

# **ADVANCED TASER M26**

Field Report Analysis

2,690 Field Applications May 1, 2003

# **Statistical Analysis**

Number of Reports 2690 Success Rate:\* 94.3%

Lives Saved 348

Success is defined that the use of the ADVANCED TASER was sufficient to bring the force confrontation to successful conclusion without any additional or alternative force used. Lives saved were based on the judgment of the reviewer "would the suspect likely have lost his life had the TASER not been present."

### Success Rate Against Subjects Under Influence

<u>Influence</u>	# Success	# Failed	<u>Rate</u>
PCP	28	1	96.55%
Cocaine	104	8	92.86%
Alcohol	1054	60	94.61%
Methamphetamines	110	5	95.65%
Misc. Drugs	58	6	90.63%
Emotionally Disturbed Persons	576	43	93.05%

**Conclusion:** There is no correlation between the presence of narcotics and the effectiveness of the M26. The weapon appears to have consistent efficacy regardless of narcotics.

### Success Rate By Gender

<u>Influence</u>	# Success	# Failed	<u>Rate</u>	<u>Total</u>
Male	2215	153	93.54%	2,368 91%
Female	219	11	95.22%	230 9%

**Conclusion:** There is no correlation between sex and efficacy. The M26 appears equally effective on both genders.

Level of Deployment	# of Incidents	<u>Rate</u>
Darts Fired at Subject	1739	64.99%
Stun Gun Application	487	18.20%
Laser Only	322	12.03%
Spark Demo	53	1.98%
Unknown	75	2.80%
		100.00%

The figures above are most likely weighted toward dart deployments. We believe that it is more likely an officer will submit a use of force report when he has fired the cartridge, hence laser presence and spark demonstration incidents are likely to be under-represented.

#### Success Rate By Level of Deployment

<u>Level</u>	<u>Success</u>	# of Incidents	<u>Rate</u>
Darts Fired at Subject	No	126	7.39%
Darts Fired at Subject	Yes	1580	92.61%
Laser Only	No	4	1.24%
Laser Only	Yes	318	98.76%
Spark Demo	No	3	5.66%
Spark Demo	Yes	50	94.34%
Stun Gun Application	No	28	5.77%
Stun Gun Application	Yes	457	94.23%

**Note:** Laser only is shown at 98.76% effective. This is due to the fact that if a laser display is not effective in gaining compliance, the officer will usually escalate to firing darts or using the stun gun. Hence, the only time a laser only display is listed as unsuccessful is when the officer displays the laser, then elects to discontinue with the TASER and transition to another force option. An example would be an officer using the laser display on a female who declares she is pregnant, at which point the officer may decide that a chemical spray is a better choice given the potential adverse consequences of a fall.

#### Success Rate By Distance of Deployment

<u>Distance</u>	Success	# of Incidents	Success	<u>Totals</u>	<u>%</u>
			<u>Rate</u>		
1-3 Feet	No	13	6.88%		
1-3 Feet	Yes	176	93.12%	189	11%
3-7 Feet	No	39	6.32%		
3-7 Feet	Yes	578	93.68%	617	37%
7-11 Feet	No	35	6.58%		
7-11 Feet	Yes	497	93.42%	532	32%
11-15 Feet	No	26	9.96%		
11-15 Feet	Yes	235	90.04%	261	16%
15-21 Feet	No	8	14.29%		
15-21 Feet	Yes	48	85.71%	56	3%
Unknown	No	18	3.81%		
Unknown	Yes	454	96.19%		100%
				1,655	

**Conclusion:** The most common firing ranges are in the 3-11 foot range (69% of firings). The reported effectiveness does appear to drop off slightly beyond 15 feet. We would anticipate this would be a combination of more misses, and perhaps less clothing penetration due to lower impact energy.

# **Injury Statistics**

#### Officer Injuries in TASER incidents

<u>Injury</u>	Number of	<u>%</u>
<u>Level</u>	<u>Incidents</u>	
Unknown	185	N.A.
None / Minor	2494	99.56%
Moderate	8	0.32%
Severe	<u>3</u>	0.12%
	2505	100.00%

#### Suspect Injuries in TASER incidents

<u>Injury</u>	Number of	<u>%</u>
<u>Level</u>	<u>Incidents</u>	
Unknown	280	N.A.
None / Minor	2348	97.43%
Moderate	45	1.87%
Severe	<u>17</u>	0.71%
	2410	100.00%

The injury rate to officers involved in reported TASER confrontations are experiencing an injury rate of less than 0.5%. Similarly, suspects are also found to have an injury rate of less than 3%. Considering the types of scenarios where the TASER is employed, these low injury rates should be considered a dramatic advancement in both officer and suspect safety.

