There is a great deal of confusion about the cause and circumstances surrounding excited delirium and restraint-related sudden deaths.

Sudden death, “excited” delirium, and jail suicide are hot topics today for criminal justice, emergency medical service providers, and correctional employees and administrators. The abundance of misinformation about the causes of sudden death, “excited” delirium, and jail suicide can lead to unjust criticism, misplaced blame, and costly litigation which often is only the tip of the iceberg. Medical researchers conducting important scientific investigations into these issues are, sometimes, at odds with one another’s findings. These deaths are often associated with chronic, rather than acute, drug use – usually multifactorial, complex, and often not isolated to a single cause of death. Agencies are learning that sudden and in-custody death events, although still rare, require specialized knowledge and training for investigators, emergency medical technicians and paramedics, emergency department doctors, pathologists, and others as key pieces of potential evidence are often overlooked, not collected or obtained, sometimes resulting in a permanent loss of vital information.

To further educate people about this important topic, this five part series will focus on such important topics as the history and realities of sudden death, “excited” delirium, and force issues; TASER® electronic control devices (ECDs or devices) and sudden death, replacing myth with fact; behavioral cues, contemporary medical theories about sudden death, and encounter recommendations; jail suicide issues; and guidelines for the investigation of sudden death and in-custody death events.

**Sudden Death: A Short History**

Sudden death is not new, although many in today’s news media want us to think otherwise. In the United States, Dr. Luther Bell is credited with writing one of the earliest medical articles on sudden death. Dr. Bell, who ran an insane asylum in Massachusetts, began observing and, ultimately, researching sudden deaths in 1836. Thinking he had discovered a new disease, he wrote about his observations in the *American Journal of Insanity* in 1849. Dr. Bell described the symptoms of some of his patients as “confused,” “no tolerance to light,” “low mutterings,” “suspicious of food being filthy or poisoned,” and having a “dull apprehension of impending danger.”

Regarding these patients’ propensity for violence, Dr. Bell noted, “[attack] anyone who approaches him with blind fury,” “struggle with the utmost desperation, irrespective of the numbers or strength of those who may be endeavoring to restrain him,” and that the patient has “no disposition to yield to an overpowering force, noticeable in some degree in the blindest fury of the most intense forms.”

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Noting the mental disturbance in these patients is “rather delirium than mania,” Dr. Bell appears to be describing behavior similar to what has been labeled as “excited delirium.” Although “excited delirium” originally was associated with chronic cocaine users who suddenly died, there are many similarities to what was observed by Dr. Bell. Although he noted that the onset of symptoms was rapid (about one week), many of the patients in this category did not die for another two or three weeks.

Similar observations were made by other medical professionals from the late 1800s through 1947. Recall that during the end of the 19th and beginning of the 20th Centuries, cocaine was legal in the United States. At one time, it was an ingredient of Coca-Cola®, hence the name “Coke.” However, from 1947 through the...
early 1960s, the medical literature is reported to be quiet on sudden death as previously described. Sudden deaths reports began to resurface in the early 1960s as the treatment of many forms of mental disease changed with the introduction of psychopharmacology.

Neuroleptic and/or antipsychotic drugs enable some individuals with mental ill-ness to be self-medicating at home, rather than be institutionalized. Reports of sudden deaths resurfaced in the late 1970s and early 1980s when media sensationalism attributed many of these deaths as resulting from chokeholds. In the 1980s, the media’s unscientific focus was on sudden deaths allegedly caused by restraint methods. In the 1990s, pepper spray was the alleged cause of many sudden deaths. Today, the focus is on ECDs, such as TASER devices.

Capture and restraint technologies and techniques used by law enforcement, correctional, emergency medical services, and hospitals are easy targets for overly simplistic and misplaced blame by the media and others as a possible cause of death. These technologies and techniques include, but are not limited to pepper spray, ECDs, hobble restraints, neck restraints, and hog-tying. Theoretically, the capture or restraint device and/or technique may have had an adverse medical impact upon the individual, but this appears to be infrequent. Rarely, if ever, has the technology caused the medical emergency (e.g., ECD, pepper spray). In contrast, the cause has often been the long-term, detrimental lifestyle of the person who was being confronted acting in a wild, bizarre manner.

