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GOVERNOR'S OFFICE OF CRIME CONTROL & PREVENTION

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Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

V. Glenn Fueston, Jr.
Executive Director

August 31, 2016

The Honorable Larry Hogan
Governor of Maryland
100 State Circle
Annapolis MD 21401

The Honorable Thomas V. Mike Miller, Jr.
President of the Senate
State House, H-107
Annapolis MD 21401-1991

The Honorable Michael Erin Busch
Speaker of the House of Delegates
State House H-101
Annapolis MD 21401-1991

Dear Governor Hogan, President Miller and Speaker Busch:

As required by Maryland Public Safety Article §3-508 and SB 652/Ch. 78, 2011/HB507/Ch. 79, 2011, please find enclosed a copy of the Maryland Statistical Analysis Center's Annual Report entitled, *Fourth Report to the State of Maryland Under Public Safety Article § 3-508* regarding the status of ECD (taser) discharges in the State of Maryland.

Maryland's Statistical Analysis Center is located in the Governor's Office of Crime Control and Prevention. Should you have any questions relating to the information provided in this report, please feel free to contact me at 410-697-9338.

Sincerely,

V. Glenn Fueston, Jr.

Fourth Report to the State of Maryland Under Public Safety Article §3-508

2015 Electronic Control Device (ECD) Discharges Analysis

August 31, 2016

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

V. Glenn Fueston, Jr.
Executive Director
Governor's Office of Crime Control & Prevention

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MSAR # 8735

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INTRODUCTION

Chapters 78 and 79 of 2011 enacted Public Safety Article, § 3-508 (see Appendix). 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 located in the Governor's Office of Crime Control & Prevention under Executive Order 01.01.2007.04. The Maryland Statistical Analysis Center and the Police and Correctional Training Commissions 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 2015 calendar year that were reported to the Maryland Statistical Analysis Center. The law requires the submission of annual ECD data to the Maryland Statistical Analysis Center by March 31st of the following year. All data sets were received in an excel format, as required, and later collated, and analyzed using IBM SPSS (Statistical Package for the Social Sciences) Statistics version 22 to formulate this report. IBM SPSS Statistics version 22 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. 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 precipitating (e.g. non-criminal, criminal, or traffic stop) 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;
- 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;

[1] According to the 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 type of weapon (e.g., firearm, edged, blunt force, or other), if any, possessed by the person against whom the ECD was discharged, or there was an indication that the person possessed a 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 2015, a total of 944 ECD discharges were reported by 47 agencies. Another 21 agencies which in prior years reported they had used ECDs 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. The full list of ECD discharges by reporting agencies is depicted in Table 1.

Table 1. Number and Percent of ECD Discharges by Agency

Agency	Frequency	Percent	Agency	Frequency	Percent
Aberdeen Police Department	13	1.4%	Delmar Police Department	0	0.0%
Allegany County Sheriff's Office	6	0.6%	District Heights Police Department	0	0.0%
Annapolis Police Department	10	1.1%	Dorchester County Sheriff's Office	3	0.3%
Anne Arundel County Sheriff	0	0.0%	Elkton Police Department	4	0.4%
Anne Arundel County Police Department	33	3.5%	Federalsburg Police Department	0	0.0%
Baltimore City Police Department	347	36.8%	Frederick County Sheriff's Office	10	1.1%
Baltimore County Police Department	85	9.0%	Frederick Police Department	3	0.3%
Baltimore County Sheriff's Office	0	0.0%	Frostburg Police Department	4	0.4%
Berlin Police Department	0	0.0%	Fruitland Police Department	5	0.5%
Brunswick Police Department	0	0.0%	Gaithersburg Police Department	2	0.2%
Calvert County Sheriff's Office	9	1.0%	Garrett County Sheriff's Office	0	0.0%
Cambridge Police Department	5	0.5%	Greenbelt Police Department	4	0.4%
Capitol Heights Police Department	1	0.1%	Greensboro Police Department	0	0.0%
Caroline County Sheriff's Office	0	0.0%	Hagerstown Police Department	17	1.8%
Cecil County Sheriff's Office	12	1.3%	Hancock Police Department	0	0.0%
Centreville Police Department	0	0.0%	Harford County Sheriff's Office	20	2.1%
Charles County Sheriff's Office	66	7.0%	Havre de Grace Police Department	3	0.3%
Chestertown Police Department	0	0.0%	Howard County Police Department	16	1.7%
Cheverly Police Department	3	0.3%	Hurlock Police Department	0	0.0%
Crofton Police Department	0	0.0%	Hyattsville Police Department	4	0.4%

Cumberland Police Department	5	0.5%	Kent County Sheriff's Office	0	0.0%
Landover Hills Police Department	0	0.0%	Queen Anne's County Sheriff's Office	4	0.4%
La Plata Police Department	3	0.3%	Ridgely Police Department	0	0.0%
Laurel Police Department	4	0.4%	Riverdale Park Police Department	4	0.4%
Manchester Police Department	0	0.0%	Rockville Police Department	3	0.3%
Maryland Transportation Authority Police	6	0.6%	Salisbury Police Department	11	1.2%
MD National Capital Park Police-Montgomery County	1	0.1%	Smithsburg Police Department	0	0.0%
Montgomery County Police Department	59	6.3%	Snow Hill Police Department	1	0.1%
Montgomery County Sheriff's Office	0	0.0%	St. Mary's County Sheriff's Office	16	1.7%
New Carrollton Police Department	1	0.1%	Sykesville Police Department	1	0.1%
Ocean City Police Department	20	2.1%	Takoma Park Police Department	2	0.2%
Perryville Police Department	4	0.4%	Washington County Sheriff's Office	11	1.2%
Prince George's County Police Department	81	8.6%	Westminster Police Department	1	0.1%
Prince George's County Sheriff's Office	18	1.9%	Wicomico County Sheriff's Office	3	0.3%
			Total	**944**	**100.0**

