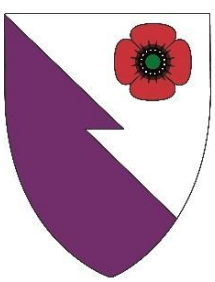
The Royal College of Emergency Medicine

Best Practice Guideline

Drug Misuse and the Emergency Department



May 2019

Contents

Summary of recommendations

1. Patients attending the Emergency Department (ED) with presentations that might possibly be related to drug use, or may be a marker for drug use, should be asked about this as part of their clinical assessment.

2. Patients with known mental illness or presenting with mental health problems (e.g. overdose) should be asked about illicit drug use, particularly those with psychosis.

3. Young people / adolescents should be asked about illicit drug use in a manner and environment that supports disclosure.

4. Patients presenting with a drug misuse issue or who are known to use illicit drugs should receive written advice signposting them to a drug service.

5. Use of Mental Health Liaison teams or alcohol liaison nurses to provide advice and support for patients whilst in the ED is encouraged if resource allows.

6. Brief interventions in the ED for illicit drug use are of unproven benefit and not currently recommended.

7. Drug detoxification should not be undertaken by the ED, but clinicians should know how to treat acute intoxication or withdrawal.

8. EDs are recommended to have clear guidance in place with regard to patients requesting drug detoxification, methadone and any short-term interventions the ED may or may not be involved with for example supply of benzodiazepines or buprenorphine for withdrawal symptoms.

9. EDs are recommended to have links to the local substance misuse service either via an Alcohol nurse, Drug and Alcohol Liaison Team (DALT) or mental health liaison service, to refer new patients but also to confirm existing maintenance prescriptions which can usually be done via pharmacists contacting community dispensing pharmacies [10]. Urine toxicology screens are not recommended; they are expensive, prone to misleading results and rarely influence immediate management decisions.

10. Consider reporting any adverse reactions to Novel Psychoactive Substances (NPS) to the RIDR scheme "Reporting Illicit Drug Reactions" on the Public Health England website.

11. All drug related deaths should be reported to the coroner.

Scope

Substance misuse or drug misuse or illicit drug use is responsible for a significant number of ED attendances as well as being responsible for a significant of deaths annually. The aim of this guidance is to provide recommendations for the ED management of patients who potentially misuse drugs. The scope of the guidance includes young adults (ages-16 and over), not children and does not relate to alcohol (see other guidance).

Reason for development

EDs are encouraged to screen for and provide brief interventions for alcohol misuse, however this approach has not been formally recommended for substance misuse. It is not an uncommon ED scenario to find that when reviewing the death of a patient due to illicit drug use, there have been multiple prior attendances to the ED with drug related problems prior to the patient's death. The aim of the guidance is to provide recommendations for clinicians with regard patients who potentially misuse drugs.

Introduction

Substance abuse or drug misuse may formally be defined as the continued misuse of any mind-altering substance that severely affects person's physical and mental health, social situation and responsibilities. Alcohol dependence is the most common form of substance misuse, but any drug, including heroin, cocaine, crack and cannabis, comes into this category, as does the misuse of glue and aerosols (1).

In 2016 there were 2,593 registered deaths in England and Wales related to drug misuse. This is an increase of 5 per cent on 2015 and 58 per cent higher than 2006.

Deaths related to drug misuse are at their highest level since comparable records began in 1993. There were 7,545 hospital admissions with a primary diagnosis of drug-related mental health and behavioural disorders. This is 12 per cent lower than 2015/16 but 12 per cent higher than 2006/07.

In 2016/17, around 1 in 12 (8.5 per cent) adults aged 16 to 59 in England and Wales had taken an illicit drug in the last year (2).

Attendances to EDs due to drug misuse are difficult to estimate, however one study at an inner-city ED estimated that illegal or illicit drug use accounted for 6.9% of attendances (3) and recent data has shown marked regional variation in deaths due to drugs (4).

Table 1 (overleaf) shows drug usage by age group and type (5), however it should be noted that recent concern has focussed on drug use in the older (>60yrs) population group (6).

