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SB 652/Ch. 78, 2011
HB 507/Ch. 79, 2011

MSAR# 8735

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SECOND REPORT TO THE STATE OF MARYLAND UNDER PUBLIC SAFETY ARTICLE § 3-508

2013 Electronic Control Device (ECD) Discharges Analysis

MSAR# 8735

Maryland Statistical Analysis Center,
Governor's Office of Crime Control & Prevention

September 4, 2014

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INTRODUCTION

On April 12, 2011 Governor O'Malley signed into law Senate Bill 652/House Bill 507, which was subsequently enacted under the *Annotated Code of Maryland, Public Safety Article § 3-508.* This law requires law enforcement agencies that issue Electronic Control Devices (ECDs)[1], also known as tasers, to report certain information regarding the use of those devices to the Maryland Statistical Analysis Center (MSAC) located in the Governor's Office of Crime Control & Prevention (GOCCP), under Executive Order 01.01.2007.04. MSAC and the Police and Correctional Training Commissions (PCTC) worked with law enforcement and legal representatives to develop a standardized, efficient, user friendly format to record and report data required under this law.

METHODOLOGY

This report represents all ECD discharges by law enforcement during the 2013 calendar year that were reported to MSAC. The law requires the submission of annual ECD data to MSAC by March 31st of the following year. All data sets were received in an excel format, as required, and later combined, merged, standardized, and analyzed using IBM SPSS (Statistical Package for the Social Sciences) Statistics version 20 to formulate this report. IBM SPSS Statistics version 20 is a system package widely accepted and used by researchers and social scientists. For the purpose of this report, an ECD discharge means an ECD was fired at a person; it does not include an ECD that was fired during a training exercise. Also, accidental discharges, as well as an ECD fired at an animal, are not included in the report. In the first year of reporting, all law enforcement agencies were required to electronically submit verification to MSAC regardless of whether the agency issued ECDs to its officers. MSAC received 100% compliance from all law enforcement agencies that were required to report. Law enforcement agencies that issued and used ECDs reported the following data:

- The number of times an ECD was discharged by the agency in the past year;
- The time, date, and location (zip code) of the discharge;
- The type of incident (e.g. non-criminal, criminal, or traffic stop) in which the person against whom the ECD was discharged was involved prior to the discharge;
- The reason for each discharge (e.g. non-threatening non-compliance, threat of force, and use of force);
- The type of mode used (e.g. probe, drive stun, or both) of the discharge;
- The number of ECD cycles, the duration of each cycle, and the duration between cycles of the discharge;

[1] According to the *Annotated Code of Maryland, Public Safety Article § 3-508 (A)(3),* an Electronic Device is defined as a portable device designed as a weapon capable of injuring, immobilizing, or inflicting pain on an individual by the discharge of an electrical current.

- The point of impact of each discharge (e.g., arm, back torso, buttocks, front torso, groin/hip, head, leg, neck, side, clothing, or miss);
- The race, gender, and age, of each person against whom the ECD was discharged;
- The type of weapon (e.g., firearm, edged, blunt force, or other), if any, possessed by the person against whom the ECD was discharged, and the threat of any weapon;
- Any injury or death resulting from the discharge other than punctures or lacerations caused by the ECD contact or the removal of ECD probes; and
- The type of medical care, if any, provided to the person against whom the ECD was discharged, other than the treatment for punctures or lacerations caused by the ECD contact or the removal of ECD probes.

RESULTS

In the calendar year 2013, a total of 788 ECD discharges were reported by 56 agencies. Another 36 agencies used ECDs but did not report any discharges during the reporting period. All remaining agencies reported that ECDs were not issued to officers and therefore are exempt from reporting and were excluded from the analysis. All law enforcement agencies in the State of Maryland that use ECDs will be required to report to the state of Maryland Indefinitely.

Table 1. Number and Percent of ECD discharges by Agency (n = 92)

Agency	Frequency	Percent	Agency	Frequency	Percent
Aberdeen Police Department	8	1.0%	Hancock Police Department	0	0.0%
Allegany Police Department	5	0.6%	Harford County Sheriff's Office	13	1.6%
Annapolis Police Department	6	0.8%	Harve De Grace Police Department	9	1.1%
Anne Arundel County Police Department	59	7.5%	Howard County Police Department	6	0.8%
Anne Arundel County Sheriff's Office	2	0.3%	Hurlock Police Department	1	0.1%
Baltimore City Police Department	159	20.2%	Hyattsville Police Department	2	0.3%
Baltimore County Police Department	105	13.3%	Kent County Sheriff's Office	0	0.0%
Baltimore County Sheriff's Office	0	0.0%	La Plata Police Department	0	0.0%
Baltimore Environmental Police	0	0.0%	Landover Hills Police Department	0	0.0%
Bel Air Police Department	1	0.1%	Laurel Police Department	18	2.3%
Berlin Police Department	0	0.0%	Manchester Police Department	0	0.0%
Boonsboro Police Department	0	0.0%	Maryland Transportation Police	1	0.1%
Bowie Police Department	1	0.1%	MNCPP Prince George's County	8	1.0%
Brentwood Police Department	0	0.0%	MNCPP Montgomery County	3	0.4%
Brunswick Police Department	0	0.0%	Maryland State Police	1	0.1%
Calvert County Sheriff's Office	8	1.0%	Montgomery County Police Department	8	1.0%
Cambridge Police Department	9	1.1%	Montgomery County Sheriff's Office	4	0.5%
Capital Heights Police Department	0	0.0%	Morningside Police Department	0	0.0%

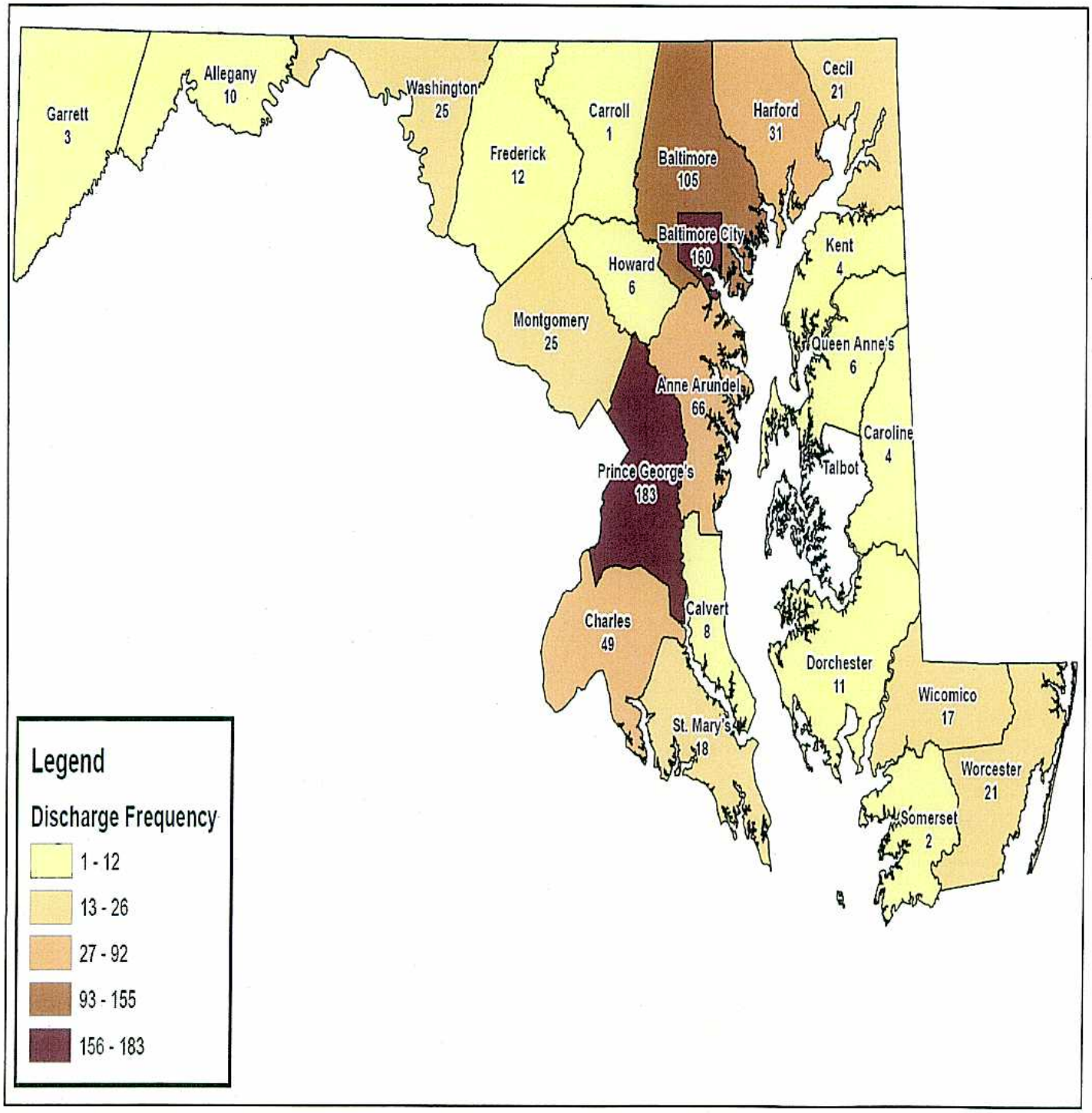
Caroline County Sheriff's Office	4	0.5%	Mount Rainier Police Department	14	1.8%
Cecil County Police Department	8	1.0%	New Carrolton City Police Department	0	0.0%
Centreville Police Department	0	0.0%	North East Police Department	0	0.0%
Charles County Sheriff's Office	49	6.2%	Oakland Police Department	0	0.0%
Chestertown Police Department	4	0.5%	Ocean City Police Department	16	2.0%
Cheverly Police Department	0	0.0%	Oxford Police Department	0	0.0%
Colmar Manor Police Department	1	0.1%	Perryville Police Department	2	0.3%
Cottage City Police Department	0	0.0%	Pocomoke Police Department	2	0.3%
Crisfield Police Department	0	0.0%	Prince George's County Police Department	119	15.1%
Crofton Police Department	0	0.0%	Prince County Sheriff's Office	8	1.0%
Cumberland Police Department	5	0.6%	Princess Anne Police Department	0	0.0%
Delmar Police Department	1	0.1%	Queen Anne's County Police Department	6	0.8%
Denton Police Department	0	0.0%	Ridgely Police Department	0	0.0%
District Heights Police Department	0	0.0%	Rising Sun Police Department	2	0.3%
Dorchester County Sheriff's Office	2	0.3%	Riverdale Park Police	2	0.3%
Edmonston Police Department	0	0.0%	Rockville City Police Department	5	0.6%
Elkton Police Department	9	1.1%	Seat Pleasant Police Department	0	0.0%
Federalsburg Police Department	0	0.0%	Smithsburg Police Department	0	0.0%
Frederick Police Department	5	0.6%	Snowhill Police Department	3	0.4%
Frederick County Sheriff's Office	7	0.9%	Somerset County Police Department	2	0.3%
Frostburg City Police Department	0	0.0%	St. Mary's County Sheriff's Office	18	2.3%
Fruitland Police Department	3	0.4%	Sykesville Police Department	0	0.0%
Gaithersburg Police Department	2	0.3%	Takoma Park Police Department	2	0.3%
Garrett County Police Department	1	0.1%	University Park Police Department	0	0.0%
Garrett County Sheriff's Office	2	0.3%	Washington County Sheriff's Office	11	1.4%
Greenbelt Police Department	9	1.1%	Westminster Police Department	0	0.0%
Greensboro Police Department	0	0.0%	Wicomico County Sheriff's Office	13	1.6%
Hagerstown Police Department	14	1.8%	Worcester County Sheriff's Office	0	0.0%

