Intoxication Guidelines

Intoxication

Recognition, Assessment and Management of Suspected and Confirmed Intoxication with Opiates and/or Alcohol

Introduction

The following guideline has been produced to aid staff, working at events, concerts or dance festivals, to recognise, assess and immediately manage intoxication of patients who have taken or are under the influence of opiates and/or alcohol.

These guidelines aid the recognition/assessment of altered level of consciousness due to intoxication. They do not detail the medical management of people in an unconscious state which should always be dealt with as a medical emergency- please refer to Paramedical Services Protocols and Clinical Practice Guidelines.

An algorithm of the policy can be found at Appendix 1. Clinical areas at major events or concert medical centres are encouraged to display this algorithm to aid management in an urgent situation.

Definition: Acute Intoxication

This follows the use of psychoactive substances i.e. alcohol/heroin and results in a disturbance of levels of consciousness, impaired cognition, altered perception and behavioural changes and other changes to psycho-physiological functions and responses. This occurs because of the acute pharmacological effect of the substance.

The state of intoxication will resolve in time with complete recovery, however, there are complications/risks associated with the intoxicated state such as trauma, inhalation of vomitus, coma, and if these are not properly managed, may result in longer-term complications or possibly death.

Recognition, Assessment and Management

Recognition/admission

All individuals who present to the event medical centre will be asked about their alcohol and substance use and, if indicated, a more in-depth assessment made. If the individual has been using alcohol/illicit drugs then please see information below for assessment and management. A decision to not treat or activate a jurisdictional ambulance service must not be based on the use of alcohol/illicit drugs. The decision to transport the patient will be based on the clinical assessment of the overall presenting clinical picture.

If a patient has a known problem with alcohol and/or illicit drugs this should alert staff to the possibility that the individual may be intoxicated when presenting with the signs and symptoms. However, individuals without a problem in these areas can also become intoxicated if they use a psychoactive substance(s).

Assessment

Detection of suspected intoxication can be informed by:

- Direct communication - the person informs staff that they have been using alcohol or illicit substances
- Through observation of the person e.g. smells of alcohol, disinhibited behaviour, and slurred speech. An examination of the patient's mental health should systematically aid the detection of the presence of signs indicative of acute intoxication.

(Refer to Appendix 2: boxes1 and 2)

- An alcohol meter may be used to confirm alcohol use (patient compliance allowing) followed by periodic use of an alcohol meter to establish on going alcohol breath level. The reading will give an accurate indication of alcohol breath level (BAC) (see appendix 3).

Note: The use of an alcoholmeter and (where in use) aid the confirmation of alcohol and/or substance use NOT the level of intoxication.

If intoxication is confirmed, or continues to be suspected in a patient who has denied use, the EMT, Paramedic, Intensive Care Paramedic or Nurse should aim to collect the following information:

- Type and amount of substance(s) used and by which route
- Time frame e.g. all at once, over a specific time period, last ingestion/injection
- If not known, the patient's relevant medical history including alcohol and/or substance misuse. Information may need to be gathered from other services/agencies.
- Prescribed and non-prescribed medication used by the patient including amounts taken.

The terms: "Intoxication" and "Intoxicated" within this document relate to both alcohol and drug intoxication

Assessment: Differential Diagnosis

Consideration should always be given as to whether intoxication is the cause of a person's behaviour/signs and symptoms or as to whether there is a differential diagnosis. Refer to appendix with regard to possible other causes for the patient's presentation. (See appendix 4)

Management

1. The primary goal of management of confirmed drug/alcohol intoxication (or suspected drug/alcohol; in cases where no other cause for the patient's presentation has been found) is to ensure the patient's safety whilst the effect of the substance taken remains in the body.
2. The level of intoxication is on a continuum from mild to life threatening.

NB: The EMT, Paramedic, Intensive Care Paramedic or Nurse must always be vigilant to the fact that the level of intoxication may continue to rise after cessation of use (for a specific time-frame based on the substance[s] taken and when last taken). Therefore monitoring will be required over a period of time. In the case of alcohol, an accurate indication of a rise or fall in levels can be ascertained by regular testing using the alcoholmeter. (See appendix 3).

3. If concerns are raised due to the patient presenting with complications of intoxication, for example, trauma, marked perceptual distortion, altered states of consciousness and/or an acute confusion **then jurisdictional ambulance services assistance may be sought.** The urgency will be informed by the presentation of and the observation of the patient. For example when a patient is experiencing a seizure, an emergency ambulance may need to be summoned immediately and physical health intervention commenced (see appendix 1)

Attention must be given to consciousness levels and it is vital that this is assessed accurately as a decreased level of consciousness can occur in intoxication. It is important that the remaining observations be completed.

