

MA Opioid-Related EMS Incidents 2013-2019

Massachusetts Department of Public Health

Enhancement of Opioid Overdose Surveillance

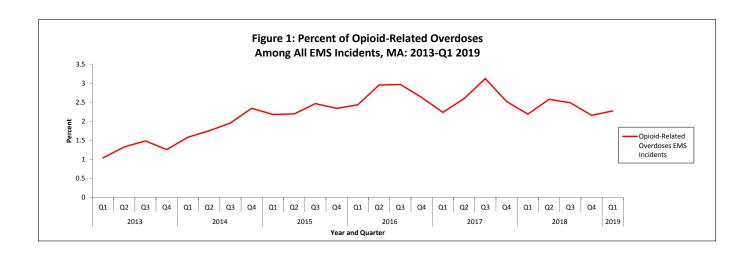
MATRIS, the Massachusetts Ambulance Trip Reporting Information System, is a statewide database for collecting emergency medical service (EMS) data from licensed ambulance services. It was not specifically designed to track opioid overdose incidents. DPH is currently working with all EMS providers to 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). 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. Beginning with the August 2017 report, incidents are only among people ages 11 and above.

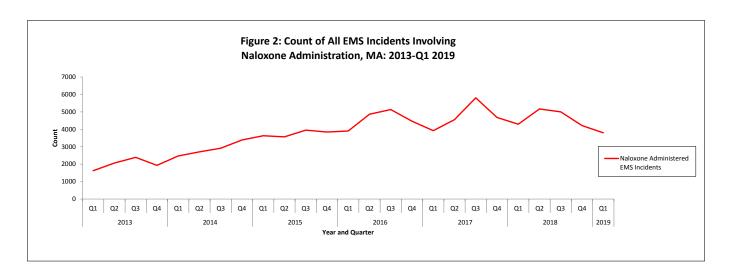
Results

The percentage of EMS incidents that are considered opioid-related (Figure 1) and the number of all EMS incidents involving naloxone administration (Figure 2) increased 7% per quarter from 2013 through the second quarter of 2016. However, since midway through 2016, the proportion of EMS incidents that are opioid-related as well as the overall number of EMS incidents involving the administration of naloxone has stabilized. This pattern also closely resembles the 2013-2019 trend in the confirmed and estimated opioid-related overdose death rate (see "Q2 2019 Opioid-related Overdose Deaths among MA Residents", Figure 3). In the first three months of 2019, the greatest number of suspected opioid-related overdoses treated by EMS is among males aged 25-34, accounting for 24% of opioid-related overdose incidents with a known age and gender.

| All Suspected Opioid Related Incidents: 2019 (Quarter 1) | | | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-----|-------|--|--|--|--|
| | 11-14 | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ | Total | | | | |
| Male | <5 | 198 | 1,127 | 804 | 535 | 349 | 106 | 3,119 | | | | |
| Female | <5 | 121 | 586 | 366 | 234 | 131 | 76 | 1,514 | | | | |
| Total | <5 | 319 | 1,713 | 1,170 | 769 | 480 | 182 | 4,633 | | | | |

POSTED: AUGUST 2019





| | | | <u>2017</u> | | | | | <u>2018</u> | | | <u>2019</u> |
|-------------|-----|-----|-------------|-----|-------|-----|-----|-------------|-----|-------|-------------|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 |
| Abington | 14 | 9 | 10 | 12 | 45 | 7 | 9 | 5 | 8 | 29 | 8 |
| Acton | * | 7 | <5 | 6 | 19 | 7 | + | <5 | <5 | 14 | <5 |
| Acushnet | 7 | 7 | 6 | 5 | 25 | 6 | <5 | <5 | <5 | 14 | + |
| Adams | <5 | <5 | <5 | 10 | 17 | 11 | <5 | * | 10 | 32 | 6 |
| Agawam | 9 | 10 | 13 | 11 | 43 | 24 | 24 | 20 | 12 | 80 | 14 |
| Alford | + | + | + | † | + | + | + | + | + | + | <5 |
| Amesbury | 11 | 15 | 14 | 12 | 52 | 11 | 7 | 13 | 7 | 38 | 7 |
| Amherst | 8 | 6 | 8 | 7 | 29 | <5 | * | 7 | 5 | 21 | + |
| Andover | 7 | 11 | 12 | 14 | 44 | 9 | 6 | 11 | 12 | 38 | 10 |
| Aquinnah | + | † | + | † | + | + | † | + | + | + | † |
| Arlington | 11 | 14 | 19 | 23 | 67 | <5 | 13 | 14 | * | 33 | 12 |
| Ashburnham | <5 | <5 | + | + | <5 | <5 | + | <5 | + | <5 | 6 |
| Ashby | † | <5 | <5 | 5 | 12 | <5 | <5 | <5 | + | 7 | <5 |
| Ashfield | + | + | + | + | + | + | + | + | <5 | <5 | + |
| Ashland | * | 9 | 7 | <5 | 25 | <5 | <5 | 5 | <5 | 15 | <5 |
| Athol | 7 | 15 | 12 | 8 | 42 | 19 | 33 | 18 | 21 | 91 | 6 |
| Attleboro | 42 | 36 | 48 | 32 | 158 | 44 | 36 | 48 | 42 | 170 | 31 |
| Auburn | 6 | 11 | 7 | 6 | 30 | 8 | 15 | 7 | 5 | 35 | + |
| Avon | <5 | <5 | <5 | + | 7 | + | 5 | <5 | <5 | 12 | † |
| Ayer | <5 | <5 | <5 | + | 7 | 5 | 8 | <5 | <5 | 16 | 5 |
| Barnstable | 63 | 48 | 91 | 44 | 246 | 33 | 29 | 31 | 30 | 123 | 40 |
| Barre | 6 | <5 | <5 | <5 | 13 | 6 | <5 | 8 | <5 | 18 | 9 |
| Becket | <5 | <5 | + | <5 | 6 | † | † | <5 | † | <5 | <5 |
| Bedford | * | 8 | 8 | <5 | 23 | 6 | 8 | * | <5 | 22 | 5 |
| Belchertown | <5 | 7 | * | 6 | 21 | * | 7 | 6 | <5 | 22 | <5 |
| Bellingham | 11 | 14 | 6 | 9 | 40 | 8 | † | 5 | 7 | 20 | <5 |
| Belmont | <5 | * | 12 | 7 | 27 | 8 | 7 | <5 | <5 | 21 | 6 |
| Berkley | <5 | <5 | <5 | <5 | 9 | <5 | <5 | <5 | <5 | 9 | <5 |
| Berlin | <5 | † | <5 | † | <5 | <5 | + | <5 | + | <5 | † |
| Bernardston | † | † | + | † | + | † | † | + | † | † | † |
| Beverly | 27 | 35 | 23 | 23 | 108 | 23 | 19 | 32 | 23 | 97 | 16 |
| Billerica | 20 | 15 | 42 | 20 | 97 | 32 | 17 | 16 | 14 | 79 | 15 |
| Blackstone | <5 | 9 | 12 | * | 30 | * | 10 | <5 | 7 | 27 | <5 |
| Blandford | + | † | † | † | + | † | † | † | <5 | <5 | † |
| Bolton | <5 | † | <5 | † | <5 | <5 | † | <5 | † | <5 | † |
| Boston | 432 | 643 | 899 | 690 | 2664 | 614 | 697 | 775 | 583 | 2669 | 568 |

