**MA Opioid‐Related EMS Incidents**

**2013‐June 2017**

Massachusetts Department of Public Health

POSTED: NOVEMBER 2017

# 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.

DPH has revised the methodology for identifying EMS incidents involving naloxone administration. The new methodology allows the capture of additional EMS incidents involving naloxone administration that were not previously counted. The EMS naloxone statistics are depicted in the new Figure 2, which shows the total number of all EMS incidents involving naloxone administration.

# Results

Since 2013, there has been an increasing trend in the percentage of EMS incidents that are considered opioid‐ related and the number of all EMS incidents involving naloxone administration. In the first six months of 2017, the greatest number of suspected opioid‐related overdoses treated by EMS is among males aged 25‐34, accounting for 27% of opioid‐related overdose incidents with a known age and gender.

|  |
| --- |
| **All Suspected Opioid Related Incidents: 2017 (Quarter 1)** |
|  | **11‐14** | **15‐24** | **25‐34** | **35‐44** | **45‐54** | **55‐64** | **65+** | **Total** |
| Male | <7 | 311 | 1228 | 604 | 396 | 245 | 107 | 2891 |
| Female | <7 | 206 | 550 | 277 | 205 | 143 | 74 | 1455 |
| Total | <7 | 517 | 1778 | 881 | 601 | 388 | 181 | 4346 |

**Figure 1: Percent of Opioid‐Related Overdoses**

**Among All EMS Incidents, MA: 2013‐Q2 2017**

3

2.5

2

1.5

1

0.5

0

Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2

2013

2014

2015

**Year and Quarter**

2016

2017

**Percent**

|  |
| --- |
| **All Suspected Opioid Related Incidents: 2017 (Quarter 2)** |
|  | **11‐14** | **15‐24** | **25‐34** | **35‐44** | **45‐54** | **55‐64** | **65+** | **Total** |
| Male | 0 | 353 | 1295 | 796 | 534 | 292 | 82 | 3352 |
| Female | 0 | 210 | 664 | 380 | 242 | 145 | 71 | 1712 |
| Total | 0 | 563 | 1959 | 1176 | 776 | 437 | 153 | 5064 |

