Guidance for the pharmacological management of substance misuse among young people in secure environments
**Document purpose** | Best Practice Guidance  
---|---  
**Gateway reference** | 11189  
**Title** | Guidance for the pharmacological management of substance misuse among young people in secure environments  
**Author** | Dr Eilish Gilvarry and Ms Jill Britton  
**Publication date** | 20 Mar 2009  
**Target audience** | Primary Care Trusts Prison Health Leads, Senior Medical Practitioner in Young Offender Institutions and Secure Training Centres, Doctors Providing Services to Local Authority Secure Children’s Homes  
**Circulation list** | PCT CEs, Youth Offender Institutions, Secure Training Centres, Local Authority Secure Children’s Homes  
**Description** | A guide to good practice in the pharmacological management of substance misuse treatment of young people in secure settings.  
**Superseeded documents** | N/A  
**Action required** | N/A  
**Timing** | N/A  
**Contact details** | National Treatment Agency  
8th Floor Hercules House  
Hercules Road  
London SE1 7DU  
020 7261 8801  
www.nta.nhs.uk  

© Crown copyright 2009  
First published April 2009  
Produced by COI for the Department of Health  
The text of this document may be reproduced without formal permission or charge for personal or in-house use.  
www.dh.gov.uk/publications
Guidance for the pharmacological management of substance misuse among young people in secure environments
The National Treatment Agency for Substance Misuse

The National Treatment Agency for Substance Misuse (NTA) is a special health authority within the NHS, established by the Government in 2001 to improve the availability, capacity and effectiveness of treatment for drug misuse in England.

Treatment can reduce the harm caused by drug misuse to individuals’ well-being, to public health and to community safety. The Home Office estimates that there are approximately 250,000–300,000 problematic drug misusers in England who require treatment.

The overall purpose of the NTA is to:

- double the number of people in effective, well-managed treatment between 1998 and 2008
- increase the percentage of those successfully completing or appropriately continuing treatment year-on-year.

Acknowledgements

This guidance was developed with support from an expert group consisting of:

Mr Tom Aldridge  National Treatment Agency
Professor Colin Drummond  Specialist Clinical Addiction Network and Royal College of Psychiatrists
Dr Michael Farrell  Institute of Psychiatry, King’s College London
Dr Clare Gerada  Royal College of General Practitioners
Ms Fiona Hackland  Outcome Consultancy
Dr Linda Harris  Clinical Director, Integrated Substance Misuse Services HMP Wakefield and YOI New Hall
Dr Paul McArdle  Consultant Child and Adolescent Psychiatrist, Fleming Nuffield Unit, Newcastle
Ms Jan Palmer  Nurse Consultant, Substance Misuse (Offender Health)

They were commissioned by the National Treatment Agency and the guidance was developed in partnership with the Department of Health.
6. **Opioid prescribing protocols** 61
   6.1 Medication for the treatment of opioid dependence 62
   6.2 Deciding if pharmacology is required for opioid use 68
   6.3 Methadone induction regime 72
   6.4 Buprenorphine induction regime 74
   6.5 Opioid detoxification 75
   6.6 Lofexidine detoxification 76
   6.7 Methadone detoxification 77
   6.8 Buprenorphine detoxification 78
   6.9 Maintenance with buprenorphine or methadone 79
   6.10 Continuation of opioid prescription from community service 80
   6.11 Naltrexone induction regime 81

7. **Prescribing protocols for alcohol and non-opioid drugs** 82
   7.1 Multiple dependences 83
   7.2 Alcohol detoxification 84
   7.3 Alcohol relapse prevention 86
   7.4 Benzodiazepine detoxification 87
   7.5 Cannabis 89
   7.6 Inhalants 89
   7.7 Nicotine 90
   7.8 Stimulants 90

8. **Management of co-morbid disorders** 93
   8.1 Mental health 94
   8.2 Physical health 96
   8.3 Pregnancy 96

**Appendix 1: Parental responsibility holder** 99

**Appendix 2: Types of substances** 100

**Appendix 3: Equality** 101

References 103
1. Introduction

Introduction – key points

• The pharmacological management of substance misuse must be in line with the recommendations in the National Service Framework for Children, Young People and Maternity Services (2004).

• The pharmacological management of substance misuse is only one component of addressing substance-related needs. A comprehensive approach is described in the National Specification for Substance Misuse for Juveniles in Custody.

• Pharmacological management of substance-related need should be based on a holistic assessment of the child’s or young person’s needs and tailored to those needs, not delivered as a ‘one model fits all’ programme.

• Effective pharmacological management could reduce self-harm and suicidal behaviour.

• Pharmacological management must be delivered alongside specific psychosocial interventions to provide comprehensive care for substance misuse.

• Pharmacological management must be delivered alongside mental health services for those children and young people with mental health needs.

• Pharmacological management must be delivered in the context of a clear clinical governance framework.
1.1 Framework for working in the secure setting

An organised, systematic and integrated approach to children’s and young people’s substance-related needs across all young people’s secure settings is desirable. This approach is inclusive, assessing and addressing all aspects of need of the child, with the help of parents/carers and close involvement of multi-professional agencies. This approach fits with the National Service Framework (NSF) for Children (Department for Education and Skills and Department of Health, 2004) that advocates services being designed and delivered around the needs of the child. The NSF for Children sets standards, many of which are directly related to young people in secure settings. It advocates access to timely, high-quality multi-disciplinary services to ensure effective assessment, treatment and support for children and their families. All children’s and young people’s healthcare developments, within and without secure settings, should be in keeping with the NSF.

The key components of addressing substance-related needs within custody are set out in the National Specification for Substance Misuse for Juveniles in Custody (Youth Justice Board, 2009). It was developed from existing Prison Service Orders, Prison Service Instructions and other standards and guidance for social care and substance misuse management.

This guidance has been drawn together by the NTA under the direction of a panel of experts as a useful summary of the appropriate pharmacological treatment for substance misuse among young people under 18 years of age. The expert panel has drawn upon the international research literature, relevant published guidance, and clinical experience and expertise. The following references are particularly important:

1999 Young people and drugs: Policy guidance for drug interventions, Standing Conference on Drug Abuse and the Children’s Legal Centre (available from DrugScope)

2004 Safe and effective alcohol detoxification in The Prison Alcohol Strategy, HM Prison Service

2004 Effective evidence based management of benzodiazepine withdrawal, British National Formulary

2004 National Service Framework for Children, Young People and Maternity Services Executive Summary (and other NSF publications), Department of Health

2007a Methadone and buprenorphine for the management of opioid dependence, National Institute for Health and Clinical Excellence (NICE)

2007b Naltrexone for the management of opioid dependence, NICE
1.2 **The care pathway**

A prerequisite of pharmacological management is a comprehensive assessment of the young person’s needs and risks to that young person, and the establishment of a care plan. Pharmacological management must be provided in conjunction with psychosocial interventions and support, including risk management tailored to the individual. Resettlement and aftercare provision needs to be put in place, which includes psychosocial interventions to ensure continuity of service provision and/or aftercare to prevent relapse. Some of these interventions may be provided by the Young People’s Substance Misuse Service, or equivalent, within the establishment. A joint care plan and multi-disciplinary approach should be taken to ensure that interventions are co-ordinated and working towards the same main goals.

Entering secure setting provides an opportunity for young people to have their substance misuse needs identified and where necessary for them to be engaged in a treatment process to address those needs, delivered within a multi-disciplinary framework. It is crucial that cognisance is given to the developmental needs of the child/young person, to their language, cognitive and emotional development, and to the issue of parental responsibility. It is incumbent on the healthcare team in the secure setting to liaise early and regularly with those community treatment services that were involved prior to admission and with a community-based treatment service that can ensure continuity of the care plan on discharge.
A clear patient pathway reduces unnecessary delay and acts to improve patient safety. This can be achieved by good joint working and should include practical support, counselling and treatment options as part of a care plan which is followed both in a secure setting and after release/discharge. Protocols should be developed for rapid information sharing across agencies, where this is necessary. These processes are being developed in community settings via changes in NHS and social services practices and procedures, and are also recommended in the National Specification for Substance Misuse for Juveniles in Custody (Youth Justice Board, 2009). Ultimately, a single patient record will help to facilitate the transfer of information in an effective and timely manner; in the meantime, systems ought to be in place to help share information across different organisations.

It is crucial that pharmacological and psychosocial substance misuse interventions are linked closely with all other services in the establishment, particularly mental health services, in order that complex needs can be assessed and comprehensively managed. Secure services should develop relationships with community-based services in order to best meet a young person’s needs and to encourage and ensure continuity of care.

The National Specification for Substance Misuse for Juveniles in Custody (Youth Justice Board, 2009) advocates equity of care in the treatment of young people whether in secure settings or in the community. Young people in the secure estate should have appropriate pharmacological interventions if it is clinically necessary, regardless of the setting, though there may be differences in approach in different settings. Pharmacological approaches must be based on individual assessed need, and must not follow a ‘one size fits all’ model. The range of clinical responses specifically for substance misuse should include pharmacological approaches including detoxification, stabilisation, reduction and maintenance regimes, with integrated psychiatric and/or psychological and physical care. Systems, policies and protocols should be in place to ensure that a care pathway is developed and followed within the secure setting.

### 1.3 Self-harm and substance-related needs

There is an increasing awareness within secure services of a correlation between drug withdrawal and self-destructive behaviours. In a review of suicides in prison (Shaw et al, 2003) it was found that 72% of individuals who had committed suicide had at least one psychiatric diagnosis identified at reception, the commonest being drug dependence. It was shown that 62% had a history of drug misuse and 31% a history of alcohol misuse. Those who were drug-dependent were twice as likely to commit suicide within one week of admission to prison.
The *Safer Prisons* report (Shaw et al, 2003: p9) recommends that:

“dedicated detoxification centres should be set up in prisons to provide more effective programmes and management of those in withdrawal.”

It acknowledges that further research is needed to show conclusively that this measure will prevent suicide. However, it also states that the need for preventive action is urgent, and in the absence of such evidence at present, the details of these suicide cases provide a sound basis for recommendations on good clinical practice.

*Safer Prisons* also supports one of the principal recommendations from the Prison Service internal review of prevention of suicide and self-harm in prisons, namely that:

“The Prison Service should pay special attention to the safe management of prisoners in the early stages of custody in a prison, with a focus on excellence of care for all prisoners in reception, first night, induction and detoxification units.” (HM Prison Service, 2001)

A broad range of clinical responses to drug and alcohol dependence could serve to reduce incidents of suicide and self-harm among those most at risk. This is especially important among young people with co-existent drug and mental health problems, as these have been found to be at even greater risk of suicide (Shaw et al, 2003).

### 1.4 Prevalence

Findings from a 2007 independent review reported a high prevalence of substance misuse in a sample of nearly 500 young people in custody. The age range was from 12 to 18 years; 19% were female and 81% male; 71% were white British, 14% were black, 8% mixed race, 3% Asian and 3% ‘other’. This study found no significant differences in substance misuse between females and males or between young people who were white compared with those from black and minority ethnic groups. Important findings were as follows:

- Substance misuse is just one of a host of needs that young people entering custody may have.
- Prevalence of substance use far exceeds the national average.
- 44% of the sample were found to be problematic substance misusers (as defined by the Assessment of Substance Misuse in Adolescence screening tool).
- 67% had drunk alcohol at least once a week prior to arrest, while 16% were getting drunk every day.
- 82% had used cannabis at least once a month prior to arrest, with 64% using it at least daily.
43% had used ecstasy at least once a month prior to arrest.
35% had used cocaine at least once a month prior to arrest.
28% had used amphetamine at least once a month prior to arrest.
10% had used crack cocaine at least once a month prior to arrest.
1% had used heroin within the previous 12 months.
14% had overdosed on drugs.
Approximately 62% indicated that they had used substances for reasons that could indicate mental health or anger management issues (e.g. to relieve stress or forget their worries).

These figures indicate a high prevalence within the custodial estate of young people with problems related to substance misuse that need identification and management. They also emphasise the relationship between the mental health needs of these young people and substance misuse.

1.5 Dependence

This document has been written to provide guidance on the pharmacological treatment of substance misuse. This is mainly concerned with the management of physical dependence. Substance use, while a prelude to misuse, and increasing risk of dependence, is not per se sufficient for a diagnosis of dependence. The Tenth Revision of the International Classification of Diseases and Health Problems (ICD-10) defines the dependence syndrome as being a cluster of physiological, behavioural, and cognitive phenomena in which the use of a substance or a class of substances takes on a much higher priority for an individual than other behaviours that once had greater value. A central descriptive characteristic of the dependence syndrome is the desire (often strong, sometimes overpowering) to take psychoactive drugs (which may or not have been medically prescribed), alcohol or tobacco (World Health Organization, 2005).

ICD-10 also states that:

“A definite diagnosis of dependence should usually be made only if three or more of the following have been present together at some time during the previous year:

- A strong desire or sense of compulsion to take the substance.
- Difficulties in controlling substance-taking behaviour in terms of its onset, termination, or levels of use.
- A physiological withdrawal state when substance use has ceased or has been reduced, as evidenced by: the characteristic withdrawal syndrome for the
substance; or use of the same (or closely related) substance with the intention of relieving or avoiding withdrawal symptoms.

- Evidence of tolerance, such that increased doses of the psychoactive substance are required in order to achieve effects originally produced by lower doses (clear examples of this are found in alcohol- and opioid-dependent individuals who may take daily doses sufficient to incapacitate or kill non-tolerant users).

- Progressive neglect of alternative pleasures or interests because of psychoactive substance use, increased amount of time necessary to obtain or take the substance or to recover from its effects.

- Persisting with substance use despite clear evidence of overtly harmful consequences, such as harm to the liver through excessive drinking, depressive mood states consequent to periods of heavy substance use, or drug-related impairment of cognitive functioning; efforts should be made to determine that the user was actually, or could be expected to be, aware of the nature and extent of the harm.”

Physical and psychological dependence must be addressed if treatment of substance misuse is to be successful. This document has been written to provide guidance on the pharmacological treatment of substance misuse, which is mainly concerned with the management of physical dependence. Nevertheless it is essential that access to support in managing psychological dependence is available. Such support is an essential part of the pharmacological management of substance misuse and is a credible intervention in its own right where pharmacological interventions are not required, as is the case in most substance misuse among young people. Guidance produced by NICE (2007c and 2007e) and the NTA (2008b) discusses evidence-based psychosocial interventions appropriate for young people with substance misuse needs.

Physiological withdrawal symptoms and physical problems as part of the dependence syndrome are less frequent in adolescents than in adults. For adolescents it is important to enquire about craving and impulsive behaviours, anxiety, panic attacks, depression, feelings of despair and deliberate self-harm, as these may complicate identification and management of dependence symptoms. Poly-substance use, including alcohol, appears to be the rule rather than the exception; this is important in the assessment and management of possible withdrawal symptoms. It is also important to recognise that, in children and adolescents with substance dependence, other disorders such as disruptive disorders, conduct disorders, attention deficit hyperactivity disorder, post-traumatic stress disorder, anxiety, depression and eating disorders frequently co-exist. Knowledge of the assessment and management of these co-morbid disorders is essential for the adequate assessment and management of substance dependence. These co-morbidities and multiple problem presentations also emphasise the importance of multi-disciplinary assessment and care.
1.6 Drug-related deaths

There has been much concern about drug-related deaths with the publication of the Advisory Council on the Misuse of Drugs (ACMD) *Reducing drug related deaths* report (2000), *Drug misuse and dependence* (Department of Health, 1999) and numerous research reports. As a consequence there is an emphasis placed on the importance of preventing drug-related deaths in local drug strategies.

Deaths result from numerous problems such as infections, use of multiple drugs and suicide. One study (Krausz et al, 1996) reported that 8–17% of fatalities in heroin addicts were due to suicide. Initiatives to reduce drug-related deaths mainly focus on deaths associated with heroin and methadone. However, cocaine, alcohol, benzodiazepines and volatile substance misuse can also lead to death, especially when combined with opioids.

Deaths occurring from methadone treatment occur mainly in the first few days, on average during the third or fourth day following initiation, generally as a result of accumulated toxicity. Methadone-related deaths are more often related to reduced tolerance to opioids, dose of methadone, especially in the naive user, and continued multiple illicit drug use. Fatalities from methadone toxicity have been reported at doses as low as 20 mg – though these have invariably been in non-opioid-dependent individuals who were poly-drug users (using benzodiazepines, alcohol, antidepressants or major tranquillisers). Non-opioid-dependent individuals are at risk from doses as low as this, and their risk may be exacerbated with the simultaneous prescription of a benzodiazepine, antidepressants or major tranquillisers. These deaths have often occurred as a consequence of inadequate assessment, unclear tolerance, failure to confirm use and dependence, treatment in the absence of withdrawal symptoms and a lack of monitoring. Methadone-related deaths have reduced in the last few years, probably as a result of increased supervised consumption in the initial stages of drug treatment. However, caution is particularly important with young people who may have unclear tolerance. Assessment of this risk is crucial both in initiation and in monitoring methadone treatment, especially during the early stages.

There is added concern about those who have just left a secure setting; this concern is related to loss of tolerance. Singleton et al (2003) found that in the week following release prisoners were 40 times more likely to die than the general population and that 90% of these deaths were associated with drug-related causes. These findings are consistent with the international literature which suggests that overdose is common in those with lost or reduced tolerance. The ACMD (2000) gives guidance and numerous recommendations on issues such as risk assessment, information required, discharge arrangements and service delivery changes to ensure reduction of these deaths.
Crucially, all young people leaving a secure setting (and their parents/carers) should be given information and advice on drug-related deaths and their prevention and be considered for priority access to young people’s specialist substance misuse treatment when returning to the community.

1.7 **Ten key policy principles**

These principles, established by the Standing Conference on Drug Abuse and the Children’s Legal Centre (1999), inform substance misuse treatment services for children and young people. These overarching principles have been kept in mind throughout the production of this guidance and should continue to be referred to by practitioners implementing the guidance. They are based on the Children Act 1989 and the United Nations Convention on the Rights of the Child.

1. A child or young person is not an adult. Approaches to young people need to reflect that there are intrinsic differences between adults and children and between children of different ages.

2. The overall welfare of the child is paramount.

3. The views of the young person are of central importance, and should always be sought and considered.

4. Services need to respect parental responsibility when working with young people.

5. Services should co-operate with the local authority in carrying out its responsibilities towards children and young people.

6. A holistic approach should occur at all levels.

7. Services must be child-centred.

8. A comprehensive range of services should be provided.

9. Services must be competent to respond to the needs of young people.

10. Services should aim to operate in all cases according to the principles of good practice.
2. Responsibilities

Responsibilities – key points

• Informed consent for treatment is required.
• Informed consent must be gained from the appropriate person, either a competent young person or a parental responsibility holder.
• While a child or young person has a right to confidentiality they should be encouraged to involve others in their care.
• Confidentiality must be balanced against the duty to protect a child or young person from significant harm, so in some cases confidentiality may need to be breached.
• All pharmacological management is subject to clinical governance arrangements and review.
• Doctors and non-medical prescribers have a range of duties in relation to prescribing, particularly in relation to the treatment of substance misuse in children and young people, and these responsibilities cannot be delegated.
• All staff involved in the assessment and pharmacological management of young people should be competent in the activities they are performing.
• In the pharmacological management of substance misuse the use of medicines outside of their licence is often unavoidable. In this case proper precautions must be taken.
• A range of protocols is required to ensure consistent good practice.
• Information about the range of substance misuse interventions available in the establishment should be provided to young people and to parents/carers.
• Careful and accurate recording of information about a young person’s assessment and treatment improves the understanding within the team and the quality of care for the young person.

This chapter describes the essential responsibilities of medical and non-medical practitioners in relation to performing and monitoring the prescribing of medication and their responsibilities in relation to working with children, particularly adolescents. The General Medical Council (GMC) (2007) has given guidance on the issues of informed consent and confidentiality for those working with young people under 18. It is incumbent on all
Responsibilities

practitioners to be aware of this advice, to assess competence and to be clear that full informed consent has been sought and freely given prior to any intervention. A young person may be anxious about obtaining treatment and due care must be taken to reassure them as well as giving full explanations of the treatment and the reasons for it.

2.1 Informed consent

When providing healthcare informed consent must be given before you can proceed, the only exception to this being a medical emergency. This is not only good practice but also a legal requirement. Informed consent should not be asked for or given until the treatment plan is proposed. Support and information are often required to help young people understand what they are being asked to consent to. To be legally valid, consent must be sufficiently informed, be specific to the treatment, and be freely given by a person who is competent to do so (Larcher, 2005). It may be helpful to use consent forms that are signed and kept in the clinical records, as consent should be recorded.

Any change in pharmacological management must be carefully discussed and reasons for change carefully recorded, to ensure that consent is maintained. Anyone who gives consent can retract it at any stage in the treatment process if they wish.