The Paramedical Services attending practitioners assessment of consciousness levels uses the AVPU scale; if a patient registers V needing a loud voice or P when only responding to pain **then additional assistance should be considered** (obviously if the patient registers as U-unconscious then this will be dealt as a medical emergency).

The patient must be informed that they will be regularly monitored to ensure their safety and that this includes their level of consciousness/alertness, therefore, if they are going to sleep, they will need to be woken up as dictated by monitoring requirements so that assessment can take place.

Monitoring requirements will be informed by the individuals presenting condition, however, as a minimum these must be carried out half hourly initially and then hourly until it is confirmed by clinical judgement, aided by the alcoholmeter in the case of alcohol use that the level of intoxication has reduced to safe levels.

Monitoring and management requirements must be informed by presenting condition of the patient. However, to aid clarity a jurisdictional ambulance transport may be sought in the following circumstances:

- When there are concerns with regard to complications of intoxication, for example, trauma, marked perceptual distortion, loss of/reduction in consciousness, fits, acute confusion.
- Treatment needed for psychiatric disorder or extreme agitation or aggressive behaviour

Where there has been a need to seek additional assistance a joint decision between the attending medical/paramedical team must be reached as to future management and monitoring requirements.

The agreed plan of care must be documented. Judgement will be informed by the type and amount of substance(s) used, the presenting picture, individual characteristics and the predicted outcome with treatment. Extra vigilance will be required if the patient has a known medical condition that increases the seriousness of intoxication e.g. brain injury, liver disease

Presence of potential increased risk factors associated with alcohol/illicit drug use which also require extra vigilance e.g.

- Injecting substances e.g. heroin (the injecting of a drug makes it most pharmacologically accessible and hence an increased risk).
- Low tolerance, or lowered tolerance through periods of abstinence and returning immediately to levels of previous use. For example, people recently released from prison, patients prevented from using substances for a period due to hospital admission. See appendix 5 for information on tolerance.
- A history of using alcohol/illicit drugs and now prescribed concurrent drugs that depress the central nervous system e.g. methadone, benzodiazepines. Benzodiazepines can cause respiratory depression and this effect can be more potent when combined with alcohol.

4. Patients who fall asleep represent a significantly increased risk. Pallor and changes in respiration can go unnoticed, normal snoring may mask a compromised airway. Risk of aspiration due to vomiting increases. Responsiveness cannot be checked unless you wake the patient

5. Paramedic staff need to respond to their observations, this cannot always be planned for and they therefore need to act according to their training and exercise their accountability in a timely way for patient's best interest.

6. If it is deemed a medical emergency e.g. cardiac arrest, then local emergency procedures must be initiated **immediately – If in doubt initiate!**

Prescribed Medication

If the patient is intoxicated with illicit drugs or alcohol then omit prescribed medication until next dose or patient not intoxicated, unless there are potential contraindications for doing so. Medical advice can be sought if required. Please see appendix 6 for information on the potential interactions between illicit drugs, alcohol and prescribed medication.