Location of ECD Discharge

The two maps below depict the location of each ECD discharge by the county and zip code respectively. At least one ECD discharge occurred in every county except Talbot County with the majority, over 60.0% in the Metro Region[2]. The number of ECD discharges per zip code ranged from 1 to 19 in 2013.

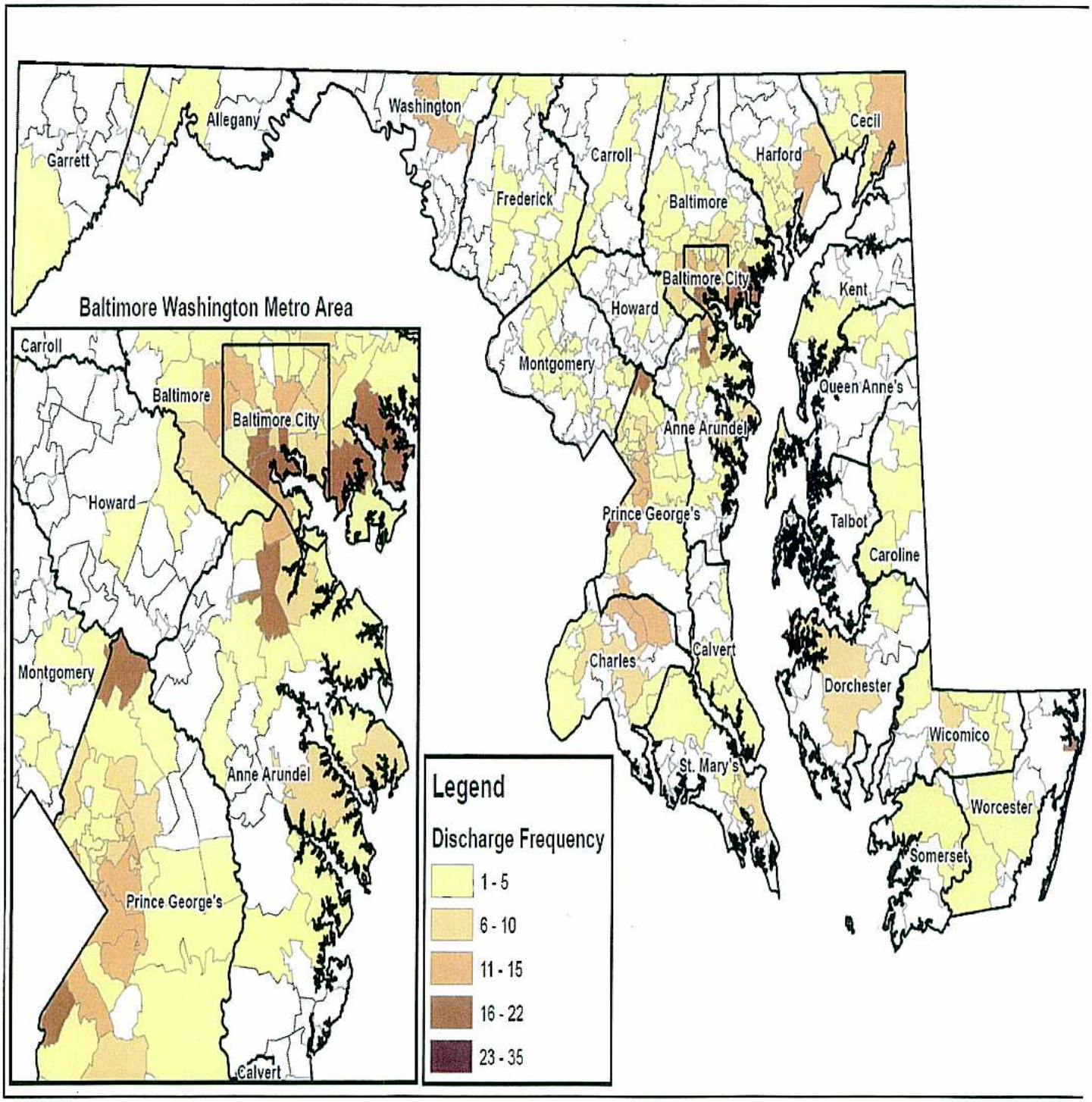
[2] The "Metro" area is defined by the following counties in Maryland: Anne Arundel, Baltimore, Howard, Prince George's, and Montgomery Counties as well as Baltimore City.

Law Enforcement Electronic Control Device Discharges aimed at Human Targets in 2013 by County



Source: Governor's Office of Crime Control and Prevention
Map Created: September 2014

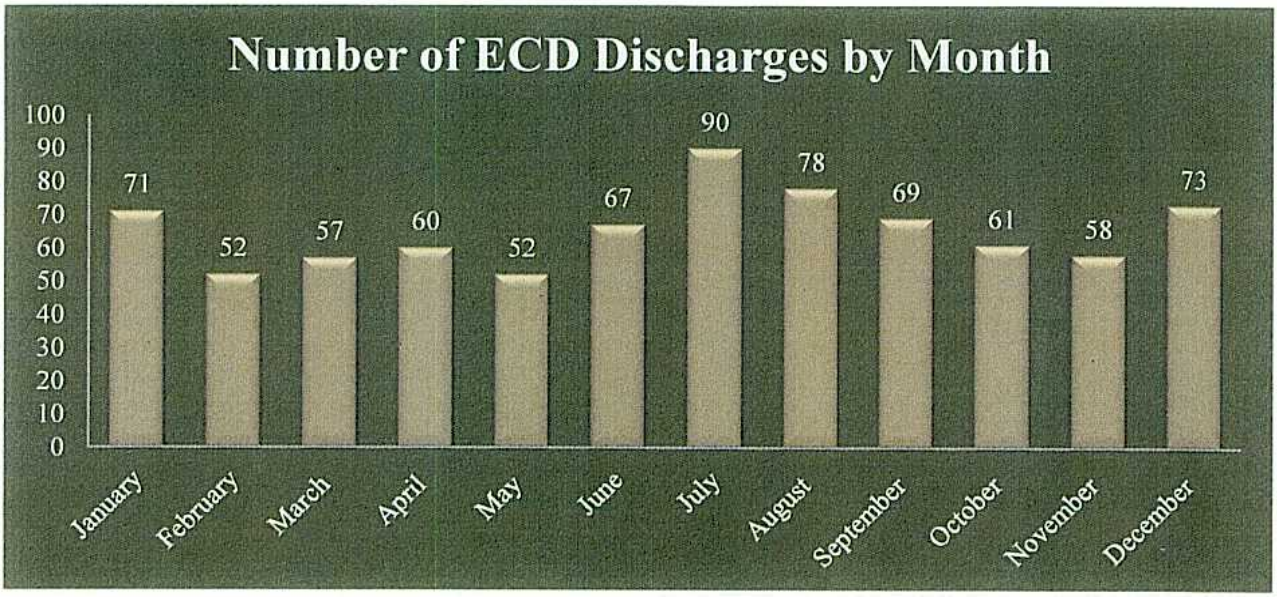
Law Enforcement Electronic Control Device Discharges aimed at Human Targets in 2013 by Zip Code

