

# Fort Collins Police



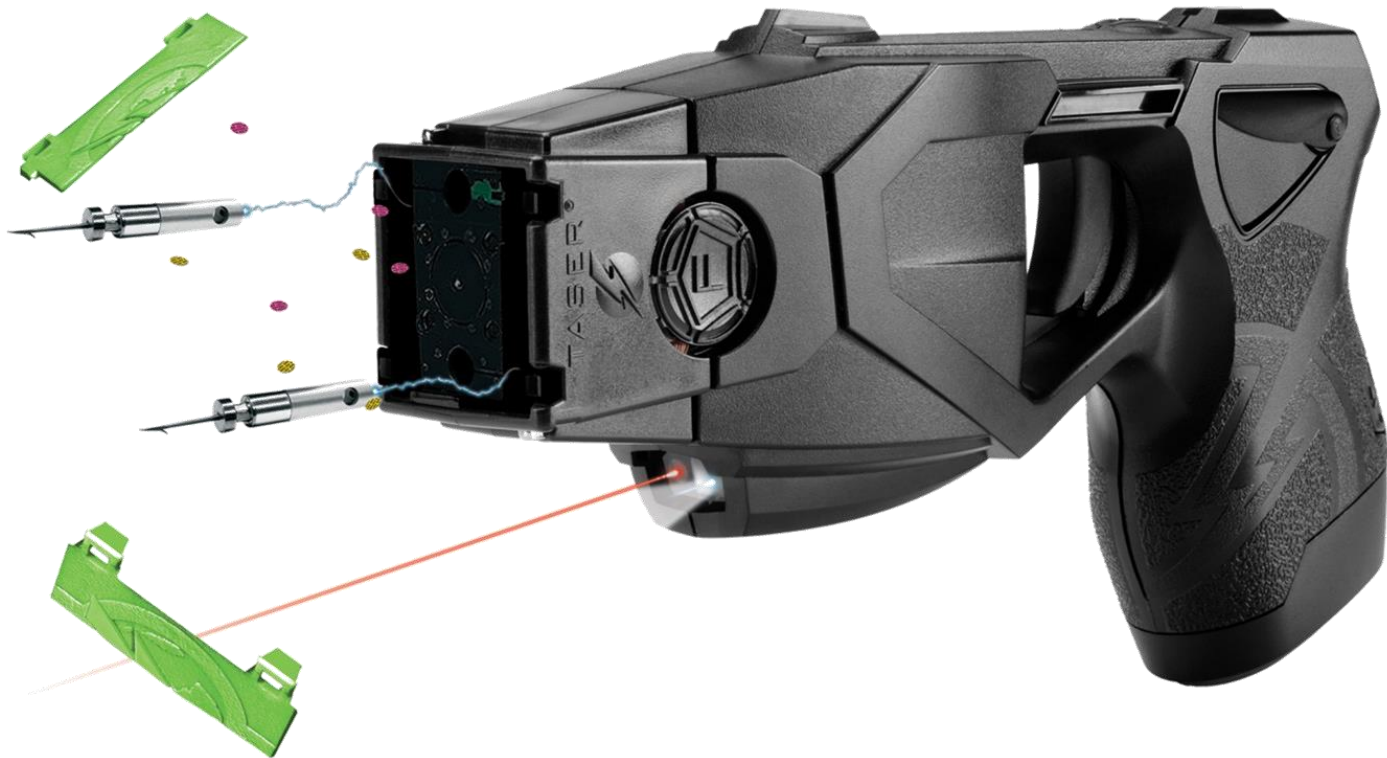
This presentation is an introduction to the Taser, its technology and tactics, our other less lethal systems plus an overview of use of force.

- The Taser is viewed as another Less-Lethal option or another tool in the tool box for FCPS officers.
- Currently FCPS has other Less-Lethal systems
  - K-9 apprehension deployments
  - Sage Ordinance Launcher
  - Pepper Ball Launcher
  - The Sage Ordinance launcher has been in operation since 1997
    - Specific officers are trained operators in these systems
  - Additional Less-Lethal options for officers
    - Standard issue to all officers and are required to be carried while in a uniform assignment
    - OC-Oleoresin capsicum canisters
    - Straight Baton and/or an ASP (expandable baton)
    - Why now....



