



# Opioid-Related EMS Incidents Massachusetts Residents: 2013-2016

Massachusetts Department of Public Health

POSTED: MAY 2017

## Enhancement of Opioid Overdose Surveillance

MATRIS, the Massachusetts Ambulance Trip Reporting Information System, is a statewide database for collecting emergency medical service data from licensed ambulance services. It was not specifically designed to track opioid overdose incidents. DPH is currently working with all Emergency Medical Services (EMS) providers to improve the quality and completeness of these data especially with respect to opioid overdose incidents. To more accurately identify ambulance trips that are opioid-related, several pieces of information from MATRIS are combined such as: a notation that a trip was listed as a poisoning, that there was an administration of naloxone, or that the patient admitted to drug use. In combination, this information allows DPH to more accurately count opioid overdose incidents. Data for Boston came from applying this algorithm to events identified by Boston EMS as "Narcotic Related Incidents" (NRI). Not all services have reported their 2016 Q1-Q4 data yet so the numbers cited here are underestimates. Counts will be updated on a quarterly basis.

## Results

Since 2013, there has been an increasing trend in the percentage of EMS incidents that are considered opioid-related. In 2016 EMS services reported an opioid-related incident in 301 of the 351 MA cities and towns (86%). Overall, there was a 22% increase in the number of opioid-related EMS transport incidents compared with 2015.

In 2016, the greatest number of suspected opioid overdose incidents was among males aged 25-34 (25% of opioid-related incidents). There is an increasing trend in the quantity of Naloxone being dispensed during each opioid-related incident. On average, EMS administered Naloxone 1.4 times per opioid-related incident in the 2016. Almost one third of opioid-related incidents required more than one dose of Naloxone.

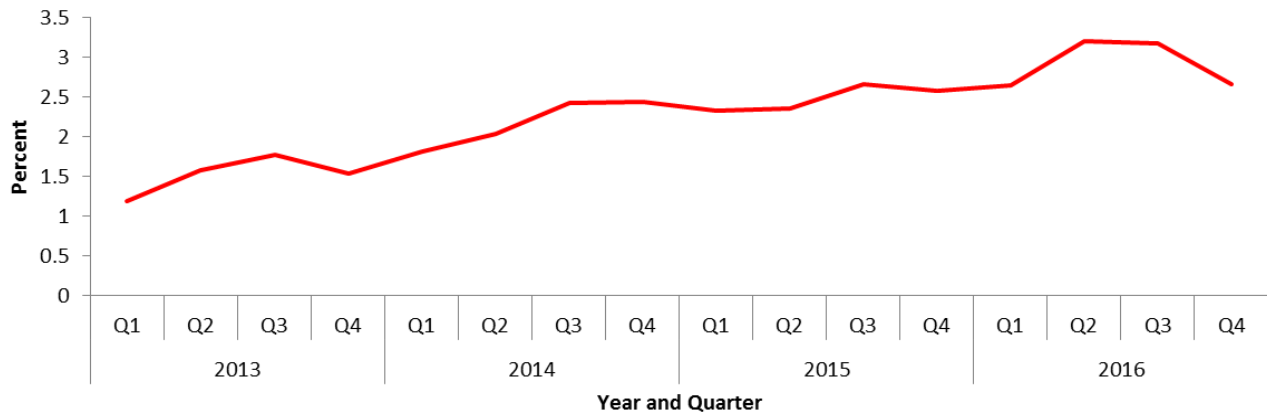
| <b>All Suspected Opioid Related Incidents: 2016 (Quarter 1)</b> |               |              |              |              |              |              |            |              |
|---|---------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|
|   | <b>&lt;15</b> | <b>15-24</b> | <b>25-34</b> | <b>35-44</b> | <b>45-54</b> | <b>55-64</b> | <b>65+</b> | <b>Total</b> |
| Male  | 10            | 400          | 1305         | 774          | 505          | 320          | 140        | 3454         |
| Female  | 8             | 243          | 575          | 320          | 244          | 166          | 116        | 1672         |
| <b>Total</b>  | <b>18</b>     | <b>643</b>   | <b>1880</b>  | <b>1094</b>  | <b>749</b>   | <b>486</b>   | <b>256</b> | <b>5126</b>  |

| <b>All Suspected Opioid Related Incidents: 2016 (Quarter 2)</b> |               |              |              |              |              |              |            |              |
|---|---------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|
|   | <b>&lt;15</b> | <b>15-24</b> | <b>25-34</b> | <b>35-44</b> | <b>45-54</b> | <b>55-64</b> | <b>65+</b> | <b>Total</b> |
| Male  | <7            | 383          | 1178         | 625          | 460          | 250          | 130        | 3026         |
| Female  | <7            | 255          | 579          | 282          | 258          | 135          | 112        | 1621         |
| <b>Total</b>  | <b>7</b>      | <b>638</b>   | <b>1757</b>  | <b>907</b>   | <b>718</b>   | <b>385</b>   | <b>242</b> | <b>4647</b>  |

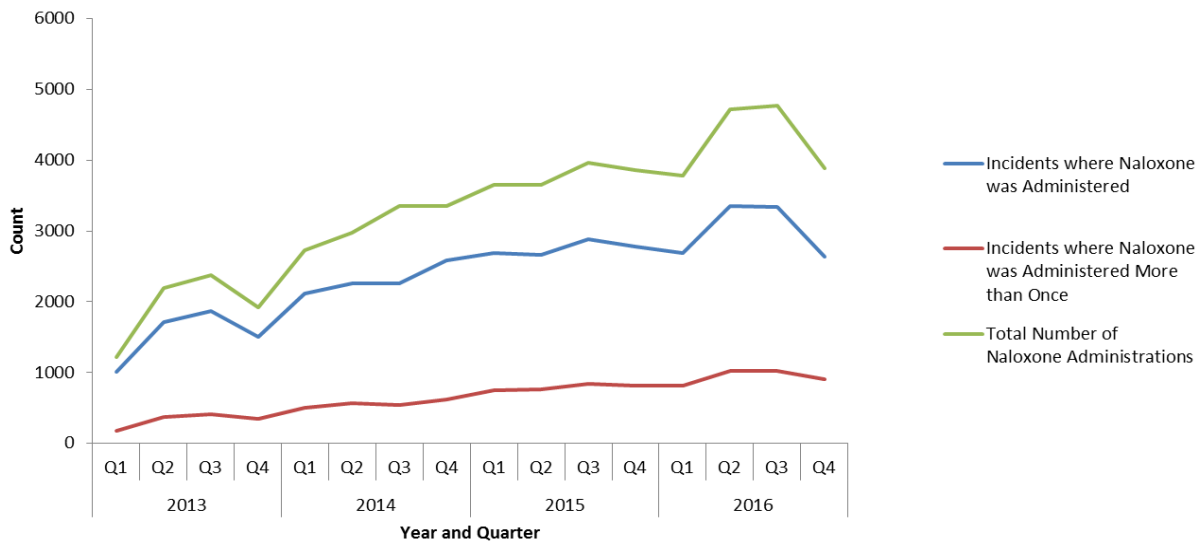
| <b>All Suspected Opioid Related Incidents: 2016 (Quarter 3)</b> |               |              |              |              |              |              |            |              |
|---|---------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|
|   | <b>&lt;15</b> | <b>15-24</b> | <b>25-34</b> | <b>35-44</b> | <b>45-54</b> | <b>55-64</b> | <b>65+</b> | <b>Total</b> |
| Male  | 8             | 518          | 1600         | 973          | 628          | 399          | 200        | 4326         |
| Female  | 15            | 290          | 865          | 451          | 304          | 199          | 125        | 2249         |
| <b>Total</b>  | <b>--</b>     | <b>808</b>   | <b>2465</b>  | <b>1424</b>  | <b>932</b>   | <b>598</b>   | <b>325</b> | <b>6575</b>  |

| <b>All Suspected Opioid Related Incidents: 2016 (Quarter 4)</b> |               |              |              |              |              |              |            |              |
|---|---------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|
|   | <b>&lt;15</b> | <b>15-24</b> | <b>25-34</b> | <b>35-44</b> | <b>45-54</b> | <b>55-64</b> | <b>65+</b> | <b>Total</b> |
| Male  | 12            | 391          | 1297         | 695          | 486          | 310          | 148        | 3339         |
| Female  | 8             | 250          | 629          | 357          | 254          | 154          | 116        | 1768         |
| <b>Total</b>  | <b>--</b>     | <b>641</b>   | <b>1926</b>  | <b>1052</b>  | <b>740</b>   | <b>464</b>   | <b>264</b> | <b>5107</b>  |

