

Excited Delirium Checklist

Excited delirium or excited delirium syndrome (ExDS) is only one form of potential sudden death that law enforcement officers may encounter. It is considered causal in about 25% of sudden non-firearm ARD (arrest-related-death) cases and present in about 75%.¹ Excited delirium signs are seen in about 4% of violent arrests.²

Other potential causes of unexpected arrest-related deaths (ARDs) include, but are not limited to: SUDEP^{3, 4} (sudden unexpected death in epilepsy), sickle cell exertional sudden death,⁵ various cardiomyopathies,⁶ coronary artery disease, drug induced arrhythmias (including those caused by alcohol^{7, 8} and marijuana⁹⁻¹²), and psychiatric arrhythmias (whether due to schizophrenia¹³ or medications¹⁴).

Present?	Criterion
911 Call – Emergency Contact for Assistance	
	1. Critical call phrases include, “He just freaked out,” “just snapped,” “flipped out,” or a person is “running around naked.” ¹⁵
Law Enforcement	
	2. Agitation, screaming, extreme fear response or panic ¹⁶⁻²¹
	3. Violence, assault, or extreme aggression towards others ^{20, 22-25}
	4. Suspicion of impending death. Typical comments include, “I’m dying,” “Please save me,” “Help me,” or “Don’t kill me” ²⁶ Note: a citizen in, say, a car accident may cry for help but that is not in the context of interfering with help.
	5. Incoherence or disorganized speech. Grunting or animal sounds ^{24, 27} Often described as keening or wailing. ²⁵
	6. Clothing removal inappropriate for ambient temperature or complete nudity. ^{2, 20, 21, 25, 28-30}
	7. Disorientation or hallucinations ^{20, 31-34}
	8. Mania, paranoia, anxiety, or avoidance behavior ^{16, 20, 35-38}
	9. Constant motion or hyperactivity ^{2, 16, 25, 34, 39-41}
	10. Does not respond to police presence. ^{2, 25}
	11. Attracted to bright lights or loud sounds. ²⁵
	12. Attempted self-cooling or hot to touch. ²⁵ Reported behaviors include splashing water on own body, laying down in frigid ditch water, jumping into fountain or pool.
Capture, Control and Restraint of Subject	
	13. Extreme or “super human” strength ^{2, 21, 24, 37}
	14. High threshold of or imperviousness to pain ^{2, 21, 25, 27, 30} Possibly related to high levels of opioid receptors. ⁴²
	15. Extreme stamina ^{43, 2, 27}
	16. Brief quiet period before collapse likely corresponding with respiratory arrest ^{16, 19, 27, 44}

	17. Profuse sweating. ^{2, 25} Often reported as subject so dripping wet with sweat that control was more difficult. Being “hot to the touch” is generally sufficient alone to diagnose ED. ² However, the majority of ED cases are <i>not</i> hot to the touch so do not demand this finding. ²
Emergency Medical Services Contact and Intervention	
	18. Presenting cardiac rhythm of PEA (pulseless electrical activity) or asystole. ^{43, 45-49} Also documented by “No shock advised” with automated external defibrillator (AED) ⁴⁷
Emergency Department	
	19. High core body temperature. ^{17, 18, 21, 24, 35, 50, 51} Note: 95% of ExDS cases will have a core temperature of > 100.6° F but 5% will have normal temperatures. ⁴⁹
	20. Acidemia (acidic blood and typically referred to as acidosis in hospitals) ^{27, 52, 53}
	21. Rhabdomyolysis (if suspect is resuscitated). ^{17, 51, 54}
Law Enforcement/Forensic Investigator Death Investigation	
	22. History of chronic stimulant abuse or mental illness ^{16, 22, 31, 36, 41, 45, 55-60} History of violence or drug related arrests, mental health histories and treatments, and drug rehabilitation interventions, etc. Chronic stimulant abuse is found in 90% of ExDS cases but there is much overlap with mental illness. ⁴⁹
	23. Damage to shiny objects such as glass, mirrors and lights. ^{2, 25, 27} Reported behaviors may include attacking a squad car light bar or charging oncoming traffic at night. Occasionally generalized vandalism.
Pathologist – Medical Examiner Investigation	
	24. Minor injuries from fighting against restraints (e.g. handcuffs, hobbles).
	25. Positive Mash (central nervous system biomarkers) test for dopamine transporter assay, brain toxicology, and heat shock proteins. ^{17, 35, 36, 49, 61-65} Note: the presence of heat shock proteins is not universally accepted as diagnostic. ⁶⁶
	26. Positive brain and hair toxicology screen for chronic stimulant abuse. ^{61, 67-71} Post-incident drug levels may be low to negative.
	27. Myocardial remodeling. ^{72, 73}

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Notes:

A syndrome is an aggregate of signs and symptoms that define a medical condition. Not all persons with a certain syndrome have all the same signs and symptoms. Not all cases of a syndrome result from the same cause. For example, some persons with carpal tunnel syndrome will have numbness and tingling, while others will have weakness and pain. Also, some persons with carpal tunnel syndrome will have it because of trauma, while others will have the syndrome because of pregnancy, diabetes, rheumatoid arthritis or thyroid disease.

Persons with the excited delirium syndrome will have various combinations of some of the signs and symptoms listed above. The cause (etiology) of the excited delirium syndrome in any individual may be due to one or more of a number of conditions. The most common conditions are mental illness and illegal stimulant abuse (especially cocaine and methamphetamine).⁴⁵

Because the term "excited delirium syndrome" has not been widely used until recent years, many physicians do not recognize the term even though they may be very familiar with agitation and deaths due to drugs and other conditions.⁷⁴ It is important to avoid the distraction of the various terms that have been applied to this syndrome. For example, what is now referred to as excited delirium^{16-18, 30, 36, 37, 40, 43-45, 51-54, 57, 62, 63, 75-82} or agitated delirium^{46, 59, 65, 83-127} has also been called: Bell's mania,³⁴ acute exhaustive mania,¹²⁸ acute delirious mania,³⁴ delirium grave,³⁴ typhoma,³⁴ acute delirium,³⁴ manic-depressive exhaustion,²⁸ excited catatonia,¹⁰¹ lethal catatonia,¹²⁹ and neuroleptic malignant syndrome.^{22, 30, 50, 84, 129}

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