



AXON

TASER X2

Axon TASER Training Department

TASER X2 Conducted Energy Weapon (CEW) – User Course

Version 22 - Effective June 22, 2020



Goal

To provide the basic operational theory and practical training to reasonably, safely and effectively operate TASER Conducted Energy Weapons (CEWs).

Course Objectives

Upon completion of this course, you will be able to:

- Explain the technology associated with X2
- Describe the nomenclature and operation of the X2
- Describe the nomenclature and operation of the TASER Smart Cartridge
- Explain proper care and troubleshooting techniques
- Explain CEW Smart Use Considerations
- Explain the Tactical Considerations associated with CEW use
- Explain proper probe placement and aiming requirements
- Demonstrate safe handling of CEWs

TASER Training Version 22

With the release of Training Version 22, all prior TASER Training materials and Training Bulletins are superseded and rendered obsolete.

Release and Warning Requirements

- **Warning Acknowledgement:**
All students attending TASER User and Instructor certification courses must **acknowledge** that they have read and understand the “TASER Handheld CEW Warnings, Instructions, and Information: Law Enforcement” prior to participating in any hands-on CEW drills required by the certification course.
- Updated copies of Version 22 documents can be found on Axon’s TASER Training Resource page at <https://www.axon.com/training-resources>

Release Form

- **All students attending a TASER Training sponsored Instructor or User certification course must read, understand and sign the “Instructor and User Warnings, Risks & Release Agreement”**
- TASER Training recommends that all students attending a non-sponsored in-house Instructor or User certification course sign a “Release Agreement”
 - Agencies should maintain a copy of all training records including signed “Release Agreements”
 - TASER Training does not maintain training records for non-sponsored courses

License Agreement

All TASER Training materials/documents are copyrighted and:

- Must be used in their entirety (PowerPoint® slides, video, and instructor notes)
- May only be used by TASER Training certified instructors holding a current certification on the CEW model being taught
- **May not be used for commercial purpose**

If you access or use TASER Training materials, you accept and agree to be bound by Axon's Training Materials Licensing Agreement, Axon Certified Trainer.

Disclaimers

- TASER Training materials should be reviewed in their entirety, including all notes.
- Agencies should add departmental policy on CEW use and any other related policies.
- Each agency is responsible for creating its CEW related use of force policies and procedures.
- CEW related use of force policies should be communicated to all officers authorized to carry a CEW.
- TASER CEWs are serious weapons and should be treated as such at all times.

Disclaimers

- TASER Training (provided by Axon Enterprise) does NOT set use of force policies, general orders, or procedures.
- TASER Training does not give legal advice, and nothing contained in these training materials creates any form of attorney-client relationship. Consult with your local legal advisors for any legal advice, guidance, or direction.
- TASER Training materials may include videos or other information from outside sources to facilitate discussion. The inclusion of such materials is not an endorsement of the procedures or tactics depicted.

Expectations

You must successfully complete the entire curriculum to be certified by TASER Training as a TASER CEW User

- **Users must be recertified annually or more frequently as necessary to stay current with updated manufacturer warnings and training**
- **Ask questions. If we do not know the answer, we will find it for you.**

Safety Rules

- **No live firearms in training area**
- **Every participant is responsible for immediately reporting any safety issues.** If an unsafe condition occurs or is noticed during an exercise, the student or instructor observing the unsafe condition will call **“STOP ACTION!”**
- One student or instructor will be designated as the safety officer during each exposure, live fire and practical exercise/scenario*
- All activity will stop when any student or instructor calls **“STOP ACTION!”**



Safety Rules

- Protective eyewear **MUST** be worn at all times during any weapons handling—including during exposures
- The safety switch on all TASER CEWs will remain in the down (SAFE) position unless the instructor directs students to arm the CEW or when it is appropriate to do so during a training drill
- TASER CEWs must not be pointed at any person or body part unless the instructor directs students to do so as part of a training exercise or scenario

Safety Rules

- A TASER CEW loaded with a live cartridge must not be pointed at another person or body part except during voluntary exposures
- During training scenarios, only use:
 - **Blue** LS cartridges (X26P, X2) with simulation suit
 - **Red** or Clear inert, resettable training cartridge
- LASERs must not be pointed at eyes
- Probes must be removed according to proper protocol

TASER CEWS ARE NOT RISK FREE

	 WARNING
	Conducted Energy Weapon <ul style="list-style-type: none">• Can temporarily incapacitate target.• Can cause death or serious injury.• Obey warnings, instructions and all laws.• Comply with current training materials and requirements.• See www.axon.com