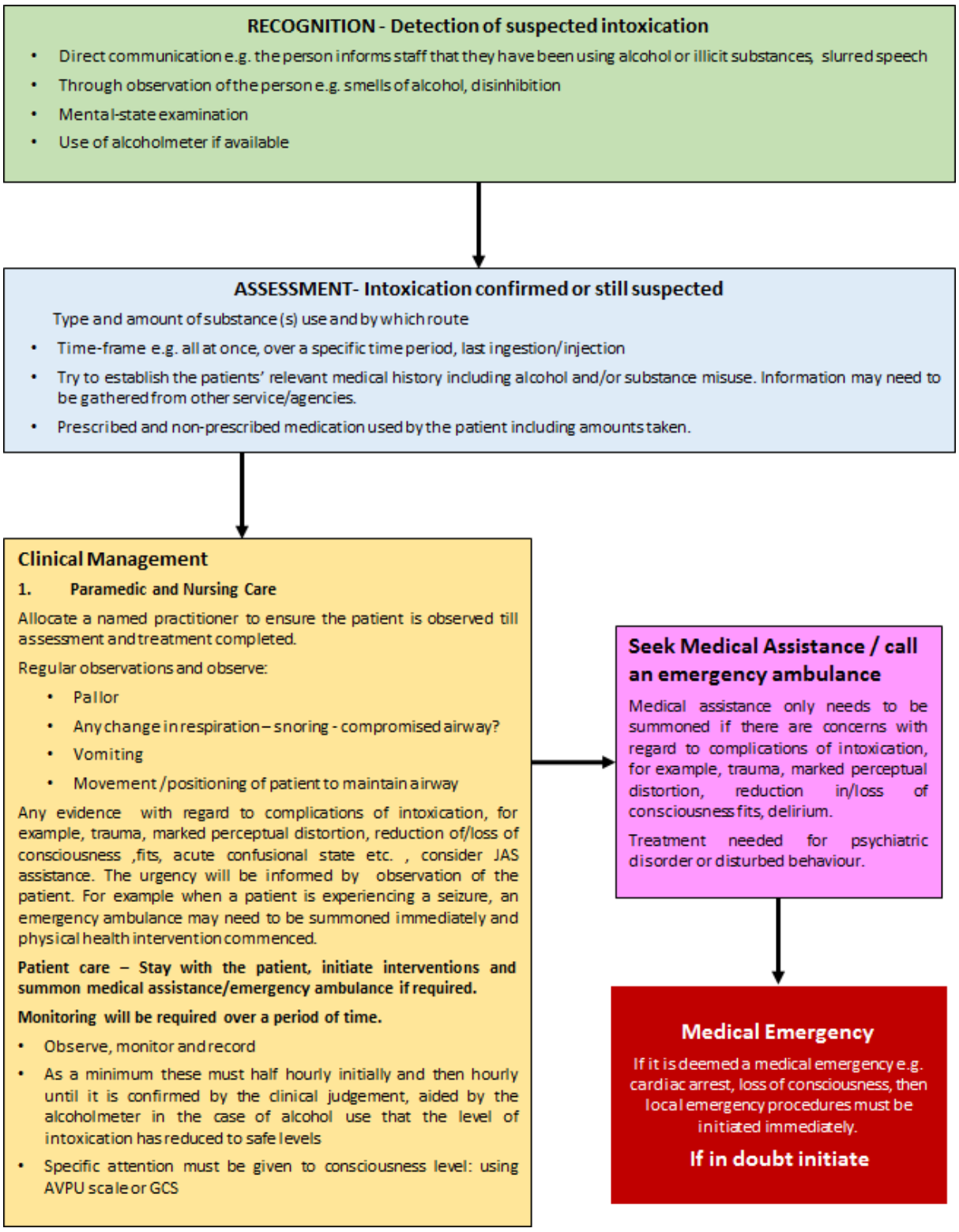
Documentation and Post-incident Management

If the patient has a recent or suspected history of intoxication then a care plan must be developed with the service user that aims to deal effectively with the person's alcohol/substance misuse problem(s) during the course of the event, concert or festival.

Records of the incident, especially monitoring information and treatment must be kept contemporaneously. The Event Medical Supervisor must be informed of the incident and a discussion between the team and the service user as to future management agreed. Education about the dangers of intoxication and the dangers surrounding the use of psychoactive substances e.g. effect of tolerance on use, must be given in a supportive manner.

APPENDIX 1

Algorithm: Recognition, Assessment and Management of Intoxication



Appendix 2 Acute Intoxication Due To Alcohol and Opiates

BOX 1

Acute Intoxication Due To Alcohol

Range of Dysfunctional behaviour that may be present

- Disinhibition
- Argumentativeness
- Aggression
- Lability of mood
- Impaired attention
- Impaired judgement
- Interference with personal functioning

Range of signs that may be present

- Smelling of alcohol
- Unsteady gait
- Difficulty in standing
- Slurred speech
- Nystagmus
- Decreased level of consciousness e.g. stupor, coma
- Flushed face
- Conjunctival infection

BOX 2

Acute Intoxication Due To Use of Opioids

Range of dysfunctional behaviour that may be present

- Apathy and sedation
- Disinhibition
- Psychomotor retardation
- Impaired attention
- Impaired judgement
- Interference with personal functioning

Range of signs that may be present

- Drowsiness
- Slurred speech
- Pupillary constriction (exception: pupillary dilation may occur after severe overdose due to anoxia)
- Decreased level of consciousness e.g. stupor, coma

Appendix 3

Use of Alcoholmeter

Following consumption of alcohol it is important that a period of at least twenty minutes has elapsed since the patient's last drink before using the alcoholmeter due to the possibility of residual alcohol left in the mouth giving a high reading (although a period of 20 minutes is normally allowed after the last alcohol intake for the dispersal of mouth alcohol, this period is, in fact quite generous since 90% is gone within only 8 minutes)

The use of the alcoholmeter will be useful in monitoring the progress of the episode. It should not be used as a diagnostic tool other than to confirm that alcohol is present. Do not assume that a positive reading is the cause of the patient's presenting signs or symptoms. Consider the full clinical presentation and possibility of differential diagnosis (Appendix 4).

The alcoholmeter should be administered every 30 minutes until such times as 2 consecutive readings have shown a reduction.

The reading is an indication of use or non-use of alcohol and not an accurate level of intoxication. The relationship between the alcohol level reading and intoxication will be patient specific, for example, it will be influenced by the patient history of alcohol use. A BAC of 0.05% (point 0 five) means that there is 0.05g of alcohol in every 100ml of blood.

