MA Opioid-Related EMS Incidents 2013-September 2017

Massachusetts Department of Public Health   POSTED: FEBRUARY 2018

Enhancement of Opioid Overdose Surveillance

MATRIS, the Massachusetts Ambulance Trip Reporting Information System, is a statewide database for collecting emergency medical service (EMS) data from licensed ambulance services. It was not specifically designed to track opioid overdose incidents. DPH is currently working with all EMS providers to improve the quality and completeness of these data especially with respect to opioid overdose incidents. To more accurately identify ambulance trips that are opioid-related, several pieces of information from MATRIS are combined such as: a notation that a trip was listed as a poisoning, that there was an administration of naloxone, or that the patient admitted to drug use. In combination, this information allows DPH to more accurately count opioid overdose incidents. Data for Boston came from applying this algorithm to events identified by Boston EMS as "Narcotic Related Incidents" (NRI). Not all ambulance services have reported their most recent data at the time this report was generated, and therefore the numbers cited here may be underestimates. Counts will be updated on a quarterly basis. Beginning with the August 2017 report, incidents are only among people ages 11 and above.

Results

Since 2013, there has been an increasing trend in the percentage of EMS incidents that are considered opioid-related (Figure 1) and the number of all EMS incidents involving naloxone administration (Figure 2). In the first nine 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	320	1258	620	409	250	102	2959
Female	<7	210	566	288	210	143	73	1490
Total	<7	530	1824	908	619	393	175	4449

All Suspected Opioid Related Incidents: 2017 (Quarter 2)

	11-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male	0	365	1340	821	553	303	82	3464
Female	0	218	679	386	246	151	69	1749
Total	0	583	2019	1207	799	454	151	5213

All Suspected Opioid Related Incidents: 2017 (Quarter 3)

	11-14	15-24	25-34	35-44	45-54	55-64	65+	Total
Male	<7	429	1694	1058	682	350	128	4341
Female	<7	233	766	513	270	172	76	2030
Total	<7	662	2460	1571	952	522	204	6371

Figure 1: Percent of Opioid-Related Overdoses Among All EMS Incidents, MA: 2013-Q3 2017

Percent

Year and Quarter

2013 | 2014 | 2015 | 2016 | 2017
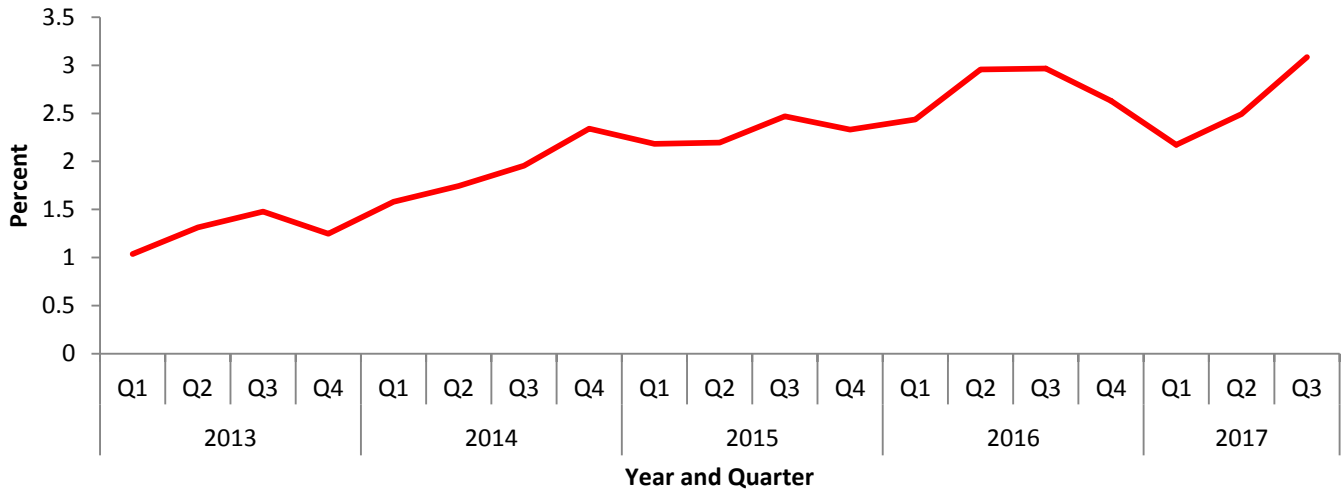
Figure 2: Count of All EMS Incidents Involving Naloxone Administration, MA: 2013-Q3 2017
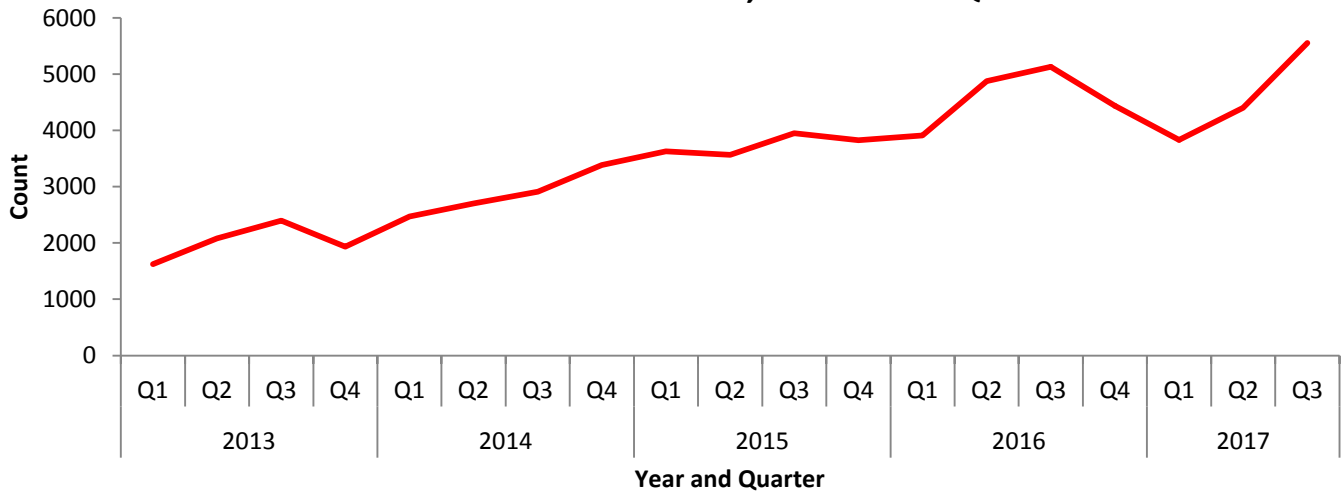
Count