REVIEW AND UNDERSTAND CURRENT TASER CEW PRODUCT WARNINGS

Share Materials & Research

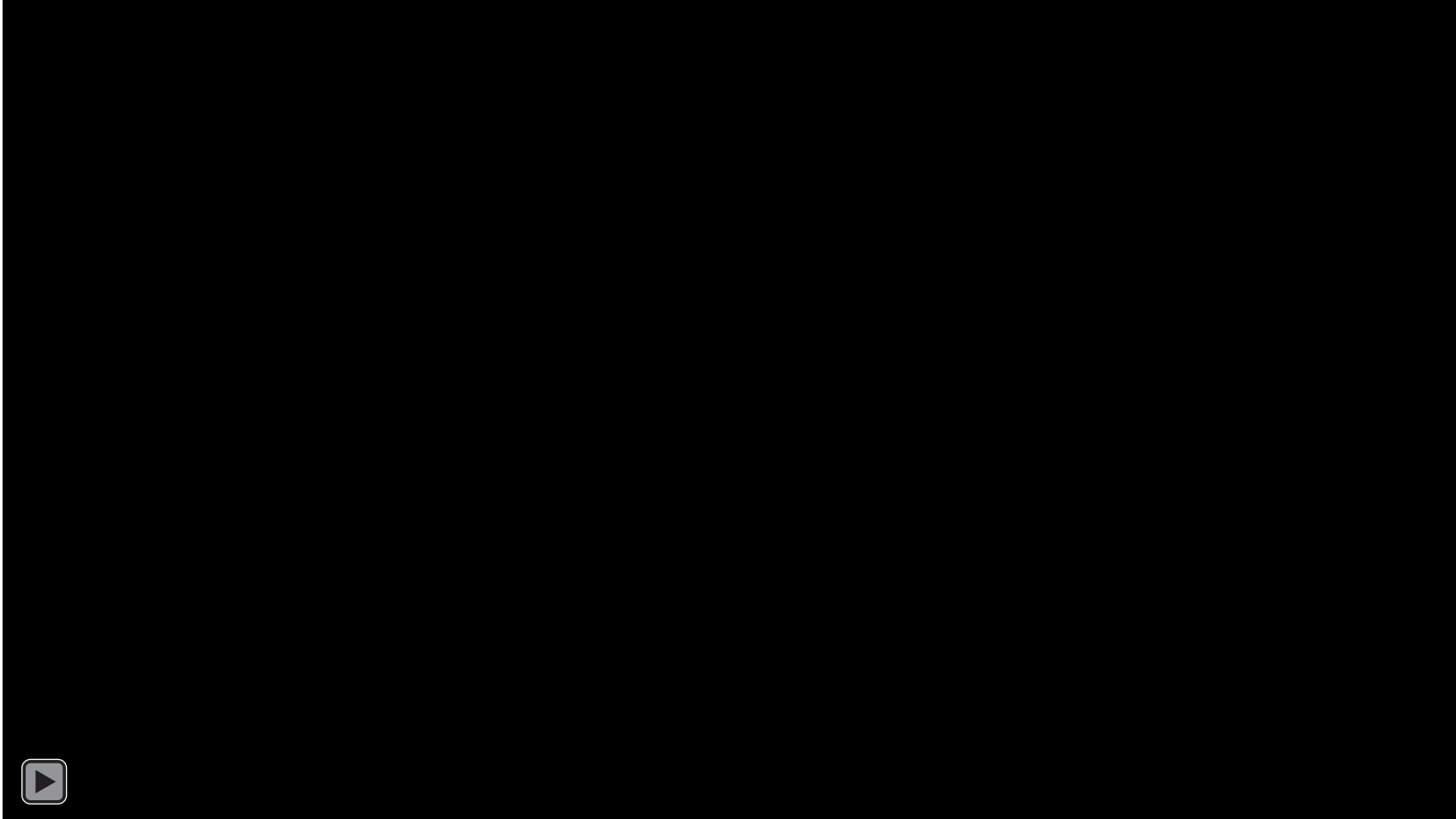
- Distribute Axon's product manual, training materials and warnings to all CEW users
- Carefully review the additional materials provided on the training resources page
- Encourage all CEW users to read and study materials
- Conduct your own independent research, analysis and evaluation of CEWs