**Figure 1: Percent of All EMS Incidents that Are Opioid-Related MA: 2013-2016**



**Figure 2: EMS Naloxone Statistics, MA: 2013-2016**



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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town   | <u>2015</u> |     |     |     |              | <u>2016</u> |     |     |    |              |
|-------------|-------------|-----|-----|-----|--------------|-------------|-----|-----|----|--------------|
|             | Q1          | Q2  | Q3  | Q4  | Total        | Q1          | Q2  | Q3  | Q4 | Total        |
| Abington    | *           | 17  | <7  | 0   | <b>32</b>    | 13          | 10  | 12  | 12 | <b>47</b>    |
| Acton       | 10          | <7  | 8   | *   | <b>28</b>    | <7          | 7   | <7  | <7 | <b>24</b>    |
| Acushnet    | <7          | 0   | 0   | 0   | <b>&lt;7</b> | 0           | <7  | 0   | 0  | <b>&lt;7</b> |
| Adams       | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0  | <b>0</b>     |
| Agawam      | <7          | <7  | <7  | 22  | <b>30</b>    | 19          | 8   | 19  | 14 | <b>60</b>    |
| Alford      | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0  | <b>0</b>     |
| Amesbury    | <7          | 14  | *   | 9   | <b>36</b>    | 20          | 27  | 15  | 17 | <b>79</b>    |
| Amherst     | 0           | 0   | 0   | 0   | <b>0</b>     | <7          | 0   | 0   | 0  | <b>&lt;7</b> |
| Andover     | 10          | 11  | *   | <7  | <b>33</b>    | <7          | 8   | 13  | *  | <b>32</b>    |
| Aquinnah    | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0  | <b>0</b>     |
| Arlington   | 17          | 20  | 36  | 24  | <b>97</b>    | 19          | 24  | 17  | 9  | <b>69</b>    |
| Ashburnham  | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | <7  | 0   | 0  | <b>&lt;7</b> |
| Ashby       | 0           | 0   | <7  | <7  | <b>&lt;7</b> | <7          | <7  | <7  | <7 | <b>12</b>    |
| Ashfield    | 0           | 0   | 0   | <7  | <b>&lt;7</b> | 0           | 0   | 0   | <7 | <b>&lt;7</b> |
| Ashland     | <7          | <7  | <7  | <7  | <b>11</b>    | <7          | *   | 7   | 8  | <b>25</b>    |
| Athol       | <7          | 11  | *   | 15  | <b>41</b>    | <7          | *   | 13  | 19 | <b>46</b>    |
| Attleboro   | 33          | 23  | 32  | 22  | <b>110</b>   | 26          | 43  | 39  | 43 | <b>151</b>   |
| Auburn      | <7          | 0   | <7  | 10  | <b>16</b>    | <7          | <7  | 12  | 9  | <b>33</b>    |
| Avon        | <7          | <7  | <7  | <7  | <b>18</b>    | <7          | <7  | <7  | 7  | <b>22</b>    |
| Ayer        | 0           | <7  | 0   | 0   | <b>&lt;7</b> | 10          | <7  | <7  | 11 | <b>29</b>    |
| Barnstable  | 108         | 68  | 80  | 58  | <b>314</b>   | 53          | 63  | 68  | 68 | <b>252</b>   |
| Barre       | <7          | <7  | <7  | <7  | <b>13</b>    | <7          | <7  | <7  | <7 | <b>9</b>     |
| Becket      | 0           | <7  | 0   | 0   | <b>&lt;7</b> | 0           | 0   | 0   | 0  | <b>0</b>     |
| Bedford     | <7          | 8   | <7  | <7  | <b>18</b>    | *           | 10  | 9   | <7 | <b>32</b>    |
| Belchertown | <7          | 0   | <7  | <7  | <b>&lt;7</b> | <7          | 0   | 0   | <7 | <b>&lt;7</b> |
| Bellingham  | 12          | <7  | *   | 11  | <b>36</b>    | 9           | 12  | 12  | 13 | <b>46</b>    |
| Belmont     | 7           | 8   | <7  | <7  | <b>22</b>    | 10          | 13  | 7   | 7  | <b>37</b>    |
| Berkley     | <7          | 0   | <7  | <7  | <b>8</b>     | <7          | <7  | <7  | <7 | <b>12</b>    |
| Berlin      | <7          | <7  | <7  | <7  | <b>&lt;7</b> | <7          | <7  | 0   | <7 | <b>7</b>     |
| Bernardston | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | <7 | <b>&lt;7</b> |
| Beverly     | 24          | 28  | 36  | 23  | <b>111</b>   | 28          | 37  | 30  | 34 | <b>129</b>   |
| Billerica   | 7           | 10  | 7   | 0   | <b>24</b>    | 21          | 12  | 33  | 15 | <b>81</b>    |
| Blackstone  | <7          | <7  | <7  | <7  | <b>11</b>    | <7          | <7  | <7  | <7 | <b>7</b>     |
| Blandford   | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0  | <b>0</b>     |
| Bolton      | <7          | <7  | <7  | <7  | <b>12</b>    | <7          | <7  | <7  | <7 | <b>12</b>    |
| Boston      | 488         | 464 | 523 | 495 | <b>1970</b>  | 419         | 652 | 695 | 26 | <b>1792</b>  |