| | | | 2017 | | | | | 2018 | | | 2019 |
|--------------|-----|-----|------|-----|-------|-----|-----|------|-----|-------|------|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 |
| Bourne | 15 | 30 | 17 | 22 | 84 | 5 | 16 | 18 | 19 | 58 | 10 |
| Boxborough | + | <5 | <5 | <5 | 7 | + | + | + | <5 | <5 | <5 |
| Boxford | <5 | <5 | + | + | <5 | <5 | <5 | <5 | <5 | 5 | <5 |
| Boylston | + | + | <5 | + | <5 | + | <5 | + | + | <5 | + |
| Braintree | 25 | 35 | 39 | 29 | 128 | 22 | 35 | 27 | 14 | 98 | 17 |
| Brewster | + | 7 | <5 | <5 | 12 | <5 | <5 | 5 | <5 | 13 | <5 |
| Bridgewater | <5 | <5 | <5 | <5 | 8 | + | <5 | * | 17 | 29 | 6 |
| Brimfield | + | + | + | + | + | + | + | + | <5 | <5 | <5 |
| Brockton | 206 | 185 | 266 | 203 | 860 | 164 | 238 | 226 | 167 | 795 | 152 |
| Brookfield | <5 | <5 | <5 | <5 | 7 | + | <5 | <5 | <5 | <5 | <5 |
| Brookline | 12 | 18 | 10 | 13 | 53 | 9 | 10 | 12 | 11 | 42 | 12 |
| Buckland | + | + | + | + | + | + | + | † | + | † | + |
| Burlington | 9 | 13 | 21 | 15 | 58 | 9 | 10 | 14 | 13 | 46 | 11 |
| Cambridge | 96 | 90 | 107 | 73 | 366 | 72 | 96 | 84 | 91 | 343 | 79 |
| Canton | 8 | 8 | 9 | 14 | 39 | * | 9 | 8 | <5 | 27 | 6 |
| Carlisle | + | + | 5 | + | 5 | + | <5 | + | <5 | 5 | + |
| Carver | 11 | 12 | 11 | 9 | 43 | <5 | 6 | 11 | <5 | 23 | 6 |
| Charlemont | + | + | + | + | + | <5 | + | † | + | <5 | + |
| Charlton | <5 | <5 | <5 | <5 | 11 | <5 | 5 | † | <5 | 11 | + |
| Chatham | 5 | <5 | <5 | <5 | 11 | <5 | <5 | <5 | <5 | 9 | + |
| Chelmsford | 19 | 12 | 13 | 12 | 56 | 19 | 15 | 15 | 14 | 63 | 6 |
| Chelsea | 49 | 83 | 91 | 43 | 266 | 69 | 71 | 72 | 36 | 248 | 30 |
| Cheshire | <5 | <5 | + | + | <5 | <5 | + | <5 | <5 | 5 | + |
| Chester | <5 | + | <5 | + | <5 | <5 | + | † | + | <5 | <5 |
| Chesterfield | + | + | <5 | + | <5 | + | <5 | † | <5 | <5 | + |
| Chicopee | 46 | 59 | 67 | 76 | 248 | 81 | 107 | 62 | 64 | 314 | 69 |
| Chilmark | + | + | + | <5 | <5 | <5 | + | <5 | + | <5 | + |
| Clarksburg | + | † | † | † | + | † | + | † | † | + | + |
| Clinton | 6 | 12 | 14 | 17 | 49 | 9 | 19 | 10 | 6 | 44 | 6 |
| Cohasset | + | <5 | <5 | <5 | 9 | † | † | <5 | † | <5 | + |
| Colrain | + | † | † | † | + | <5 | † | <5 | <5 | <5 | + |
| Concord | <5 | <5 | <5 | <5 | 8 | <5 | 5 | <5 | † | 11 | <5 |
| Conway | + | † | † | † | + | † | † | † | <5 | <5 | + |
| Cummington | + | † | <5 | † | <5 | † | † | † | † | † | † |
| Dalton | <5 | † | <5 | † | 6 | † | <5 | <5 | 5 | 13 | 8 |
| Danvers | 30 | 41 | 36 | 35 | 142 | 44 | 41 | 26 | 30 | 141 | 34 |
| Dartmouth | 18 | 27 | 21 | 29 | 95 | 34 | 24 | 29 | 32 | 119 | 33 |