Year and Quarter

2013 | 2014 | 2015 | 2016 | 2017

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.

City/Town	2015					2016					2017		
	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3
Abington	*	<7	<7	†	**10**	12	9	12	9	**42**	14	9	10
Acton	9	<7	7	<7	**25**	<7	<7	<7	<7	**21**	<7	7	<7
Acushnet	<7	<7	<7	†	**<7**	†	<7	<7	<7	**12**	7	7	<7
Adams	†	†	†	†	**†**	†	†	†	†	**†**	<7	<7	<7
Agawam	<7	<7	<7	21	**30**	18	8	16	12	**54**	9	10	13
Alford	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Amesbury	<7	13	*	8	**33**	16	24	13	16	**69**	11	15	14
Amherst	<7	<7	<7	7	**18**	8	<7	<7	<7	**20**	8	<7	<7
Andover	<7	13	<7	<7	**28**	<7	<7	11	12	**32**	7	11	12
Aquinnah	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Arlington	16	16	34	21	**87**	18	16	16	8	**58**	11	14	19
Ashburnham	†	†	†	†	**†**	<7	<7	<7	†	**9**	<7	<7	†
Ashby	†	†	<7	<7	**<7**	<7	†	<7	<7	**8**	†	<7	<7
Ashfield	†	†	†	<7	**<7**	†	†	†	<7	**<7**	†	†	†
Ashland	<7	<7	<7	<7	**9**	<7	*	7	8	**25**	<7	9	7
Athol	<7	*	9	14	**36**	<7	*	9	16	**38**	7	15	12
Attleboro	25	21	30	19	**95**	21	39	38	40	**138**	36	31	46
Auburn	<7	†	<7	8	**13**	<7	<7	11	7	**27**	<7	11	7
Avon	<7	<7	<7	<7	**15**	<7	<7	<7	7	**20**	<7	<7	<7
Ayer	†	<7	<7	†	**<7**	<7	<7	<7	7	**18**	<7	<7	<7
Barnstable	94	57	64	52	**267**	44	54	62	59	**219**	63	48	86
Barre	<7	<7	<7	<7	**8**	†	<7	<7	<7	**8**	<7	<7	<7
Becket	†	<7	†	†	**<7**	†	<7	†	†	**<7**	<7	<7	†
Bedford	<7	<7	<7	<7	**14**	<7	8	9	<7	**28**	<7	8	8
Belchertown	<7	†	†	<7	**<7**	<7	†	†	<7	**<7**	<7	†	<7
Bellingham	8	<7	8	*	**26**	7	11	11	13	**42**	11	14	<7
Belmont	<7	7	<7	<7	**18**	10	11	*	<7	**33**	<7	<7	12
Berkley	<7	†	<7	†	**<7**	<7	<7	<7	<7	**11**	<7	<7	<7
Berlin	<7	†	<7	<7	**<7**	<7	<7	†	<7	**7**	<7	†	<7
Bernardston	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Beverly	21	27	34	22	**104**	24	31	24	31	**110**	25	35	23
Billerica	<7	11	*	†	**26**	19	12	30	13	**74**	20	15	42
Blackstone	†	<7	<7	<7	**8**	<7	<7	<7	<7	**7**	<7	9	12
Blandford	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Bolton	<7	<7	†	<7	**<7**	<7	<7	<7	<7	**7**	†	†	<7