Table 1. Proportion of Adults reporting drug use

	16-24yrs	16-59yrs
Any drug (Class A, B, C)	19.8%	9.0%
Class A Drug	8.4%	3.5%
Cocaine	6.0%	2.7%
Amphetamine	1.5%	0.5%
Ecstasy	5.1%	1.7%
Cannabis	16.7%	7.2%

The harms associated with illicit drug use include; withdrawal, bloodborne virus infections, accidental overdose, interactions with prescribed drugs as well as respiratory, hepatic, cardiovascular diseases and cancer. Substance abuse increases the risk of other behaviours e.g. self-harm, self-neglect, abuse or exploitation by others, accidental injury. High risk groups include patients with mental illness as well as prisoners.

Considerations

NICE recommendations

In accordance with NICE recommendations (7) consider asking young people about recent drug use if they have symptoms that suggest the possibility of drug misuse, such as: acute chest pain in a young person, acute psychosis, mood and sleep disorders or if they present as a direct result of illicit drug ingestion. Screening adolescent attendances may be appropriate in some situations (Appendix 2).

Patients with known or suspected psychosis, should be asked about illicit drug use (8). Patients should be asked:

-**D**uration of use
-**R**oute of administration
-**U**sing which drug(s)
-**G**rams- how much, how often

Refer patients

Refer patients with known or suspected substance misuse who are suspected of having coexisting psychosis to mental health services or child and adolescent mental health services for assessment and further management.

Medical history

A standard medical history for ED attenders should include a drug history and enquiry about any illicit drug use if the patient or presenting condition is deemed 'at risk' (box 1).

It is important that questions regarding illicit drug use are asked in a non-judgemental manner and in an environment that promotes disclosure particularly when dealing with young people and adolescents. It may, in certain circumstances, be appropriate to discuss the issue of illicit drug use with a patient's guardian if sufficient concern exists.

Illicit drug screening questions

Specific illicit drug screening questions have been proposed for the ED setting and notably emphasise the need to concentrate on problematic drug use and potentially not use ED resource for those whose only illicit drug use is cannabis (9).

Written information

Patients presenting to the ED with drug misuse or are found, on history taking, to admit to drug misuse should receive written information regarding local substance misuse support programmes.

Existing resources

EDs are encouraged to utilise any existing resources to help promote prevention of drug misuse e.g. use of the mental health liaison team or alcohol liaison nurse service, where the expertise exists.

Box 1 Patient groups / presenting complaints to consider specifically asking about drug use

Patient Groups	Presenting Conditions
Students	Attendance directly related to drug ingestion
Adolescents	Alcohol intoxication
	Mental health presentations
	Road traffic collisions

Unlike alcohol screening and brief interventions, the evidence base to support this for drug misuse in the ED is currently lacking (10,11,12) and given the time resource required (13) it cannot currently be recommended adopted practise for all EDs.

Defining the degree of dependency

Various scales exist for defining the degree of dependency, for an example, see appendix 3; the utility of these in the ED setting is not known.

Drug detoxification services

Drug detoxification services are not part of core ED activity, but clinicians should be competent to treat acute intoxication or acute withdrawal symptoms.

Clear guidance

EDs are recommended to have clear guidance in place regarding patients requesting drug detoxification, methadone and any short-term interventions the ED may or may not be involved with, for example, supply of benzodiazepines or buprenorphine for withdrawal symptoms.

Clinical examination

Clinical examination for signs of drug use e.g. injection sites as well as using drug specific withdrawal scales may help to determine the extent of drug use (Appendix 4) if there are concerns about the veracity of requests for controlled drugs.

Checking a patient's prescribed dose

EDs should be able to access methadone for patients who need this acutely. Clinicians should check a patient's prescribed dose with the patient's dispensing chemist where possible, but if this is not possible, it should not prevent methadone administration after discussion with a senior clinician.

Local substance misuse service

EDs are recommended to have links with the local substance misuse service either via an Alcohol nurse, Drug and alcohol Liaison Team (DALT) or mental health liaison service, to refer new patients but also to confirm existing maintenance prescriptions which can usually be done via pharmacists contacting community dispensing pharmacies.

The use of urine toxicology screens

The use of urine toxicology screens in the ED is expensive and does not often change management. Their use should be restricted to times when knowledge of what a patient has taken actually guides management e.g. an unconscious patient.

Toxicology screens are very sensitive and remain positive for several days after drug ingestion which means that a positive result may actually be irrelevant to that presentation of the patient.

Reporting illicit drug reactions

For any patient presenting to the ED with harm related to ingestion of a Novel Psychoactive Substance (NPS), or any substance of unknown aetiology, consider reporting the harm confidentially to the RIDR (Reporting Illicit Drug Reactions) scheme. RIDR is a UK-wide system for reporting the effects of NPS in a similar way to how adverse effects of pharmaceutical drugs are reported using the MHRA's Yellow Card Scheme.