# Evolution of TASER Technology

# X26P Taser CEW



Officers will be carrying the X26P from Taser International

- Taser International has been in businesses for a period of time
- Taser is a very reliable product and company
- FCPS is currently using the Axon camera system which is a Taser product
- Compatibility with both systems for downloading information
- FCPS has used Taser for several years on the SWAT Team
- FCPS already has officers trained as instructors for the Taser system

Reduce the overall injury to officers and suspects.

- Studies submitted to the NIJ by PERF show that the odds that an officer will be injured decreases by 70% with a 76% reduction in actual officer injuries.
- In addition, the odds that a suspect will be injured are reduced by more than 40% (Taylor, Bruce, et al.2009 – PERF 2011)

In 2013, Taser® reported that in a study of 28 departments across the U.S., injuries to officers and suspects were both reduced by an average of 58%.

# Purpose of TASER Program: To Protect Life on Both Sides of the Badge

\*Information not available

Dept. Data During 2011-2012	Officer Injuries	Suspect Injuries	Officer Assaults	Force Complaints <sup>1</sup> or Use of Force <sup>2</sup>
New Orleans PD LA	↓ 90%	*	*	↓ 27% <sup>1</sup>
Richmond C Sheriff's, GA	↓ 64%	*	↓ 52%	↓ 64% <sup>2</sup>
Portland, ME	↓ 70%	↓ 22%	*	↓ 37% <sup>2</sup>
Bay Area Rapid Trans PD, CA	↓ 0 Injuries Reported	↓ 0 Injuries Reported	*	*
Bulgaria Police	↓ 100%	↓ 0 Injuries Reported	*	*



## Use of Force & Injuries

Data from FCPS resources from 2011-2014 showed more than 900 incidents of use of force.

- 45 incidents where officers reported receiving bodily injury, 26 incidents where the officer suffered pain only and 3 incidents where an officer received serious bodily injury.
- 142 incidents where the suspect suffered bodily injury, 79 incidents where the officer reported pain only and 2 incidents where the suspect suffered serious bodily injury
- The incidents, where officers reported that they received bodily injury, were looked at and reviewed. The review revealed 40 incidents **may have** been resolved with the application of an ECW, thus potentially reducing injury to the employee.



Presence and demeanor of officer

Verbal direction

**Suspect decides – compliance or not...**

Physical control

Chemical agents

Intermediate and impact weapons

Deadly force

- Psychological intimidation
- Verbal non-compliance
- Passive resistance
- Defensive resistance
- Active aggression
- Aggravated active aggression

## Cardiac effect - Injuries (cont.)

One of the most common concerns raised about the use of ECWs is the cardiac effect of the electrical charge that is transmitted by the weapon.

- At least one independent study looked at the cardiac effect of the TASER X26 and its relationship to delayed or sudden cardiac arrest in normal adults.
- The study found that “it is highly unlikely that the TASER X26 can cause ventricular fibrillation minutes to hours after its use through direct cardiac effects of the electric field generated by the TASER” (Ideker and Dosdall 2007). (PERF 2011)

A 2008 study funded by the National Institute of Justice examined ECW use by law enforcement officers during interaction with suspects.

- Six law enforcement agencies participated in the study, which included a mandatory physician review of police and medical records following every ECW activation against a subject.
- During a 36-month period, approximately 1,200 incidents were reviewed. The study reported that “more than 99% of subjects do not experience significant injuries after conducted electrical weapon use.
- Two subjects died in police custody but medical examiners did not find ECW use to be causal or contributory in either case” (Bozeman et al. 2009 – PERF 2011).

# Arrest-Related Death (ARD) Warning Signs

We train Arrest Related Death awareness – one or more of the following behaviors manifest, the suspect may require immediate medical assistance due to pre-existing conditions, possible overdose, cocaine psychosis, excited delirium, etc. Consider having EMS standing by.