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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town    | <u>2015</u> |     |     |     |              | <u>2016</u> |     |     |     |              |
|--------------|-------------|-----|-----|-----|--------------|-------------|-----|-----|-----|--------------|
|              | Q1          | Q2  | Q3  | Q4  | Total        | Q1          | Q2  | Q3  | Q4  | Total        |
| Bourne       | <7          | *   | 25  | 20  | <b>57</b>    | 20          | 30  | 42  | 17  | <b>109</b>   |
| Boxborough   | <7          | 0   | <7  | 0   | <b>&lt;7</b> | <7          | <7  | <7  | 7   | <b>19</b>    |
| Boxford      | <7          | <7  | <7  | <7  | <b>&lt;7</b> | 0           | <7  | <7  | <7  | <b>8</b>     |
| Boylston     | 0           | 0   | <7  | <7  | <b>&lt;7</b> | 0           | <7  | <7  | <7  | <b>9</b>     |
| Braintree    | 32          | 19  | 19  | 32  | <b>102</b>   | 30          | 37  | 34  | 47  | <b>148</b>   |
| Brewster     | 13          | <7  | 8   | <7  | <b>29</b>    | <7          | <7  | <7  | <7  | <b>9</b>     |
| Bridgewater  | <7          | <7  | <7  | <7  | <b>9</b>     | <7          | 7   | 0   | <7  | <b>10</b>    |
| Brimfield    | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Brockton     | 233         | 185 | 101 | 198 | <b>717</b>   | 203         | 287 | 288 | 213 | <b>991</b>   |
| Brookfield   | <7          | <7  | 0   | <7  | <b>&lt;7</b> | <7          | <7  | 0   | <7  | <b>8</b>     |
| Brookline    | 11          | 14  | 7   | 8   | <b>40</b>    | 13          | *   | 9   | <7  | <b>33</b>    |
| Buckland     | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Burlington   | 13          | <7  | <7  | 8   | <b>29</b>    | *           | <7  | 15  | 17  | <b>44</b>    |
| Cambridge    | 77          | 100 | 100 | 91  | <b>368</b>   | 99          | 187 | 146 | 110 | <b>542</b>   |
| Canton       | <7          | <7  | <7  | <7  | <b>11</b>    | <7          | 14  | *   | 12  | <b>38</b>    |
| Carlisle     | <7          | 0   | 0   | 0   | <b>&lt;7</b> | 0           | 0   | 0   | <7  | <b>&lt;7</b> |
| Carver       | 7           | <7  | *   | 10  | <b>28</b>    | 13          | 12  | 16  | 15  | <b>56</b>    |
| Charlemont   | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Charlton     | 0           | 0   | 0   | 0   | <b>0</b>     | <7          | 0   | 0   | <7  | <b>&lt;7</b> |
| Chatham      | <7          | 0   | 0   | 0   | <b>&lt;7</b> | <7          | <7  | <7  | <7  | <b>11</b>    |
| Chelmsford   | 7           | 14  | 21  | 10  | <b>52</b>    | 19          | 17  | 10  | 11  | <b>57</b>    |
| Chelsea      | 36          | 72  | 90  | 82  | <b>280</b>   | 66          | 84  | 97  | 50  | <b>297</b>   |
| Cheshire     | 0           | 0   | 0   | <7  | <b>&lt;7</b> | <7          | 0   | <7  | <7  | <b>&lt;7</b> |
| Chester      | 0           | 0   | 0   | <7  | <b>&lt;7</b> | 0           | 0   | 0   | <7  | <b>&lt;7</b> |
| Chesterfield | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Chicopee     | 27          | 49  | 32  | 51  | <b>159</b>   | 50          | 36  | 37  | 35  | <b>158</b>   |
| Chilmark     | 0           | 0   | <7  | 0   | <b>&lt;7</b> | <7          | 0   | <7  | 0   | <b>&lt;7</b> |
| Clarksburg   | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Clinton      | 10          | 13  | 14  | 9   | <b>46</b>    | <7          | 13  | *   | 31  | <b>62</b>    |
| Cohasset     | <7          | <7  | <7  | <7  | <b>7</b>     | <7          | <7  | <7  | <7  | <b>11</b>    |
| Colrain      | 0           | <7  | 0   | 0   | <b>&lt;7</b> | 0           | 0   | 0   | 0   | <b>0</b>     |
| Concord      | <7          | 8   | <7  | <7  | <b>24</b>    | <7          | 8   | 7   | <7  | <b>24</b>    |
| Conway       | 0           | 0   | 0   | 0   | <b>0</b>     | <7          | 0   | 0   | 0   | <b>&lt;7</b> |
| Cummington   | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Dalton       | <7          | <7  | 0   | <7  | <b>8</b>     | <7          | <7  | <7  | <7  | <b>10</b>    |
| Danvers      | 45          | 24  | 48  | 39  | <b>156</b>   | 38          | 53  | 49  | 27  | <b>167</b>   |

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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town           | <u>2015</u> |    |     |     |              | <u>2016</u> |     |     |     |              |
|---------------------|-------------|----|-----|-----|--------------|-------------|-----|-----|-----|--------------|
|                     | Q1          | Q2 | Q3  | Q4  | Total        | Q1          | Q2  | Q3  | Q4  | Total        |
| Dartmouth           | 14          | 22 | 19  | 20  | <b>75</b>    | 20          | 26  | 25  | 25  | <b>96</b>    |
| Dedham              | 18          | 15 | 7   | 9   | <b>49</b>    | 14          | 26  | 15  | 0   | <b>55</b>    |
| Deerfield           | <7          | <7 | <7  | 0   | <b>9</b>     | <7          | <7  | 0   | 0   | <b>&lt;7</b> |
| Dennis              | 16          | *  | 10  | <7  | <b>39</b>    | <7          | <7  | 11  | *   | <b>23</b>    |
| Dighton             | <7          | <7 | <7  | <7  | <b>12</b>    | <7          | 7   | <7  | 0   | <b>10</b>    |
| Douglas             | <7          | 0  | <7  | 0   | <b>&lt;7</b> | <7          | <7  | 0   | 0   | <b>9</b>     |
| Dover               | 0           | <7 | 0   | 0   | <b>&lt;7</b> | 0           | <7  | <7  | 0   | <b>&lt;7</b> |
| Dracut              | 12          | 15 | 16  | 22  | <b>65</b>    | 14          | 11  | 14  | 12  | <b>51</b>    |
| Dudley              | 0           | 12 | <7  | <7  | <b>17</b>    | 0           | <7  | 9   | *   | <b>19</b>    |
| Dunstable           | 0           | 0  | <7  | 0   | <b>&lt;7</b> | 0           | 0   | <7  | 0   | <b>&lt;7</b> |
| Duxbury             | <7          | <7 | <7  | <7  | <b>13</b>    | <7          | <7  | <7  | <7  | <b>18</b>    |
| East<br>Bridgewater | 22          | <7 | *   | 13  | <b>50</b>    | 9           | 19  | 10  | 9   | <b>47</b>    |
| East Brookfield     | 0           | <7 | 0   | <7  | <b>&lt;7</b> | 0           | 0   | 0   | <7  | <b>&lt;7</b> |
| East<br>Longmeadow  | <7          | <7 | <7  | 8   | <b>19</b>    | <7          | 8   | <7  | 10  | <b>24</b>    |
| Eastham             | <7          | <7 | <7  | <7  | <b>16</b>    | <7          | <7  | <7  | <7  | <b>12</b>    |
| Easthampton         | <7          | <7 | <7  | 0   | <b>&lt;7</b> | 0           | 0   | <7  | 0   | <b>&lt;7</b> |
| Easton              | 7           | 0  | <7  | <7  | <b>14</b>    | <7          | <7  | <7  | 0   | <b>10</b>    |
| Edgartown           | 0           | <7 | <7  | <7  | <b>&lt;7</b> | <7          | <7  | <7  | <7  | <b>9</b>     |
| Egremont            | 0           | 0  | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Erving              | <7          | 0  | 0   | <7  | <b>&lt;7</b> | 0           | 0   | 0   | <7  | <b>&lt;7</b> |
| Essex               | <7          | 0  | <7  | 0   | <b>&lt;7</b> | <7          | <7  | <7  | <7  | <b>&lt;7</b> |
| Everett             | 41          | 29 | 41  | 34  | <b>145</b>   | 40          | 62  | 55  | 48  | <b>205</b>   |
| Fairhaven           | 13          | 24 | 24  | 18  | <b>79</b>    | 27          | 29  | 22  | 16  | <b>94</b>    |
| Fall River          | 20          | 71 | 166 | 198 | <b>455</b>   | 166         | 168 | 314 | 243 | <b>891</b>   |
| Falmouth            | 35          | 39 | 28  | 17  | <b>119</b>   | 31          | 61  | 53  | 47  | <b>192</b>   |
| Fitchburg           | 53          | 54 | 61  | 74  | <b>242</b>   | 77          | 89  | 102 | 74  | <b>342</b>   |
| Florida             | 0           | 0  | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Foxborough          | <7          | 0  | <7  | 0   | <b>9</b>     | <7          | <7  | 13  | 16  | <b>35</b>    |
| Framingham          | 44          | 64 | 49  | 40  | <b>197</b>   | 34          | 67  | 69  | 61  | <b>231</b>   |
| Franklin            | 9           | <7 | 10  | *   | <b>32</b>    | <7          | <7  | <7  | 0   | <b>&lt;7</b> |
| Freetown            | 0           | 0  | 0   | <7  | <b>&lt;7</b> | 0           | 0   | 0   | 0   | <b>0</b>     |
| Gardner             | 24          | 22 | 30  | 27  | <b>103</b>   | 14          | 29  | 24  | 18  | <b>85</b>    |
| Georgetown          | <7          | <7 | <7  | 9   | <b>21</b>    | 7           | <7  | <7  | 7   | <b>20</b>    |
| Gill                | 0           | 0  | 0   | 0   | <b>0</b>     | <7          | <7  | 0   | <7  | <b>&lt;7</b> |
| Gloucester          | 30          | 31 | 35  | 30  | <b>126</b>   | 44          | 36  | 35  | 11  | <b>126</b>   |

