## **Use of Force Update**

Medical Science Behind Excited Delirium

## **Objectives**

- To educate CMPD officers on the signs, symptoms, and behaviors associated with Excited Delirium
- To understand how Excited Delirium happens to the human body
- To understand why subjects experiencing Excited Delirium may die

## **Objectives**

- Discuss and understand CMPD and MEDIC response to Excited Delirium subjects covered in CMPD Directive 500-003 – Management of Persons in Extreme Distress
- Review Positional Asphyxia and Suffocation factors

## **Palm Spring Video**



### **Excited Delirium Signs**

- Profuse sweating
- Dilated pupils
- Skin discoloration (flushing)
- Foaming at the mouth
- Uncontrollable shaking/shivering
- Respiratory distress

# Excited Delirium Psychological Behaviors

- Intense paranoia
- Disoriented (about self, place, time, and purpose)
- Hallucinations
- Delusional
- Scattered ideas and thoughts

# Excited Delirium Psychological Behaviors

- Easily Distracted (cannot follow commands)
- Psychotic in appearance
- Described as "just snapped" or "flipped out"
- Extreme agitation
- Rapid emotional changes

# Excited Delirium Physical Behaviors

- Demonstrates violent/bizarre behavior
- Aggression towards inanimate objects, i.e. glass/reflective surfaces
- Running into traffic
- Running wildly
- Naked/stripping off clothing
- Apparent superhuman strength

# Excited Delirium Physical Behaviors

- Seemingly unlimited endurance
- Resist violently during capture, control, and restraint
- Resist violently after being restrained
- Muscle rigidity
- Diminished sense of pain
- Self induced injuries
- Says "I can't breathe", "I'm dying", "You're killing me"

# **Excited Delirium Communication Behavior**

- Screaming for no apparent reason
- Pressured, loud, incoherent speech (mumbling)
- Grunting; guttural sounds, agonal breathing
- Talks to invisible to people
- Irrational speech

#### Wisconsin Video

Appleton Police
Department
Jefferson Street Incident
June 15, 2009

#### **Excited Delirium Breakdown**

- Deals with the disturbance of thoughts
- Violence takes delirium to excited

# Contributors to Excited Delirium

- Cocaine
- Methamphetamine
- Alcohol
- Mental Disease
- Genetics (Polymorphism)

#### **Proposed Causes of Death**

Excited Delirium deaths have historically been blamed on:

- Taser
- Positional Asphyxia
- Pressure on thorax (back)

### **Positional Asphyxia Facts**

- Resting ventilation is about 6-8 liters per minute
- Exercise ventilation is about 100-140 liters per minute
- Maximum amount of air we can voluntarily breathe is 180-200 liters per minute
- To suffocate you would have to restrict the breathing to less than 3/4% of their maximal capacity
- Sudden deaths associated with Excited Delirium are usually not respiratory

#### Suffocation is still a factor

700-800 pounds on the back for an extended period of time is likely to suffocate

## Why do they really die?

Delirium = Emotional Stress Excitement = Physical Stress Struggle = Police, Medic, Others

\*These physiological effects stimulate the sympathetic nervous system

### **Excited Delirium Subjects**

- Small percentage of Excited Delirium victims die in police custody
- Of the Excited Delirium subjects that die, 75% go into cardiac arrest on scene, 25% arrest in ER
- Generally if they go into cardiac arrest, they die
- Meth and Cocaine are drug contributors
- Bi Polar and Schizophrenia are mostly responsible for non-drug induced excited delirium

### **Burns Video**



#### **CMPD** Response

- Call Medic immediately upon recognition of Excited Delirium. This could be initiated by the 911 call taker or by the officer
- Success is related to stopping the struggle and sedating ASAP!
- PD role should be to reduce time of struggle

#### **MEDIC Response**

- Medic role should be to sedate
- Physicians like Taser for Excited Delirium subjects because it is the quickest way to gain control of an Excited Delirium patient, and it allows us to reduce the time of struggle
- Latest numbers indicating police ARD is 0.09% chance that ARD would be related to the Taser

## **Positional Asphyxia**

"Positional Asphyxia is one of the most globally stupid things that I've ever heard in my life." -When speaking about police ARD

Dr. Tom Neuman, San Diego University; Pulmonary Diseases Physician, ER Doc, Undersea and Hyperbaric Medicine Physician, and Captain US Navy; Naval Undersea Medical Officer

#### What does all of this mean?

Excited Delirium is a real emergency medical condition, recognized now by first responders, police, and physicians. The science demonstrates that the fate for a person to become in a highly agitated state from Excited Delirium happens before police contact is made with the subject.

#### What does all of this mean?

It is very unlikely that the force itself, used by the police is the reason for death. The biggest contributing factor for death with a person experiencing Excited Delirium appears to be the factors that caused Excited Delirium prior to police contact.

#### What does all of this mean?

The ability to reduce the death rate in Excited Delirium subjects depends upon the ability to reduce the time of struggle while the subject is in this highly agitated state, and immediate sedation to be delivered by medical personnel in post care, whether on-scene or in the emergency department.

## **Questions?**