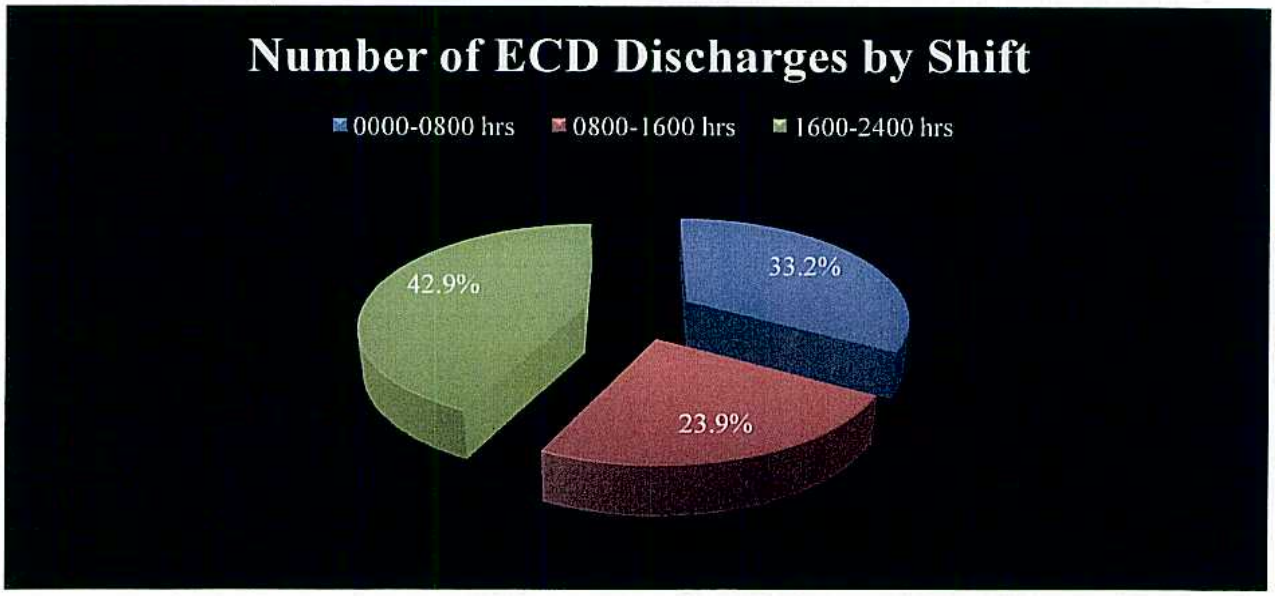


Source: Governor's Office of Crime Control and Prevention
Map Created: September 2014

ECD Discharge Date and Time of Day

The number of ECD discharges ranged from 52 discharges in February and May to 90 discharges in July. ECD discharges were more likely to occur in the evening from 1600 hours to 2400 hours (4 pm-12 am), (42.9%, n=330), followed by 0000 hours to 0800 hours (12 am-8 am), (33.2%, n=255), and 0800 hours to 1600 hours (8 am- 4 pm), (23.9%, n=184).





Race

Of the people tased by law enforcement agencies in 2013, approximately 95% were African American or Caucasian (61.8% and 33.1% respectively). Data reported to MSAC included all ECD discharges per device. Therefore, it is possible for one person to have been tased multiple times during an incident. This would be captured as a separate ECD discharge incident in the analysis. This could result in the potential duplication of some race, gender, and age frequencies.

Table 2. Number of ECD Discharges by Race/Ethnicity (n=788)			
Race/Ethnicity	**Frequency**	**Percent**	**Cumulative Percent**
Asian	1	0.1%	0.1%
African American	486	61.7%	61.8%
Hispanic	27	3.4%	65.2%
Caucasian	260	33.0%	98.2%
Other/Unknown	114	1.8%	100.0%
Total	**788**	**100.0%**	**100.0%**

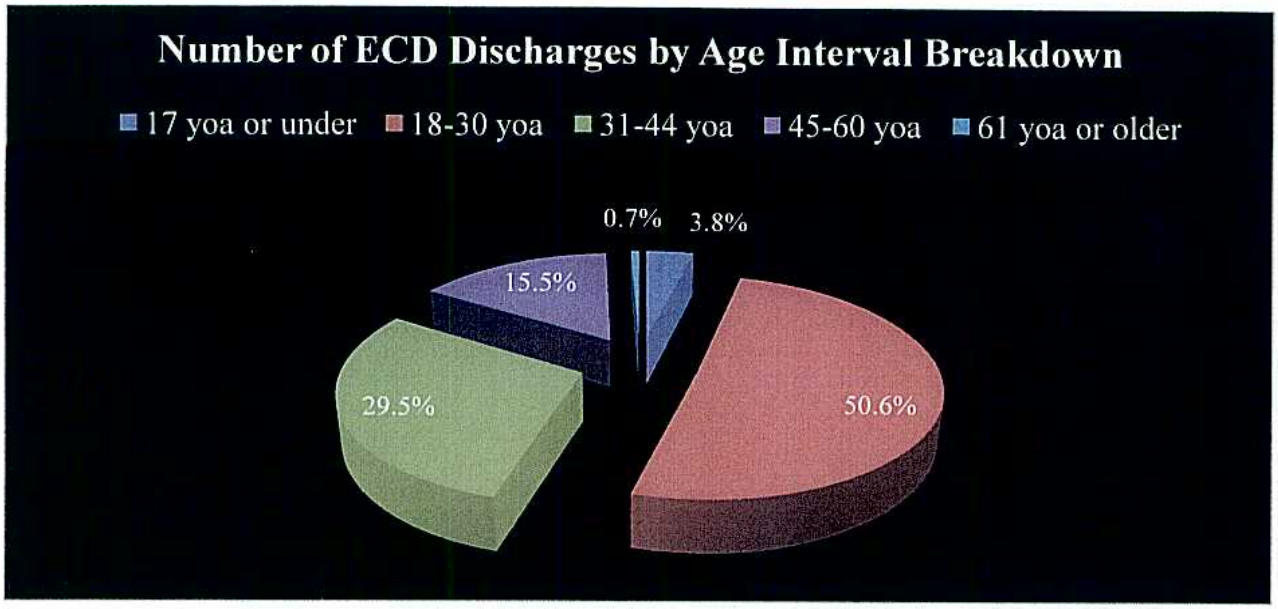
Gender

The vast majority (93.8%) of persons targeted with an ECD were male (n=739); females only accounted for 5.7% of persons tased (n=45). Gender information was missing in four discharges.

Table 3. Number of ECD Discharges by Gender (n=788)			
Gender	**Frequency**	**Percent**	**Cumulative percent**
Males	739	93.8%	93.8%
Females	45	5.7%	99.5%
Unknown/Missing	4	0.5%	100.0%
Total	**788**	**100.0%**	**100.0%**