If a young person is not legally competent (does not have ‘capacity’) to give consent for themselves, consent will need to be gained from someone who has parental responsibility for them, unless it is an emergency and it would be unreasonable to wait.

If a young person is competent to give consent for themselves, consent should be sought directly from them. The legal position regarding ‘competence’ is different for young people aged over and under 16.

Young people aged 16 and 17 are presumed in law to be competent to give consent for themselves. However, it is still good practice to involve their families and/or carers in decision-making.

Young people under 16 are not automatically presumed to be legally competent to make decisions about their healthcare. However, they may be competent if they can demonstrate that they are ‘Gillick’ or ‘Fraser’ competent. There is no specific age when a young person becomes competent; it will depend on the young person, their own development, and the seriousness and complexity of the treatment. It is still good practice to involve their families in decision-making.
It should not be assumed that a young person with a learning disability is not competent to make their own decisions. Many young people with learning disabilities will be competent provided that they are given appropriate information and supported through the process. However, if a young person is not thought to be competent, then the person with parental responsibility should make the decision for them, but the young person should continue to be involved as much as possible.

Practitioners working with young people must have the skills and knowledge to assess this capacity to consent.

2.2 Assessing competence

For young people to have the capacity (be competent) to take a particular decision (give or withhold consent), they must be able to comprehend and retain information relevant to the decision, especially as to the consequences of having or not having the intervention in question, and use and weigh this information in the decision-making process.

2.2.1 Gillick or Fraser competence

Young people under 16 have a right to confidential medical advice and treatment if the provider assesses that:

- the young person understands the advice and has the maturity to understand what is involved
- their physical and/or mental health will suffer if they do not have treatment
- it is in their best interest to be given such advice/treatment without parental consent
- they will continue to put themselves at risk of harm if they do not have advice/treatment
- they cannot be persuaded by the doctor/health professional to inform parental responsibility holder(s), nor allow the doctor/healthcare professional to inform them.

If a child, or a young person under 18 years old, is not competent to consent to their own treatment, consent should be sought from a person with ‘parental responsibility’. Legally, consent is needed from one person with parental responsibility, although it is good practice to involve all those close to the child in the decision-making process (see Appendix 1 for who holds parental responsibility).
2.3 Confidentiality

Within the youth justice system information is shared between professionals in order to deliver programmes and interventions to meet a child’s needs. Initially information about a young person is gathered via ASSET; it is then shared with colleagues and can be added to if the young person enters a secure environment. It is appropriate that information is shared between professionals acting to support a young person provided that the young person is aware when the information is gathered that it is not confidential and will be shared with those professionals involved in their care, or that their consent is later gained to share information beyond that originally envisaged, for example gaining support from an external professional.

However, when discussing health and social circumstances with professionals it is reasonable to assume that a child or young person would expect that this information is kept confidential (as the information is not generally known to other people). The National Specification for Substance Misuse for Juveniles in Custody (Youth Justice Board, 2009) states that interventions must be undertaken within clear confidentiality arrangements, and that information about a young person’s medical needs and interventions should be used to inform substance misuse care plans.

Whenever a confidential relationship is entered into, the boundaries of this confidentiality must be discussed with the young person so that they understand what it means and how and when information is likely to be shared.

The boundaries are:

- Information is confidential to healthcare and specific social care professions; for example the primary healthcare team and substance misuse team.
- Certain general information will be shared with other criminal justice staff for care planning purposes, for example with the young person’s named Youth Offending Team (YOT) worker and at multi-disciplinary team meetings. This will be in the form of a summary of needs and interventions.
- Information about health or substance misuse will not be passed to other people without the young person’s consent; for example passing information to community services.
- Confidential information will be disclosed to others if the child is suffering, or likely to suffer, significant harm; for example to promote and safeguard the welfare of a child.
- Confidential information will be disclosed to others if a person is at risk of significant harm or community safety is at risk.
Where concerns arise as a result of information given by a child it is important to reassure the child but not to promise confidentiality.

If confidential information is to be disclosed attempts should be made to communicate this to the child or young person, unless you feel this would be detrimental. The nature of this communication will also depend on the content, nature and seriousness of the concerns.

Despite the right to confidentiality, it is often in children and young people’s best interests to have the support of their family, particularly in making and supporting decisions about their health and treatment. The Children Act 1989 therefore encourages practitioners in contact with children to encourage them to involve their family. In some cases this may not be in the child’s best interests, but this should not be assumed.

Inter-agency collaboration is often required to assess and respond to the needs of vulnerable children and young people. Partnership working is a fundamental principle and is encompassed in the Children Acts of 1989 and 2004, and Working together to safeguard children: A guide to inter-agency working to safeguard and promote the welfare of children (HM Government, 2006a). Developing links between services will enable coherent packages of care, but it is important to continue working with the child, and gain their consent to involve the family wherever possible.

What to do if you’re worried a child is being abused (HM Government, 2006b) gives more information on the procedures and legal issues in relation to aspects of child protection investigations.

2.4 Governance

Clinical governance is a term used to describe the systematic approach to monitoring and continuously improving the quality of clinical interventions. For doctors and professionals involved in substance misuse and clinical management there are a number of important elements: clinical effectiveness, competence and continuous professional development, team working, information management, patient, public and carer involvement, risk management and public health. The doctor and healthcare professionals must be aware of and have considered these issues (Department of Health, 2007). These elements are a mix of both individual and organisational responsibilities, to ensure appropriate and effective systems necessary to meet good practice standards. The NTA (2008a) has published guidance on drug treatment and clinical governance recommendations.
The GMC (2006) sets out principles and values on which good medical practice is founded. There is a wide range of guidance available from professional bodies (such as the GMC, the Medical Royal Colleges, the Nursing and Midwifery Council and the Royal Pharmaceutical Society), the Department of Health (2007) and the NTA (2005). Prescribing governance and an adequate understanding of the law relating to prescribing are important.

Clinicians working with drug misusers must be appropriately competent, trained and supervised. They must have annual appraisals, with evidence of competence, continuous professional development and regular audit. A supervisory framework should be in place with regular supervision and advice available, both within and without the secure setting. All professionals should be aware of the clinical governance framework and process within their workplace. A timely and regular audit cycle should be in place. For example, under the processes of risk management, incident reporting, risk assessment and infections control, each constitutes a duty on both the individual and organisations, and may be audited to improve practice. Interventions should be provided consistent with national guidelines and in line with the evidence base.

2.5 Prescribing responsibilities

Drug misuse and dependence: Guidelines on clinical management (Department of Health, 2007) notes the roles and responsibilities of doctors and non-medical prescribers when prescribing drugs. All of these roles and responsibilities apply to doctors and non-medical prescribers practising, though there are some differences related to the setting of treatment. For example, in custody supervised consumption of prescribed drugs is mandatory.

The term ‘non-medical prescribing’ refers to the prescribing of medication by health professionals other than doctors and dentists, categorised by supplementary prescribing and independent non-medical prescribing. The clinical governance requirements are similar to those of doctors (Department of Health, 2007).

Clinical care should be in accordance with evidence-based practice and within the context of a clinical governance framework. Clinical supervision and access to programmes of continuous professional development that offer staff the ability to develop skills both in managing adolescents and in addressing substance misuse problems are important means of supporting high-quality clinical practice. All staff should be competent to fulfil their roles, and work within clear guidelines.
Minimum responsibilities of the prescriber:

- Prescribing is the responsibility of the person signing the prescription – this responsibility cannot be delegated.
- Medical practitioners should not prescribe in isolation – a multi-disciplinary approach is essential.
- A prescriber should have a competent understanding of the pharmacology and clinical indications for use, dose regimes and therapeutic monitoring in young people.
- A full assessment, in conjunction with other professionals involved, should be undertaken and treatment goals set.
- The clinician has a responsibility to ensure that the person is prescribed the correct dose, both at induction and throughout treatment.
- The interventions must be consistent with national guidelines and in line with the evidence base. Any deviation must be documented, with clear reasoning and appropriate supervision sought.
- Supervised consumption in custodial establishments is mandatory.
- The prescriber must liaise regularly with the dispensing pharmacist and healthcare nurse about the specific patient and the prescribing regime.
- Clinical reviews must be undertaken regularly.
- Thorough, clearly written records must be kept.
- Informed consent to treatment should always be secured.

Department of Health (2007)

Special considerations when prescribing for children and young people:

- Informed consent must be appropriately sought and clarified for the specific treatment planned.
- Any child protection concerns must be disclosed within the appropriate procedures and acted on.
- Prescribing should be seen as an enhancement to other psychological, social and medical interventions.
- Substitute prescribing should only be undertaken when there is convincing evidence of current dependence.
• Specialist involvement is important for managing the substance misuse treatment of young people, and active supervision and support should be sought by generalists or those with less experience. This supervision should be part of the clinical governance requirements.

• Practitioners must ensure that they have opportunities to discuss and review their work with colleagues to maintain good and up-to-date practice.

• Prescribing of licensed medications outside of the product’s licence alters the prescriber’s responsibility; the prescriber must be aware of this responsibility and discuss issues with the patient and their parents/carers as appropriate.

• Parents/carers should be informed about and aware of any medications that are prescribed, with the young person’s permission and continued involvement. The doctor, non-medical prescriber and the team should actively seek to involve the parents/carers (with consent from the young person).

• Settings of treatment (regardless of custodial care) must be appropriate for the level of observation required.

• Where withdrawal rating scales have been used action points arising from recorded symptoms must be recorded.

2.6 Skills, knowledge and training

All staff providing assessment and clinical management of substance misuse should be competent in the activities they are performing. Skills and knowledge in substance misuse work is described in the nationally recognised standards Drug and Alcohol National Occupational Standards (DANOS). There are standards for the training of specialist doctors from all the Royal Colleges as well as agreed standards on roles and responsibilities (Royal College of Psychiatrists and Royal College of General Practitioners, 2005). These standards should be used to develop job descriptions, appoint and appraise staff and professionally develop staff. Additional competences in working with children and adolescents are also published and should be utilised. These include National Standards for Youth Justice, Health and Social Care Standards and forthcoming Children’s National Occupational Standards.

Clinical supervision is an important means of supporting high-quality clinical practice. An annual appraisal for nurses and doctors should be delivered in accordance with the Nursing and Midwifery Council, the Royal Colleges and the GMC respectively and in line with the clinical governance framework of the organisation.
2.7 Licensing of medications

In the United Kingdom, ‘licensed’ medicines are those that receive a marketing authorisation (previously called a product licence). Licensing arrangements are determined by the Medicines Act 1968 and are implemented through the Medicines and Healthcare products Regulatory Agency. For each medicine, the doses, indications, cautions, contraindications and side effects given in the British National Formulary (BNF) reflect those in the manufacturer’s data sheets or Summary of Product Characteristics. The BNF also indicates when a treatment recommendation is for the use of a medicine outside the licensed indication (off-label use) for that product.

Absence of a licence does not necessarily mean the absence of evidence for the proposed interventions. Most medicines have been tested for safe and effective use only in the adult population; typically evaluation takes place between 18 and 65 years, with few medicines used in adults specifically licensed for use in the treatment of children. Medicines prescribed for a child that are not licensed for that age group or for their health problem are referred to as ‘off label’ and medicines that do not have a licence at all as ‘unlicensed’.

Children are different from adults, their bodies metabolise medicines differently from those of adults, and young children respond differently from older children. Thus detailed care and attention needs to be applied when making prescribing decisions for children and young people, taking into account their age, weight and developmental stage (Department for Education and Skills and Department of Health, 2004). When making the clinical decision to prescribe these drugs, the risks and benefits of the treatment must be considered and fully documented.

The informed use of unlicensed or off label medicines is often unavoidable if children are to have access to the most effective medicines. Both scenarios are quite common and allowed for in legislation if the medicine is prescribed by a registered prescribing professional.

The Medicines Act 1968 and its Regulations provide exemptions that enable professionals to use or advise the use of licensed medicines outside the recommendations for the licence, or to override the warnings and precautions given in the licence. In these circumstances, the prescribing professional must be able to justify this action in accordance with a respectable, responsible body of professional opinion.

Information must be given to the young person and their parents/carers on the nature of the drug to be used, the likely effect, the timing of this effect and the safety and licensing of the medication. It would be useful if this information is available in leaflet form as well as discussed verbally. Any difficulties in literacy skills need to be acknowledged.
This information is important for a number of reasons:

- young people need to feel that their dosage adjustments are for their own comfort and safety, rather than any punishment system
- to ensure that informed consent can be given
- to facilitate understanding of treatment given including likely outcomes.

Primary care and health trusts, prescribers, dispensers and those administering medicines must take precautions to ensure that the use of off label or unlicensed medications is managed properly. There should be local safety standards and arrangements in place to monitor the use of unlicensed and off label medicines.

### Markers of good practice in the prescribing of medication

*National Service Framework for Children, Young People and Maternity Services: Medicines*  
(Department for Education and Skills and Department of Health, 2004)

1. The use of medicines in children is based on the best available evidence of clinical and cost-effectiveness and safety, ideally derived from clinical trials, but also including, where appropriate, medicines that are not licensed for their age group or for their particular health problem ('off-label'), or those that do not have a licence at all ('unlicensed') in order to achieve the best possible health outcomes and minimise harm and side effects.

2. In all settings and whatever the circumstances, children and young people have equitable access to safe, clinically and cost-effective medicines in age-appropriate formulations.

3. Appropriate information and decision support is available for professionals who prescribe, dispense and administer medicines for children and young people.

4. Children, young people and their parents/carers receive consistent, up-to-date, comprehensive, timely information on the safe and effective use of medicines.

5. In all settings, professionals enable parents, young people and, where appropriate, children to be active partners in the decisions about the medicines prescribed for them.

6. Primary Care Trusts, NHS Trusts and other organisations ensure that the use of medicines in children is incorporated in their clinical governance and audit arrangements.

7. The contribution of pharmacists in the effective and safe use of medicines in children is maximised.
2.8 Licensed medications for the management of substance misuse

The following is a list of the current licensing arrangements for medications used in the management of substance misuse:

- Acamprosate is licensed from 18 years upwards.
- Buprenorphine is licensed from age 16 for those with opioid dependence.
- Bupropion is not recommended for those under 18 years.
- Dihydrocodeine is not licensed for the treatment of dependence and is not recommended.
- Lofexidine is licensed from age 18 for use in those with opioid dependence.
- Methadone is not licensed for children. ‘Children’ in this context is generally recognised to mean those aged 13 and younger; however, manufacturers note the lack of evidence for adolescents.
- Naltrexone is licensed for post-opioid detoxification for those over 18 years, but it is not licensed in management of relapse prevention for alcohol misuse in the UK.
- Nicotine replacement therapies are licensed from 18 years upwards.

2.9 Protocols

Ensure that good practice is standardised in a specific setting by the development of audited local policies and protocols. There should be active involvement of all staff in developing protocols. These should be based on evidence of good practice, and help to improve clarity of roles and responsibilities and understanding of these roles between different members of staff. Many of these protocols will already be available but it is important that staff are properly inducted in them and that they are regularly reviewed.

Protocols are required for:

- assessment
- prescribing
- obtaining consent to treatment/consent forms
- sharing of information, confidentiality and involvement of parents/carers
- child protection concerns
- record-keeping between teams and working partnerships
- overdose management and prevention
• Supervised consumption of medication
• Observation, during the first 72 hours, of the first phase of pharmacological management (except for nicotine).

There may be other protocols pertinent to a particular unit; these should be devised by the team and audited. A timely and regular audit and review cycle of all protocols and standards should be in place.

All establishments must have written information available on the process of assessment, the types of pharmacological and psychosocial treatments available, how these interventions work, and how parents/carers are involved in these processes.

This written information must be accessible to young people, physically available and written in a style that they can understand. It can include:

• choice and length of treatments
• consequences of untreated withdrawal, both physical and psychological
• potential benefits of seeking help
• risks of overdose and how to prevent overdose.

Written information must be discussed with an individual considering engaging in treatment, to ensure their understanding of the written word and the content of the documents. Written information may be required in different languages and formats appropriate to a range of abilities to understand it.

2.10 Data collection

Providers of services must be prepared to establish comprehensive data collection and monitoring systems. Careful and accurate records need to be kept on assessment of the young person, their ability to consent, the involvement of parents/carers, the reasons for and goals of treatment, and outcomes. A copy of the care plan should be available for the young person and their parents/carers where the parents/carers are participating in it. Accurate record-keeping improves understanding within the team and the quality of care for the young person.
3. Assessment of substance misuse

Assessment of substance misuse – key points

• Access to a substance misuse assessment must be available throughout a young person’s residency, as well as on reception.

• The key features of identification and comprehensive assessment are:
  – assessment is an overall part of care
  – assessment is an ongoing process
  – the young person and their parents or carers should participate
  – the goals and process of assessment must be clear.

• Identification of substance use-related needs at reception can:
  – determine risks to a young person
  – determine substance dependence and immediate pharmacological needs
  – determine immediate physical and mental health needs
  – provide an opportunity to offer hepatitis B vaccination.

• Where a reception identification process indicates a pharmacological response, a doctor must undertake a pharmacological assessment before the first night of stay, which will form part of the comprehensive assessment of substance misuse.

• Key issues to be addressed at the pharmacological assessment are:
  – ascertain substance dependence, substance use history, route of use and inspection of any injecting sites
  – positive urine/oral fluid screen for drug of dependence
  – identification of objective withdrawal symptoms
  – corroboration of reported current prescribed medication
  – ascertain urgent physical health difficulties
  – ascertain any risk of suicide, self-harm or psychiatric difficulties
  – identification of pregnancy.
• Comprehensive assessment of substance misuse should be undertaken within 5 days of identifying any substance-related need. This should include:
  – involvement of the young person, to discuss and assess their physical health, injecting behaviour, mental health and social factors related to substance misuse behaviour
  – conducting any necessary invasive investigations such as drug screens, blood tests for infectious diseases, pregnancy etc
  – parental/carer involvement
  – community substance misuse service involvement.

• Comprehensive assessment of substance misuse will often involve a multi-disciplinary approach.

• Comprehensive assessment will include assessment of all domains of functioning, both antecedent and current, e.g. mental health, risk and educational ability.

• Assessment must be used to formulate a care plan of treatment interventions, each of which requires informed consent from the appropriate person before they can commence.

Young people may present at various stages during their sentence with problems related to drug and alcohol use. Therefore assessments are not just related to reception into the secure setting, but must be available on request and where a need is identified. Nevertheless reception provides a very important opportunity to consider the urgent needs of a young person. See page 27 for a flowchart showing the time-frame and process of assessment in young people’s secure facilities.

Galahad (2004) reported that many juveniles seemed uneasy about disclosing drug use in or out of custody. Barriers to appropriate disclosure such as lack of treatment, perception of lack of treatment or lack of skill of the assessor must be overcome. Information, in both written and oral form, must be provided during the identification process about the treatment options available, both in the short term and the long term. Should dependence or problems related to substance misuse be noted, reassurance must be given that services are available to support the individual and their parent/carer.

Interviewers within the secure setting may be perceived by the young person as authoritarian or the interviewer’s approach may seem patronising. It is important that the interviewer acknowledges the possibility of these difficulties and attempts to conduct the interview in as facilitative as manner as possible. Presenting a non-judgemental, reassuring attitude helps establish rapport and good communication, which facilitates engagement with the assessment and treatment process. In addition assessment must take account of the young person’s cultural background, and their cognitive, language and emotional development.
It is common for substance users to use local slang or terms for substances and routes of administration; these differ from region to region and change rapidly. It is important to clarify what substances are being used and how they are taken by checking with the young person, rather than guessing their meaning. The same slang name is often used in different areas for different substances.

Good assessment is crucial for the continuing care of the young person. It is essential in the development of a comprehensive care plan and the review of this care plan. Assessment is an ongoing process that must be updated fully and regularly. Comprehensive assessment is likely to take several sessions to complete in order to organise a full care plan. It is essential that there is accurate documentation of this assessment in the medical records. The rest of this chapter describes specific elements of the assessment process.

