

POSTED: AUGUST 2017

Massachusetts Department of Public Health

**Opioid-Related EMS Incidents Massachusetts Residents: 2013-2017**

**Note to Readers:** This quarter’s EMS data includes changes from previous reports. After receiving feedback from cities and towns following the posting of 2015 and 2016 counts by town in the May 2017 report, DPH completed a validation of the logic used to identify opioid cases which led to several changes. These changes removed cases that were previously counted as opioid-related overdose incidents but are most likely not true overdoses. Additionally, in order to be consistent with CDC reporting requirements, this report includes all incidents involving people ages 11 and above; previously all ages were included. As a result of these changes, the total numbers of opioid-related overdose incidents have been updated to: 8,389 in 2013, 13,226 in 2014, 17,252 in 2015, and 20,978 in 2016. Previous totals were: 10,048 in 2013, 15,107 in 2014, 19,572 in 2015, and

23,499 in 2016.

Not all ambulance services have reported their most recent data at the time this report was generated, and therefore the numbers cited here may be underestimates. Counts will be updated on a quarterly basis. Due to non-reporting by several large ambulance services, DPH expects significant changes for the fourth quarter 2016 and first quarter 2017 data when the report is next updated.

# 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. To more accurately identify ambulance trips that are opioid-related, several pieces of information from MATRIS are combined such as: a 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. Data for Boston came from applying this algorithm to events identified by Boston EMS as “Narcotic Related Incidents” (NRI).

# Results

Between the first quarter of 2013 and the third quarter of 2016, there was an increasing trend in the percentage of EMS incidents that involved opioid-related overdoses. Since then, there has been no statistically significant change in the percentages that are opioid-related overdoses.

In 2017, the greatest number of suspected opioid overdose incidents was among males aged 25-34 (28% of opioid-related incidents). There is an increasing trend in the quantity of Naloxone being dispensed during each opioid-related incident. On average, EMS administered Naloxone 1.4 times per opioid-related incident in the first quarter of 2017. Almost one third of opioid-related incidents required more than one dose of Naloxone.

Please note, counts in this table reflect the town in which the incident occurred (not the city/town of residence as shown in the table of deaths by city/town). † indicates no opioid overdose incidents were recorded, which may be due to non-reporting by EMS services or no incidents occurring.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| Abington | <7 | <7 | † | † | **<7** | † | 8 | 12 | 9 | **29** | 14 |
| Acton | 9 | <7 | 7 | <7 | **24** | <7 | <7 | <7 | <7 | **19** | <7 |
| Acushnet | <7 | † | † | † | **<7** | † | <7 | † | † | **<7** | † |
| Adams | † | † | † | † | **†** | † | † | † | † | **†** | <7 |
| Agawam | <7 | <7 | <7 | 21 | **28** | 17 | 8 | 16 | 13 | **54** | 9 |
| Alford | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Amesbury | <7 | 13 | <7 | 8 | **32** | 15 | 24 | 13 | 16 | **68** | 11 |
| Amherst | <7 | <7 | <7 | 7 | **17** | 8 | <7 | <7 | <7 | **20** | 8 |
| Andover | <7 | 13 | <7 | <7 | **28** | <7 | <7 | 9 | <7 | **22** | <7 |
| Aquinnah | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Arlington | 15 | 16 | 32 | 21 | **84** | 15 | 16 | 15 | 8 | **54** | 8 |
| Ashburnham | † | † | † | † | **†** | † | <7 | † | † | **<7** | † |