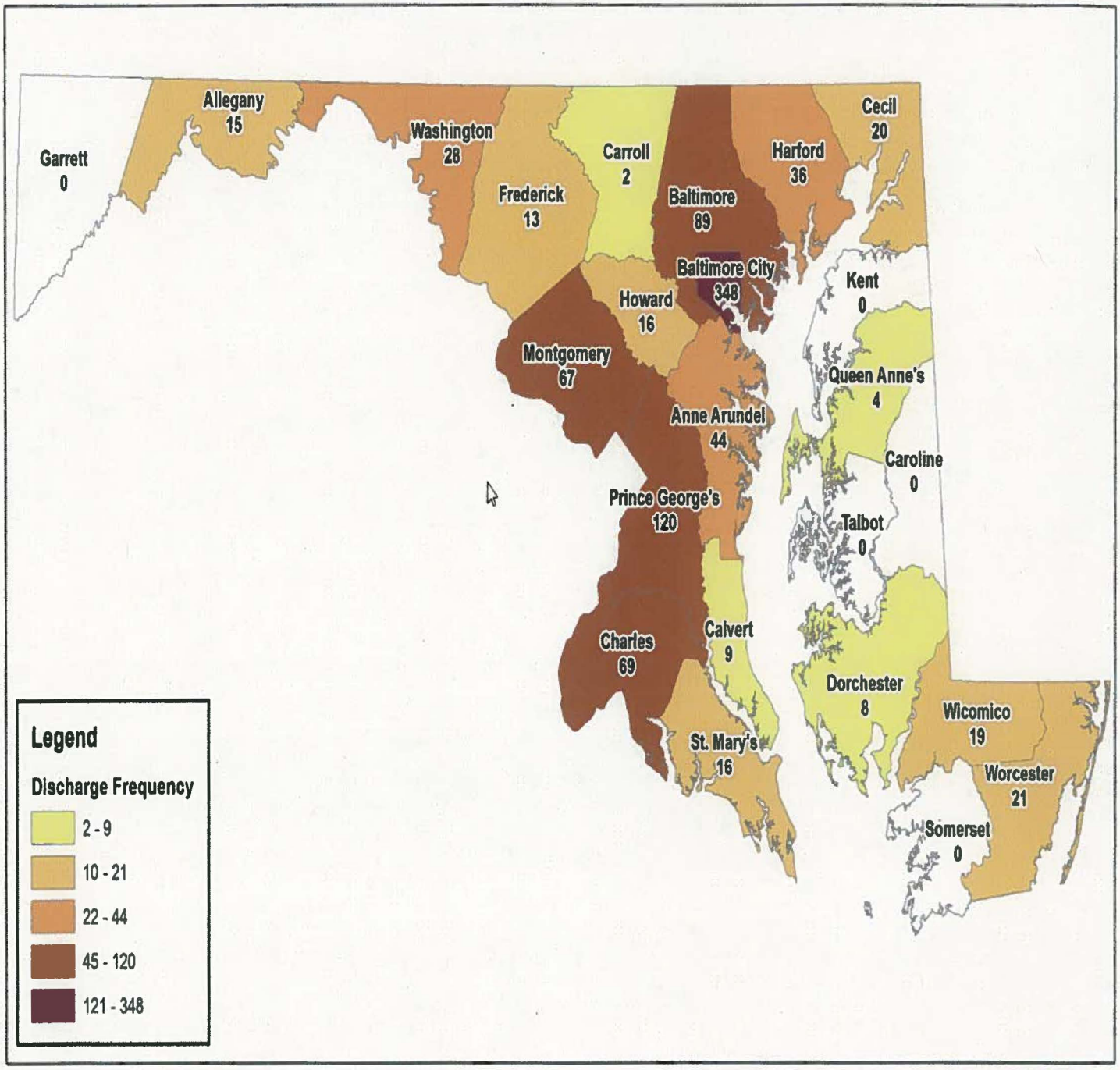
Location of ECD Discharge

The following two maps depict the location of each ECD discharge by the county and zip code respectively. At least one ECD discharge was reported in every county except Caroline, Garrett, Kent, Somerset, and Talbot. The majority, over 72% (n=684) were in the Metro Region[2]. The number of ECD discharges per zip code ranged from 1 to 45 in 2015. A further display of ECD discharges by county and zip code can be found on Maps 1 and 2.

[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.

Map 1

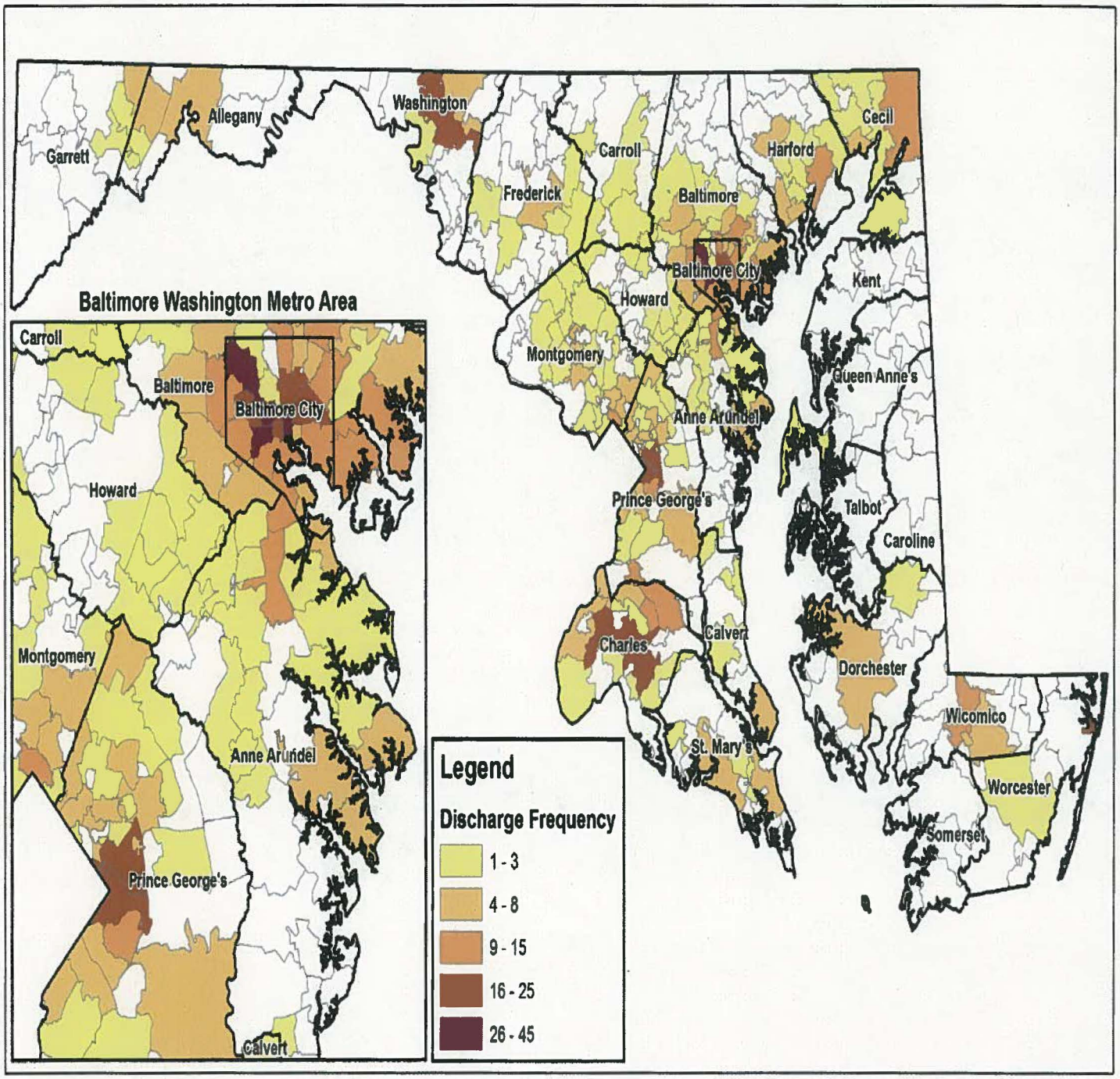
Law Enforcement Electronic Control Device Discharges aimed at Human Targets in 2015 by County



Source: Governor's Office of Crime Control and Prevention
Map Created: August 2016

Map 2

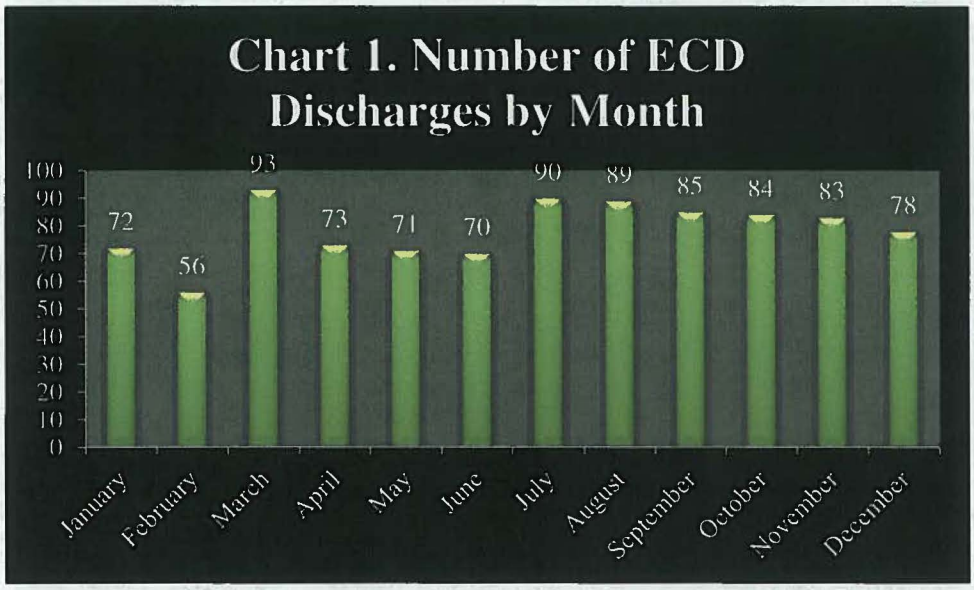
Law Enforcement Electronic Control Device Discharges aimed at Human Targets in 2015 by Zip Code