A NPS clinical network (consisting of clinicians, other front-line experts and policy makers from around the UK) has been established to regularly analyse the data coming from this

reporting system and other existing drugs intelligence systems, to identify patterns of harms/symptoms, and agree appropriate clinical responses to help emergency physicians and others manage these patients (Appendix 6).

Coroner

All drug related deaths should be reported to the coroner, these may be classed as 'unnatural' or 'suspicious'. The Office of National Statistics (ONS) believes that Public Health England (PHE), the Chief Coroner and the Coroners' Society should work together to promote the value of coroners' records as a source of information, which can help to prevent future deaths (14).

About this document

Authors

James France, Catherine Hayhurst, Sarah Elise Finlay

Acknowledgements

Mark Vardy

Review

Usually within three years or sooner if important information becomes available.

Conflicts of Interest

None.

Disclaimers

RCEM recognises that patients, their situations, Emergency Departments and staff all vary. This guideline cannot cover all possible scenarios. The ultimate responsibility for the interpretation and application of this guideline, the use of current information and a patient's overall care and wellbeing resides with the treating clinician.

Research Recommendations

ED prevalence surveys of drug misuse.
Impact of RAID model on drug misuse attendances in the ED.
Initiation of drugs in the ED to prevent withdrawal syndromes.

Audit standards

There should be a documentation and audit system in place within a system of clinical governance.

Key words for search

Drug misuse, substance misuse, illicit drugs

Appendix 1

Methodology

Where possible, appropriate evidence has been sought and appraised using standard appraisal methods. High quality evidence is not always available to inform recommendations. Best Practice Guidelines rely heavily on the consensus of senior emergency physicians and invited experts.

Evidence Levels

1. Evidence from at least one systematic review of multiple well-designed randomised control trials
2. Evidence from at least one published properly designed randomised control trials of appropriate size and setting
3. Evidence from well-designed trials without randomisation, single group pre/post, cohort, time series or matched case control studies
4. Evidence from well-designed non experimental studies from more than one centre or research group
5. Opinions, respected authority, clinical evidence, descriptive studies or consensus reports.

Appendix 2

Example of an adolescent screening tool -CRAFFT Questionnaire (15)

C Have you ever ridden in a **CAR** driven by someone (including yourself) who was 'high' or had been using alcohol or drugs?
R Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?
A Do you ever use alcohol or drugs while you are by yourself, **ALONE**?
F Do you ever **FORGET** things you did while using alcohol or drugs?
F Do your family or **FRIENDS** ever tell you that you should cut down in your drinking or drug use
T Have you gotten into **TROUBLE** while you were using alcohol or drugs?

Appendix 3

Example of definition of severity of substance misuse disorder – the DSM 5 Criteria for Substance Use Disorders (16, 17)

The DSM 5 recognizes substance-related disorders resulting from the use of 10 separate classes of drugs: alcohol; caffeine; cannabis; hallucinogens (phencyclidine or similarly acting arylcyclohexylamines, and other hallucinogens, such as LSD); inhalants; opioids; sedatives, hypnotics, or anxiolytics; stimulants (including amphetamine-type substances, cocaine, and other stimulants); tobacco; and other or unknown substances.
A problematic pattern of use leading to clinically significant impairment or distress is manifested by two or more of the following within a 12-month period:

1. Often taken in larger amounts or over a longer period than was intended.
2. A persistent desire or unsuccessful efforts to cut down or control use.
3. A great deal of time is spent in activities necessary to obtain, use, or recover from the substance's effects.
4. Craving or a strong desire or urge to use the substance.
5. Recurrent use resulting in a failure to fulfil major role obligations at work, school, or home.
6. Continued use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by its effects.
7. Important social, occupational, or recreational activities are given up or reduced because of use.
8. Recurrent use in situations in which it is physically hazardous.
9. Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
10. Tolerance.
11. Withdrawal.