Many times, an autopsy revealed the person had stimulants, such as cocaine and/or methamphetamine, in his (or her) system at the time of death. These stimulants are known to be significant factors in sudden deaths and are often coupled with other factors. There are theoretical explanations, too, such as low blood sugar (hypoglycemia), metabolic acidosis, enlarged heart, ventricular fibrillation, exhaustive mania, and others, but these theories will be discussed in Part III of this series.

Finally, please note that sudden deaths are not limited to the United States. Australia, for example, has been averaging ten such deaths per year for the past decade, and it has a fraction of the population of the United States. Geography is not a factor regarding this issue.

**Sudden Death Defined**

Most people think of death occurring when the heart stops beating. For example, a person who “drops over dead” from a myocardial infarction (heart attack) is an example of a sudden death. While death may be the final outcome, family members, pathologists, law enforcement, correctional officers, and administrators want to know what con-tributed to or caused the death, and usually demand to know immediately. One author identified four causes of death: the gradual wearing out of the human body; disease; injury from accidents; and sudden death.

According to the World Health Organization, sudden death refers to cardiorespiratory collapse occurring within 24 hours of the beginning of symptoms. Using this definition, one must ask when law enforcement officers, correctional officers, or others entered into this 24 hour window. Was it at 23 hours and 49 minutes? Others define sudden death as cardiorespiratory collapse occurring within one hour of the onset of symptoms.

**Instantaneous Death Defined**

In contrast to sudden death, instantaneous death has been defined by several authorities as cardiorespiratory collapse within five minutes of the onset of symptoms. Notice that the time frame is much shorter. Even with this smaller window of time, think about the deaths you have read about being attributed to pepper spray or ECDs. Most of these deaths, if not all of them, are outside this boundary of time.

**In-Custody Death Defined**

What is an in-custody death? There are many answers, depending upon where, when, and to whom you ask this question. For example, when noted Mafia boss, John Gotti, died in prison from throat cancer, this was an in-custody death. Why? He died while in custody. Likewise, an inmate who dies after a heart attack while serving a prison sentence is also an in-custody death. A jail suicide is also an in-custody death for the same reason. So, what happens when we combine terms?

**Sudden In-Custody Death**

Krosch, Binkerd, and Blackbourne (1992) defined a sudden in-custody death as “Any unintentional death that occurs while a subject is in police custody.” Notice the word “unintentional.” Although rare, there are times when a SWAT sniper is given the “green light” for a head shot to stop the violent person and the probability for death is quite high. This set of circumstances and outcome would not fit this definition of a sudden in-custody death.

How does “excited delirium” fit into this definitional framework?

**“Excited Delirium”**

The term “excited delirium” was coined in the early 1980s by Dr. David Fishbain and made popular by then Dade County (Florida) Medical Examiner, Dr. Charles Wetli. Initially, Drs. Fishbain and Wetli published medical articles about cocaine-related deaths beginning in 1981. Dr. Wetli authored and coauthored several other medical articles about cocaine and sudden death, but credits Dr. Fishbain for the term “excited delirium.” Although not a medical or psychological diagnosis, it refers to individuals who exhibit behavioral signs including, but not limited to, fear, panic, shouting, physical violence, hyperactivity, and thrashing about. Dr. Wetli used this “label” to describe those individuals who died for no visible reason after engaging in often violent and bizarre behavior with the police. Most, if not all, of Dr. Wetli’s cases involved individuals who were chronic cocaine abusers and many had cocaine in their systems at the time of death.

While delirium is found in the medical and psychological literature, the term “excited delirium” is used as a descriptive phrase. Although it is generally associated with cocaine, its roots are found in agitated delirium. Dr. Elizabeth Laposata, a well-known medical researcher in the criminal justice community, has written that the diagnosis of delirium depends upon the observation of behavior and not on a particular drug level.

