



INSIDE EXCITEMENT DELIRIUM

Understanding excited delirium and best practices for law enforcement response

/Abbie Darst, Program Coordinator

On Sept. 5, 2006, Louisville Metro police responded to a downtown disturbance call just after 1 a.m. When officers arrived on scene, ex-Marine Larry Noles, 52, was standing naked in the middle of the street. Exhibiting extremely aggressive behavior, Noles was damaging cars and not responding to officer efforts to subdue him. One officer on the scene fired two TASER darts carrying 50,000 volts into Noles' chest. Noles began moving toward the officers and was tased two more times before falling to the ground, unconscious. He was taken to the nearest hospital where he was pronounced dead.

Later, Noles attorney said on the night of his death Noles was off medication and suffered from Bipolar disorder. It was the

Jefferson County medical examiner's controversial determination that the TASER did not cause Noles' death; instead, he died of excited delirium scenario.

Across the country, officers and medical professionals are searching for answers about this highly-controversial diagnosis. Some police critics have insisted that excited delirium is nothing more than a convenient concept manufactured by law enforcement to cover up brutality and exonerate authorities when a suspect dies in custody. Even Noles' estate attorney said in an interview that excited delirium is known in most circles as death by police.

However, in October 2009, a special investigative task force of the American College of Emergency Physicians formally declared that the violent and sometimes lethal >>



phenomenon known as excited delirium is a real condition and should be taken seriously.

So what exactly is excited delirium?

The term excited delirium first was used in 1849 by Luther Bell to describe psychiatric patients who developed an onset of continuous agitation and mania in the presence of fever, and suddenly died. According to Theresa Di Maio, author of "Excited Delirium Syndrome: Cause of Death and Prevention," delirium is a mental state characterized by an acute circumstance of disorientation, disorganized thought process and disturbances in speech. When that mental state involves violent behavior, it is called excited delirium. In that state, when there is a sudden death and the autopsy fails to reveal a cause, it is ruled excited delirium syndrome.

The ACEP group recently affirmed that excited delirium, or ED, is a unique syndrome that can be recognized in the field by a distinctive group of clinical and behavioral characteristics. Individuals exhibiting these common ED characteristics are hyperaggressive with bizarre behavior, impervious to pain, combative and have abnormally high body temperatures, usually around 105 degrees Fahrenheit. Officers are likely to find them tirelessly resistant, sweating, breathing rapidly, agitated, unusually strong and inappropriately clothed or nude. The ACEP report also explained that remorse, normal fear, understanding of surroundings and rational thoughts for safety are absent in these individuals.

Individuals suffering from ED pose a daunting challenge to law enforcement officers. The ACEP report acknowledged that "officers are in the difficult and sometimes impossible position of having to recognize the encounter as a medical emergency while attempting to control an irrational and physically resistive person and mind the safety of all involved.

"Given the irrational and potentially violent, dangerous and lethal behavior of an ED subject, any law enforcement officer interaction ... risks significant injury or death to either the officer or the ED subject," the report continued.

Unfortunately, those cases in which an individual's confrontation with an officer has resulted in death have brought about intense media coverage and officer and agency scrutiny.

"In forensic pathology ... when dealing with what I would refer to as excited delirium scenario - to raise that as a possibility, what we have to have is a good, thorough investigation by law enforcement and a good avenue of communication between the forensic pathologist and the law enforcement investigators," said Dr. Tracey Corey, Kentucky's chief medical examiner.

An extremely detailed timeline and witness statements are two vital pieces of information that medical examiners must have from law enforcement in a potential ED scenario case, Corey explained, because it allows the medical examiner to determine exactly what happened in the situation.

"If there is an in-car camera, we want to review that film, because what you will find is that most of the cases where they are initially reported by the media as 'TASER related,' they're not really TASER related," Corey said. "The person continued to function long after the TASER was deployed. So it really was not involved.

"But for us to be able to make that determination, we have to work closely with law enforcement and law enforcement has to be willing to provide us with a lot of information," Corey added.

However, law enforcement officers should realize that the psycho-physiological meltdown of ED is not always fatal, and that given the proper collaboration between responding officers and EMS personnel, the condition might be treated before an untimely, unexpected death occurs.

Since an estimated 250 ED subjects die in the United States each year - an estimated 8 to 14 percent of those who experience the syndrome - in order for collaboration between officers and EMS to take place, officers first must be able to assess the signs and symptoms of excited delirium very quickly in an altercation or confrontation.

Published accounts show that typical ED >>>

WHAT'S THE DIFFERENCE?

The term excited delirium is a descriptive phrase for an individual exhibiting the disorder and may result in death and may not. Excited delirium syndrome is only attached when the individual dies and there is no pathology or injury to explain the death. However, many medical examiners prefer to use the terminology excited delirium scenario as opposed to syndrome.