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City/Town	2015					2016					2017		
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3
Boston	525	489	529	489	**2032**	423	674	707	435	**2239**	356	493	691
Bourne	<7	<7	21	18	**47**	18	28	32	12	**90**	15	30	13
Boxborough	†	†	<7	†	**<7**	<7	<7	<7	7	**18**	†	<7	<7
Boxford	<7	<7	<7	<7	**<7**	†	<7	<7	<7	**7**	<7	<7	†
Boylston	†	†	<7	<7	**<7**	†	<7	<7	<7	**9**	†	†	<7
Braintree	27	14	19	27	**87**	23	33	28	43	**127**	25	35	39
Brewster	7	†	<7	<7	**15**	<7	<7	†	<7	**<7**	†	7	<7
Bridgewater	<7	<7	<7	<7	**7**	<7	<7	†	<7	**9**	<7	<7	<7
Brimfield	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Brockton	231	192	91	180	**694**	191	261	256	180	**888**	186	164	253
Brookfield	<7	<7	†	<7	**<7**	†	<7	†	<7	**<7**	<7	<7	†
Brookline	9	8	<7	*	**30**	*	7	<7	10	**31**	12	18	10
Buckland	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Burlington	10	<7	<7	7	**24**	<7	<7	14	11	**33**	9	13	21
Cambridge	57	74	79	74	**284**	93	162	128	94	**477**	81	92	107
Canton	<7	<7	<7	<7	**12**	<7	13	*	10	**34**	7	7	9
Carlisle	†	†	†	†	**†**	†	†	†	†	**†**	†	†	<7
Carver	<7	<7	<7	8	**23**	13	12	15	13	**53**	11	12	11
Charlemont	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Charlton	†	†	†	†	**†**	<7	†	†	<7	**<7**	<7	<7	<7
Chatham	<7	<7	<7	<7	**13**	<7	<7	<7	<7	**7**	<7	<7	<7
Chelmsford	8	14	22	9	**53**	19	17	11	10	**57**	19	12	13
Chelsea	35	71	87	73	**266**	59	73	84	42	**258**	49	83	91
Cheshire	†	†	†	<7	**<7**	<7	†	<7	<7	**<7**	<7	<7	†
Chester	†	†	†	†	**†**	†	<7	†	†	**<7**	<7	†	<7
Chesterfield	†	†	†	†	**†**	†	†	†	†	**†**	†	†	<7
Chicopee	37	70	50	79	**236**	78	61	49	54	**242**	46	55	66
Chilmark	†	†	<7	†	**<7**	<7	†	<7	†	**<7**	†	†	†
Clarksburg	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Clinton	10	11	11	9	**41**	<7	13	*	28	**55**	<7	12	14
Cohasset	<7	†	†	†	**<7**	†	†	<7	<7	**<7**	†	<7	<7
Colrain	†	<7	†	†	**<7**	†	†	†	†	**†**	†	†	†
Concord	<7	<7	<7	<7	**17**	<7	7	<7	<7	**18**	<7	<7	<7
Conway	†	†	†	†	**†**	<7	†	†	†	**<7**	†	†	†
Cummington	†	†	†	†	**†**	†	†	†	†	**†**	†	†	<7
Dalton	<7	<7	†	<7	**8**	<7	<7	<7	<7	**12**	<7	†	<7

