2.3 Stimulant Drugs and Excited Delirium
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Learning objectives
At the end of the presentation, participants will be able to:

1. Explain that drugs are only one of numerous aetiologies for excited delirium
2. Describe the different classes of drugs (not only classical stimulant drugs) which may cause excited delirium
3. Recall that that each toxicology laboratory may not assay all the possible drugs that cause excited delirium, or the drugs used for its treatment, and so, each pathologist and coroner should discuss the limitations with their own laboratory.

Abstract
There is a strong association between excited delirium and stimulant drugs, but some cases are caused by unusual bystander mechanisms of non-stimulant drugs (as an example, fentanyl). There is a growing, and forever changing, plethora of designer drugs, in particular, synthetic cannabinoids receptor-agonists which have an association with extreme agitation and so may lead to excited delirium. The treatment of excited delirium is symptomatic, using drugs such as benzodiazepines and ketamine. These drugs, if used incorrectly can have significant and potentially fatal outcomes.

One of the poor prognostic features in excited delirium is “instant tranquillity,” where an individual who has been agitated suddenly becomes quiet and subdued. This may be masked or mimic the concurrent use of the sedative drugs. Therefore, for a full investigation, the toxicology laboratory should offer analysis of the classical stimulant drugs, those drugs which have a bystander effect, the ever-changing New Psychoactive Substances, as well as the sedative drugs (in the case of drug errors). Very few laboratories can offer this full suite of testing so there should be an awareness by the pathologist and coroner of the limitations of any toxicology laboratory and processes in place to ensure appropriate testing.