This is the legal limit for driving in Australia. To avoid a driving under the influence conviction your BAC must be under 0.05%.

Intoxication Guidelines

For guidance only the chart below gives an indication of the alcohol concentration to stage of alcohol influence in normal social drinkers:

BAC (breath alcohol concentration)-mg/l	Stage of influence	Symptoms
0-0.20	Sobriety	No obvious effect for the person, may be more talkative and have a general feeling of wellbeing
0.15-0.50	Euphoria	Increased self-confidence and decreased inhibition. Loss of attention, judgement and control by decrease in coordination and sensory perception.
0.40-1.00	Excitement	Emotional instability and loss of initial judgement. Decreased perception and coordination (hence staggering gait). Increased reaction time, possible nausea and/or desire to lie down.
0.70-1.20	Confusion	Disorientation, mental confusion and dizziness. Exaggerated fear, anger and grief. Loss of perceptions of colour, form, motions and dimensions. Decreased pain sense. Impaired balance and slurred speech. Possibly coma.
1.10-1.60	Stupor	Apathy, general inertia, approaching paralysis. Marked lack of response to stimuli, inability to stand or walk. Vomiting, incontinence of urine and faeces. Coma, sleep or stupor.
1.50-2.00	Coma	Coma and anaesthesia. Depressed or abolished reflexes. Hypothermia. Impaired circulation and respiration. Possible death.
1.90-+	Death	Death from respiratory paralysis.

Appendix 4: Differential Diagnosis

Ensure that the symptoms are not due to a general medical condition and are not better accounted for by another mental disorder.

Factors in differential diagnosis of altered mental status in an acutely intoxicated patient

Toxic

- Ethanol intoxication
- Other psychoactive drugs (e.g., tetrahydrocannabinol, cocaine, opiates)
- Disulfiram (Antabuse) reactions, disulfiram-like reactions

Metabolic

- Hepatic encephalopathy
- Hypoglycaemia (alcohol-induced)
- Electrolyte abnormalities (hypernatremia, hyponatremia)
- Hypoxia secondary to aspiration or depression of respiratory drive

Infectious disease

- Sepsis
- Meningitis
- Encephalitis

Neurologic

- Alcohol withdrawal or alcohol hallucinosis
- Post-ictal state
- Wernicke-Korsakoff syndrome
- Cerebrovascular accident

Miscellaneous

- Hypotension (due to dehydration, vomiting, haemorrhage)
- Hypothermia

Trauma

- Closed head injuries (e.g., intracranial bleeding, concussion syndromes)

Appendix 5

Tolerance

Tolerance means that after continued use, consumption of a constant amount of alcohol/drug produces a lesser effect or increasing amounts of alcohol/drug are necessary to produce the same effect.

If a person has a period of time, where they are not taking the substance then their tolerance levels will drop. This could be problematic, if for example, a patient has been restricted to the ward for an extended period and then uses drugs or alcohol when at liberty to do so. If they consume the substance at their previous level of use, the effects of the substance on the person will be far greater than expected.

Appendix 6

Interactions between Illicit Drugs and Prescribed Medication

Information about interactions between illicit drugs / alcohol and prescribed psychotropic medication is poor so always err on the side of caution. In practice, individual assessment and monitoring is required, since it is not possible to predict precisely the nature and degree of interactions

General considerations

- Purity of drug illicit drug – most illicit drugs are diluted with other substances, so the amount / effect of the actual drug may vary and also the possible impact of the substance used to dilute the drug may also vary.
- Poly-drug use – some users may use a combination of drugs to achieve a desired effect which will increase risks.
- Street drugs and prescribed drugs may not be used on a regular basis and amounts/doses taken may fluctuate and effects be unpredictable
- Some street drugs, like crack cocaine, are very short acting, so if there was a drug interaction it might be transient. Ask when the drug was taken and assess according to the drug half-life (duration of action).
- Physical health – injecting drug users are at higher risk of hepatitis A/B/C infection that may affect the metabolism of prescribed medication.
- Street drugs have dose related cardiac effects which may be exacerbated by prescribed medication, as well as having additive sedative properties.
- If the prescribed medication has a narrow therapeutic range then the impact of the interaction may be greater e.g. phenytoin. Dehydration due to alcohol use may result in lithium toxicity.

Prescribing during acute behavioural disturbance due to intoxication

- Non-drug management is preferable
- Try to avoid benzodiazepines
- If an antipsychotic is unavoidable consider Sulpiride (Dogmatil) or Olanzapine (Zyprexa)

Monitoring

Particular attention should be paid to respiratory and cardiac monitoring when prescribed and illicit drugs have been used together.