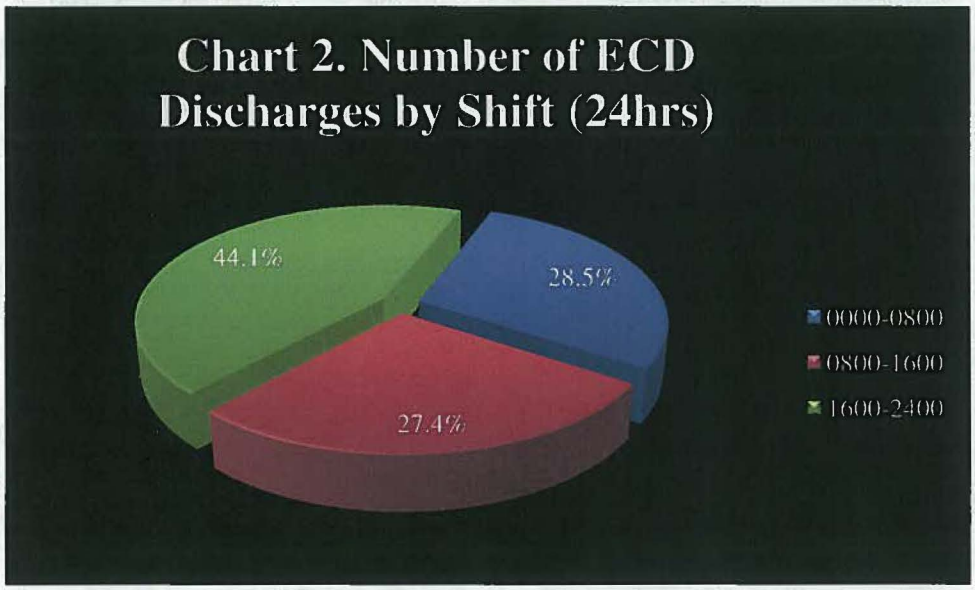


Source: Governor's Office of Crime Control and Prevention
Map Created: August 2016

ECD Discharge Date and Time of Day

As shown in Chart 1, the number of ECD discharges ranged from 56 discharges in February to 93 discharges in March. ECD discharges were more likely to occur in the evening from 1600 hours to 2400 hours (4 pm-12 am), (44.1%, n=416), followed by 0000 to 0800 hours (12am-8 am), (28.5%, n=269), and 0800 hours to 1600 hours (8 am-4pm), (27.4%, n=259) (see Chart 2).





Race

Table 2 showcases ECD discharges by the race/ethnicity of the subject. Of the people tased by law enforcement agencies in 2015, over 95% were African American or Caucasian (73.0% and 22.7% respectively). Data reported to the Maryland Statistical Analysis Center 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=944)			
Race/Ethnicity	**Frequency**	**Percent**	**Cumulative Percent**
Asian	5	0.5%	0.5%
African American	689	73.0%	73.5%
Hispanic	25	2.6%	76.1%
Caucasian	214	22.7%	98.8%
Other/Unknown/Missing	11	1.2%	100.0%
Total	**944**	**100.0%**	**100.0%**

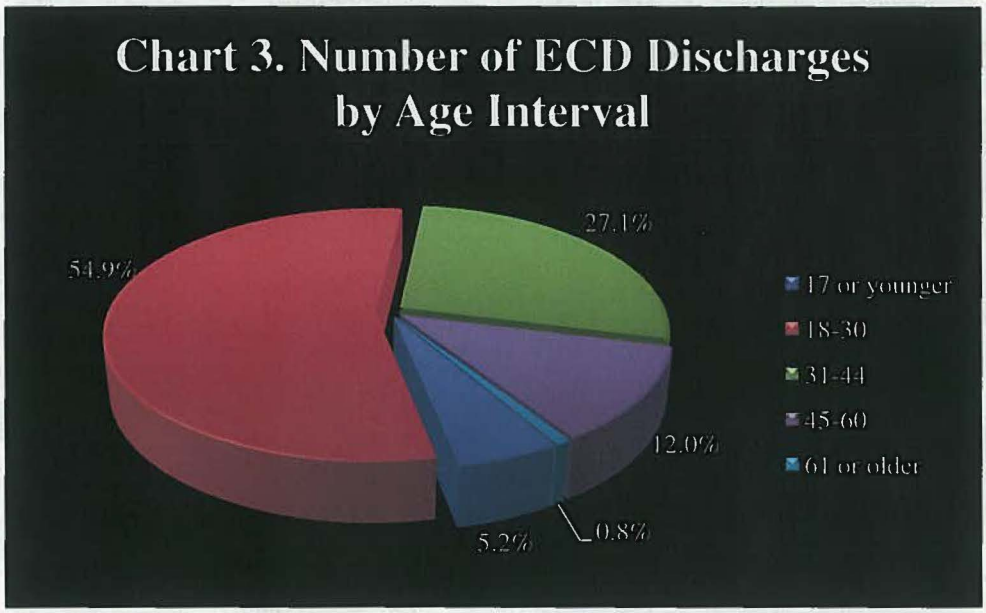
Gender

The vast majority (92.6%) of persons targeted with an ECD were male (n=874); females only accounted for 7.0% of persons tased (n=66). Gender information was missing in 4 discharges (see Table 3 below).

Table 3. Number of ECD Discharges by Gender (n=944)			
Gender	**Frequency**	**Percent**	**Cumulative percent**
Males	874	92.6%	92.6%
Females	66	7.0%	99.6%
Other/Unknown/Missing	4	0.4%	100.0%
Total	**944**	**100.0%**	**100.0%**

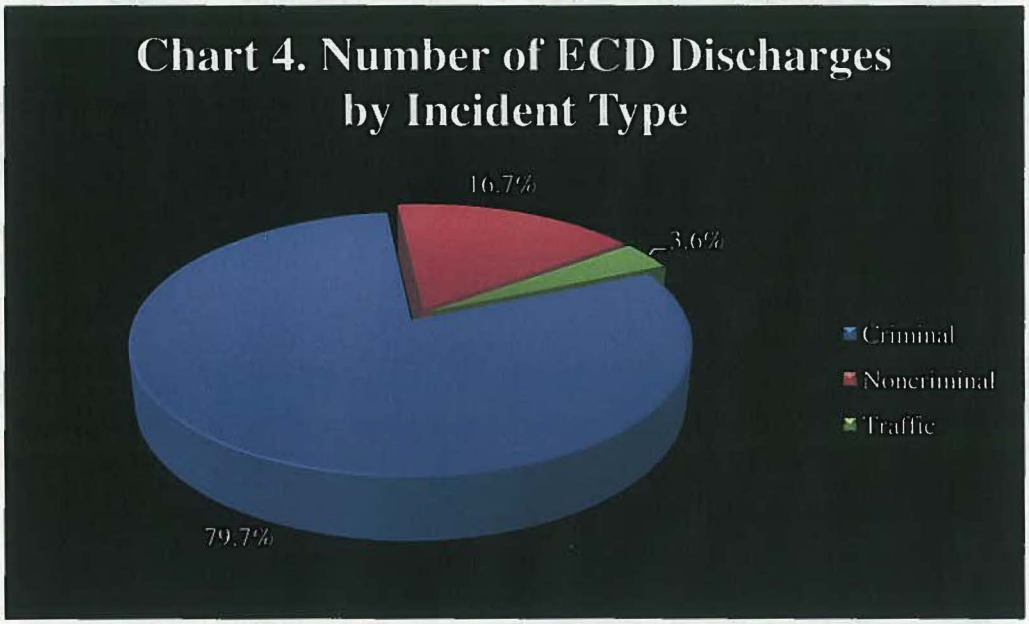
Age

As depicted in Chart 3, ECDs were primarily discharged against persons 18-30 years old (54.9%). Juveniles and persons 61 years or older had the lowest rate of ECD discharges (5.2% and 0.8% respectively.) The individual's age was unknown in 34 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. Nearly 80% of ECD discharges in 2015 were in response to criminal incidents (n=752), followed by noncriminal incidents (16.7%, n=158), and during traffic stops (3.6%, n=34) (see Chart 4).