| | | | 2017 | | | | | 2018 | | | 2019 |
|---------------------|-----|-----|------|-----|-------|-----|-----|------|-----|-------|------|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 |
| Dedham | 16 | 15 | 21 | 15 | 67 | 13 | 21 | 6 | 7 | 47 | 12 |
| Deerfield | + | <5 | † | <5 | 7 | + | <5 | <5 | 5 | 8 | <5 |
| Dennis | 11 | 11 | 20 | 16 | 58 | 7 | 14 | 10 | 8 | 39 | 13 |
| Dighton | <5 | <5 | † | † | <5 | + | <5 | + | + | <5 | <5 |
| Douglas | + | + | + | <5 | <5 | <5 | <5 | <5 | <5 | 11 | <5 |
| Dover | + | + | <5 | + | <5 | <5 | <5 | <5 | <5 | 6 | + |
| Dracut | 11 | 17 | 26 | 13 | 67 | 28 | 25 | 18 | 20 | 91 | 5 |
| Dudley | <5 | 7 | * | 7 | 23 | 5 | 18 | 12 | 11 | 46 | 17 |
| Dunstable | <5 | + | <5 | <5 | <5 | <5 | + | + | + | <5 | <5 |
| Duxbury | <5 | <5 | <5 | 5 | 13 | <5 | <5 | <5 | <5 | 10 | <5 |
| East Bridgewater | 5 | 6 | 5 | 9 | 25 | 6 | 5 | 15 | 8 | 34 | 8 |
| East Brookfield | † | + | † | + | + | + | <5 | <5 | + | <5 | + |
| East Longmeadow | 7 | * | <5 | 6 | 20 | 7 | <5 | 8 | * | 24 | 6 |
| Eastham | <5 | <5 | <5 | † | 8 | <5 | <5 | <5 | <5 | 6 | <5 |
| Easthampton | <5 | 5 | 10 | <5 | 23 | 7 | 12 | 7 | 5 | 31 | 7 |
| Easton | <5 | <5 | 6 | 13 | 22 | 11 | 12 | 10 | 11 | 44 | 9 |
| Edgartown | <5 | <5 | <5 | + | 5 | + | + | <5 | <5 | 5 | <5 |
| Egremont | + | + | + | + | + | + | + | + | + | + | + |
| Erving | <5 | + | + | <5 | <5 | + | <5 | + | + | <5 | <5 |
| Essex | <5 | <5 | <5 | <5 | 5 | <5 | + | <5 | + | <5 | <5 |
| Everett | 39 | 43 | 49 | 39 | 170 | 37 | 40 | 27 | 42 | 146 | 37 |
| Fairhaven | 11 | 13 | 11 | 12 | 47 | 17 | 24 | 12 | 12 | 65 | 6 |
| Fall River | 196 | 172 | 250 | 252 | 870 | 168 | 259 | 372 | 276 | 1075 | 180 |
| Falmouth | 40 | 48 | 29 | 34 | 151 | 36 | 35 | 30 | 32 | 133 | 38 |
| Fitchburg | 75 | 80 | 105 | 81 | 341 | 66 | 78 | 82 | 42 | 268 | 85 |
| Florida | † | + | † | + | + | + | + | + | + | + | + |
| Foxborough | 14 | 8 | 10 | 7 | 39 | <5 | * | 13 | 9 | 35 | 10 |
| Framingham | 45 | 34 | 48 | 54 | 181 | 39 | 61 | 51 | 48 | 199 | 40 |
| Franklin | 16 | 15 | * | <5 | 46 | 10 | 9 | 5 | 10 | 34 | 7 |
| Freetown | <5 | <5 | <5 | <5 | 11 | <5 | 8 | 5 | <5 | 19 | <5 |
| Gardner | 22 | 13 | 20 | 13 | 68 | 11 | 23 | 29 | 31 | 94 | 15 |
| Georgetown | <5 | <5 | † | <5 | 6 | * | <5 | † | 7 | 16 | <5 |
| Gill | † | † | † | † | + | + | <5 | <5 | <5 | 7 | † |
| Gloucester | 17 | 27 | 38 | 30 | 112 | 27 | 29 | 32 | 21 | 109 | 15 |
| Goshen | + | + | + | + | + | + | + | + | + | + | + |