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City/Town	2015					2016					2017		
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3
Danvers	40	20	43	34	**137**	30	45	39	22	**136**	30	41	36
Dartmouth	13	22	17	20	**72**	18	25	25	23	**91**	19	26	17
Dedham	15	12	<7	<7	**38**	*	26	13	<7	**57**	16	15	19
Deerfield	<7	<7	<7	†	**<7**	<7	<7	†	†	**<7**	†	<7	†
Dennis	14	<7	8	<7	**34**	<7	<7	9	*	**18**	11	11	20
Dighton	<7	<7	<7	<7	**9**	<7	<7	†	†	**7**	<7	<7	†
Douglas	<7	†	<7	†	**<7**	<7	<7	†	†	**<7**	†	†	†
Dover	†	<7	†	†	**<7**	†	†	†	†	**†**	†	†	<7
Dracut	18	19	23	22	**82**	16	10	22	14	**62**	11	17	26
Dudley	†	10	<7	<7	**13**	†	<7	9	*	**19**	<7	7	<7
Dunstable	†	†	<7	†	**<7**	†	†	<7	†	**<7**	<7	†	<7
Duxbury	<7	<7	<7	<7	**12**	<7	<7	<7	<7	**18**	<7	<7	<7
East Bridgewater	20	<7	*	11	**43**	<7	15	9	*	**37**	<7	<7	<7
East Brookfield	†	<7	†	<7	**<7**	†	†	†	<7	**<7**	†	†	†
East Longmeadow	<7	<7	<7	8	**18**	<7	8	<7	9	**23**	7	<7	<7
Eastham	<7	<7	<7	†	**<7**	<7	<7	<7	<7	**9**	<7	<7	<7
Easthampton	<7	<7	<7	†	**<7**	†	†	<7	†	**<7**	†	†	†
Easton	7	†	<7	<7	**13**	<7	<7	<7	†	**9**	<7	<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	<7
Everett	37	27	37	28	**129**	36	57	49	41	**183**	39	43	49
Fairhaven	13	21	23	16	**73**	26	24	19	15	**84**	11	13	11
Fall River	26	73	157	185	**441**	151	156	299	228	**834**	195	169	246
Falmouth	32	33	18	13	**96**	23	55	46	45	**169**	40	48	28
Fitchburg	43	47	55	68	**213**	70	80	94	66	**310**	54	48	67
Florida	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Foxborough	<7	†	<7	†	**7**	<7	<7	12	16	**34**	11	7	9
Framingham	43	57	44	36	**180**	32	60	66	55	**213**	44	34	48
Franklin	*	<7	13	12	**37**	<7	17	16	<7	**44**	16	15	12
Freetown	<7	<7	9	<7	**19**	<7	<7	7	8	**24**	<7	<7	<7
Gardner	19	20	25	21	**85**	14	28	24	12	**78**	22	13	20
Georgetown	<7	<7	<7	<7	**15**	<7	<7	<7	<7	**11**	<7	<7	†
Gill	†	†	†	†	**†**	<7	<7	†	<7	**<7**	†	†	†

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	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3
Gloucester	26	24	30	24	**104**	39	33	29	15	**116**	17	27	32
Goshen	†	†	†	†	**†**	†	†	<7	†	**<7**	†	†	†
Gosnold	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Grafton	<7	10	8	<7	**24**	<7	<7	<7	<7	**15**	<7	7	10
Granby	<7	<7	<7	<7	**10**	<7	<7	<7	<7	**9**	<7	†	<7
Granville	†	<7	<7	†	**<7**	<7	†	†	†	**<7**	†	†	†
Great Barrington	<7	†	†	<7	**<7**	<7	<7	<7	<7	**12**	<7	<7	<7
Greenfield	<7	8	<7	13	**32**	10	8	23	9	**50**	11	15	20
Groton	†	†	†	†	**†**	<7	†	†	<7	**<7**	†	<7	†
Groveland	†	†	<7	†	**<7**	<7	<7	<7	<7	**<7**	<7	<7	†
Hadley	<7	<7	<7	7	**14**	7	<7	<7	<7	**19**	<7	<7	<7
Halifax	16	9	*	<7	**36**	10	22	<7	*	**45**	<7	<7	7
Hamilton	†	<7	<7	<7	**<7**	<7	<7	†	†	**<7**	<7	<7	<7
Hampden	<7	<7	†	†	**<7**	†	<7	†	<7	**<7**	<7	<7	<7
Hancock	†	†	†	†	**†**	†	†	†	†	**†**	†	<7	†
Hanover	9	<7	<7	<7	**20**	<7	<7	<7	<7	**18**	<7	<7	<7
Hanson	14	14	9	8	**45**	8	<7	9	<7	**28**	<7	9	<7
Hardwick	<7	†	<7	<7	**<7**	<7	†	†	<7	**<7**	<7	†	†
Harvard	†	<7	†	†	**<7**	<7	†	†	<7	**<7**	<7	†	†
Harwich	10	<7	*	8	**28**	<7	7	<7	<7	**19**	11	<7	11
Hatfield	<7	†	<7	†	**<7**	†	†	†	<7	**<7**	†	<7	<7
Haverhill	72	79	91	100	**342**	92	90	77	105	**364**	87	85	121
Hawley	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Heath	†	<7	†	<7	**<7**	†	†	†	†	**†**	<7	†	†
Hingham	<7	<7	<7	<7	**11**	<7	<7	<7	14	**25**	<7	<7	<7
Hinsdale	†	†	†	†	**†**	†	<7	†	†	**<7**	†	†	†
Holbrook	10	<7	13	<7	**33**	16	17	21	18	**72**	17	18	13
Holden	<7	<7	<7	<7	**15**	<7	<7	<7	<7	**13**	<7	<7	<7
Holland	†	†	†	†	**†**	†	†	†	†	**†**	†	†	<7
Holliston	†	†	<7	<7	**<7**	†	†	†	†	**†**	<7	<7	<7
Holyoke	54	62	57	91	**264**	79	86	62	74	**301**	55	49	65
Hopedale	<7	<7	<7	<7	**10**	†	†	†	<7	**<7**	<7	<7	†
Hopkinton	<7	<7	<7	<7	**12**	<7	<7	<7	†	**10**	<7	<7	<7
Hubbardston	<7	<7	†	†	**<7**	†	<7	<7	†	**<7**	<7	<7	<7
Hudson	<7	7	18	*	**37**	11	*	13	<7	**36**	<7	<7	7
Hull	<7	†	<7	†	**<7**	11	<7	<7	†	**18**	<7	<7	<7