**Key principles of identification and comprehensive assessment process:**

- Assessment is an overall part of care.
- Assessment is an ongoing process.
- Assessment should be comprehensive, including all aspects of risk and child protection.
- The young person and their parents/carers should participate.
- The goals and process of assessment must be clear.
Time-frame for identification and assessment

**Activity**

- **RECEPTION**
  - Identification of substance use-related needs

- **Substance use-related needs not requiring pharmacological interventions exist**
  - Development of a care plan to address substance use-related needs by substance misuse interventions and treatment team

- **Comprehensive substance misuse assessment**
  - Referral for comprehensive substance misuse assessment within one day of identification of need

- **Substance use-related needs requiring pharmacological interventions exist**
  - Referral for pharmacological substance misuse assessment within one hour of identification of need
  - Pharmacological substance misuse assessment to inform safe prescribing, before the first night of stay

- **Comprehensive substance misuse assessment within 5 days of referral**

- **Initiation of a care plan to address substance use-related needs, within 10 working days of arrival (or 5 days if on remand)**
The essential aims of identification and comprehensive substance misuse assessment are:

- to treat any emergency situation
- to confirm tobacco, drug and alcohol use or misuse
- to confirm physical dependence and need for a pharmacological response
- to ascertain complications of drug and alcohol use/dependence
- to ascertain other mental health needs
- to ascertain other physical health needs
- to ascertain social factors that are associated with substance misuse such as offending behaviour, peer group and exploitation
- to ascertain psychological problems related to substance use, such as anxiety or behaviour disorders
- to ascertain child protection needs and the involvement of parents/carers
- to assess educational abilities and needs
- to ascertain highly risky substance use behaviour and give appropriate advice on harm reduction, including overdose risk, risk of injecting, risk of exposure to blood-borne viruses and risky sexual behaviour
- to ascertain the risk of hepatitis, blood-borne viruses, sexually transmitted diseases or pregnancy
- to offer immunisation to hepatitis B
- to ascertain capacity to consent to treatment.

3.1 Identification process

Reception provides the first opportunity in the secure setting to determine if there are any immediate needs that must be addressed.

The essential aims of the identification process are:

- to identify young people’s risks
- to identify substance use and risks associated with it
- to identify substance dependence and immediate needs – intoxication/withdrawal
• to determine immediate physical healthcare needs, e.g. resulting from diabetes, epilepsy or pregnancy
• to determine immediate mental health needs, including vulnerability to self-harm and suicide
• to offer hepatitis B vaccination.

The substance misuse element of the identification process must include:

• ascertaining physical dependence through the identification of withdrawal symptoms in those who report current or recent use
• identifying recently prescribed medication
• identifying if substance misuse is contributing to identified physical or mental health problems
• differentiating between young people who require urgent assessment by a doctor prior to the first night of stay and those who require assessment after the first night, according to their pharmacological needs.

In order to determine if a pharmacological treatment response is required, physical dependence must be identified. This is determined primarily by the history of continued daily use for some time, the presence of withdrawal symptoms on cessation of use (in line with the timescale expected from the length of action of the substance and the young person’s length of history with the substance), and the relief of these withdrawal symptoms on reinstatement of use. The treatment of withdrawal symptoms will act to reduce the risk of self-harm and complications associated with withdrawal from alcohol and drugs.

Severe withdrawal phenomena can occur: for example, alcohol dependence with withdrawal may cause seizures or delirium states, and for benzodiazepines seizures can occur. Opioid withdrawal may present with physical problems of increased sweating, diarrhoea and/or marked anxiety and agitation. Severe withdrawal or the consequences of withdrawal (e.g. delirium tremens) can in rare cases lead to fatality. Where withdrawal symptoms are present, a more detailed assessment and commencement of substitute medication may be required to ensure adequate and effective management of the symptoms on the first night in a secure setting.

Substance use can be associated with mental health problems such as psychosis, either causal (drug induced) or aggravating existing psychotic symptoms. The presence of significant mental health symptoms such as psychosis or self-harm and suicide risk should precipitate an urgent assessment, on the first night of stay.
Evidence of psychological dependence on substances, provided it is not associated with mental health problems or other substance misuse, should trigger a further and comprehensive assessment by a substance misuse worker within 5 days.

### 3.2 Pharmacological assessment of substance misuse

Where the reception identification process indicates a pharmacological response, a pharmacological assessment must be undertaken before the first night of stay, to precipitate an urgent intervention. This forms a component of the comprehensive assessment, other components of which must be completed within 5 days.

The key issues to be addressed at this assessment are:

- to ascertain drug and/or alcohol dependence, substance misuse history, route of use and inspection of injecting sites
- positive urine/oral fluid screen for the particular drug(s) of dependence
- identification of objective withdrawal symptoms
- ascertain corroboration of reported current prescribed medication either for substance misuse or other health issues
- urgent physical health related difficulties
- risk assessment: of suicide, of self-harm, of violence, or of psychotic or other acute psychiatric difficulties (urgent action should be taken to reduce these risks where they are identified)
- identification of pregnancy – all females must be offered and encouraged to accept pregnancy tests prior to prescribing medication, with a full explanation of the reasons for the test.

Establishing clear evidence of substance use is required prior to prescribing any substitute medication. Therefore a drug toxicology test should be undertaken, though a positive result does not necessarily denote dependence. A range of withdrawal rating scales are available that can help with determining physical dependence, including:

- Clinical Opiate Withdrawal Scale (COWS) (Wesson and Ling, 2003)
- Clinical Institute Assessment of Withdrawal – Benzodiazepines (CIAW-B) (in Baillie, 1996)
- Alcohol Withdrawal Syndrome (Bayard, McIntyre, Hill and Woodside, 2004).

However, while the use of formal rating scales may be helpful, they must be considered as an adjunct to, but not a substitute for, clinical assessment (NICE, 2007d).
Where a young person reports that they have been undertaking a pharmacological intervention in the community prior to admission it is recommended that this treatment is continued. However, to be safe, it is clearly imperative to corroborate the prescription and compliance with treatment. Information required includes:

- name of medication
- dose including concentration of medication
- whether consumption was supervised and by whom
- compliance with the regime (including collection and consumption of medication where appropriate) from the community professionals.

Where corroborative information cannot be gained, including both the prescription and the consumption of the prescribed medication (essentially confirmed supervised dispensing), it is unsafe to prescribe based on a young person’s report alone. Drug toxicology and evidence of withdrawal signs will be required. Medication must also be re-titrated to ensure that the appropriate dose is administered. Please refer to later chapters which describe the induction process for specific medications.

### 3.3 Comprehensive assessment of substance misuse

This section describes the comprehensive assessment process of which pharmacological assessment is but one element. It can take some time to complete a comprehensive substance misuse assessment so it is likely to take place over several sessions. It may be that some interventions are commenced prior to full completion of the comprehensive assessment.

Comprehensive assessment may be undertaken following:

- first-night assessment of immediate pharmacological needs
- identification at reception of substance misuse need that did not require an immediate pharmacological assessment
- referral to the substance misuse service sometime during the residential phase of the sentence.

Access to pharmacological interventions must not be restricted to needs identified at reception. Sometimes the assessment may indicate that a pharmacological intervention is required for a need that had previously been undetected. This may be due to:

- commencement or cessation of tobacco, drug or alcohol use in a secure setting
- disclosure of a drug history not indicated at reception
• non-urgent pharmacological intervention for the treatment of drug use without an associated physical dependence syndrome, e.g. acamprosate or naltrexone for opioids or alcohol relapse prevention.

3.3.1 Interview with the young person

The main feature of an assessment is the interview with the young person. It is vital that they are allowed the opportunity to contribute fully to this in order to establish a clear picture of the young person’s life, including substance use and how it directly and indirectly impacts on their life. The following factors must be covered in the interview.

a) Review of substance use behaviour

It is important to establish the quantity, frequency, route of administration, age of initiation and progression of substance misuse, and the types of substances used. This helps to define the level and severity of substance misuse/dependence and the risk factors associated with use. The pattern of young people’s substance misuse may be quite sporadic with little regularity of use. This irregular use may have prevented the development of physical dependence but there may still be problems related to substance misuse that need to be addressed. The type of substance, the route of use and the age of initiation can be indicators of current or future problematic substance misuse.

b) Risk assessment

The multi-disciplinary team must assess and act on risks in relation to:

• mental health, such as self-harm, suicide and psychotic thinking
• violence to self and others
• physical health, such as overdose, sexual health difficulties and physical problems related to drug use such as abscess, infections and injecting by sharing drug-taking equipment
• child protection – any concerns about risk must be dealt with urgently according to local policy and procedure.

Those who use opioids are at a greatly increased risk of death during the first week of release from prison (Singleton et al, 2003). The predominant cause of these deaths is accidental drug overdose; the most likely cause is the loss of tolerance to opioids often complicated by the use of other drugs such as benzodiazepines and alcohol. Therefore advice and education on overdose prevention and seamless transfer of substance misuse treatment to a community team are vital, including arrangements for continued, regularly supervised pharmacological care where required.
c) **Context of use**
Commonly young people take substances with their peers. Having family members with substance misuse problems increases the likelihood of the young person developing substance misuse. Some young people become involved in substance misuse because they are being exploited by others, criminally and/or sexually.

d) **Factors contributing to vulnerabilities and resilience**
This aspect may demonstrate how the young person is getting on in school and with their family, and general social functioning, including offending behaviour. Young people may have poor insight into how substance use affects these aspects of their life. Understanding how a young person functions socially can be used in psychosocial support to explore the relationship with substance misuse and help to develop insight. Factors that support resilience to substance misuse, where they exist, should be encouraged and built upon.

Vulnerability to substance misuse includes children who:

- are 'looked after' or supervised by the local authority
- are excluded from or disaffected with school
- are involved in offending behaviour
- have mental health difficulties
- are homeless or local authority care leavers
- are living in difficult family circumstances, including those subject to abuse
- have drug- or alcohol-misusing parents
- have physical or learning disabilities
- are living in areas where there is a high availability of drugs.

Resilience to substance misuse includes:

- a positive temperament and intellectual abilities
- a supportive family environment
- a caring relationship with at least one adult
- external systems of support that encourage positive values.

(ACMD, 2006)
e) **Young person’s view of substance use**

It is important to allow the young person to explore the advantages and disadvantages of their substance misuse from their perspective. This allows the assessor an opportunity to develop a rapport with the young person, as well as understand triggers, negative aspects and social reinforcers of substance misuse from the young person’s perspective.

f) **Injecting**

Injecting is not common among young people but it is important to be alert to the possibility. Injecting drugs increases the risks to a young person, for example from overdose and blood-borne viruses; in addition injecting technique may be poor, which further increases risks.

Injecting drug misuse carries a substantial risk of physical complications, particularly with sharing of drug-using equipment. Assessment should elicit information on exposure to blood-borne viruses, and lead to appropriate referrals. Those who inject substances are particularly at risk from viral hepatitis (A, B and C), HIV, bacterial endocarditis, sepsicaemia, deep vein thrombosis, pulmonary embolism, abscesses and thrombophlebitis.

This period in secure settings should be used to discuss harm reduction techniques and the availability of services in the community for the young person. Assistance should be given to help the young person engage with these services.

It is also an opportunity to consider testing for hepatitis and initiate vaccination for hepatitis A and B. For those under 16, information on viral hepatitis and other blood-borne viruses should be discussed with the young person and their parents/carers whenever possible, preferably supported by written information.

The Department of Health and Department for Education and Skills (2004) recommend that all intravenous drug users and close household contacts of intravenous drug users receive hepatitis B vaccinations. This is now offered to all young offenders in custody because of their engagement with high-risk behaviour and living in a high-risk environment (a prison). Vaccination should be commenced as early as possible, with accelerated programmes offered for hepatitis B following consent.

Information and discussion about hepatitis C virus and HIV testing should be offered to all intravenous drug users. It is especially important to involve parents/carers in the process wherever possible as a positive test result will have lifelong implications. Time should be allowed to take on board the information and make a decision about whether to proceed with testing. Pre- and post-test counselling must be given, by a person with the skills and knowledge to help a young person to make an informed decision.
g) **History of treatment**

Some young people will have previously been involved in substance misuse treatment. Exploring periods of reduced use or abstinence and how this was achieved as well as their perceptions of treatment can help to develop a care plan that the young person feels confident with.

Community services that have been involved with the young person must be involved wherever possible. They will have detailed information about interventions that the YOT may not have access to, or have further details on these interventions. They will also be responsible for providing any continued pharmacological or psychological support following the end of the residential phase of the sentence. As such the early involvement of the service is to be encouraged.

Community substance misuse services can inform the overall care plan, the nature of the prescription, the goals of treatment and the psychosocial interventions required. It is essential that good liaison is continued throughout the young person’s contact with the community substance misuse service, to ensure easy and appropriate transfer on discharge. A member of the community substance misuse service should be encouraged to visit the young person to maintain the relationship, and ensure continuity of treatment when released.

Other community-based services such as Child and Adolescent Mental Health Services (CAMHS) may have a role to play in the holistic assessment of the child and their ongoing care. Services in secure settings should attempt to gather information from these children’s services to organise a joint and integrated care plan.

h) **Physical health**

Children and young people who misuse substances should have a physical examination. Primarily this is to establish a baseline of the health and development of the child/young person: this will include height and weight, any breathing difficulties or other health problems related to substance misuse, or other unmet healthcare needs. The physical history identification conducted at reception may also indicate other areas to be explored.

Height and weight measurements should be used to calculate the Body Mass Index (BMI). If a pharmacological intervention is to be considered the dose of the drug to be prescribed must take account of the BMI as currently evidence for drug prescribing is only available for adults. In all cases the dose must be titrated according to withdrawal symptoms; however, because there is little evidence about dose in younger people, particular caution should be applied when working with young people with low body weight. Consideration should always be given to the physical and mental development of all younger people.
Sexual health risks should also be considered and assessed, with a range of interventions available, such as chlamydia screening, hepatitis screening and vaccination, or other sexually transmitted infection risks. This may mean referral to and/or discussion with community clinics. Pregnancy must always be considered, and women must be encouraged to take a pregnancy test prior to any medication for substance misuse being prescribed, with an explanation of why this is required.

Those who misuse substances are more at risk of developing a number of medical conditions such as pneumonia, asthma, tuberculosis, dental caries, seizures and other neurological impairments. Many of these physical manifestations of substance misuse may not yet be present in the young person; nevertheless, one must always be alert to possible complications of substance misuse.

The risk of infectious diseases must be assessed, particularly HIV and hepatitis B and C. These infections are related to a history of sharing injecting equipment and/or risky sexual behaviour. Counselling and testing should be available, with full consent obtained and parental involvement as appropriate.

Ongoing close clinical monitoring of physical health needs is important as the early symptoms of drug withdrawal may mask a separate underlying physical condition.

**Mental health**

Young people who misuse drugs and alcohol often have co-existing psychiatric disorders and psychological difficulties that may affect their ability to engage with services, increasing the risk of relapse and poor compliance with treatment. These psychiatric conditions often co-exist alongside episodes of self-harm and suicidal behaviour. They may include conduct disorder, depression, post-traumatic stress disorder, anxiety, attention deficit hyperactivity disorder or early psychosis. Young people may be receiving treatment from CAMHS in the community, and this requires assessment and confirmation.

Drug or alcohol use may directly affect mental health, particularly causing paranoid ideation, hallucinations, anxiety and depression that may mimic some withdrawal symptoms. One must also be alert to nicotine withdrawal symptoms that may complicate mood and anxiety disorders.

It is essential that these psychiatric and psychological problems are assessed. Ongoing monitoring of mental health is essential if there is any concern about, or any history of, psychiatric or psychological difficulties.

A history of drug or alcohol overdose must also prompt an assessment of mental health. While most substance misuse overdoses are considered to be accidental, the possibility of suicidal intent must always be considered.
3.3.2 Parental involvement

Every effort should be made to involve parents or carers in the assessment and treatment of substance misuse, as involvement is most often beneficial. While this may be difficult in a secure environment, it is important to remember that in many cases the child will return to family care or remain in close contact with their family.

There are a number of barriers to engaging parents or carers. Apart from their geographical distance from the secure facility there may be issues in relation to parents’ own drug or alcohol use, their mental health or their fear of judgemental attitudes. Families will almost always need support to engage them in their child’s care. However, the potential benefits must encourage this approach.

It is important to remember that children and young people are entitled to confidentiality so contact with families should only be made with their explicit consent (see Section 2.3).

The parent/carer’s role in the assessment of the child’s difficulties should include:

- history of presenting problems with details of substance use
- behaviour associated with substance use
- onset and progression of co-morbid psychiatric, psychosocial and behavioural problems
- treatment history
- developmental history
- medical history, e.g. accidents and possible head injuries
- school and vocational history
- peer relationships
- family history, e.g. significant events, such as divorce or bereavements.

3.3.3 Invasive investigations

An invasive or physical examination cannot be conducted without consent from the young person or parental responsibility holder (see Section 2.1). Some invasive investigations may be required as part of a comprehensive assessment. This would include drug toxicology prior to and during the prescribing of substitute medication, and blood tests to investigate health disorders. Drug toxicology and blood tests should be undertaken on a case-by-case basis and not universally applied to a whole population.
Tests for disorders such as hepatitis B and C and HIV that may have a lifelong impact should be conducted only in conjunction with pre- and post-test counselling by a skilled and knowledgeable practitioner. All young people who inject substances, share drug-using equipment/paraphernalia or engage in risky sexual behaviour should be considered for counselling and possible testing.

Blood tests generally comprise:

- liver function tests
- full blood count
- tests for hepatitis (A, B and C) and HIV.

Drug testing can be a useful tool in assessment and in monitoring compliance with and outcomes of treatment. Prior to providing pharmacological interventions, a drug toxicology test is vital for establishing current use. This is to confirm self-report of opioid or benzodiazepine use and the use of other drugs that may complicate the presentation and management. Drug toxicology is also used to monitor ongoing treatment.

The clinician must be aware of the detection time of the various drugs in urine or oral fluid, be able to interpret the findings and be aware of false positive and negative results. Urine testing has the advantage that drug concentrations are higher and the window for detection is longer, which can be important where young people have been held in police custody for some time. Oral fluid, while less invasive to collect and harder to adulterate, will provide results only on very recent drug use (24–48 hours) (Department of Health, 2007). As a result urine testing may be preferable in secure settings, but measures should be put in place to ensure the dignity of young people, for example by using thermal cups rather than observed sample collection.

While it is essential to conduct a drug toxicology test prior to prescribing, the clinician must be aware that the results are generally qualitative and do not confirm dependence. However, the clinician should not usually prescribe substitute drugs if a urine/oral fluid test is negative, and/or in the absence of clinical withdrawal signs.

In some cases a drug toxicology test does not detect opioids or benzodiazepines even when there is a history of regular use. This may happen due to the detection time of a drug or the sensitivity of a test. This situation must be treated with extreme caution, and clear withdrawal symptoms should be detected before continuing with substitute medication, and a non-substitute, safer alternative may be preferred. It is more likely that the person is not physically dependent if the drug toxicology test is negative and there are no current withdrawal symptoms. A clinician may need specialist support and advice if they are still considering prescribing on such occasions. Further reading about drug toxicology can be found in Department of Health (2007).
Protocol for drug toxicology

First night – urine sample for analysis taken in a thermal pot to help to ensure that it is actually the patient’s sample should be tested immediately. This test or an oral fluid sample should always be subject to a confirmatory test from a laboratory. However, treatment may need to begin prior to the confirmatory test result.

Ongoing – urine sample for analysis collected in a thermal pot or oral fluid is recommended. These tests throughout treatment can be subject to immediate testing, but should also include some laboratory confirmatory testing.

Urine drug analysis – for urine tests it is important that the clinician is sure that the sample belongs to the individual. Supervised urination may be appropriate in some circumstances though it can be conducted only with consent. It can be seen as humiliating; it is not always practical and is generally not acceptable for those under 16. Numerous techniques are available that can avoid the need for supervised collection, such as checking the temperature of the urine in thermal cups, and the use of more sensitive dipsticks. Dipsticks can be especially useful when immediate results are required. However, temperature and dipsticks can still be tampered with. Laboratory testing should be conducted to confirm initial immediate results and to support ongoing monitoring of compliance. Confirmatory laboratory tests are more reliable than screening tests. These screening tests are quick and easy and negative results can usually be accepted as such. However, positive results should normally be confirmed.

Oral fluid drug analysis – these are useful as they can be easily supervised. They ensure certainty that the sample belongs to the correct young person and a result is often available immediately. However, the immediate results are not as sensitive and the window of detection of positive and negative results is much shorter than urine tests, which can be problematic if the young person has been held in police custody.

3.3.4 Capacity to understand the treatment and give informed consent

Following assessment, whether pharmacological or comprehensive, proposals will be made to the young person about the intended course of interventions. At this stage consent will need to be gained from either the young person or the parental responsibility holder for any invasive investigations (such as urine analysis) and each proposed treatment intervention, psychological and pharmacological (see Section 2.1).
Consent cannot be requested nor competence to consent assessed (in order to allow a young person to consent themselves) prior to the proposal of an intervention. It is impossible to give informed consent or to be competent to do so if no one has yet explained the treatment that consent is required for.
4. Care planning

Care planning – key points

- Substance misuse must not be managed in isolation from the holistic management of the child or young person. A multi-disciplinary approach must be taken.

- The *National Specification for Substance Misuse for Juveniles in Custody* (Youth Justice Board, 2009) details a range of interventions to address different levels of substance misuse-related needs.

- A care plan with clear goals, agreed with the young person, must be developed and regularly reviewed.

- Parents and carers of young people should be actively encouraged to participate in the young person’s care plan, with consent from the young person.

- Careful discharge planning must be in place to ensure continuity of care.