**Figure 2: Count of All EMS Incidents Involving**

**Naloxone Administration, MA: 2013‐Q2 2017**

6000

5000

4000

3000

2000

1000

0

Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2

2013

2014

2015

**Year and Quarter**

2016

2017

**Count**

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 | Q2 |
| Abington | <7 | <7 | <7 | † | **<7** | 11 | 8 | 12 | 9 | **40** | 14 | 7 |
| Acton | 9 | <7 | 7 | <7 | **24** | <7 | <7 | <7 | <7 | **19** | <7 | 7 |
| Acushnet | <7 | <7 | <7 | † | **<7** | † | <7 | <7 | <7 | **12** | 7 | 7 |
| Adams | † | † | † | † | **†** | † | † | † | † | **†** | <7 | <7 |
| Agawam | <7 | <7 | <7 | 21 | **28** | 18 | 8 | 16 | 13 | **55** | 9 | 10 |
| Alford | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Amesbury | <7 | 13 | <7 | 8 | **32** | 15 | 24 | 13 | 16 | **68** | 11 | 14 |
| Amherst | <7 | <7 | <7 | 7 | **17** | 8 | <7 | <7 | <7 | **20** | 8 | <7 |
| Andover | <7 | 13 | <7 | <7 | **28** | <7 | <7 | 10 | 12 | **30** | 7 | 10 |
| Aquinnah | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Arlington | 15 | 16 | 32 | 21 | **84** | 15 | 16 | 15 | 8 | **54** | 9 | 14 |
| Ashburnham | † | † | † | † | **†** | <7 | <7 | <7 | † | **9** | <7 | <7 |
| Ashby | † | † | <7 | <7 | **<7** | <7 | † | <7 | <7 | **8** | † | <7 |
| Ashfield | † | † | † | <7 | **<7** | † | † | † | <7 | **<7** | † | † |
| Ashland | <7 | <7 | <7 | <7 | **10** | <7 | \* | 7 | 8 | **25** | <7 | 9 |
| Athol | <7 | \* | 9 | 14 | **36** | <7 | \* | 9 | 16 | **38** | <7 | 15 |
| Attleboro | 27 | 21 | 30 | 19 | **97** | 22 | 39 | 38 | 40 | **139** | 36 | 31 |
| Auburn | <7 | † | <7 | 8 | **13** | <7 | <7 | 11 | 8 | **27** | <7 | 11 |
| Avon | <7 | <7 | <7 | <7 | **14** | <7 | <7 | <7 | <7 | **19** | <7 | <7 |
| Ayer | † | <7 | <7 | † | **<7** | <7 | <7 | <7 | <7 | **17** | <7 | <7 |
| Barnstable | 94 | 55 | 63 | 51 | **263** | 45 | 54 | 61 | 58 | **218** | 61 | 46 |
| Barre | <7 | <7 | <7 | <7 | **8** | <7 | <7 | <7 | <7 | **8** | <7 | <7 |
| Becket | † | <7 | † | † | **<7** | † | <7 | † | † | **<7** | <7 | <7 |
| Bedford | <7 | <7 | <7 | <7 | **14** | <7 | 8 | 9 | <7 | **28** | <7 | 8 |
| Belchertown | <7 | † | † | <7 | **<7** | <7 | † | † | <7 | **<7** | <7 | † |
| Bellingham | \* | <7 | 8 | 7 | **26** | 7 | 11 | 11 | 13 | **42** | 11 | 14 |
| Belmont | <7 | 7 | <7 | <7 | **18** | 10 | 11 | \* | <7 | **33** | <7 | <7 |
| Berkley | <7 | † | <7 | <7 | **<7** | <7 | <7 | <7 | <7 | **11** | <7 | <7 |
| Berlin | <7 | † | <7 | <7 | **<7** | <7 | † | † | <7 | **<7** | <7 | † |
| Bernardston | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Beverly | 21 | 27 | 33 | 22 | **103** | 24 | 31 | 24 | 31 | **110** | 25 | 34 |
| Billerica | <7 | 10 | \* | † | **21** | 19 | 12 | 29 | 12 | **72** | 20 | 15 |
| Blackstone | † | <7 | <7 | <7 | **8** | <7 | <7 | <7 | <7 | **7** | <7 | 9 |
| Blandford | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Bolton | <7 | <7 | † | <7 | **<7** | <7 | <7 | <7 | <7 | **7** | † | † |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2015** | **2016** | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 |
| Boston | 496 | 477 | 519 | 480 | **1972** | 323 | 517 | 526 | 328 | **1694** | 347 | 498 |
| Bourne | <7 | <7 | 21 | 18 | **46** | 18 | 28 | 31 | 12 | **89** | 17 | 29 |
| Boxborough | † | † | <7 | † | **<7** | <7 | <7 | <7 | <7 | **17** | † | <7 |
| Boxford | <7 | <7 | <7 | <7 | **<7** | † | <7 | <7 | <7 | **7** | <7 | <7 |
| Boylston | † | † | <7 | <7 | **<7** | † | <7 | <7 | <7 | **8** | † | † |
| Braintree | 26 | 15 | 19 | 27 | **87** | 23 | 32 | 26 | 41 | **122** | 23 | 34 |
| Brewster | 7 | † | <7 | <7 | **15** | <7 | <7 | † | <7 | **<7** | † | <7 |
| Bridgewater | <7 | <7 | <7 | <7 | **7** | <7 | <7 | † | <7 | **9** | <7 | <7 |
| Brimfield | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Brockton | 225 | 187 | 91 | 180 | **683** | 189 | 261 | 245 | 169 | **864** | 173 | 154 |