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	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3
Huntington	†	†	†	<7	**<7**	†	†	<7	†	**<7**	†	†	<7
Ipswich	<7	<7	<7	<7	**12**	7	<7	<7	<7	**22**	8	7	<7
Kingston	10	<7	8	<7	**26**	<7	<7	<7	9	**20**	<7	<7	9
Lakeville	<7	†	<7	<7	**10**	<7	*	31	14	**56**	21	15	22
Lancaster	<7	<7	<7	<7	**7**	<7	<7	<7	<7	**8**	†	<7	<7
Lanesborough	<7	†	†	†	**<7**	†	†	†	<7	**<7**	†	<7	<7
Lawrence	136	87	112	98	**433**	197	100	170	179	**646**	150	178	242
Lee	†	<7	<7	†	**<7**	<7	<7	<7	<7	**7**	<7	<7	<7
Leicester	<7	8	<7	<7	**21**	<7	<7	<7	10	**25**	9	<7	<7
Lenox	<7	†	<7	<7	**<7**	†	<7	<7	<7	**<7**	<7	<7	<7
Leominster	23	41	57	40	**161**	50	67	113	63	**293**	68	56	70
Leverett	†	†	†	†	**†**	†	†	†	†	**†**	<7	†	†
Lexington	<7	8	<7	<7	**17**	<7	<7	8	<7	**16**	<7	<7	<7
Leyden	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Lincoln	†	†	†	†	**†**	<7	†	<7	†	**<7**	†	<7	<7
Littleton	†	<7	<7	<7	**<7**	<7	<7	<7	<7	**15**	<7	<7	<7
Longmeadow	<7	<7	<7	<7	**16**	<7	<7	<7	<7	**13**	<7	<7	<7
Lowell	172	202	241	151	**766**	193	187	216	241	**837**	269	309	322
Ludlow	9	7	12	21	**49**	11	14	<7	*	**44**	10	<7	13
Lunenburg	<7	7	13	<7	**28**	<7	7	9	<7	**23**	<7	†	<7
Lynn	53	91	63	76	**283**	97	113	137	123	**470**	117	147	172
Lynnfield	<7	<7	<7	<7	**15**	<7	<7	<7	<7	**9**	<7	<7	<7
Malden	22	82	50	34	**188**	37	61	62	42	**202**	31	55	76
Manchester	†	<7	<7	<7	**<7**	†	<7	<7	†	**<7**	<7	<7	†
Mansfield	<7	<7	<7	†	**7**	<7	9	10	<7	**28**	7	9	<7
Marblehead	<7	<7	<7	<7	**13**	<7	*	15	8	**36**	9	<7	<7
Marion	<7	<7	<7	<7	**9**	<7	<7	<7	<7	**<7**	<7	<7	<7
Marlborough	12	17	14	10	**53**	21	13	19	13	**66**	<7	9	16
Marshfield	<7	<7	10	8	**30**	8	16	12	7	**43**	8	7	12
Mashpee	14	11	*	<7	**39**	<7	12	17	*	**42**	16	8	†
Mattapoisett	<7	<7	<7	<7	**12**	<7	7	<7	<7	**13**	<7	<7	<7
Maynard	7	<7	<7	<7	**14**	<7	<7	<7	<7	**12**	9	9	<7
Medfield	†	<7	<7	†	**<7**	<7	<7	<7	<7	**8**	<7	<7	<7
Medford	25	28	40	30	**123**	41	42	34	21	**138**	14	24	27
Medway	<7	†	<7	<7	**8**	<7	<7	<7	8	**19**	7	8	16
Melrose	7	<7	13	<7	**29**	16	17	17	9	**59**	7	<7	15