Effective substance misuse treatment and interventions to reduce the harm associated with substance misuse are best achieved in a culture of support, warmth and non-judgemental care, one that expects positive change and encourages individuals to make efforts to change.

Alcohol and drug problems should not be managed in isolation, either from one another or from the comprehensive management of the young person. The findings of numerous studies report the high prevalence of substance misuse and the common co-occurrence of co-morbid disorders with the need for greater integrated planning and management (Gilvarry, 2000; Health Advisory Service, 2001; Galahad, 2004).

When addressing substance misuse it is important that all aspects of functioning are considered and assessed: educational needs, emotional needs, physical health, mental health and substance misuse as well as any child protection concerns or risk issues such as self-harm, suicide and violence. The co-ordination of multi-disciplinary involvement should be evident both in the assessment process and in the development of the care plan with clear liaison with community services. Multi-disciplinary care planning can take place at the regular substance misuse intervention team meeting. This integrated care is documented in the *National Specification for Substance Misuse for Juveniles in Custody* (Youth Justice Board, 2009).
All interventions, including pharmacological management, must be evidence-based and not simply carried out on an ‘it feels right’ principle. Interventions should be consistent with national guidance and principles (Department of Health, 2007). If there is little evidence for the intervention, then it should be delivered according to the best empirical principles available, with clear evaluation and review processes established. All programmes must reflect the developmental needs of the children and young people in the setting, including their educational, language and emotional development. There will need to be particular consideration of aspects of programmes for those with learning disabilities.

4.1 Care plan and ongoing assessment

As the initial induction and monitoring of the pharmacological intervention is proceeding, it is essential that there is further in-depth and comprehensive assessment of all risks and needs of the young person. The healthcare team, mental health staff and substance misuse team are responsible for comprehensively assessing the young person, to ascertain all substance-related problems and other psychological, emotional and educational difficulties. A full care plan with clear goals should then be established and agreed with the young person, with the involvement of their parents/carers, if this is appropriate. Collecting information from community agencies and discussing with them their options for ongoing care following accommodation in a secure setting is an important aspect of care planning. Involving all the professionals involved in the young person’s care before, during and after their stay in a secure setting is good practice in multi-disciplinary working. All aspects of the care plan then need to be monitored and regularly reviewed. It is important that the care plan is integrated and organised by the whole multi-disciplinary team, including pharmacological management of substance misuse, psychosocial interventions for substance misuse, management of mental and physical health problems, resettlement arrangements etc. Multi-disciplinary discussions can take place in the substance misuse intervention team meetings.

There should be ongoing sharing of relevant information between the clinical and other residential staff, with the young person’s consent. Assessment by any discipline (e.g. educational needs) must link in with and inform the pharmacological intervention. Further assessment and other interventions should be paced according to individual need, including length of stay in a secure setting, degree of urgency, educational requirements and treatment options. Systems should be developed that minimise duplication of questioning and paperwork between healthcare and other residential staff. This should be facilitated via multi-disciplinary meetings and shared notes.
Systematic ongoing assessment and regular review should be carried out to reduce the risk of suicide or self-harm. There should be regular review of the care plan and monitoring of the abstinent or controlled drug use state, random clinical urine/oral fluid analysis and clinical review. Full information should be given to the young person about their care plan and the monitoring of illicit substance use.

4.2 Parental involvement

The following section relates to parents, carers or guardians.

As with the assessment process parent or carer involvement in the care planning and review process should be encouraged. An ethos of good communication and expectation of routine involvement at intervals throughout the sentence and at all meetings (reviews/pre-release) should be promoted. The expectation of involvement and responsibility of the parent should not be different from parents whose child is not in a secure setting. A proactive approach should be encouraged. Parents (with consent from the young person) should be invited to all meetings; of particular importance would be their involvement in pre-release sessions with their child.

Communication methods should be established with parents. In courts prior to remand or sentence, mobile phone and land line numbers, along with grandparents’ numbers (email addresses in some situations) should be obtained by the youth justice workers. These contact details may then be given (with consent) to the secure establishment to facilitate contact.

There are a number of reasons for the involvement of parents:

- to ensure appropriate parental responsibility for the child
- parental responsibility holder consent may be needed for treatment for some children and young people
- to give information to the parent/carer on the range of interventions and the specific interventions required for their child
- to improve communication with the young person
- to reframe anxieties for parents/carers and young people
- to provide sources of support for children and young people
- to seek help and support for those parents/carers with substance use problems or mental health difficulties
- to seek help and support for families with difficulties.
Some children may not be involved with either of their parents. In such cases active involvement from any responsible adult who has a relationship with the child should be encouraged. This may include a social worker, an older friend or a mentor. Evidence suggests that a caring relationship with at least one adult can be a protective factor to reduce the risk of development of substance misuse problems.

Common themes of these sessions should be relapse, prevention and management, harm reduction techniques, overdose prevention, continued motivational work after the completion of treatment, and arrangements post release for both the young person and their parent/carer with clear appointments made. Other areas would include knowledge of the progress made in all domains by the child, the support structures needed to be in place and support structures for parents.

### 4.3 Discharge planning

It is crucial that there is close liaison with community teams during the sentence or remand period. Community teams should be involved in the care plan and plans for its continuity on release. Communication with community services should start as soon as possible on entry to the secure setting. If there has been previous involvement of community services, continued contact with the key worker while the young person is in a secure setting should be encouraged. This will allow continued liaison and maximise engagement and retention in services on release.

Young people (particularly those under 16 years) who are identified as having a substance misuse problem, or are at risk of progression to problematic misuse, should be supported and encouraged to participate in substance awareness, activities and education on facts about substances, motivational work, stop smoking programmes if appropriate and relapse prevention activities (NICE, 2007c). The substance misuse services must be marketed appropriately to the developmental age to ensure maximum participation.

Early drug and alcohol initiation coupled with offending are seen as high-risk markers for future substance misuse. Quite often young people who exhibit these markers will require intensive support on release. Specialist provision may need to be organised on release such as family support and interventions, continued educational assessment and return to appropriate educational settings, forensic psychiatric follow-up and intensive youth support services. All these should be linked with young people’s substance misuse services by a co-ordinated care plan.
Consideration of the need for ongoing treatment on release should be given at the earliest opportunity for all those young people on prescribed regimes or with significant history of misuse of substances. It is not sufficient to consider this on the day of release. One must also anticipate the possibility of earlier release than planned if there are any court appearances.

Prior to any court appearance, arrangements need to be put in place to ensure continuity of care in the community if the young person is released. This can be a time-consuming activity; nevertheless, it is crucial if young people are going to be helped to stay in treatment and not revert to illicit or excessive substance misuse. On the day they are due at court, all young people should receive their substitute medication in the morning prior to the court appearance. Local protocols should be negotiated between the secure facility, escort contractors and court administrators for the secure administration of medicines that are prescribed in more frequent doses.

The period immediately following release/discharge from a secure setting is a time of considerable vulnerability, especially to a relapse into drug and alcohol use with an increased risk of overdose and death. For those being discharged from a secure setting on continuing prescribed medication, contact must be secured with a community team so that an appointment is already arranged immediately following release, with careful handover of the prescription. Close working relationships between the clinical community team, the YOT and Resettlement and Aftercare Programme, where available, are central to securing good integrated care.

Pre-release meetings should take place if time permits, with the secure setting team, the YOT worker, if possible the community drugs team and a CAMHS representative. There should be documented action points from the meetings (stored in clinical records) which are shared with all members of the team to ensure continuity and good practice in recording concerns and action. Parents should be invited to these meetings, with support provided for them also on discharge.
5. Pharmacological approaches

Pharmacological approaches – key points

- Pharmacological interventions for substance misuse can be used:
  - as an emergency response
  - to stabilise substance misuse
  - to detoxify from substances
  - to ameliorate withdrawal symptoms
  - to prevent relapse.

- Pharmacological interventions for substance misuse in children and young people lack a strong evidence base, so extra care and caution must be used.

- Pharmacological interventions must be:
  - preceded by an assessment
  - preceded by a drug screen
  - titrated against withdrawal symptoms
  - closely monitored and consumption supervised
  - part of a care plan, which includes psychosocial interventions.

- Initiation of pharmacological management of substance misuse must be monitored by unrestricted observation by trained healthcare staff 24 hours a day for at least 72 hours (except for nicotine replacement therapy). Ideally this should be extended to 5 days for opioid and benzodiazepine management and 7 days for alcohol detoxification, or longer if complications arise.

- A treatment regime must be chosen according to individual need and in consultation with the young person. A young person’s parents/carers and previous community substance misuse services should also be involved whenever possible.

- Clear procedures for responding to emergency overdoses must be in place. This must include access to naloxone and staff who can administer it and perform resuscitative procedures.

- A period of stabilisation of at least 5 days is required for opioid prescribing, before reaching a decision on whether to adopt a maintenance or detoxification regime.

- Longer-term stabilisation on opioids or detoxification from opioids, alcohol, benzodiazepines and nicotine may be required. Additional ameliorative prescribing to control any withdrawal symptoms may also be required.
Pharmacological approaches

- In cases of poly-drug dependence concurrent detoxification is **not** recommended. Alcohol detoxification should be completed first, followed by benzodiazepine detoxification and finally opioid detoxification.

- Amelioration of withdrawal symptoms may include non-pharmacological interventions, such as extra food and drink in addition to any prescribed medication.

- Adjuncts to relapse prevention lack evidence in young people and are not routinely recommended; they should be used only in conjunction with community substance misuse services that agree to support the young person following release.

- Young people inducted into pharmacological treatment will require careful monitoring and supervised consumption of their medication.

This chapter is concerned with the general principles of prescribing and choosing a prescribing regime, and more detailed prescribing protocols are described in later chapters. Pharmacological management of substance misuse does not constitute appropriate stand-alone treatment. Substitution with pharmacological agents should be seen as a 'structured doorway' into other forms of psychosocial treatment (aimed to motivate the young person to become stable and/or abstinent, as well as at improvements in all domains of function). Pharmacological interventions should not be commenced, apart from emergency and urgent treatment, without a clear care plan that includes psychosocial interventions.

Pharmacotherapy for substance misuse is directed at a number of specific areas, including:

- treatment of overdose and other emergencies
- substitute prescribing
- detoxification
- amelioration of or adjunct to amelioration of withdrawal symptoms
- adjunct to relapse prevention.

For young people, adverse effects directly related to drug and alcohol misuse are more often related to intoxication rather than dependence. Many young people may be distressed on admission to a secure facility. This distress may require support and observation but a 'binge drug/alcohol history' in itself would not denote a requirement for a pharmacological intervention. It is important that anxiety symptoms and/or an anxiety disorder are not confused with withdrawal symptoms and inappropriate treatment commenced.
Regular, though non-daily, non-dependent injecting of opioids is not necessarily an indication for substitute medication. However, if there is chaotic misuse with unclear tolerance and with concern of overdose on release, a prescription might offer an opportunity to stabilise behaviour and provide overdose protection on release. However, this form of pharmacological intervention should be undertaken only by a specialist.

While there is substantial evidence for pharmacological interventions in adults this is not the case for children and young people. This is partly due to a lack of clinical trials for controlled drugs in minors, and partly due to the relatively new initiative to provide pharmacological interventions for substance misuse to children and young people. For some drugs used in clinical management, there is little evidence on dose, on duration of treatment, or on adverse effects. Young people respond to drugs differently to adults, these responses being influenced by the physiological and psychological changes that occur in adolescence. In essence, children are not little adults, and it is essential that dose is carefully titrated against withdrawal symptoms to ensure that a young person does not overdose.

Commencing a new prescribing regime can affect sleep and eating patterns and cause distress. It is recommended that additional blankets, food and drink are given to young people at night to help alleviate these symptoms. These food packs can contain hot chocolate or other sweet nutritious drinks, and long-life food such as sandwiches and cereal bars. These packs can be given until better sleep and eating patterns return and the risks of malnutrition, anorexia, hypothermia and hypoglycaemia are alleviated (Department of Health, 2006).

5.1 Initiating prescribing

The aim of prescribing a substitute drug for someone with physical dependence is to prevent withdrawal symptoms and further use of illicit drugs. A diagnosis of physical dependence must be made prior to initiation of medication; this is established by history, physical examination and corroborative evidence such as toxicology and information from other professionals. The history of substance misuse should show regular daily use of the specified substance over a prolonged period.

5.1.1 What to prescribe

 Prior to the initiating of any prescribed treatment, practitioners must familiarise themselves with section 2.5 of this document ‘Prescribing responsibilities’, on pages 17-19 of this document. It is usual to consider a long-acting drug, for example:

- methadone and buprenorphine for opioid withdrawal
- chlordiazepoxide or diazepam for alcohol withdrawal
- diazepam for benzodiazepine withdrawal
• lofexidine, which may be useful in treatment of withdrawal from opioids, particularly if there is mild physical dependence, unclear tolerance and a short history of use
• nicotine replacement therapy, for nicotine withdrawal.

The doctor or non-medical prescriber must be aware of the licensing of drugs and its relevance to young people (see Sections 2.7 and 2.8).

5.1.2 When to start

Pharmacological management is required if the young person is physically dependent on drugs and/or alcohol. Young people should not experience untreated withdrawal symptoms. However, the doctor or non-medical prescriber must be sure that the symptoms are those of withdrawal and not exclusively those of a co-morbid disorder, or distress related to intoxication, or post-binge or psychological difficulties.

• The dose should be titrated against withdrawal symptoms.
• The urine/oral fluid result should be positive for the drug(s) considered.
• If the urine/oral fluid result is negative then clear and unambiguous withdrawal symptoms need to be observed and recorded. If there is any doubt a further period of observation is warranted prior to any prescription. If there is any continued doubt then more specialist advice is required.
• Review frequently in the first few hours and then for 3 days – at least until steady state is achieved.
• Doses of all drugs must be supervised.
• Only oral preparations of the prescribed drugs should be dispensed.
• There is no indication to prescribe injectables to young people.

5.1.3 Settings of treatment

The setting in which clinical management occurs varies between establishments. All establishments must have equivalent approved accommodation. This environment must permit unrestricted observation by trained healthcare staff 24 hours a day for at least the first 72 hours of clinical management, and beyond this period where withdrawal is complex. Observations should continue at least twice daily until stabilisation is achieved. Nicotine replacement therapy does not require this highly intensive observation.

5.2 Adopting a regime

Once a decision has been made to undertake pharmacological management, there are a range of regimes that can be used. These depend on the needs of the young person and on the goals of the treatment.
5.2.1 Emergency treatment

For young people who are excessively sedated or unconscious, regardless of causation, emergency procedures must be put in place with immediate transfer to the local general hospital.

All establishments should have naloxone available for use in opioid overdose. All healthcare personnel should be aware of the location of this medication. Care must be taken with naloxone; it is short acting and may therefore need to be administered on several occasions to overcome the effects of overdose. Those young people who require this emergency procedure must be transferred urgently to the local general hospital, with naloxone available on route. Staff trained in administration of naloxone and resuscitative procedures should be available on all shifts. There must be a protocol on the use of naloxone that is known by staff and capable of implementation and audit. The protocol for the particular route of use will depend on the setting and availability of trained staff in the institution. Protocols must be in place and agreed with all personnel.

If a practitioner or any person believes a child or young person to be suffering from possible alcohol poisoning, any decline in consciousness must trigger a transfer to general hospital, to ensure both treatment and review of any poly-substance use. Staff trained in resuscitative procedures should be available on all shifts.

5.2.2 Substitute prescribing

The main purposes of substitute prescribing in secure settings are:

- to provide treatment for withdrawal symptoms via induction onto substitute medication upon admission to the establishment for those dependent on opioids, nicotine, alcohol or benzodiazepines
- to keep side effects to a minimum and reduce the need for further illicit drugs
- to continue an established community prescription that will be continued following release. There is good evidence that engagement with community specialist drug programmes may have beneficial effects on health and on offending behaviour (Mattick et al, 2002)
- to reduce the risk of fatal drug overdose especially upon release from a secure setting
- to reduce self-harming and suicidal behaviour.
The prescribing of substitute medication (apart from treatment of nicotine) should be commenced with a short period of stabilisation, followed by a planned detoxification regime or maintenance for opioid dependence. Detoxification or maintenance decisions should be based on clinical need and follow a comprehensive assessment.

The term ‘stabilisation’ means the moderating and control of withdrawal symptoms during a given period of time of no less than 5 days. Stabilisation is achieved through a process of dose induction – the gradual introduction of medication titrated in response to withdrawal symptoms. Stabilisation can reduce the risk of suicidal behaviour and self-harm.

A short stabilisation period permits time for input from professionals, both within the community and the establishment, to inform decisions for the care plan. Dose reduction regimes or maintenance must be tailored to the individual, shaped by a realistic appraisal of treatment goals between the young person, their parents/carers and the clinical team, and taking into account the expected length of their residency. If detained for a short period, an extended period of stabilisation may be the safest option, particularly in relation to overdose prevention. In this instance, arrangements must be made to transfer the prescription to a community team on discharge.

Maintenance prescribing of opioids provided alongside psychosocial interventions can enable users to achieve stability, reduce drug use and other illegal behaviours and demonstrate improvements in many domains of functioning. Containment in a secure environment may present an opportunity to engage intensively with a young person that was not achieved in community settings, which may result in greater involvement with services. Maintenance as a goal remains controversial in young people with little evidence on outcome to guide the clinician. Most clinicians would suggest that maintenance with no time-frame of reduction for young people, especially those under 16 with a short opioid history and few other difficulties, would not be recommended.

However, maintenance in the secure setting may be a viable option, provided that the sentence is short, up to 6 months, and community services are engaged to continue the care plan. This option of maintenance might be particularly important to a young person with a history of chaotic use who has not previously engaged in treatment or who has not stabilised in the community environment. It is, however, somewhat different for the older adolescent (17–18 years and onwards), who might have a long history of opioid use. In this case maintenance over a longer period should be considered with goals reviewed regularly.
Where there is a high likelihood of a young person returning to injecting opioid use on release, maintenance of the prescription while in the secure setting may be provided both on the grounds of engagement with services and stabilisation of all domains of functioning, and on the grounds of post-release overdose prevention. Random clinical testing for illicit drug usage should form a part of any maintenance programme. It would then be imperative that community settings are involved in the continuation of the care plan and have contributed to its formation prior to discharge.

For those who have already been prescribed medication in the community who are then remanded or given short sentences (from days to a few weeks), prescriptions should be continued in the secure setting following titration and stabilisation, unless the young person or the existing community prescriber indicates otherwise and this option fits with good practice.

It may be appropriate to set up a formal detoxification regime, agreed with the young person and their parents/carers. Decisions on the regime must be based on individual needs. The NICE (2007c) guideline on opioid detoxification recommends regimes that can last up to 12 weeks. A period of stabilisation followed by detoxification may be appropriate for some young people in line with their care plan and review.

In some instances young people and their parents/carers may wish to reduce or stop substitution drug therapy. This option must be offered and discussed with the family and young person. The opportunity to be drug-free may be particularly important, but should be balanced against the potential risks of such a strategy. All young people and their parents/carers must be warned about the increased risk of overdose, both from reduction of tolerance and poly-drug use. It is essential that those who have been on prescribed opioid replacement with slow reduction or had detoxification in a secure setting must be engaged by appropriate services on discharge. Those who are recently abstinent have a significantly high risk of overdose and relapse into drug use.

### 5.2.3 Detoxification

Detoxification refers to the process by which the effects of drugs are eliminated from dependent users in a safe and effective manner, so that withdrawal symptoms are eliminated. This process may be carried out by using the same drug, or another which has a similar effect, in decreasing doses. It can also be assisted by the prescription of adjunctive medication to reduce withdrawal symptoms (NICE, 2007c).

#### Opioids

There are several pharmacological options for opioid detoxification, including non-opioid based medication. Opioid detoxification will depend on:
Pharmacological approaches

- the young person’s wishes and needs (and parental considerations)
- the setting of detoxification
- the length of sentence
- the severity of physical dependence and history of dependence
- other complex needs, e.g. mental health.

For many young people, especially those under 16 years and with a short history of mild opioid physical dependence, detoxification is considered appropriate. However, NICE (2007c) states that opioid detoxification should not routinely be offered to people who are serving a short prison sentence or a short period of remand. In this situation consideration should be given to treating opioid withdrawal symptoms with opioid agonist medication.

For some, particularly those older adolescents with more complex problems and a longer history of opioid and poly-drug dependence, clinicians may wish to stabilise for a period of up to a few months, using methadone or buprenorphine with the objective of stabilising other aspects of life, and improving functioning with parents/carers and peers. Once some stabilisation is achieved, the methadone or buprenorphine can be gradually reduced.