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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town        | <u>2015</u> |    |    |     |              | <u>2016</u> |    |    |     |              |
|------------------|-------------|----|----|-----|--------------|-------------|----|----|-----|--------------|
|                  | Q1          | Q2 | Q3 | Q4  | Total        | Q1          | Q2 | Q3 | Q4  | Total        |
| Goshen           | 0           | 0  | 0  | 0   | <b>0</b>     | 0           | <7 | <7 | 0   | <b>&lt;7</b> |
| Gosnold          | 0           | 0  | 0  | 0   | <b>0</b>     | 0           | 0  | 0  | 0   | <b>0</b>     |
| Grafton          | <7          | 9  | 10 | <7  | <b>26</b>    | <7          | <7 | <7 | <7  | <b>17</b>    |
| Granby           | <7          | <7 | <7 | <7  | <b>10</b>    | <7          | 7  | <7 | <7  | <b>11</b>    |
| Granville        | 0           | <7 | <7 | <7  | <b>&lt;7</b> | <7          | 0  | 0  | <7  | <b>&lt;7</b> |
| Great Barrington | <7          | 0  | 0  | <7  | <b>&lt;7</b> | <7          | <7 | <7 | <7  | <b>15</b>    |
| Greenfield       | <7          | 10 | *  | 13  | <b>36</b>    | 15          | 12 | 30 | 12  | <b>69</b>    |
| Groton           | 0           | 0  | 0  | <7  | <b>&lt;7</b> | <7          | 0  | 0  | <7  | <b>7</b>     |
| Groveland        | <7          | 0  | <7 | 0   | <b>&lt;7</b> | <7          | <7 | <7 | <7  | <b>&lt;7</b> |
| Hadley           | <7          | <7 | <7 | 8   | <b>16</b>    | 7           | <7 | <7 | <7  | <b>15</b>    |
| Halifax          | <7          | 0  | 9  | <7  | <b>17</b>    | <7          | 7  | <7 | 11  | <b>24</b>    |
| Hamilton         | 0           | <7 | <7 | <7  | <b>&lt;7</b> | <7          | <7 | 0  | 0   | <b>&lt;7</b> |
| Hampden          | <7          | <7 | 0  | 0   | <b>&lt;7</b> | 0           | <7 | 0  | <7  | <b>&lt;7</b> |
| Hancock          | 0           | 0  | 0  | 0   | <b>0</b>     | 0           | 0  | 0  | 0   | <b>0</b>     |
| Hanover          | <7          | 0  | <7 | 0   | <b>&lt;7</b> | 0           | 0  | 0  | <7  | <b>&lt;7</b> |
| Hanson           | 17          | 16 | 11 | 10  | <b>54</b>    | 8           | *  | 9  | <7  | <b>31</b>    |
| Hardwick         | 0           | 0  | 0  | 0   | <b>0</b>     | 0           | 0  | 0  | 0   | <b>0</b>     |
| Harvard          | <7          | <7 | <7 | 0   | <b>&lt;7</b> | <7          | 0  | <7 | 0   | <b>&lt;7</b> |
| Harwich          | 10          | <7 | *  | 13  | <b>34</b>    | <7          | *  | 10 | 8   | <b>26</b>    |
| Hatfield         | <7          | 0  | <7 | 0   | <b>&lt;7</b> | 0           | <7 | 0  | <7  | <b>&lt;7</b> |
| Haverhill        | 78          | 91 | 98 | 105 | <b>372</b>   | 96          | 96 | 82 | 111 | <b>385</b>   |
| Hawley           | 0           | 0  | 0  | 0   | <b>0</b>     | 0           | 0  | 0  | 0   | <b>0</b>     |
| Heath            | 0           | <7 | 0  | <7  | <b>&lt;7</b> | 0           | 0  | 0  | 0   | <b>0</b>     |
| Hingham          | <7          | <7 | <7 | 7   | <b>20</b>    | <7          | 7  | <7 | 17  | <b>36</b>    |
| Hinsdale         | 0           | 0  | 0  | 0   | <b>0</b>     | 0           | 0  | 0  | 0   | <b>0</b>     |
| Holbrook         | 0           | 0  | *  | <7  | <b>19</b>    | 18          | 15 | 23 | 14  | <b>70</b>    |
| Holden           | <7          | 7  | <7 | <7  | <b>19</b>    | <7          | <7 | <7 | <7  | <b>16</b>    |
| Holland          | 0           | 0  | 0  | 0   | <b>0</b>     | 0           | 0  | 0  | 0   | <b>0</b>     |
| Holliston        | 0           | 0  | <7 | <7  | <b>&lt;7</b> | 0           | 0  | 0  | 0   | <b>0</b>     |
| Holyoke          | 58          | 61 | 60 | 94  | <b>273</b>   | 85          | 92 | 67 | 81  | <b>325</b>   |
| Hopedale         | <7          | <7 | <7 | <7  | <b>13</b>    | 0           | 0  | 0  | <7  | <b>&lt;7</b> |
| Hopkinton        | <7          | <7 | <7 | 0   | <b>&lt;7</b> | 0           | <7 | 0  | 0   | <b>&lt;7</b> |
| Hubbardston      | <7          | <7 | 0  | 0   | <b>&lt;7</b> | <7          | <7 | <7 | 0   | <b>9</b>     |
| Hudson           | <7          | *  | 19 | 7   | <b>38</b>    | 12          | 12 | 7  | 0   | <b>31</b>    |
| Hull             | <7          | 0  | *  | 0   | <b>10</b>    | 13          | <7 | <7 | <7  | <b>21</b>    |
| Huntington       | 0           | 0  | 0  | 0   | <b>0</b>     | 0           | 0  | 0  | 0   | <b>0</b>     |