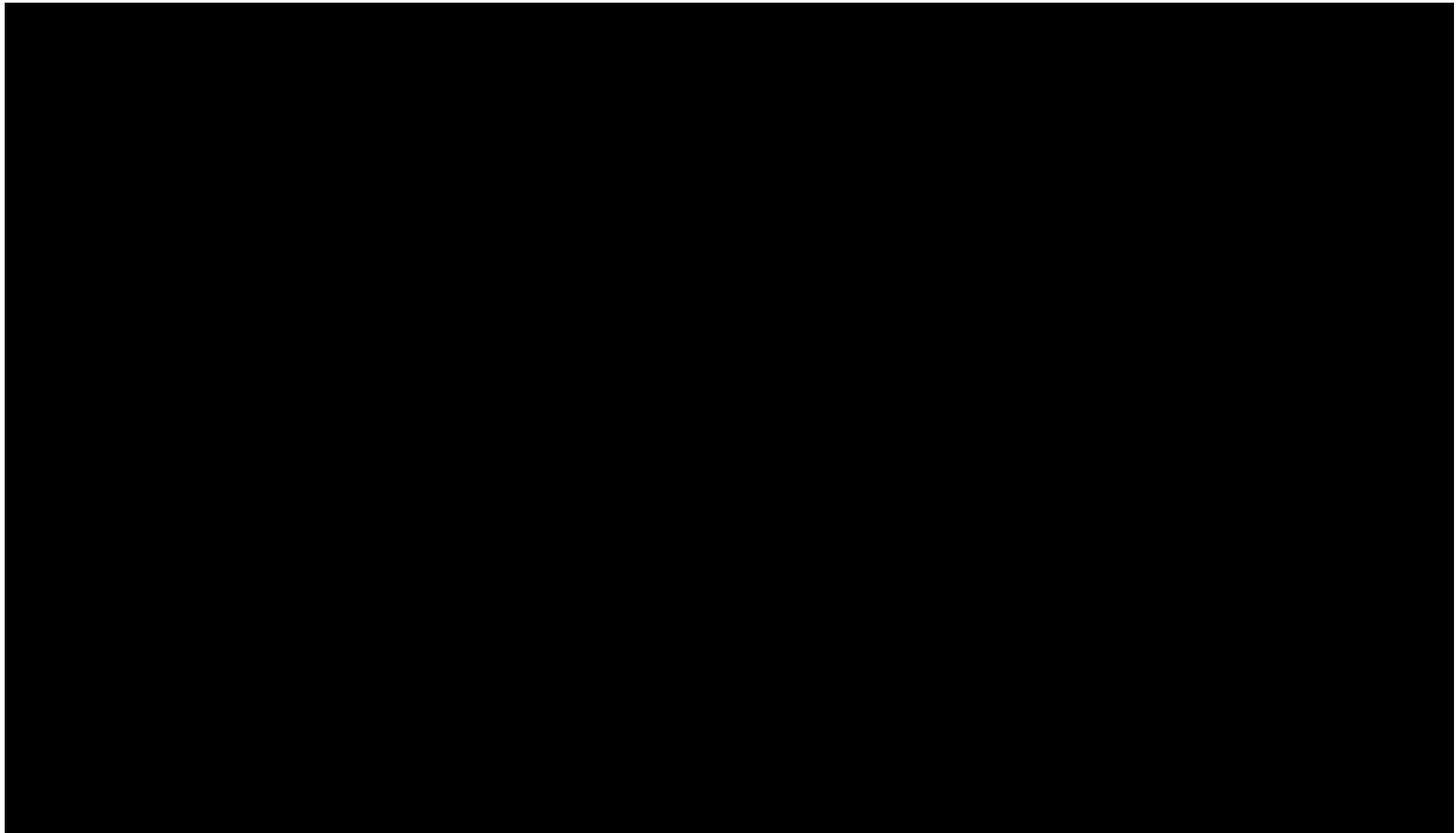


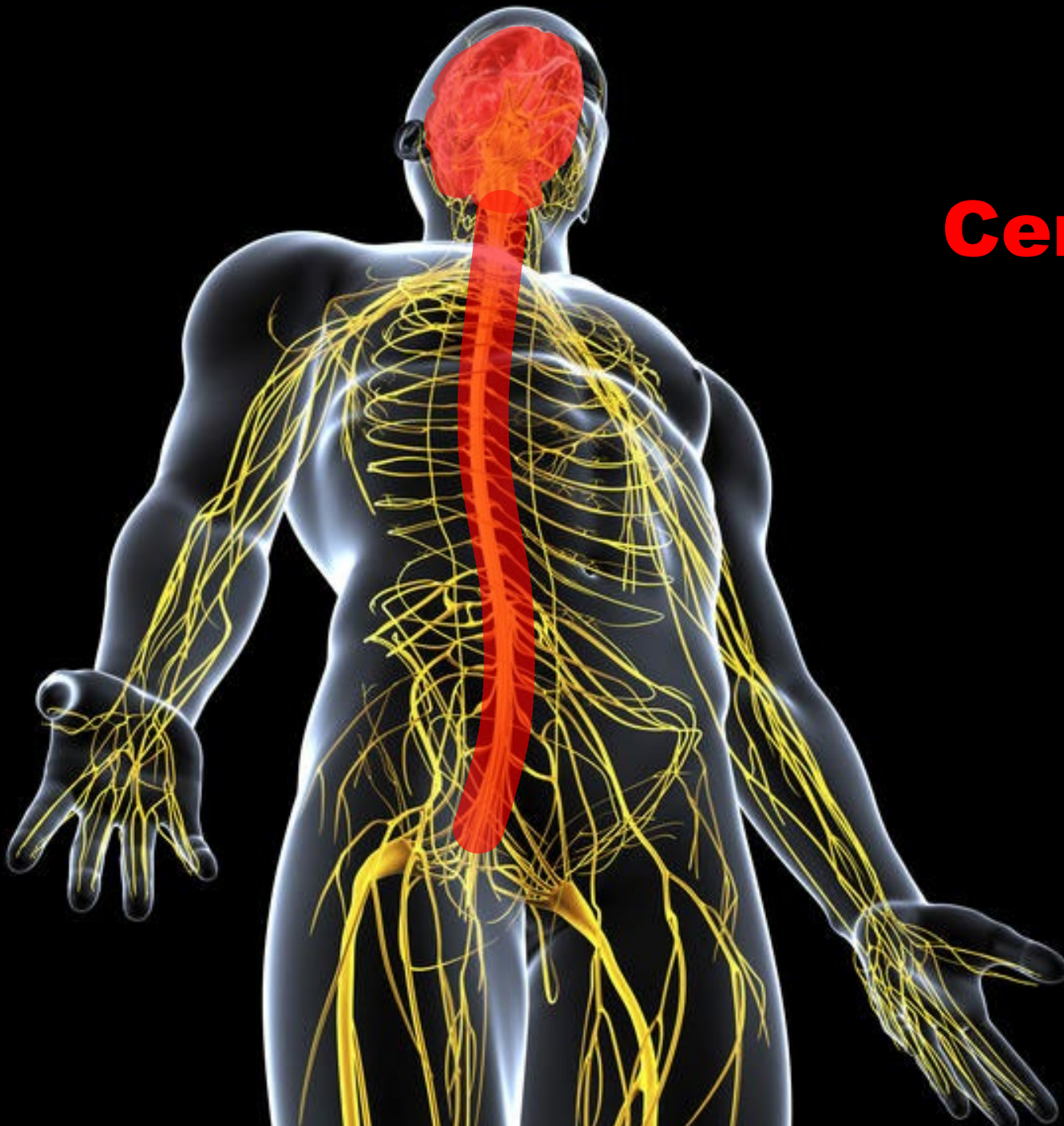
Brief Overview of CEW Technology



Arcing Probes







Central Nervous System

Includes the brain and spinal cord

The command center where information is processed, decisions are made, and information is stored.



Sensory Nervous System

Brings information into the brain.

Consists of the nerves that connect the sensors of the body (eyes, ears, skin, etc.) to the brain.

Early stun devices primarily stimulated the sensory nervous system, causing pain but not stopping truly motivated subjects.



Motor Nervous System

Carries commands from the brain to the body's muscles

Consists of the nerves that go out from the spinal cord and connect to the muscles controlling muscle movements.

NMI systems affect BOTH the sensory and motor nerves



NEURO-MUSCULAR INCAPACITATION

Causes uncontrollable muscle contractions and reduced ability to perform voluntary movements.

- Accomplished by delivering electrical pulses across two electrodes to over stimulate the motor nerves.

**SPREAD OF ELECTRODES IS KEY:
12+ INCHES OPTIMAL**



Neuro-Muscular Incapacitation

- █ [Redacted]
- █ [Redacted]
- █ [Redacted]
- █ [Redacted]
- █ [Redacted]
- █ [Redacted]



Voluntary Exposures



Voluntary Exposure

- TASER Training does **NOT** require a CEW exposure for instructor or user certification
- Voluntary CEW exposure is each agency's sole and exclusive decision
- Voluntary CEW exposures must only be conducted by a currently certified TASER Instructor adhering to TASER Training
- Group CEW exposures are prohibited

Voluntary Exposure

- [REDACTED] Risks of injury from stress, physical exertion, falling, etc. while low, are not zero (see full warnings)
- Notify instructor verbally and in writing on Release Agreement of any pre-existing injuries, medical conditions, or individual susceptibilities
- **All volunteers must review the current TASER warnings and complete the Release Agreement before receiving an exposure**

Release Agreement Form Retention

Each law enforcement agency or employer of the volunteer participating in a training course or receiving a CEW exposure is tasked with retaining the original release as part of its training records for the duration of the student's employment with the agency. These records should not be sent to Axon Enterprise.

Voluntary Exposure


BENEFITS

- Instructor credibility as a leader and subject matter expert
- Officers can better understand the effects of the CEW
 - For deployment
 - Confidence to go “hands-on” without receiving shock
 - Self-defense
 - Court expertise
 - Secondary exposures

RISKS

- Stress, anxiety, panic
 - Exertion and effects
 - Strong muscle contractions and effects
 - Discomfort or painful experience
 - Significant injuries have occurred
- (SEE FULL WARNINGS)**

Voluntary Exposure Guidelines

- Eye protection is required for the spotters, volunteer, and anyone within the training area
- 
- Properly supported by two spotters to prevent falls, or placed face down on the mat prior to exposure
- Realistic field probe placements only

Voluntary Exposure Guidelines

Each spotter should hold an upper arm of the standing volunteer under the armpit, so that:

- The shoulder, arm, elbow, and wrist are stabilized close to the body to prevent stress/tension on the joints
- The volunteer can be safely supported and lowered to the ground after being hit without twisting, rotating, or putting undue stress on the arm or shoulder; or flailing/jerking forward after discharge

Voluntary Exposure Guidelines

- Proper matting
- Clear area of bystanders and objects
- Make area safe
- Careful probe removal using proper protocols

Subjects with pre-existing injuries, medical conditions, or individual susceptibilities should avoid CEW exposure or areas of concern

WARNING: FAILURE TO FOLLOW SAFETY PROCEDURES INCREASES THE RISK OF INJURY

Voluntary Exposure Training Guidelines

- Utilize probe hits to allow students to remove probes
- Target different parts of the body to show different effects
- Demonstrate one probe hit with 3-point drive-stun follow up
- Demonstrate difference between probe hits and drive-stun

Voluntary Exposure WARM-UP

Prior to receiving a CEW exposure, volunteers **SHALL** stretch and warm-up as before exercising or athletics.