- Bizarre or violent behavior
- Signs of overheating/profuse sweating
- Disrobing
- Violence toward/attacking glass, lights, and reflective surfaces
- Superhuman strength and endurance
- Impervious to pain - self-mutilation
- Loss of consciousness
- Disturbance in respiratory pattern

## Central Nervous System

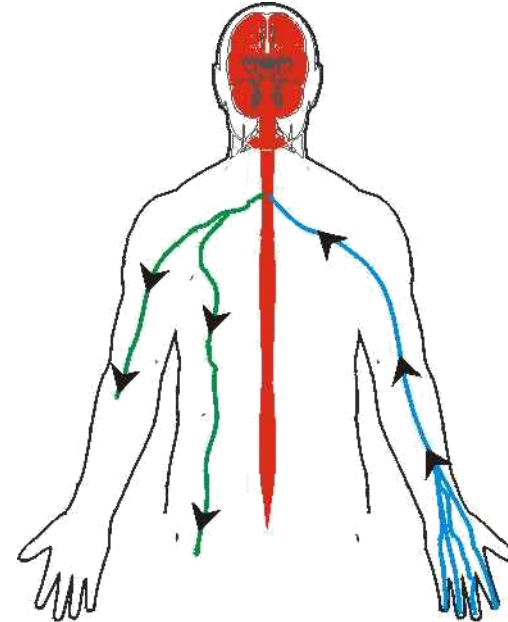
Command center – brain & spinal cord.

## Motor Nervous System

Carries commands from the brain to muscles (NMI systems affect BOTH the sensory and motor nerves)