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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town    | <u>2015</u> |     |     |     |              | <u>2016</u> |     |     |     |              |
|--------------|-------------|-----|-----|-----|--------------|-------------|-----|-----|-----|--------------|
|              | Q1          | Q2  | Q3  | Q4  | Total        | Q1          | Q2  | Q3  | Q4  | Total        |
| Ipswich      | <7          | <7  | <7  | <7  | <b>17</b>    | 8           | <7  | 8   | <7  | <b>26</b>    |
| Kingston     | 10          | <7  | 9   | <7  | <b>29</b>    | <7          | <7  | <7  | <7  | <b>12</b>    |
| Lakeville    | <7          | 0   | <7  | <7  | <b>16</b>    | <7          | *   | 33  | 19  | <b>67</b>    |
| Lancaster    | <7          | <7  | <7  | <7  | <b>10</b>    | <7          | <7  | <7  | <7  | <b>11</b>    |
| Lanesborough | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | <7  | <b>&lt;7</b> |
| Lawrence     | 137         | 92  | 117 | 104 | <b>450</b>   | 206         | 108 | 171 | 185 | <b>670</b>   |
| Lee          | 0           | <7  | <7  | 0   | <b>&lt;7</b> | <7          | <7  | <7  | <7  | <b>10</b>    |
| Leicester    | 0           | 0   | 0   | 0   | <b>0</b>     | <7          | 0   | 0   | 0   | <b>&lt;7</b> |
| Lenox        | <7          | 0   | 0   | <7  | <b>&lt;7</b> | 0           | <7  | <7  | 0   | <b>&lt;7</b> |
| Leominster   | 34          | 45  | 67  | 41  | <b>187</b>   | 55          | 75  | 128 | 69  | <b>327</b>   |
| Leverett     | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Lexington    | <7          | 10  | <7  | <7  | <b>22</b>    | <7          | <7  | 11  | <7  | <b>21</b>    |
| Leyden       | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Lincoln      | <7          | 0   | 0   | 0   | <b>&lt;7</b> | <7          | 0   | <7  | <7  | <b>&lt;7</b> |
| Littleton    | 0           | <7  | <7  | <7  | <b>7</b>     | <7          | 7   | <7  | <7  | <b>17</b>    |
| Longmeadow   | <7          | <7  | <7  | 7   | <b>18</b>    | <7          | <7  | <7  | <7  | <b>16</b>    |
| Lowell       | 131         | 157 | 191 | 151 | <b>630</b>   | 188         | 184 | 206 | 233 | <b>811</b>   |
| Ludlow       | 10          | 9   | 16  | 21  | <b>56</b>    | 14          | 15  | 9   | 0   | <b>38</b>    |
| Lunenburg    | <7          | 7   | <7  | <7  | <b>19</b>    | <7          | <7  | <7  | <7  | <b>13</b>    |
| Lynn         | 58          | 98  | 69  | 78  | <b>303</b>   | 105         | 123 | 151 | 142 | <b>521</b>   |
| Lynnfield    | <7          | <7  | <7  | 7   | <b>20</b>    | <7          | <7  | <7  | <7  | <b>12</b>    |
| Malden       | 26          | 86  | 56  | 39  | <b>207</b>   | 42          | 69  | 69  | 50  | <b>230</b>   |
| Manchester   | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | 0   | <b>0</b>     |
| Mansfield    | <7          | <7  | <7  | 0   | <b>&lt;7</b> | <7          | 14  | 16  | *   | <b>45</b>    |
| Marblehead   | <7          | <7  | <7  | <7  | <b>15</b>    | <7          | *   | 17  | 13  | <b>47</b>    |
| Marion       | <7          | <7  | <7  | <7  | <b>10</b>    | <7          | <7  | <7  | <7  | <b>10</b>    |
| Marlborough  | 15          | 19  | 18  | 15  | <b>67</b>    | 23          | 17  | 13  | 0   | <b>53</b>    |
| Marshfield   | <7          | <7  | <7  | 0   | <b>&lt;7</b> | <7          | <7  | <7  | 0   | <b>&lt;7</b> |
| Mashpee      | 17          | 20  | 13  | 8   | <b>58</b>    | <7          | 15  | 21  | *   | <b>52</b>    |
| Mattapoisett | <7          | <7  | <7  | <7  | <b>15</b>    | <7          | 8   | <7  | <7  | <b>17</b>    |
| Maynard      | 9           | <7  | <7  | <7  | <b>21</b>    | <7          | <7  | 7   | <7  | <b>21</b>    |
| Medfield     | 0           | <7  | <7  | 0   | <b>&lt;7</b> | <7          | <7  | <7  | <7  | <b>8</b>     |
| Medford      | 33          | 37  | 51  | 36  | <b>157</b>   | 49          | 50  | 37  | 29  | <b>165</b>   |
| Medway       | <7          | 0   | <7  | <7  | <b>8</b>     | <7          | <7  | <7  | <7  | <b>11</b>    |
| Melrose      | 8           | <7  | 15  | <7  | <b>32</b>    | 16          | 16  | 15  | 10  | <b>57</b>    |
| Mendon       | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0   | <7  | <b>&lt;7</b> |



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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town        | <u>2015</u> |     |     |     |              | <u>2016</u> |     |    |    |              |
|------------------|-------------|-----|-----|-----|--------------|-------------|-----|----|----|--------------|
|                  | Q1          | Q2  | Q3  | Q4  | Total        | Q1          | Q2  | Q3 | Q4 | Total        |
| Merrimac         | <7          | <7  | <7  | <7  | <b>16</b>    | <7          | 0   | <7 | <7 | <b>10</b>    |
| Methuen          | 78          | 29  | 32  | 53  | <b>192</b>   | 48          | 57  | 63 | 52 | <b>220</b>   |
| Middleborough    | 23          | 7   | 10  | 11  | <b>51</b>    | *           | 22  | <7 | 0  | <b>38</b>    |
| Middlefield      | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | <7 | <7 | <b>&lt;7</b> |
| Middleton        | <7          | <7  | <7  | <7  | <b>8</b>     | <7          | 9   | 7  | <7 | <b>20</b>    |
| Milford          | 9           | 11  | 18  | 14  | <b>52</b>    | 8           | 19  | 27 | 16 | <b>70</b>    |
| Millbury         | 17          | 10  | 15  | 13  | <b>55</b>    | 11          | 23  | 18 | 9  | <b>61</b>    |
| Millis           | 0           | 0   | <7  | <7  | <b>&lt;7</b> | <7          | <7  | <7 | 9  | <b>19</b>    |
| Millville        | <7          | <7  | 0   | <7  | <b>&lt;7</b> | <7          | <7  | 0  | <7 | <b>8</b>     |
| Milton           | <7          | 11  | 15  | *   | <b>39</b>    | 7           | 8   | 10 | 0  | <b>25</b>    |
| Monroe           | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| Monson           | <7          | <7  | <7  | 8   | <b>15</b>    | <7          | <7  | <7 | <7 | <b>16</b>    |
| Montague         | <7          | <7  | <7  | <7  | <b>18</b>    | 11          | 12  | *  | <7 | <b>38</b>    |
| Monterey         | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| Montgomery       | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| Mount Washington | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | <7 | 0  | <b>&lt;7</b> |
| Nahant           | <7          | <7  | 0   | <7  | <b>7</b>     | <7          | <7  | 0  | <7 | <b>7</b>     |
| Nantucket        | <7          | <7  | 0   | <7  | <b>12</b>    | <7          | <7  | 10 | <7 | <b>19</b>    |
| Natick           | *           | <7  | 10  | 11  | <b>35</b>    | 9           | 11  | 10 | 10 | <b>40</b>    |
| Needham          | 7           | <7  | <7  | <7  | <b>16</b>    | <7          | <7  | <7 | <7 | <b>20</b>    |
| New Ashford      | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| New Bedford      | 163         | 183 | 226 | 158 | <b>730</b>   | 128         | 166 | 59 | 27 | <b>380</b>   |
| New Braintree    | 0           | <7  | 0   | 0   | <b>&lt;7</b> | 0           | 0   | 0  | <7 | <b>&lt;7</b> |
| New Marlborough  | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| New Salem        | 0           | 0   | 0   | <7  | <b>&lt;7</b> | 0           | 0   | 0  | 0  | <b>0</b>     |
| Newbury          | <7          | <7  | 0   | 0   | <b>7</b>     | <7          | 0   | 0  | 0  | <b>&lt;7</b> |
| Newburyport      | <7          | 7   | <7  | <7  | <b>21</b>    | <7          | 12  | <7 | 16 | <b>35</b>    |
| Newton           | 7           | 24  | 12  | 14  | <b>57</b>    | 16          | 18  | 20 | 21 | <b>75</b>    |
| Norfolk          | <7          | <7  | <7  | <7  | <b>11</b>    | 9           | <7  | <7 | 8  | <b>26</b>    |
| North Adams      | <7          | *   | 11  | 14  | <b>38</b>    | 11          | 29  | 23 | 16 | <b>79</b>    |
| North Andover    | 11          | 7   | <7  | <7  | <b>25</b>    | 13          | 12  | 19 | 15 | <b>59</b>    |
| North Attleboro  | 0           | 0   | 0   | 0   | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| North Brookfield | 0           | 0   | <7  | <7  | <b>&lt;7</b> | 0           | <7  | <7 | <7 | <b>&lt;7</b> |
| North Reading    | <7          | 11  | <7  | <7  | <b>24</b>    | 8           | <7  | 12 | <7 | <b>29</b>    |

