



Annual Electronic Control Weapons Use Brief

Electronic Control Weapons in Massachusetts: 2013

Daniel Bennett, Secretary
Executive Office of Public Safety and Security

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INTRODUCTION

Massachusetts General Law chapter 140, section 131J permits the use of Electronic Control Weapons (ECW) by law enforcement personnel in the course of their official duties, provided that they have completed a training course approved by the Secretary of Public Safety and Security. Moreover, the statute requires that ECW devices contain a mechanism in order to track the number of times each weapon is deployed.¹ In October 2004, in response to Chapter 170 of the Acts of 2004, the Executive Office of Public Safety and Security (EOPSS) promulgated 501 CMR 8.00 *et seq.*, regulations governing the sale of electronic control weapons in the Commonwealth and the training of law enforcement personnel on the appropriate use of such weapons. In September 2005, the Secretary of Public Safety and Security began authorizing ECW training programs in order to facilitate the purchase and use of ECWs by law enforcement agencies in the Commonwealth.

The law further states that the Secretary of Public Safety and Security shall develop a uniform protocol directing state police and municipal police officers to collect data pursuant to this act. Such data shall include the number of times the device or weapon has been fired and the identifying characteristics, including the race and sex, of the individuals who have been fired upon. This brief provides information pursuant to this legislative requirement.

METHODOLOGY

Law enforcement agencies may request approval from the Secretary of Public Safety and Security for their proposed ECW training programs on a rolling basis over the course of a calendar year. Once approved, the law enforcement agency is required to report on its ECW usage, regardless of whether equipment and training has been procured.

During 2013, agencies with approved training programs were required to complete and submit quarterly ECW reports detailing the usage of ECWs each quarter ([Appendix A](#)). Questions included on the quarterly reporting form consisted of: (1) the number of both sworn and ECW trained officers serving the agency, as well as the number of ECWs owned by the agency; (2) a list of ECW involved incidents (e.g., warnings, deployments, submissions, etc.); and (3) demographic information for the subject. This brief examines the data reported by the law enforcement agencies with approved ECW training programs from January 1, 2013 through December 31, 2013.

AGENCY LEVEL INFORMATION

As of December 31, 2013, a total of 172 law enforcement agencies had ECW training programs that were approved by the Secretary of Public Safety and Security ([Appendix B](#)). These agencies consisted of 168 municipal police departments and 4 non-municipal agencies (i.e., state police and regional law enforcement agencies). It was reported that 8,648 sworn officers served these agencies, of which 4,620 (53.4%) were trained in ECW usage ([Table 1](#)).

¹ As amended by St. 2004, c. 170, § 1.

Table 1. Number of Sworn Officers, Trained Officers, and ECWs, Yearend 2011-2013

Officer/Device	Number			Annual percent change		Percent change, 2011-2013
	2011	2012	2013	2011-2012	2012-2013	
Sworn Officers	6839	7564	8648	10.6 %	14.3 %	26.5 %
Municipal	4760	5485	6407	15.2	16.8	34.6
Non-municipal	2079	2079	2241	0.0	7.8	7.8
ECW Trained Officers	3134	4013	4620	28.0 %	15.1 %	47.4 %
Municipal	3032	3902	4506	28.7	15.5	48.6
Non-municipal	102	111	114	8.8	2.7	11.8
ECW Devices	1656	2193	2586	32.4 %	17.9 %	56.2 %
Municipal	1632	2169	2548	32.9	17.5	56.1
Non-municipal	24	24	38	0.0	58.3	58.3

INCIDENTS AND CONTACTS

An ECW *incident* is defined as an event in which an officer (or a group of officers) issued a warning and/or deployed an ECW towards a single subject. An ECW *contact* is defined as an individual officer's deployment, warning, or display of an ECW towards a single subject. Multiple contacts can occur within an incident. For example, if two officers each deploy their individual ECWs at a single subject, this would be considered two contacts and one incident.

From January 1, 2013, through December 31, 2013, municipal departments with approved training programs reported 949 ECW incidents which resulted in 1,000 contacts. Non-municipal law enforcement agencies reported zero ECW incidents and contacts during 2013. (Appendix B). This was a 12.8% increase from the total number of incidents reported by both municipal and non-municipal law enforcement agencies in 2012 (841) and a 12.9% increase from the total number of contacts reported by both municipal and non-municipal agencies in 2012 (886).²

Of the 1,000 municipal ECW contacts made in 2013, the majority of subjects were male (89.6%), almost three-quarters were white (73.3%), followed by black (15.7%), Hispanic (10.0%), and other (0.4%) (Table 2).³

Table 2. ECW Contacts by Sex and Race, Yearend 2013

Characteristic	Number	Percent
Total	1000	100.0 %
Sex	1000	100.0 %
Male	896	89.6
Female	96	9.6
Unknow n	8	0.8
Race	1000	100.0 %
White	733	73.3
Black	157	15.7
Hispanic	100	10.0
Other ^a	4	0.4
Unknow n	6	0.6

^aThe race/ethnic categories of Asian, Middle Eastern, and Native American comprise *other*.