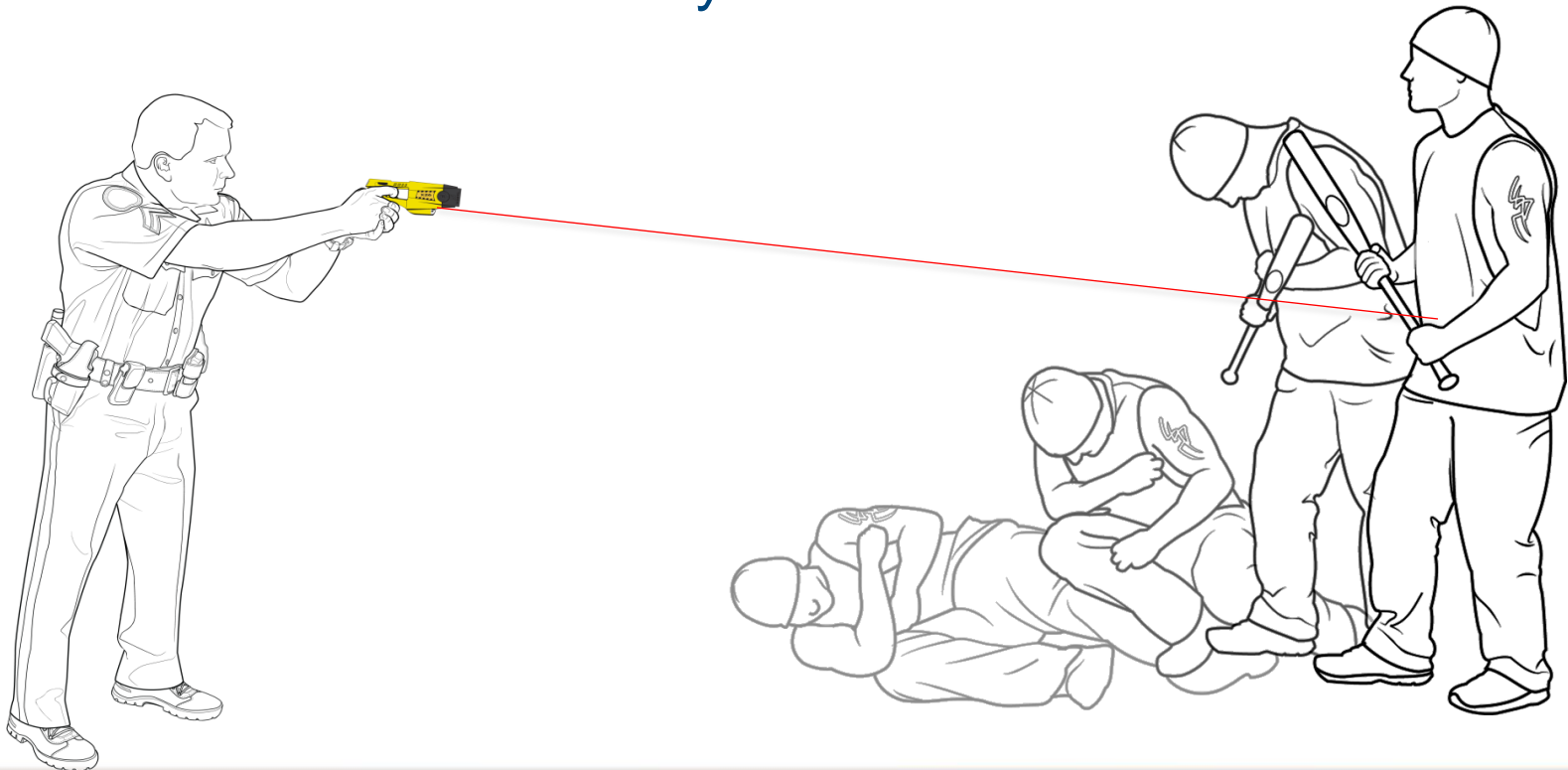
## Sensory Nervous System

Brings information into the brain (effected by stun systems)

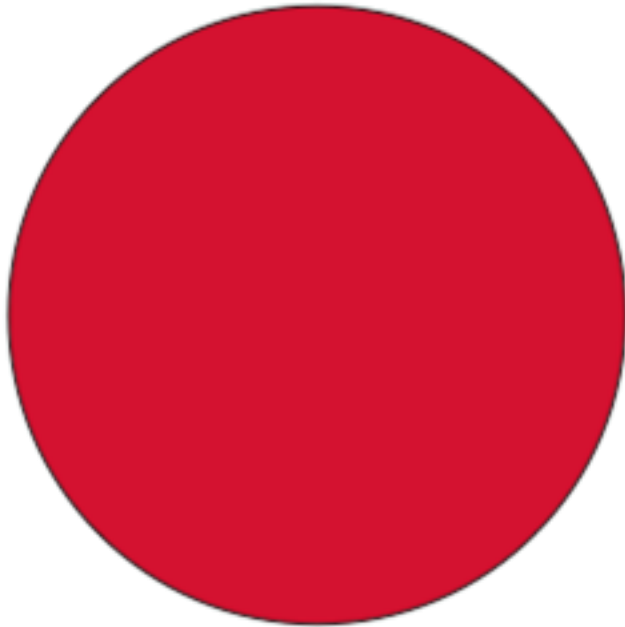


# Conducted Electrical Weapons (CEW)

CEW's are designed to use propelled wires or direct contact to conduct energy to affect the sensory and/or motor functions of the nervous system







**110 V wall Outlet:  
16 Amperes**



**Christmas  
Tree Bulb:  
1 Ampere**



**TASER  
X26:  
0.0021  
Ampere**

# What Is a “joule”?

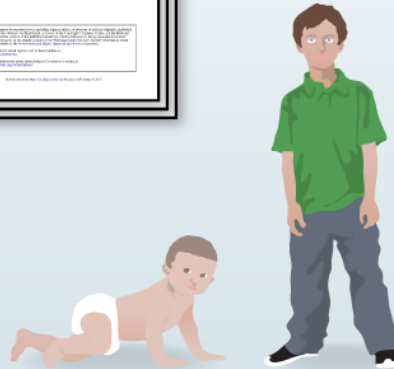
“joule”: International system of units measurement of energy (mechanical, electrical, or thermal) describing the energy delivered in a single pulse.



Automated External Defibrillator (AED):  
Delivers **360 joules**



– Pediatric Defibrillator  
Energy Analogy American  
Heart Association current  
Pediatric Advanced Life  
Support (PALS) Guidelines



Infants & Children:  
**2–10 joules/kilogram**



TASER X26:  
Delivers up to about  
**0.1 joule**



## JAMMING THE NERVOUS SYSTEM



NERVE SIGNAL OR  
"BRAIN WAVE"

TASER WAVE

## SAGE Control Ordnance



K01 Baton/K08 Baton



Deuce Launcher



## PepperBall Systems



Carbine-SX Rifle



Red (live)  
PAVA powder



SA200 Rifle

# Use of Force Paradigm





## **Use of Force Paradigm**

- A circle is the graphical representation
- The officer is in the middle of the circle
- Use of force options are pieces of the circle
- Options are available as to what degree and type of force an officer should use
- Circumstance driven
- Reasonable and appropriate – based on the law