When determining the dose, duration and regimen of opioid detoxification, healthcare professionals based in secure facilities should, in discussion with the young person and their parents/carers, when appropriate, take into account, in accordance with NICE (2007c), the:

- severity of the dependence
- stability of the young person (e.g. other substance dependence and mental health issues)
- context and setting of the detoxification
- pharmacology of the chosen detoxification medication and any adjunctive medication
- length of sentence or remand period and possibility of unplanned release
- risks of self-harm, post-release overdose or death
- practical difficulties in assessing dependence and the associated risk of opioid toxicity early in treatment.
NICE (2007c) states that the duration of opioid detoxification should normally be up to 4 weeks in an in-patient or residential setting and up to 12 weeks in a community setting. For young people in secure settings the length of detoxification will depend on setting, duration of their stay, their wishes and needs, and the severity of the dependence. Access to and choice of treatment should be the same for young people regardless of whether they enter treatment voluntarily or are legally required to do so (NICE, 2007c).

Following successful opioid detoxification, and irrespective of the setting in which it is delivered, continued treatment should be offered. This should take the form of interventions designed to provide support and monitoring to maintain abstinence. This should normally be for a period of at least 6 months (NICE, 2007c).

**Nicotine**

Young people who smoke and are held in a secure setting may suffer from nicotine withdrawal symptoms on admission. These withdrawal symptoms may present as significant anxiety states and agitation with change in mood and concentration. Nicotine may also have been used to manage impulsiveness in those with attention deficit hyperactivity disorder (self-medication theory); many young people consider that it controls anxiety, so stopping may aggravate this disorder. Assessment and shared care with mental health services are crucial. Stop smoking services, including the use of nicotine replacement therapy, are recommended in secure settings (MacAskill and Hayton, 2007).

**Alcohol**

Though alcohol dependence is not common in young people, one must be alert to the possibility of dependence in those who are drinking excessively or who binge drink. Alcohol misuse is commonly associated with other illicit and prescribed/over-the-counter drug use in younger people. For all those young people who report alcohol and drug use, a careful and comprehensive assessment of alcohol use must be made. A minority of young people may be dependent on alcohol, making them at risk of more serious withdrawal complications, such as delirium tremens and seizures. These two conditions are potentially fatal, so it is essential that all young people are thoroughly assessed, and receive detoxification when required. If they are not dependent, it is important to address alcohol misuse using brief interventions, family interventions and individual motivational therapy (Heather, Raistrick and Godfrey, 2006 and NTA, 2008b).
Benzodiazepines
Benzodiazepines are misused by young people, often alone or together with other illicit drug misuse, including symptomatic relief following stimulant use, or to boost the effect of methadone or other opioids. A further group may be prescribed benzodiazepines for anxiety states or sleep difficulties. Cessation of benzodiazepines can lead to a recognised withdrawal state, where there is risk of seizures. Other withdrawal symptoms include anxiety, insomnia, nausea, headaches and tremor. In the most extreme cases the young person may experience psychotic agitation, depersonalisation or delirium. A slow reducing approach should be taken to detoxification.

Poly-substance dependence
In cases of current dependence on a combination of alcohol, opioids and benzodiazepines, more than one reduction regime may be required. Prescribing should proceed with additional caution due to the interaction of these drugs. In the context of opioids and alcohol physical dependence, pharmacological management of both dependences should commence at the same time, and the alcohol detoxification regime should then be managed with the opioid dependence stabilised (generally using buprenorphine or methadone) until the alcohol detoxification is complete (NICE, 2007c). Such management may assist in reducing the risk of impulsive self-harming behaviour.

For dual alcohol and benzodiazepine dependence, clinicians may wish to combine the regimes using an increased level of chlordiazepoxide for the first seven days to cover both alcohol and benzodiazepine withdrawal regimes. Following this the chlordiazepoxide can be converted to an equivalent once daily dose of diazepam to manage the benzodiazepine dependence; this should be a planned gradual reduction which is regularly reviewed.

5.2.4 Amelioration of withdrawal symptoms
Withdrawal from any drug, alcohol or nicotine may cause distressing symptoms that may require additional supportive management and pharmacological responses at times. These ameliorating regimes are not in themselves appropriate to use for detoxification alone but are adjuncts to ease distress. Adjunctive treatment of symptoms during withdrawal should be regarded as part of active clinical management with due care and risks considered.

NICE (2007c) suggests caution when prescribing adjunctive medication:

- Only use when clinically indicated, such as agitation, nausea, insomnia, pain or diarrhoea.
- Use the minimum effective dosage and number of drugs needed to manage symptoms.
- Be alert to risks of adjunctive medications, as well as interactions between them and opioid agonists.
Patients must be monitored frequently during the induction/stabilisation phase to ensure that symptoms are controlled – deaths have occurred in the past as a consequence of uncontrolled vomiting and dehydration during detoxification in custody. Vomiting and diarrhoea should therefore be managed by effective hydration and if necessary prescribing of carefully monitored anti-emetic and anti-diarrhoeal medication. Transfer must be organised to a general hospital if significant symptoms are not adequately controlled within 24 hours. Where there is a clear indication of significant medical complications developing, transfer to a local general hospital must be arranged immediately. The Department of Health (2007) concludes that there is no systematic evidence that any of these symptomatic medicines work to improve the outcome of opioid treatment though they may be useful to the clinician in situations where for safety reasons initial dose titration must be undertaken with extreme caution. Particular care is needed concerning the risk of poly-pharmacy and ensuring that appropriate supervision and support are in place in each case.

The following medications are suggested for adjunctive therapy, where required (Department of Health, 2007):

- diarrhoea – loperamide
- nausea and vomiting – metoclopramide, cyclizine or prochlorperazine
- stomach cramps – mebeverine
- muscular pains – paracetamol or non-steroidal anti-inflammatory drugs.

Symptoms such as anorexia, hypothermia and hypoglycaemia are common problems during the early stages of drug withdrawal. Patients must have access to food, naturally sweetened drinks, adequate fluids and extra blankets or bedding during this phase. Additional food and fluids at night are necessary during the recovery phase of withdrawal, when the appetite returns and sleep problems occur, to ensure that these problems are not further aggravated by hunger or thirst.

Insomnia is a common symptom of stimulant, opioid, alcohol and benzodiazepine withdrawal. This may be disabling, causing significant anxiety and distress, and should be regarded as a potential risk factor for self-harm and suicide. It is recommended that a range of non-pharmacological interventions should be available to young people experiencing insomnia, such as adequate hydration, support and listening, reading material, access to a television throughout the night and access to sleep advice.
Prescription of hypnotics should be considered very carefully. If insomnia becomes particularly problematic, a short-acting hypnotic may be prescribed for a limited period (a few days) and reviewed according to patient response. This action should be reserved for those who have not responded to other sleep aids and who have completed detoxification or stabilisation of medication and yet have not been able to recover their sleep patterns. These hypnotic drugs are in themselves dependence forming and liable to misuse. The possibility of interaction between methadone and hypnotics should also be considered when deciding on treatment. Continued insomnia must be assessed; this may be related to tranquiliser withdrawal, unrecognised depression or other physical problems.

Where insomnia has not been resolved with non-pharmacological approaches and where it is causing daytime fatigue and/or distress, a short course of a short-acting benzodiazepine (loprazolam, lorazepam, lormetazepam and temazepam) or Z-drug (zaleplon, zolpidem or zopiclone) may be considered (Department of Health, 2007 and NICE, 2004). These short courses should last no more than a few days as dependence can develop. In severe cases advice should be sought from an addiction psychiatrist or CAMHS or on-call psychiatrist.

It is not appropriate to prescribe anti-depressant drugs such as mirtazepine just to use their sedative properties. The use of anti-depressants in young people needs to be very carefully managed and they should not be used unless in conjunction with child and adolescent psychiatric advice and in accordance with NICE (2005) advice.

5.2.5 Adjunct to relapse prevention

Some drugs are useful in helping to maintain abstinence by blocking the effects of opioids or alcohol. However, they are not without complications. They have little evidence base for use in young people and should be carefully considered before prescribing is initiated. In general, because of the lack of evidence in young people, the use of this medication is not recommended. If it is considered, the young person should be highly motivated, aware of the potential adverse effects and able to access a wider programme of care from community specialist teams (and family members/carers where possible) who have agreed to support the young person following release (NICE, 2007b). Supervised consumption of this medication both in the secure setting and in the community is recommended. It may be considered for older adolescents but should be part of a comprehensive care plan, supervised and regularly reviewed.

5.3 Monitoring the induction process

It is essential that those who are undergoing pharmacological interventions are monitored closely. All secure establishments that undertake these interventions must have a setting with accommodation that allows unrestricted 24-hour observation, by trained healthcare staff (except for nicotine replacement therapy). This level of observation should include visual, oral, auditory, olfactory and tactile communication and monitoring.
During induction and stabilisation there should be a minimum of 72 hours’ observation by professional healthcare staff, and longer if problems are detected (except for nicotine replacement therapy). It is necessary to observe young people during the induction onto pharmacological therapy, to observe for problems either as a consequence of withdrawal symptoms, such as fitting, vomiting and distress, or for side effects of medication, such as a sudden reduction in blood pressure, drowsiness and excess sedation. Observations should continue at least twice daily until stabilisation is achieved.

Recorded nursing observation and other forms of clinical interaction should be ongoing throughout the first phase of pharmacological management, and ideally should last for the whole of the stabilisation period of 5–7 days (5 days for opioid and benzodiazepines and 7 days for alcohol detoxification). This should include frequent clinical reviews, usually co-ordinated by a nurse. Reviews should consist of general observation, gait, and physical determinants such as blood pressure, pulse, temperature and signs of agitation or sedation. These symptoms could reflect inadequate or excessive medication or poor tolerance during induction phases.

Protocols must be available on observational methods such as general demeanour, blood pressure, pulse, temperature and urine/oral fluid testing and these should be recorded. Breathalysers can be used to ensure that no illicit alcohol use is continuing during an alcohol detoxification.

Any signs of drowsiness, slurred speech, droopy eyelids, or lowering of blood pressure, or any security information received that might indicate illicit drug or alcohol use or excess dose of prescribed medications must be acted upon (see Section 5.4).

Withdrawal scales in relation to drugs and alcohol can be useful, and they allow careful and routine enquiry with the young person about their symptoms. Symptoms and the response of the team to the symptoms must be recorded when these scales are used. However, while they are useful, they must never take the place of clinical assessment and regular review.

While monitoring and psychosocial support are important when prescribing nicotine replacement therapy, 24-hour observations are not required. Carbon monoxide monitors are also useful in stop smoking programmes for giving positive feedback to patients as their carbon monoxide levels drop.
It is necessary to assess routinely and frequently the mental state of the young person, paying particular attention to the increased likelihood of self-harming as withdrawal proceeds. Self-injurious behaviours are common on admission to secure settings and especially in those in distress due to drug dependence. It is imperative that the drug and alcohol dependence is adequately and appropriately managed, so as to reduce the incidence of self-harming behaviour and suicide. Use of rating/monitoring scales for mental state would again be useful in the day-to-day observation and monitoring of these young people.

Ongoing reviews by the same team should occur where any extended prescribing regimes are in place, to ensure that the original plan is adhered to, or adjusted if circumstances change.

5.4 Supervised consumption of medications

All doses of drugs used in the management of substance misuse must be consumed under supervised conditions. When administering medication nursing staff must:

- check the identity of the patient
- ensure that the patient is fully alert and responding appropriately, and that there are no signs of drowsiness/collapse, slurred speech, droopy eyelids or lowering of blood pressure
- consider whether there are any other reasons to suspect additional illicit drug use.

In the event of uncertainty regarding any of the above, the nurse must withhold medication, observe the patient, monitor blood pressure, notify a doctor and test urine/oral fluid. Physical examination must take place, the level of drowsiness ascertained, and its cause determined through examination by the healthcare team. Observation of the patient must continue until any excess sedation has reduced. Excessive sedation and continued increasing sedation despite withholding drugs should necessitate urgent assessment and probable transfer to general hospital.

**Buprenorphine**

Particular care needs to be taken in the supervision of buprenorphine as it will become inactive if swallowed. It must be allowed to slowly dissolve under the tongue and such supervision can take at least 10 minutes.
Supervised consumption of buprenorphine consists of the following:

- Identity check
- Initial drink of water
- Constant observation throughout the whole process
- Check end of dissolving process
- Further drink of water.

An advantage of this procedure is the opportunity to engage with the young person, increasing informal discussion during the observation period.
6. Opioid prescribing protocols

Opioid prescribing protocols – key points

- The use of methadone, buprenorphine and lofexidine is recommended.
- Dosage for a young person is likely to be relatively lower than for adults though there is no evidence base to guide this.
- Methadone or buprenorphine must never be prescribed in the absence of positive drug testing and/or observable withdrawal symptoms. Non-opioid medication, such as lofexidine, should be used as an alternative if prescribing is deemed necessary and tolerance is unclear.
- A period of at least 5 days’ stabilisation should be achieved prior to detoxification regardless of the medication used, unless lofexidine is used for safety reasons because of concerns about dependence and tolerance.
- Stabilisation on a dose may be appropriate especially in the case of a short sentence or remand.
- In induction always titrate doses to withdrawal symptoms and observe for over-sedation.
- Detoxification should be a gradual process; consider up to 12 weeks, and in some cases longer tapering may be required.
- For all detoxifications adjunctive medical and non-medical treatments may be required, though evidence for symptomatic prescribing is poor.
- Naltrexone must only be used in young people where there is strong community support from both substance misuse specialists and family/carers. Young people must also be highly motivated and understand the full implications of the medication.

This chapter guides the practitioner in the management of opioid dependence. In line with NICE (2007d) guidance in this document the term ‘opioid’ will be used to refer to the whole group of natural, semi-synthetic and synthetic compounds that act on opioid receptors. It includes guidance on induction, stabilisation and detoxification regimes using methadone, buprenorphine and lofexidine. All of these drugs are effective in treatment.
Maintenance is generally not a goal in adolescents though a small but perhaps significant minority of young opioid users may benefit from short-term maintenance followed by a slow reduction. This could last for some months, though in the context of a secure setting, length of sentence or remand and severity of dependence are relevant factors. As a caveat to all pharmacological approaches, they must be administered within an overall comprehensive care plan.

Before commencing pharmacological management for opioid use physical dependence must be established. This can be complicated by the length of stay in police cells or other reasons for a short break in use happening for a young person who is dependent. The full range of indicators of dependence should be considered in making prescribing decisions.

Decisions on maintenance or detoxification in secure settings need extra consideration with regard to the expected duration of stay. It is crucial that due recognition is given to loss of tolerance and risk of overdose on leaving the institution; this must be considered in deciding whether to stabilise or detoxify. Should a young person be remanded, with the possibility of unplanned release, or in custody on a short sentence, it may be more appropriate to consider maintenance with appropriate transfer to a community service on discharge that can then develop a care plan based on needs and motivations in a community setting. Establishments are encouraged to develop close working relationships with community services, and to help to establish contact between young people and these services.

High-quality reviews on the three main methods of detoxification from opioids are available (NICE, 2007a and 2007d and Department of Health, 2007). Although these relate to adults (those aged from 16) there was minimal evidence available to be included in these reviews on detoxification from opioids specifically from populations of young people (those under 18 years). The methods of opioid detoxification are:

- tapering methadone
- tapering buprenorphine
- use of lofexidine.

# 6.1 Medication for the treatment of opioid dependence

_Prior to the initiating of any prescribed treatment, practitioners must familiarise themselves with section 2.5 of this document 'Prescribing responsibilities', on pages 17-19 of this document._ Methadone and buprenorphine are both approved for the treatment and prevention of withdrawals from opioids, though licensing arrangements differ
Opioid prescribing protocols

in young people. The choice of methadone or buprenorphine depends on a number of factors, including:

- level of opioid use
- safety, e.g. risk of diversion and overdose
- concomitant dependence on other drugs such as benzodiazepines and alcohol
- severity of dependence
- patient preference
- history of use of either or both drug(s) in treatment
- retention and treatment compliance
- prescribers’ experience
- context and setting of treatment.

The Department of Health (2007) notes that evidence suggests that methadone is more likely to retain people in treatment, though the evidence for the relative effectiveness of methadone and buprenorphine in preventing illicit drug use is mixed. NICE (2007a: p4) recommends:

“If both drugs are equally suitable, methadone should be prescribed as the first choice.”

In order to make decisions about which medication is most suitable in the treatment of opioid dependence, it is important to understand the differences between them, and how they compare to heroin.

The timing of the onset of withdrawal symptoms will depend on the opioid that an individual has developed physical dependence to; this is due to the half-life of the opioid. The shorter the half-life the quicker withdrawal symptoms will be observed and the longer they are likely to last, as the opioid will take longer to completely stop its effect. The half-life of a drug is the name given to the time it takes for blood levels of a drug to drop to 50% of the peak concentration.

**Heroin** fits opioid receptors almost perfectly and stimulates them strongly. It also inhibits the release of noradrenalin, which causes the body to produce more noradrenalin. Continued use of heroin inhibits the release of this noradrenalin. On cessation of heroin use, noradrenalin is released in excess of normal levels, causing many of the unpleasant symptoms associated with heroin withdrawal (Preston, 2004). The half-life of heroin is around 3 hours.
Methadone binds well to opioid receptors and stimulates them in a way that is similar to heroin. It has a less intense but longer lasting effect. It has the same effect on noradrenaline production as heroin (Preston, 2004). The half-life of methadone depends on whether it is a first dose or part of daily consumption. The half-life of a single first dose is around 15 hours; the half-life of regular methadone consumption is around 25 hours (Preston, 1996).

It is generally advised that methadone following a stabilisation period of 5 days should be slowly reduced in a linear fashion. The reduction should last at least 14 days, perhaps longer if withdrawing from prescribed methadone or buprenorphine rather than illicit heroin. It would be likely to be longer in those with more severe and longer dependence. Short detoxification should be recommended only for those with short histories of dependence who have titrated to low levels of methadone and wish to detoxify quickly and have given their full consent to do so. Evidence suggests that a slower detoxification from methadone is associated with improved completion rates. The duration of opioids detoxification should:

“... normally be up to 4 weeks in an inpatient/residential setting and up to 12 weeks in a community setting.”

(NICE, 2007d: p15)

The detoxification plan must be reviewed on a daily basis, with review of the overall care plan occurring frequently during the detoxification process. Withdrawal symptoms can present later in the detoxification period rather than in the early phase of the process. Equally for those with longer stabilisation needs, the care plan should be reviewed frequently.

Methadone is considered useful as it:

- is evidence based (in adults)
- is relatively straightforward to titrate against withdrawal symptoms
- can be dispensed once daily (following stabilisation) and is easy to supervise
- can be used in pregnancy (see Section 8.3)
- is the preferred substitution agent within the secure setting.

For those young people who are stabilised while in a secure setting, it is likely that the dose will be relatively low, usually less than 40 mg of methadone. If a higher dose is required specialist advice is warranted.
Buprenorphine binds very well to opioid receptors, so well that if any methadone or heroin is still attached to the receptors it will be displaced, which will precipitate withdrawal symptoms and stop heroin and methadone having their usual effects. Buprenorphine does not stimulate the opioid receptors strongly. It has the same effect on noradrenalin production as heroin (Preston, 2004). Buprenorphine’s half-life is between 20 and 37 hours (Royal College of General Practitioners, 2004).

Buprenorphine is considered to be less dangerous in overdose than methadone and is useful for both maintenance and detoxification, anecdotal reports of ‘clearer heads’ are reported and with maintenance doses use of illicit opioids is reduced. Disadvantages include the length of time required for supervised consumption of sublingual tablets, the diversion potential, misuse of the drug, precipitated withdrawal and expense.

Buprenorphine should not normally be used in those who:

• have been taking or have been prescribed methadone in quantities greater than 20 mg per day – hence making transfer more difficult in the secure setting
• require analgesia, possibly opioid based
• have abnormal liver function tests
• are pregnant.

Caution should be used in prescribing buprenorphine to those with benzodiazepine dependence due to the increased risk of fatal overdoses.

The risk of precipitated withdrawal is the main problem with induction.

Achieving a stabilisation dose, one that has no withdrawal symptoms and seeks to avoid any craving, may take 1–2 weeks. The dose for maintenance in adults is regarded as between 8 and 32 mg but the most common effective maintenance dose is between 12 and 16 mg (adults) though some need higher doses. For those young people who are stabilised while in a secure setting a lower dose than for adults may achieve stabilisation, for example around 8 mg of buprenorphine. This is satisfactory provided that it is decided on an individual basis and there are no cravings or withdrawal symptoms.

Suboxone is a new formulation of buprenorphine which is now available; it includes the opioid antagonist naloxone in a combined sublingual tablet, in a ratio of 4:1 of buprenorphine:naloxone.
This new form is used at the same dose, that is, 8 mg of buprenorphine (Subutex) is the same as 8 mg of the new combination of buprenorphine and naloxone (Suboxone). The combination is expected to provide the same therapeutic effect while preventing or reducing the liability for misuse. This is based on the rationale that when taken sublingually the naloxone has a low bioavailability and does not diminish the therapeutic effect. However, when injected the naloxone has a high bioavailability and may precipitate opioid withdrawal, which is therefore likely to discourage injection of the drug. Misuse intra-nasally appears to have variable effects.