² Both municipal and non-municipal agencies reported at least one ECW incident and contact in 2012.

³ Race and ethnic categories of Asian, Middle Eastern, and Native American comprise *other*.

WARNINGS

Of the 1,000 ECW contacts made as of December 31, 2013, warnings were issued in 844 instances (84.4% of the time) (Table 3). Males were 3.6% less likely to receive a warning than females (83.9% and 87.5%, respectively). Amongst the four racial categories, the frequency of warnings was similar for whites and Hispanics (85.7% and 85.0%, respectively) and black subjects received a warning 78.3% of the time.

Table 3. Distribution of Warnings by Sex and Race, Yearend 2013

Characteristic	Warnings		Contacts		Percent of contacts receiving warning
	Number	Percent	Number	Percent	
Total	844	100.0 %	1000	100.0 %	84.4 %
Sex	844	100.0 %	1000	100.0 %	84.4 %
Male	752	89.1	896	89.6	83.9
Female	84	10.0	96	9.6	87.5
Unknown	8	0.9	8	0.8	100.0
Race	844	100.0 %	1000	100.0 %	84.4 %
White	628	74.4	733	73.3	85.7
Black	123	14.6	157	15.7	78.3
Hispanic	85	10.1	100	10.0	85.0
Other ^a	2	0.2	4	0.4	50.0
Unknown	6	0.7	6	0.6	100.0

^aThe race/ethnic categories of Asian, Middle Eastern, and Native American comprise *other*.

ADDITIONAL INFORMATION ON WARNINGS

Of the 844 instances when a warning was issued, the subject submitted 353 times (41.8%). Of the 491 cases where a warning was issued but the subject did not comply, weapons were deployed 471 times (95.9%).⁴ Probe devices were fired in 206 instances, with subjects submitting 148 times (71.8%). Stun devices were deployed in 225 instances with subjects submitting 202 times (89.8%). In 40 instances both a probe and a stun were deployed with subjects submitting 33 times (82.5%). In the remaining 20 cases, a warning was issued and the subject did not comply, but neither a probe nor stun device was deployed.

There were 156 cases in which a warning was not issued. Devices were utilized in every instance with submission resulting 82.7% of the time. There were 72 probe submissions, 53 stun submissions and 4 combined probe and stun submissions.

⁴ See Appendix A, page 7 for definition.

**Executive Office of Public Safety and Security
Electronic Control Weapons (ECWs) Use Quarterly Report**

Calendar Year 2013

Agency Name:

Individual Completing Report:

Date Completed:

Phone Number:

Reporting Quarter	Reporting Period	Report Due Date
____ 1 st Quarter	January 1 st – March 31 st , 2013	April 15 th , 2013
____ 2 nd Quarter	April 1 st – June 30 th , 2013	July 15 th , 2013
____ 3 rd Quarter	July 1 st – September 30 th , 2013	October 15 th , 2013
____ 4 th Quarter	October 1 st – December 31 st , 2013	January 15 th , 2014

Please provide information that reflects use of electronic control weapons (ECWs) *during this quarter only*.

Police departments that have issued ECWs to their officers must submit a quarterly report ***even if ECWs were not used or were not issued*** during the quarter. In this case, please indicate that there were zero (0) incidents in which ECW's were used this quarter.

Part I. Agency Level Information

1. How many sworn officers were in your department at the end of this quarter?	
2. How many officers have completed the approved training program for ECWs?	
3. How many ECWs does your department own?	
4. In how many <i>incidents</i> was an ECW involved during this quarter? (An incident is an event in which the officer issued a warning or displayed or deployed an ECW.)	

Electronic Control Weapons (ECWs) Use Quarterly Report

Part II. Incident Level Information

A: INSTRUCTIONS:

Please complete one row for each officer involved in an incident in which an ECW was involved and the officer issued a warning or displayed or deployed an ECW. If more than one officer is involved in the same incident, use the same incident number for all officers in that incident. The number of incidents containing information should equal the total incidents reported in question #4 on page 2. Additional rows can be added to the table if necessary.

Please provide information that reflects use of electronic control weapons (ECWs) *during this quarter only* (not including usage during trainings, testing, or usage on animals).