| Brookfield | <7 | <7 | † | <7 | **<7** | † | <7 | † | <7 | **<7** | <7 | <7 |
| Brookline | 9 | \* | <7 | 7 | **29** | 9 | \* | <7 | 10 | **31** | 12 | 18 |
| Buckland | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Burlington | 10 | <7 | <7 | 7 | **23** | <7 | <7 | 14 | 12 | **35** | 9 | 13 |
| Cambridge | 55 | 71 | 78 | 72 | **276** | 90 | 154 | 120 | 93 | **457** | 76 | 88 |
| Canton | <7 | <7 | <7 | <7 | **11** | <7 | 13 | \* | 10 | **34** | <7 | 7 |
| Carlisle | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Carver | <7 | <7 | <7 | 8 | **23** | 13 | 12 | 14 | 13 | **52** | 11 | 12 |
| Charlemont | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Charlton | † | † | † | † | **†** | <7 | † | † | <7 | **<7** | <7 | <7 |
| Chatham | <7 | <7 | <7 | <7 | **13** | <7 | <7 | <7 | <7 | **7** | <7 | <7 |
| Chelmsford | 7 | 11 | 20 | 9 | **47** | 19 | 17 | 11 | 10 | **57** | 19 | 12 |
| Chelsea | 34 | 71 | 87 | 71 | **263** | 56 | 70 | 81 | 41 | **248** | 48 | 81 |
| Cheshire | † | † | † | <7 | **<7** | <7 | † | <7 | <7 | **<7** | <7 | <7 |
| Chester | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Chesterfield | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Chicopee | 36 | 69 | 48 | 80 | **233** | 78 | 58 | 45 | 54 | **235** | 44 | 54 |
| Chilmark | † | † | <7 | † | **<7** | <7 | † | <7 | † | **<7** | † | † |
| Clarksburg | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Clinton | 10 | 11 | 11 | 9 | **41** | <7 | 13 | \* | 28 | **54** | <7 | 11 |
| Cohasset | <7 | † | † | † | **<7** | † | † | <7 | <7 | **<7** | † | <7 |
| Colrain | † | <7 | † | † | **<7** | † | † | † | † | **†** | † | † |
| Concord | <7 | <7 | <7 | <7 | **17** | <7 | 7 | <7 | <7 | **18** | <7 | <7 |
| Conway | † | † | † | † | **†** | <7 | † | † | † | **<7** | † | † |
| Cummington | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Dalton | <7 | <7 | † | <7 | **8** | <7 | <7 | <7 | <7 | **12** | <7 | † |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2015** | **2016** | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 |
| Danvers | 40 | 20 | 43 | 34 | **137** | 31 | 45 | 39 | 22 | **137** | 28 | 41 |
| Dartmouth | 13 | 21 | 16 | 20 | **70** | 18 | 24 | 25 | 24 | **91** | 19 | 25 |
| Dedham | 15 | 12 | <7 | <7 | **37** | 13 | 26 | \* | <7 | **57** | 16 | 15 |
| Deerfield | <7 | <7 | <7 | † | **<7** | <7 | <7 | † | † | **<7** | † | <7 |
| Dennis | 13 | <7 | 8 | <7 | **33** | <7 | <7 | 9 | \* | **18** | 11 | 12 |
| Dighton | <7 | <7 | <7 | <7 | **9** | <7 | <7 | † | † | **7** | <7 | <7 |
| Douglas | <7 | † | <7 | † | **<7** | <7 | <7 | † | † | **<7** | † | † |
| Dover | † | <7 | † | † | **<7** | † | † | † | † | **†** | † | † |
| Dracut | 12 | 15 | 16 | 22 | **65** | 15 | 10 | 22 | 14 | **61** | 11 | 16 |
| Dudley | † | 10 | <7 | <7 | **13** | † | <7 | 8 | \* | **18** | <7 | 7 |
| Dunstable | † | † | <7 | † | **<7** | † | † | <7 | † | **<7** | <7 | † |
| Duxbury | <7 | <7 | <7 | <7 | **12** | <7 | <7 | <7 | <7 | **19** | <7 | <7 |
| EastBridgewater | 20 | <7 | \* | 11 | **43** | <7 | 15 | 9 | \* | **37** | <7 | <7 |
| East Brookfield | † | <7 | † | <7 | **<7** | † | † | † | <7 | **<7** | † | † |
| East Longmeadow | <7 | <7 | <7 | 8 | **19** | <7 | 8 | <7 | 9 | **23** | 7 | <7 |
| Eastham | <7 | <7 | <7 | † | **<7** | <7 | <7 | <7 | <7 | **9** | <7 | <7 |
| Easthampton | <7 | <7 | <7 | † | **<7** | † | † | <7 | † | **<7** | † | † |
| Easton | 7 | † | <7 | <7 | **13** | <7 | <7 | <7 | † | **9** | <7 | <7 |
| Edgartown | † | <7 | † | <7 | **<7** | <7 | <7 | <7 | <7 | **7** | <7 | <7 |
| Egremont | † | † | † | † | **†** | † | † | <7 | † | **<7** | † | † |
| Erving | <7 | † | † | <7 | **<7** | † | † | † | <7 | **<7** | <7 | † |
| Essex | <7 | † | <7 | † | **<7** | <7 | <7 | † | <7 | **<7** | <7 | <7 |