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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town    | <u>2015</u> |     |    |    |            | <u>2016</u> |     |     |     |            |
|--------------|-------------|-----|----|----|------------|-------------|-----|-----|-----|------------|
|              | Q1          | Q2  | Q3 | Q4 | Total      | Q1          | Q2  | Q3  | Q4  | Total      |
| Northampton  | <7          | 8   | 22 | <7 | <b>35</b>  | 29          | 25  | <7  | *   | <b>81</b>  |
| Northborough | <7          | 0   | <7 | <7 | <7         | 8           | <7  | 13  | <7  | <b>30</b>  |
| Northbridge  | <7          | 8   | 8  | *  | <b>27</b>  | 7           | *   | 9   | <7  | <b>26</b>  |
| Northfield   | 0           | 0   | 0  | 0  | <b>0</b>   | 0           | 0   | 0   | 0   | <b>0</b>   |
| Norton       | <7          | 0   | <7 | 0  | <7         | 0           | 10  | 7   | 13  | <b>30</b>  |
| Norwell      | <7          | 10  | 12 | <7 | <b>30</b>  | <7          | 8   | <7  | <7  | <b>22</b>  |
| Norwood      | <7          | 0   | <7 | <7 | <b>7</b>   | <7          | 0   | <7  | 12  | <b>19</b>  |
| Oak Bluffs   | <7          | <7  | <7 | <7 | <b>18</b>  | <7          | <7  | <7  | <7  | <b>14</b>  |
| Oakham       | 0           | <7  | 0  | 0  | <7         | 0           | <7  | <7  | 0   | <7         |
| Orange       | 0           | 0   | <7 | <7 | <7         | <7          | <7  | <7  | 7   | <b>12</b>  |
| Orleans      | <7          | 0   | <7 | 0  | <7         | 0           | 0   | <7  | <7  | <7         |
| Otis         | 0           | 0   | 0  | 0  | <b>0</b>   | 0           | 0   | <7  | 0   | <7         |
| Oxford       | 10          | <7  | 15 | *  | <b>40</b>  | <7          | 12  | 25  | <7  | <b>45</b>  |
| Palmer       | <7          | <7  | <7 | <7 | <b>20</b>  | 0           | <7  | 0   | <7  | <7         |
| Paxton       | <7          | 0   | <7 | 0  | <7         | <7          | <7  | <7  | <7  | <b>7</b>   |
| Peabody      | 41          | 30  | 32 | 30 | <b>133</b> | 41          | 52  | 52  | 50  | <b>195</b> |
| Pelham       | 9           | <7  | <7 | 10 | <b>28</b>  | 10          | <7  | <7  | <7  | <b>18</b>  |
| Pembroke     | <7          | 15  | 12 | *  | <b>41</b>  | 10          | 12  | 8   | 22  | <b>52</b>  |
| Pepperell    | <7          | <7  | 7  | <7 | <b>15</b>  | <7          | <7  | 7   | <7  | <b>19</b>  |
| Peru         | 0           | 0   | 0  | 0  | <b>0</b>   | 0           | <7  | 0   | 0   | <7         |
| Petersham    | 0           | <7  | 0  | 0  | <7         | 0           | <7  | 0   | <7  | <7         |
| Phillipston  | 0           | <7  | 0  | 0  | <7         | 0           | 0   | <7  | 0   | <7         |
| Pittsfield   | 31          | 24  | 39 | 60 | <b>154</b> | 36          | 31  | 28  | 37  | <b>132</b> |
| Plainfield   | 0           | 0   | 0  | 0  | <b>0</b>   | 0           | 0   | 0   | 0   | <b>0</b>   |
| Plainville   | 7           | <7  | <7 | 10 | <b>26</b>  | <7          | 7   | <7  | 12  | <b>27</b>  |
| Plymouth     | 60          | 50  | 38 | 52 | <b>200</b> | 39          | 64  | 61  | 56  | <b>220</b> |
| Plympton     | <7          | <7  | <7 | 0  | <7         | 0           | <7  | <7  | <7  | <b>7</b>   |
| Princeton    | 0           | 0   | 0  | <7 | <7         | <7          | 0   | 0   | 0   | <7         |
| Provincetown | <7          | 7   | 11 | <7 | <b>21</b>  | <7          | <7  | <7  | <7  | <b>14</b>  |
| Quincy       | 109         | 108 | 50 | 94 | <b>361</b> | 61          | 136 | 152 | 139 | <b>488</b> |
| Randolph     | <7          | <7  | 21 | 10 | <b>39</b>  | 34          | 34  | 19  | 28  | <b>115</b> |
| Raynham      | 7           | <7  | 20 | *  | <b>40</b>  | *           | <7  | 9   | 14  | <b>36</b>  |
| Reading      | 7           | <7  | <7 | <7 | <b>18</b>  | 8           | 8   | 9   | 7   | <b>32</b>  |
| Rehoboth     | 0           | 0   | 0  | 0  | <b>0</b>   | 0           | 0   | 0   | 0   | <b>0</b>   |
| Revere       | 46          | 67  | 88 | 64 | <b>265</b> | 58          | 88  | 100 | 85  | <b>331</b> |
| Richmond     | 0           | 0   | 0  | 0  | <b>0</b>   | 0           | 0   | 0   | 0   | <b>0</b>   |