| | | | 2017 | | | | | 2018 | | | 2019 |
|---------------------|----|----|------|----|-------|----|-----|------|----|-------|------|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 |
| Gosnold | + | + | + | + | + | + | + | + | + | + | + |
| Grafton | * | 7 | 10 | <5 | 25 | <5 | 6 | <5 | 8 | 18 | <5 |
| Granby | <5 | + | <5 | 8 | 13 | * | 6 | <5 | 5 | 19 | <5 |
| Granville | † | † | † | + | † | + | + | † | † | † | <5 |
| Great Barrington | 6 | <5 | <5 | 6 | 19 | † | <5 | * | 7 | 16 | <5 |
| Greenfield | 11 | 15 | 20 | 7 | 53 | 13 | 10 | 22 | 15 | 60 | 22 |
| Groton | + | <5 | † | † | <5 | <5 | <5 | † | † | 5 | † |
| Groveland | <5 | <5 | + | <5 | 7 | + | <5 | <5 | <5 | 5 | + |
| Hadley | <5 | <5 | 7 | <5 | 15 | <5 | <5 | <5 | <5 | 10 | <5 |
| Halifax | * | <5 | 5 | 11 | 23 | 8 | 5 | <5 | <5 | 19 | <5 |
| Hamilton | <5 | <5 | <5 | <5 | 6 | + | <5 | + | <5 | <5 | <5 |
| Hampden | <5 | <5 | <5 | + | 6 | 5 | <5 | <5 | 5 | 15 | <5 |
| Hancock | + | <5 | + | + | <5 | + | + | † | † | + | + |
| Hanover | <5 | 5 | 5 | <5 | 17 | <5 | 5 | <5 | <5 | 12 | 6 |
| Hanson | <5 | 9 | <5 | <5 | 21 | 10 | <5 | * | 5 | 21 | 5 |
| Hardwick | <5 | + | + | + | <5 | <5 | <5 | <5 | <5 | 6 | <5 |
| Harvard | <5 | + | + | <5 | <5 | + | + | + | <5 | <5 | <5 |
| Harwich | 11 | 6 | 11 | 8 | 36 | 6 | 8 | <5 | <5 | 21 | <5 |
| Hatfield | + | <5 | <5 | + | 6 | <5 | + | + | + | <5 | + |
| Haverhill | 87 | 85 | 121 | 76 | 369 | 75 | 82 | 75 | 78 | 310 | 55 |
| Hawley | + | + | + | + | † | + | + | † | † | + | † |
| Heath | <5 | + | + | <5 | <5 | + | + | + | + | + | + |
| Hingham | <5 | <5 | 5 | <5 | 14 | <5 | <5 | <5 | 5 | 13 | 6 |
| Hinsdale | + | + | + | + | + | + | <5 | + | <5 | <5 | + |
| Holbrook | 17 | 18 | 17 | 9 | 61 | 8 | 12 | 12 | 6 | 38 | <5 |
| Holden | <5 | <5 | 5 | <5 | 11 | <5 | <5 | <5 | <5 | 8 | <5 |
| Holland | + | + | <5 | + | <5 | <5 | <5 | + | + | <5 | + |
| Holliston | <5 | <5 | <5 | 5 | 14 | <5 | <5 | + | <5 | 6 | <5 |
| Holyoke | 55 | 63 | 83 | 66 | 267 | 81 | 159 | 102 | 18 | 360 | <5 |
| Hopedale | <5 | <5 | <5 | <5 | 7 | <5 | <5 | † | <5 | 8 | <5 |
| Hopkinton | <5 | 6 | <5 | <5 | 13 | 5 | <5 | 5 | <5 | 12 | <5 |
| Hubbardston | <5 | <5 | <5 | + | 7 | <5 | † | <5 | 5 | 7 | <5 |
| Hudson | 5 | 6 | 7 | 9 | 27 | 6 | 9 | 8 | 6 | 29 | 8 |
| Hull | <5 | <5 | <5 | † | 8 | <5 | <5 | 9 | <5 | 13 | <5 |
| Huntington | † | † | <5 | † | <5 | <5 | † | † | † | <5 | † |
| Ipswich | 8 | 9 | <5 | * | 26 | <5 | <5 | 9 | † | 14 | + |

| | | | 2017 | | | | | 2018 | | | 2019 |
|--------------|-----|-----|------|-----|-------|-----|-----|------|-----|-------|------|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 |
| Kingston | 6 | * | 9 | <5 | 24 | 12 | 7 | <5 | <5 | 26 | <5 |
| Lakeville | 21 | 15 | 23 | 29 | 88 | 21 | 19 | 20 | 18 | 78 | 14 |
| Lancaster | + | <5 | <5 | <5 | 6 | <5 | + | 8 | <5 | 13 | <5 |
| Lanesborough | + | <5 | <5 | + | <5 | + | <5 | <5 | <5 | 9 | <5 |
| Lawrence | 151 | 178 | 242 | 207 | 778 | 180 | 169 | 183 | 132 | 664 | 134 |
| Lee | <5 | <5 | <5 | <5 | 10 | <5 | 5 | <5 | <5 | 11 | + |
| Leicester | 9 | 6 | 6 | 8 | 29 | 6 | 5 | <5 | <5 | 19 | 6 |
| Lenox | <5 | 5 | <5 | <5 | 16 | + | <5 | <5 | + | 5 | <5 |
| Leominster | 68 | 56 | 70 | 56 | 250 | 46 | 62 | 55 | 70 | 233 | 48 |
| Leverett | <5 | + | † | + | <5 | + | + | + | + | + | + |
| Lexington | 5 | <5 | 5 | <5 | 16 | <5 | <5 | <5 | <5 | 8 | <5 |
| Leyden | + | + | † | + | + | + | + | + | + | + | + |
| Lincoln | <5 | <5 | <5 | <5 | 10 | + | + | + | + | + | + |
| Littleton | <5 | <5 | <5 | <5 | 9 | + | + | <5 | <5 | <5 | <5 |
| Longmeadow | <5 | <5 | <5 | <5 | 10 | <5 | <5 | <5 | 7 | 15 | <5 |
| Lowell | 269 | 309 | 322 | 238 | 1138 | 320 | 290 | 337 | 282 | 1229 | 160 |
| Ludlow | 10 | 6 | 13 | 10 | 39 | 9 | 18 | 6 | 7 | 40 | 7 |
| Lunenburg | <5 | + | <5 | <5 | 6 | <5 | * | 8 | 8 | 26 | <5 |
| Lynn | 117 | 147 | 172 | 150 | 586 | 117 | 162 | 202 | 110 | 591 | 92 |
| Lynnfield | 5 | <5 | <5 | <5 | 11 | <5 | <5 | <5 | 8 | 17 | <5 |
| Malden | 31 | 55 | 76 | 42 | 204 | 52 | 50 | 55 | 41 | 198 | 27 |
| Manchester | <5 | <5 | † | <5 | 6 | † | † | + | <5 | <5 | <5 |
| Mansfield | 7 | 10 | 6 | 17 | 40 | 8 | 13 | 9 | 7 | 37 | 8 |
| Marblehead | 9 | <5 | * | 10 | 28 | <5 | 6 | 9 | <5 | 19 | <5 |
| Marion | <5 | <5 | <5 | <5 | 9 | <5 | † | <5 | <5 | 5 | <5 |
| Marlborough | 5 | 9 | 19 | 17 | 50 | 20 | 12 | 19 | 23 | 74 | 17 |
| Marshfield | 8 | 7 | 12 | 16 | 43 | 8 | * | <5 | 7 | 21 | 6 |
| Mashpee | 16 | 16 | 10 | 10 | 52 | 9 | 12 | 9 | 6 | 36 | 10 |
| Mattapoisett | <5 | <5 | 6 | 5 | 15 | 6 | <5 | 10 | <5 | 23 | 5 |
| Maynard | 9 | 9 | <5 | <5 | 23 | <5 | <5 | <5 | <5 | 8 | <5 |
| Medfield | 5 | <5 | <5 | <5 | 10 | † | <5 | <5 | <5 | 5 | <5 |
| Medford | 14 | 24 | 27 | 27 | 92 | 18 | 19 | 34 | 21 | 92 | 25 |
| Medway | * | 8 | 17 | <5 | 35 | 8 | <5 | * | 7 | 25 | 8 |
| Melrose | * | <5 | 15 | 7 | 33 | 9 | 9 | 5 | 5 | 28 | <5 |
| Mendon | <5 | <5 | † | <5 | 7 | <5 | † | <5 | <5 | 7 | <5 |
| Merrimac | <5 | <5 | 7 | <5 | 15 | 6 | † | <5 | <5 | 10 | <5 |
| Methuen | 28 | 49 | 60 | 55 | 192 | 34 | 24 | 11 | 38 | 107 | 44 |