- Warning Type – More than one response may be entered. Please indicate all that apply:
 - N/A = not applicable (no warning given)
 - V = verbal warning used
 - L = laser function used
 - S = spark function used
- For Deployment Type – Please indicate the number of each deployment type in ALL applicable columns:
 - STUN DEPLOYMENT = number of times drive stun function used
 - PROBE DEPLOYMENT = number of times probe function used and includes follow-up drive stun when a single probe is still attached
- Subject Submitted: Indicate whether each warning, probe, or stun resulted in the submission or cooperation of the subject. If subject did not submit (e.g., through flight or continued resistance), please answer “no”. If a subject submitted for reasons *other than* ECW use, such as hands-on techniques, pepper spray, or baton use, enter “no” in “Subject Submitted” columns.
- Race/Ethnicity – Please indicate the racial/ethnic composition of the targets of all ECW drive stuns or probes.
 - A = Asian or Pacific Islander
 - B = Black
 - H = Hispanic
 - I = Native American, American Indian, or Alaskan Native
 - M = Middle Eastern or East Indian
 - W = White

**Executive Office of Public Safety and Security
Electronic Control Weapons (ECWs) Use Quarterly Report**

B: EXAMPLES OF INCIDENT LEVEL INFORMATION:

Incident Number	Weapon Serial Number	Date of Incident	Warning Type	Did Subject Submit? Y/N	# of Probe Deployments	Subject Submitted? Y/N	# of Stun Deployments	Did Subject Submit? Y/N	Target's Gender	Target's Race / Ethnicity
1A	XX12345	1/1/13	S	No	0	N/A	2	Yes	M	W
1B	C23456	1/1/13	N/A	N/A	1	Yes	0	N/A	M	W
2	11234DE	2/5/13	V	No	0	N/A	1	No	F	B
3	B23456	3/7/13	V, L, S	No	1	No	3	No	M	A
4	W78514	3/15/13	V	Yes	0	N/A	0	N/A	M	H
5	X225844	3/31/13	N/A	N/A	1	Yes	1	No	M	I

C: CURRENT INCIDENT LEVEL INFORMATION*

Incident Number	Weapon Serial Number	Date of Incident	Warning Type	Did Subject Submit? Y/N	# of Probe Deployments	Subject Submitted? Y/N	# of Stun Deployments	Did Subject Submit? Y/N	Target's Gender	Target's Race / Ethnicity

**If necessary, please insert additional columns.*

Part III. Additional Information

If there is any other information you would like to report, including details regarding a specific incident or incidents, please use this space to do so.

Appendix B. Number of Municipal and Non-municipal ECW Incidents, 2010 - 2013

Agency type	Number of incidents			
	2010 ^a	2011 ^b	2012 ^b	2013
Total	275	521	841	949
Non-municipal	0	4	2	0
Cape Cod Regional Law Enforcement Council	0	0	0	0
Mass. State Police	--	3	2	0
Martha's Vineyard Police Tactical Response Team	--	0	0	0
Northeast Mass. Law Enforcement Council	--	1	0	0
Municipal	275	517	839	949
Abington	--	0	9	3
Acushnet	--	--	0	2
Adams	2	1	1	4
Amesbury	5	5	6	0
Andover	0	2	2	2
Ashburnham	--	6	0	3
Athol	--	--	11	41
Attleboro	10	14	17	10
Auburn	--	--	--	0
Ayer	--	--	5	10
Barnstable	37	33	36	45
Barre	--	--	3	6
Belchertown	2	2	2	4
Berkley	--	0	0	0
Bernardston	--	0	1	0
Beverly	--	0	0	0
Billerica	--	2	5	4
Blackstone	--	2	2	1
Bourne	--	--	10	12
Boxborough	--	--	--	0
Brewster	--	--	--	0
Bridgewater	--	2	0	2
Brockton	--	--	--	6
Brookfield	--	--	--	2
Canton	2	1	3	2
Carver	--	--	--	2
Chelmsford	3	3	3	1
Chelsea	14	17	6	15
Clinton	--	--	--	0
Concord	--	0	0	1
Dalton	--	3	1	0
Danvers	--	--	0	5
Dartmouth	--	0	8	13
Deerfield	3	7	5	3
Dennis	--	0	2	5
Dighton	--	0	0	0
Dover	--	--	0	2
Dracut	--	--	--	5
Dunstable	--	--	--	0

-- Data not collected as agency did not have an approved ECW training program.

^a As reported in *Annual Electronic Weapons Use Analysis: A Summary of Electronic Weapons Use in Massachusetts* (May 2011).

^b Data reflects updated numbers from those previously reported.