Tables 4-6 provide cross tabulations on the type of ECD discharge incident stratified by various demographics. African Americans (82.4%) were more likely to be tased during response to a criminal incident than Caucasians (72.0%). Caucasians (23.8%) were more likely to be tased in response to a noncriminal incident than any other race/ethnicity. Males (81.4%) were more likely to be tased during law enforcements response to a criminal incident compared to females (59.1%). Juveniles (89.4%) were most likely to be tased in response to a criminal incident than any other age group.

Table 4. Number of ECD Discharges by Type of Incident and Race/Ethnicity (n=944)

Discharge type	Asian	African American	Hispanic	Caucasian	Other/Unknown/Missing	Total
Criminal	5	568	20	154	5	752
Percent	100.0%	82.4%	80.0%	72.0%	45.5%	79.7%
Non Criminal	0	97	4	51	6	158
Percent	0.0%	14.1%	16.0%	23.8%	54.5%	16.7%
Traffic	0	24	1	9	0	34
Percent	0.0%	3.5%	4.0%	4.2%	0.0%	3.6%
Total	**5**	**689**	**25**	**214**	**11**	**944**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

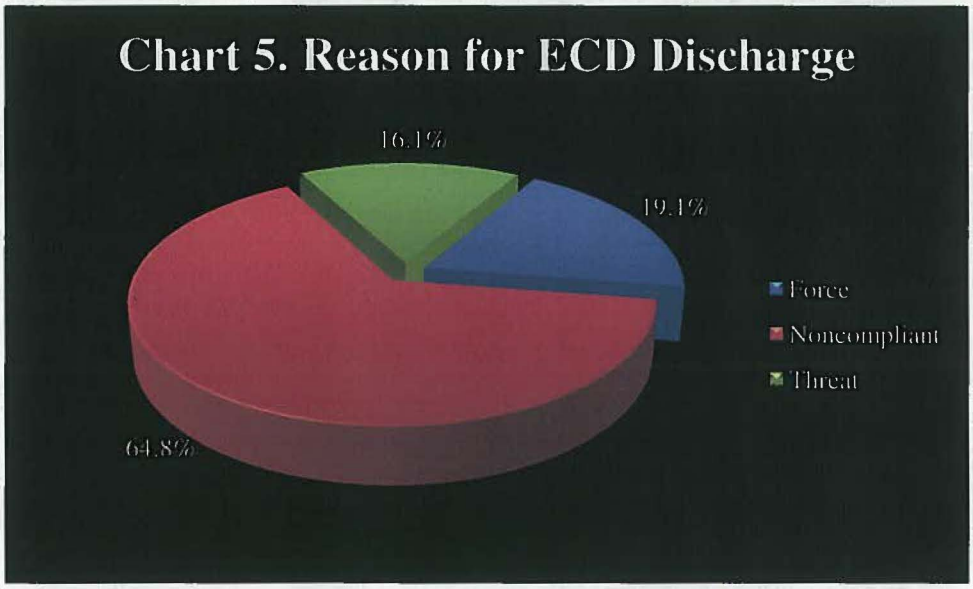
Table 5. Number of ECD Discharges by Type of Incident and Gender (n=944)

Discharge Type	Male	Female	Other/Unknown/Missing	Total
Criminal	711	39	2	752
Percent	81.4%	59.1%	50.0%	79.7%
Noncriminal	131	25	2	158
Percent	15.0%	37.9%	50.0%	16.7%
Traffic	32	2	0	34
Percent	3.7%	3.0%	0.0%	3.6%
Total	**874**	**66**	**4**	**944**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 6. Number of ECD Discharges by Type of Incident and Age Interval (n=944)							
Discharge Type	**17 & Under**	**18-30**	**31-44**	**45-60**	**61 & Older**	**Missing**	**Total**
Criminal	42	423	180	77	3	27	752
Percent	89.4%	84.6%	72.9%	70.6%	42.9%	79.4%	79.7%
Noncriminal	5	61	55	27	4	6	158
Percent	10.6%	12.2%	22.3%	24.8%	37.1%	17.6%	16.7%
Traffic	0	16	12	5	0	1	34
Percent	0.0%	3.2%	4.9%	4.5%	0.0%	2.9%	3.6%
Total	**47**	**500**	**247**	**109**	**7**	**34**	**944**
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 (64.8%, n=610). Use of force (19.1%, n=180), or threatened to use force (16.3%, n=152) accounted for the remainder of the discharges. The discharge reason was missing in two cases (see Chart 5).



Tables 7-9 show the ECD discharge reason stratified by race, gender, and age respectively. Across all race/ethnicities, the most common reason for being tased was noncompliance. Caucasians (26.9%) were more likely to be tased for use of force than African Americans (15.2%), who were more likely to be tased for non-compliance (71.3%). The reason for an ECD discharge did not vary by gender. Juveniles were most likely to be tased for using force (27.7%) which is more than any other age group. Adults 18 to 44 years of age were more likely to be

tased for noncompliance than older individuals, while adults 45 and older were more likely to be tased due to a threat of force.

Table 7. Reason for ECD Discharges by Type and Race/Ethnicity (n=942)						
Discharge Reason	**Asian**	**African American**	**Hispanic**	**Caucasian**	**Other/Unknown/Missing**	**Total**
Force	2	105	7	63	3	180
Percent	40.0%	15.2%	28.0%	29.4%	33.3%	19.1%
Noncompliant	1	491	10	102	6	610
Percent	20.0%	71.3%	40.0%	47.7%	66.7%	64.8%
Threat	2	93	8	49	0	152
Percent	40.0%	13.5%	32.0%	22.9%	0.0%	16.3%
Total	**5**	**689**	**25**	**214**	**9**	**942**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

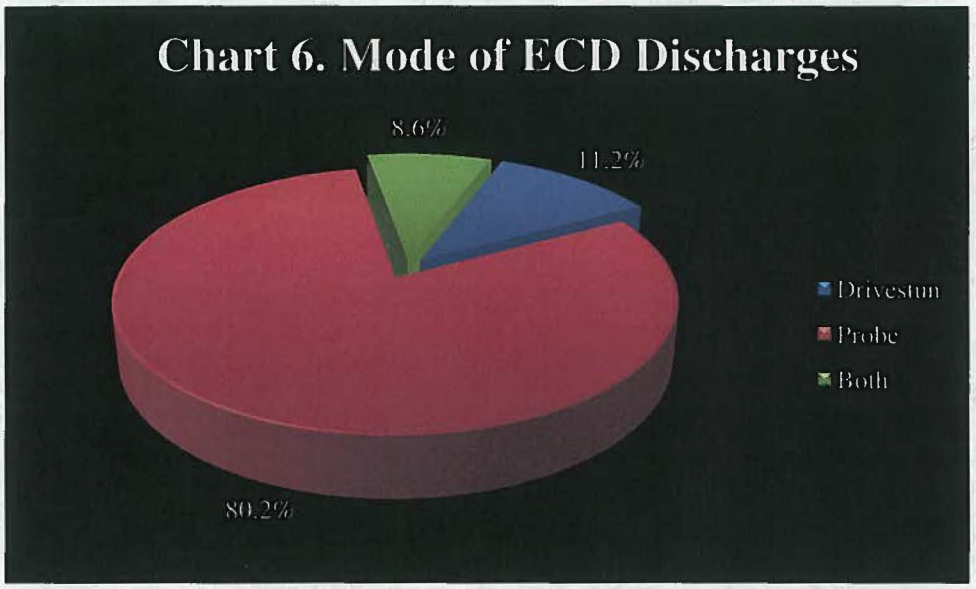
Table 8. Reason for ECD Discharges by Type and Gender (n=942)				
Discharge Reason	**Male**	**Female**	**Unknown/Missing**	**Total**
Force	168	11	1	180
Percent	19.2%	16.7%	50.0%	19.1%
Noncompliant	566	43	1	610
Percent	64.8%	65.2%	50.0%	64.8%
Threat	140	12	0	152
Percent	16.0%	18.2%	0.0%	16.3%
Total	**874**	**66**	**2**	**942**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 9. Reason for ECD Discharges by Type and Age Interval (n=942)							
Discharge Reason	**17 & Under**	**18-30**	**31-44**	**45-60**	**61 & Older**	**Missing**	**Total**
Force	13	98	45	20	1	3	180
Percent	27.7%	19.6%	18.2%	18.3%	14.3%	9.3%	19.1%
Noncompliant	27	329	161	63	4	26	610
Percent	57.4%	65.8%	65.2%	57.8%	57.1%	81.3%	64.8%
Threat	7	73	41	26	2	3	152
Percent	14.9%	14.6%	16.6%	23.9%	28.6%	9.3%	16.3%
Total	**47**	**500**	**247**	**109**	**7**	**32**	**942**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Mode of ECD Discharge

A law enforcement officer can elect to discharge an ECD in three 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. 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. If both modes are used than the discharge gets categorized as "both". As displayed in Chart 6, probe mode was used more frequently (80.2%, n=756) than drive stun (11.2%, n=106), or both (8.6%. n=81). Missing data was apparent in 1 case.