| | | | <u>2017</u> | | | | | <u>2018</u> | | | 2019 |
|---------------------|-----|-----|-------------|-----|-------|-----|-----|-------------|-----|-------|------|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 |
| Middleborough | <5 | <5 | <5 | <5 | 9 | <5 | <5 | + | 5 | 9 | + |
| Middlefield | + | <5 | + | + | <5 | † | + | + | + | + | † |
| Middleton | <5 | <5 | 6 | 7 | 19 | 13 | <5 | * | 8 | 31 | <5 |
| Milford | 13 | 24 | 12 | 16 | 65 | 19 | 12 | 9 | 24 | 64 | 23 |
| Millbury | 8 | 12 | 10 | 14 | 44 | 8 | 13 | 11 | 11 | 43 | 9 |
| Millis | 6 | <5 | 5 | <5 | 15 | 7 | † | <5 | <5 | 14 | † |
| Millville | † | † | <5 | <5 | 5 | <5 | <5 | † | <5 | 7 | † |
| Milton | 9 | 9 | 9 | 5 | 32 | 10 | <5 | 7 | * | 25 | <5 |
| Monroe | + | † | + | + | + | + | + | + | + | + | + |
| Monson | <5 | <5 | 6 | <5 | 14 | <5 | <5 | <5 | <5 | 11 | <5 |
| Montague | 6 | * | 8 | <5 | 23 | <5 | 10 | 6 | <5 | 22 | <5 |
| Monterey | + | + | † | † | † | + | + | † | † | † | + |
| Montgomery | + | + | † | † | † | + | + | † | † | † | + |
| Mount Washington | † | † | † | † | † | † | † | <5 | † | <5 | † |
| Nahant | + | <5 | <5 | † | 6 | <5 | <5 | † | <5 | 7 | + |
| Nantucket | <5 | <5 | <5 | <5 | 10 | <5 | <5 | 5 | 5 | 14 | + |
| Natick | 7 | 6 | 8 | 9 | 30 | 8 | 5 | 11 | 11 | 35 | 18 |
| Needham | <5 | + | <5 | <5 | 7 | <5 | <5 | <5 | <5 | 10 | 5 |
| New Ashford | + | + | † | † | † | + | + | † | † | † | + |
| New Bedford | 122 | 203 | 238 | 133 | 696 | 148 | 259 | 195 | 126 | 278 | 181 |
| New Braintree | + | <5 | + | + | <5 | + | + | <5 | + | <5 | † |
| New Marlborough | † | <5 | † | † | <5 | † | † | <5 | <5 | <5 | <5 |
| New Salem | + | <5 | + | + | <5 | + | + | + | + | + | † |
| Newbury | <5 | <5 | † | <5 | 6 | + | <5 | <5 | 5 | 9 | <5 |
| Newburyport | <5 | <5 | 8 | <5 | 16 | <5 | 5 | <5 | <5 | 17 | <5 |
| Newton | 17 | 16 | 15 | 17 | 65 | 18 | 13 | 12 | 17 | 60 | 11 |
| Norfolk | <5 | <5 | <5 | <5 | 6 | <5 | <5 | <5 | † | 5 | <5 |
| North Adams | 9 | 9 | 17 | 13 | 48 | 12 | 19 | 26 | 10 | 67 | 23 |
| North Andover | 19 | 12 | 16 | 24 | 71 | 13 | * | 12 | <5 | 36 | 13 |
| North Attleboro | 10 | 25 | 21 | 22 | 78 | 21 | 18 | 14 | 18 | 71 | 7 |
| North Brookfield | † | † | † | <5 | <5 | <5 | † | † | <5 | <5 | + |
| North Reading | <5 | 9 | <5 | <5 | 17 | <5 | 7 | <5 | 9 | 23 | <5 |
| Northampton | 25 | 20 | 16 | 20 | 81 | 15 | 30 | 20 | 24 | 89 | 27 |