# **M26 Weapon Statistics**

#### Number of Shots Fired

# of Shots	# of Incidents	
Unknown	684	NA
0	22	1.23%
1	1534	85.79%
2	113	6.32%
2D	90	5.03%
3	21	1.17%
4	7	0.39%
5	<u>1</u>	0.06%
	1788	100.00%

85.79% of deployments require only one shot from the M26. It is interesting to note that, if a second shot is required, it is almost equally likely to come from a second M26 on scene as from a reload in the original unit. This data supports the usefulness of having multiple M26 weapons on scene.

### Number of Probes That Hit Subject When Probes Fired

<u># of Probes In Subject</u>	<u># of Incidents</u>	<u>%</u>
Unknown	76	N.A.
1	101	7.62%
2	1218	91.92%
3	5	0.38%
4	<u>1</u>	0.08%
	1325	100.00%

91.92% of the time, there are two probes in the suspect. Given that 86% of M26 confrontations involve only one discharge, this data indicates that the rate of both probes adhering to the target is high.

#### Failure Causes

<u>Descrption</u>	# Incidents	% of failures	% of all
Clothing	43	22.3%	1.60%
Unknown	33	17.1%	1.23%
Low Nerve / Muscle Location	29	15.0%	1.08%
Miss	24	12.4%	0.89%
Single Dart	20	10.4%	0.74%
Weapon Problem	8	4.1%	0.30%
Cartridge Failure	7	3.6%	0.26%
Low Battery	6	3.1%	0.22%
Operator Error	6	3.1%	0.22%
Door Closed	4	2.1%	0.15%
Decided not to use	4	2.1%	0.15%
Animal Use	4	2.1%	0.15%
Dropped / Broken	3	1.6%	0.11%
Propped Up	2	1.0%	0.07%
	193		

The chart above lists the most likely cause of failure in the cases marked unsuccessful. This includes both probe firings and touch stun applications. The percentage of all uses column is not additive (some incidents have multiple failure issues, hence it would not be accurate to add all failures together as a percentage of total uses).

### Duration of M26 Discharges

<u>Duration</u>	# of Incidents	% of known
Unknown	754	-
1 sec	16	1%
2 sec	38	2%
3 sec	61	4%
4 sec	35	2%
5 sec	914	59%
More than one cycle	<u>492</u>	<u>32%</u>
Total	1556	100%

The data seems to support that a five-second discharge is optimal. The 5-second discharge is sufficient in 68% of confrontations. However the fact that

32% of incidents require additional discharges, suggests that shortening the cycle would not be recommended. The performance of the automated 5-second burst appears to be fairly optimized.

### Location of M26 Uses

<u>Location</u>	<u># of Incidents</u>	
Indoor	667	27%
Jail / Hospital	304	12%
Outdoor	<u>1496</u>	<u>61%</u>
Total	2467	100%

# **M26 Incidents: Subject Statistics**

### Ages of Subjects

<u>Age</u>	# of Incidents	<u>%</u>
10-18	183	7.40%
19-40	1794	72.54%
41-60	477	19.29%
61+	<u>19</u>	0.77%
	2473	100.00%

The M26 is being safely applied across a broad age range.

# Analysis of Call Types

Call Type	<u>Success</u>	<u>Fail</u>	Success%	<u>Total</u>	% of Total
Violent	770	62	92.5%	832	28.0%
Resisting Arrest	770	67	92.0%	837	28.2%
Suicide	422	19	95.7%	441	14.8%
Civil Disturbance	371	21	94.6%	392	13.2%
Barricade	144	8	94.7%	152	5.1%
Serve Warrant	152	8	95.0%	160	5.4%
Officer Assault	144	15	90.6%	<u>159</u>	<u>5.3%</u>
				2973	100.0%

The M26 is performing above 90% across all call type categories. Of particular interest is the fact that 15% of M26 uses involve suicidal persons.

## Analysis of Suspect Force Level

Suspect Force	<u>Success</u>	<u>Fail</u>	<u>%</u>	<u>Total</u>	% of Total
Verbal Non-Comp	906	45	95.3%	951	36.1%
Active Aggression	792	51	94.0%	843	32.0%
Defensive Resist	707	51	93.3%	758	28.8%
Deadly Assault	76	3	96.2%	<u>79</u>	3.0%
-				2631	100.0%

# Analysis of Suspect Weapons

Suspect Weapon	<u>Success</u>	<u>Fail</u>	<u>%</u>	<u>Total</u>	% of Total
None	2041	131	94.0%	2172	83.3%
Edged Weapon	321	11	96.7%	332	12.7%
Firearm	96	6	94.1%	102	3.9%
Blunt Force	58	5	92.1%	<u>63</u>	<u>2.4%</u>
				2606	100.0%