- Back
- Shoulders
- Arms
- Legs
- Torso

X2 Double Cartridge Exposure



Safety Considerations

Review the [TASER CEW Research Index](https://www.axon.com/training-resources) and other documents and materials at <https://www.axon.com/training-resources>

Watch For Medical Crisis Signs and Call for Medical Backup – Before Engaging if Practicable

DANGER SIGNS: “This isn’t normal”

- Naked
- Profuse sweating
- Doesn’t feel pain
- Incoherence
- Random violence
- Aggression toward objects (breaking glass, etc.)
- Disoriented
- Super-human strength
- Emotional instability
- Hallucinations
- Inability to focus
- Appears drugged
- “I can’t breathe”

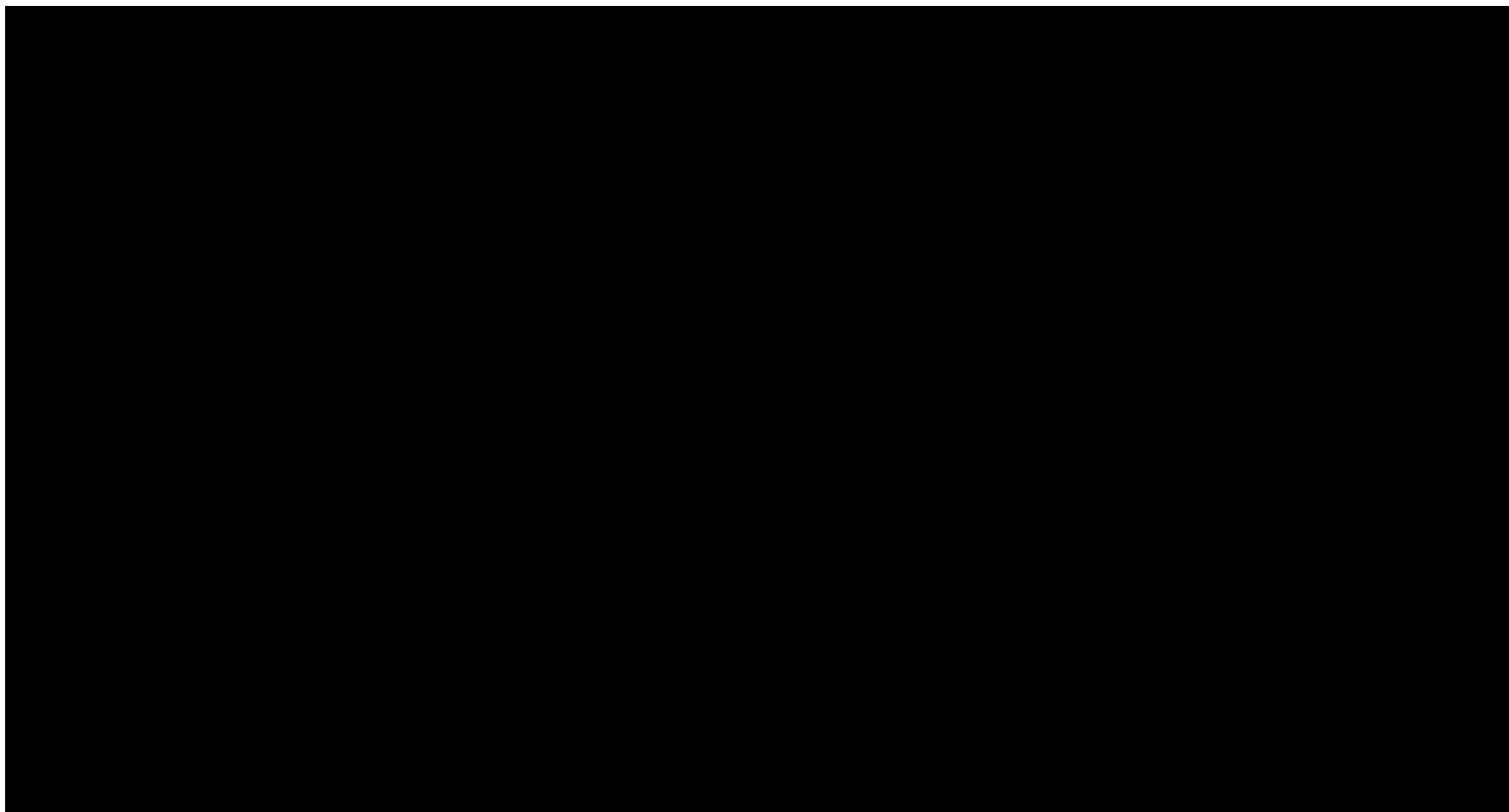
Key Safety Guidelines

1. Avoid dangerous falls
2. Avoid flammables & explosives
3. Use preferred target zones
4. Restrain fast – avoid prolonged exposures
5. Use caution with sensitive populations