| | | | 2017 | | | | | 2018 | | | 2019 |
|--------------|----|-----|------|----|-------|-----|-----|------|----|-------|------|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 |
| Northborough | <5 | <5 | 6 | <5 | 12 | <5 | 6 | <5 | 8 | 19 | 7 |
| Northbridge | <5 | * | 9 | 6 | 25 | 5 | 14 | 12 | 6 | 37 | 6 |
| Northfield | + | + | <5 | <5 | <5 | <5 | <5 | + | <5 | <5 | + |
| Norton | 9 | <5 | 9 | * | 28 | * | 9 | 5 | <5 | 23 | <5 |
| Norwell | * | 7 | <5 | 6 | 21 | <5 | 5 | <5 | 5 | 17 | <5 |
| Norwood | 16 | 17 | 22 | 14 | 69 | 14 | 17 | 19 | 6 | 56 | 16 |
| Oak Bluffs | <5 | + | <5 | <5 | 5 | <5 | + | + | + | <5 | <5 |
| Oakham | <5 | + | <5 | + | <5 | <5 | + | + | + | <5 | + |
| Orange | 8 | <5 | <5 | <5 | 18 | <5 | 11 | 10 | * | 29 | <5 |
| Orleans | 5 | <5 | <5 | + | 9 | <5 | <5 | <5 | 7 | 16 | <5 |
| Otis | + | + | <5 | + | <5 | + | + | + | + | + | + |
| Oxford | 11 | * | <5 | 11 | 34 | <5 | 14 | * | 17 | 46 | 8 |
| Palmer | <5 | 8 | * | 9 | 28 | 8 | 15 | 13 | 8 | 44 | 10 |
| Paxton | <5 | <5 | <5 | + | 5 | <5 | <5 | <5 | + | 7 | <5 |
| Peabody | 34 | 37 | 51 | 41 | 163 | 44 | 56 | 38 | 35 | 173 | 28 |
| Pelham | + | + | † | + | + | + | + | <5 | + | <5 | + |
| Pembroke | 12 | 8 | 8 | 5 | 33 | * | 7 | <5 | 7 | 22 | 5 |
| Pepperell | <5 | + | 7 | <5 | 14 | 7 | <5 | <5 | <5 | 13 | + |
| Peru | + | + | + | + | + | + | + | + | + | + | + |
| Petersham | + | + | + | + | + | + | + | + | + | + | <5 |
| Phillipston | + | + | † | + | + | + | + | + | + | + | + |
| Pittsfield | 36 | 32 | 66 | 38 | 172 | 33 | 61 | 64 | 37 | 195 | 37 |
| Plainfield | + | <5 | <5 | <5 | <5 | <5 | + | <5 | <5 | 6 | <5 |
| Plainville | 7 | * | <5 | 6 | 23 | <5 | <5 | 5 | <5 | 15 | <5 |
| Plymouth | 53 | 63 | 78 | 67 | 261 | 37 | 72 | 39 | 48 | 196 | 48 |
| Plympton | <5 | <5 | + | + | <5 | + | <5 | <5 | <5 | <5 | + |
| Princeton | + | <5 | <5 | <5 | 5 | <5 | <5 | + | <5 | 5 | + |
| Provincetown | <5 | <5 | <5 | + | 9 | + | <5 | 14 | <5 | 20 | <5 |
| Quincy | 96 | 107 | 182 | 92 | 477 | 112 | 123 | 131 | 77 | 443 | 83 |
| Randolph | 19 | 14 | 21 | 24 | 78 | 10 | 9 | 14 | 24 | 57 | 16 |
| Raynham | 6 | 10 | 12 | 9 | 37 | 13 | 12 | 10 | 16 | 51 | 8 |
| Reading | <5 | 5 | <5 | <5 | 13 | <5 | <5 | <5 | <5 | 8 | <5 |
| Rehoboth | <5 | <5 | <5 | <5 | 8 | + | † | <5 | <5 | <5 | <5 |
| Revere | 52 | 69 | 82 | 54 | 257 | 63 | 69 | 70 | 49 | 251 | 36 |
| Richmond | † | † | † | † | † | † | <5 | <5 | † | <5 | † |
| Rochester | <5 | † | <5 | <5 | 7 | <5 | <5 | † | <5 | 6 | † |
| Rockland | 17 | 19 | 23 | 20 | 79 | 17 | 16 | 13 | 14 | 60 | 6 |