Although Part III of this series will discuss the contemporary theories about sudden death, for now, it is important to note that there are many theoretical causes of “excited delirium.” Possible causes other than cocaine include, but are not limited to: low blood sugar (hypoglycemia); organic brain disease; steroid use; illicit drugs, such as methamphetamine; and as well as the abuse of prescription medications.

**Rising Drug Use**

In October 2005, the Los Angeles Times ran a story which highlighted what it called the “pandemic” use of methamphetamine in California. Since “meth” use has been linked to “excited delirium” and sudden death, this article had significance to the criminal justice community. Methamphetamine and amphetamine hospital admittance rates per 100,000 population in the U.S. for ages 12 and up from 1992 to 2002 saw as high as a 123.8 times increase in the
Cocaine-related emergency department episodes between 1990 and 2002 saw a 2.5 times increase for people of all ages in the United States. There also appears to be significant increases in abusers combining multiple stimulants and/or alcohol. One research study concluded that mixing alcohol with cocaine increased the abuser’s risk of sudden death 18 times. Other medical researchers agree the risk of sudden death is greatly increased, but are unsure if it is as high as 18 times. One medical finding which is generally undisputed is that there is no such thing as a nonlethal dose of cocaine. Admittedly, not everyone who takes it will die, or die suddenly, but no amount of this illicit drug is safe. These are yet more statistics which illustrate the increasing chronic and acute abuse of illicit drugs.

Aside from an increase in “meth” and/or cocaine usage, approximately 1% of the U.S. population over 18 years of age has bipolar disease and many of these individuals are on neuroleptic medications. Abuse of rapid withdrawal of these medications may also cause bizarre behavior in some individuals resulting in sudden death.

**Bizarre Behavior Scenario**

A review of the medical and criminal justice literature provides insight into a “typical” scenario which involves a person who presents behavioral cues which may indicate (s)he is a high risk candidate for sudden death. While Part III of this series will describe these behavioral cues in more detail, for now, a behavioral cue is a secondary stimulus which guides behavior, either consciously or unconsciously (e.g., running wildly for no apparent reason).

The incident usually begins when a family member or friend “suddenly snaps” or “flips out” and those present cannot quiet the person. It is important to note that research indicates that males are the most likely candidates for a sudden death in this type of scenario, with one research study indicating that males accounted for 99% of sudden deaths studied. When the person cannot be controlled or quieted by family members and friends, usually someone will call 911 requesting police and/or emergency medical services.

When public safety personnel arrive, they quickly develop the opinion that the individual will attempt to defeat their efforts for a safe apprehension. When confronted by the police, these individuals begin active physical resistance, forcing the officers to use defensive tactics, pepper spray, batons, ECDs, lateral vascular neck restraint, or other tactics, such as the SWARM.

These tactics usually result in the person being taken to the ground for control and handcuffing. Historically, the person was then placed into the rear seat of a police vehicle in a prone position, or put onto a gurney in the prone position for transport in an awaiting ambulance. During transport and, in some cases, during the restraint process, the individual will suddenly get calm, become unconscious, and go into respiratory arrest and/or cardiac arrest. The media then label the death as “another pepper spray death,” “another TASER death,” or “another restraint death.”

Remember this hypothetical – but typical – scenario is based upon the review of many sudden death incidents which were reported by the police, emergency medical providers, and/or the media. While each situation is unique, tense, rapidly evolving, and uncertain, there are common threads which appear to exist and these have been highlighted. There must also be an understanding that the person who is experiencing this spiral toward sudden death cannot be medically treated until captured, controlled, and restrained.

**Medical Emergency vs. Criminal Act**

Although the individual may have engaged in negative lifestyle choices (i.e., cocaine or “meth” user), (s)he may also have low blood sugar from diabetes, mental health issues, and/or organic brain disease. These generally remain invisible to the responding police and emergency service providers.

When rolling to the scene of bizarre behavior such as described above, it is strongly recommended that both you and your agency develop a new mental approach and philosophy about these situations. While clearly remembering officer safety and survival, consider adopting this new paradigm: Struggling and resistance can indicate a MEDICAL EMERGENCY and not a criminal act.