Tables 10-12 provide statistics on the ECD discharge type by race, gender, and age. Probe mode was the most frequency mode of discharge across all race and ethnicities (60.0% for Asians, 81.7% for African Americans, 76.0% for Hispanics, and 75.7% for Caucasians) and gender (79.5% for males and 89.4% for females). Similarly, probe mode was the primary mode of discharge across all age groups (76.6% for 17 and under, 80.4% for 18-30, 76.9% for 31-44, 85.3% for 45-60, and 85.7% for 61 years and older).

Table 10. Mode of ECD Discharge by Type and Race/Ethnicity (n=943)

Mode of Discharge	Asian	African American	Hispanic	Caucasian	Other/Unknown/Missing	Total
Both Drive and Probe	0	51	5	25	0	81
Percent	0.0%	7.4%	20.0%	11.7%	0.0%	8.6%
Drive stun	2	75	1	27	1	106
Percent	40.0%	10.9%	4.0%	12.6%	9.1%	11.2%
Probe	3	562	19	162	10	756
Percent	60.0%	81.7%	76.0%	75.7%	90.9%	80.2%
Total	**5**	**688**	**25**	**214**	**11**	**943**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 11. Mode of Discharge by Type Gender (n=943)				
Mode of Discharge	**Male**	**Female**	**Missing/Unknown**	**Total**
Both Percent	78 8.9%	3 4.5%	0 0.0%	81 8.6%
Drive Stun Percent	101 11.6%	4 6.1%	1 25.0%	106 11.2%
Probe Percent	694 79.5%	59 89.4%	3 75.0%	756 80.2%
Total Percent	**873 100.0%**	**66 100.0%**	**4 100.0%**	**943 100.0%**

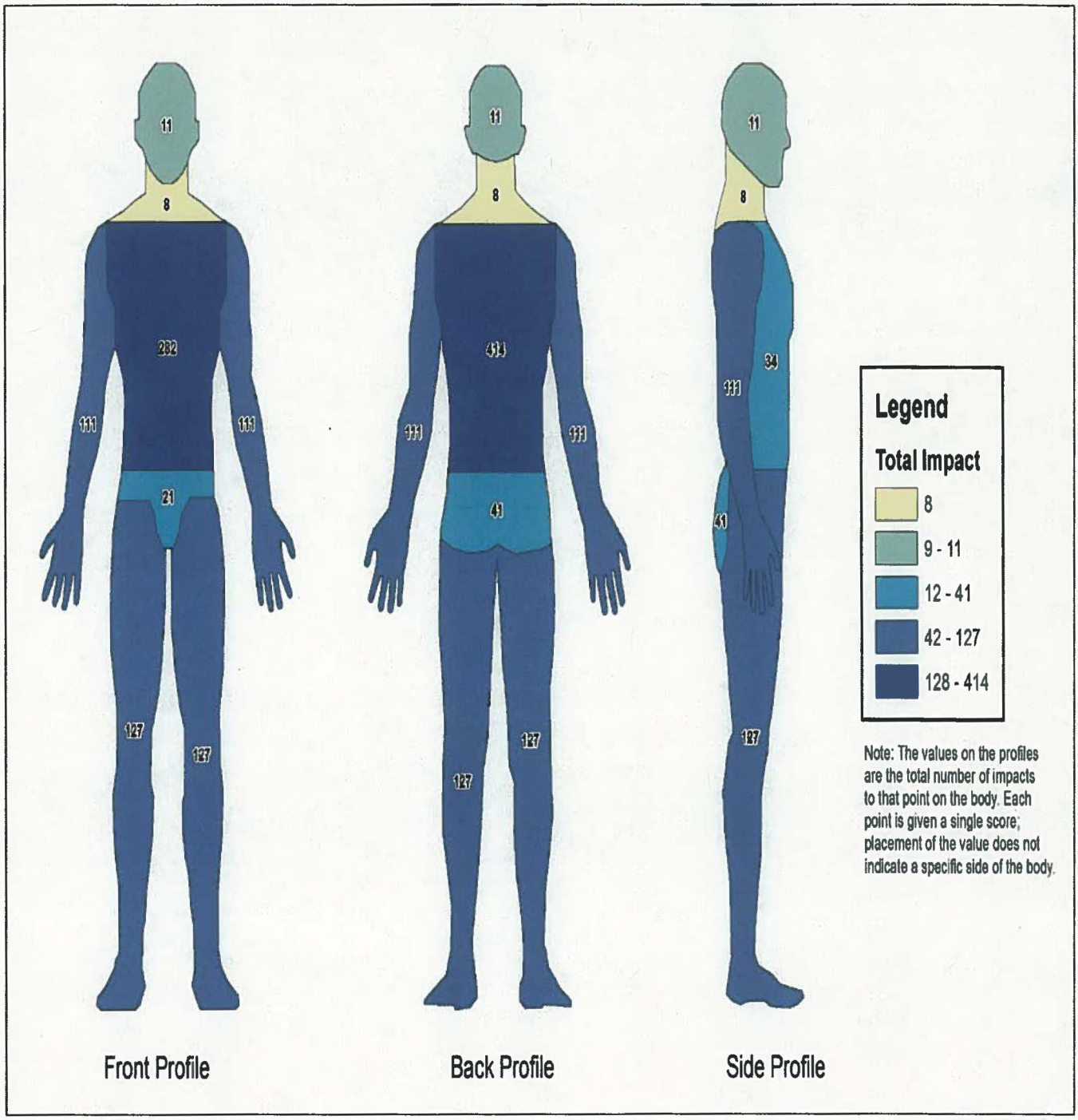
Table 12. Mode of Discharge by Type and Age Interval (n=943)							
Mode of Discharge	**17 & Under**	**18-30**	**31-44**	**45-60**	**61 & Older**	**Missing/Unknown**	**Total**
Both Percent	3 6.4%	42 8.4%	27 10.9%	8 7.3%	1 14.2%	0 0.0%	81 8.6%
Drive Stun Percent	8 17.0%	56 11.2%	30 12.1%	8 7.3%	0 0.0%	2 6.3%	106 11.2%
Probe Percent	36 76.6%	401 80.4%	190 76.9%	93 85.3%	6 85.7%	30 93.8%	756 80.2%
Total Percent	**47 100.0%**	**499 100.0%**	**247 100.0%**	**109 100.0%**	**7 100.0%**	**32 100.0%**	**943 100.0%**

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 misses its intended target, this is considered to be a missed "point of contact." The total "points of impact" do not equal the total number of ECD discharges because some incidents involved multiple points of impact. It is to be expected in probe mode that the two probes will sometimes impact different parts of the body. Overall, 88.2% of all discharges resulted in at least one point of impact (n =833, excluding clothing and misses). Some taser discharges resulted in multiple points of impact (e.g. front torso and arm) as shown in Table 13. Approximately 2/3 of discharges hit the intended target in the front torso (26.9%, n = 282) or the back torso (49.5%, n =415). Points of impact in the more sensitive areas of the body (e.g., head, neck, and groin) occurred in less than 4% of all discharges. Table 3 shows that while two parts of the body were hit in about 22% of the cases, only 16 of 944 discharges (1.6%) hit more than two body parts. Map 3 also further shows the breakdown of ECD discharge locations on the body.