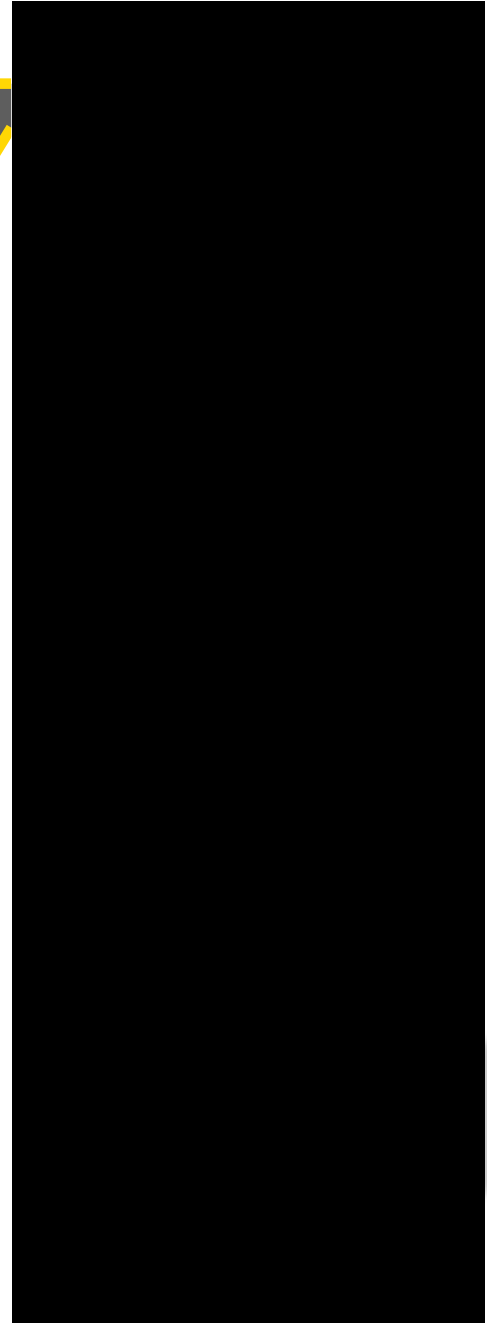
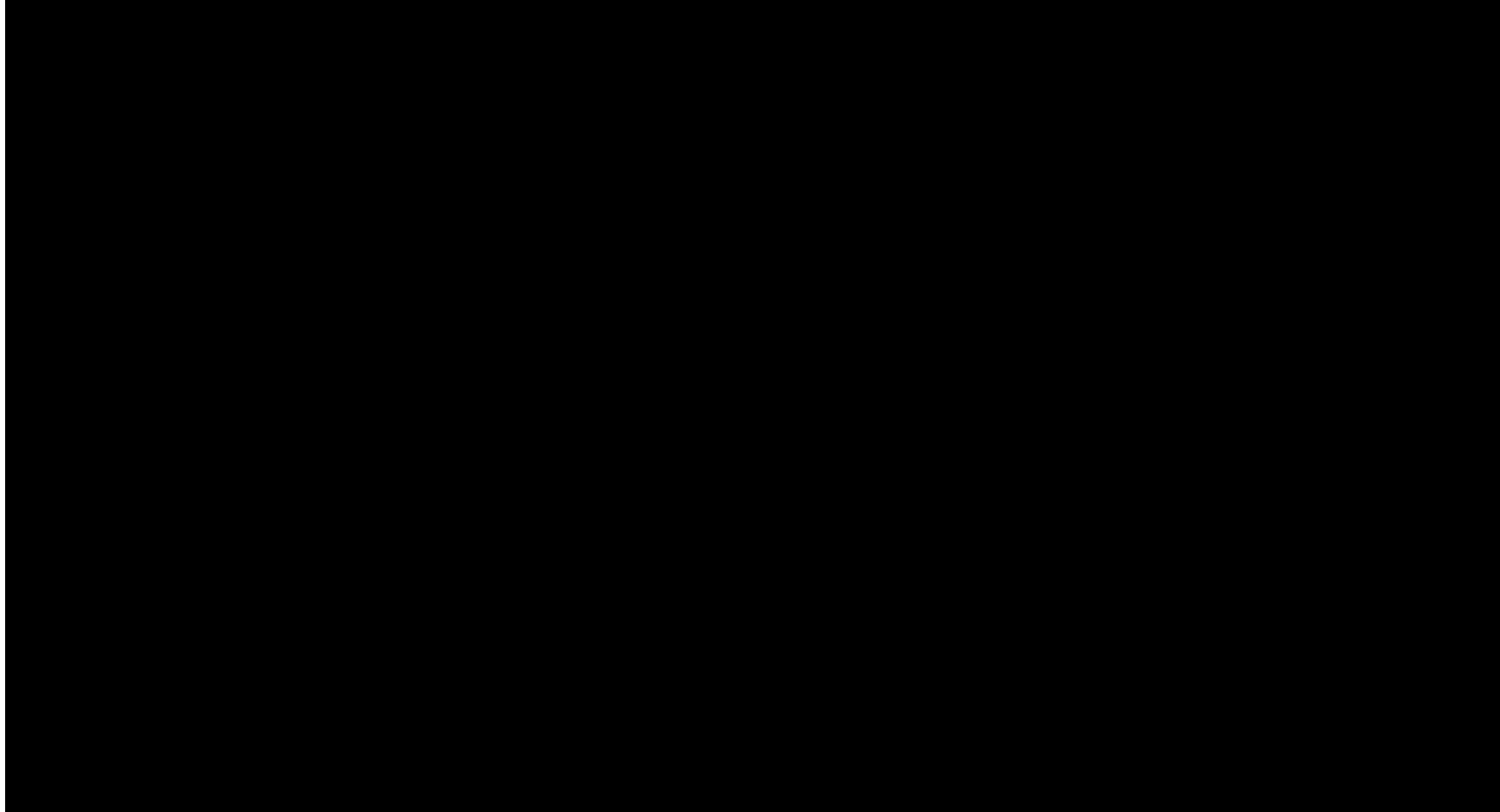