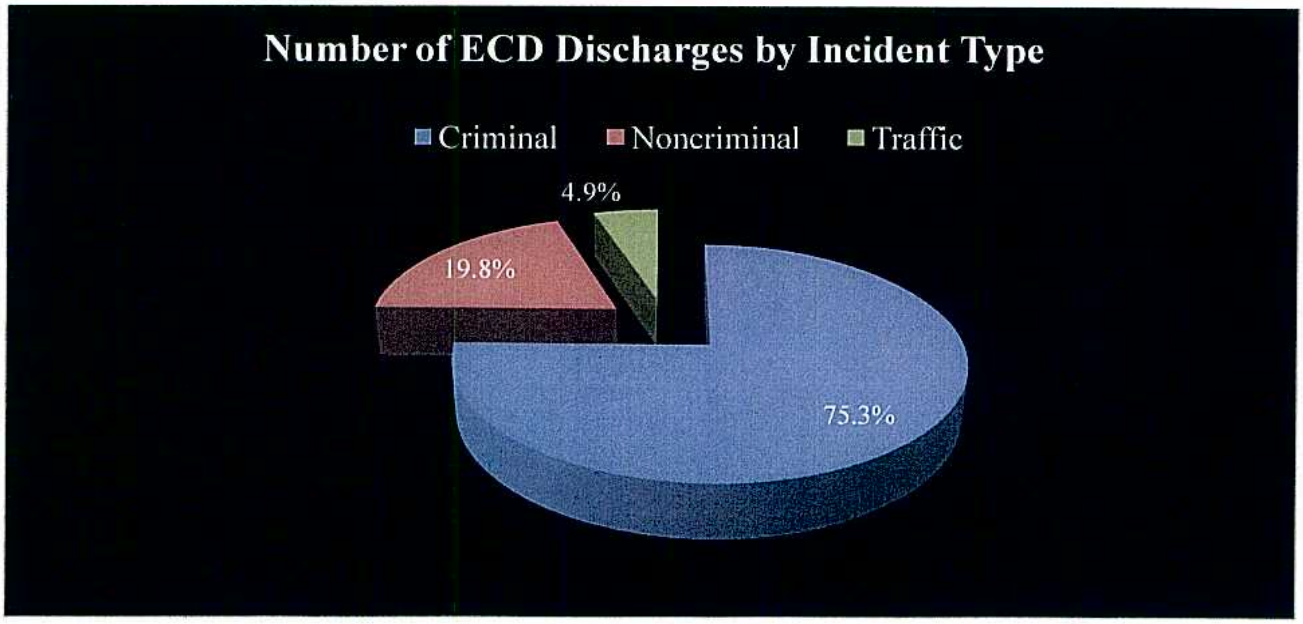
Age

ECDs were primarily discharged against persons 18-30 years old (50.6%). Persons 61 years or older and juveniles had the lowest rate of ECD discharges (0.7% and 3.8% respectively.) Missing data for person's age was apparent in 25 cases.



Type of Incident

The type of incident is defined as law enforcement's initial response to the person against whom the ECD was discharged regardless of the reason for the actual discharge. The types of incidents resulting in an ECD discharge are classified into three different law enforcement responses: criminal, noncriminal, and traffic. Over 75% of ECD discharges in 2013 were in response to criminal incidents (n=593), followed by noncriminal incidents (19.8%, n=156), and during traffic stops (4.9%, n=39).



African Americans (78.6%) were more likely to be tased during response to a criminal incident than Hispanics (59.3%) and Caucasians (72.3%). Hispanics (25.9%) were more likely to be tased in response to a noncriminal incident than any other race/ethnicities. Females (84.6%) were more likely to be tased during law enforcements response to a criminal incident compared to males (75.0%). However, males (19.8%) were more likely to be tased during a noncriminal incident than females (15.6%). Juveniles (89.7%) were most likely to be tased in response to a criminal incident and individuals 61 years and older (80%) were most likely to be tased in response to a noncriminal incident.

Table 4. Number of ECD Discharges by Type of Incident and Race/Ethnicity (n=788)

Discharge Type	Asian	African American	Hispanic	Caucasian	Unknown/ missing	Total
Criminal	1	382	16	188	6	**593**
Percent	100.0%	78.6%	59.3%	72.3%	42.9%	75.3%
Non Criminal	0	82	7	59	8	**156**
Percent	0.0%	16.9%	25.9%	22.7%	57.1%	19.8%
Traffic	0	22	4	13	0	**39**
percent	0.0%	4.5%	14.8%	5.0%	0.0%	4.9%
Total	**1**	**486**	**27**	**260**	**14**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

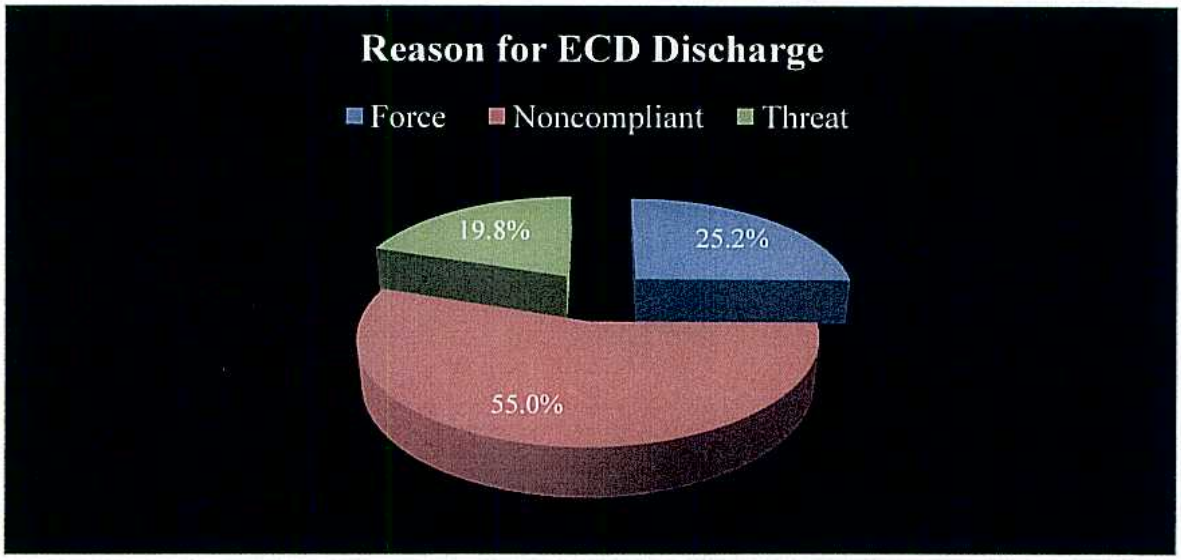
Table 5. Number of ECD Discharges by Type of Incident and Gender (n=788)

Discharge Type	Male	Female	Missing/Unknown	Total
Criminal	554	38	1	**593**
Percent	75.0%	84.4%	25.0%	75.3%
Noncriminal	146	7	3	**156**
Percent	19.8%	15.6%	75.0%	19.8%
Traffic	39	0	0	**39**
Percent	5.3%	0.0%	0.0%	4.9%
Total	**739**	**45**	**4**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 6. Number of ECD Discharges by Type of Incident and Age Interval (n=788)							
Discharge Type	**17 and Under**	**18-30**	**31-44**	**45-60**	**61 and older**	**Missing**	**Total**
Criminal	26	309	168	74	1	15	**593**
Percent	89.7%	80.1%	74.7%	62.7%	20.0%	60.0%	75.3%
Noncriminal	3	64	40	36	4	9	**156**
Percent	10.3%	16.6%	17.8%	30.5%	80.0%	36.0%	19.8%
Traffic	0	13	17	8	0	1	**39**
Percent	0.0%	3.4%	7.6%	6.8%	0.0%	4.0%	4.9%
Total	**29**	**386**	**225**	**118**	**5**	**25**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Reason for ECD Discharge

ECD discharges occurred most often when the target individual was noncompliant (55.0%, n=432), used force (25.2%, n=198), or threatened to use force (19.8%, n=156).



Across all race/ethnicities, the most common reason for being tased was noncompliance. Hispanics (37.0%) were more likely to be tased for use of force than any other race. Females (33.3%) were more likely to be tased for use of force than males (24.8%). However, males (55.2%) were more likely to be tased for being noncompliant than females (51.1%). Juveniles (62.1%) were most likely to be tased for being noncompliant as well as for using force than any other age group. Adults 61 years and older (60.0%) were more likely to be tased for using a threat than any other age group.