Severity

Alcohol and drug symptom profiles appear to vary along a severity dimension. DSM-5 severity specifiers mild, moderate, and severe are based on the number of diagnostic criteria met by the patient at the time of diagnosis:

- Mild – Two to three criteria
- Moderate – Four to five criteria
- Severe – Six or more criteria

Appendix 4

Clinical Opioid withdrawal Scale (18)

For each item, circle the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

Patient's Name:_____ Date and Time ____/____/____:_____

Reason for this assessment:_____

Resting Pulse Rate: _____beats/minute *Measured after patient is sitting or lying for one minute* 0 pulse rate 80 or below 1 pulse rate 81-100 2 pulse rate 101-120 4 pulse rate greater than 120	**GI Upset**: *over last 1/2 hour* 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 multiple episodes of diarrhea or vomiting
Sweating: *over past 1/2 hour not accounted for by room temperature or patient activity.* 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face	**Tremor** *observation of outstretched hands* 0 no tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching
Restlessness *Observation during assessment* 0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 unable to sit still for more than a few seconds	**Yawning** *Observation during assessment* 0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute
Pupil size 0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible	**Anxiety or Irritability** 0 none 1 patient reports increasing irritability or anxiousness 2 patient obviously irritable or anxious 4 patient so irritable or anxious that participation in the assessment is difficult
Bone or Joint aches *If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored* 0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort	**Gooseflesh skin** 0 skin is smooth 3 piloerrection of skin can be felt or hairs standing up on arms 5 prominent piloerrection
Runny nose or tearing *Not accounted for by cold symptoms or allergies* 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks	Total Score _____ The total score is the sum of all 11 items Initials of person completing assessment: _____

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

This version may be copied and used clinically.

Appendix 5

Drug Classification (5)

A	Cocaine Ecstasy Hallucinogens (LSD, Magic mushrooms) Opiates
A/B	Amphetamine / Metamphetamine
B	Cannabis Ketamine Mephedrone
B/C	Tranquillisers
C	Anabolic Steroids

New Psychoactive substances (NPS) (19)
New psychoactive substances (NPS) are drugs which were designed to replicate the effects of illegal substances like cannabis, cocaine and ecstasy whilst remaining legal – hence their previous name 'legal highs'.
NPS began to appear in the UK drug scene around 2008/09. They fall into four main categories:

Synthetic cannabinoids – these drugs mimic cannabis and are traded under such names as Clockwork Orange, Black Mamba, Spice and Exodus Damnation. They bear no relation to the cannabis plant except that the chemicals which are blended into the base plant matter act on the brain in a similar way to cannabis.

Stimulant-type drugs – these drugs mimic substances such as amphetamine, cocaine and ecstasy and include BZP, mephedrone, MPDV, NRG-1, Benzo Fury, MDAI, ethylphenidate.
'Downer'/tranquiliser-type drugs – these drugs mimic tranquiliser or anti-anxiety drugs, in particular from the benzodiazepine family and include Etizolam, Pyrazolam and Flubromazepam.

Hallucinogenic drugs – these drugs mimic substances like LSD and include 25i-NBOMe, Bromo-Dragonfly and the more ketamine-like methoxetamine.
While many of these drugs were once legal, with the advent of the Psychoactive Substances Act 2016 it is now illegal to produce, supply, or import them for human consumption – including for personal use. Possession for personal use is not an offence, unless in prison.

Appendix 6

Reporting Illicit Drug Reactions
https://report-illicit-drug-reaction.phe.gov.uk

Report and treat emerging drug health harms

REPORT	TREAT
✓ Report the new and unusual adverse illicit drug reactions that you encounter quickly online: report-illicit-drug-reaction.phe.gov.uk/	✓ Get an up-to-date headline summary of the latest clinical messages and intelligence on new psychoactive substances (NPS) and other drug health harms: report-illicit-drug-reaction.phe.gov.uk/latest-information/

Reporting Illicit Drug Reactions (RIDR) is a national system for reporting adverse illicit drug reactions being piloted by PHE with Medicines and Healthcare products Regulatory Agency (MHRA). RIDR aims to reduce the length of time between drug-related health harms emerging and developing effective treatment responses.

Get in contact: ridr@phe.gov.uk

Public Health England

Protecting and improving the nation's health

Improving knowledge/treatment of NPS

A new online system called Report Illicit Drug Reaction (RIDR) has been launched to improve the knowledge and treatment of new psychoactive substances (NPS)

Last year, one in 40 young adults aged 16-24 took a NPS. Evidence also suggests widespread use among prisoners and homeless people

About RIDR:

- Online national system developed by PHE and MHRA
- Accessible to all front-line health staff
- Monitors the negative effects of NPS
- Shares best treatment responses across A&E, sexual & mental health clinics, prisons, GP surgeries etc to improve patient safety

References

1) Mental Health Foundation. *Drugs and Mental Health*. Available from: https://www.mentalhealth.org.uk/a-to-z/d/drugs-and-mental-health [Accessed 13 August 2018].

