

# MA Opioid-Related EMS Incidents 2013-June 2017

POSTED: NOVEMBER 2017

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.

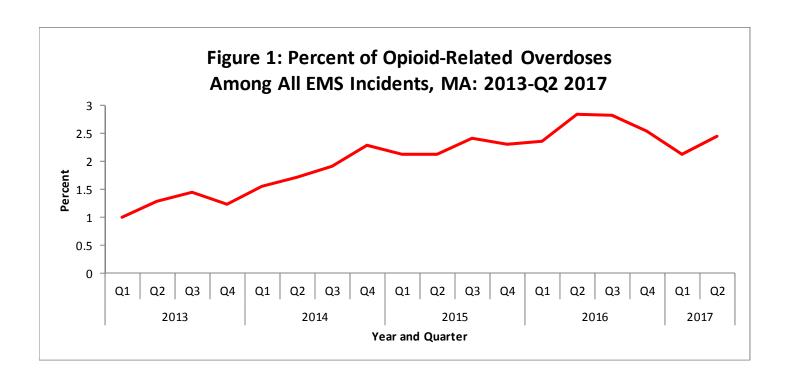
DPH has revised the methodology for identifying EMS incidents involving naloxone administration. The new methodology allows the capture of additional EMS incidents involving naloxone administration that were not previously counted. The EMS naloxone statistics are depicted in the new Figure 2, which shows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

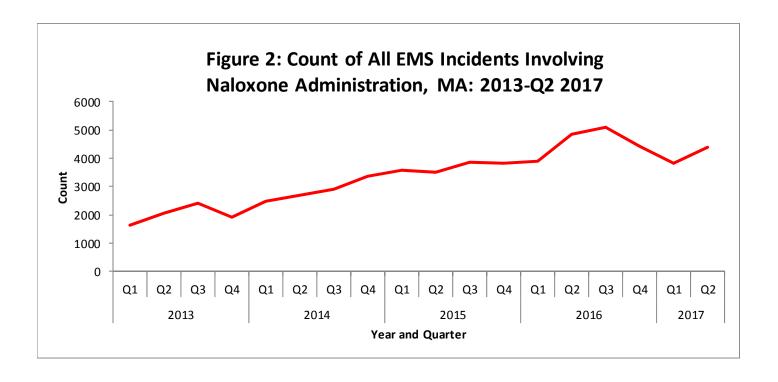
### **Results**

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 |  |  |  |  |  |  |  |

|        | 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 |  |  |  |  |  |  |  |





|             |    |    | <u>2015</u> |    |       |    |    | <u>2016</u> |    |       | 20 | 17 |
|-------------|----|----|-------------|----|-------|----|----|-------------|----|-------|----|----|
| 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 | +  | †  | †           | †  | †     | †  | †  | †           | †  | t     | †  | †  |
| 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     | †  | †  |

|              |     |     | <u>2015</u> |     |       |     |     | <u>2016</u> |     |       | 20  | ) <u>17</u> |
|--------------|-----|-----|-------------|-----|-------|-----|-----|-------------|-----|-------|-----|-------------|
| 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  | †           |

| due to non repor    |    |    | 2015 |     |       |     |     | <u>2016</u> |     |       | 20  | <u>17</u> |
|---------------------|----|----|------|-----|-------|-----|-----|-------------|-----|-------|-----|-----------|
| 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        |
| East<br>Bridgewater | 20 | <7 | *    | 11  | 43    | <7  | 15  | 9           | *   | 37    | <7  | <7        |
| East Brookfield     | +  | <7 | +    | <7  | <7    | +   | +   | +           | <7  | <7    | +   | +         |
| East<br>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    | †   | †         |

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.

| due to non-repor    | THIS BY L | .1415 561 4 | 2015 | io iriciae | nts occurr |    |    | 2016 |     |       | 20 | 17 |
|---------------------|-----------|-------------|------|------------|------------|----|----|------|-----|-------|----|----|
| 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    | †  | +  |
| Great<br>Barrington | <7        | †           | †    | <7         | <7         | <7 | <7 | <7   | <7  | 12    | <7 | <7 |
| Greenfield          | <7        | 8           | <7   | 13         | 32         | 10 | 7  | 21   | 9   | 47    | 10 | 15 |
| Groton              | †         | †           | †    | †          | t          | <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             | †         | +           | †    | †          | t          | †  | +  | +    | +   | +     | †  | <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              | +         | +           | †    | +          | t          | †  | +  | +    | +   | +     | +  | +  |
| 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 |

| due to non repor |     |     | 2015 |     |       |     |     | <u>2016</u> |     |       | 20  | ) <u>17</u> |
|------------------|-----|-----|------|-----|-------|-----|-----|-------------|-----|-------|-----|-------------|
| 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          |

|                     |     |     | <u>2015</u> |     |       |     |     | <u>2016</u> |     |       | 20  | 17  |
|---------------------|-----|-----|-------------|-----|-------|-----|-----|-------------|-----|-------|-----|-----|
| 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<br>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  |
| New<br>Marlborough  | †   | +   | †           | †   | †     | †   | †   | †           | †   | +     | †   | <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  |
| North<br>Brookfield | †   | †   | <7          | <7  | <7    | †   | †   | <7          | <7  | <7    | †   | †   |

|               |    |    | 2015 |    | ints occur |    |     | <u>2016</u> |     |       | 20 | ) <u>17</u> |
|---------------|----|----|------|----|------------|----|-----|-------------|-----|-------|----|-------------|
| 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      | t  | †  | †    | <7 | <7         | †  | †   | †           | †   | +     | <7 | <7          |
| Revere        | 44 | 61 | 75   | 59 | 239        | 50 | 80  | 85          | 72  | 287   | 50 | 66          |

|              |     |     | <u>2015</u> |     |       |     |     | <u>2016</u> |     |       | 20  | 17  |
|--------------|-----|-----|-------------|-----|-------|-----|-----|-------------|-----|-------|-----|-----|
| 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 |    | ints occur |    |     | <u>2016</u> |    |       | 20 | ) <u>17</u> |
|--------------|----|----|------|----|------------|----|-----|-------------|----|-------|----|-------------|
| 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 | +           |

|                     |      |      | <u>2015</u> |      |       |      |      | <u>2016</u> |      |       | <u>20</u> | 17   |
|---------------------|------|------|-------------|------|-------|------|------|-------------|------|-------|-----------|------|
| 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<br>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<br>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   |
| <b>Grand Total</b>  | 4044 | 4183 | 4650        | 4471 | 17348 | 4559 | 5711 | 5984        | 5137 | 21391 | 4393      | 5118 |

<sup>\*</sup>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.