1. Immediate threat to safety of officers/others
2. Actively resisting
3. Circumstances tense, uncertain, rapidly evolving (“*pace*” of events)
4. Severity of the crime at issue
5. Attempting to evade seizure by flight
6. The officer shall not be judged in 20/20 hindsight
7. Officer’s reasonable perceptions of subject’s actions or behaviors the officer is attempting to stop, thwart, or control
8. Give a warning – if possible

## Fully document

- Subject's threats, behaviors, and actions
- Each use or application of force
- Each CEW trigger pull or 5-second discharge
- Each mode of CEW use
- Each injury or allegation of injury

Avoid multiple, repeated, prolonged, extended, or continuous CEW exposures<sup>1</sup> unless necessary to counter reasonably perceived threat(s) and it is justifiable

— always document your justifications

## 18-1-707 Use of physical force in making an arrest or in preventing an escape

- (1) A peace officer is justified in using reasonable and appropriate physical force upon another person when and to the extent that he reasonably believes it is necessary:
  - (a) To effect an arrest or to prevent the escape from custody of an arrested person unless he knows that the arrest is unauthorized; or
  - (b) To defend himself or a third person from what he reasonably believes to be the use or imminent use of physical force while effecting or attempting to effect such an arrest or while preventing or attempting to prevent such an escape.

## 18-1-707

- A peace officer is justified in using deadly physical force upon another person for a purpose specified in subsection (1) of this section only when he reasonably believes that it is necessary:
  - (a) To defend himself or a third person from what he reasonably believes to be the use or imminent use of deadly physical force; or
  - (b) to effect an arrest, or to prevent the escape from custody, of a person whom he reasonably believes:
    - (I) Has committed or attempted to commit a felony involving the use or threatened use of a deadly weapon; or
    - (II) Is attempting to escape by the use of a deadly weapon: or
    - (III) Otherwise indicates, except through a motor vehicle violation, that he is likely to endanger human life or to inflict serious bodily injury to another unless apprehended without delay.

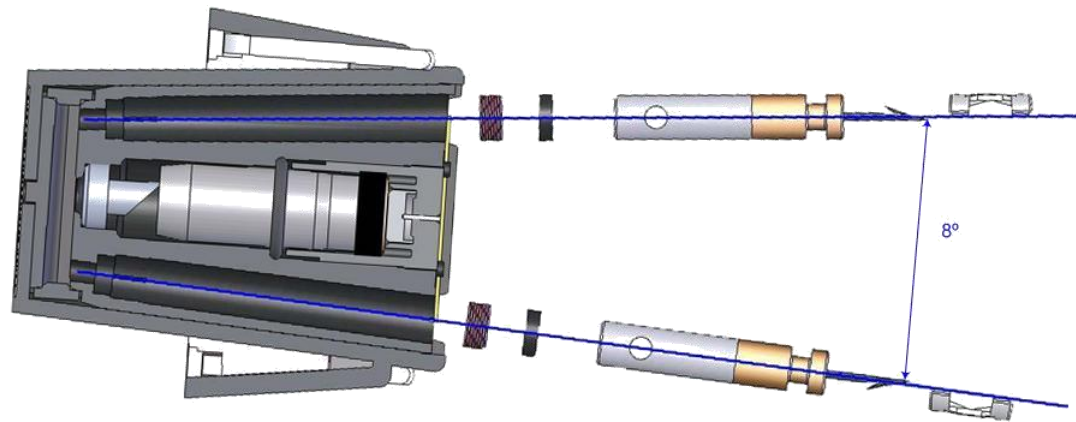
## 18-1-703 Use of physical force- special relationships

- (1) The use of physical force upon another person which would otherwise constitute an offense is justifiable and not criminal under any of the following circumstances:
- (d) A person acting under a reasonable belief that another person is about to commit suicide or to inflict serious bodily injury upon himself may use reasonable and appropriate physical force upon that person to the extent that it is reasonably necessary to thwart the result.