Kentucky's Chief Medical Examiner Tracey Corey described a syndrome as a consolation of physical findings and symptoms, and in the case of excited delirium, it is more of a presentation because scene information and a historical timeline have to be taken into account in addition to the physical findings.

>> subjects experiencing an episode exhibit signs of acute drug intoxication and often have a history of mental illness such as paranoia. These subjects struggle with law enforcement; do not respond to physical control measures, use of pepper spray or electronic control devices; and suffer a sudden death. In most cases, autopsy fails to reveal a definite cause of death from trauma or natural disease.

Cases show a majority of lethal ED subjects die shortly after a violent struggle. Many already have sustained traumatic injuries before the arrival of law enforcement and still struggle intensely with officers, the ACEP report stated.

"Expecting an ED encounter to be resolved without a potentially fatal struggle may be asking the near impossible of responding officers," the ACEP task force report said. "Almost everything taught to law enforcement officers about control of subjects relies on a suspect to either be rational, appropriate or to comply with painful stimuli. ... Tools and tactics (such as pepper spray, impact batons, joint lock maneuvers, punches and kicks and [TASERS]) that are traditionally effective in controlling resisting subjects are likely to be less effective on ED subjects."

In situations where officers realize they are dealing with an ED individual, they should immediately call for EMS and try to contain the individual. Officers should try to take the individual into custody quickly, safely and efficiently, if necessary, and then immediately turn the care of the individual over to EMS personnel when they arrive.

Though there is no specific protocol for Kentucky officers in ED encounters, Dr. William Smock, a professor of emergency medicine at the University of Louisville's Department of Emergency Medicine, made several protocol suggestions during a presentation

about excited delirium in June 2009.

Officers should attempt to document the body temperature of the individual at the scene, because in fatal cases, a significantly elevated temperature is present. Once in EMS care, the individual should be cooled as quickly as possible through either intravenous fluids or spritzing with cool water and blown with a fan, to reduce the risk of death. Other suggestions include medication to produce a rapid calming effect, oxygen saturation and monitoring and cardiac monitoring.

"At this time there is insufficient data to determine whether fatal ED syndrome is preventable, or whether there is a point of no return after which a patient will die regardless of advanced life support intervention," the ACEP report concluded.

In recent years, hundreds of cases of unexpected, in-custody deaths have been documented and researched, leaving involved law enforcement officers and their agencies mired in media and legal scrutiny. Though research into excited delirium syndrome, its causes and possible prevention is still very much ongoing, officers now can be proactive in understanding signs and symptoms of ED and knowing what steps to take to ensure the best possible outcome.

"All of these cases are going to have to go to post mortem examination," Corey said. "So we're going to work with the coroner and the investigating law enforcement agency, but they have to bring a lot ... of detailed information to us so that we can put that in the context of the overall investigation, including what we find on toxicology, what we see grossly, that is with our naked eye at autopsy, [and] what our microscopic findings are. We are going to take a lot of things into account. These are complicated, complex cases." J



IS IT THE TASER?

Excerpts taken from July 20, 2009 Force Science News

The concept of excited delirium frequently appears in literature about TASERS. Patients with excited delirium usually are violent and aggressive. They may be difficult to subdue and need to be detained for their own safety and the safety of others. It is understandable that law enforcement officers would rather subdue these individuals with a TASER device than in a physical confrontation. The controversy comes when the use of a TASER is thought to cause the death instead of excited delirium syndrome, or that the stress-related chemicals released as a result of the use of a TASER aggravated the symptoms of ED.

A study headed by Dr. Jeffrey Ho, a deputy sheriff and emergency medicine specialist with the Hennepin County, Minn. Medical Center turns that premise upside down. At an international conference in Australia in June 2009, Ho reported that TASER application is one of the weakest stimulants of stress chemicals among sources that are commonly present during a police confrontation.

Ho and a team of researchers from four

states randomly assigned 60 law enforcement and civilian volunteers to one of five groups in which they:

- sprinted 164 yards, simulating flight from law enforcement officers
- hit and kicked a heavy bag for 45 seconds, simulating physical combat with officers
- took a 10-second hit with at TASER X26
- endured a K-9 training exercise attack for 30 seconds
- were sprayed in the face with OC spray

The test subjects were predominantly male with a median age of 35. There was no significant difference between the five groups in terms of stress-chemical levels prior to their assigned tasks.

The researchers discovered that the highest level of stress chemicals was generated by the heavy bag exercise, which simulated the struggle with officers. After that, in decreasing order, came the sprint group, the K-9 group, the TASER group and the OC group. In other

words, only the administration of OC was slightly less stress inducing to the subject than a TASER zap. In addition, tasing generated nearly 3.5 times less adrenaline than the simulated fighting.

"The comparison of use-of-force encounters demonstrated that the electrical control device was one of the least activating" of stress chemicals, Ho wrote in his study report. "These results ... suggest that fighting with law enforcement officers may be the most detrimental [to subjects] from a physiologic standpoint." J