2) NHS Digital. *Statistics on Drugs Misuse: England, 2018*. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-drug-misuse/2018. [Accessed 13 August 2018].

3) Binks, S et al. *Prevalence and healthcare burden of illegal drug use among emergency department patients*. *Emergency Medicine Journal*. 2005. 22:872–873. Available from: doi: 10.1136/emj.2004.022665.

4) Office of National Statistics. *Deaths related to drug poisoning in England and Wales: 2017 registrations*. Statistical Bulletin. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsrelatedtodrugpoisoninginenglandandwales/2017registrations [Accessed 6 August 2018].

5) GOV.UK. Drug Misuse. *Findings from the 2017/18 Crime Survey for England and Wales.* Statistical Bulletin. Available from: https://www.gov.uk/government/statistics/drug-misuse-findings-from-the-2017-to-2018-csew [Accessed 2 July 2018].

6) Rao, R, Roche A. *Substance misuse in older people. Baby boomers are the population at highest risk*. *British Medical Journal* 2017. 358; j3885: 1-3. Available from: doi: 10.1136/bmj.j3885.

7) National Institute for Health and Care Excellence. Drugs misuse management in over 16s overview. Available from: http://pathways.nice.org.uk/pathways/drug-misuse-management-in-over-16s. [Accessed 13 August 2018].

8) *Kendall T et al. Assessment and management of psychosis with coexisting substance misuse: summary of NICE guidance. British Medical Journal 2011.* 342; d1351: 1-3. Available from: doi:10.1136/bmj.d1351.

9) Konstantopoulos WLM et al. *Identifying Patients with Problematic Drug Use in the Emergency Department: Results of a Multisite* Study. *Ann Emerg Med.* 2014; 64(5): 517-525. Available from: doi:10.1016/j.annemergmed.2014.05.012.

10) European Monitoring Centre for Drugs and Drug Addiction. *Emergency department-based brief interventions for individuals with substance-related problems: a review of effectiveness.* Available from: http://www.emcdda.europa.eu/publications/papers/2016/emergency-department-based-brief-interventions_en. [Accessed 13 August 2018].

11) Michael P. Bogenschutz, MP et al. *Brief Intervention for Drug Users Presenting in Emergency Departments. JAMA Intern Med.* 2014;174(11): 1736–1745. Available from: doi: 10.1001/jamainternmed.2014.4052.

12) Hawk, K and D'Onofrio, G . *Emergency department screening and interventions for substance use disorders. Addict Sci Clin Pract*. 2018;13 (1). Available from: doi: 10.1186/s13722-018-0117-1.

13) Patston LLM, Travers KA, Newcombe DAL. *The Acceptability and Feasibility of Screening for Alcohol and Drug Misuse in a Hospital Emergency Department*. *Addict Disord Their Treatment*. 2017;16(3): 111–120). Available from: doi: 10.1097/ADT.0000000000000108.

14) Office of National Statistics. *Drug-related deaths "deep dive" into coroners' records*. Statistics Bulletin. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/drugrelateddeathsdeepdiveintocoronersrecords/2018-08-06 [Accessed 6 August 2018].

15) The Royal College of Psychiatrists. *Practice standards for young people with substance misuse problems.* London: CCQI 127; 2012.

16) Verywell Mind. *5 criteria for substance use disorders*. Available from: https://www.verywellmind.com/dsm-5-criteria-for-substance-use-disorders-21926 [Accessed 13 August 2018].

17) American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Arlington: American Psychiatric Association; 2013.

18) Wesson DR, Ling W. The Clinical Opiate Withdrawal Scale (COWS). *J Psychoactive Drugs*. 2003; 35(2): 253-259.

19) DrugWise. *New Psychoactive Substances.* Available from: http://www.drugwise.org.uk/new-psychoactive-substances [Accessed 15 August 2018].

The Royal College of Emergency Medicine

The Royal College of Emergency Medicine
7-9 Breams Buildings
London
EC4A 1DT
Tel: +44 (0)20 7400 1999
Fax: +44 (0)20 7067 1267
www.rcem.ac.uk

Incorporated by Royal Charter, 2008
Registered Charity number 1122689

Excellence in Emergency Care