths per 100,000 residents in 2000. In 2012, 668 Massachusetts residents died from unintentional opioid overdoses, a ten percent increase over the previous year. While data are still preliminary, unintentional overdose deaths for the first six months of 2013<sup>2</sup> point to even higher numbers than 2012. (Figures 1 and 2).

This bulletin provides a brief summary of the Massachusetts data to inform discussion about this national public health epidemic. The Department of Public Health is applying a number of promising practices to help reduce deaths, including promoting safe opiate prescribing, preventing opiate abuse from occurring and treating addictive disorders.

**Figure 1.** Rate of Unintentional Opioid Overdose Deaths, MA Residents, 2000-2013

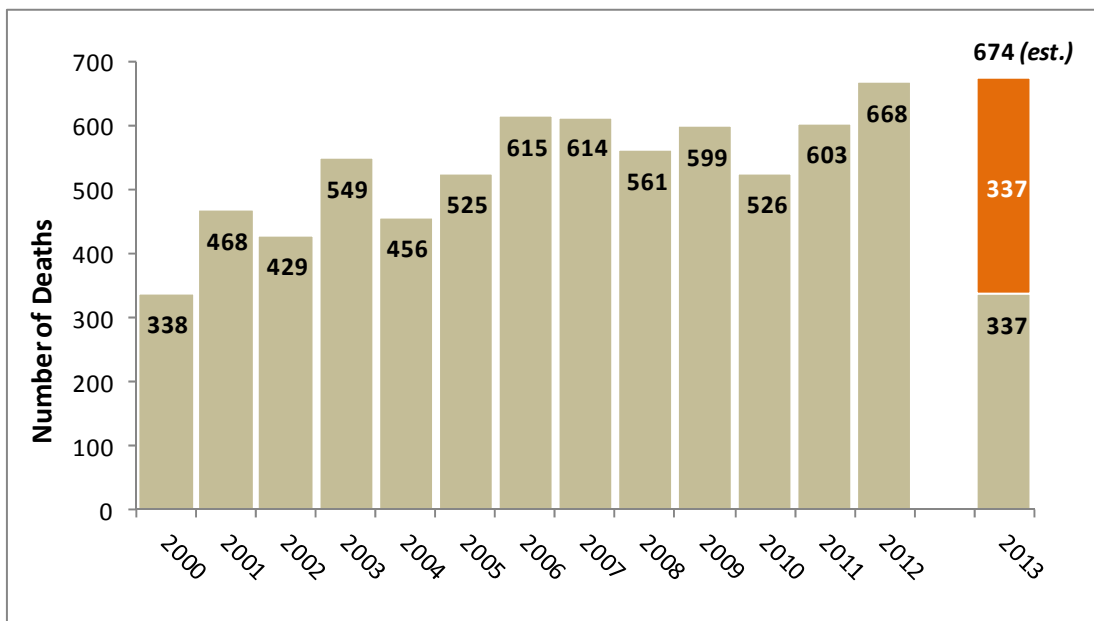


Source: Registry of Vital Records and Statistics, MDPH

<sup>1</sup> Unintentional includes unintentional *and undetermined* intents to account for a change in death coding that occurred in 2005. Opioids include heroin, opioid-based prescription painkillers, and other unspecified opioids. This report tracks opioid-related overdoses due to difficulties in identifying heroin separately. Many deaths related to heroin cannot be specifically coded as such due to the fast metabolism of heroin into morphine and the possible interaction of multiple drugs. To avoid underrepresenting the magnitude of the problem, all unintentional and undetermined opioid-related deaths are tracked.

<sup>2</sup> This is the projected rate for 2013 based on the first six months of preliminary data.