| Ashby | † | † | <7 | <7 | **<7** | <7 | † | <7 | <7 | **8** | † |
| Ashfield | † | † | † | <7 | **<7** | † | † | † | <7 | **<7** | † |
| Ashland | <7 | <7 | <7 | <7 | **10** | <7 | 7 | 7 | <7 | **23** | <7 |
| Athol | <7 | \* | 9 | 14 | **36** | <7 | \* | 9 | 16 | **38** | <7 |
| Attleboro | 27 | 21 | 30 | 19 | **97** | 22 | 39 | 38 | 40 | **139** | 36 |
| Auburn | <7 | † | <7 | 8 | **13** | <7 | <7 | 11 | 8 | **27** | <7 |
| Avon | <7 | <7 | <7 | <7 | **14** | <7 | <7 | <7 | <7 | **19** | <7 |
| Ayer | † | <7 | <7 | † | **<7** | <7 | † | <7 | <7 | **9** | † |
| Barnstable | 94 | 55 | 63 | 51 | **263** | 45 | 54 | 61 | 58 | **218** | 61 |
| Barre | <7 | <7 | <7 | <7 | **8** | <7 | <7 | <7 | <7 | **8** | <7 |
| Becket | † | <7 | † | † | **<7** | † | <7 | † | † | **<7** | † |
| Bedford | † | <7 | <7 | <7 | **9** | <7 | 8 | 9 | <7 | **27** | <7 |
| Belchertown | <7 | † | † | † | **<7** | † | † | † | † | **†** | † |
| Bellingham | 8 | <7 | 8 | \* | **26** | 7 | 11 | 11 | 13 | **42** | 11 |
| Belmont | <7 | 7 | <7 | <7 | **18** | 10 | 11 | \* | <7 | **32** | <7 |
| Berkley | <7 | † | <7 | <7 | **<7** | <7 | <7 | <7 | <7 | **11** | <7 |
| Berlin | <7 | † | <7 | <7 | **<7** | <7 | † | † | <7 | **<7** | <7 |
| Bernardston | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Beverly | 21 | 27 | 33 | 22 | **103** | 24 | 31 | 24 | 31 | **110** | 25 |
| Billerica | † | <7 | \* | † | **10** | 19 | 12 | 29 | 11 | **71** | 20 |
| Blackstone | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Blandford | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Bolton | <7 | <7 | † | <7 | **<7** | <7 | <7 | <7 | <7 | **7** | † |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| Boston | 491 | 475 | 511 | 477 | **1954** | 321 | 506 | 520 | 322 | **1669** | 348 |
| Bourne | <7 | <7 | 21 | 18 | **46** | 18 | 28 | 31 | 12 | **89** | 12 |
| Boxborough | † | † | <7 | † | **<7** | <7 | <7 | <7 | <7 | **17** | † |
| Boxford | <7 | <7 | <7 | <7 | **<7** | † | <7 | <7 | <7 | **7** | <7 |
| Boylston | † | † | † | <7 | **<7** | † | † | <7 | <7 | **7** | † |
| Braintree | 26 | 15 | 19 | 27 | **87** | 23 | 32 | 26 | 41 | **122** | 23 |
| Brewster | 7 | † | <7 | <7 | **15** | <7 | <7 | † | <7 | **<7** | † |
| Bridgewater | <7 | <7 | † | † | **<7** | <7 | † | † | <7 | **<7** | <7 |
| Brimfield | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Brockton | 225 | 187 | 91 | 180 | **683** | 189 | 262 | 245 | 169 | **865** | 173 |
| Brookfield | <7 | <7 | † | <7 | **<7** | † | <7 | † | <7 | **<7** | <7 |
| Brookline | 7 | 7 | <7 | <7 | **24** | 7 | <7 | <7 | <7 | **20** | † |
| Buckland | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Burlington | 7 | <7 | <7 | <7 | **18** | <7 | <7 | 7 | <7 | **20** | 7 |
| Cambridge | 56 | 71 | 78 | 72 | **277** | 90 | 154 | 120 | 93 | **457** | 76 |
| Canton | <7 | <7 | † | <7 | **<7** | <7 | 13 | \* | 10 | **34** | <7 |
| Carlisle | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Carver | <7 | <7 | <7 | 8 | **23** | 13 | 12 | 14 | 13 | **52** | 11 |
| Charlemont | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Charlton | † | † | † | † | **†** | <7 | † | † | <7 | **<7** | † |
| Chatham | <7 | † | † | † | **<7** | <7 | <7 | <7 | <7 | **7** | <7 |
| Chelmsford | 7 | 11 | 20 | 9 | **47** | 17 | 16 | 10 | 10 | **53** | 17 |
| Chelsea | 34 | 71 | 87 | 71 | **263** | 56 | 70 | 81 | 41 | **248** | 48 |
| Cheshire | † | † | † | <7 | **<7** | <7 | † | <7 | <7 | **<7** | <7 |
| Chester | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Chesterfield | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Chicopee | 36 | 69 | 48 | 78 | **231** | 74 | 56 | 45 | 52 | **227** | 43 |