| | | | 2017 | | | | | 2018 | | | 2019 |
|--------------|-----|-----|------|-----|-------|-----|-----|------|-----|-------|------|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 |
| Rockport | <5 | * | + | 6 | 13 | + | + | <5 | <5 | <5 | <5 |
| Rowe | + | + | + | + | † | + | + | + | † | + | + |
| Rowley | <5 | <5 | <5 | + | <5 | + | <5 | <5 | + | <5 | + |
| Royalston | <5 | + | + | <5 | <5 | <5 | <5 | + | † | <5 | + |
| Russell | + | <5 | + | + | <5 | <5 | <5 | + | + | <5 | <5 |
| Rutland | 5 | <5 | <5 | <5 | 13 | <5 | <5 | † | † | <5 | <5 |
| Salem | 54 | 56 | 78 | 44 | 232 | 39 | 51 | 52 | 37 | 179 | 31 |
| Salisbury | 19 | 25 | 34 | 29 | 107 | 17 | 22 | 27 | 17 | 83 | 8 |
| Sandisfield | <5 | + | + | + | <5 | + | + | + | + | + | + |
| Sandwich | 14 | 9 | 5 | 11 | 39 | 10 | 12 | * | <5 | 35 | 7 |
| Saugus | 25 | 31 | 32 | 28 | 116 | 30 | 27 | 21 | 16 | 94 | 30 |
| Savoy | + | + | † | + | + | + | + | + | + | + | + |
| Scituate | <5 | <5 | 6 | <5 | 13 | <5 | <5 | 5 | 6 | 16 | <5 |
| Seekonk | <5 | 10 | 8 | * | 29 | <5 | <5 | 5 | 8 | 18 | 6 |
| Sharon | <5 | <5 | <5 | 7 | 16 | 5 | <5 | <5 | <5 | 15 | <5 |
| Sheffield | + | 8 | <5 | <5 | 14 | + | + | <5 | <5 | 6 | <5 |
| Shelburne | <5 | + | <5 | + | <5 | + | <5 | <5 | + | <5 | <5 |
| Sherborn | + | + | † | <5 | <5 | <5 | + | <5 | + | <5 | + |
| Shirley | * | <5 | 7 | 5 | 21 | 6 | 8 | 6 | 5 | 25 | <5 |
| Shrewsbury | 7 | 16 | 13 | 18 | 54 | 24 | 25 | 14 | 14 | 77 | 16 |
| Shutesbury | + | + | † | + | + | <5 | + | <5 | + | <5 | + |
| Somerset | 8 | 10 | 14 | 15 | 47 | 12 | 14 | * | <5 | 35 | <5 |
| Somerville | 27 | 39 | 43 | 24 | 133 | 30 | 31 | 35 | 26 | 122 | 24 |
| South Hadley | + | + | <5 | <5 | <5 | <5 | 11 | 11 | * | 31 | 7 |
| Southampton | <5 | <5 | + | <5 | <5 | + | <5 | <5 | + | 7 | + |
| Southborough | + | + | <5 | <5 | 5 | <5 | <5 | 6 | + | 8 | <5 |
| Southbridge | 8 | 14 | 20 | 24 | 66 | 8 | 20 | 24 | 23 | 75 | 32 |
| Southwick | 8 | <5 | <5 | 8 | 23 | 5 | 10 | 5 | 12 | 32 | 6 |
| Spencer | <5 | * | 7 | 10 | 24 | <5 | 12 | * | 7 | 29 | 9 |
| Springfield | 115 | 186 | 212 | 161 | 674 | 184 | 278 | 262 | 206 | 930 | 220 |
| Sterling | <5 | <5 | <5 | <5 | 8 | * | 5 | 9 | <5 | 21 | <5 |
| Stockbridge | <5 | † | † | <5 | <5 | † | <5 | † | † | <5 | + |
| Stoneham | 10 | 8 | 21 | 8 | 47 | 12 | * | 10 | <5 | 34 | + |
| Stoughton | 15 | 17 | 17 | 14 | 63 | 26 | 17 | 24 | 23 | 90 | 22 |
| Stow | <5 | 6 | <5 | <5 | 13 | <5 | † | <5 | <5 | 6 | † |
| Sturbridge | <5 | <5 | <5 | 8 | 17 | <5 | 8 | 8 | * | 23 | <5 |
| Sudbury | <5 | † | <5 | <5 | 5 | <5 | <5 | <5 | <5 | 8 | † |

| | | | <u>2017</u> | | | | | <u>2018</u> | | | <u>2019</u> |
|---------------------|----|----|-------------|----|-------|----|----|-------------|----|-------|-------------|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 |
| Sunderland | + | <5 | + | + | <5 | <5 | + | <5 | † | <5 | † |
| Sutton | <5 | <5 | <5 | <5 | 12 | 6 | <5 | <5 | 7 | 17 | <5 |
| Swampscott | <5 | <5 | 5 | <5 | 15 | <5 | <5 | <5 | <5 | 12 | <5 |
| Swansea | 10 | <5 | 17 | <5 | 34 | * | 13 | <5 | 11 | 36 | 12 |
| Taunton | 42 | 78 | 94 | 78 | 292 | 62 | 77 | 72 | 68 | 279 | 53 |
| Templeton | 5 | <5 | 6 | <5 | 15 | <5 | <5 | 5 | 6 | 18 | <5 |
| Tewksbury | 37 | 41 | 29 | 20 | 127 | 47 | 26 | 29 | 23 | 125 | 14 |
| Tisbury | <5 | <5 | <5 | + | 7 | + | + | <5 | <5 | <5 | <5 |
| Tolland | + | + | + | + | + | + | + | + | † | † | + |
| Topsfield | <5 | 6 | + | <5 | 8 | <5 | + | + | <5 | 6 | <5 |
| Townsend | <5 | <5 | + | <5 | 10 | * | 9 | <5 | † | 16 | <5 |
| Truro | + | + | + | <5 | <5 | <5 | <5 | <5 | <5 | 5 | + |
| Tyngsborough | <5 | * | 6 | 6 | 19 | 10 | 10 | <5 | <5 | 28 | <5 |
| Tyringham | + | + | + | + | + | + | + | + | + | † | + |
| Upton | † | 5 | <5 | <5 | 10 | <5 | + | <5 | <5 | 5 | <5 |
| Uxbridge | * | <5 | 7 | 6 | 22 | <5 | 11 | <5 | <5 | 22 | <5 |
| Wakefield | 10 | 19 | 23 | 13 | 65 | 9 | 18 | 13 | 5 | 45 | + |
| Wales | + | + | <5 | <5 | <5 | <5 | <5 | <5 | † | 5 | + |
| Walpole | 9 | * | 8 | <5 | 29 | 10 | 17 | 12 | 6 | 45 | 6 |
| Waltham | 20 | 35 | 45 | 25 | 125 | 34 | 31 | 23 | 16 | 104 | 14 |
| Ware | <5 | 6 | 11 | <5 | 22 | 8 | 10 | 9 | 8 | 35 | 6 |
| Wareham | 41 | 39 | 52 | 52 | 184 | 39 | 45 | 52 | 36 | 172 | 34 |
| Warren | 6 | <5 | <5 | + | 13 | <5 | 6 | <5 | <5 | 14 | 5 |
| Warwick | + | <5 | + | + | <5 | + | + | <5 | † | <5 | + |
| Washington | + | + | + | <5 | <5 | + | + | + | † | † | + |
| Watertown | 5 | 11 | 15 | 13 | 44 | 15 | 18 | 20 | 11 | 64 | 8 |
| Wayland | <5 | <5 | <5 | + | 5 | <5 | + | + | † | <5 | <5 |
| Webster | 13 | 18 | 23 | 17 | 71 | 14 | 28 | 30 | 28 | 100 | 35 |
| Wellesley | <5 | <5 | <5 | 6 | 14 | <5 | <5 | 7 | 5 | 17 | <5 |
| Wellfleet | † | 5 | <5 | <5 | 10 | † | <5 | <5 | <5 | <5 | † |
| Wendell | † | + | † | † | + | + | + | † | † | + | + |
| Wenham | <5 | + | <5 | <5 | <5 | † | <5 | † | <5 | <5 | † |
| West Boylston | 6 | <5 | <5 | 6 | 16 | * | 5 | 7 | <5 | 21 | 6 |
| West Bridgewater | <5 | 5 | <5 | 10 | 21 | <5 | 7 | <5 | <5 | 13 | <5 |
| West Brookfield | <5 | <5 | <5 | 5 | 10 | <5 | <5 | <5 | <5 | 9 | <5 |