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City/Town	2015					2016					2017		
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3
Mendon	†	†	†	†	**†**	†	†	†	<7	**<7**	<7	<7	†
Merrimac	<7	<7	<7	<7	**15**	<7	†	<7	<7	**<7**	<7	<7	7
Methuen	72	27	31	54	**184**	47	53	62	51	**213**	24	34	42
Middleborough	22	<7	*	11	**48**	*	20	<7	†	**35**	<7	<7	<7
Middlefield	†	†	†	†	**†**	†	†	<7	†	**<7**	†	<7	†
Middleton	<7	<7	<7	<7	**<7**	<7	<7	<7	†	**12**	<7	<7	<7
Milford	<7	<7	14	11	**36**	<7	14	23	*	**56**	13	23	12
Millbury	12	9	14	10	**45**	7	19	17	8	**51**	8	12	10
Millis	†	†	<7	†	**<7**	<7	<7	<7	8	**18**	<7	<7	<7
Millville	<7	<7	†	<7	**<7**	<7	<7	†	<7	**7**	†	†	<7
Milton	<7	*	13	7	**32**	7	12	9	8	**36**	9	9	9
Monroe	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Monson	<7	<7	<7	7	**11**	<7	<7	<7	<7	**12**	<7	<7	<7
Montague	<7	<7	<7	<7	**16**	*	10	8	<7	**29**	<7	<7	8
Monterey	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Montgomery	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Mount Washington	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Nahant	<7	<7	†	<7	**7**	<7	<7	†	<7	**<7**	†	<7	<7
Nantucket	<7	<7	†	<7	**11**	<7	<7	9	<7	**18**	<7	<7	<7
Natick	<7	<7	9	9	**29**	<7	9	*	10	**33**	7	<7	8
Needham	<7	<7	<7	†	**9**	<7	<7	<7	<7	**15**	<7	†	<7
New Ashford	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
New Bedford	151	177	211	147	**686**	116	153	221	216	**706**	118	199	229
New Braintree	†	<7	†	†	**<7**	†	†	†	<7	**<7**	†	<7	†
New 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	8
Newton	<7	20	*	9	**42**	11	13	15	16	**55**	17	16	15
Norfolk	<7	†	<7	<7	**7**	7	<7	<7	<7	**18**	<7	<7	<7
North Adams	<7	*	9	13	**34**	11	27	22	14	**74**	9	9	17
North Andover	16	18	10	8	**52**	12	11	19	15	**57**	18	12	18
North Attleboro	11	15	8	15	**49**	13	21	18	16	**68**	11	25	21
North Brookfield	†	†	<7	<7	**<7**	†	†	<7	<7	**<7**	†	†	†

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City/Town	2015					2016					2017		
	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3
North Reading	<7	8	<7	<7	**15**	<7	<7	9	<7	**21**	<7	9	<7
Northampton	<7	8	20	<7	**33**	26	*	<7	22	**71**	26	20	16
Northborough	<7	†	<7	<7	**<7**	<7	<7	10	<7	**23**	<7	<7	<7
Northbridge	<7	7	<7	<7	**22**	<7	7	7	<7	**22**	<7	<7	9
Northfield	†	†	†	†	**†**	†	†	†	†	**†**	†	†	<7
Norton	<7	†	†	†	**<7**	†	*	<7	11	**26**	7	<7	8
Norwell	<7	*	10	†	**22**	<7	7	<7	<7	**19**	<7	7	<7
Norwood	<7	<7	<7	<7	**8**	<7	†	<7	11	**18**	13	13	15
Oak Bluffs	<7	<7	<7	<7	**16**	<7	<7	<7	<7	**14**	<7	†	†
Oakham	†	†	†	†	**†**	†	<7	<7	†	**<7**	<7	†	<7
Orange	†	†	<7	<7	**<7**	<7	<7	<7	<7	**10**	8	<7	<7
Orleans	†	†	†	†	**†**	†	†	†	†	**†**	<7	<7	<7
Otis	†	†	†	†	**†**	†	†	†	†	**†**	†	†	<7
Oxford	10	<7	12	*	**34**	<7	10	22	<7	**40**	11	8	<7
Palmer	<7	<7	<7	<7	**15**	†	<7	†	<7	**<7**	<7	<7	†
Paxton	<7	†	<7	†	**<7**	<7	<7	<7	<7	**<7**	<7	<7	<7
Peabody	38	26	30	26	**120**	34	44	42	43	**163**	34	37	51
Pelham	†	†	<7	†	**<7**	†	†	†	†	**†**	†	†	†
Pembroke	<7	12	12	<7	**34**	9	9	8	17	**43**	12	8	7
Pepperell	<7	<7	9	<7	**23**	<7	<7	9	<7	**20**	<7	†	7
Peru	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Petersham	†	<7	†	†	**<7**	†	<7	†	<7	**<7**	†	†	†
Phillipston	†	<7	†	†	**<7**	†	†	<7	†	**<7**	†	†	†
Pittsfield	28	24	38	56	**146**	38	40	30	40	**148**	35	29	57
Plainfield	†	†	†	†	**†**	†	†	†	†	**†**	†	<7	<7
Plainville	<7	<7	<7	<7	**21**	<7	<7	<7	11	**23**	7	<7	<7
Plymouth	57	47	35	47	**186**	38	60	49	43	**190**	50	58	69
Plympton	<7	<7	<7	†	**<7**	†	<7	<7	<7	**<7**	<7	<7	†
Princeton	†	†	†	<7	**<7**	†	†	†	†	**†**	†	<7	<7
Provincetown	†	*	7	<7	**15**	<7	<7	<7	<7	**11**	<7	<7	<7
Quincy	93	94	44	89	**320**	57	123	131	122	**433**	89	101	164
Randolph	<7	<7	19	7	**34**	30	30	16	24	**100**	20	13	21
Raynham	7	<7	18	<7	**37**	<7	<7	7	13	**32**	<7	10	12
Reading	<7	<7	<7	<7	**15**	<7	<7	7	7	**26**	<7	<7	<7
Rehoboth	†	†	†	<7	**<7**	†	†	†	†	**†**	<7	<7	<7
Revere	45	61	77	59	**242**	52	81	92	76	**301**	52	69	82