| Chilmark | † | † | <7 | † | **<7** | † | † | <7 | † | **<7** | † |
| Clarksburg | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Clinton | 10 | 11 | 11 | 9 | **41** | <7 | 13 | \* | 28 | **54** | <7 |
| Cohasset | <7 | † | † | † | **<7** | † | † | <7 | <7 | **<7** | † |
| Colrain | † | <7 | † | † | **<7** | † | † | † | † | **†** | † |
| Concord | <7 | <7 | <7 | <7 | **17** | <7 | 7 | <7 | <7 | **18** | <7 |
| Conway | † | † | † | † | **†** | <7 | † | † | † | **<7** | † |
| Cummington | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Dalton | <7 | <7 | † | <7 | **8** | <7 | <7 | <7 | <7 | **8** | <7 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| Danvers | 40 | 20 | 43 | 35 | **138** | 31 | 45 | 39 | 22 | **137** | 28 |
| Dartmouth | 13 | 21 | 16 | 20 | **70** | 18 | 24 | 25 | 24 | **91** | 19 |
| Dedham | 14 | 12 | <7 | <7 | **36** | 13 | 24 | 13 | † | **50** | <7 |
| Deerfield | <7 | <7 | <7 | † | **<7** | <7 | <7 | † | † | **<7** | † |
| Dennis | 13 | <7 | 8 | <7 | **33** | † | <7 | 9 | \* | **17** | 9 |
| Dighton | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Douglas | <7 | † | <7 | † | **<7** | <7 | <7 | † | † | **<7** | † |
| Dover | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Dracut | 12 | 15 | 16 | 19 | **62** | 12 | 10 | 14 | 12 | **48** | 9 |
| Dudley | † | \* | <7 | <7 | **13** | † | <7 | 8 | \* | **18** | <7 |
| Dunstable | † | † | <7 | † | **<7** | † | † | <7 | † | **<7** | <7 |
| Duxbury | <7 | <7 | <7 | <7 | **12** | <7 | <7 | <7 | <7 | **18** | <7 |
| East  Bridgewater | † | † | † | † | **†** | † | † | † | <7 | **<7** | † |
| East Brookfield | † | <7 | † | <7 | **<7** | † | † | † | <7 | **<7** | † |
| East  Longmeadow | <7 | <7 | <7 | 8 | **19** | <7 | 8 | <7 | 9 | **23** | 7 |
| Eastham | <7 | <7 | <7 | † | **<7** | <7 | <7 | <7 | <7 | **9** | <7 |
| Easthampton | <7 | <7 | <7 | † | **<7** | † | † | <7 | † | **<7** | † |
| Easton | 7 | † | <7 | <7 | **13** | <7 | <7 | <7 | † | **<7** | <7 |
| Edgartown | † | <7 | † | <7 | **<7** | <7 | <7 | <7 | <7 | **7** | <7 |
| Egremont | † | † | † | † | **†** | † | † | <7 | † | **<7** | † |
| Erving | <7 | † | † | † | **<7** | † | † | † | <7 | **<7** | <7 |
| Essex | <7 | † | <7 | † | **<7** | <7 | <7 | † | <7 | **<7** | <7 |
| Everett | 37 | 27 | 36 | 29 | **129** | 34 | 55 | 48 | 38 | **175** | 38 |
| Fairhaven | 13 | 20 | 23 | 16 | **72** | 25 | 24 | 19 | 14 | **82** | 11 |
| Fall River | 20 | 66 | 156 | 185 | **427** | 151 | 155 | 297 | 226 | **829** | 193 |
| Falmouth | 32 | 33 | 18 | 13 | **96** | 23 | 56 | 46 | 45 | **170** | 40 |
| Fitchburg | 43 | 47 | 55 | 65 | **210** | 71 | 80 | 90 | 66 | **307** | 53 |
| Florida | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Foxborough | <7 | † | <7 | † | **7** | <7 | <7 | 12 | 16 | **34** | 11 |
| Framingham | 43 | 57 | 42 | 36 | **178** | 29 | 60 | 66 | 55 | **210** | 42 |
| Franklin | \* | <7 | 8 | 7 | **25** | <7 | <7 | <7 | † | **<7** | <7 |
| Freetown | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Gardner | 18 | 19 | 25 | 22 | **84** | 14 | 29 | 24 | 12 | **79** | 20 |
| Georgetown | <7 | <7 | <7 | <7 | **15** | <7 | <7 | <7 | <7 | **10** | <7 |
| Gill | † | † | † | † | **†** | † | <7 | † | <7 | **<7** | † |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| Gloucester | 26 | 22 | 31 | 23 | **102** | 39 | 30 | 29 | 9 | **107** | † |
| Goshen | † | † | † | † | **†** | † | † | <7 | † | **<7** | † |
| Gosnold | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Grafton | <7 | 9 | 8 | <7 | **23** | <7 | <7 | <7 | <7 | **16** | <7 |
| Granby | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Granville | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Great  Barrington | <7 | † | † | <7 | **<7** | <7 | <7 | <7 | <7 | **12** | <7 |