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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town    | <u>2015</u> |     |     |     |            | <u>2016</u> |     |     |     |            |
|--------------|-------------|-----|-----|-----|------------|-------------|-----|-----|-----|------------|
|              | Q1          | Q2  | Q3  | Q4  | Total      | Q1          | Q2  | Q3  | Q4  | Total      |
| Rochester    | 0           | <7  | 0   | 0   | <7         | <7          | <7  | 0   | 0   | <7         |
| Rockland     | 12          | 7   | 19  | 14  | <b>52</b>  | 43          | 30  | 30  | 28  | <b>131</b> |
| Rockport     | <7          | 0   | <7  | <7  | <b>9</b>   | <7          | 0   | <7  | <7  | <b>8</b>   |
| Rowe         | 0           | 0   | 0   | 0   | <b>0</b>   | 0           | 0   | 0   | 0   | <b>0</b>   |
| Rowley       | 0           | <7  | 0   | <7  | <7         | <7          | <7  | <7  | 0   | <7         |
| Royalston    | 0           | <7  | <7  | <7  | <7         | <7          | <7  | <7  | 0   | <7         |
| Russell      | 0           | <7  | <7  | 0   | <7         | 0           | 0   | 0   | <7  | <7         |
| Rutland      | <7          | <7  | <7  | 0   | <b>8</b>   | 0           | <7  | <7  | <7  | <b>10</b>  |
| Salem        | 38          | 64  | 43  | 38  | <b>183</b> | 52          | 72  | 85  | 64  | <b>273</b> |
| Salisbury    | 17          | 19  | 11  | 15  | <b>62</b>  | 28          | 35  | 35  | 19  | <b>117</b> |
| Sandisfield  | 0           | 0   | 0   | 0   | <b>0</b>   | 0           | <7  | 0   | 0   | <7         |
| Sandwich     | 0           | 0   | <7  | 0   | <7         | 0           | 0   | *   | <7  | <b>13</b>  |
| Saugus       | 32          | 31  | 30  | 21  | <b>114</b> | 31          | 38  | 39  | 33  | <b>141</b> |
| Savoy        | 0           | 0   | 0   | 0   | <b>0</b>   | 0           | 0   | 0   | 0   | <b>0</b>   |
| Scituate     | <7          | 7   | 9   | <7  | <b>27</b>  | <7          | <7  | 8   | <7  | <b>23</b>  |
| Seekonk      | <7          | 0   | <7  | 18  | <b>24</b>  | 7           | 0   | 0   | 0   | <b>7</b>   |
| Sharon       | <7          | 0   | 0   | 0   | <7         | 0           | <7  | 8   | <7  | <b>15</b>  |
| Sheffield    | 0           | 0   | <7  | <7  | <7         | 0           | 0   | <7  | 0   | <7         |
| Shelburne    | 0           | <7  | 0   | <7  | <7         | <7          | <7  | 0   | <7  | <7         |
| Sherborn     | 0           | 0   | 0   | <7  | <7         | 0           | 0   | 0   | 0   | <b>0</b>   |
| Shirley      | <7          | <7  | <7  | <7  | <b>11</b>  | <7          | <7  | 10  | <7  | <b>15</b>  |
| Shrewsbury   | <7          | <7  | <7  | 7   | <b>15</b>  | <7          | <7  | <7  | <7  | <b>11</b>  |
| Shutesbury   | <7          | 0   | 0   | 0   | <7         | 0           | 0   | 0   | 0   | <b>0</b>   |
| Somerset     | 0           | <7  | <7  | <7  | <7         | <7          | <7  | <7  | 0   | <7         |
| Somerville   | 20          | 45  | 45  | 48  | <b>158</b> | 45          | 60  | 68  | 54  | <b>227</b> |
| South Hadley | <7          | 0   | 0   | <7  | <7         | 0           | <7  | 0   | <7  | <7         |
| Southampton  | 0           | <7  | <7  | <7  | <7         | 0           | <7  | <7  | <7  | <b>7</b>   |
| Southborough | <7          | <7  | <7  | <7  | <7         | <7          | <7  | <7  | <7  | <b>9</b>   |
| Southbridge  | 14          | 15  | 12  | 11  | <b>52</b>  | <7          | 0   | 0   | <7  | <7         |
| Southwick    | <7          | <7  | <7  | <7  | <b>12</b>  | 11          | 12  | *   | <7  | <b>37</b>  |
| Spencer      | <7          | 0   | <7  | <7  | <b>9</b>   | <7          | <7  | <7  | <7  | <b>12</b>  |
| Springfield  | 131         | 181 | 172 | 276 | <b>760</b> | 226         | 238 | 192 | 223 | <b>879</b> |
| Sterling     | <7          | 0   | <7  | <7  | <b>8</b>   | <7          | 7   | <7  | <7  | <b>15</b>  |
| Stockbridge  | 0           | 0   | <7  | 0   | <7         | 0           | 0   | 0   | 0   | <b>0</b>   |
| Stoneham     | 16          | 17  | 11  | 20  | <b>64</b>  | 9           | 26  | 10  | 14  | <b>59</b>  |
| Stoughton    | 11          | 12  | 20  | 14  | <b>57</b>  | 11          | 23  | 15  | 15  | <b>64</b>  |

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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town     | <u>2015</u> |    |    |    |              | <u>2016</u> |     |    |    |              |
|---------------|-------------|----|----|----|--------------|-------------|-----|----|----|--------------|
|               | Q1          | Q2 | Q3 | Q4 | Total        | Q1          | Q2  | Q3 | Q4 | Total        |
| Stow          | <7          | <7 | <7 | <7 | <b>8</b>     | 0           | <7  | <7 | 0  | <b>7</b>     |
| Sturbridge    | 0           | <7 | <7 | <7 | <b>7</b>     | <7          | 12  | <7 | <7 | <b>28</b>    |
| Sudbury       | <7          | <7 | <7 | <7 | <b>15</b>    | 0           | <7  | 0  | <7 | <b>7</b>     |
| Sunderland    | <7          | 0  | 0  | <7 | <b>&lt;7</b> | <7          | <7  | <7 | <7 | <b>8</b>     |
| Sutton        | <7          | <7 | <7 | <7 | <b>14</b>    | <7          | <7  | <7 | <7 | <b>17</b>    |
| Swampscott    | <7          | <7 | <7 | <7 | <b>11</b>    | <7          | 9   | <7 | 8  | <b>28</b>    |
| Swansea       | <7          | 0  | <7 | <7 | <b>9</b>     | 10          | 15  | 13 | 16 | <b>54</b>    |
| Taunton       | 82          | 81 | 87 | 82 | <b>332</b>   | 76          | 123 | 81 | 68 | <b>348</b>   |
| Templeton     | <7          | 11 | <7 | <7 | <b>27</b>    | 7           | <7  | 7  | <7 | <b>17</b>    |
| Tewksbury     | 0           | <7 | *  | 10 | <b>21</b>    | 12          | 24  | 20 | 25 | <b>81</b>    |
| Tisbury       | <7          | <7 | 0  | <7 | <b>&lt;7</b> | 0           | <7  | <7 | <7 | <b>&lt;7</b> |
| Tolland       | 0           | 0  | 0  | 0  | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| Topsfield     | <7          | <7 | <7 | <7 | <b>14</b>    | 0           | <7  | *  | 0  | <b>9</b>     |
| Townsend      | 7           | <7 | <7 | <7 | <b>18</b>    | 10          | <7  | <7 | <7 | <b>23</b>    |
| Truro         | <7          | 0  | <7 | 0  | <b>&lt;7</b> | 0           | <7  | 0  | 0  | <b>&lt;7</b> |
| Tyngsborough  | 0           | <7 | 0  | <7 | <b>&lt;7</b> | <7          | <7  | 7  | <7 | <b>19</b>    |
| Tyringham     | 0           | 0  | 0  | <7 | <b>&lt;7</b> | 0           | 0   | 0  | 0  | <b>0</b>     |
| Upton         | 0           | <7 | <7 | <7 | <b>&lt;7</b> | <7          | <7  | <7 | <7 | <b>8</b>     |
| Uxbridge      | <7          | 14 | 12 | *  | <b>39</b>    | 9           | *   | 12 | <7 | <b>32</b>    |
| Wakefield     | 18          | 9  | 16 | 14 | <b>57</b>    | 12          | 13  | 19 | 20 | <b>64</b>    |
| Wales         | 0           | 0  | 0  | 0  | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| Walpole       | 14          | <7 | <7 | 11 | <b>37</b>    | 7           | 11  | 11 | 15 | <b>44</b>    |
| Waltham       | 27          | 42 | 29 | 37 | <b>135</b>   | 47          | 46  | 46 | 37 | <b>176</b>   |
| Ware          | 0           | <7 | 0  | 0  | <b>&lt;7</b> | 0           | 0   | <7 | 0  | <b>&lt;7</b> |
| Wareham       | 32          | 38 | 51 | 27 | <b>148</b>   | 33          | 38  | 44 | 35 | <b>150</b>   |
| Warren        | <7          | 0  | <7 | <7 | <b>&lt;7</b> | <7          | <7  | 0  | <7 | <b>7</b>     |
| Warwick       | 0           | 0  | 0  | 0  | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| Washington    | 0           | <7 | 0  | 0  | <b>&lt;7</b> | 0           | <7  | 0  | 0  | <b>&lt;7</b> |
| Watertown     | 28          | 30 | 15 | 13 | <b>86</b>    | 30          | 26  | 9  | 23 | <b>88</b>    |
| Wayland       | <7          | <7 | <7 | <7 | <b>7</b>     | <7          | <7  | <7 | <7 | <b>7</b>     |
| Webster       | 26          | 9  | 14 | 14 | <b>63</b>    | 18          | 18  | 26 | 28 | <b>90</b>    |
| Wellesley     | <7          | <7 | <7 | <7 | <b>16</b>    | <7          | <7  | <7 | 7  | <b>15</b>    |
| Wellfleet     | 0           | <7 | <7 | <7 | <b>&lt;7</b> | <7          | <7  | <7 | <7 | <b>12</b>    |
| Wendell       | 0           | 0  | 0  | 0  | <b>0</b>     | 0           | 0   | 0  | 0  | <b>0</b>     |
| Wenham        | 0           | 0  | 0  | <7 | <b>&lt;7</b> | <7          | <7  | <7 | 0  | <b>&lt;7</b> |
| West Boylston | <7          | <7 | <7 | <7 | <b>13</b>    | <7          | <7  | <7 | <7 | <b>13</b>    |