Many times, a person who is in the process of being restrained will utter, “I can’t breathe.” Most of us believe that, if a person cannot breathe, then (s)he cannot talk, either. However, this may not be the case, as the person being restrained may be experiencing a gas exchange issue in the lungs, meaning, while he appears to be able to breathe, he cannot breathe deeply or rapidly enough to keep pace with the gas and/or chemical changes within the body. Hence, this becomes, and is, a medical issue.

Another medical issue can quickly develop if too many officers are on the person’s back, attempting to hold him on the ground. Here, too, the person may be struggling not to escape the situation, but simply to raise the chest to increase his ability to breathe. Those of you who swim can probably recall the last time you swam underwater with the intent to play a trick on another swimmer. As you approached your friend, (s)he saw you coming and held your head down, stopping you from surprising him or her, and also stopping you from surfacing for air. Your reaction was probably one of panic, because you needed air. This is not unlike a person who is being compressed onto the ground or floor by having too much weight on his (or her) back and then struggles for air.

In summary, remember that struggling and resistance can indicate a medical emergency and not a criminal act. While it may be difficult to distinguish the two, always use appropriate legally permissible force when attempting to capture, control, and restrain the individual.

**Use-of-Force Considerations**

In 1989, the United States Supreme Court held that, when a free person is seized, the Fourth Amendment standard will be applied. The “test” under the Fourth Amendment is objective reasonableness. In short, the Court held that an officer’s actions must be objectively reasonable based upon the totality of the facts and circumstances confronting the officer at the moment the seizure occurs, without regard to the officer’s underlying intent or motivation.

If force is used on a person who is incarcerated and convicted of a crime, the Eighth Amendment standard (cruel and unusual punishment) applies. Of course, the Fourteenth Amendment may also apply to various situations. This latter standard, for our purposes, will usually focus on the denial of medical attention.

Since this is not an article about use of force, suffice it to say that it may be difficult to adequately explain the force used on a naked, profusely sweating person whose only crime was breaking glass and then violently resisted police efforts to be taken into custody. If baton strikes were first used on the resisting person and, later, pepper spray, how can an officer convincingly justify using a generally higher level of force first (batons), and then, when the baton strikes did not work, de-escalate to pepper spray, generally
regarded as a lower level of force?

In Part III, the suggestion will be made to use ECDs sooner, rather than later, to reduce the cumulative stress to the individual and others who are involved in the confrontation. Medical researchers theorize that the sooner a person can be “captured,” the faster physical stress is decreased which may help the person to survive the event. For some officers, this means skipping lower levels of force to use the ECD to quickly and more safely end the struggle.

It is strongly suggested that you read or reread the force continuum article which appeared in the January/February 2006 issue of Police and Security News, and only adopt the language of legal force standards in your policy: For a seized free person, an officer’s use of force must be objectively reasonable based upon the circumstances reasonably perceived by the officer at the moment the seizure occurs. When confronting high risk candidates for a sudden death, officers do not want to survive the encounter to only lose in a civil trial, disciplinary hearing, and/or criminal prosecution.

Summary

While a lot more can be said about the various topics covered, keep in mind the purpose of this series is to educate you in the basics of sudden death, “excited delirium,” behavioral cues, contemporary theories about sudden death, encounter guidelines, jail suicide, and also guidelines for the investigation of sudden and in-custody deaths.

Part II, appearing in the May/June 2006 issue of this magazine, will dispel myths and, in some cases, media created misinformation about the TASER ECDs with facts, while also focusing on sudden death.

Note: This is the first of a five part series about sudden death, “excited” delirium, and jail suicide. In a pioneering, progressive, and cooperative educational venture between Police and Security News and the Institute for the Prevention of In-Custody Deaths, Inc. (IPICD), readers may receive their Basic Certification in this subject after reading Parts I-III; watching two short video vignettes; and completing a short case study via the IPICD Web site (www.ipicd.com or www.incustodydeath.com). Readers who are interested in obtaining Basic Certification in this subject, or administrators who are interested in training their employees via this hybrid educational approach, are urged to E-mail David Berman at staff@ipicd.com for enrollment information.

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