| Greenfield | <7 | 8 | <7 | 13 | **32** | 10 | 7 | 21 | 9 | **47** | 10 |
| Groton | † | † | † | † | **†** | <7 | † | † | <7 | **<7** | † |
| Groveland | † | † | <7 | † | **<7** | <7 | <7 | <7 | <7 | **<7** | <7 |
| Hadley | <7 | <7 | <7 | 7 | **12** | 7 | <7 | <7 | <7 | **19** | <7 |
| Halifax | <7 | † | 8 | <7 | **14** | <7 | 7 | <7 | 9 | **21** | <7 |
| Hamilton | † | <7 | † | † | **<7** | † | † | † | † | **†** | † |
| Hampden | <7 | <7 | † | † | **<7** | † | <7 | † | <7 | **<7** | <7 |
| Hancock | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Hanover | <7 | † | <7 | † | **<7** | † | † | † | <7 | **<7** | <7 |
| Hanson | 14 | 12 | 9 | 8 | **43** | 7 | <7 | 9 | <7 | **27** | <7 |
| Hardwick | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Harvard | † | † | † | † | **†** | † | † | † | † | **†** | <7 |
| Harwich | <7 | † | <7 | † | **<7** | † | <7 | † | † | **<7** | 9 |
| Hatfield | <7 | † | <7 | † | **<7** | † | † | † | <7 | **<7** | † |
| Haverhill | 72 | 78 | 89 | 100 | **339** | 91 | 89 | 77 | 104 | **361** | 87 |
| Hawley | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Heath | † | <7 | † | <7 | **<7** | † | † | † | † | **†** | † |
| Hingham | <7 | <7 | <7 | <7 | **11** | <7 | <7 | <7 | 13 | **23** | <7 |
| Hinsdale | † | † | † | † | **†** | † | <7 | † | † | **<7** | † |
| Holbrook | † | † | \* | <7 | **14** | 15 | 14 | 21 | 17 | **67** | 16 |
| Holden | <7 | <7 | <7 | <7 | **13** | <7 | <7 | <7 | <7 | **14** | <7 |
| Holland | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Holliston | † | † | <7 | <7 | **<7** | † | † | † | † | **†** | <7 |
| Holyoke | 54 | 61 | 57 | 92 | **264** | 81 | 86 | 64 | 75 | **306** | 55 |
| Hopedale | <7 | <7 | † | † | **<7** | † | † | † | <7 | **<7** | <7 |
| Hopkinton | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Hubbardston | <7 | <7 | † | † | **<7** | <7 | <7 | <7 | † | **7** | <7 |
| Hudson | <7 | \* | 17 | 7 | **36** | 10 | 10 | 7 | † | **27** | <7 |
| Hull | <7 | † | <7 | † | **<7** | 9 | <7 | <7 | † | **16** | <7 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| Huntington | † | † | † | <7 | **<7** | † | † | † | † | **†** | † |
| Ipswich | <7 | <7 | <7 | <7 | **12** | 7 | <7 | <7 | <7 | **20** | 8 |
| Kingston | 10 | <7 | 8 | <7 | **25** | <7 | <7 | <7 | <7 | **9** | <7 |
| Lakeville | <7 | † | <7 | <7 | **9** | <7 | <7 | 27 | 11 | **47** | 17 |
| Lancaster | <7 | <7 | <7 | <7 | **7** | <7 | <7 | <7 | <7 | **7** | † |
| Lanesborough | † | † | † | † | **†** | † | † | † | <7 | **<7** | † |
| Lawrence | 132 | 86 | 109 | 94 | **421** | 191 | 96 | 161 | 170 | **618** | 142 |
| Lee | † | <7 | <7 | † | **<7** | <7 | <7 | <7 | <7 | **7** | <7 |
| Leicester | <7 | <7 | <7 | <7 | **16** | <7 | <7 | <7 | <7 | **8** | <7 |
| Lenox | <7 | † | † | <7 | **<7** | † | <7 | <7 | † | **<7** | <7 |
| Leominster | 23 | 41 | 59 | 40 | **163** | 49 | 66 | 111 | 62 | **288** | 65 |
| Leverett | † | † | † | † | **†** | † | † | † | † | **†** | <7 |
| Lexington | <7 | 8 | <7 | <7 | **18** | <7 | <7 | <7 | † | **9** | † |
| Leyden | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Lincoln | † | † | † | † | **†** | <7 | † | <7 | † | **<7** | † |
| Littleton | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Longmeadow | <7 | <7 | <7 | <7 | **15** | <7 | <7 | <7 | <7 | **13** | <7 |
| Lowell | 124 | 153 | 185 | 144 | **606** | 179 | 179 | 197 | 218 | **773** | 202 |
| Ludlow | <7 | † | † | <7 | **<7** | † | † | <7 | † | **<7** | † |
| Lunenburg | <7 | 7 | <7 | <7 | **17** | <7 | <7 | <7 | <7 | **9** | † |
| Lynn | 53 | 90 | 63 | 73 | **279** | 92 | 108 | 132 | 114 | **446** | 110 |