| | | | 2017 | | | | | 2018 | | | | | |
|---------------------|------|------|------|------|---------------|------|------|------|------|-------|------|--|--|
| City/Town | Q1 | Q2 | Q3 | Q4 | Total | Q1 | Q2 | Q3 | Q4 | Total | Q1 | | |
| West Newbury | † | † | <5 | † | <5 | <5 | <5 | † | † | <5 | + | | |
| West Springfield | 11 | 14 | 40 | 23 | 88 | 23 | 35 | 23 | 20 | 101 | 29 | | |
| West Stockbridge | <5 | † | † | † | <5 | † | <5 | † | † | <5 | † | | |
| West Tisbury | + | <5 | <5 | + | < 5 | † | † | † | † | † | † | | |
| Westborough | 14 | 26 | 15 | 11 | 66 | 12 | 13 | 8 | 12 | 45 | 15 | | |
| Westfield | 11 | 14 | 15 | 21 | 61 | 27 | 27 | 20 | 14 | 88 | 21 | | |
| Westford | 5 | 9 | 5 | 6 | 25 | * | 10 | <5 | † | 20 | <5 | | |
| Westhampton | <5 | † | † | † | <5 | <5 | † | † | † | <5 | † | | |
| Westminster | <5 | 5 | <5 | 8 | 19 | * | <5 | 5 | 6 | 19 | 6 | | |
| Weston | 9 | <5 | <5 | † | 11 | <5 | <5 | † | † | <5 | † | | |
| Westport | 7 | 8 | 6 | 5 | 26 | 9 | 9 | 7 | 6 | 31 | <5 | | |
| Westwood | <5 | 6 | <5 | 5 | 13 | + | <5 | <5 | + | <5 | <5 | | |
| Weymouth | 49 | 57 | 71 | 62 | 239 | 51 | 50 | 32 | 41 | 174 | 42 | | |
| Whately | <5 | <5 | + | <5 | <5 | + | + | <5 | + | <5 | <5 | | |
| Whitman | 9 | 6 | 19 | 9 | 43 | 13 | 5 | 10 | 11 | 39 | 9 | | |
| Wilbraham | <5 | 6 | * | 5 | 20 | 6 | 6 | 8 | 7 | 27 | 9 | | |
| Williamsburg | <5 | <5 | <5 | + | <5 | <5 | + | † | + | <5 | <5 | | |
| Williamstown | + | <5 | <5 | + | <5 | <5 | <5 | + | <5 | 6 | <5 | | |
| Wilmington | 6 | 14 | 17 | 21 | 58 | 19 | 12 | * | <5 | 41 | 7 | | |
| Winchendon | + | 5 | 5 | 6 | 16 | 7 | 8 | * | <5 | 25 | <5 | | |
| Winchester | <5 | † | <5 | <5 | 7 | <5 | <5 | <5 | 6 | 13 | <5 | | |
| Windsor | † | † | † | † | † | † | † | † | † | † | † | | |
| Winthrop | <5 | 11 | 12 | * | 37 | 9 | * | 11 | <5 | 32 | + | | |
| Woburn | 43 | 36 | 45 | 28 | 152 | 31 | 37 | 26 | 32 | 126 | 24 | | |
| Worcester | 263 | 361 | 448 | 432 | 1504 | 342 | 451 | 461 | 446 | 1700 | 398 | | |
| Worthington | † | † | † | † | † | † | † | † | † | † | + | | |
| Wrentham | 6 | 6 | 7 | 6 | 25 | <5 | <5 | <5 | † | 8 | + | | |
| Yarmouth | 16 | 29 | 35 | 17 | 97 | 10 | 19 | 15 | 13 | 57 | 19 | | |
| Unknown | 51 | 49 | 63 | 51 | 214 | 36 | 32 | 7 | 8 | 83 | <5 | | |
| Grand Total | 4714 | 5634 | 6957 | 5607 | 22912 | 5245 | 6281 | 6167 | 5045 | 22738 | 4536 | | |

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, under B010T009024, NU17CE924877, and 1U17CE002724. 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.

Source

• Office of Emergency Medical Services, Bureau of Health Care Safety and Quality, MDPH