**Figure 2.** Number of Unintentional Opioid Overdose Deaths, MA Residents, 2000-2013



Source: Registry of Vital Records and Statistics, MDPH

**Table 1.** Cities/Towns with Over 7 Unintentional Opioid Overdose Deaths in 2012, MA Residents

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
BOSTON	36	66	57	72	55	47	90	82	52	69	43	59	62
BROCKTON	8	7	9	10	8	14	10	17	15	13	8	13	9
CHICOPEE	2	6	7	4	3	7	6	5	5	7	7	4	9
EVERETT	0	2	4	14	6	5	7	6	3	8	2	8	9
FALL RIVER	10	22	17	24	20	21	19	26	20	23	20	25	22
HAVERTHILL	0	5	2	5	5	4	7	11	8	8	3	2	11
LOWELL	11	13	5	13	12	9	11	17	10	20	9	25	8
LYNN	9	18	12	21	15	25	22	22	8	15	15	10	21
MALDEN	4	5	7	5	9	3	9	7	9	8	10	4	9
MEDFORD	2	7	5	6	7	8	7	5	10	6	9	5	10
NEW BEDFORD	12	11	22	20	25	27	28	12	26	17	27	19	25
PITTSFIELD	1	1	0	0	1	4	0	5	1	3	0	1	8
QUINCY	6	11	9	13	15	12	11	6	19	19	11	22	23
REVERE	4	8	10	11	10	8	8	7	9	14	10	9	11
SAUGUS	5	6	3	6	1	2	4	3	5	5	4	2	9
SPRINGFIELD	16	18	13	20	12	7	16	11	19	17	13	15	22
TAUNTON	3	5	8	7	4	9	6	4	4	5	5	3	14
WEYMOUTH	5	4	4	5	5	13	7	6	9	15	11	10	11
WORCESTER	26	33	15	10	10	16	21	33	25	17	26	22	24

Source: Registry of Vital Records and Statistics, MDPH

**Table 2.** A Comparison between Two Time Periods for Cities/Towns with 10 or more Unintentional Opioid Overdose Deaths between 2008 and 2012, MA Residents

	5-YR Total 2003-2007	5-YR Total 2008-2012
<b>AGAWAM*</b>	9	11
ARLINGTON	14	16
<b>ATTLEBORO*</b>	13	27
BARNSTABLE	23	23
BEVERLY	16	18
BILLERICA	17	12
BOSTON	346	285
<b>BOURNE*</b>	3	12
<b>BRAINTREE*</b>	9	13
<b>BRIDGEWATER*</b>	9	13
BROCKTON	59	58
CAMBRIDGE	37	14
<b>CARVER*</b>	4	10
CHELSEA	29	21
<b>CHICOPEE*</b>	25	32
<b>DANVERS*</b>	8	10
DARTMOUTH	14	15
DEDHAM	13	11
DRACUT	12	13
EVERETT	38	30
FAIRHAVEN	15	12
FALL RIVER	110	110
<b>FALMOUTH*</b>	12	17
FITCHBURG	27	26
FRAMINGHAM	24	23
GLOUCESTER	28	13
HAVERHILL	32	32
<b>HOLYOKE*</b>	13	27
LAWRENCE	37	23
LEOMINSTER	21	15
LOWELL	62	72
LYNN	105	69
<b>MALDEN*</b>	33	40
MARLBOROUGH	20	11
<b>MARSHFIELD*</b>	8	15
<b>MEDFORD*</b>	33	40
MELROSE	12	14
METHUEN	21	10
<b>MIDDLEBOROUGH*</b>	9	13
MILFORD	11	10