**Lofexidine** does not affect the opioid receptors and so does not have any heroin-like effects. Lofexidine reduces withdrawal symptoms by preventing too much noradrenalin production, the cause of many, but not all, physical withdrawal symptoms (Preston, 2004).

For those young people who do not want to use methadone or buprenorphine and have a history of mild dependence with relatively low levels of illicit use, lofexidine could be considered as a first choice for detoxification. This may be the option of choice for young people with presumed low or unknown tolerance to opioids.

Lofexidine may be considered for those:

- "who have made an informed and clinically appropriate decision not to use methadone or buprenorphine,
- who have made an informed and clinically appropriate decision to detoxify within a short time period
- with mild or uncertain dependence (including young people)."

(NICE, 2007d: p14)

Lofexidine could be initiated at the start of the treatment process or it could be commenced following a 5 day stabilisation period of methadone or buprenorphine, provided that a high stabilisation dose is not required, in which case lofexidine may be used at the end of a tapering opioid detoxification.

Reported side effects include dry mouth and mild drowsiness, though if the person is drowsy, one must be alert for other concomitant drug use. Lofexidine may cause bradycardia or hypotension (lowered blood pressure) in some people. Blood pressure and pulse rates must be checked prior to initiation, and then prior to the administration of each dose for at least the first 72 hours of the detoxification regime and for longer if there are problems. Observations should continue at least twice daily until a stable dose is achieved. The safety of this drug is not established for those young women who are pregnant or breastfeeding.
6.1.1 Poly-drug management

In cases of current dependence on any combination of alcohol, opioids and benzodiazepine, more than one reduction regime may be required. Prescribing should proceed with additional caution due to the interaction of these drugs. In the context of opioid and alcohol physical dependence a more graduated individual approach will be necessary; the opioid regime should remain stable while the alcohol detoxification is taking place. Such management may assist in reducing the risk of impulsive self-harming behaviour. For the management of both alcohol and benzodiazepine dependence, clinicians may wish to combine the regimes using an increased level of chlordiazepoxide for the first seven days to cover both alcohol and benzodiazepine withdrawal regimes. Following this the chlordiazepoxide should be converted to an equivalent level of diazepam with a once daily dosing regime. A clear gradual reduction regime of the diazepam should be instigated; the speed of this reduction will depend on the assessed needs of the young person and should be frequently reviewed.

Naltrexone may be prescribed following detoxification for those who require assistance to sustain abstinence from opioids. However, the evidence base for the clear recommendation of naltrexone to prevent relapse to opioid dependence is currently weak (British Association for Psychopharmacology, 2004) and care should be exercised particularly with the younger child/young person.

NICE (2007b) recommended that naltrexone should:

- be considered as a treatment option in detoxified, formerly opioid dependent people who are highly motivated to remain in an abstinence programme
- only be administered under adequate supervision
- always be accompanied by full information on potential adverse effects
- be part of a programme of supportive care
- be under regular review with discontinuation if there is evidence of misuse.

Naltrexone may be a potential adjunct to a comprehensive care plan for an older adolescent who is highly motivated and has significant support networks. Prior to release from a secure setting liaison with community services must occur, to organise further prescriptions for this drug and ensure careful aftercare provision, as its use is recommended only in conjunction with community specialist services. The co-operation of parents/carers may be particularly helpful in supervision of this drug on release.
Young people who are being considered for this therapy must be given full information prior to commencement, in leaflet form as well as verbally. Parents/carers should be involved wherever possible. Poor compliance or cessation of naltrexone significantly increases the risk of overdose and subsequent fatality if opioids are used when the young person returns to the community. This is due to the loss of tolerance to opioids.

Young people must be cautioned against any attempt to overcome the blocking effect of naltrexone by the use of increasing amounts of heroin. All young people commencing naltrexone treatment should be issued with a medical alert card, with advice on analgesic requirements. The patient’s GP should be informed of this treatment.

6.2 Deciding if pharmacology is required for opioid use

Methadone or buprenorphine should not be prescribed to a patient who has produced a negative opioid urine/oral fluid test unless they exhibit clear objective signs of opioid withdrawal or evidence of recent use by way of a confirmed and supervised dispensed prescription.

In the absence of positive urine/oral fluid analysis or objective withdrawal symptoms it is advisable to use a non-opioid medication such as lofexidine, if prescribing is required, at least until objective withdrawal symptoms emerge. Negative urine/oral fluid analysis can sometimes occur in those who are dependent because they have been unable to obtain supplies of opioids for several days, perhaps due to time held in police cells. In these cases objective withdrawal symptoms will be present and can be used to help to confirm dependence. It should be borne in mind that the absence of opioids for a number of days will reduce tolerance levels, and great care will be needed on dose induction to avoid overdose.

Induction of a young person onto an opioid to avoid and ameliorate withdrawal symptoms must be carefully conducted.

The following factors can help to decide if pharmacology is required:

- a careful assessment of past history – to include quantity, frequency, when last used and route of use of opioids, but also benzodiazepines, alcohol and other illicit drugs
- presence of withdrawal symptoms
- an opioid positive urine/oral fluid test
- physical objective signs of use, e.g. injecting sites (although not all those who are dependent will inject)
- corroboration of history and treatment history with other practitioners.
Objective and subjective signs of opioid withdrawal are described in Table 1. Due to the different half-life periods of different opioids withdrawal symptoms present at different times. Untreated heroin dependence shows early withdrawal symptoms within 8 hours with peak symptoms at 36–72 hours. Methadone and buprenorphine withdrawal occurs later with longer lasting symptoms before subsiding.

Table 1: Signs of opioid withdrawal (Department of Health, 2007)

<table>
<thead>
<tr>
<th>Objective signs of opioid withdrawal</th>
<th>Subjective signs of opioid withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yawning</td>
<td>Restlessness</td>
</tr>
<tr>
<td>Coughing</td>
<td>Irritability</td>
</tr>
<tr>
<td>Sneezing</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Runny nose</td>
<td>(The signs listed above may also be useful objective signs)</td>
</tr>
<tr>
<td>Lachrymation (watery eyes)</td>
<td>Sleep disorders</td>
</tr>
<tr>
<td>Raised blood pressure</td>
<td>Depression</td>
</tr>
<tr>
<td>Increased pulse</td>
<td>Drug craving</td>
</tr>
<tr>
<td>Dilated pupils</td>
<td>Abdominal cramps</td>
</tr>
<tr>
<td>Cool, clammy skin</td>
<td></td>
</tr>
<tr>
<td>Diarrhoea</td>
<td></td>
</tr>
<tr>
<td>Nausea</td>
<td></td>
</tr>
<tr>
<td>Fine muscle tremor</td>
<td></td>
</tr>
</tbody>
</table>
Deciding if pharmacology is required to manage opiate use

- Young person reports regular opiate use?
  - No – only occasional
  - Yes
    - Are there withdrawal symptoms present?
      - No
        - Is urine/oral fluid positive for opiates?
          - No
            - Do not prescribe
          - Yes
            - Yes
              - Is prior opiate use methadone or buprenorphine (not heroin), indicating withdrawal will be slow to develop?
                - No
                  - Consider prescription of lofexidine
                - Yes
                  - Do any of the following apply?
                    - History of daily use with a gap of 2–3 days, due to being located in a secure setting
                    - Corroboration of opiate dependence by community substance misuse team
                    - Objective signs of use (injecting marks)
                      - Yes
                        - Consider prescription of methadone, buprenorphine or lofexidine – using titration and with regard to individual needs
                      - No
                        - Yes
                          - Consider prescription of lofexidine
                          - No

Initial doses must be titrated to relieve withdrawal symptoms, without inducing intoxication. The symptoms and signs of opioid overdose are:

- nausea and vomiting
- pin-point pupils
- drowsiness
- cold, clammy, blue-ish skin
- reduced heart rate
- reduced systolic blood pressure
- reduced body temperature
- breathlessness
- respiratory depression
- cyanosis – convulsions (due to lack of oxygen)
- death.

(Preston, 1996)

The following factors should be considered when deciding on initial dose and beginning the induction process:

- age, weight, body mass and physical development
- be aware of possible drug interactions (see Department of Health, 2007)
- tolerance and dependence
- other poly-drug use
- accumulated toxicity particularly with methadone.

To ensure safe prescribing the following procedures must be in place:

- **Unrestricted observation by trained healthcare staff 24 hours a day for at least the first 72 hours of clinical management**, and beyond this period where withdrawal is complex and a longer period of stabilisation is required. Observations should continue at least twice daily until stabilisation is achieved.

- In the event of any sign of drowsiness – withhold the due dose of methadone and any other sedating medication that could affect respiratory function pending reassessment. In the event of drowsiness, care must be taken that the young person has not taken other non-prescribed medication and/or alcohol. Careful
observation is important. Dose must be withheld until the healthcare team are clear about the cause of the drowsiness and this has abated. Where sedation is sustained, the young person may need transfer to a general hospital setting.

- A defined period of at least twice daily recorded observations should be put in place, until steady state is reached.

### 6.3 Methadone induction regime

Prior to the initiating of any prescribed treatment, practitioners must familiarise themselves with section 2.5 of this document ‘Prescribing responsibilities’, on pages 17-19 of this document. To ensure safety, methadone should be commenced through a process of induction. Methadone should normally be prescribed as a 1 mg in 1 ml oral solution. It is important to start on a low dose, observe for withdrawals and increase accordingly, as there is a lack of evidence for methadone treatment in young people. Inappropriate dosing can result in overdose related to cumulative toxicity in the first few days. The initial dose will be in the range of 5–10 mg. This is lower than that advised in adults, due to the shorter history and often uncertain tolerance of young people. The observation period for expected response for a single dose is up to at least 4 hours because of the long and variable half-life of methadone. Protocols note that further doses should not be given within 6 hours. Any requirement for supplemental doses should be assessed by an experienced medical practitioner. In general, caution with frequent and rapid induction should be advised in high-risk young people, or those with uncertain tolerance. Greater caution should be taken in the secure setting, if the young person cannot be well observed. Steady state plasma levels are generally expected within about 5 days, and therefore close observation is necessary until stabilisation is achieved.

Great care must be taken in estimating dose levels that approximate with illicit heroin, as the purity and consequently the strength of street heroin fluctuates markedly. An individual can only approximate how much they have used and this may be inaccurate.

**Induction regime:**

- Full explanation of methadone, its toxicity and induction regime must be given to the patient and to their parents/carers.
- Methadone is commenced at least 8 hours after the last heroin dose provided that there is evidence of objective withdrawal symptoms.
- Urine/oral fluid test should be positive for opioids.
- A starting dose of 5–10 mg of methadone is administered – this must be supervised.
Withdrawal severity scales can be useful in assisting with withdrawal monitoring and in conjunction with intoxication monitoring, though they must not take the place of clinical observation.

Further methadone is titrated against withdrawal symptoms and intoxication signs.

**Table 2: Methadone induction regime**

<table>
<thead>
<tr>
<th>Suggested titration doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 0</td>
</tr>
<tr>
<td>First day in a secure setting – 10 mg methadone</td>
</tr>
<tr>
<td>Days 1 and 2</td>
</tr>
<tr>
<td>Methadone 10 mg BD</td>
</tr>
<tr>
<td>Day 3</td>
</tr>
<tr>
<td>15 mg mane and 10 mg nocte</td>
</tr>
<tr>
<td>Day 4</td>
</tr>
<tr>
<td>25 mg mane and 5 mg nocte</td>
</tr>
<tr>
<td>Day 5</td>
</tr>
<tr>
<td>30 mg mane – can be given at this time on a daily basis</td>
</tr>
</tbody>
</table>

If the young person arrives in the late afternoon or evening, the prescription of one dose of methadone of 10 mg will usually suffice for that day. If the young person arrives in the morning, a dose of 5–10 mg is given on arrival at the detoxification unit. A further 5–10 mg of methadone may be given in response to objective withdrawal signs later in the evening if required but must not be given within a 6-hour period.

The protocol above notes a methadone titration up to 30 mg. There may need to be further administration of methadone on day 1 and 2, depending on the severity of dependence and observable withdrawal symptoms. However, the dose should not generally be in excess of a further 10 mg and needs to be carefully monitored. If higher doses are required, then specialist advice should be sought.

It may be that the young person does not need 30 mg daily. Increases in methadone should only be given in response to clear withdrawal symptoms and not requests for sedation. One must be careful that anxiety symptoms related to the process and the circumstances are not judged to be withdrawal symptoms and methadone adjusted upwards.

Titration for young people should only be undertaken in an environment where there is close supervision. Operating a twice daily administration of medication allows smaller doses to be given which increases the flexibility of titration. Any observation of drowsiness must be responded to by omission of the next dose and formal review by the healthcare team. If the young person is already prescribed concomitant respiratory depressant drugs then great care is needed with slow titration, of perhaps up to 5 mg increments. There should be no medication given while drowsiness is observed, with clear review by the healthcare team to ascertain the cause of this sedation and transfer to general hospital if it continues.
6.4 Buprenorphine induction regime

Buprenorphine is administered as sublingual tablets. Supervision takes at least 10 minutes and demands close observation. Supervision, however, is important, as diversion, intravenous use and snorting of these tablets have been recorded; anecdotal evidence of snorting has been reported in prisons. Should the tablet be injected or snorted the patient’s treatment must be reviewed urgently by the clinical team. The review could include ensuring that there is dependence to opioids, a switch to methadone to optimise treatment, and increasing the dose if dosage has been insufficient and led to a need to seek additional substances.

Liver function tests (LFTs) should be undertaken at the beginning of treatment. If normal these tests should be repeated periodically throughout treatment, as buprenorphine can cause an increase in aspartate aminotransferase (AST) and alanine aminotransferase (ALT). If LFTs are abnormal the patient should be investigated for the underlying cause. Significant decompensating liver function is a contraindication to its use.

The young person and their parents/carers (if appropriate) must be informed about the different properties of buprenorphine as compared with methadone, especially precipitated withdrawal risk. This may exacerbate rather than reduce withdrawal symptoms in the event of recent or current heroin or methadone use. Without full discussion of these and other properties of the medication informed consent cannot be given.

To avoid precipitated withdrawal patients should have been heroin-free for a minimum of 8 hours and methadone-free for at least 24 hours prior to the initial dose of buprenorphine. Ideally, they should also be exhibiting clear signs of opioid withdrawal (Royal College of General Practitioners, 2004). Precipitated opioid withdrawal, if it occurs, starts within 1–3 hours of the first buprenorphine dose, peaks in about 6 hours and then subsides. Adjunctive therapy may be required such as lofexidine if withdrawals are severe.

**Induction regime:**

- Observe for clear objective withdrawal signs.
- Initiate at least 8 hours after the last heroin dose or 24–36 hours at least after the last dose of methadone.
- Full explanation of the effects of the drug to be given.
- Commence on 2–4 mg (2 mg to the younger person with low BMI).
- Titrate the dose on subsequent days, up to increments of 2–4 mg daily.
- Dividing the daily dose may be useful in the short term.
- Consumption supervised to ensure that the tablet has fully dispersed.
• Adjunctive symptomatic support or additional buprenorphine may be required in the early stage of treatment.
• Ongoing assessment and monitoring and regular clinical review and reassurance are likely to improve compliance and retention.

6.5 Opioid detoxification

In adult prisons, it is advised that all those who are dependent on opioids should be stabilised, usually on methadone, in the first instance, for a period of assessment and care planning. This advice is similar for young people.

However, for those with a short history of dependence on opioids who have mild dependent symptoms, are under 16 years, and do not wish (and their parents/carers agree) to have either methadone or buprenorphine, then detoxification using lofexidine may be the treatment of choice. It is recommended if there is unknown tolerance or suspected low tolerance to opioids to commence detoxification with lofexidine.

For all detoxifications adjunctive treatment may be required, though care should be taken to ensure that the detoxification regime is at a suitably high level to optimise care for the young person. This will include non-drug measures, such as appropriate amounts of food and adequate hydration. To alleviate withdrawal symptoms drug preparations, such as anti-emetics or anti-diarrhoeal drugs, may be required, though care must be taken with interactions and multiple prescriptions.

Staff should be aware that, whatever the duration of detoxification, withdrawal symptoms may frequently persist beyond the cessation of all medication. It is important to provide support for individuals in the first few days after stopping methadone or buprenorphine; at this time some individuals may require symptomatic relief which may include the use of low-dose lofexidine.

Detoxification regimes must not be commenced without first explaining the overall aims of treatment and the likely process of detoxification. The reduction programme can be slowed or stopped at any time; the process should be reviewed regularly, at least twice weekly. If there are concerns about increasing withdrawal symptoms the reduction can be slowed or dose increased following careful review. In these circumstances, the healthcare team must consider whether there are other problems that could mimic withdrawal symptoms, or if illicit drugs have been used, or if they will be used if withdrawal symptoms continue.

The length of the process needs to reflect the level of physical dependence, the length of time the young person was already on the prescription (if this was so), the age and needs of the young person and the wishes of the young person and their parents/carers.
Some young people may not be able to successfully detoxify from opioids and remain opioid-free. In these cases maintenance may be required for a while and can act to help to reduce drug-related harm.

### 6.6 Lofexidine detoxification

Methadone or buprenorphine should be offered as first line treatment in opioids detoxification (NICE, 2007d). Lofexidine may be considered in those who do not want either of these drugs, want a short detoxification and have mild or unclear dependence. The symptoms of withdrawal present earlier and more intensely in the first few days than with tapering methadone regimes. It may cause hypotension.

Detoxification should commence at 0.2–0.4 mg twice a day, increased daily as necessary to control withdrawal, in increments of 0.2–0.8 mg daily to a maximum of 2.4 mg a day.

This regime may need to be adjusted in response to withdrawal symptoms, with higher doses needed by some patients in the early stages of opioid withdrawal. Young people are more inclined to need lower doses but again there is little evidence on those under 16. The dose should be titrated according to withdrawal symptoms with the young people in accommodation where they can be continuously observed.

**Lofexidine detoxification regime:**

- Observe for withdrawal signs, unless the person has previously been stabilised on methadone or buprenorphine.
- Take baseline pulse and blood pressure readings.
- Give a full explanation of the effects of the medication to be given.
- Initial dosage should be 0.2–0.4 mg twice daily. This dose may be increased by increments of 0.2–0.8 mg a day up to a maximum of 2.4 mg (12 tablets).
- Monitor blood pressure and pulse prior to each dose for at least 72 hours.
- Stop medication if there is severe bradycardia or hypotension.
- Stabilise at a constant dose for 7–10 days.
- Decrease dose gradually over a period of at least 2–4 days.
- Slow reduction if hypertension occurs.
- Do not prescribe to pregnant or breastfeeding women.
Table 3: Example of approximately 3 week lofexidine detoxification

<table>
<thead>
<tr>
<th>Three phases of detoxification</th>
<th>Example dosage</th>
<th>Total daily dose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Increase</strong> dosage according to patient’s response to a maximum of 2.4 mg</td>
<td>Day 1 0.4 mg BD</td>
<td>0.8 mg</td>
</tr>
<tr>
<td></td>
<td>Day 2 0.6 mg BD</td>
<td>1.2 mg</td>
</tr>
<tr>
<td></td>
<td>Day 3 0.8 mg BD</td>
<td>1.6 mg</td>
</tr>
<tr>
<td></td>
<td>Day 4 0.8 mg BD</td>
<td>1.6 mg</td>
</tr>
<tr>
<td></td>
<td>Day 5 1 mg BD</td>
<td>2 mg</td>
</tr>
<tr>
<td><strong>Stabilise for 7–10 days</strong></td>
<td>Days 6–12 1 mg BD</td>
<td>2 mg</td>
</tr>
<tr>
<td><strong>Reduce</strong> speed of withdrawal if blood pressure elevates</td>
<td>Day 13 0.8 mg BD</td>
<td>1.6 mg</td>
</tr>
<tr>
<td></td>
<td>Day 14 0.6 mg BD</td>
<td>1.2 mg</td>
</tr>
<tr>
<td></td>
<td>Day 15 0.4 mg BD</td>
<td>0.8 mg</td>
</tr>
<tr>
<td></td>
<td>Day 16 0.2 mg BD</td>
<td>0.4 mg</td>
</tr>
<tr>
<td></td>
<td>Day 17 0 mg BD</td>
<td>0 mg</td>
</tr>
</tbody>
</table>

### 6.7 Methadone detoxification

Methadone detoxification should only be commenced after at least a 5 day period of stabilisation to ensure that the optimum dose has been reached before considering reduction to minimise discomfort. Due to methadone’s long half-life reduction should be relatively slow as withdrawal symptoms may take some time to become obvious.