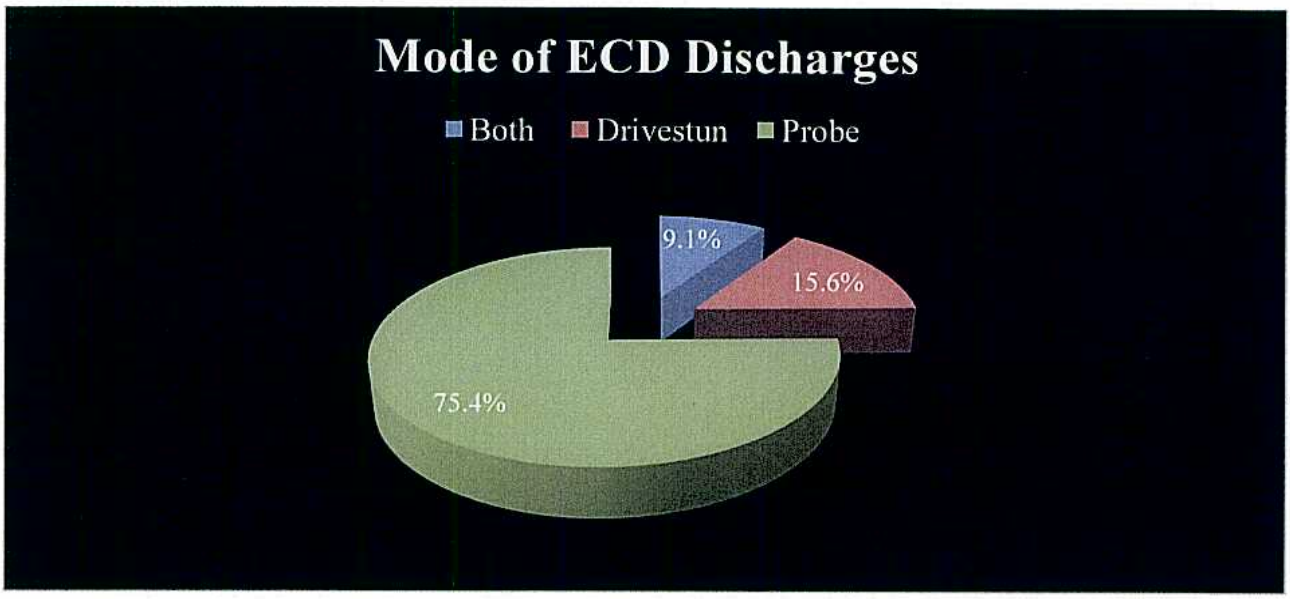
Table 7. Reason for Discharge by Type and Race/Ethnicity (n=788)						
Discharge Reason	**Asian**	**African American**	**Hispanic**	**Caucasian**	**Unknown**	**Total**
Force	0	116	10	71	1	**198**
Percent	0.0%	23.9%	37.0%	27.3%	7.1%	25.1%
Noncompliant	1	285	12	128	6	**432**
Percent	100.0%	58.6%	44.4%	49.2%	42.9%	54.8%
Threat	0	85	5	61	5	**156**
Percent	0.0%	17.5%	18.5%	23.5%	35.7%	19.8%
Missing	0	0	0	0	2	**2**
Percent	0.0%	0.0%	0.0%	0.0%	14.3%	0.3%
Total	**1**	**486**	**27**	**260**	**14**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 8. Reason for ECD Discharges by Type and Gender (n=788)				
Discharge Reason	**Male**	**Female**	**Unknown/Missing**	**Total**
Force	183	15	0	**198**
Percent	24.8%	33.3%	0.0%	25.1%
Noncompliant	408	23	1	**432**
Percent	55.2%	51.1%	25.0%	54.8%
Threat	148	7	1	**156**
Percent	20.0%	15.6%	25.0%	19.8%
Missing	0	0	2	**2**
Percent	0.0%	0.0%	50.0%	0.3%
Total	**739**	**45**	**4**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 9. Reason for ECD Discharges by Type and Age Interval (n=788)							
Discharge Reason	**17 and Under**	**18-30**	**31-44**	**45-60**	**61 and Older**	**Missing**	**Total**
Force	9	101	58	28	1	1	**198**
Percent	31.0%	26.2%	25.8%	23.7%	20.0%	4.0%	25.1%
Noncompliant	18	217	119	63	1	14	**432**
Percent	62.1%	56.2%	52.9%	53.4%	20.0%	56.0%	54.8%
Threat	2	68	48	27	3	8	**156**
Percent	6.9%	17.6%	21.3%	22.9%	60.0%	32.0%	19.8%
Missing	0	0	0	0	0	2	**2**
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	0.3%
Total	**29**	**386**	**225**	**118**	**5**	**25**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Mode of ECD Discharge

An ECD discharge can result from various modes: probe mode, drive stun mode, or both. Probe mode occurs when two probes are fired from a disposable cartridge releasing electrical pulses to the body. This includes any third point of contact. The purpose for this mode is incapacitation by transmitting an electrical current to the central nervous system. Drive stun mode occurs when an ECD is applied directly to the body but does not include a third point of contact discharge. This mode is based on pain and compliance. Probe mode was used more frequently (75.4%, n=590) than drive stun (15.6%, n=122), or both (9.1%. n=71). Missing data was apparent in five cases.



The mode of ECD discharge was fairly consistent across race gender and age. Probe mode was the most frequency mode of discharge across all race and ethnicities (100.0% for Asians, 75.9% for African Americans, 74.1% for Hispanics, and 73.1% for Caucasians) and gender (76.0% for males and 57.8% for females). Similarly, probe mode was the primary mode of discharge across all age groups (79.3% for 17 and under, 74.6% for 18-30, 73.8% for 31-44, 77.1% for 45-60, and 80% for 61 years and older).

Table 10. Mode of ECD Discharge by Type and Race/Ethnicity (n=788)						
Mode of ECD Discharge	**Asian**	**African American**	**Hispanic**	**Caucasian**	**Unknown**	**Total**
Both	0	45	2	24	0	**71**
Percent	0.0%	9.3%	7.4%	9.2%	0.0%	9.0%
Drive stun	0	69	5	44	4	**122**
Percent	0.0%	14.2%	18.5%	16.9%	28.6%	15.5%
Probe	1	369	20	190	10	**590**
Percent	100.0%	75.9%	74.1%	73.1%	71.4%	74.9%
Missing	0	3	0	2	0	**5**
Percent	0.0%	0.6%	0.0%	0.8%	0.0%	0.6%
Total	**1**	**486**	**27**	**260**	**14**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

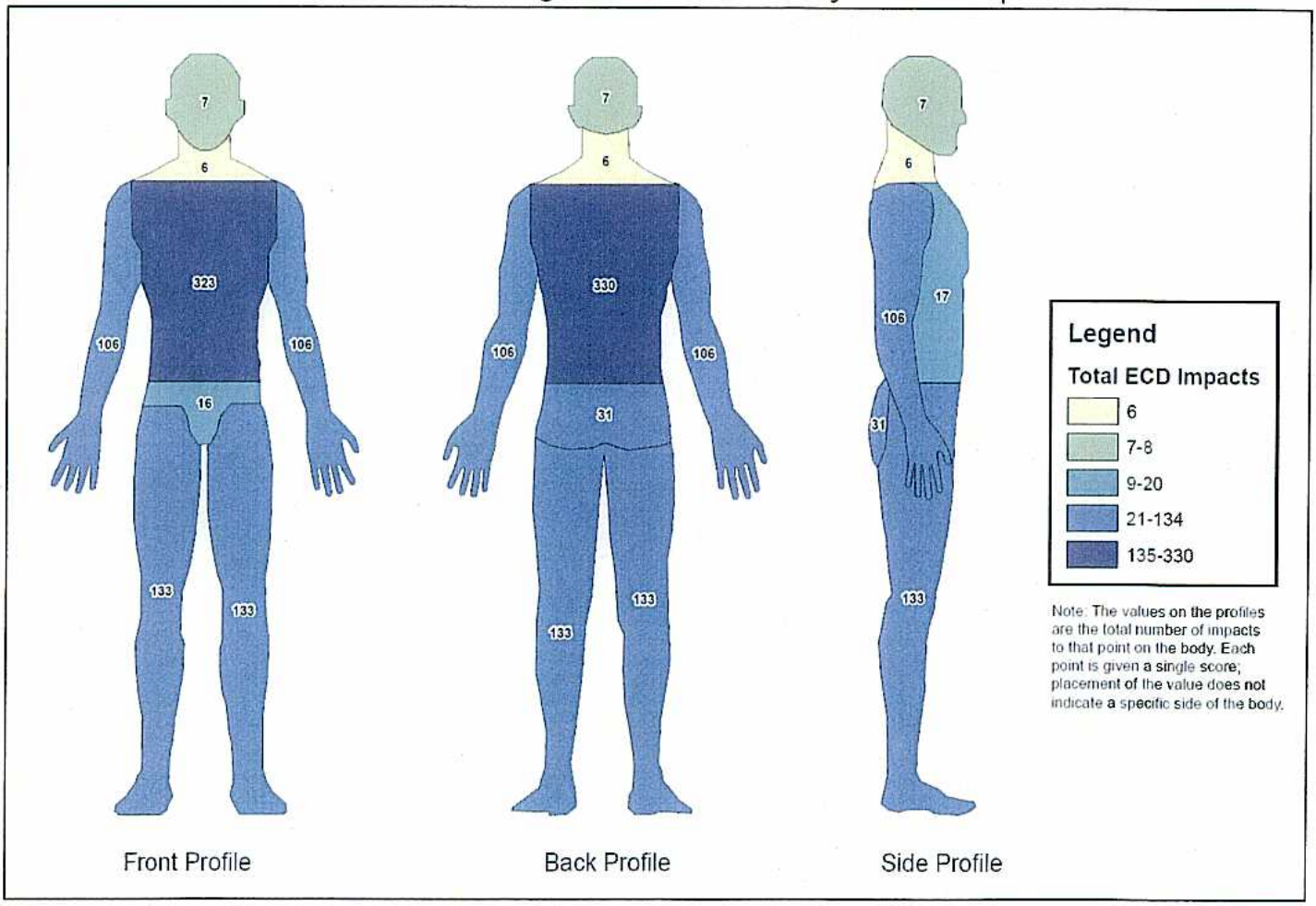
Table 11. Mode of Discharge by type and Gender (n=788)				
Mode of ECD Discharge	**Male**	**Female**	**Missing/Unknown**	**Total**
Both	63	8	0	**71**
Percent	8.5%	17.8%	0.0%	9.0%
Drive Stun	110	10	2	**522**
Percent	14.9%	22.2%	50.0%	66.2%
Probe	562	26	2	**190**
Percent	76.0%	57.8%	50.0%	24.1%
Missing/Unknown	4	1	0	**5**
Percent	0.5%	2.2%	0.0%	16.1%
Total	**739**	**45**	**4**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 12. Mode of Discharge by Type and Age Stratification (n=788)							
Mode of ECD Discharge	**17 and Under**	**18-30**	**31-44**	**45-60**	**61 and Older**	**Missing/Unknown**	**Total**
Both	0	33	26	10	0	2	**71**
Percent	0.0%	8.5%	11.6%	8.5%	0.0%	8.0%	9.0%
Drive Stun	5	62	33	16	1	5	**122**
Percent	17.2%	16.1%	14.7%	13.6%	20.0%	20.0%	15.5%
Probe	23	288	166	91	4	18	**590**
Percent	79.3%	74.6%	73.8%	77.1%	80.0%	72.0%	74.9%
Missing/Unknown	1	3	0	1	0	0	**5**
Percent	3.4%	0.8%	0.0%	0.8%	0.0%	0.0%	0.6%
Total	**29**	**386**	**225**	**118**	**5**	**25**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Point of Impact