| Lynnfield | <7 | <7 | <7 | <7 | **14** | <7 | <7 | <7 | <7 | **9** | <7 |
| Malden | 22 | 83 | 50 | 33 | **188** | 36 | 56 | 61 | 39 | **192** | 29 |
| Manchester | † | <7 | <7 | <7 | **<7** | † | <7 | <7 | † | **<7** | <7 |
| Mansfield | <7 | <7 | <7 | † | **<7** | <7 | 9 | 10 | <7 | **28** | 7 |
| Marblehead | <7 | <7 | <7 | <7 | **13** | <7 | \* | 14 | 8 | **35** | 8 |
| Marion | <7 | <7 | <7 | <7 | **9** | <7 | <7 | <7 | <7 | **<7** | <7 |
| Marlborough | 12 | 17 | 14 | 11 | **54** | 21 | 13 | 9 | † | **43** | <7 |
| Marshfield | <7 | † | † | † | **<7** | † | † | <7 | † | **<7** | † |
| Mashpee | 13 | \* | 10 | <7 | **36** | <7 | 12 | 17 | \* | **42** | 16 |
| Mattapoisett | <7 | <7 | <7 | <7 | **12** | <7 | 7 | <7 | <7 | **13** | <7 |
| Maynard | 7 | <7 | <7 | <7 | **14** | <7 | <7 | <7 | <7 | **12** | 9 |
| Medfield | † | <7 | <7 | † | **<7** | <7 | <7 | <7 | <7 | **8** | <7 |
| Medford | 25 | 28 | 39 | 30 | **122** | 40 | 42 | 34 | 21 | **137** | 13 |
| Medway | <7 | † | <7 | <7 | **8** | <7 | <7 | <7 | 10 | **21** | 7 |
| Melrose | 7 | <7 | 13 | <7 | **29** | 16 | 17 | 17 | 9 | **59** | 7 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| Mendon | † | † | † | † | **†** | † | † | † | <7 | **<7** | <7 |
| Merrimac | <7 | <7 | <7 | <7 | **14** | <7 | † | <7 | <7 | **<7** | <7 |
| Methuen | 24 | 11 | 11 | 14 | **60** | 17 | 13 | 13 | 14 | **57** | 7 |
| Middleborough | † | † | † | † | **†** | † | † | <7 | † | **<7** | <7 |
| Middlefield | † | † | † | † | **†** | † | † | <7 | † | **<7** | † |
| Middleton | <7 | <7 | <7 | <7 | **<7** | <7 | <7 | <7 | † | **12** | <7 |
| Milford | <7 | <7 | 13 | 11 | **36** | <7 | 14 | 22 | \* | **54** | 13 |
| Millbury | 12 | 9 | 14 | 10 | **45** | 7 | 19 | 17 | 9 | **52** | 8 |
| Millis | † | † | <7 | † | **<7** | <7 | <7 | <7 | 7 | **17** | <7 |
| Millville | <7 | <7 | † | <7 | **<7** | <7 | <7 | † | <7 | **7** | <7 |
| Milton | <7 | 7 | 12 | <7 | **29** | 7 | 8 | 9 | † | **24** | <7 |
| Monroe | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Monson | <7 | <7 | <7 | <7 | **10** | <7 | <7 | <7 | <7 | **12** | <7 |
| Montague | <7 | <7 | <7 | <7 | **15** | \* | 10 | 7 | <7 | **28** | <7 |
| Monterey | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Montgomery | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Mount  Washington | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Nahant | <7 | <7 | † | <7 | **7** | <7 | <7 | † | <7 | **<7** | † |
| Nantucket | <7 | <7 | † | <7 | **11** | <7 | <7 | 9 | <7 | **18** | <7 |
| Natick | <7 | <7 | 9 | 9 | **29** | <7 | 9 | \* | 10 | **33** | 7 |
| Needham | † | † | † | † | **†** | <7 | <7 | <7 | <7 | **<7** | <7 |
| New Ashford | † | † | † | † | **†** | † | † | † | † | **†** | † |
| New Bedford | 151 | 174 | 212 | 146 | **683** | 115 | 151 | 213 | 148 | **627** | 117 |
| New Braintree | † | <7 | † | † | **<7** | † | † | † | <7 | **<7** | † |
| New  Marlborough | † | † | † | † | **†** | † | † | † | † | **†** | † |
| New Salem | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Newbury | <7 | <7 | † | † | **<7** | <7 | † | † | † | **<7** | † |
| Newburyport | <7 | <7 | <7 | <7 | **17** | <7 | 9 | <7 | 11 | **24** | <7 |
| Newton | <7 | 20 | \* | 9 | **43** | 11 | 12 | 15 | 16 | **54** | 16 |
| Norfolk | <7 | † | <7 | <7 | **7** | 7 | <7 | <7 | <7 | **17** | <7 |
| North Adams | <7 | \* | 8 | 13 | **31** | 11 | 27 | 20 | 14 | **72** | † |
| North Andover | <7 | <7 | <7 | <7 | **16** | 12 | 11 | 18 | 13 | **54** | 15 |
| North Attleboro | 11 | 14 | 8 | 14 | **47** | 13 | 21 | 18 | 16 | **68** | 11 |
| North  Brookfield | † | † | <7 | <7 | **<7** | † | † | <7 | <7 | **<7** | † |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| North Reading | <7 | <7 | <7 | † | **11** | <7 | <7 | 8 | <7 | **20** | <7 |
