

Issue date
4 May 2023

Distributed to:

Chief Executives
Directors of Clinical Governance
Director, Regulation and Compliance Unit

Action required by:

Chief Executives
Directors of Clinical Governance
Director Regulation and Compliance Unit

We recommend you also inform:

Directors, Managers and Staff of:

- Drug and Alcohol
- All Service Directors
- Emergency Department
- Intensive Care Unit
- Toxicology units
- Ambulance
- All toxicology Staff

Expert Reference Group

Content reviewed by:

Centre for Alcohol and Other Drugs, NSW Ministry of Health
Standing Panel on Toxicity Risk, NSW Ministry of Health

Clinical Excellence Commission

Tel: 02 9269 5500

[Email](#)
[Internet Website](#)
[Intranet Website](#)

Review date
November 2023

UPDATED: Illicit cocaine containing high levels of lidocaine (lignocaine)

What is updated in this Safety Notice from SN:017/21?

The case data has been updated and review date of the Safety Notice has been extended.

Background

Adulteration of illicit cocaine with lidocaine (lignocaine) remains an ongoing issue in NSW. One further related death has been reported since the last clinician Safety Notice was issued in 2021. Very high blood levels of lidocaine associated with the use of illicit cocaine were detected in this case. Several recent samples of cocaine across NSW have contained high concentrations of lidocaine, often in combination with low cocaine content, which can result in increased re-dosing of the substance. These factors suggest an ongoing risk of further cases of poisoning. Expect variations in purity and contamination with lidocaine (and other substances) in currently circulating illicit drugs.

Clinical manifestations of lidocaine (lignocaine) toxicity

Effects of local anaesthetic poisoning are dose related and develop rapidly after exposure. They include:

- mild to moderate toxicity
 - drowsiness, perioral tingling, numbness, tinnitus, dizziness, anxiety, agitation, hallucination, ataxia, dysarthria
 - tachycardia, hypertension
- severe toxicity
 - tremor, confusion, seizures, coma
 - hypotension, bradycardia, QRS widening, atrial and ventricular dysrhythmias, cardiovascular collapse, cardiac arrest
 - respiratory depression, apnoea
- methaemoglobinaemia has been observed in mild to severe toxicity.

Case management

- Be alert for local anaesthetic toxicity in patients presenting with seizures and cardiac arrest. People who report use of cocaine are at risk.
- Management priorities for severe local anaesthetic toxicity include resuscitation and serum alkalinisation. In addition to following the standard protocol for Advanced Cardiac Life Support, administer a bolus of 100 mmol of 8.4% sodium bicarbonate intravenously in patients with ventricular dysrhythmias or cardiac arrest following cocaine use.
- Key investigations include ECG, blood gas analysis and oxygen saturation.
- Consult early with a clinical toxicologist through the Poisons Information Centre (13 11 26) or local toxicology service for any patient with suspected drug-induced cardiac arrest.
- Further advice regarding [local anaesthetic poisoning](#) is found in eTG Toxicology and Toxicology Guidelines, accessible via [CIAP](#).

Notification

Notify the NSW Poisons Information Centre (13 11 26) or NSW Ministry of Health Toxicity Surveillance (MOH-PRISE@health.nsw.gov.au) of suspected local anaesthetic toxicity from illicit drugs. Please ensure that urine and blood samples are collected and retained.

Required actions for the Local Health Districts/Networks

1. Confirm receipt and distribution of this Safety Notice **within 72 hours** to CEC-MedicationSafety@health.nsw.gov.au.
2. Ensure emergency clinicians are aware of the treatment for local anaesthetic toxicity, and are alert for people who report using cocaine.
3. Consult with the NSW Poisons Information Centre (13 11 26) or local toxicology service for any suspected drug-induced cardiac arrest.