2. Avoid Flammables & Explosives

3. Use Preferred Target Zones:

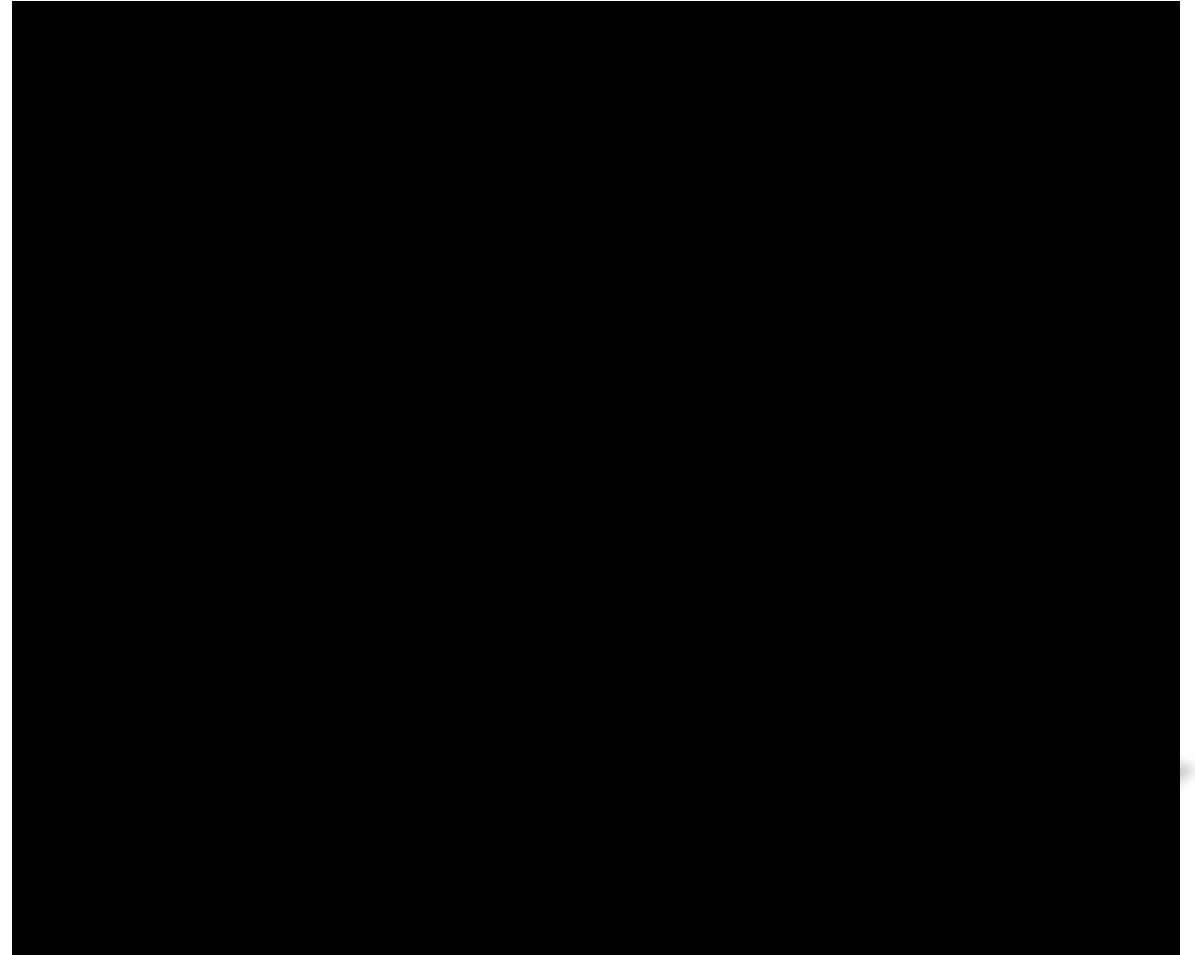


3. Use Preferred Target Zones:



3. Use Preferred Target Zones:

CEW cardiac risks are low,
but not zero



3. Use Preferred Target Zones (when practicable)

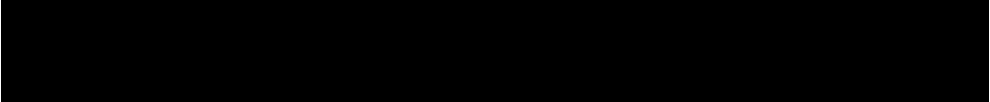
Experts have identified the following key factors related to CEW cardiac risks:

- [REDACTED]
- [REDACTED]

[REDACTED]

4. Restrain Fast

– Avoid Prolonged Exposures

- 
- Long or multiple CEW applications extend stress, pain, and metabolic effects
- You need to be able to clearly justify each activation or extended activation

Physiologic/Metabolic Effects

CEWs may produce effects that could increase the risk of sudden death, including changes in:

- Blood chemistry
- Blood pressure
- Respiration
- Heart rate and rhythm
- Adrenaline and stress hormones

The longer the CEW exposure, the greater the potential effects. Use reasonable efforts to minimize the number and duration of CEW exposures, when practicable.

Physiologic/Metabolic Effects

Studies show CEW effects are usually comparable to or less than:

- Fighting
- Fleeing

Numerous human studies have shown lower CEW effects on human physiology compared to some other force options.

5. Use Caution with Sensitive Populations



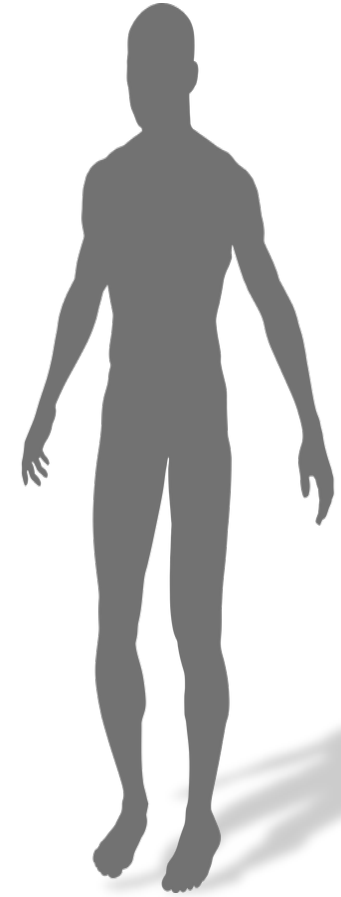
Pregnant



Children &
Minors



Elderly



Sickly / Low Body Mass

Higher Risk Populations

CEWs, like other force options, have not been laboratory tested on:

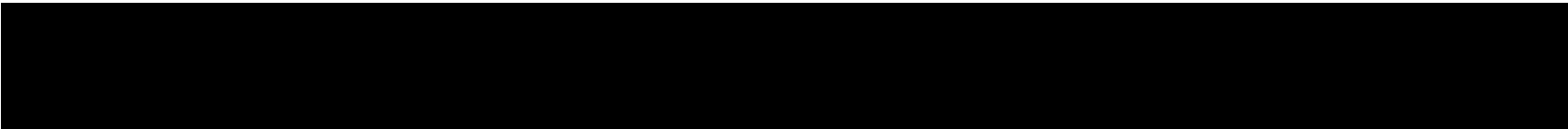
- Pregnant women
- Elderly
- Small children
- Low body-mass index / very thin persons