Appendix B-continued. Number of Municipal and Non-municipal ECW Incidents, 2010 - 2013

Agency type	Number of incidents			
	2010 ^a	2011 ^b	2012 ^b	2013
Duxbury	--	2	2	2
East Bridgewater	--	--	3	2
East Brookfield	--	2	2	2
Eastham	--	1	1	1
Edgartown	--	--	--	2
Erving	--	--	0	0
Everett	--	--	--	7
Fairhaven	--	9	7	5
Fall River	37	28	44	37
Falmouth	--	--	15	12
Foxborough	5	1	6	2
Framingham	3	3	4	2
Franklin	2	1	3	6
Freetown	2	3	0	2
Gardner	4	5	12	10
Georgetown	--	1	0	1
Gill	0	0	0	1
Grafton	--	--	--	0
Granville	--	0	0	0
Great Barrington	--	--	--	3
Greenfield	5	18	12	9
Groton	1	0	0	0
Groveland	--	0	1	0
Hampden	--	--	2	0
Hanson	--	--	--	0
Hardwick	--	4	3	3
Harwich	--	6	0	2
Hingham	--	2	11	5
Holden	--	0	0	2
Holyoke	--	--	6	37
Hopedale	--	5	0	0
Hubbardston	--	3	4	1
Hudson	--	0	4	5
Ipswich	--	0	0	0
Lanesborough	--	--	0	0
Lawrence	7	19	26	26
Lee	--	--	2	0
Lenox	--	--	0	2
Leominster	8	23	18	10
Littleton	3	3	1	2
Lynnfield	--	0	0	0
Mansfield	8	5	4	1
Marblehead	--	--	--	0
Marion	--	--	0	9
Marlborough	--	--	0	12
Mashpee	--	6	7	7
Maynard	--	0	0	2
Mendon	--	1	2	0
Methuen	6	6	1	4
Middleborough	--	13	10	6

-- Data not collected as agency did not have an approved ECW training program.

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Appendix B-continued. Number of Municipal and Non-municipal ECW Incidents, 2010 - 2013

Agency type	Number of incidents			
	2010 ^a	2011 ^b	2012 ^b	2013
Middleton	--	0	3	1
Milford	1	2	3	16
Millbury	--	--	--	1
Millville	--	4	1	0
Montague	2	2	0	0
Nantucket	3	2	5	2
Natick	3	10	3	10
New Bedford	--	14	145	125
New Braintree	--	0	0	0
New bury	--	--	--	2
Norfolk	--	0	0	1
North Adams	4	5	4	5
North Andover	--	--	0	0
North Attleboro	--	0	0	0
North Brookfield	1	1	2	3
North Reading	--	0	0	0
Northborough	--	0	0	0
Northfield	--	0	0	0
Norton	8	8	5	12
Norwood	--	1	16	12
Oak Bluffs	--	--	--	1
Oxford	--	0	14	8
Palmer	--	--	7	24
Paxton	--	0	0	1
Peabody	0	3	5	3
Pembroke	2	2	8	3
Pepperell	4	4	3	6
Petersham	--	0	0	1
Phillipston	--	0	0	0
Pittsfield	--	24	14	13
Plainville	--	0	0	3
Plymouth	--	4	35	31
Plympton	2	1	0	0
Provincetown	--	2	2	5
Raynham	1	1	0	6
Rehoboth	--	0	10	0
Rockland	5	4	7	7
Rowley	--	0	0	0
Salisbury	1	4	7	2
Sandwich	--	0	2	6
Seekonk	2	6	3	17
Sharon	--	0	0	0
Sherborn	--	3	3	0
Somerset	4	2	1	3
South Hadley	--	1	5	0
Southbridge	--	10	36	18
Southwick	--	--	--	2
Spencer	--	3	3	10
Sterling	2	0	2	0
Stoughton	--	--	6	24

-- Data not collected as agency did not have an approved ECW training program.

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Appendix B-continued. Number of Municipal and Non-municipal ECW Incidents, 2010 - 2013

Agency type	Number of incidents			
	2010 ^a	2011 ^b	2012 ^b	2013
Sturbridge	--	0	1	1
Sunderland	--	--	0	0
Swampscott	--	--	0	0
Swansea	3	2	3	4
Taunton	6	13	22	18
Templeton	--	6	0	2
Tewksbury	6	5	12	11
Tisbury	--	--	--	0
Topsfield	--	2	3	0
Truro	--	1	2	2
Tyngsborough	--	0	0	1
Upton	--	--	--	0
Wareham	18	14	31	14
Warren	--	--	--	2
Warwick	--	--	--	0
Webster	1	25	9	8
Wellfleet	--	--	--	1
West Boylston	2	2	0	1
West Bridgewater	--	--	--	0
West Brookfield	--	--	--	3
West Springfield	--	0	0	1
Westfield	6	26	18	16
Westminster	--	2	5	2
Westport	1	0	2	6
Williamstown	--	2	1	5
Winchendon	--	3	3	6
Woburn	--	--	--	0
Worcester	8	9	7	4
Yarmouth	10	12	9	4

-- Data not collected as agency did not have an approved ECW training program.

^a As reported in *Annual Electronic Weapons Use Analysis: A Summary of Electronic Weapons Use in Massachusetts* (May 2011).

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