| Everett | 37 | 27 | 36 | 29 | **129** | 34 | 56 | 48 | 38 | **176** | 38 | 44 |
| Fairhaven | 13 | 20 | 23 | 16 | **72** | 25 | 24 | 19 | 15 | **83** | 11 | 13 |
| Fall River | 20 | 66 | 155 | 185 | **426** | 151 | 155 | 297 | 227 | **830** | 194 | 165 |
| Falmouth | 32 | 33 | 18 | 13 | **96** | 23 | 56 | 46 | 45 | **170** | 40 | 48 |
| Fitchburg | 43 | 47 | 55 | 65 | **210** | 71 | 80 | 90 | 65 | **306** | 53 | 48 |
| Florida | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Foxborough | <7 | † | <7 | † | **7** | <7 | <7 | 12 | 16 | **34** | 11 | 7 |
| Framingham | 43 | 57 | 42 | 36 | **178** | 29 | 61 | 66 | 55 | **211** | 43 | 34 |
| Franklin | \* | <7 | 13 | 12 | **37** | <7 | 17 | 16 | <7 | **44** | 16 | 15 |
| Freetown | <7 | <7 | 9 | <7 | **19** | <7 | <7 | 7 | 7 | **23** | <7 | <7 |
| Gardner | 18 | 19 | 25 | 22 | **84** | 14 | 29 | 24 | 12 | **79** | 20 | 13 |
| Georgetown | <7 | <7 | <7 | <7 | **15** | <7 | <7 | <7 | <7 | **10** | <7 | <7 |
| Gill | † | † | † | † | **†** | <7 | <7 | † | <7 | **<7** | † | † |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2015** | **2016** | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 |
| Gloucester | 26 | 22 | 31 | 23 | **102** | 39 | 30 | 29 | 14 | **112** | 16 | 25 |
| Goshen | † | † | † | † | **†** | † | † | <7 | † | **<7** | † | † |
| Gosnold | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Grafton | <7 | 9 | 7 | <7 | **22** | <7 | <7 | <7 | <7 | **16** | <7 | 7 |
| Granby | <7 | <7 | <7 | <7 | **10** | <7 | <7 | <7 | <7 | **9** | <7 | † |
| Granville | † | <7 | <7 | † | **<7** | <7 | † | † | † | **<7** | † | † |
| GreatBarrington | <7 | † | † | <7 | **<7** | <7 | <7 | <7 | <7 | **12** | <7 | <7 |
| Greenfield | <7 | 8 | <7 | 13 | **32** | 10 | 7 | 21 | 9 | **47** | 10 | 15 |
| Groton | † | † | † | † | **†** | <7 | † | † | <7 | **<7** | † | <7 |
| Groveland | † | † | <7 | † | **<7** | <7 | <7 | <7 | <7 | **<7** | <7 | <7 |
| Hadley | <7 | <7 | <7 | 7 | **12** | 7 | <7 | <7 | <7 | **19** | <7 | <7 |
| Halifax | 16 | 9 | \* | <7 | **36** | 10 | 22 | <7 | \* | **45** | <7 | <7 |
| Hamilton | † | <7 | <7 | <7 | **<7** | <7 | <7 | † | † | **<7** | <7 | <7 |
| Hampden | <7 | <7 | † | † | **<7** | † | <7 | † | <7 | **<7** | <7 | <7 |
| Hancock | † | † | † | † | **†** | † | † | † | † | **†** | † | <7 |
| Hanover | 8 | <7 | <7 | <7 | **19** | <7 | <7 | <7 | <7 | **18** | <7 | <7 |
| Hanson | 14 | 14 | 9 | 8 | **45** | 7 | <7 | 9 | <7 | **27** | <7 | 8 |
| Hardwick | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Harvard | † | <7 | † | † | **<7** | <7 | † | † | † | **<7** | <7 | † |
| Harwich | 10 | <7 | \* | 8 | **28** | <7 | 7 | 7 | <7 | **20** | 9 | <7 |
| Hatfield | <7 | † | <7 | † | **<7** | † | † | † | <7 | **<7** | † | <7 |
| Haverhill | 72 | 78 | 89 | 100 | **339** | 91 | 89 | 77 | 104 | **361** | 87 | 82 |
| Hawley | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Heath | † | <7 | † | <7 | **<7** | † | † | † | † | **†** | <7 | † |
| Hingham | <7 | <7 | <7 | <7 | **11** | <7 | <7 | <7 | 13 | **23** | <7 | <7 |
| Hinsdale | † | † | † | † | **†** | † | <7 | † | † | **<7** | † | † |
| Holbrook | 10 | <7 | 12 | <7 | **32** | 16 | 17 | 21 | 18 | **72** | 17 | 20 |
| Holden | <7 | <7 | <7 | <7 | **13** | <7 | <7 | <7 | <7 | **14** | <7 | <7 |
| Holland | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Holliston | † | † | <7 | <7 | **<7** | † | † | † | † | **†** | <7 | <7 |
| Holyoke | 54 | 61 | 57 | 92 | **264** | 81 | 86 | 64 | 75 | **306** | 55 | 48 |
| Hopedale | <7 | <7 | <7 | <7 | **11** | † | † | † | <7 | **<7** | <7 | <7 |
| Hopkinton | <7 | <7 | <7 | <7 | **12** | <7 | <7 | 7 | † | **15** | <7 | 8 |
| Hubbardston | <7 | <7 | † | † | **<7** | <7 | <7 | <7 | † | **7** | <7 | <7 |
| Hudson | <7 | \* | 18 | 7 | **37** | \* | 10 | 13 | <7 | **35** | <7 | <7 |
| Hull | <7 | † | <7 | † | **<7** | 11 | <7 | <7 | † | **18** | <7 | <7 |