Map 3

Law Enforcement Electronic Control Device Discharges aimed at Human Targets in 2015: Count by Point of Impact



Source: Governor's Office of Crime Control and Prevention
Washington College GIS
August 2016

Table 13. ECD Points of Impact						
Point of Impact	**Point of Impact 1**	**Point of Impact 2**	**Point of Impact 3**	**Point of Impact 4**	**Total**	**Percent**
Arm	78	32	1	0	111	10.6%
Back Torso	372	40	1	2	415	39.5%
Buttocks	19	21	1	0	41	3.9%
Front Torso	259	21	2	0	282	26.9%
Groin/Hip	7	13	1	0	21	2.0%
Head	10	1	0	0	11	1.0%
Leg	52	69	5	1	127	12.1%
Neck	7	1	0	0	8	0.8%
Side	29	4	1	0	34	3.2%
Discharges with a point of impact	**833**	**202**	**12**	**3**	**1,050**	**100.0%**
Miss	109	3	0	1	113	10.8%
Clothing	2	1	0	0	3	0.3%
Total Discharges	**944**	**206**	**12**	**4**	**1,166**	**100.0%**

ECD Cycles

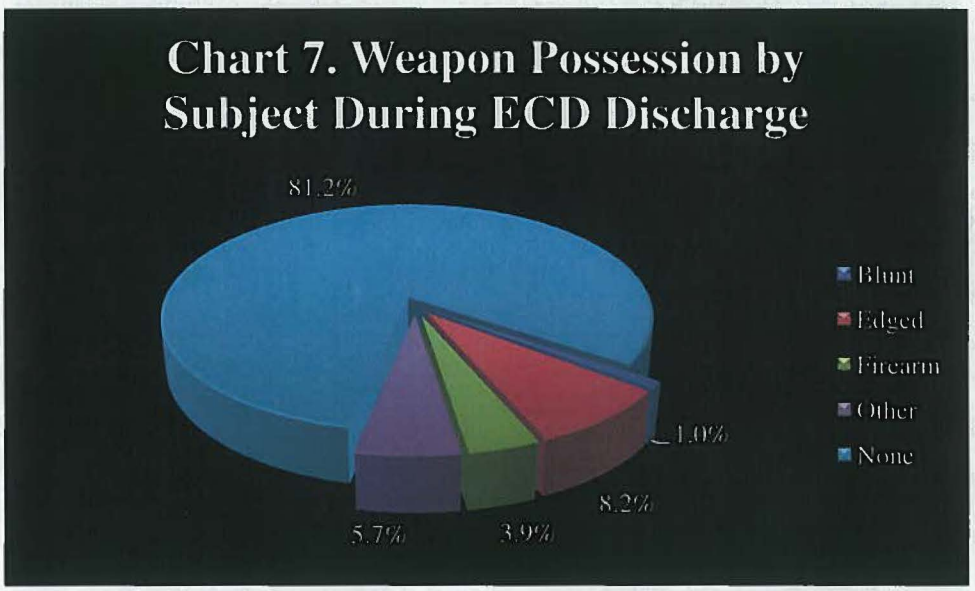
Three variables were captured to measure ECD cycles as shown in Table 14. An ECD cycle is defined as a press of the trigger to discharge the electrical current. The first variable measured the number of ECD cycles used per discharging incident. For example, every recorded ECD cycle was analyzed to capture 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 15 (mean = 1.69 cycles, median = 1 cycles), and the duration of each cycle ranged from 1 to 48 seconds (mean = 4.87 seconds, median = 5 seconds). 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 458 seconds, (mean = 18.54 seconds, median = 5 seconds).

Statistics indicated that there was no significant difference in the number of cycles, duration of cycles, or duration between cycles when analyzed by race. Males and females also had similar statistics for number of ECD cycles and duration of ECD cycle. Additionally, the duration between ECD cycles varied across age groups with individuals 17 and younger (mean = 12.42) being tased on average for a shorter period of time than individuals 45-60 (mean = 20.39) and individuals 61 and older (mean = 27.5).

Table 14. Number, Duration, and Duration Between Cycles by Race, Gender, and Age Interval				
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	1.60	3.63	15.67
n = 5	Median	2	4	20
African American	Mean	1.69	4.84	18.37
n = 689	Median	1	5	7
Hispanic	Mean	1.88	4.85	16.65
n = 25	Median	1	5	17
Caucasian	Mean	1.70	5.01	18.29
n = 214	Median	1	5	8
Other/Unknown/Missing	Mean	1	4.6	n/a
n = 11	Median	1	5	n/a
GENDER				
Female	Mean	1.68	5.03	10.93
n = 66	Median	1	5	2
Male	Mean	1.69	4.86	19.15
n = 874	Median	1	5	8
Unknown/Missing	Mean	1	6.67	n/a
n = 4	Median	1	5	n/a
AGE GROUPING				
17 & Under	Mean	1.45	4.37	12.42
n = 47	Median	1	5	5
18-30	Mean	1.59	4.83	17.90
n = 500	Median	1	5	6
31-44	Mean	1.93	4.92	19.19
n = 247	Median	1	5	10
45-60	Mean	1.85	5.24	20.39
n = 109	Median	1	5	10
61 & Older	Mean	2.00	4.69	27.5
n = 7	Median	2	5	7.5
Unknown/Missing	Mean	1.12	3.94	3
n = 34	Median	1	4	3
Combined Total	**Mean**	**1.69**	**4.87**	**18.54**
n = 944	**Median**	**1**	**5**	**5**

Weapon Possession

Chart 7 shows information related to 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=944), the target individual possessed a weapon approximately 19% of the time. If a weapon was possessed, the most common type was an edged weapon (8.2%, n=77). Other weapons accounted for 5.7%, (n = 54), firearms (3.9%, n=37), and blunt force weapons (1.0%, n=9) (See Chart 7). Missing data was apparent in three cases.



Tables 15-17 showcase the procession of various weapons during ECD discharge incidents by the demographic variables or race, gender, and age. Caucasians (25.7%) were more likely to possess a weapon than African Americans (17.3%) and Hispanics (20.0%). An edged weapon was the most common weapon possessed across races. Females (39.4%) were significantly more likely to possess a weapon than males (17.3%). With regards to age, persons aged 45-60 years were more likely to possess a weapon when tased (34.9%) than younger individuals.