The point of impact includes seven parts of the body (i.e., arm, back torso, buttocks, front torso, groin/hip, head, leg, neck, and side), as well as clothing or a missed impact. When an ECD discharge hits a person's clothing and does not affect the body, it is classified as a clothing "point of contact." Similarly, when an ECD discharge misses its intended target, this is considered to be a missed "point of contact." Also, the total "points of impact" do not equal the total number of ECD discharges because some incidents involved multiple points of impact. Approximately 92% of all discharges resulted in at least one point of impact (n =726, excluding clothing and misses) which totaled 969 points of impact (*points of impact are based on exact location of the impact; please see Table 13 for more information*). Approximately 6% of these discharges hit the intended target in the front torso (33.3%, n = 323) or the back torso (34.1%, n =330). Points of impact in the more sensitive areas of the body (e.g., head, neck, and groin) occurred in approximately 3.0% of all discharges.

Law Enforcement Electronic Control Device Discharges
aimed at Human Targets in 2013: Count by Point of Impact



Source: Governor's Office of Crime Control and Prevention
Washington College GIS
September 2014

Table 13. Point of Impact ECD Discharge Data						
	Point of Impact 1	Point of Impact 2	Point of Impact 3	Point of Impact 4	Total	Percent
Arm	61	44	1	0	106	10.9%
Back Torso	278	46	5	1	330	34.1%
Butt	18	8	5	0	31	3.2%
Front Torso	295	28	0	0	323	33.3%
Groin/Hip	8	6	2	0	16	1.7%
Head	6	1	0	0	7	0.7%
Leg	52	73	8	0	133	13.7%
Neck	3	3	0	0	6	0.6%
Side	5	10	2	0	17	1.8%
Discharges with a point of impact	**726**	**219**	**23**	**1**	**969**	**100.0%**
Miss	60	4	1	0	65	6.3%
Clothing	2	1	0	0	3	0.3%
Total Discharges	**788**	**224**	**24**	**1**	**1,037**	**100.0%**

ECD Cycles

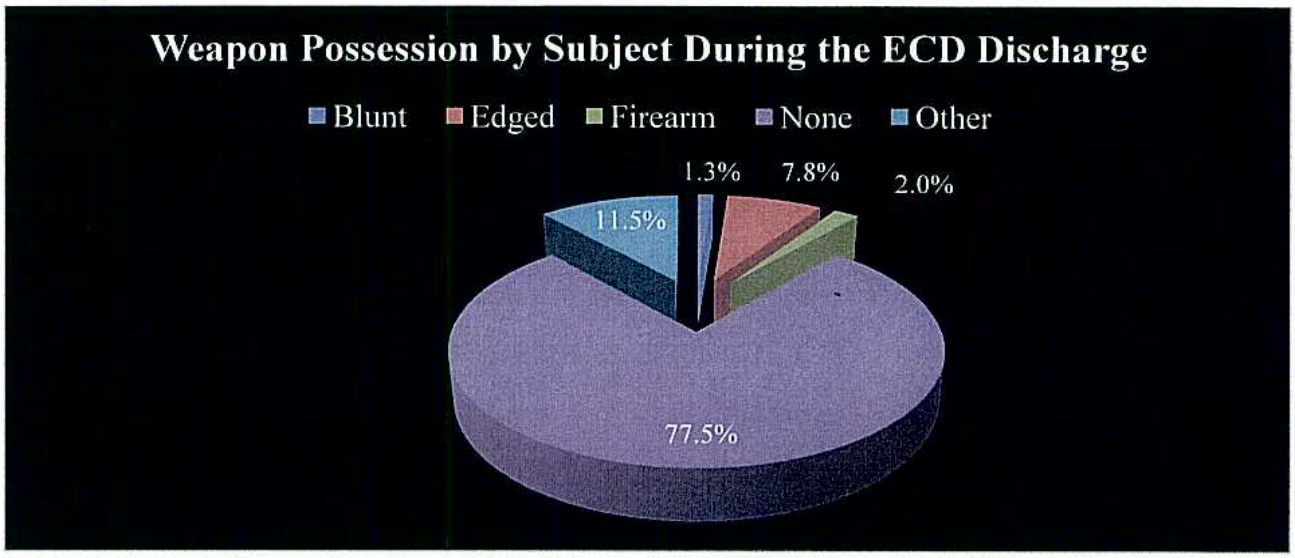
Three variables were captured to measure ECD cycles. The first variable measured the number of ECD cycles used per discharging incident. For example, every recorded ECD cycle was analyzed by MSAC to capture the duration of each cycle in seconds. If there were multiple cycles in an ECD discharge, the length (in seconds) between cycles was also captured. The only ECD brand used by law enforcement agencies in Maryland is Taser International Inc. which provides records for every discharge including the cycle information used in this analysis. The number of ECD cycles per discharge ranged from 1 to 31 (mean = 1.90 cycles, median = 1.0 cycles), and the duration of each cycle ranged from 0 to 44 seconds (mean = 4.98 seconds, median = 5 seconds). A vast majority of cycles lasted five seconds which occurred in approximately 75% of all cycles. The standard ECD cycle from a Taser International Inc. device occurs for five seconds when the trigger is pressed. Therefore, in order to increase the duration of an ECD cycle, a manual override would need to occur to lengthen or shorten the duration. The duration between cycles ranged from 0 seconds to 300 seconds, excluding one outlier of 900 seconds (mean = 10.09 seconds median = 6.0 seconds).

Statistics indicated that there was no significant difference in the number of cycles, duration of cycles, or duration between cycles when cross tabbed by race. In fact, Caucasians and African Americans showed an exact median for all categories (1.0 cycles, 5.0 seconds, and 6.0 seconds respectively). Males and females also had similar statistics for number of ECD cycles and duration of ECD cycle. Also, the duration between ECD cycles was relatively similar across all age groups.

Table 14. Number, Duration, and Duration Between Cycles by Race, Gender, and Age Grouping (n = 788)				
ECD Data Distribution	**Mean and Median**	**Number of ECD Cycles**	**Duration of ECD Cycles (in seconds)**	**Duration between ECD Cycles (in seconds)**
RACE				
Asian	Mean	1	5	n/a
n = 1	Median	1	5	n/a
African American	Mean	2.01	4.95	10.69
n = 486	Median	1	5	6
Hispanic	Mean	1.95	4.92	9.86
n =27	Median	1	5	5
Caucasian	Mean	1.97	4.95	10.18
n = 260	Median	1	5	6
Unknown/Missing	Mean	2	5.03	10.67
n =114	Median	1	5	7
GENDER				
Female	Mean	1.98	4.94	10.16
n = 45	Median	1	5	6
Male	Mean	1.97	4.95	10.69
n = 739	Median	1	5	6
Unknown/Missing	Mean	1.99	5.23	9.75
n = 4	Median	1	5	5
AGE GROUPING				
17 and under	Mean	1.97	4.94	10.22
n = 29	Median	1	5	6
18-30	Mean	1.97	4.95	10.67
n = 386	Median	1	5	6
31-44	Mean	1.97	4.95	10.12
n = 225	Median	1	5	6
45-60	Mean	1.97	4.95	10.16
n = 118	Median	1	5	6
61 and older	Mean	1.97	5	7.82
n = 5	Median	1.5	5	5
Unknown/Missing	Mean	1.99	4.98	10.21
n = 25	Median	1	5	6
Combined Total	**Mean**	**1.90**	**4.98**	**10.09**
n = 788	**Median**	**1**	**5**	**6**

Weapon Possession

Possession of a weapon was included in the analysis of this report to capture the type of weapon (if any) that was on the person being tased at the time of the incident. Of the total number of ECD discharges (n=788), the target individual possessed a weapon approximately 23.0% of the time (n=177). If a weapon was possessed, the most common type was other weapons (11.5%. n=90), edged weapons (7.8%, n=61), firearms (2.0%, n=16), and blunt force weapons (1.3%, n=10). Missing data was apparent in two cases.