	5-YR Total 2003-2007	5-YR Total 2008-2012
NEW BEDFORD	112	114
<b>NEWTON*</b>	11	18
NORTH ADAMS	10	10
<b>NORTH ATTLEBOROUGH*</b>	8	16
<b>NORTHAMPTON*</b>	9	16
<b>NORTHBRIDGE*</b>	5	12
<b>NORTON*</b>	9	11
NORWOOD	11	13
PEABODY	18	18
<b>PEMBROKE*</b>	5	11
<b>PITTSFIELD*</b>	10	13
<b>PLYMOUTH*</b>	15	28
<b>QUINCY*</b>	57	94
<b>RANDOLPH*</b>	8	14
<b>REVERE*</b>	44	53
ROCKLAND	14	14
SALEM	31	17
<b>SALISBURY*</b>	6	10
<b>SAUGUS*</b>	16	25
<b>SOMERSET*</b>	6	10
SOMERVILLE	26	24
<b>SOUTHBRIDGE*</b>	8	11
<b>SPRINGFIELD*</b>	66	86
<b>STONEHAM*</b>	9	11
<b>STOUGHTON*</b>	12	26
TAUNTON	30	31
<b>TEWKSBURY*</b>	3	13
<b>WAKEFIELD*</b>	10	13
WALTHAM	23	17
<b>WAREHAM*</b>	10	15
WATERTOWN	17	10
<b>WEBSTER*</b>	5	13
WEST SPRINGFIELD	17	13
WESTFIELD	17	18
<b>WEYMOUTH*</b>	36	56
<b>WILMINGTON*</b>	7	10
<b>WINTHROP*</b>	16	20
<b>WOBURN*</b>	17	21
<b>WORCESTER*</b>	90	114
YARMOUTH	14	13

\* Indicates a 20% or greater increase between the two time periods.

Across Massachusetts, the total number of unintentional opioid overdose deaths increased from 2,759 in the first 5-year time period (2003-2007), to 2,957 in the second 5-year time period (2008-2012). In addition to the burden in major cities, many smaller communities saw increases between the two time periods.

## DATA SOURCES AND METHOD NOTES

### Data Sources:

Deaths to Massachusetts Residents:

MA Registry of Vital Records and Statistics, MA Department of Public Health.

Please note that 2013 death data are preliminary and subject to updates. The projected rate for 2013 is based on the first six months of data. Case reviews of deaths are evaluated and updated on an ongoing basis. A small number of death certificates have yet to be received from the municipalities and many have yet to be assigned cause-of-death codes.

The Department's 2013 death report will be available in the summer of 2014.

### Population Data:

2000-2009. National Center for Health Statistics. Postcensal estimates of the resident population of the United States, Based on Vintage 2010 file. March 29, 2012.

2010-2011. National Center for Health Statistics. Postcensal estimates of the resident population of the United States, Based on Vintage 2011 file. May 17, 2012.

2012. U.S. Census Bureau, Population Division. Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States.

### Method Notes:

Unintentional opioid-related poisoning deaths (overdoses) were defined using the International Classification of Disease (ICD-10) codes for mortality. The following codes were selected from the underlying cause of death field to identify poisonings of an unintentional (and undetermined) intent: X40-X49, Y10-Y19. All multiple cause of death fields were then used to identify an opioid-related death: T40.0, T40.1, T40.2, T40.3, T40.4, and T40.6.

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All rates are crude rates per 100,000 residents (# of deaths/total population\*100,000).

## RESOURCES

For additional data:

### **Injury Surveillance Program**

250 Washington Street, 6th Floor

Boston MA, 02108

Tel. (617) 624-5648

[www.mass.gov/dph/bhsre/isp/isp.htm](http://www.mass.gov/dph/bhsre/isp/isp.htm)

For general poisoning prevention:

### **Injury Prevention and Control Program**

250 Washington Street, 4th Floor

Boston MA, 02108

Tel. (617) 624-5557

Fax (617) 624-5075

TTY (617) 624-5992

[www.mass.gov/dph/fch/injury/index.htm](http://www.mass.gov/dph/fch/injury/index.htm)

For information on treatment and services:

### **Bureau of Substance Abuse Services**

250 Washington Street, 3rd Floor

Boston MA, 02108

Tel. (617) 624-5111

Fax (617) 624-5185

TTY 1-888-448-8321

[www.mass.gov/dph/bsas/BSAS.htm](http://www.mass.gov/dph/bsas/BSAS.htm)