# Suicidal Female



The top probe is “horizontal”  
relative to CEW



Bottom probe 8-degrees down





15 ft.  
(4.6 meters)  
Yellow blast doors  
Live cartridge  
Regular probe



21 ft.  
(6.4 meters)  
Silver blast doors  
Live cartridge  
Regular probe



XP 25 ft.  
(7.6 meters)  
Green blast doors  
Live cartridge  
XP probe



LS 21 ft.

(6.4 meters)

Blue cartridge/blue blast doors

Short probe

Below neck (blue zone)

- Large muscles
- Avoid head

*The back is always the preferred target area when reasonably practicable under the totality of circumstances of the incident.*



Lower torso (blue zone below chest)

More effective

- Split the belt line
- Larger muscles

Reduces risk of hitting sensitive body areas (see current product warnings)

Increases dart-to-heart (DTH) safety margin distances

Do not intentionally target genitals



Deployment range from point blank to 15, 21, or 25 feet depending on cartridge

Preferred range = 7 to 15 feet from target for probe spread, officer safety, and accuracy

## Subject Risk Considerations:

- On an elevated position or platform
- Running or under momentum
- Operating vehicle or machinery
- In flammable or explosive environment

You can go hands on with the subject during the 5-second cycle without feeling the effects of the NMI

- Electricity generally follows the path of least resistance
- Do not place hands on or between probes



# Probe Removal Policy Considerations

May officers remove probes:

- Common probe penetration
- Sensitive location probe penetration
- Uncommon probe penetration

Proper handling of removed probes

- Bio-hazard
- Evidentiary value

- Note if probes penetrated skin
- Photographs of impact site and injuries
- **Medical follow-up**
- Ensure probe and barb are intact

# Tactical Contingencies

- The Taser may have limited or no effect
- A cartridge may not fire or be effective
- No weapon system will operate or be effective all of the time
- Officers must be prepared to transition to other force options



# Training Plan

Training will be regular and on-going for Taser and all less lethal systems.

Currently LL operators (Sage/Pepper Ball) are required to attend 10 hours of initial training.

- Includes tactical decision making, individual systems, the munitions for systems and the manipulation of the systems.
- Officers have to successfully complete qualifications and a written test in order to complete initial training and deploy with the systems.
- LL operators are required to pass qualification twice a year on the LL launchers that they are trained in.

FCPS officers that will be issued and deploying the Taser X26P will be required to attend 10 hours of initial training as established with other LL systems.

The training will be the same format as other LL systems and require the officer to successfully complete testing before being allowed to deploy with the device.

All FCPS officers have on going yearly training in Less-Lethal tactical decision making.

This type of training is incorporated in lectures, live scenarios and defensive tactics (i.e. straight and asp batons/ OC-Oleoresin capsicum).

Taser training will be incorporated with current LL training and defensive tactics.

Several officers within the department are trained as LL instructors and Taser instructors and will be training the officers in the LL systems.



# Scenario Based Training



## **309.5.1 APPLICATION OF THE ECW**

The ECW may be used in any of the following circumstances, when the circumstances perceived

by the officer at the time indicate that such application is reasonably necessary to control a person:

- (a) for the use of the ECW to apprehend an individual. The subject is violent or is physically resisting.
- (b) The subject has demonstrated, by words or action, an intention to be violent or to physically resist, and reasonably appears to present the potential to harm officers, him/herself or others.
- Mere flight from a pursuing officer, without other known circumstances or factors, is not sufficient cause

## **309.5.6 DANGEROUS ANIMALS**

The ECW may be deployed against an animal as part of a plan to deal with a potentially dangerous animal, such as a dog, if the animal reasonably appears to pose an imminent threat to human safety and alternative methods are not reasonably available or would likely be ineffective.

## **309.7 MEDICAL TREATMENT**

All persons who have been struck by ECW probes or who have been subjected to the electric discharge of the device shall be medically cleared at the hospital prior to booking. If any individual refuses medical attention at the hospital, such a refusal should be witnessed by another officer and/or medical personnel and shall be documented in related reports. If an audio recording is made of the contact or an interview with the individual, any refusal should be included, if possible.

Colorado Revised Statutes

Fort Collins Police Policies

Fort Collins Police Use of Force Training

Taser International

National Tactical Officer's Association

PERF (Police Executive Research Forum) 2011 E.C.W. Guidelines