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). In 2015, 64% of opioid deaths occurred in the same city/town as the person resided.

| City/Town          | <u>2015</u> |             |             |             |              | <u>2016</u> |             |             |             |              |
|--------------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|--------------|
|                    | Q1          | Q2          | Q3          | Q4          | Total        | Q1          | Q2          | Q3          | Q4          | Total        |
| West Bridgewater   | <7          | <7          | 7           | <7          | <b>18</b>    | 11          | <7          | <7          | 0           | <b>20</b>    |
| West Brookfield    | 0           | <7          | 0           | 0           | <b>&lt;7</b> | 0           | 0           | 0           | <7          | <b>&lt;7</b> |
| West Newbury       | <7          | 0           | 0           | 0           | <b>&lt;7</b> | <7          | <7          | 0           | <7          | <b>&lt;7</b> |
| West Springfield   | 0           | 0           | 0           | 0           | <b>0</b>     | <7          | 0           | 0           | 0           | <b>&lt;7</b> |
| West Stockbridge   | <7          | 0           | 0           | 0           | <b>&lt;7</b> | 0           | 0           | <7          | 0           | <b>&lt;7</b> |
| West Tisbury       | 0           | 0           | <7          | 0           | <b>&lt;7</b> | <7          | <7          | <7          | 0           | <b>&lt;7</b> |
| Westborough        | 11          | <7          | <7          | 13          | <b>35</b>    | 7           | 14          | 13          | 11          | <b>45</b>    |
| Westfield          | 10          | 15          | 12          | 36          | <b>73</b>    | 32          | 18          | 19          | 23          | <b>92</b>    |
| Westford           | 0           | 0           | <7          | <7          | <b>8</b>     | 8           | <7          | <7          | <7          | <b>23</b>    |
| Westhampton        | 0           | <7          | *           | 11          | <b>19</b>    | 7           | 11          | 8           | 8           | <b>34</b>    |
| Westminster        | <7          | <7          | <7          | 0           | <b>10</b>    | <7          | <7          | <7          | <7          | <b>10</b>    |
| Weston             | <7          | <7          | <7          | 0           | <b>&lt;7</b> | <7          | <7          | 0           | <7          | <b>&lt;7</b> |
| Westport           | <7          | 0           | <7          | 0           | <b>&lt;7</b> | <7          | 12          | *           | 12          | <b>33</b>    |
| Westwood           | <7          | <7          | 0           | <7          | <b>&lt;7</b> | <7          | <7          | <7          | <7          | <b>15</b>    |
| Weymouth           | 67          | 56          | 59          | 33          | <b>215</b>   | 45          | 54          | 86          | 11          | <b>196</b>   |
| Whately            | 0           | <7          | <7          | 0           | <b>&lt;7</b> | 0           | 0           | <7          | 0           | <b>&lt;7</b> |
| Whitman            | 0           | <7          | 10          | <7          | <b>16</b>    | 7           | 11          | 10          | 18          | <b>46</b>    |
| Wilbraham          | <7          | <7          | <7          | 8           | <b>21</b>    | <7          | 10          | <7          | 7           | <b>24</b>    |
| Williamsburg       | 0           | 0           | 0           | 0           | <b>0</b>     | 0           | 0           | 0           | 0           | <b>0</b>     |
| Williamstown       | <7          | <7          | 0           | <7          | <b>9</b>     | <7          | <7          | <7          | 0           | <b>&lt;7</b> |
| Wilmington         | 12          | 18          | 17          | 7           | <b>54</b>    | 13          | *           | 11          | <7          | <b>39</b>    |
| Winchendon         | <7          | 0           | <7          | <7          | <b>&lt;7</b> | <7          | <7          | 10          | <7          | <b>20</b>    |
| Winchester         | <7          | <7          | <7          | <7          | <b>12</b>    | 7           | <7          | <7          | 11          | <b>23</b>    |
| Windsor            | 0           | 0           | 0           | 0           | <b>0</b>     | 0           | 0           | 0           | <7          | <b>&lt;7</b> |
| Winthrop           | 7           | 9           | 7           | 12          | <b>35</b>    | 13          | 20          | 23          | 9           | <b>65</b>    |
| Woburn             | 37          | 29          | 21          | 28          | <b>115</b>   | 46          | 44          | 46          | 35          | <b>171</b>   |
| Worcester          | 272         | 259         | 371         | 302         | <b>1204</b>  | 283         | 334         | 388         | 317         | <b>1322</b>  |
| Worthington        | 0           | 0           | 0           | 0           | <b>0</b>     | 0           | 0           | 0           | 0           | <b>0</b>     |
| Wrentham           | <7          | <7          | <7          | <7          | <b>7</b>     | 9           | 13          | 12          | 7           | <b>41</b>    |
| Yarmouth           | 38          | 25          | 18          | 27          | <b>108</b>   | 17          | 36          | 23          | 30          | <b>106</b>   |
| Unknown            | 308         | 307         | 395         | 329         | <b>1339</b>  | 283         | 396         | 403         | 340         | <b>1422</b>  |
| <b>Grand Total</b> | <b>4561</b> | <b>4719</b> | <b>5236</b> | <b>5056</b> | <b>19572</b> | <b>5181</b> | <b>6468</b> | <b>6675</b> | <b>5175</b> | <b>23499</b> |

\*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. Due to differences in reporting by EMS services, these numbers are likely an undercount of true opioid-related incidents.

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.