African Americans (24.1%) were more likely to possess a weapon that Caucasians (18.1%). African Americans were more likely to possess a weapon classified as "Other" while Caucasians were more likely to possess an Edged" weapon. Females (24.6%) were slightly more likely to possess a weapon than males (22.5%). With regards to age, individuals 45-60 and 61 years and older were more likely to possess a weapon when tased (30.5% and 40% respectively).

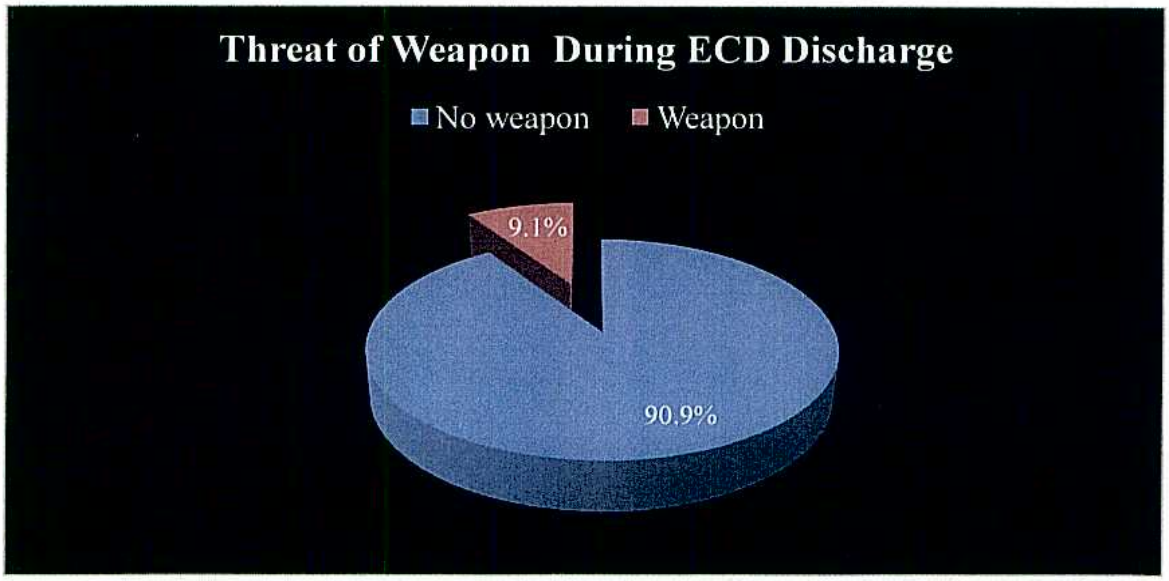
Table 15. Weapon Possession at the Time of ECD Discharge by Race/Ethnicity (n=788)						
Weapon Possessed	**Asian**	**African American**	**Hispanic**	**Caucasian**	**Unknown**	**Total**
Blunt	0	7	0	3	0	**10**
Percent	0.0%	1.4%	0.0%	1.2%	0.0%	1.3%
Edged	0	28	7	26	0	**61**
Percent	0.0%	5.8%	25.9%	10.0%	0.0%	7.7%
Firearm	0	11	0	5	0	**16**
Percent	0.0%	2.3%	0.0%	1.9%	0.0%	2.0%
None	1	369	16	213	10	**599**
Percent	100.0%	75.9%	59.3%	81.9%	71.4%	77.3%
Other	0	71	4	13	4	**92**
Percent	0.0%	14.6%	14.8%	5.0%	28.6%	11.7%
Total	**1**	**486**	**27**	**260**	**4**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 16. Weapon Possession at the Time of ECD Discharge by Gender (n=788)				
Weapon Possessed	**Male**	**Female**	**Missing/Unknown**	**Total**
Blunt	10	0	0	**10**
Percent	1.4%	0.0%	0.0%	1.3%
Edged	54	7	0	**61**
Percent	7.3%	15.6%	0.0%	7.7%
Firearm	15	1	0	**16**
Percent	2.0%	2.2%	0.0%	2.0%
None	573	34	2	**609**
Percent	77.5%	75.6%	50.0%	77.3%
Other	87	3	2	**92**
Percent	11.8%	6.7%	50.0%	11.7%
Total	**739**	**45**	**4**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 17. Weapon Possession at the Time of ECD Discharge by Age Stratification (n=788)							
Weapon Possessed	**17 and Under**	**18-30**	**31-44**	**45-60**	**61 and Older**	**Missing**	**Total**
Blunt	0	4	4	2	0	0	**10**
Percent	0.0%	1.0%	1.8%	1.7%	0.0%	0.0%	1.3%
Edged	0	25	19	15	2	0	61
Percent	0.0%	6.5%	8.4%	12.7%	40.0%	0.0%	7.7%
Firearm	1	7	4	4	0	0	**16**
Percent	3.4%	1.8%	1.8%	3.4%	0.0%	0.0%	2.0%
None	25	310	169	82	3	20	**609**
Percent	86.2%	80.3%	75.1%	69.5%	60.0%	80.0%	77.3%
Other	3	40	29	15	0	5	**92**
Percent	10.3%	10.4%	12.9%	12.7%	0.0%	20.0%	11.7%
Total	**29**	**386**	**225**	**118**	**5**	**25**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Threat of Weapon

Of ECD discharges where no weapon was present, MSAC analyzed whether a threat of a weapon occurred. Law enforcement may assume a threat exists based on verbal threat or other indication, based on a person's actions (e.g. does not remove hands from pockets). Of the 609 ECD discharge incidents where a weapon was not possessed, a threat of a weapon only occurred during 9.1% of the incidents (n=52).



A threat of a weapon was more likely to occur for African Americans compared to Caucasians (9.5% and 8.0% respectively). Males (8.9%) were significantly more likely to threaten the use of a weapon than females (2.9%). Individuals 18-30 years old were the least likely to show a threat of a weapon during an ECD discharge (8.3%); whereas, individuals who were 61 years and older (33.3%) and juveniles (12.0%) were more likely to show a threat of a weapon during an ECD discharge incident.

Table 18. Threat of a weapon during ECD Discharges by Race/Ethnicity (n=609)

Threat of a Weapon During ECD Discharges	Asians	African American	Hispanic	Caucasian	Missing/Unknown	Total
Yes	0	35	0	17	0	**52**
Percent	0.0%	9.5%	0.0%	8.0%	0.0%	8.5%
No	1	334	16	196	10	**557**
Percent	100.0%	90.5%	100.0%	92.0%	100.0%	91.5%
Total	**1**	**369**	**16**	**213**	**10**	**609**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 19. Threat of a Weapon During an ECD Discharge by Gender (n = 836)

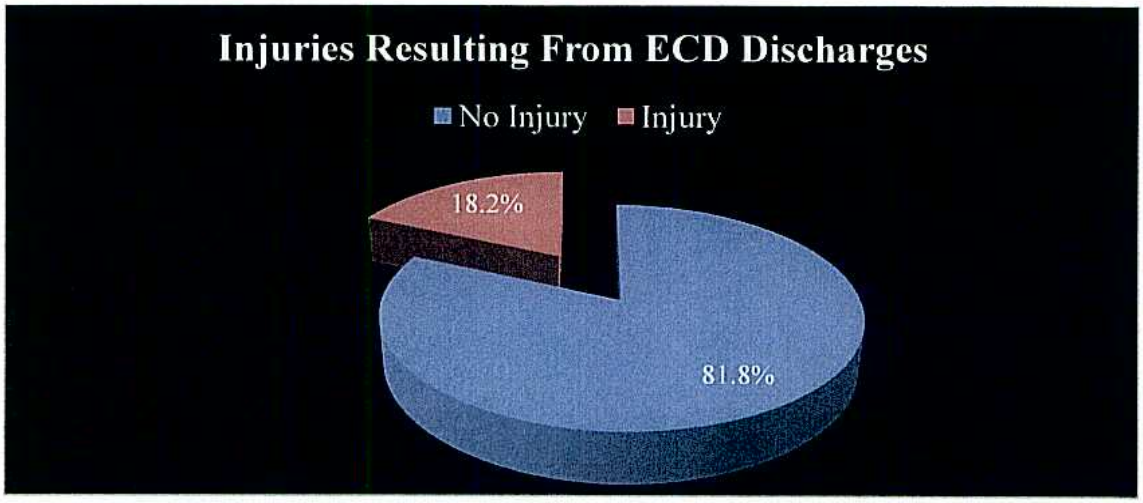
Threat of a Weapon During ECD Discharges	Male	Female	Missing/Unknown	Total
Yes	51	1	0	**52**
Percent	8.9%	2.9%	0.0%	8.5%
No	522	33	2	**557**
Percent	91.1%	97.1%	100.0%	91.5%
Total	**573**	**34**	**2**	**609**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 20. Threat of a Weapon During an ECD Discharge by Age Grouping (n = 836)

Threat of a Weapon During ECD Discharges	17 and Under	18-30	31-44	45-60	61 Years and Older	Missing	Total
Yes	3	25	14	7	1	0	**50**
Percent	12.0%	8.1%	8.3%	8.5%	33.3%	0.0%	8.2%
No	22	285	155	75	2	20	**559**
Percent	88.0%	91.9%	91.7%	91.5%	66.7%	100.0%	91.8%
Total	**25**	**310**	**169**	**82**	**3**	**20**	**609**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Death and Injuries

Death and Injuries resulting from an ECD discharge exclude deaths or injuries from punctures or lacerations caused by ECD contact or the removal of ECD probes. One death occurred from a direct result of an ECD discharge in 2013. Injuries only occurred in 18.2 % of all ECD discharges (n=142). Missing data was apparent for eight injury incidents.