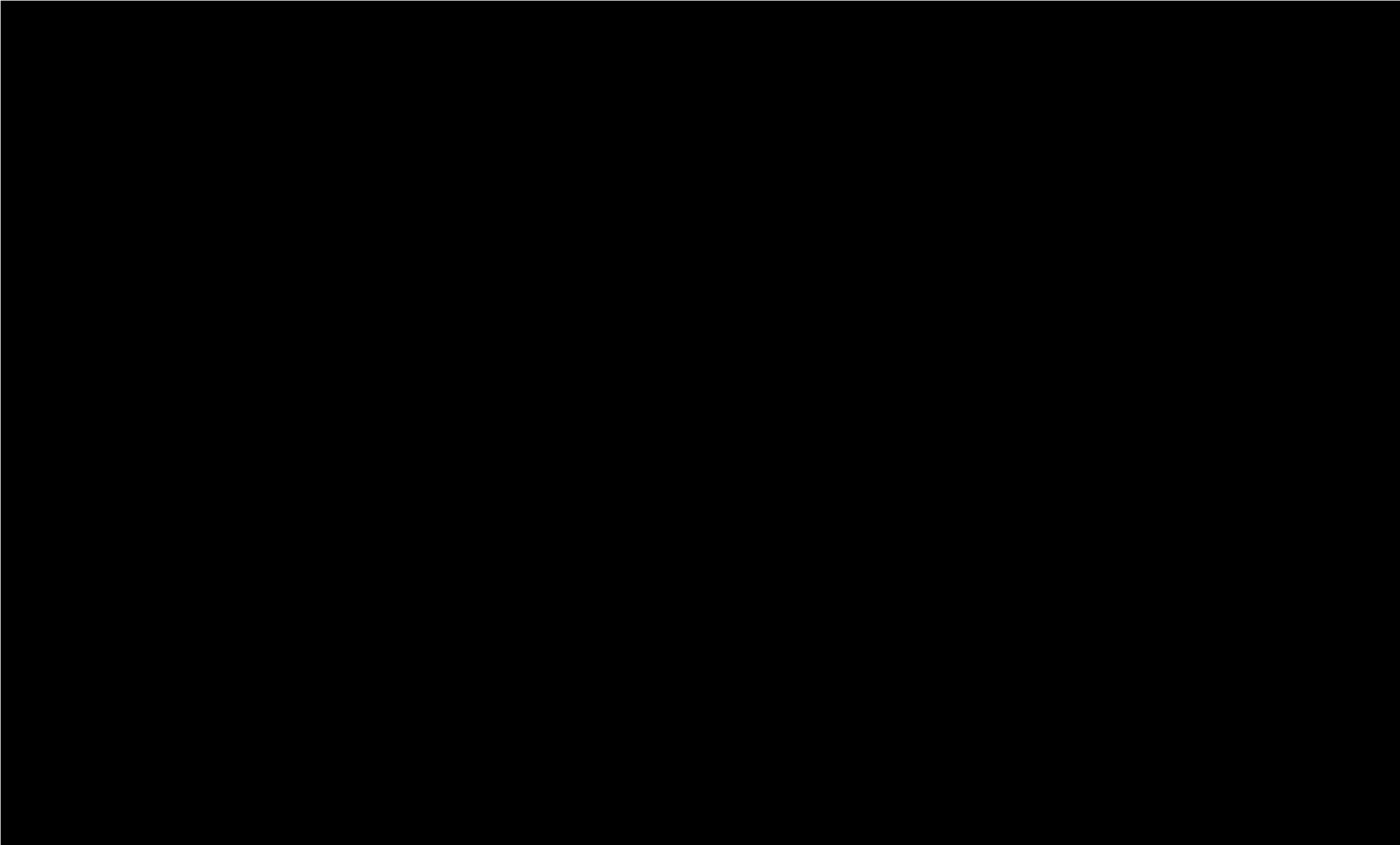
CEW use on these individuals could increase the risk of death or serious injury.

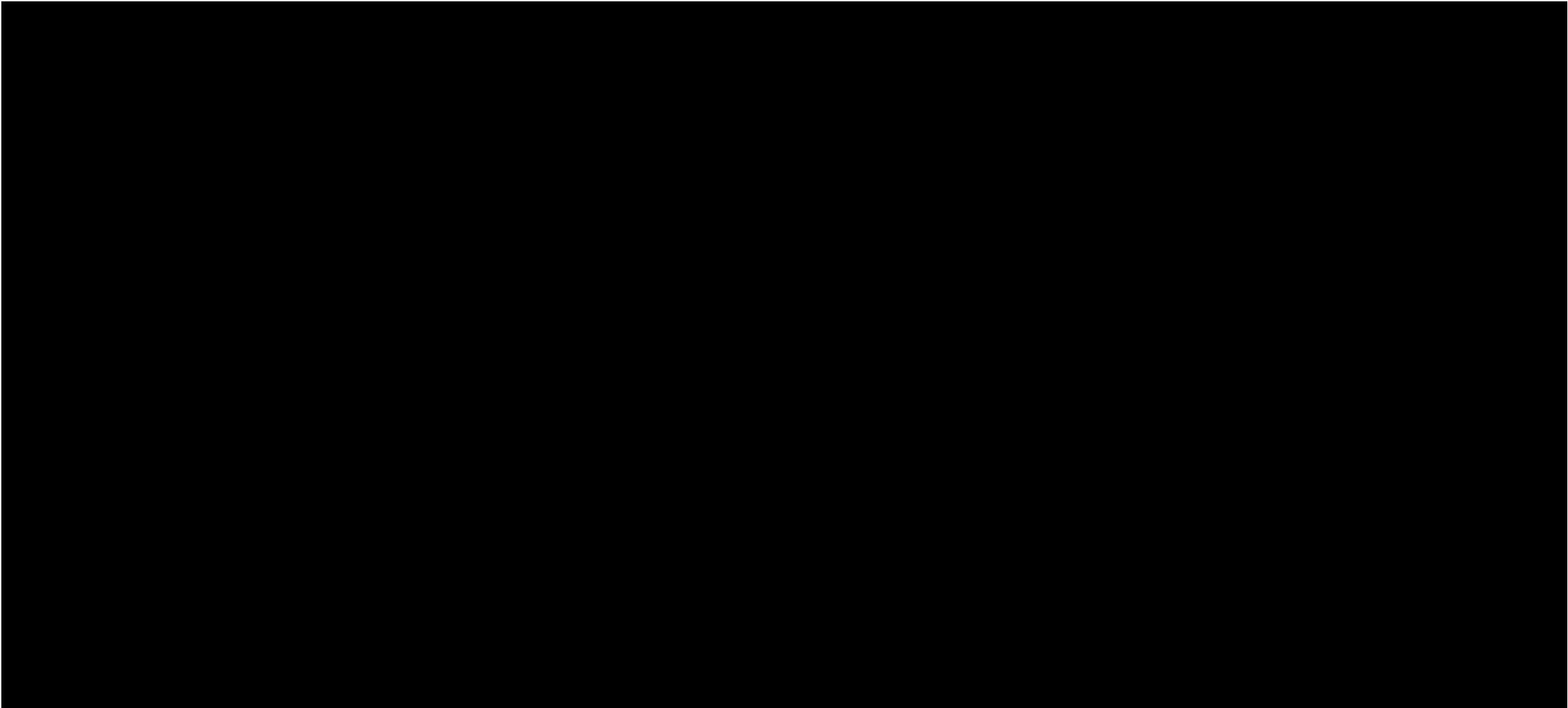
Medically Compromised Persons

- Any law enforcement use of force, including a CEW, may cause or contribute to death or serious injury
- Law enforcement personnel are called upon to deal with individuals in crisis that are often medically compromised and who may be susceptible to arrest-related death
- The subject may already be at risk of death or serious injury as a result of pre-existing conditions, individual susceptibilities, or other factors
- **Follow your agency's guidance and policies when dealing with known, medically compromised persons**