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City/Town	2015					2016					2017		
	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3
Richmond	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Rochester	†	<7	†	†	**<7**	<7	<7	<7	<7	**8**	<7	†	<7
Rockland	12	9	21	13	**55**	42	28	24	22	**116**	17	19	23
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	<7
Salem	34	59	39	35	**167**	47	62	78	60	**247**	54	56	78
Salisbury	16	16	10	12	**54**	25	33	33	17	**108**	19	25	33
Sandisfield	†	†	†	†	**†**	†	<7	†	†	**<7**	<7	†	†
Sandwich	†	†	<7	†	**<7**	†	†	*	<7	**8**	<7	†	†
Saugus	29	25	26	16	**96**	26	37	38	28	**129**	25	31	32
Savoy	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Scituate	<7	<7	7	<7	**20**	<7	<7	9	<7	**21**	<7	<7	<7
Seekonk	<7	<7	<7	13	**26**	<7	7	10	<7	**26**	<7	10	8
Sharon	†	†	†	†	**†**	†	<7	8	<7	**12**	<7	<7	<7
Sheffield	†	†	<7	<7	**<7**	<7	†	<7	†	**<7**	†	<7	<7
Shelburne	†	<7	†	<7	**<7**	<7	†	†	<7	**<7**	<7	†	<7
Sherborn	†	†	†	†	**†**	†	†	†	<7	**<7**	†	†	†
Shirley	<7	<7	<7	<7	**9**	<7	<7	9	†	**13**	<7	<7	7
Shrewsbury	12	8	12	18	**50**	10	19	11	11	**51**	7	16	13
Shutesbury	<7	†	†	†	**<7**	†	†	†	†	**†**	†	†	†
Somerset	<7	8	10	<7	**29**	13	17	11	9	**50**	8	10	9
Somerville	17	42	38	45	**142**	39	52	56	50	**197**	27	39	43
South Hadley	<7	†	†	<7	**<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**	†	†	<7
Southbridge	13	13	10	15	**51**	11	26	22	37	**96**	8	14	20
Southwick	<7	<7	<7	<7	**11**	11	11	*	<7	**34**	8	<7	<7
Spencer	<7	†	<7	<7	**9**	<7	<7	<7	<7	**12**	<7	<7	7
Springfield	114	163	165	260	**702**	212	227	183	206	**828**	126	187	244
Sterling	<7	†	<7	<7	**7**	<7	<7	<7	<7	**13**	<7	<7	<7
Stockbridge	†	†	<7	†	**<7**	†	†	†	†	**†**	<7	†	†
Stoneham	15	13	11	14	**53**	<7	23	*	12	**52**	9	<7	18

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City/Town	2015					2016					2017		
	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3
Stoughton	9	12	18	12	**51**	10	21	12	11	**54**	14	16	16
Stow	<7	†	<7	<7	**<7**	†	<7	<7	†	**<7**	<7	<7	<7
Sturbridge	†	<7	<7	<7	**<7**	<7	11	<7	<7	**25**	<7	<7	<7
Sudbury	<7	<7	<7	†	**11**	†	<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	<7
Swampscott	<7	<7	<7	<7	**10**	<7	9	<7	<7	**25**	<7	<7	<7
Swansea	<7	†	<7	<7	**9**	8	13	13	15	**49**	10	<7	17
Taunton	78	77	84	76	**315**	75	117	73	59	**324**	39	75	90
Templeton	<7	10	<7	<7	**21**	<7	<7	<7	<7	**13**	<7	<7	<7
Tewksbury	<7	<7	9	13	**33**	12	24	21	24	**81**	37	41	29
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	<7
Tyringham	†	†	†	<7	**<7**	†	†	†	†	**†**	†	†	†
Upton	†	<7	<7	†	**<7**	<7	<7	<7	<7	**<7**	†	<7	<7
Uxbridge	<7	10	10	<7	**31**	9	<7	11	<7	**29**	<7	<7	7
Wakefield	13	<7	*	12	**40**	10	11	18	15	**54**	10	17	18
Wales	†	†	†	†	**†**	†	†	†	†	**†**	†	†	<7
Walpole	13	<7	<7	9	**32**	<7	10	*	12	**37**	9	8	8
Waltham	27	39	25	32	**123**	38	36	40	30	**144**	20	35	45
Ware	<7	<7	<7	<7	**12**	9	<7	<7	<7	**23**	<7	<7	11
Wareham	31	32	44	24	**131**	28	33	40	32	**133**	39	36	47
Warren	<7	†	<7	<7	**<7**	<7	<7	†	<7	**9**	<7	<7	<7
Warwick	†	†	†	†	**†**	†	†	†	†	**†**	†	<7	†
Washington	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Watertown	22	22	15	8	**67**	28	23	7	22	**80**	<7	11	15
Wayland	†	†	<7	<7	**<7**	†	<7	<7	<7	**<7**	<7	<7	<7
Webster	20	<7	13	*	**50**	16	14	20	22	**72**	13	18	23
Wellesley	<7	<7	<7	<7	**14**	<7	<7	<7	<7	**12**	<7	<7	<7
Wellfleet	†	<7	<7	<7	**<7**	<7	<7	<7	<7	**9**	†	<7	<7
Wendell	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
Wenham	†	†	†	<7	**<7**	<7	<7	†	†	**<7**	<7	†	<7