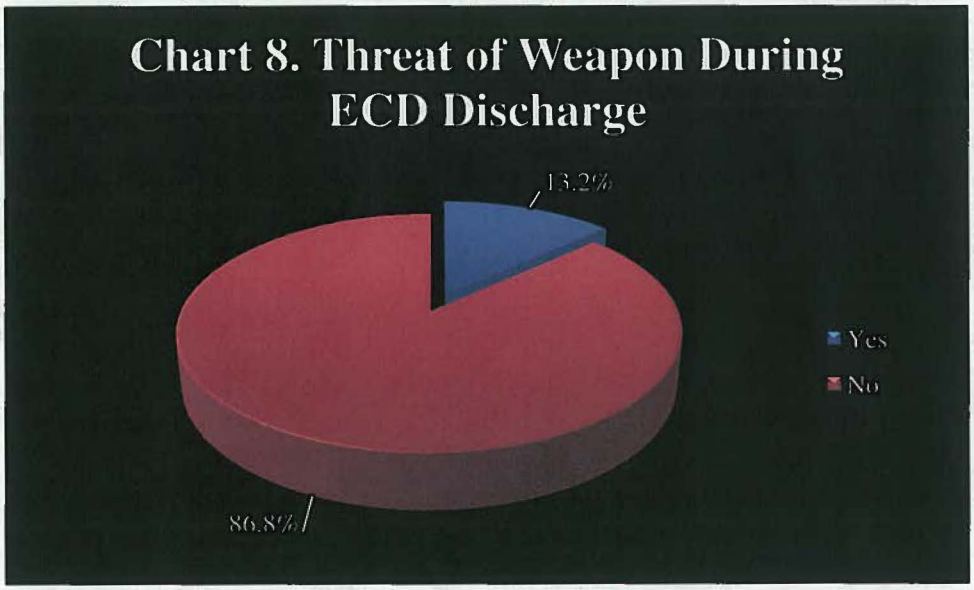
Table 15. Weapon Possession at the Time of ECD Discharge by Race/Ethnicity (n=941)						
Weapon Possessed	**Asian**	**African American**	**Hispanic**	**Caucasian**	**Other/Unknown/Missing**	**Total**
Blunt	0	6	0	3	0	9
Percent	0.0%	0.9%	0.0%	1.4%	0.0%	1.0%
Edged	0	41	2	28	0	77
Percent	0.0%	6.0%	8.0%	13.1%	0.0%	8.2%
Firearm	0	33	1	2	1	37
Percent	0.0%	4.8%	4.0%	0.9%	10.0%	3.9%
None	5	568	20	159	9	761
Percent	100.0%	82.7%	80.0%	74.3%	90.0%	81.2%
Other	0	39	2	9	0	54
Percent	0.0%	5.7%	8.0%	4.2%	0.0%	5.7%
Total	**5**	**687**	**25**	**214**	**10**	**941**
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=941)				
Weapon Possessed	**Male**	**Female**	**Missing**	**Total**
Blunt	9	0	0	9
Percent	1.0%	0.0%	0.0%	1.0%
Edged	58	19	0	77
Percent	6.7%	28.8%	0.0%	8.2%
Firearm	36	1	0	37
Percent	4.1%	1.5%	0.0%	3.9%
None	721	40	3	761
Percent	82.7%	60.6%	100.0%	81.2%
Other	48	6	0	54
Percent	5.5%	9.1%	0.0%	5.7%
Total	**872**	**66**	**3**	**941**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 17. Weapon Possession at the Time of ECD Discharge by Age Interval (n=941)							
Weapon Possessed	**17 & Under**	**18-30**	**31-44**	**45-60**	**61 & Older**	**Missing**	**Total**
Blunt	0	5	4	0	0	0	9
Percent	0.0%	1.0%	1.6%	0.0%	0.0%	0.0%	1.0%
Edged	5	26	18	25	2	1	77
Percent	10.6%	5.2%	7.3%	22.9%	28.6%	3.0%	8.2%
Firearm	1	21	13	1	1	0	37
Percent	2.1%	4.2%	5.3%	0.9%	14.3%	0.0%	3.9%
None	39	425	197	71	3	29	761
Percent	83.0%	85.0%	80.4%	65.1%	42.9%	87.9%	81.2%
Other	2	23	13	12	1	3	54
Percent	4.3%	4.6%	5.3%	11.0%	14.3%	9.1%	5.7%
Total	**47**	**500**	**245**	**109**	**7**	**33**	**941**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Threat of Weapon

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 after being ordered to show hands). Of ECD discharges where no weapon was present, the Maryland Statistical Analysis Center analyzed whether a threat of a weapon occurred. Of the 764 ECD discharge incidents where a weapon was not possessed, a threat of a weapon occurred during 13.2% of those incidents (n=101). Threat of a weapon data was missing in four cases. Chart 8 shows this information.



As shown in Tables 18-20, a threat of a weapon was more likely to occur for Males (13.7 %) than females (2.5%). There was little variance in ECD discharge incidents involving the threat of a weapon by race or age.

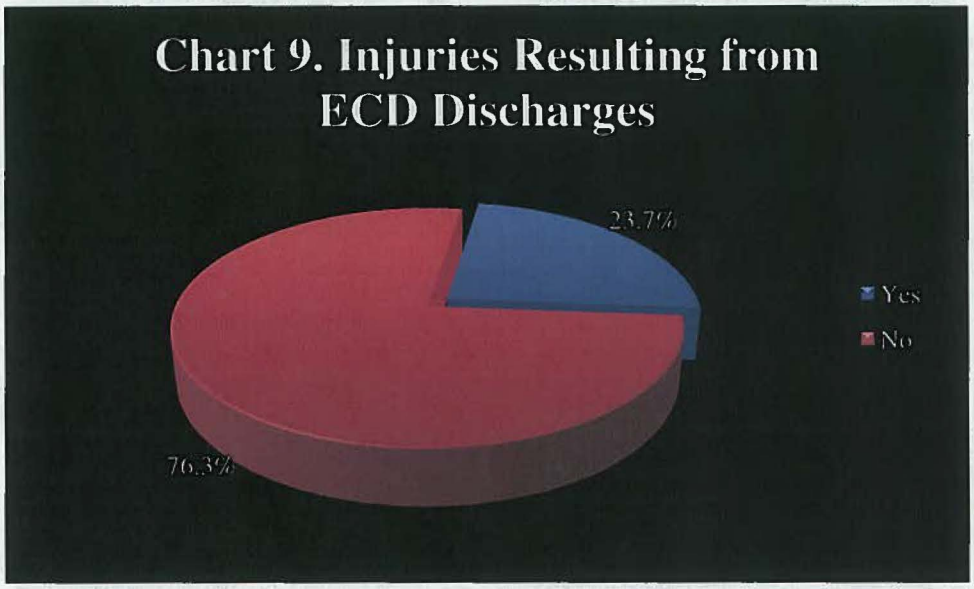
Table 18. Threat of a weapon during ECD Discharges by Race/Ethnicity (n=764)						
Threat of a weapon During ECD Discharge	**Asian**	**African American**	**Hispanic**	**Caucasian**	**Other/Missing/Unknown**	**Total**
Yes	2	71	4	24	0	101
Percent	40.0%	12.5%	20.0%	14.8%	0.0%	13.2%
No	3	497	16	138	9	663
Percent	60.0%	87.5%	80.0%	85.2%	100.0%	86.8%
Total	**5**	**568**	**20**	**162**	**9**	**764**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 19. Threat of a Weapon During ECD Discharges by Gender (n=764)				
Threat of a weapon During ECD Discharge	**Male**	**Female**	**Missing/Unknown**	**Total**
Yes	99	1	1	101
Percent	13.7%	2.5%	33.3%	13.2%
No	622	39	2	663
Percent	86.3%	97.5%	66.7%	86.8%
Total	**721**	**40**	**3**	**764**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Table 20. Threat of Weapon During ECD Discharge by Age (n=764)							
Threat of a weapon During ECD Discharge	**17 & Under**	**18-30**	**31-44**	**45-60**	**61 & Older**	**Missing/Unknown**	**Total**
Yes	8	50	30	9	0	4	101
Percent	20.5%	11.8%	15.2%	12.7%	0.0%	13.8%	13.2%
No	31	375	167	57	3	25	663
Percent	79.5%	88.2%	84.8%	30.3%	100.0%	86.2%	86.8%
Total	**39**	**425**	**197**	**71**	**3**	**29**	**764**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Death and Injuries

Chart 9 shows death and injuries resulting from an ECD discharge excluding deaths or injuries from punctures or lacerations caused by ECD contact or the removal of ECD probes which are excluded by statute.[3] Two deaths occurred in 2015 stemming from an incident where an individual received an ECD discharge. Injuries were reported in approximately 23.7% of cases (see Chart 9). Injury information was missing in three cases.



As displayed in tables 21-23, African Americans were less likely to sustain an injury as a result of being tased than any other race. There was only slight variance in the rate among injury among males and females (23.5% vs. 27.3% respectively). Individuals ages 45-60 were slightly more likely to be injured as a result of being tased than any other age group (27.5%).

