

Overdose/Poisoning/Toxic Ingestion

Medical

CRITERIA

- Signs and symptoms of excited delirium (ExDS) have a median age of 36 years old but occur in all populations from pediatric to geriatric.
- Use of an electronic control device (ECD) such as the Tazer, Oleoresin Capsicum (OC)/Pepper spray, or other less-lethal law enforcement methods to gain control of the patient may have been employed by law enforcement.
- Prior history of psychosis or mental illness.
- Stimulant drug use, including cocaine, methamphetamines (Meth), synthetic drugs and PCP demonstrates a well-established association with ExDS and is usually associated with cases of ExDS death.

PROTOCOL

EMR	Follow General – Universal Patient Care/Initial Patient Contact protocol.	EMR
EMR	Contact Law Enforcement early, scene safety is paramount	EMR
EMR	 Obtain patient history for: Evidence of excited delirium prior to application of ECD, OC spray, or other less-lethal law enforcement methods that may have been used to gain control of the patient. Known or suspected stimulant drug use including but not limited to: cocaine, methamphetamines, synthetic drugs or PCP. Known failure to comply with prescribed medications for mental illness. Cardiac history. Obtain further assessment for: Altered level of consciousness. Evidence of hyperthermia by either touch (hot to touch away from direct sunlight) or tympanic/temporal temperature more than 38.8°C/102°F. Abnormal complaints including: shortness of breath, chest pain, nausea, or headache. Diaphoresis unexplained by environment. Suspected cervical spine or other significant musculoskeletal injury (Immobilize appropriately as soon as it is safe to do so). 	EMR
EMR	 Initial Care: If ECD (Tazer) utilized, prior to patient contact, ensure that the ECD cartridge is not attached to the device. See Procedures - Tazer Barb Removal. Patient should be in supine or lateral recumbent position. DO NOT place patient in prone position. Administer high flow oxygen regardless of pulse oximetry reading. Obtain blood glucose level. 	EMR
*	See Administrative Policies - Patient Restraint.	*
*	See General – Behavioral/Patient Restraint protocol.	*



Overdose/Poisoning/Toxic Ingestion

Medical

*	See Medical – Altered Mental Status Protocol.	*
[I]	 If chemical restraint is required, administer Lorazepam (Ativan) 1mg IV/IM If patient still requires chemical restraint, administer Midazolam (Versed) 5mg IN/IM or 2.5mg IV, then restrain patient. If continued chemical restraint is required, consider Haloperidol (Haldol) 5mg IM 	[I]
A	If patient shows signs of dystonic reaction after Haldol administration, consider <i>Diphenhydramine (Benadryl) 25 mg IM or slow IV/IO</i>	A
MC	Contact Medical Control if patient remains combative	MC
I	If temperature is more than 38.8°C/102°F or patient is hot to the touch, administer Sodium Bicarbonate 50 mEq by mixing in one (1) liter of 0.9% Normal Saline and infuse wide open. In addition, cool hyperthermic patient by use of cool water, Apply ice packs to the axillae, neck and groin, or by removing layers of clothing. Cold fluid may be painful in the conscious patient. If cooled solution is not available, do not withhold administration of normal saline.	I
I	Obtain a 12-Lead ECG, right-sided ECG and 15-lead ECG; pulse oximetry; end-tidal CO2 devices; monitor cardiac and respiratory status throughout transport.	I

PEARLS

- Consider encephalitis or other Central Nervous System (CNS) infections.
- Consider sepsis.
- Excited Delirium is a condition in which a patient is in a psychotic state and extremely agitated. Mentally, the patient is unable to focus and process any rational thought or focus his attention to any one thing. Physically the organs within the patient are functioning at such an excited rate that they begin to shut down. These two factors occurring at the same time cause the patient to act erratically. They become a danger to themselves and to the public. This is typically where law enforcement comes into contact with the patient. Possible causes of excited delirium may include, but are not limited to:
 - Overdose on stimulant (typically cocaine) or hallucinogenic drugs. NOTE: This is the cause in the majority of cases where an ECD is needed.
 - o Drug withdrawal.
 - o Psychiatric patient off medication.
 - o Illness/sepsis.
 - o Low blood sugar.
 - Psychosis/mental illness.
 - o Head trauma.



Overdose/Poisoning/Toxic Ingestion

Medical

PEARLS (cont.)

- Symptoms of excited delirium include:
 - o Bizarre and aggressive behavior.
 - o Dilated pupils.
 - o High body temperature.
 - o Incoherent speech.
 - o Inconsistent breathing patterns.
 - o Fear and panic.
 - o Profuse sweating.
 - o Shivering.
 - Nakedness
- High body temperature is a key finding in predicting a high risk of sudden death. Another key symptom to impending death while experiencing excited delirium is "instant tranquility." This is when the person has been very violent and suddenly becomes quiet and docile.

TABLE 1Potential Prehospital ExDS Features and Frequencies

<u>FEATURE</u>	<u>FREQUENCY</u> <u>% (95% CI)</u>
Pain Tolerance	100 (83-100)
Tachypnea	100 (83-100)
Sweating	95 (75-100)
Agitation	95 (75-100)
Tactile Hyperthermia	95 (75-100)
Police Noncompliance	90 (68-99)
Lack of Tiring	90 (68-90)
Unusual Strength	90 (68-90)
Inappropriately Clothed	70 (45-88)
Mirror/Glass Attraction	10