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City/Town	2015					2016					2017		
	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3	Q4	**Total**	Q1	Q2	Q3
West Boylston	<7	<7	<7	<7	**11**	<7	<7	<7	<7	**12**	<7	<7	<7
West Bridgewater	<7	<7	7	<7	**14**	7	<7	<7	†	**15**	<7	<7	<7
West Brookfield	<7	<7	†	†	**<7**	†	†	†	†	**†**	<7	<7	<7
West Newbury	<7	†	†	†	**<7**	<7	<7	†	<7	**<7**	†	†	<7
West Springfield	†	†	†	†	**†**	†	†	†	†	**†**	†	†	†
West Stockbridge	<7	†	†	†	**<7**	†	†	†	†	**†**	<7	†	†
West Tisbury	<7	<7	<7	†	**<7**	<7	<7	†	†	**<7**	†	<7	<7
Westborough	10	<7	<7	9	**29**	<7	13	13	*	**43**	7	13	<7
Westfield	10	15	12	34	**71**	28	15	16	21	**80**	11	14	15
Westford	†	†	<7	<7	**<7**	8	<7	<7	<7	**20**	<7	9	<7
Westhampton	†	<7	<7	10	**17**	*	7	<7	7	**27**	<7	<7	10
Westminster	<7	<7	<7	†	**7**	<7	<7	†	<7	**7**	<7	<7	<7
Weston	<7	<7	<7	†	**<7**	<7	<7	†	<7	**<7**	9	<7	<7
Westport	<7	<7	<7	<7	**9**	<7	9	<7	10	**28**	7	8	<7
Westwood	<7	<7	†	†	**<7**	<7	<7	<7	<7	**14**	<7	<7	<7
Weymouth	59	52	53	22	**186**	35	61	81	37	**214**	50	57	68
Whately	†	<7	†	†	**<7**	†	†	†	†	**†**	<7	<7	†
Whitman	†	<7	9	<7	**16**	7	7	10	18	**42**	9	<7	19
Wilbraham	<7	<7	<7	<7	**13**	<7	7	<7	<7	**17**	<7	<7	<7
Williamsburg	†	†	†	†	**†**	†	<7	†	†	**<7**	<7	<7	<7
Williamstown	<7	<7	<7	<7	**11**	<7	<7	<7	<7	**9**	†	<7	<7
Wilmington	*	15	15	<7	**44**	12	*	9	<7	**33**	<7	9	8
Winchendon	<7	†	<7	<7	**<7**	<7	<7	<7	<7	**17**	†	<7	<7
Winchester	†	<7	<7	<7	**<7**	<7	<7	<7	7	**18**	<7	†	<7
Windsor	†	†	†	†	**†**	†	†	†	<7	**<7**	†	†	†
Winthrop	<7	7	<7	10	**29**	13	18	21	8	**60**	<7	8	9
Woburn	32	23	14	22	**91**	42	38	36	28	**144**	43	36	45
Worcester	299	287	451	362	**1399**	327	396	480	408	**1611**	262	361	445
Worthington	†	†	†	†	**†**	†	†	<7	†	**<7**	†	†	†
Wrentham	<7	†	<7	<7	**<7**	*	12	11	<7	**35**	<7	<7	<7
Yarmouth	35	20	11	21	**87**	15	31	20	26	**92**	16	29	35
Unknown	123	99	121	70	**413**	65	115	109	72	**361**	51	50	62
Grand Total	**4201**	**4325**	**4788**	**4516**	**17830**	**4726**	**5940**	**6295**	**5348**	**22309**	**4501**	**5271**	**6463**

*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.