PSYCHOSTIMULANT EARLY INTERVENTION FLOWCHART

Assessment: Confirm use and type of substance, frequency and length of use, mode of administration and time of last use.

ACUTE INTOXICATION PATHWAY

START HERE

IS THE PERSON INTOXICATED?

Features of psychostimulant intoxication:
- Euphoria, excitement, increased confidence
- New or worsening mental health symptoms: anxiety, panic, hallucinations, paranoia
- Hypervigilance, impulsivity
- Agitation, irritability, anger, hostility
- Psychomotor agitation: restlessness, pacing, repetitive movements, tremor
- Rapid, pressured speech
- Flushed cheeks, sweating, dry mouth
- Dilated pupils or sluggish light reflex
- Hypertension, tachycardia
- Decreased appetite and need for sleep
- Hypersexuality, at risk sexual behaviours
- Fresh needle marks

YES → **ACUTE INTOXICATION PATHWAY**

NO → **NO ACUTE INTOXICATION PATHWAY** → See *No Acute Intoxication Pathway* A3 Poster for more details.

Assessment:
DRABC: Danger, **R**esponse, **A**irway **B**reathing, **C**irculation

Needs resuscitation?
- YES → Commence resuscitation, call 000 ambulance / Refer to ED
- NO

Medically unstable?
- YES → Commence resuscitation, call 000 ambulance / Refer to ED
- NO

- BP › 180/120
- Chest pain
- Severe SOB
- Seizure
- Severe headache
- Neurological changes

Serotonin toxicity?
- Temp › 38°C, flushing, sweating
- Tachycardia
- Mydriasis
- Muscle rigidity, shivering, tremor
- Hyperreflexia, ocular clonus, myoclonus
- Altered conscious state (delirium, confusion, disorientation)
- Anxiety

DIFFERENTIAL DIAGNOSES:
Delirium, head trauma, encephalitis, meningitis, metabolic encephalopathy (renal, hepatic, Na, Ca, low BSL), sepsis, seizure / post-ictal, dementia, poly-substance intoxication.

INVESTIGATIONS:
- Full set of physical observations, O_2 saturation
- Neurological examination
- BSL, BAL and UDS
- Urine dipstick testing for haemoglobin / myoglobinuria
- Pathology FBC, E/LFT, Mg, CK, troponin if chest pain
- ECG if chest pain, SOB, low O_2 Sat, hypertension tachycardia
- CT brain if altered conscious state, focal neurological signs, severe headache
- HepC, HepB, HIV if Hx of IV drug use or snorting or STD check

ASSESSMENT – MENTAL AND PHYSICAL

Requires or requests sedation?
- YES → **Continue assessment in a safe area**
- NO

Acute Behavioural Disturbance?

NB: IN MENTAL HEALTH SETTINGS REFER TO:
'Acute behavioural disturbance management (including acute sedation) in Queensland Health Authorised Mental Health Services (adults and children/adolescents)'.

YES → **De-escalation techniques**
- Safety first, ensure back-up
- Try earlier than later
- Do not antagonise
- Listen to concerns
- Be empathic, non-judgemental and respectful
- Acknowledge distress
- Offer help
- Set limits

De-escalation successful?
- YES → **Continue assessment in a safe area**
- NO

Accepts oral sedation?
- YES
- NO

- diazepam 5-20mg oral; or
- lorazepam 1-2mg oral; and/or
- olanzapine 5-10mg oral

May be repeated after 4-6 hours. The level of sedation should ensure that the person is drowsy but rousable!

Enough resources to handle the situation safely?
- YES → **Parenteral sedation** (‹65 years old, organic diagnosis excluded)
- NO → **Secure area, call 000 police**

- Trained and rehearsed team?
- Senior Medical Officer aware?
- Airway and resuscitation equipment available?

Parenteral sedation (‹65 years old, organic diagnosis excluded)

First dose: droperidol 10mg IM
If patient does not settle in 15 minutes:
Second dose: droperidol 10mg IM / IV
NB: Maximum dose of droperidol is 20mg per event
If patient does not settle after another 15 minutes:
Third line agents (‹65 years old) Senior Medical consultation required
- ketamine 4-5mg/kg IM or 1mg/kg IV
- midazolam 5-10mg IM / IV

See Qld Emergency Medicine Guidelines for more detail

PLEASE NOTE:
- Only apply if the patient is a danger to him/herself and/or others, combative, violent, out of control, very anxious and/or agitated.
- Ensure maximum safety. Gather resources first (including security), keep calm, get all staff and equipment ready before commencing.
- IV access preferred if available.
- Use five point restraint, one on each limb and head with team leader for monitoring. Cease as soon as it is no longer required (‹10 minutes).
- Monitor airway, breathing, circulation, consciousness, body alignment.
- Avoid prone position! If essential, should not exceed 2 minutes.
- Monitor Pulse Oximetry and Vital Signs 5 minutely for 20 minutes then every 30 minutes for 2 hours after EACH parenteral sedation.
- Beware O_2 Sat ‹ 95% and Resp rate ‹ 12 or patient appears poorly perfused, T › 38 rising.
- Benztropine 1-2mg IM / IV for Acute Dystonic Reaction.

MEDICAL COMPLICATIONS:

Dehydration or water intoxication: Monitor urine output check serum sodium.

Cardiac chest pain: Use aspirin (avoid if BP › 160), oxygen and sublingual GTN. AVOID BETA BLOCKERS, they can worsen coronary vasoconstriction and AVOID CALCIUM CHANNEL BLOCKERS may trigger seizures.

Hypoglycaemia: Check BSL.

Haematuria / myoglobinuria.

Hypertension: Mostly transient, no specific treatment necessary. In extremes and possible neurovascular pathology use vasodilators: hydralazine, phentolamine or labetolol, NOT BETA BLOCKERS!

Rhabdomyolysis: Check serum potassium, CK and urine for blood. Treat with good hydration, may need dialysis.

Seizures: Use benzodiazepines first then phenobarbitone. DO NOT USE PHENYTOIN IN DRUG INDUCED SEIZURES!

Serotonin toxicity (NB: increased risk if also taking antidepressants and serotoninergic medication): Supportive treatment, IV hydration, benzodiazepines and monitoring; in severe cases active cooling, paralysis and ventilation in ICU.

References: 'Addiction Medicine' Oxford Specialist Handbooks, Latt et al. 2009; 'Guidelines for the acute assessment and management of amphetamine-ltype stimulant intoxication and toxicity' St Vincent's Hospital (Melb.), Nexus, and the VDDI 2014; Management of patients with Acute Severe Behavioural Disturbance in Emergency Departments, NSW Health, August 2015; The DORM Study, Ann Emerg Med 2010;56:392-401.

Developed by Insight Clinical Support Services, July 2016. To download visit **www.insightqld.org/meth-check**

This initiative is part of Queensland Health's response to 'ice' crystal methamphetamine.

Queensland Government