- Explain fully the regime and goals of the detoxification.
- Reduce methadone by 2.5–5 mg every 4 days.
- Stop withdrawal and restabilise if the young person recommences illicit opioid use, or if there are other signs that they cannot manage the detoxification.
Table 4: Example of 3 week methadone detoxification

<table>
<thead>
<tr>
<th>Day</th>
<th>Dose (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>30</td>
</tr>
<tr>
<td>Days 2–4</td>
<td>25</td>
</tr>
<tr>
<td>Days 5–7</td>
<td>20</td>
</tr>
<tr>
<td>Days 8–10</td>
<td>15</td>
</tr>
<tr>
<td>Days 11–14</td>
<td>10</td>
</tr>
<tr>
<td>Days 15–17</td>
<td>5</td>
</tr>
<tr>
<td>Days 18–20</td>
<td>2.5</td>
</tr>
<tr>
<td>Day 21</td>
<td>0</td>
</tr>
</tbody>
</table>

**6.8 Buprenorphine detoxification**

Buprenorphine detoxification should only be commenced after at least a 5 day period of stabilisation to ensure that the optimum dose has been reached before considering a reduction to minimise discomfort.

For patients who have been stabilised on buprenorphine, a buprenorphine detoxification involves a gradual reduction in doses over the course of at least 2 weeks, but can be up to 12 weeks.

For patients who have been stabilised on methadone, a buprenorphine detoxification should not be commenced until the patient has reduced to at least 20 mg of methadone a day, with a minimum gap of 24 hours between the last dose of methadone and the initial dose of buprenorphine, to avoid precipitated withdrawal symptoms. Ideally, the young person should be exhibiting some signs of withdrawal prior to initiation of the buprenorphine.

Table 5: Gradual reduction of buprenorphine

<table>
<thead>
<tr>
<th>Daily dose</th>
<th>Suggested reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 mg or over</td>
<td>4 mg every 1–2 weeks</td>
</tr>
<tr>
<td>8–16 mg</td>
<td>2–4 mg every week</td>
</tr>
<tr>
<td>2–8 mg</td>
<td>2 mg every week</td>
</tr>
</tbody>
</table>

(Guidance for the use of buprenorphine, Royal College of General Practitioners, 2004)

Tables 6 and 7 show alternative suggestions for detoxification from a stabilised dose of 8 mg of buprenorphine, though these must be tailored to the individual’s needs.
Table 6: Example of 2 week detoxification from 8 mg of buprenorphine

<table>
<thead>
<tr>
<th>8 mg buprenorphine approximately 2 week detoxification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
</tr>
<tr>
<td>Days 2–4</td>
</tr>
<tr>
<td>Days 5–7</td>
</tr>
<tr>
<td>Days 8–10</td>
</tr>
<tr>
<td>Days 11–13</td>
</tr>
<tr>
<td>Days 14–15</td>
</tr>
</tbody>
</table>

Table 7: Example of 4 week detoxification from 8 mg of buprenorphine

<table>
<thead>
<tr>
<th>8 mg buprenorphine approximately 4 week detoxification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days 1–4</td>
</tr>
<tr>
<td>Days 5–8</td>
</tr>
<tr>
<td>Days 9–12</td>
</tr>
<tr>
<td>Days 13–16</td>
</tr>
<tr>
<td>Days 17–20</td>
</tr>
<tr>
<td>Further reduction of 0.4 mg every 3–4 days</td>
</tr>
</tbody>
</table>

There is no evidence on which withdrawal regimes are most effective in young people. Clinical reports and opinion would suggest that there is an individualised process of detoxification that considers the individual needs of the child/young person. NICE (2007d) suggests that detoxification should normally be up to 4 weeks in a residential setting and 12 weeks in a community setting. Careful thought must be given if considering a shorter detoxification.

6.9 Maintenance with buprenorphine or methadone

It will not be appropriate to detoxify all opioid-dependent young people. Some will have severe dependence, a well established history of misuse and/or previous treatment and multiple difficulties including mental health problems, and will be at high risk of future overdose. These and other factors such as the age of the young person, whether they are on remand or sentence and the length of sentence may indicate that a young person may be more suitable for maintenance while in a secure environment. The decision as to whether to maintain or detoxify should be made by a multi-disciplinary team which includes the young person and their parents/carers as appropriate, and with access to community teams and specialist advice.
6.10 Continuation of opioid prescription from community service

It is important that there is continuity of care from the community to a secure setting, particularly if the length of the sentence or remand is expected to be short.

If a young person declares that they are already on a prescription (methadone or buprenorphine) the following issues must be considered prior to continuation of this prescription:

- Is the young person receiving methadone/buprenorphine under supervised consumption conditions in the community?
- Has the young person been receiving this medication regularly for at least the previous two weeks?
- Has the young person had the full supervised dose of methadone/buprenorphine at least within the past 48 hours?
- Have the young person’s treatment details been fully verified with the prescribing doctor and the supervising pharmacist? This includes dosage, pick-up arrangements, supervision, compliance and description of the patient.
- Does the community prescribing doctor support the plan to continue methadone/buprenorphine in a secure setting?

If the above criteria are confirmed with the pharmacist and doctor or non-medical prescriber, and compliance with supervised daily use has been verified, then the prescription should be continued, although initial dosing should still be divided until tolerance is assured.

It is imperative to consider the last prescribed dose prior to entering a secure setting, and whether there was any other use of illicit drugs on top of the prescription in the days leading up to entering a secure setting. This must include time/days spent in police cells, and whether the police organised the dispensing and taking under supervision of the prescribed medication during this time. If there is any lapse in the prescription, then the young person must be titrated against withdrawals, as with induction.

If it is not possible to verify the taking of the prescribed medication at that time or whether it was supervised, to ensure safety methadone/buprenorphine treatment should be given in accordance with the standard dose induction regime.
6.11 Naltrexone induction regime

Naltrexone is an opioid antagonist, and can be helpful following detoxification in enabling a person to maintain abstinence. It is licensed for oral use in those over 18 years. Due to the potential for hepatotoxicity, a liver function test should be organised prior to commencement of treatment and repeated during treatment; if there are even minor abnormalities this should be discussed with specialist teams and caution should be observed when considering the medication for patients with impaired hepatic or renal functioning (NICE, 2007b).

Care must be taken on initiation, as withdrawal would be precipitated in those dependent on opioids. It is recommended that naltrexone treatment should not be initiated until a patient is 5–7 days clear of heroin or (because of its greater half-life) 10 days clear of methadone. A urine/oral analysis should confirm this opioid-free status during these abstinent days and on the day of initiation.

If it is uncertain whether the person has used opiates, then it may be necessary to conduct a challenge. Following a negative urine or oral screen, a test dose (e.g. 12.5 mg of naltrexone) is given orally and the person is observed over a few hours for withdrawal symptoms. If no withdrawal symptoms are observed then up to 50 mg can be prescribed on a once daily basis. This drug may be considered for those adolescents who have detoxified from opioids as one part of a programme of supervision, which could involve parents/carers providing some of the support on release.

It is important to ensure that the young person is aware of their loss of tolerance to opioids and the risk of overdose should opioids be taken, especially if there is poor compliance with the naltrexone regime.
7. Prescribing protocols for alcohol and non-opioid drugs

Prescribing protocols for alcohol and non-opioid drugs – key points

Multiple dependences

• Dependence on a combination of alcohol, opioids and benzodiazepines will require more than one reduction regime.

Alcohol

• The recommended medication for the treatment of alcohol detoxification is chlordiazepoxide. The usual regime will be 20 mg of chlordiazepoxide QDS initially and then reducing over 7 days.

• The dose of chlordiazepoxide must be titrated until withdrawal symptoms cease.

• If withdrawal symptoms do not stabilise, or if there are seizures or delirium symptoms, the young person must be transferred to a general hospital.

• Acamprosate or disulfiram may have a role, but only where supported by specialist community substance misuse teams and the young person’s family/carers.

Benzodiazepines

• Benzodiazepine maintenance prescribing is not recommended in children and young people.

• Detoxification using diazepam must be gradual according to the length and severity of dependence.

• Diazepam at 30 mg a day is usually a sufficient maximum detoxification dose, even where previous use was higher.

• Benzodiazepine dependence and withdrawal can be associated with suicidal and self-harming behaviours.
Cannabis

- Withdrawal from cannabis may precipitate decreased appetite, weight loss, sleep problems, craving, irritability and vivid dreams. These symptoms may require management.

- Cannabis can contribute to and compound mental health problems. Where there is any evidence of psychoses a full mental health assessment must be completed; anti-psychotic medications may be required.

Inhalants

- Deaths are mostly related to ‘sudden sniffing’ or accidental injury while intoxicated.

- For very frequent inhalant users withdrawal may precipitate agitation which should be monitored as it may require treatment.

Nicotine

- There is a high incidence of dependence among regular cigarette smokers.

- Bupropion has not been shown to be effective in adolescents.

- Nicotine replacement products have a strong evidence base, though evidence is lacking in adolescents. Nicotine patches in adolescents appear to be safe.

- Smoking cessation programmes should be used to enhance nicotine replacement therapy.

Stimulants

- There is little evidence for the use of pharmacology in the treatment of cocaine or amphetamine dependence for adults, and none for children or young people.

- Stimulant withdrawal may precipitate significant psychological symptoms such as self-harm and suicide, violence, agitation and depression which may require treatment and careful monitoring.

- Psychological symptoms must be managed in tandem with the mental health team and include a full mental health assessment.

7.1 Multiple dependences

Dependence on any combination of alcohol, opioids and benzodiazepine will require more than one reduction regime. Prescribing should proceed with additional caution due to the interaction of these drugs.
In the context of opioid and alcohol physical dependence, the opioid regime should remain stable while the alcohol detoxification is taking place. For dual alcohol and benzodiazepine dependence, clinicians may wish to combine the regimes using an increased level of chlordiazepoxide for the first seven days to cover both alcohol and benzodiazepine withdrawal regimes, followed by conversion to once daily use of diazepam and a graduated withdrawal regime.

### 7.2 Alcohol detoxification

The choice of drug for alcohol detoxification is benzodiazepines, usually chlordiazepoxide or diazepam. The benefits of this are:

- a reduction in the severity of withdrawal
- a reduction in the incidence of complications
- a reduction in the adverse effects of medication
- improved completion rates.

The British Association for Psychopharmacology guidelines (2004) do not consider the choice of benzodiazepine to be crucial though longer-acting benzodiazepines are more effective in preventing fits and delirium. Chlordiazepoxide is generally recommended (Royal College of Physicians, 2001), though diazepam may be more beneficial if there is a history of seizures. Symptoms of withdrawal following diagnoses of physical dependence must be treated on an urgent basis.

The symptoms of alcohol withdrawal include:

- sweating
- tremors
- nausea
- vomiting
- hypertension (raised blood pressure)
- tachycardia
- agitated states
- seizures or delirium tremens as complicating factors.

The severity of dependent symptoms can vary and so affect the amount of benzodiazepines required. There are alternative models of delivery of benzodiazepines, such as titration of dose against withdrawal symptoms, ‘front loading’ until light sedation is achieved, or fixed reducing regime. Some of these regimes require more skilled monitoring and supervision.
A usual regime is of approximately 20 mg of chlordiazepoxide QDS initially, then reducing over about 7 days. This dose should be given on a four times daily basis initially so that withdrawal symptoms can be observed and the chlordiazepoxide titrated to the dose required. A reduction over 5 days for mild dependence could be:

- Day 1 – 20 mg QDS
- Day 2 – 15 mg QDS
- Day 3 – 10 mg QDS
- Day 4 – 5 mg QDS
- Day 5 – 5 mg BD

or gradations similar to this reduction (Parker et al, 2008).

The regime should be closely monitored, with a reduction of dose if there is evidence of over-sedation. There is little evidence on dose requirements for children and young people. While the dose of 20 mg QDS may be appropriate for a young person with mild dependence, it is important to be aware that, though unusual, severe dependence may occur with the need for increased doses that are titrated against increasing withdrawal symptoms. If vomiting is persistent hospitalisation should be considered as parenteral sedation may be required. For those who have a diagnosis of epilepsy and are prescribed anti-convulsant medication this should be stabilised, with careful monitoring. Advice from neurological services may be required.

It is important that individuals are closely observed in an appropriate setting for the first seven days of their management because of possible seizures, or symptoms of co-existing illness that may confound diagnosis, such as anxiety disorder or head injury.

Where concurrent opioid detoxification is indicated, no reduction in methadone or buprenorphine should be attempted until the alcohol detoxification is complete.

### 7.2.1 Complications

If a young person continues to demonstrate signs of alcohol withdrawal during detoxification additional doses of chlordiazepoxide or diazepam should be given. Should a patient’s condition not stabilise, they must be transferred to a general hospital urgently, as this is a potentially fatal condition.
Benzodiazepines, particularly diazepam, reduce de novo seizures and are recommended for treatment of withdrawal previously complicated by withdrawal seizures. Lorazepam is considered efficacious in preventing a second seizure in the same withdrawal episode. The evidence does not support the use of phenytoin in this circumstance (British Association for Psychopharmacology, 2004). Carbamazepine is also effective in both management of withdrawal symptoms and in management of seizures (British Association for Psychopharmacology, 2004). However, the use of benzodiazepines is advised as the treatment of choice in the management of alcohol withdrawal. Chlormethiazole is not recommended for use in alcohol withdrawal in younger people.

Longer-acting benzodiazepines help to prevent delirium and are recommended for this complication of alcohol withdrawal. However, should the young person have delirium symptoms, then they must be urgently transferred to a general hospital.

Should the young person have delirium symptoms, symptoms of Wernicke’s encephalopathy or even some symptoms suggestive of this, they must be urgently transferred to general hospital. (Wernicke’s encephalopathy presents with the full classical triad in only 10% of adults dependent on alcohol.)

7.3 Alcohol relapse prevention

Acamprosate can be used to improve abstinence rates and reduce drinking days and craving, though there is no clear evidence on which type of person might benefit. In adults acamprosate is recommended for those attempting to maintain abstinence when combined with psychosocial treatments. For those under 18 with alcohol dependence acamprosate is not recommended unless there is clear involvement with community specialist teams. However, there are some early positive suggestions for the use of acamprosate in adolescents.

With regard to disulfiram, despite its use for many years, there have been few controlled trials. Supervised consumption of this drug may improve efficacy. When prescribed without this supervision, there is little evidence for effectiveness above basic support. Care must be taken on initiation of this prescription as a young person may binge drink on discharge, without consideration of the consequences of the use of this drug. For those young people with dependence disulfiram is not recommended for use without the full involvement of community specialist teams, and parents/carers may be useful in terms of supervision of these drugs and support on release.

Naltrexone is not licensed for use in those with alcohol difficulties.
7.4 Benzodiazepine detoxification

Benzodiazepine withdrawal symptoms may take more than 72 hours to become established; a negative urine/oral fluid result would be unusual in a young person with physical dependence but should not automatically preclude the need for management of this dependence pharmacologically, especially as there may have been several days spent in police custody. However, only a minority of young people who misuse these drugs develop dependence (Ross and Darke, 2000).

Where physical dependence is established, either from illicit use or prescription for anxiety states, gradual discontinuation is recommended. There is little evidence that long-term prescribing of benzodiazepines reduces the harm associated with benzodiazepine dependence and increasing evidence that long-term prescribing may cause harm. Maintenance is not recommended in children and young people.

Where clinical assessment indicates a previous history of regular benzodiazepine use sufficient in dose and duration to suggest dependence, a benzodiazepine detoxification regime should be prescribed. Diazepam is licensed for the management of benzodiazepine withdrawal.

Detoxification should be initiated on the night of admission where there is a history of benzodiazepine physical dependence, and observed objective withdrawal symptoms. It is important to note that, depending on the timing of ingestion of last dose and assessment on the first night, withdrawal may not present until the following day, so it is important to continue monitoring for withdrawal signs. However, even if the young person reports the historical use of very large amounts of benzodiazepines, evidence suggests that prescribing need only be in moderate doses, often far lower than the previously stated dose. The lowest dose to prevent withdrawal should be used (Department of Health, 1999).

Diazepam is the drug of choice as it has a long half-life, can be given in daily doses and is helpful in preventing seizures, and tablets are available in various doses. For those already prescribed both diazepam and a hypnotic such as temazepam, it is advisable to convert all benzodiazepines to diazepam; this can be approximated from equivalents charts (Department of Health, 2007). For example, 5 mg of diazepam is roughly equivalent to 15 mg of chlordiazepoxide and 10 mg of temazepam. Confirmation of prescriptions must be sought from community services, and that supervised daily dispensing took place, otherwise benzodiazepines must be titrated according to withdrawal symptoms.

The dose for initiation to ease withdrawal symptoms is unlikely to exceed 30 mg. If there is a need for larger doses then the young person must be reviewed by a doctor and the healthcare team within 24 hours.
Diazepam should initially be prescribed in divided doses titrated against withdrawal symptoms for the first seven days. Reduction or omission of dose must occur if there is any evidence of sedation and the patient should be reviewed by the healthcare team prior to reinitiation of the prescribing regime. The young person must be observed in appropriate accommodation allowing unrestricted observation for at least the first five days.

There is no clear guidance on the rate of withdrawal. The withdrawal regime will depend on a number of factors: severity of dependence, age of the individual, body weight, history of tolerance, history of prescribed use of benzodiazepines, reason for any previous prescriptions, and use of or dependence on illicit drugs or alcohol.

If the young person is receiving a prescription for opiate dependence at the same time, the methadone or buprenorphine dose should be kept stable while the benzodiazepines are being reduced. For those with dependence on both alcohol and benzodiazepines, the withdrawals should be managed with clordiazepoxide initially. Clordiazepoxide should be initiated, increasing the dose to manage both dependences, and then reducing over a period of days (administered QDS); this will manage the alcohol withdrawal. The clordiazepoxide should then be converted to diazepam for a once daily dose and gradually reduced to manage the benzodiazepine dependence.

Benzodiazepine withdrawal should be gradual. The Department of Health (2007) suggests withdrawal in proportions of about one eighth of a daily dose once a fortnight, or for those with dependence on therapeutic doses, clinicians suggest 2 mg per week which should be reviewed if withdrawal symptoms occur. Suggestions for rate of withdrawal include 2–4 mg per week, or 5–10 mg per month. The rate of withdrawal is often determined by the individual’s capacity to tolerate symptoms. However, the rate should be partly determined by the level of severity of dependence on the drug and length of use.

Longer-term prescribing and gradual withdrawal of benzodiazepines should adhere to the general principles of management: clear indications of dependence, clear intermediate goals, regular review and methods to prevent diversion (Department of Health, 2007).

Benzodiazepine dependence and withdrawal can be associated with suicidal and self-harming behaviours, and should be managed accordingly with due caution, and may require a slow reduction and psychological support.

Young people with a confirmed history of epilepsy will require cautious rates of reduction for benzodiazepine dependence, informed by ongoing monitoring. A review of any currently prescribed anti-convulsant medication should be organised, with advice from specialists if required.
7.5 Cannabis

Cannabis use is common among young people in the custodial system (Galahad, 2004). Dependence is reported in regular cannabis users, with characteristic withdrawal symptoms apparent on sudden cessation. This syndrome can last between 10 days and several weeks and may be associated with decreased appetite, weight loss, sleep problems and craving as well as irritability, aggression and vivid dreams. These withdrawal symptoms may need supportive management.

Cannabis may both precipitate psychoses in young people and impact negatively on those with mental health problems. Among young people with psychoses such as schizophrenia, chronic cannabis use negatively impacts on course and treatment of the illness, and is associated with poor compliance with medication and earlier and more frequent relapses. There is increasing interest in drug-induced psychoses caused by cannabis and its relationship with long-term psychotic illnesses. A number of studies have demonstrated that young cannabis users are at least 2–3 times more likely to demonstrate psychotic symptomatology; it appears that this primarily relates to the precipitation of psychoses in vulnerable groups. Management of drug-induced psychoses requires urgent treatment with anti-psychotic medications and close working with the CAMHS team. It is crucial that young cannabis misusers with dependence are monitored, with their mental state carefully assessed. Psychosocial treatments should be given to those with cannabis misuse in line with the NICE (2007e) and NTA (2008b) guidelines.

7.6 Inhalants

Young people may abuse these drugs as they are cheap and easily available and provide rapid intoxication. There are a wide range of household and commercial products that fall into this category. This intoxication is similar to that of alcohol, with symptoms of euphoria, disinhibition and excitement leading to disorientation and short-acting central nervous system depression. Deaths are related more often to ‘sudden sniffing’ or accidental injury while intoxicated. Evidence of inhalant physical dependence is limited with case reports suggesting a withdrawal syndrome similar to alcohol withdrawal. Physical symptoms are usually short-lived, though agitation and craving may continue for weeks. It is recommended that inhalant users are routinely assessed, and if intoxicated the young person may need unrestricted observation for some time.