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| --- | --- | --- | --- |
|  | **2015** | **2016** | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 |
| Huntington | † | † | † | <7 | **<7** | † | † | † | † | **†** | † | † |
| Ipswich | <7 | <7 | <7 | <7 | **12** | 7 | <7 | <7 | <7 | **20** | 8 | 7 |
| Kingston | 10 | <7 | 8 | <7 | **25** | <7 | <7 | <7 | 9 | **20** | <7 | <7 |
| Lakeville | <7 | † | <7 | <7 | **9** | <7 | <7 | 27 | 11 | **47** | 17 | 10 |
| Lancaster | <7 | <7 | <7 | <7 | **7** | <7 | <7 | <7 | <7 | **7** | † | <7 |
| Lanesborough | <7 | † | † | † | **<7** | † | † | † | <7 | **<7** | † | <7 |
| Lawrence | 133 | 86 | 109 | 94 | **422** | 192 | 96 | 163 | 171 | **622** | 142 | 177 |
| Lee | † | <7 | <7 | † | **<7** | <7 | <7 | <7 | <7 | **7** | <7 | <7 |
| Leicester | <7 | 8 | <7 | <7 | **21** | <7 | <7 | <7 | 10 | **25** | 10 | <7 |
| Lenox | <7 | † | <7 | <7 | **<7** | † | <7 | <7 | <7 | **<7** | <7 | <7 |
| Leominster | 23 | 41 | 59 | 39 | **162** | 49 | 66 | 111 | 62 | **288** | 65 | 53 |
| Leverett | † | † | † | † | **†** | † | † | † | † | **†** | <7 | † |
| Lexington | <7 | 8 | <7 | <7 | **18** | <7 | <7 | 8 | <7 | **16** | <7 | <7 |
| Leyden | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Lincoln | † | † | † | † | **†** | <7 | † | <7 | † | **<7** | † | <7 |
| Littleton | † | <7 | <7 | <7 | **<7** | <7 | <7 | <7 | <7 | **15** | <7 | <7 |
| Longmeadow | <7 | <7 | <7 | <7 | **15** | <7 | <7 | <7 | <7 | **13** | <7 | <7 |
| Lowell | 124 | 153 | 184 | 150 | **611** | 191 | 186 | 214 | 236 | **827** | 268 | 307 |
| Ludlow | 9 | 7 | 12 | 21 | **49** | \* | 13 | <7 | 13 | **43** | 10 | <7 |
| Lunenburg | <7 | 8 | 13 | <7 | **29** | <7 | <7 | 9 | <7 | **22** | <7 | † |
| Lynn | 53 | 90 | 63 | 73 | **279** | 92 | 108 | 132 | 114 | **446** | 111 | 141 |
| Lynnfield | <7 | <7 | <7 | <7 | **14** | <7 | <7 | <7 | <7 | **9** | <7 | <7 |
| Malden | 22 | 83 | 50 | 33 | **188** | 36 | 56 | 61 | 39 | **192** | 29 | 54 |
| Manchester | † | <7 | <7 | <7 | **<7** | † | <7 | <7 | † | **<7** | <7 | <7 |
| Mansfield | <7 | <7 | <7 | † | **<7** | <7 | 9 | 10 | <7 | **28** | 7 | 9 |
| Marblehead | <7 | <7 | <7 | <7 | **13** | <7 | \* | 14 | 8 | **35** | 8 | <7 |
| Marion | <7 | <7 | <7 | <7 | **9** | <7 | <7 | <7 | <7 | **<7** | <7 | <7 |
| Marlborough | 12 | 17 | 14 | 10 | **53** | 21 | 13 | 19 | 12 | **65** | <7 | 9 |
| Marshfield | <7 | <7 | 10 | 8 | **29** | 9 | 16 | 12 | 7 | **44** | 8 | † |
| Mashpee | 13 | 10 | \* | <7 | **36** | <7 | 12 | 17 | \* | **42** | 16 | 8 |
| Mattapoisett | <7 | <7 | <7 | <7 | **12** | <7 | 7 | <7 | <7 | **13** | <7 | <7 |
| Maynard | 7 | <7 | <7 | <7 | **14** | <7 | <7 | <7 | <7 | **12** | 9 | 9 |
| Medfield | † | <7 | <7 | † | **<7** | <7 | <7 | <7 | <7 | **8** | <7 | <7 |
| Medford | 25 | 28 | 39 | 30 | **122** | 40 | 42 | 34 | 21 | **137** | 14 | 24 |
| Medway | <7 | † | <7 | <7 | **8** | <7 | <7 | <7 | 8 | **19** | 7 | 8 |
| Melrose | 7 | <7 | 13 | <7 | **29** | 16 | 17 | 17 | 9 | **59** | 7 | <7 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2015** | **2016** | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 |
| Mendon | † | † | † | † | **†** | † | † | † | <7 | **<7** | <7 | <7 |
| Merrimac | <7 | <7 | <7 | <7 | **14** | <7 | † | <7 | <7 | **<7** | <7 | <7 |
| Methuen | 68 | 25 | 29 | 50 | **172** | 44 | 51 | 61 | 47 | **203** | 23 | 31 |
| Middleborough | 22 | <7 | \* | 11 | **48** | \* | 20 | <7 | † | **35** | <7 | <7 |
| Middlefield | † | † | † | † | **†** | † | † | <7 | † | **<7** | † | <7 |
| Middleton | <7 | <7 | <7 | <7 | **<7** | <7 | <7 | <7 | † | **12** | <7 | <7 |
| Milford | <7 | <7 | 13 | 11 | **35** | <7 | 14 | 22 | \* | **54** | 13 | 23 |
| Millbury | 12 | 9 | 14 | 10 | **45** | 7 | 19 | 17 | 9 | **52** | 8 | 11 |
| Millis | † | † | <7 | † | **<7** | <7 | <7 | <7 | 8 | **18** | <7 | <7 |
| Millville | <7 | <7 | † | <7 | **<7** | <7 | <7 | † | <7 | **7** | <7 | † |
| Milton | <7 | 7 | 12 | <7 | **29** | 7 | 12 | 9 | 8 | **36** | 10 | 9 |
| Monroe | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Monson | <7 | <7 | <7 | 7 | **11** | <7 | <7 | <7 | <7 | **12** | <7 | <7 |
| Montague | <7 | <7 | <7 | <7 | **15** | \* | 10 | 7 | <7 | **28** | <7 | <7 |