Table 21. Injuries Reported From an ECD Discharge by Race/Ethnicity (n=941)

Injuries	Asian	African American	Hispanic	Caucasian	Other/Unknown/Missing	Total
Yes	2	150	6	64	1	223
Percent	33.3%	13.9%	18.5%	21.4%	7.1%	23.7
No	3	537	19	150	9	718
Percent	66.7%	85.7%	81.5%	78.6%	78.6%	76.3%
Total	**5**	**687**	**25**	**214**	**10**	**941**
Percent	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

[3] Public Safety Article, § 3-508

(b) On or before March 31 of each year, a law enforcement agency that issues electronic control devices to its law enforcement officers shall report, for each time a law enforcement officer discharges an ECD, the following information to the Governor's Office of Crime Control and Prevention using the format developed under subsection (c) of this section:

(8) any injuries or deaths resulting from the discharge other than punctures or lacerations caused by the ECD probes; and

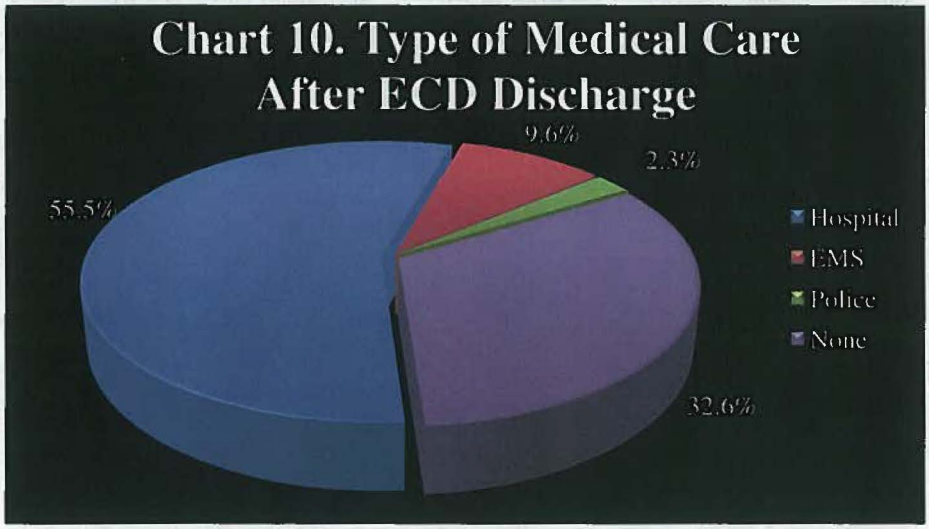
(9) the type of medical care, if any, provided to the person against whom the ECD was discharged, other than the treatment of punctures or lacerations caused by the ECD probes.

Table 22. Injuries Reported from an ECD Discharge by Gender (n=941)				
Injuries	**Male**	**Female**	**Missing/Unknown**	**Total**
Yes Percent	205 23.5%	18 27.3%	0 0.0%	223 23.7
No Percent	667 76.5%	48 72.7%	3 80.0%	718 76.3%
Total Percent	**872 100.0%**	**66 100.0%**	**3 100.0%**	**941 100.0%**

Table 23. Injuries Reported from an ECD Discharge by Age Interval (n=941)							
Injuries	**17 & Under**	**18-30**	**31-44**	**45-60**	**61 & Older**	**Missing/Unknown**	**Total**
Yes Percent	10 21.3%	122 24.4%	59 24.1%	30 27.5%	1 14.3%	1 3.0%	223 23.7
No Percent	37 78.7%	378 75.6%	186 75.9%	79 72.5%	6 85.7%	32 97.0%	718 76.3%
Total Percent	**47 100.0%**	**500 100.0%**	**245 100.0%**	**109 100.0%**	**7 100.0%**	**33 100.0%**	**941 100.0%**

Medical Care

The type of medical care needed for individuals who were tased was analyzed for this report. The statute specifically excludes medical care resulting from treatment of punctures or lacerations caused by ECD contact or the removal of ECD probes. As depicted in table 10, results indicate that individuals who were tased received hospital care 55.5% of the time, followed by no medical care (32.6%); EMS care (9.6%) and police care (2.3%).



DISCUSSION AND RECOMMENDATIONS

This report provides an overview of law enforcement ECD discharges in the State of Maryland for calendar year 2015. ECD discharges were most likely to occur in densely populated areas. Almost half of all discharges occurred 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 one five second cycle. Persons who were tased possessed a weapon approximately 19% of the time and showed a threat of a weapon approximately 13% of the time. Two deaths occurred where individuals received an ECD discharge in 2015. Injuries resulting from an ECD discharge occurred in approximately 24% of the incidents. Approximately 2/3 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 than other races. A weapon was possessed more often during ECD discharge incidents by Caucasians. There were no significant differences in the type of mode used, point of impact, or frequency of injuries among the two races.

Males accounted for approximately 93% of persons who were tased. Males were more likely to be tased during an initial response to a criminal incident. Females were more likely to be noncompliant and 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 significant differences in the point of impact, or frequency of injuries by gender.

Approximately 82% 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 criminal incident, as well as for using force. Young adults were most likely to be noncompliant while being tased while older adults were more likely to possess a weapon during an ECD discharge incident. 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 the Maryland Statistical Analysis Center 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.

APPENDIX

Article - Public Safety

3–508.

(a) (1) In this section the following words have the meanings indicated.

(2) (i) "Discharge" means firing an ECD at a person.

(ii) "Discharge" does not include firing an ECD during a training exercise.

(3) "Electronic control device" or "ECD" means a portable device designed as a weapon capable of injuring, immobilizing, or inflicting pain on an individual by the discharge of electrical current.

(4) "Law enforcement agency" means an agency that is listed in § 3–101(e) of this title.

(5) "Police Training Commission" means the unit within the Department of Public Safety and Correctional Services established under § 3–202 of this title.

(b) On or before March 31 of each year, a law enforcement agency that issues electronic control devices to its law enforcement officers shall report, for each time a law enforcement officer discharges an ECD, the following information to the Governor's Office of Crime Control and Prevention using the format developed under subsection (c) of this section:

(1) the date, time, and location of the discharge;

(2) the type of mode used and the point of impact;

(3) the number of ECD cycles, the duration of each cycle, and the duration between cycles;

(4) the race, gender, and age of the person against whom the ECD was discharged;

(5) the law enforcement officer's reason for discharging the ECD;

(6) the type of weapon, if any, possessed by the person against whom the ECD was discharged;

(7) the type of incident in which the person against whom the ECD was discharged was involved;

(8) any injuries or deaths resulting from the discharge other than punctures or lacerations caused by the ECD probes; and

(9) the type of medical care, if any, provided to the person against whom the ECD was discharged, other than the treatment of punctures or lacerations caused by the ECD probes.

(c) The Police Training Commission, in consultation with the Governor's Office of Crime Control and Prevention, the Maryland Chiefs of Police Association, and the Maryland Sheriffs' Association, shall develop a standardized format that each law enforcement agency shall use in reporting data to the Governor's Office of Crime Control and Prevention under subsection (b) of this section.

(d) A law enforcement agency shall:

(1) compile the data described in subsection (b) of this section for each year as a report in the format required under subsection (c) of this section;

(2) not later than March 31 of each year, submit the report to:

(i) the Governor's Office of Crime Control and Prevention; and

(ii) 1. the local governing body of the jurisdiction served by the law enforcement agency that is the subject of the report; or

2. if the jurisdiction served by the law enforcement agency that is the subject of the report is a municipal corporation, the chief executive officer of the jurisdiction; and

(3) make the report available to the public on request.

(e) (1) The Governor's Office of Crime Control and Prevention shall analyze and summarize the reports of law enforcement agencies submitted under subsection (d) of this section.

(2) The Governor's Office of Crime Control and Prevention shall submit a report of the analyses and summaries of the reports of law enforcement agencies described in paragraph (1) of this subsection to the Governor, the General Assembly, as provided in § 2–1246 of the State Government Article, and each law enforcement agency before September 1 of each year.

(f) (1) If a law enforcement agency fails to comply with the reporting provisions of this section, the Governor's Office of Crime Control and Prevention shall report the noncompliance to the Police Training Commission.

(2) On receipt of a report of noncompliance, the Police Training Commission shall contact the law enforcement agency and request that the agency comply with the required reporting provisions.

(3) If the law enforcement agency fails to comply with the required reporting provisions of this section within 30 days after being contacted by the Police Training Commission with a request to comply, the Governor's Office of Crime Control and Prevention and the Police Training Commission jointly shall report the noncompliance to the Governor and the Legislative Policy Committee of the General Assembly.