| Northampton | <7 | 7 | 19 | <7 | **31** | 25 | \* | <7 | 21 | **67** | 26 |
| Northborough | <7 | † | <7 | <7 | **<7** | <7 | <7 | 9 | <7 | **21** | <7 |
| Northbridge | <7 | 7 | <7 | <7 | **22** | <7 | 7 | 7 | <7 | **22** | <7 |
| Northfield | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Norton | <7 | † | † | † | **<7** | † | \* | <7 | 11 | **25** | 7 |
| Norwell | <7 | \* | 10 | † | **22** | <7 | 7 | <7 | <7 | **19** | <7 |
| Norwood | † | <7 | <7 | <7 | **<7** | <7 | † | <7 | 11 | **18** | 13 |
| Oak Bluffs | <7 | <7 | <7 | <7 | **16** | <7 | <7 | <7 | <7 | **11** | <7 |
| Oakham | † | † | † | † | **†** | † | <7 | <7 | † | **<7** | <7 |
| Orange | † | † | † | <7 | **<7** | <7 | <7 | <7 | 7 | **11** | 8 |
| Orleans | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Otis | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Oxford | 9 | <7 | 13 | \* | **34** | <7 | 10 | 23 | <7 | **41** | 10 |
| Palmer | <7 | <7 | <7 | <7 | **12** | † | <7 | † | <7 | **<7** | † |
| Paxton | <7 | † | <7 | † | **<7** | <7 | <7 | <7 | <7 | **<7** | <7 |
| Peabody | 37 | 27 | 30 | 27 | **121** | 34 | 43 | 41 | 42 | **160** | 33 |
| Pelham | † | † | <7 | † | **<7** | † | † | † | † | **†** | † |
| Pembroke | <7 | 13 | 12 | \* | **36** | 8 | 9 | 8 | 17 | **42** | 13 |
| Pepperell | <7 | <7 | 8 | <7 | **20** | <7 | <7 | 9 | <7 | **20** | <7 |
| Peru | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Petersham | † | <7 | † | † | **<7** | † | <7 | † | <7 | **<7** | † |
| Phillipston | † | <7 | † | † | **<7** | † | † | <7 | † | **<7** | † |
| Pittsfield | 28 | 21 | 36 | 56 | **141** | 31 | 27 | 27 | 29 | **114** | 31 |
| Plainfield | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Plainville | <7 | <7 | <7 | <7 | **21** | <7 | <7 | <7 | 11 | **23** | 7 |
| Plymouth | 57 | 46 | 35 | 46 | **184** | 37 | 60 | 45 | 39 | **181** | 49 |
| Plympton | <7 | <7 | <7 | † | **<7** | † | <7 | <7 | <7 | **<7** | <7 |
| Princeton | † | † | † | <7 | **<7** | † | † | † | † | **†** | † |
| Provincetown | † | \* | 7 | <7 | **15** | <7 | <7 | <7 | <7 | **10** | <7 |
| Quincy | 86 | 88 | 41 | 86 | **301** | 55 | 113 | 119 | 117 | **404** | 85 |
| Randolph | † | † | † | † | **†** | <7 | 30 | \* | 24 | **73** | 19 |
| Raynham | \* | <7 | 18 | 7 | **38** | <7 | <7 | 7 | 12 | **31** | <7 |
| Reading | <7 | † | † | † | **<7** | <7 | <7 | † | <7 | **<7** | <7 |
| Rehoboth | † | † | † | <7 | **<7** | † | † | † | † | **†** | <7 |
| Revere | 44 | 61 | 75 | 59 | **239** | 50 | 80 | 85 | 71 | **286** | 50 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| Richmond | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Rochester | † | <7 | † | † | **<7** | <7 | <7 | <7 | <7 | **8** | <7 |
| Rockland | 12 | 7 | 18 | 12 | **49** | 41 | 27 | 23 | 22 | **113** | 17 |
| Rockport | <7 | † | <7 | † | **7** | † | † | <7 | <7 | **<7** | <7 |
| Rowe | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Rowley | † | <7 | † | <7 | **<7** | <7 | <7 | <7 | <7 | **8** | † |
| Royalston | † | <7 | <7 | <7 | **<7** | <7 | <7 | <7 | † | **<7** | <7 |
| Russell | † | <7 | <7 | † | **<7** | † | † | † | <7 | **<7** | † |
| Rutland | † | <7 | <7 | † | **<7** | † | <7 | <7 | <7 | **10** | <7 |
| Salem | 35 | 59 | 38 | 33 | **165** | 45 | 58 | 78 | 58 | **239** | 53 |
| Salisbury | 16 | 16 | 10 | 12 | **54** | 23 | 32 | 32 | 15 | **102** | 17 |
| Sandisfield | † | † | † | † | **†** | † | <7 | † | † | **<7** | <7 |
| Sandwich | † | † | <7 | † | **<7** | † | † | 7 | † | **7** | <7 |
| Saugus | 29 | 24 | 26 | 16 | **95** | 25 | 37 | 38 | 27 | **127** | 24 |