| Monterey | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Montgomery | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Mount Washington | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Nahant | <7 | <7 | † | <7 | **7** | <7 | <7 | † | <7 | **<7** | † | <7 |
| Nantucket | <7 | <7 | † | <7 | **11** | <7 | <7 | 9 | <7 | **18** | <7 | <7 |
| Natick | <7 | <7 | 9 | 9 | **29** | <7 | 9 | \* | 10 | **33** | 7 | <7 |
| Needham | <7 | <7 | † | † | **8** | <7 | <7 | <7 | <7 | **15** | <7 | † |
| New Ashford | † | † | † | † | **†** | † | † | † |  | **†** | † | † |
| New Bedford | 151 | 174 | 211 | 146 | **682** | 116 | 152 | 218 | 214 | **700** | 118 | 196 |
| New Braintree | † | <7 | † | † | **<7** | † | † | † | <7 | **<7** | † | <7 |
| NewMarlborough | † | † | † | † | **†** | † | † | † | † | **†** | † | <7 |
| New Salem | † | † | † | <7 | **<7** | † | † | † | † | **†** | † | <7 |
| Newbury | <7 | <7 | † | † | **<7** | <7 | † | † | † | **<7** | † | † |
| Newburyport | <7 | <7 | <7 | <7 | **17** | <7 | 9 | <7 | 11 | **24** | <7 | <7 |
| Newton | <7 | 20 | \* | 9 | **43** | 11 | 12 | 15 | 16 | **54** | 16 | 15 |
| Norfolk | <7 | † | <7 | <7 | **7** | 7 | <7 | <7 | <7 | **17** | <7 | <7 |
| North Adams | <7 | \* | 8 | 13 | **31** | 11 | 27 | 20 | 14 | **72** | 9 | 8 |
| North Andover | 10 | 14 | 10 | 7 | **41** | 12 | 11 | 18 | 13 | **54** | 15 | 11 |
| North Attleboro | 11 | 15 | 8 | 15 | **49** | 13 | 21 | 18 | 16 | **68** | 11 | 24 |
| NorthBrookfield | † | † | <7 | <7 | **<7** | † | † | <7 | <7 | **<7** | † | † |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2015** | **2016** | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 |
| North Reading | <7 | 8 | <7 | <7 | **15** | <7 | <7 | 9 | <7 | **21** | <7 | 9 |
| Northampton | <7 | 7 | 19 | <7 | **31** | 25 | \* | <7 | 21 | **68** | 26 | 19 |
| Northborough | <7 | † | <7 | <7 | **<7** | <7 | <7 | 9 | <7 | **22** | <7 | <7 |
| Northbridge | <7 | 7 | <7 | <7 | **22** | <7 | 7 | 7 | <7 | **22** | <7 | <7 |
| Northfield | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Norton | <7 | † | † | † | **<7** | † | \* | <7 | 11 | **26** | 7 | <7 |
| Norwell | <7 | \* | 10 | † | **22** | <7 | 7 | <7 | <7 | **19** | <7 | <7 |
| Norwood | <7 | <7 | <7 | <7 | **7** | <7 | † | <7 | 11 | **18** | 13 | 13 |
| Oak Bluffs | <7 | <7 | <7 | <7 | **15** | <7 | <7 | <7 | <7 | **14** | <7 | † |
| Oakham | † | † | † | † | **†** | † | <7 | <7 | † | **<7** | <7 | † |
| Orange | † | † | <7 | <7 | **<7** | <7 | <7 | <7 | 7 | **11** | 8 | <7 |
| Orleans | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Otis | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Oxford | 9 | <7 | 13 | \* | **34** | <7 | 10 | 23 | <7 | **41** | 10 | 8 |
| Palmer | <7 | <7 | <7 | <7 | **14** | † | <7 | † | <7 | **<7** | † | <7 |
| Paxton | <7 | † | <7 | † | **<7** | <7 | <7 | <7 | <7 | **<7** | <7 | <7 |
| Peabody | 37 | 27 | 30 | 27 | **121** | 34 | 43 | 41 | 42 | **160** | 33 | 35 |
| Pelham | † | † | <7 | † | **<7** | † | † | † | † | **†** | † | † |
| Pembroke | <7 | 13 | 12 | \* | **36** | 8 | 9 | 8 | 17 | **42** | 13 | 8 |
| Pepperell | <7 | <7 | 9 | <7 | **23** | <7 | <7 | 9 | <7 | **20** | <7 | † |
| Peru | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Petersham | † | <7 | † | † | **<7** | † | <7 | † | <7 | **<7** | † | † |
| Phillipston | † | <7 | † | † | **<7** | † | † | <7 | † | **<7** | † | † |
| Pittsfield | 28 | 24 | 38 | 56 | **146** | 39 | 40 | 31 | 39 | **149** | 33 | 27 |
| Plainfield | † | † | † | † | **†** | † | † | † | † | **†** | † | <7 |
| Plainville | <7 | <7 | <7 | <7 | **21** | <7 | <7 | <7 | 11 | **23** | 7 | <7 |
| Plymouth | 57 | 46 | 35 | 47 | **185** | 38 | 60 | 45 | 39 | **182** | 49 | 58 |
| Plympton | <7 | <7 | <7 | † | **<7** | † | <7 | <7 | <7 | **<7** | <7 | <7 |
| Princeton | † | † | † | <7 | **<7** | † | † | † | † | **†** | † | <7 |
| Provincetown | † | 7 | \* | <7 | **15** | <7 | <7 | <7 | <7 | **10** | <7 | <7 |
| Quincy | 86 | 88 | 41 | 86 | **301** | 56 | 123 | 121 | 117 | **417** | 86 | 87 |
| Randolph | <7 | <7 | 19 | 7 | **34** | 30 | 30 | 16 | 24 | **100** | 19 | 13 |
| Raynham | \* | <7 | 18 | 7 | **38** | <7 | <7 | 7 | 13 | **32** | <7 | 9 |
| Reading | <7 | <7 | <7 | <7 | **15** | <7 | <7 | 7 | 7 | **26** | <7 | <7 |
| Rehoboth | † | † | † | <7 | **<7** | † | † | † | † | **†** | <7 | <7 |