Caucasians (27.7%) were more likely to sustain an injury as a result of being tased than any other race. Males were slightly more likely to sustain injuries than females (18.4% and 13.4% respectively). Individuals 61 and older and juveniles were most likely to be injured as a result of being tased than any other age group (40.0% and 27.4% respectively).

Table 21. Injuries Reported From an ECD Discharge by Race/Ethnicity (n=788)

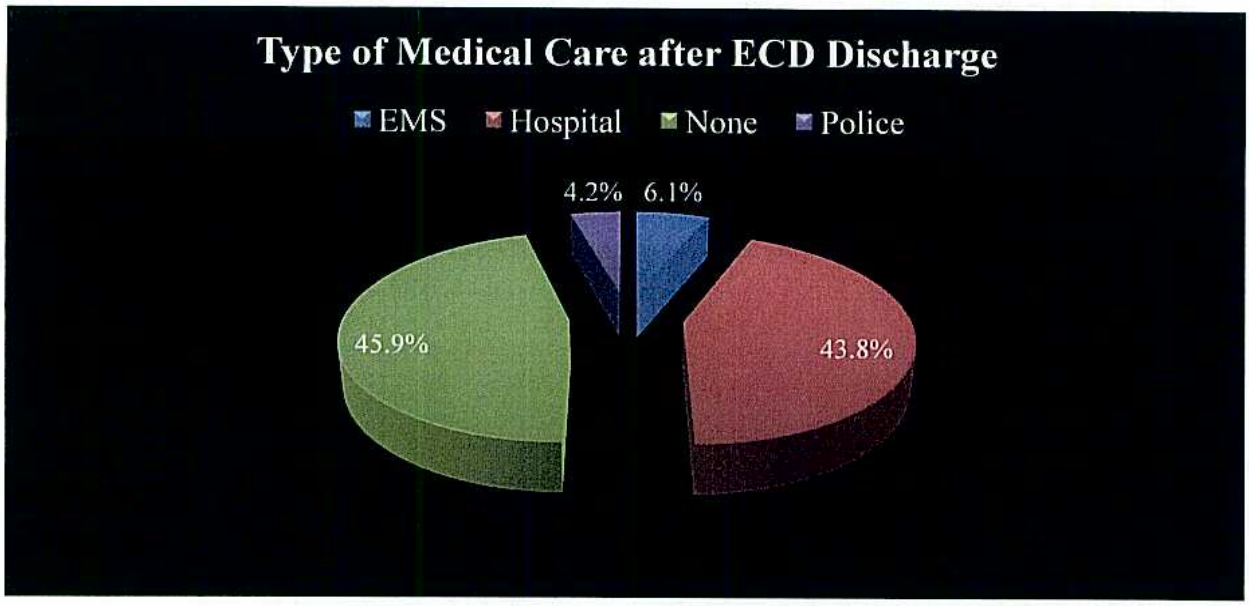
Injuries Reported	Asian	African American	Hispanic	Caucasian	Missing/Unknown	Total
Yes	1	67	2	72	0	**142**
Percent	100.0%	13.8%	7.4%	27.7%	0.0%	18.0%
No	0	418	25	183	12	**638**
Percent	0.0%	86.0%	92.6%	70.4%	85.7%	81.0%
Missing	0	1	0	5	2	**8**
Percent	0.0%	0.2%	0.0%	1.9%	14.3%	1.0%
Total	**1**	**486**	**27**	**260**	**14**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 22. Injuries Reported from an ECD Discharge by Gender (n=788)				
Injuries Reported	**Male**	**Female**	**Missing/Unknown**	**Total**
Yes	136	6	0	**142**
Percent	18.4%	13.3%	0.0%	18.0%
No	598	38	2	**638**
Percent	80.9%	84.4%	50.0%	81.0%
Missing	5	1	2	**8**
percent	0.7%	2.2%	50.0%	1.0%
Total	**739**	**45**	**4**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 23. Injuries Reported from an ECD Discharge by Age Stratification (n=788)							
Injuries Reported	**17 and Under**	**18-30**	**31-44**	**45-60**	**61 and older**	**Missing/Unknown**	**Total**
Yes	8	69	40	22	2	1	**142**
Percent	27.6%	17.9%	17.8%	18.6%	40.0%	4.0%	18.0%
No	21	313	183	96	3	22	**638**
Percent	72.4%	81.1%	81.3%	81.4%	60.0%	88.0%	81.0%
Missing	0	4	2	0	0	2	**8**
percent	0.0%	1.0%	0.9%	0.0%	0.0%	8.0%	1.0%
Total	**29**	**386**	**225**	**118**	**5**	**25**	**788**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Medical Care

The type of medical needed for individuals who were tased was analyzed for this report. This excludes medical care resulting from treatment of punctures or lacerations caused by ECD contact or the removal of ECD probes. Results indicate that individuals who were tased received no medical care 45.9% of the time, followed by hospital care (43.8%), EMS care (6.1%) and police care (4.2%). However, these percentages may not represent an accurate portrayal of medical care provided because this was not consistently reported by all agencies, using the given definition. Some agencies included hospital care for all discharges regardless of whether additional treatment beyond the standard procedure to treat puncture or lacerations occurred. Given this observation, MSAC is not confident that the medical care data provided by law enforcement accurately captures the ECD discharge incidents where additional medical care was provided.



DISCUSSION AND RECOMMENDATIONS

This report provides an overview of law enforcement ECD discharges in the State of Maryland for calendar year 2013. ECD discharges were most likely to occur in densely populated areas between 1600-2400 hours. The majority of discharges occurred during law enforcement's initial response to a criminal incident and when a person failed to comply with law enforcement officer orders. Probe mode was most commonly used during an ECD discharge in which a person's center mass (i.e., front and back torso) were the most frequent a point of impact. There were very few ECD discharges that made contact with the head, neck, and groin (the more sensitive areas of the body). On average, an ECD discharge incident only involved only one five second cycle. Persons who were tased possessed a weapon less than 23.0% of the time and showed a threat of a weapon approximately 9.0% of the time. One death occurred as a result OF an ECD discharge in 2013. Injuries resulting from an ECD discharge occurred in approximately 18.0% of the incidents. Approximately 50% of the person's that were tased received additional medical care.

Approximately 95% of the individuals who were tased were African American or Caucasian. Overall, African Americans were more likely to be tased during law enforcement's initial response to a criminal incident, and were more likely to be noncompliant than Caucasians. Caucasians were tased more often during a response to a noncriminal incident and were more likely to have used, or threatened to use force on law enforcement officers. A weapon was possessed more often during ECD discharge incidents by African Americans who were also more likely to pose the threat of a weapon, compared to Caucasians. There were no differences in the type of mode used, point of impact, or frequency of injuries among the two races.

Males comprised 93.8% of persons who were tased. Females were more likely to be tased during an initial response to a criminal incident; however, males were more likely to be noncompliant. Females were more likely to possess a weapon than males when they were tased. Probe mode

was the most frequent mode of discharge for both males and females. There were no differences in the point of impact, or frequency of injuries by gender.

Over 80% of people tased were between the ages of 18 and 44. Generally, juveniles were tased more often during law enforcement's initial response to a noncriminal incident, as well as for being noncompliant. Middle aged men and women were most likely to use a threat while being tased. Probe mode was the consistent mode of discharge across all age groups. Injuries and point of impact were fairly consistent across all age groups.

Data regarding threat of a weapon, injury, or fatality were reported to MSAC in a format consisting of "yes" or "no." Law enforcement was not required to report the situation or reason surrounding these occurrences. One limitation pertaining to the current study resulted from agency responses to "medical care". Some agencies selected hospital care for all discharges regardless of whether additional treatment beyond the standard procedure to treat puncture or lacerations occurred. As a result, data pertaining to the frequency of additional medical care received appears to be inflated. For incidents in which a weapon was possessed, it was unclear whether law enforcement saw a weapon on an individual prior to discharging an ECD, or located it after the fact.