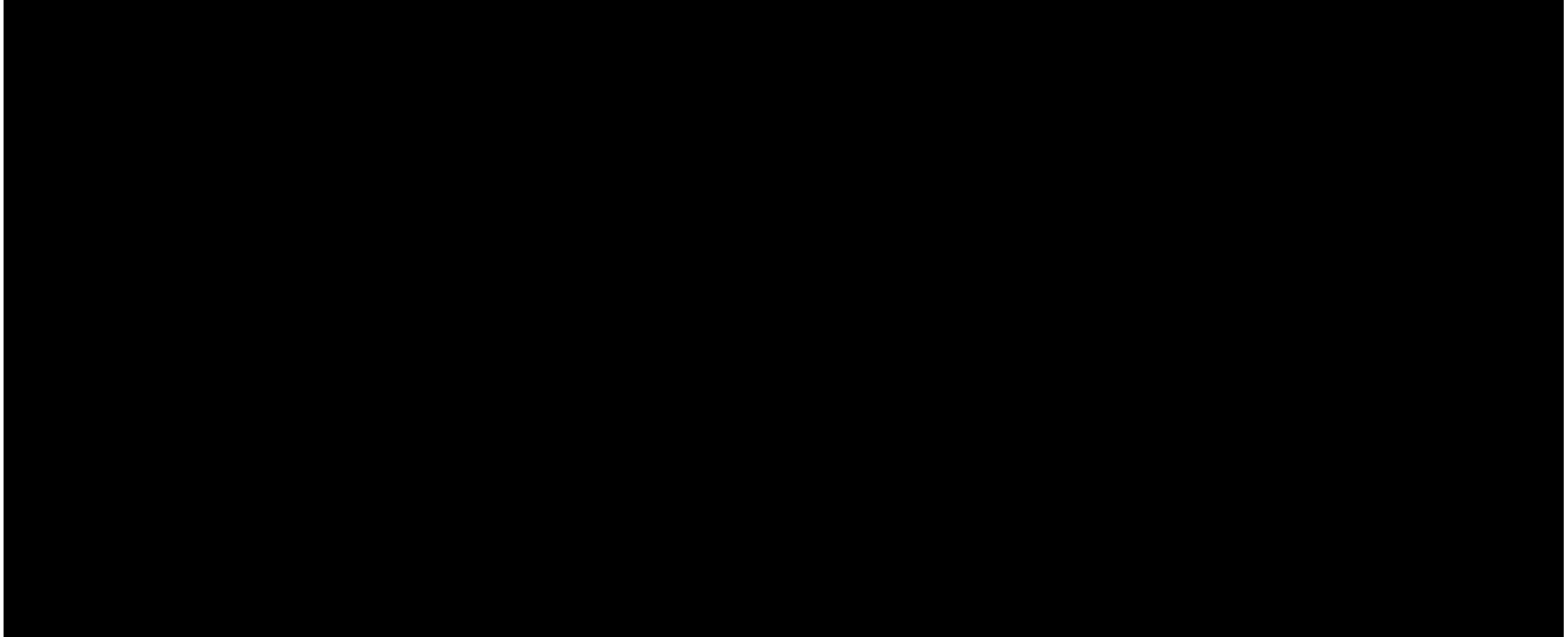
RECAP: Key Safety Guidelines

1. Avoid dangerous falls
2. Avoid flammables & explosives
3. Use preferred target zones
4. 
5. Use caution with sensitive populations

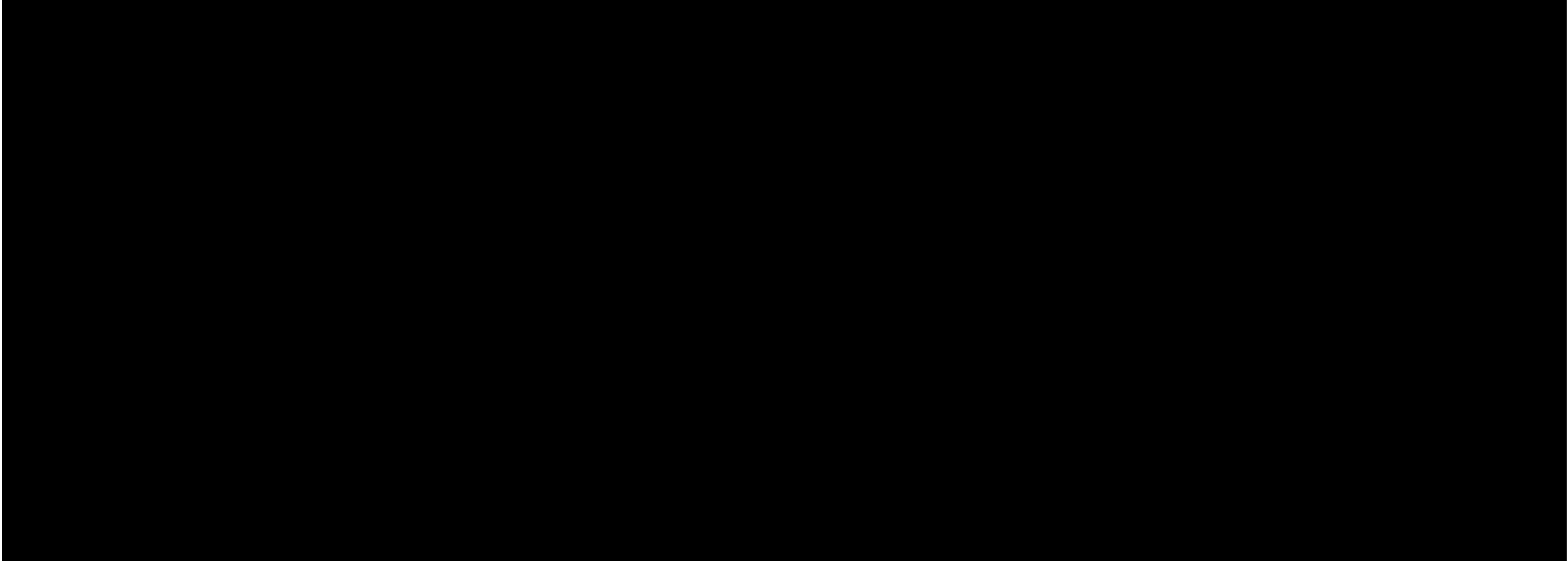




Safety Switch



TASER CEW Safety Switch



X2 CEW Trigger Operation