| Revere | 44 | 61 | 75 | 59 | **239** | 50 | 80 | 85 | 72 | **287** | 50 | 66 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2015** | **2016** | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 |
| Richmond | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Rochester | † | <7 | † | † | **<7** | <7 | <7 | <7 | <7 | **8** | <7 | † |
| Rockland | 12 | 7 | 18 | 12 | **49** | 41 | 27 | 23 | 22 | **113** | 17 | 19 |
| Rockport | <7 | † | <7 | † | **7** | † | † | <7 | <7 | **<7** | <7 | <7 |
| Rowe | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Rowley | † | <7 | † | <7 | **<7** | <7 | <7 | <7 | <7 | **8** | † | <7 |
| Royalston | † | <7 | <7 | <7 | **<7** | <7 | <7 | <7 | † | **<7** | <7 | † |
| Russell | † | <7 | <7 | † | **<7** | † | † | † | <7 | **<7** | † | <7 |
| Rutland | † | <7 | <7 | † | **<7** | † | <7 | <7 | <7 | **10** | <7 | <7 |
| Salem | 35 | 59 | 38 | 33 | **165** | 45 | 58 | 78 | 58 | **239** | 53 | 54 |
| Salisbury | 16 | 16 | 10 | 12 | **54** | 23 | 32 | 32 | 15 | **102** | 17 | 23 |
| Sandisfield | † | † | † | † | **†** | † | <7 | † | † | **<7** | <7 | † |
| Sandwich | † | † | <7 | † | **<7** | † | † | \* | <7 | **8** | <7 | † |
| Saugus | 29 | 24 | 26 | 16 | **95** | 25 | 37 | 38 | 27 | **127** | 24 | 31 |
| Savoy | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Scituate | <7 | <7 | 7 | <7 | **20** | <7 | <7 | 9 | <7 | **21** | <7 | <7 |
| Seekonk | <7 | <7 | 7 | 26 | **42** | 8 | \* | 10 | <7 | **30** | <7 | 9 |
| Sharon | † | † | † | † | **†** | † | <7 | 7 | <7 | **11** | <7 | <7 |
| Sheffield | † | † | <7 | <7 | **<7** | † | † | <7 | † | **<7** | † | <7 |
| Shelburne | † | <7 | † | <7 | **<7** | <7 | † | † | <7 | **<7** | <7 | † |
| Sherborn | † | † | † | † | **†** | † | † | † | <7 | **<7** | † | † |
| Shirley | <7 | <7 | <7 | <7 | **9** | <7 | <7 | 7 | † | **11** | <7 | <7 |
| Shrewsbury | 12 | 8 | 12 | 18 | **50** | 10 | 19 | 11 | 11 | **51** | 7 | 16 |
| Shutesbury | <7 | † | † | † | **<7** | † | † | <7 | † | **<7** | † | † |
| Somerset | <7 | 8 | 10 | <7 | **29** | 13 | 17 | 10 | 9 | **49** | 8 | 10 |
| Somerville | 17 | 42 | 38 | 44 | **141** | 38 | 52 | 54 | 49 | **193** | 25 | 35 |
| South Hadley | <7 | † | † | <7 | **<7** | † | <7 | † | † | **<7** | † | † |
| Southampton | † | <7 | <7 | <7 | **<7** | † | <7 | <7 | <7 | **<7** | <7 | <7 |
| Southborough | † | † | <7 | <7 | **<7** | <7 | <7 | <7 | <7 | **<7** | † | † |
| Southbridge | 13 | 13 | 10 | 15 | **51** | 11 | 26 | 21 | 36 | **94** | 8 | 14 |
| Southwick | <7 | <7 | <7 | <7 | **10** | 11 | 10 | \* | <7 | **33** | 7 | <7 |
| Spencer | <7 | † | <7 | <7 | **9** | <7 | <7 | <7 | <7 | **12** | <7 | <7 |
| Springfield | 116 | 160 | 162 | 264 | **702** | 209 | 224 | 184 | 204 | **821** | 128 | 189 |
| Sterling | <7 | † | <7 | <7 | **7** | <7 | <7 | <7 | <7 | **12** | <7 | <7 |
| Stockbridge | † | † | <7 | † | **<7** | † | † | † | † | **†** | <7 | † |
| Stoneham | 15 | 13 | 11 | 14 | **53** | <7 | 23 | \* | 12 | **52** | 9 | <7 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2015** | **2016** | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 |
| Stoughton | 7 | 12 | 18 | 12 | **49** | 10 | 21 | 12 | 11 | **54** | 13 | 16 |
| Stow | <7 | † | <7 | <7 | **<7** | † | <7 | <7 | † | **<7** | <7 | <7 |
| Sturbridge | † | <7 | <7 | <7 | **<7** | <7 | 11 | <7 | <7 | **25** | <7 | <7 |
| Sudbury | <7 | <7 | <7 | † | **10** | † | <7 | † | <7 | **<7** | <7 | <7 |
| Sunderland | <7 | † | † | <7 | **<7** | <7 | <7 | † | <7 | **<7** | † | <7 |
| Sutton | <7 | <7 | <7 | <7 | **11** | <7 | <7 | <7 | <7 | **12** | <7 | <7 |
| Swampscott | <7 | <7 | <7 | <7 | **10** | <7 | 9 | <7 | <7 | **24** | <7 | <7 |
| Swansea | <7 | † | <7 | <7 | **9** | 8 | 13 | 13 | 15 | **49** | 10 | <7 |
| Taunton | 77 | 77 | 83 | 77 | **314** | 75 | 116 | 72 | 54 | **317** | 37 | 69 |
| Templeton | <7 | 10 | <7 | <7 | **21** | <7 | <7 | <7 | <7 | **13** | <7 | <7 |
| Tewksbury | † | <7 | \* | 13 | **23** | 12 | 23 | 21 | 24 | **80** | 38 | 40 |
| Tisbury | <7 | <7 | † | <7 | **<7** | † | <7 | † | <7 | **<7** | <7 | <7 |
| Tolland | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Topsfield | <7 | <7 | <7 | <7 | **9** | † | † | <7 | † | **<7** | <7 | <7 |
| Townsend | 7 | <7 | <7 | <7 | **16** | <7 | <7 | <7 | <7 | **15** | <7 | <7 |