| Savoy | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Scituate | <7 | <7 | 7 | <7 | **20** | <7 | <7 | 9 | <7 | **21** | <7 |
| Seekonk | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Sharon | † | † | † | † | **†** | † | <7 | 7 | <7 | **11** | <7 |
| Sheffield | † | † | † | † | **†** | † | † | <7 | † | **<7** | † |
| Shelburne | † | <7 | † | <7 | **<7** | <7 | † | † | <7 | **<7** | <7 |
| Sherborn | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Shirley | <7 | <7 | <7 | <7 | **9** | <7 | <7 | 7 | † | **11** | <7 |
| Shrewsbury | 12 | 8 | 12 | 18 | **50** | 10 | 19 | 11 | 11 | **51** | 7 |
| Shutesbury | <7 | † | † | † | **<7** | † | † | <7 | † | **<7** | † |
| Somerset | † | † | <7 | † | **<7** | † | <7 | <7 | † | **<7** | <7 |
| Somerville | 17 | 42 | 38 | 44 | **141** | 38 | 52 | 54 | 49 | **193** | 25 |
| South Hadley | <7 | † | † | <7 | **<7** | † | <7 | † | † | **<7** | † |
| Southampton | † | <7 | <7 | <7 | **<7** | † | <7 | <7 | <7 | **<7** | <7 |
| Southborough | † | † | <7 | <7 | **<7** | <7 | <7 | <7 | <7 | **<7** | † |
| Southbridge | † | † | † | <7 | **<7** | <7 | † | † | † | **<7** | † |
| Southwick | † | † | † | <7 | **<7** | \* | 7 | 7 | <7 | **26** | 7 |
| Spencer | <7 | † | <7 | <7 | **9** | <7 | <7 | <7 | <7 | **12** | <7 |
| Springfield | 116 | 160 | 162 | 264 | **702** | 210 | 224 | 183 | 205 | **822** | 128 |
| Sterling | <7 | † | <7 | <7 | **7** | <7 | <7 | <7 | <7 | **12** | <7 |
| Stockbridge | † | † | <7 | † | **<7** | † | † | † | † | **†** | <7 |
| Stoneham | 15 | 13 | 11 | 14 | **53** | <7 | 23 | \* | 12 | **52** | 9 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| Stoughton | 7 | 12 | 17 | 12 | **48** | 10 | 21 | 12 | 11 | **54** | 13 |
| Stow | <7 | † | <7 | <7 | **<7** | † | <7 | <7 | † | **<7** | <7 |
| Sturbridge | † | <7 | <7 | <7 | **<7** | <7 | 11 | <7 | <7 | **25** | <7 |
| Sudbury | <7 | <7 | <7 | † | **10** | † | <7 | † | <7 | **<7** | <7 |
| Sunderland | <7 | † | † | <7 | **<7** | <7 | <7 | † | <7 | **<7** | † |
| Sutton | <7 | <7 | <7 | <7 | **12** | <7 | <7 | <7 | <7 | **12** | <7 |
| Swampscott | <7 | <7 | <7 | <7 | **10** | <7 | 9 | <7 | <7 | **24** | <7 |
| Swansea | <7 | † | <7 | <7 | **9** | 8 | 13 | 13 | 15 | **49** | 10 |
| Taunton | 77 | 76 | 83 | 77 | **313** | 74 | 115 | 72 | 54 | **315** | 37 |
| Templeton | <7 | 10 | <7 | <7 | **20** | <7 | <7 | <7 | <7 | **13** | <7 |
| Tewksbury | † | <7 | \* | 10 | **20** | 12 | 22 | 20 | 24 | **78** | 31 |
| Tisbury | <7 | <7 | † | <7 | **<7** | † | <7 | † | <7 | **<7** | <7 |
| Tolland | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Topsfield | <7 | <7 | <7 | <7 | **9** | † | † | <7 | † | **<7** | <7 |
| Townsend | <7 | <7 | <7 | † | **<7** | † | † | <7 | <7 | **<7** | † |
| Truro | <7 | † | † | † | **<7** | † | <7 | † | † | **<7** | † |
| Tyngsborough | † | <7 | † | <7 | **<7** | <7 | <7 | <7 | <7 | **18** | <7 |
| Tyringham | † | † | † | <7 | **<7** | † | † | † | † | **†** | † |
| Upton | † | <7 | <7 | † | **<7** | <7 | <7 | <7 | <7 | **<7** | † |
| Uxbridge | <7 | 9 | 10 | <7 | **30** | 9 | <7 | 11 | <7 | **29** | <7 |
| Wakefield | 13 | <7 | \* | 10 | **38** | 10 | 11 | 16 | 16 | **53** | 9 |
| Wales | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Walpole | 13 | <7 | <7 | 9 | **32** | <7 | 9 | \* | 13 | **35** | 10 |
| Waltham | 26 | 40 | 25 | 32 | **123** | 37 | 36 | 40 | 29 | **142** | 21 |
| Ware | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Wareham | 30 | 33 | 41 | 22 | **126** | 28 | 33 | 41 | 32 | **134** | 39 |
| Warren | <7 | † | <7 | <7 | **<7** | <7 | <7 | † | <7 | **7** | <7 |
| Warwick | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Washington | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Watertown | 23 | 22 | 15 | 8 | **68** | 28 | 23 | 7 | 22 | **80** | <7 |