There is no specific pharmacological treatment recommended but support and symptomatic treatment may be required in the short term for agitation. Clearly, a comprehensive assessment of all needs must be conducted accompanied by the development of a care plan organised with secure and community services.
7.7 **Nicotine**

This dependence is recognised in international classifications of disorders. There have been many systematic reviews and guidelines in this field (British Association for Psychopharmacology, 2004 and West et al, 2000). However, there have been no adequate studies of pharmacological treatments in adolescents.

In adults, pharmacological responses are largely nicotine replacement therapies and bupropion. Bupropion is not licensed in those under 18 years. There have been some recent adolescent trials, but effectiveness was not established. An individual approach is recommended for those under 18 years.

All nicotine replacement therapy products are effective, with higher doses more effective for heavily dependent smokers. A combination of patches and an inhalant can be used and may be helpful. Additional support is recommended, but nicotine replacement therapy is effective outside these programmes. Although evidence is lacking in adolescents, treatment can be considered on an individual basis, and it is recommended that this is done in conjunction with specialist teams. Nicotine patches in adolescents appear to be safe though efficacy trials are needed. In secure settings a weekly exchange of used patches for new patches has empowered users and minimised the use of nicotine replacement therapy as a currency (MacAskill and Hayton, 2007).

Prevalence of cigarette smoking in adults who have problematic alcohol and drug use is high. Evidence suggests that addressing smoking in these co-morbid groups does not have an adverse effect on recovery from alcohol and drug use. Stop smoking programmes and nicotine substitution can be effective for those in alcohol and drug use programmes.

MacAskill and Hayton (2007) have produced guidance on the provision of stop smoking support in prisons. They suggest that stop smoking programmes, both group and one-to-one models, should be available in secure settings, both as an alternative to, and in combination with, nicotine replacement therapy.

7.8 **Stimulants**

The mainstay of treatment for stimulant users is psychosocial approaches with little evidence for pharmacological approaches. Research on pharmacology has mainly concentrated on withdrawal and the maintenance of abstinence. The evidence for pharmacological approaches is scanty at best. Likewise, while psychosocial interventions are considered the mainstay of treatment, there is also a lack of good quality research and reviews in young people.
For those with cocaine dependence, there has been much interest in anti-depressants, disulfiram, carbamazepine, dopamine agonists, dexamphetamine and other drugs, such as phenytoin and naltrexone. To date there is little evidence to support the use of these pharmacological agents, with no evidence for their use in young people.

Similarly for those with amphetamine dependence there is no clear evidence to support substitute medication at present. At this stage, there is no evidence to support the use of any pharmacological drugs to effect withdrawal or substitution for cocaine or amphetamine dependence in children and young people. It is important to consider that, like other young people who use illicit drugs and alcohol, those using stimulants may use many other substances, e.g. cannabis, alcohol and ketamine.

Psychosocial interventions, an abstinence-based approach linking counselling and social support, have the greatest impact on cocaine misuse with approaches incorporating contingency management found to be successful (Department of Health, 2007 and NICE, 2007e). However, there is a dearth of well evidenced therapies in the younger age group. Nevertheless, a young person admitted to a secure setting may have problems on withdrawal of stimulants and this needs careful monitoring and management (British Association for Psychopharmacology, 2004).

A young person with stimulant withdrawal may present with problems related to mood changes, suicidal and self-harming behaviours, possible violence/psychoses and significant agitation. A short but profound depression is a recognised withdrawal symptom, which may necessitate treatment. There is no evidence that anti-depressants can ameliorate the effects of withdrawal from stimulants (Department of Health, 2007). Sudden death occasioned by an intracranial bleed or cardiac arrest appears to be an increasing risk among young people abusing crack.

It is recommended that young people reporting recent heavy stimulant use and whose urine/oral fluid tests are positive for stimulants are admitted to the detoxification unit for monitoring. This includes general observation and monitoring of blood pressure for signs of hypertension and neurological observations, for the first 72 hours of stay in a secure setting. Any abnormalities would warrant full medical assessment, and in the event of continued concern, transfer to a general hospital.

Where there is evidence of agitation or volatility in those withdrawing from stimulants stress reduction procedures may benefit the young person. There is no evidence to prescribe benzodiazepines though a short regime of diazepam may be required for extreme agitation (Department of Health, 2007). A psychosis related to stimulant abuse needs careful assessment and management, probable anti-psychotic medication with close review and involvement of the specialist mental health team.
At the same time there needs to be observation for a co-existing mental illness, change in mood or behaviour related to withdrawals, or use of drugs precipitating and exacerbating other mental illnesses. A full mental health assessment must be considered for any young person demonstrating symptoms/signs of any of these problems. Concerns for the young person’s safety as a result of their mental distress must result in appropriate action to reduce risk.

All those with stimulant-related problems should have this full assessment with a comprehensive plan in place, particularly with regard to psychosocial treatments and family therapies, details of which can be found in NTA (2008b).
8. Management of co-morbid disorders

Management of co-morbid disorders – key points

• A high percentage of young people in secure settings will have a co-morbid disorder, for example substance misuse and depression.

• Substance misuse may contribute to or exacerbate mental illness; symptoms of mental illness are common.

• Any mental health diagnosis and consideration of treatment should be in conjunction with the establishment’s mental health practitioners, and community-based mental health and substance misuse services.

• Clear discharge arrangements with community mental health and substance misuse services must be in place for those with co-morbid substance misuse and mental health problems (dual diagnosis).

• Psychological interventions are the mainstay of mental health management in children and young people, but pharmacology may be required.

• Physical health problems must be considered as these may have been exacerbated by substance misuse, or their treatments contraindicated with regard to substance misuse pharmacology.

• It is vital that pregnancy is identified and the implications taken account of with regard to substance misuse pharmacology and the care and safety of the mother and child.

The successful treatment of substance misuse disorders is likely to involve the use of multiple treatment interventions, related to the high prevalence of co-morbid disorders in this population, combined with multiple social difficulties. Co-morbid disorders are particularly high in the young offending population with figures varying from 95% (ONS, 2000) to 85% (Nicol et al, 2000).
The term ‘dual diagnosis’ is used to describe the co-existence of psychiatric disorders and substance misuse. Many young people with a substance misuse disorder have pre-existing impulsive, oppositional and conduct disorder behaviours with others reporting anxiety and depressive disorders. Approximately 30–50% of substance misusers have psychiatric disorders, and approximately 30–50% of young people with psychiatric disorders, especially disruptive behaviour disorders, have substance misuse problems. Psychiatric disorders that begin in childhood have a strong likelihood of continuing into later life, and may be further complicated by substance misuse. Affective disorders, personality difficulties and attention deficit hyperactivity disorder can all be associated with substance use. Substance misuse is also a powerful predictor of suicide.

8.1 Mental health

Symptoms of mood disorder, anxiety and psychosis are common in those who misuse alcohol and drugs. Chronic use, intoxication and withdrawal can produce symptoms similar to anxiety and depression, precipitate panic disorders, agitation and extreme irritability, and may mimic a schizophrenia-like illness. In addition those with pre-existing mental health problems are at higher risk of substance misuse, with withdrawal symptoms possibly exacerbating the pre-existing mental illness.

Young women in secure settings are likely to be highly vulnerable to mental health problems especially in relation to post traumatic stress disorder, depression, suicide and self-harm (Douglas and Plugge, 2006 and Galahad, 2004). Other studies suggest that, among young people being treated for substance misuse, young women will have more severe mental health problems than young men (Ruiz et al, 2005).

An assessment must be conducted which should include:

- a complete history of substance use with toxicology and corroborative evidence where possible from community teams and parents/carers
- a mental health assessment which includes persistence of mental health symptoms during substance use, abstinence and response to previous treatments.

The child/young person should be observed over a 24-hour period. For those with a co-morbidity assessment, treatment, anti-psychotic medication, substance misuse medication and other pharmacological treatments should all be discussed and a treatment plan arrived at in conjunction with the mental health and substance misuse teams.
A pragmatic and integrated approach must be taken with treatment of both disorders concurrently, using both psychosocial and pharmacological approaches if necessary, in liaison with the mental health team. There must be clear discussion with community-based CAMHS to produce clarity on care planning, and continued treatment on discharge. There must be clarity about the responsibilities of the residential healthcare team to liaise with community teams. Care must be taken to avoid any separation between substance misuse and mental health teams both inside secure establishments and in the community, as this might lead to confusion of role with inadequate assessment, treatment and follow-up plans. Prior to discharge liaison with CAMHS and a substance misuse service must take place, to draw up plans for the continued co-ordination of care and the responsibilities of both services.

Commissioners in community settings must also be aware of the high prevalence of co-morbid disorders, particularly in young offenders. Appropriate arrangements for shared care between specialist community drug services and CAMHS must be recognised and put in place to ensure fast and accessible treatment on discharge from a secure setting.

Psychosocial interventions are the mainstay of treatment. Management of mood and anxiety disorders with pharmacological interventions are generally not recommended in young people (NICE, 2005). Mood disorders should be observed carefully, and mood may improve with management of the dependence and withdrawal symptoms. Advice and assessment from CAMHS should be sought.

Should the young person be on medication for co-morbid disorders on reception into a secure setting, there must be:

- confirmation of the prescription and compliance
- confirmation of diagnoses and the care plan
- review of the care plan
- appropriate continuation of the medication
- continued liaison with the community service during remand/sentence.

For example, those young people receiving treatment for attention deficit hyperactivity disorder should have this continued provided that confirmation of prescribing in the community can be obtained from the prescriber (most often methylphenidate or dexamphetamine). Medication should be dispensed under supervision. The dose should be assessed in conjunction with the CAMHS team, taking into account the community history of use and effectiveness of the medication.
Care provided by community mental health and/or forensic services prior to accommodation in a secure setting should be communicated if at all possible. For those with co-morbid and substance use problems the advice of the community team and their ongoing work should be carefully considered when treatment interventions are planned. The care plan and more urgent treatment should be discussed with the young person, their parents/carers and community services as well as the multi-disciplinary health and substance misuse team within the secure setting.

### 8.2 Physical health

Young people may have physical difficulties, e.g. diabetes, asthma, obesity and infections that will need assessment and treatment. Some young people may have sexually transmitted infections that need to be identified and treated. This is a period in which young people can be screened for chlamydia, or other infections, receive a baseline physical assessment (all with informed consent), and receive advice and support on all physical health needs.

It is important that all those with a history of intravenous drug use are assessed for blood-borne viruses. This is particularly important given the high prevalence of some blood-borne viruses, and testing must be done with full consent. It is an ideal opportunity to offer accelerated vaccination for hepatitis B, as recommended by the Department of Health Offender Health Team.

Offenders under 18 years of age should be given an accelerated regime of four vaccinations (Department of Health, 2007):

- at entry into the establishment
- 7 days later
- 21 days later
- with a further booster at 12 months.

If a young person is receiving treatment for HIV or hepatitis C, then it is important that the healthcare team liaises closely with the infectious disease team, particularly as some medications may interact with methadone.

### 8.3 Pregnancy

It is important that pregnancy is considered in all young women. Some may be unaware that they are pregnant because amenorrhea is common and withdrawal symptoms may mimic signs of early pregnancy. All should be encouraged to have a pregnancy test. If a woman is considering termination, or miscarries, counselling needs to be given and appropriate drug treatment maintained until she recovers (Department of Health, 2007).
The management of those young women who are pregnant must be carefully planned, and managed within a multi-disciplinary team. Antenatal care is important with advice and management of all risks such as smoking, nutritional status, and management of alcohol and other drugs. Guidelines are available for the management of substance misuse in pregnancy (Department of Health, 2007 and British Association for Psychopharmacology, 2004).

The aim is to identify all pregnant substance misusers at their initial reception into a secure setting, to establish with drug and alcohol services and obstetric services an integrated and evidence-based plan of care, and to allow transfer of care across community and secure services. Good co-ordination between all services in and out of a secure setting is essential. Child protection for the unborn child must be considered and indeed for the young woman.

For those who are pregnant and alcohol dependent, benzodiazepines are the drug advised but the lowest doses should be used to avoid potential teratogenicity (British Association for Psychopharmacology, 2004). Medication for relapse prevention (e.g. acamprosate) should be avoided.

Pregnant young women who are cigarette smokers should be strongly advised to stop smoking with a full explanation given of the risks to the foetus and long-term related problems. Bupropion is not advised. The British Association for Psychopharmacology (2004) guidelines suggest that, for the use of nicotine replacement therapy, the risk:benefit ratio should be considered. However, this guidance does not recommend its use in pregnant young women.

For those with opioid physical dependence, methadone is the drug recommended for the management of opioid dependence in pregnancy. Methadone maintenance combined with antenatal care can result in significant improvement in the health of the young woman and the foetus. There appears to be no adverse effect on the foetus or young woman, with improved birth weight being found, though the neonatal withdrawal syndrome must be anticipated and carefully managed.

In line with the Department of Health (2007) guidelines, the overall evidence indicates that methadone at a dose that stops or minimises illicit use is most appropriate for ensuring continuity of management of pregnancy and aftercare. This principle applies to all pregnant women though there is little evidence available to guide the clinician specifically in the adolescent.
For those considering detoxification it is advised that during the first trimester the person should be stabilised. The middle trimester is considered the most appropriate, with reduction of methadone in small, frequent reductions of 2–3 mg of methadone every 3–5 days as long as opioid use is not continuing; during the third trimester methadone metabolises more quickly and should therefore be stabilised, or increases in dosing and/or frequency of dosing may be required (Department of Health, 2007). However, stability with no illicit use is the main goal of treatment. Should there be any illicit use, then increase in dose or cessation of this slow reduction regime should be considered.

There must be careful planning and co-ordination with community services if the woman is discharged prior to delivery. The low dose of methadone may not be appropriate in community settings, and the dose may need to be increased or delivered on a twice daily basis. Once the length of the sentence is known plans must be put in place for discharge, involving communication with substance misuse, obstetric, social, primary care and health visiting services.
Appendix 1: Parental Responsibility Holder

The Children Act 1989 sets out who has parental responsibility:

- The child’s parents, if married to each other at the time of conception or birth.
- The child’s mother, but not the father if they were not married, unless the father has acquired parental responsibility via a court order or a parental responsibility agreement or the couple subsequently marry.
- The child’s legally appointed guardian – appointed either by a court or by a parent with parental responsibility in the event of their own death.
- A person in whose favour a court has made a residence order concerning the child.
- A local authority designated in a care order in respect of the child (but not where the child is being looked after under Section 20 of the Children Act 1989, also known as being ‘accommodated’ or in ‘voluntary care’).
- A local authority or other authorised person who holds an emergency protection order in respect of the child.
- Foster parents, step-parents and grandparents do not automatically have parental responsibility.

(Department of Health, 2001, Seeking consent: working with children)

The Children Act 2004 sets out the parental responsibility for unmarried fathers:

Unmarried fathers do not have automatic parental responsibility. Unless they have registered or re-registered their names on their children’s birth certificates after 1 December 2003, in which case they will have parental responsibility for their children. Therefore:

- If an unmarried father has a child after 1 December 2003 and is registered on the birth certificate, he will have parental responsibility.
- If a child was registered before 1 December 2003 and the father was not named on the birth certificate, the child can be re-registered to include the father’s name. Once this has been done, the father will have parental responsibility.
- If an unmarried father’s name is already on the birth certificate and the child was registered before 1 December 2003, the law has not changed this situation so the father will not have parental responsibility (unless obtained by other means).

(Children’s Legal Centre, 2006)
Appendix 2: Types of substances

The following list shows substances according to three categories: depressants, stimulants and hallucinogens. Many young people take more than one drug at the same time, which is known as poly-drug use. Combining substances in the same category will increase the effect, and in the case of depressants is strongly linked to overdose. Combining substances from different categories can have an unpredictable effect.

Substances are often known to young people by their street name. These have not been reproduced here, as professionals are encouraged to use the correct terminology to help young people understand the substances they have taken. There are a large number of street names that regularly change, are affected by fashions and have regional variance. For comprehensive information about street names and effects of substances, go to www.talktofrank.com

Table 8: Action of substances on the central nervous system

<table>
<thead>
<tr>
<th>Depressants</th>
<th>Stimulants</th>
<th>Hallucinogens</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opioids</strong> – heroin (street names include: brown, smack, H), methadone, buprenorphine, dihydrocodeine, codeine</td>
<td><strong>Tobacco</strong></td>
<td><strong>Cannabis</strong> (also has a sedative effect)</td>
</tr>
<tr>
<td><strong>Alcohol</strong></td>
<td><strong>Cocaine</strong> – crack</td>
<td><strong>LSD</strong></td>
</tr>
<tr>
<td><strong>Benzodiazepines</strong> – diazepam, temazepam</td>
<td><strong>Amphetamine</strong></td>
<td><strong>Magic mushrooms</strong></td>
</tr>
<tr>
<td><strong>Inhalants</strong> – solvents, gas, glue and aerosols</td>
<td><strong>Ecstasy</strong> – MDMA (metylenedioxy-methamphetamine)</td>
<td><strong>Ketamine</strong> (also has an analgesic effect)</td>
</tr>
</tbody>
</table>
Appendix 3: Equality

Legislation that directly addresses equality

The Race Relations (Amendment) Act 2000, which amends the 1976 Act, prohibits race discrimination by placing a duty on public authorities (or bodies providing public services) to eliminate race discrimination, promote equality of opportunity, promote good relations and have systems in place to meet these obligations.

The Sex Discrimination Act 1975 (as amended) prohibits discrimination on the basis of sex and places a duty on public authorities to proactively promote equality. It is permissible for a service to be delivered separately for either sex where this is the most effective way for the service to be delivered, as in the case, for instance, of victims of sexual abuse.

The Disability Discrimination Act 1995 (as amended) offers similar protection to people of all ages with disabilities as are offered under the Acts described above. It also places similar obligations with regard to people with disabilities on public authorities or private bodies delivering public services.

The Equality Act 2006 outlaws discrimination on the basis of religion or sexual orientation in the provision of goods, facilities and services. It complements the Employment Equality (Religion or Belief) Regulations 2003 and the Employment Equality (Sexual Orientation) Regulations 2003, which make it unlawful for employers to discriminate on the basis of religion or sexual orientation.

Other legislation which, while not being directly relevant to this guidance, may have an impact on the agencies involved in the delivery of clinical services, includes:

- the Gender Recognition Act 2004
- the Sex Discrimination (Gender Reassignment) Regulations 1999
- the Equal Pay Act 1970 (as amended)
- the Civil Partnership Act 2004.

Local planning and delivery

Local areas are responsible for meeting the needs of all communities and should be aware that the provision of universally available services does not necessarily, by itself, meet those needs. There may be cultural or practical impediments to members of different
communities approaching mainstream services for help. Service providers have a duty to tackle this discrimination proactively.

For many areas, existing sources of information may be insufficient for the effective planning of clinical services to young people. This may be the case where, for example, a specific group is under-represented in treatment or access to other services, or where there has been significant demographic change. Commissioners and providers of clinical services should therefore consider putting in place systems to determine the baseline level and nature of needs, and should plan and deliver services accordingly. However, where data and information are not available at a local level, this should not inhibit the provision of appropriate services to meet assumed or anticipated needs. The extent to which this provision meets the needs of all communities should be monitored, and this information should inform ongoing delivery.

Commissioners and providers of services should consider the following key equality issues:

- access to comprehensive services to young women with children
- the provision of culturally competent services, including meeting language needs
- sensitivity to the wider issues of sense of self, particularly for young people of dual heritage
- the complex needs of service users with learning difficulties\(^1,\^2\)
- providing family-based services which address the needs of all families, as most widely defined
- investigating the means by which information might be obtained to determine patterns of drug use and service needs, particularly where there are significant gaps in evidence, such as the needs of lesbian, gay, bisexual, and transsexual young people (www.cypf.csip.org.uk/camhs).

---

\(^1\) Taggart L, Mc Laughlin D, Quinn B and Milligan V (2004), *An Exploration of Substance Misuse in People with Learning Disabilities Living within Northern Ireland*, University of Ulster.


HM Government (2006b) *What to do if you’re worried a child is being abused*. London: HM Government


NICE (2007c) Community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people. London: NICE


Guidance for the pharmacological management of substance misuse among young people in secure environments


Royal College of Physicians (2001) *Alcohol: Can the NHS afford it?* London: Royal College of Physicians


Guidance for the pharmacological management of substance misuse among young people in secure environments

© Crown copyright 2009

Produced by COI for the Department of Health

If you require further copies of this title visit www.orderline.dh.gov.uk and quote: 294326/Guidance for the pharmacological management of substance misuse among young people in secure environments or write to DH Publications Orderline PO Box 777 London SE1 6XH Email: dh@prolog.uk.com Tel: 0300 123 1002 Fax: 01623 724 524 Minicom: 0300 123 1003 (8am to 6pm, Monday to Friday) www.dh.gov.uk/publications

National Treatment Agency for Substance Misuse