| Truro | <7 | † | † | † | **<7** | † | <7 | † | † | **<7** | † | † |
| Tyngsborough | † | <7 | † | <7 | **<7** | <7 | <7 | <7 | 7 | **19** | <7 | <7 |
| Tyringham | † | † | † | <7 | **<7** | † | † | † | † | **†** | † | † |
| Upton | † | <7 | <7 | † | **<7** | <7 | <7 | <7 | <7 | **<7** | † | <7 |
| Uxbridge | <7 | 9 | 10 | <7 | **30** | 9 | <7 | 11 | <7 | **29** | <7 | <7 |
| Wakefield | 13 | <7 | \* | 10 | **38** | 10 | 11 | 16 | 16 | **53** | 9 | 15 |
| Wales | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Walpole | 13 | <7 | <7 | 9 | **32** | <7 | 9 | \* | 13 | **35** | 10 | 9 |
| Waltham | 26 | 40 | 25 | 32 | **123** | 37 | 36 | 40 | 29 | **142** | 21 | 32 |
| Ware | † | <7 | † | † | **<7** | † | † | † | † | **†** | † | <7 |
| Wareham | 30 | 33 | 41 | 22 | **126** | 28 | 33 | 41 | 32 | **134** | 39 | 34 |
| Warren | <7 | † | <7 | <7 | **<7** | <7 | <7 | † | <7 | **7** | <7 | <7 |
| Warwick | † | † | † | † | **†** | † | † | † | † | **†** | † | <7 |
| Washington | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Watertown | 23 | 22 | 15 | 8 | **68** | 28 | 23 | 7 | 22 | **80** | <7 | 11 |
| Wayland | † | † | <7 | <7 | **<7** | † | <7 | <7 | <7 | **<7** | <7 | <7 |
| Webster | 20 | <7 | 13 | \* | **48** | 16 | 13 | 20 | 21 | **70** | 13 | 18 |
| Wellesley | <7 | <7 | <7 | <7 | **13** | <7 | <7 | <7 | <7 | **12** | <7 | <7 |
| Wellfleet | † | <7 | <7 | <7 | **<7** | <7 | <7 | <7 | <7 | **9** | † | <7 |
| Wendell | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Wenham | † | † | † | <7 | **<7** | <7 | <7 | † | † | **<7** | <7 | † |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2015** | **2016** | **2017** |
| City/Town | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 | Q3 | Q4 | **Total** | Q1 | Q2 |
| West Boylston | <7 | <7 | <7 | <7 | **11** | <7 | <7 | <7 | <7 | **12** | <7 | <7 |
| West Bridgewater | <7 | <7 | <7 | <7 | **13** | 8 | <7 | <7 | † | **16** | <7 | <7 |
| West Brookfield | † | <7 | † | † | **<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 | † | † | **<7** | † | <7 |
| Westborough | 10 | <7 | <7 | 9 | **29** | <7 | 13 | 13 | \* | **43** | 7 | 13 |
| Westfield | 10 | 13 | 11 | 33 | **67** | 28 | 16 | 15 | 22 | **81** | 11 | 13 |
| Westford | † | † | <7 | <7 | **<7** | 8 | <7 | <7 | <7 | **21** | <7 | 10 |
| Westhampton | † | <7 | <7 | 9 | **16** | \* | 7 | <7 | 7 | **27** | <7 | <7 |
| Westminster | <7 | <7 | <7 | † | **7** | <7 | <7 | † | <7 | **7** | <7 | <7 |
| Weston | <7 | <7 | <7 | † | **<7** | <7 | <7 | † | <7 | **<7** | 9 | <7 |
| Westport | <7 | <7 | <7 | <7 | **7** | <7 | 9 | <7 | 10 | **27** | 7 | 8 |
| Westwood | <7 | <7 | † | † | **<7** | <7 | <7 | <7 | <7 | **14** | <7 | <7 |
| Weymouth | 57 | 50 | 50 | 17 | **174** | 35 | 61 | 80 | 37 | **213** | 50 | 57 |
| Whately | † | <7 | † | † | **<7** | † | † | † | † | **†** | <7 | <7 |
| Whitman | † | <7 | 9 | <7 | **14** | 7 | 7 | 9 | 18 | **41** | 9 | <7 |
| Wilbraham | <7 | <7 | <7 | <7 | **14** | <7 | 8 | <7 | <7 | **18** | <7 | <7 |
| Williamsburg | † | † | † | † | **†** | † | <7 | † | † | **<7** | <7 | <7 |
| Williamstown | <7 | <7 | <7 | <7 | **10** | <7 | <7 | <7 | <7 | **9** | † | <7 |
| Wilmington | \* | 14 | 14 | <7 | **41** | 11 | \* | 9 | <7 | **32** | <7 | 9 |
| Winchendon | <7 | † | <7 | <7 | **<7** | <7 | <7 | <7 | <7 | **15** | † | <7 |
| Winchester | † | <7 | <7 | <7 | **<7** | <7 | <7 | <7 | 9 | **20** | <7 | † |
| Windsor | † | † | † | † | **†** | † | † | † | <7 | **<7** | † | † |
| Winthrop | <7 | 7 | <7 | 10 | **29** | 12 | 18 | 21 | 7 | **58** | <7 | 8 |
| Woburn | 32 | 23 | 14 | 22 | **91** | 41 | 38 | 30 | 26 | **135** | 40 | 32 |
| Worcester | 304 | 289 | 457 | 358 | **1408** | 330 | 396 | 478 | 409 | **1613** | 265 | 340 |
| Worthington | † | † | † | † | **†** | † | † | † | † | **†** | † | † |
| Wrentham | <7 | † | <7 | <7 | **<7** | \* | 12 | 12 | <7 | **36** | <7 | <7 |
| Yarmouth | 34 | 21 | 11 | 21 | **87** | 15 | 30 | 20 | 26 | **91** | 16 | 27 |
| Unknown | 117 | 94 | 111 | 68 | **390** | 58 | 112 | 106 | 69 | **345** | 55 | 50 |
| **Grand Total** | **4044** | **4183** | **4650** | **4471** | **17348** | **4559** | **5711** | **5984** | **5137** | **21391** | **4393** | **5118** |

\*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.