| Wayland | † | † | <7 | <7 | **<7** | † | <7 | <7 | <7 | **<7** | <7 |
| Webster | \* | † | † | <7 | **22** | 16 | 13 | 20 | 21 | **70** | 13 |
| Wellesley | <7 | <7 | <7 | <7 | **12** | <7 | <7 | <7 | <7 | **8** | † |
| Wellfleet | † | <7 | <7 | <7 | **<7** | <7 | <7 | <7 | <7 | **9** | † |
| Wendell | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Wenham | † | † | † | <7 | **<7** | <7 | <7 | † | † | **<7** | <7 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **2015** | | | | | **2016** | | | | | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 |
| West Boylston | <7 | <7 | <7 | <7 | **10** | <7 | <7 | <7 | <7 | **12** | <7 |
| West  Bridgewater | <7 | <7 | <7 | <7 | **13** | 8 | <7 | <7 | † | **16** | <7 |
| West Brookfield | † | <7 | † | † | **<7** | † | † | † | † | **†** | <7 |
| West Newbury | <7 | † | † | † | **<7** | <7 | <7 | † | <7 | **<7** | † |
| West  Springfield | † | † | † | † | **†** | † | † | † | † | **†** | † |
| West  Stockbridge | <7 | † | † | † | **<7** | † | † | † | † | **†** | <7 |
| West Tisbury | † | † | <7 | † | **<7** | <7 | <7 | † | † | **<7** | † |
| Westborough | <7 | <7 | † | † | **<7** | † | † | <7 | † | **<7** | <7 |
| Westfield | 10 | 13 | 11 | 34 | **68** | 28 | 16 | 15 | 22 | **81** | 11 |
| Westford | † | † | <7 | <7 | **<7** | 8 | <7 | <7 | <7 | **21** | <7 |
| Westhampton | † | <7 | † | † | **<7** | † | † | † | † | **†** | <7 |
| Westminster | <7 | <7 | <7 | † | **7** | <7 | <7 | † | <7 | **7** | <7 |
| Weston | <7 | <7 | <7 | † | **<7** | <7 | <7 | † | † | **<7** | † |
| Westport | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Westwood | <7 | <7 | † | † | **<7** | <7 | <7 | <7 | <7 | **14** | <7 |
| Weymouth | 56 | 50 | 50 | 17 | **173** | 35 | 51 | 80 | 10 | **176** | 15 |
| Whately | † | <7 | † | † | **<7** | † | † | † | † | **†** | <7 |
| Whitman | † | <7 | 8 | <7 | **14** | <7 | \* | 9 | 18 | **40** | 9 |
| Wilbraham | <7 | <7 | <7 | <7 | **14** | <7 | 8 | <7 | <7 | **18** | <7 |
| Williamsburg | † | † | † | † | **†** | † | <7 | † | † | **<7** | <7 |
| Williamstown | <7 | <7 | † | <7 | **8** | <7 | <7 | † | † | **<7** | † |
| Wilmington | \* | 14 | 14 | <7 | **40** | 11 | \* | 9 | <7 | **32** | <7 |
| Winchendon | <7 | † | <7 | <7 | **<7** | <7 | <7 | <7 | <7 | **15** | † |
| Winchester | † | <7 | <7 | <7 | **<7** | <7 | <7 | <7 | 9 | **16** | <7 |
| Windsor | † | † | † | † | **†** | † | † | † | <7 | **<7** | † |
| Winthrop | <7 | 7 | <7 | 10 | **29** | 12 | 18 | 21 | 7 | **58** | <7 |
| Woburn | 31 | 23 | 14 | 22 | **90** | 40 | 37 | 30 | 26 | **133** | 40 |
| Worcester | 264 | 239 | 363 | 284 | **1150** | 267 | 337 | 382 | 314 | **1300** | 172 |
| Worthington | † | † | † | † | **†** | † | † | † | † | **†** | † |
| Wrentham | <7 | † | <7 | <7 | **<7** | \* | 12 | 12 | <7 | **36** | <7 |
| Yarmouth | 34 | 21 | 11 | 21 | **87** | 15 | 30 | 20 | 26 | **91** | 16 |
| Unknown | 378 | 292 | 415 | 360 | **1445** | 349 | 452 | 420 | 376 | **1597** | 279 |

\*Complementary suppression of the next smallest count was applied if only one count was < 7

# 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. In Boston, this algorithm was applied to a subset of incidents that were reported in their internal “Narcotic Related Incidents” database. This data brief was supported by funds made available from the Centers for Disease Control and Prevention, Office for State, Tribal, Local and Territorial Support, under B01OT009024 and NU17CE924877. The findings of this data brief are those of the authors and do not necessarily represent the official position of or endorsement by the Centers for Disease Control and Prevention.