

# Needle and syringe programmes

Public health guideline

Published: 26 March 2014

[www.nice.org.uk/guidance/ph52](http://www.nice.org.uk/guidance/ph52)

## Your responsibility

The recommendations in this guideline represent the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, professionals and practitioners are expected to take this guideline fully into account, alongside the individual needs, preferences and values of their patients or the people using their service. It is not mandatory to apply the recommendations, and the guideline does not override the responsibility to make decisions appropriate to the circumstances of the individual, in consultation with them and their families and carers or guardian.

Local commissioners and providers of healthcare have a responsibility to enable the guideline to be applied when individual professionals and people using services wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with complying with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

# Contents

Overview .....	6
Who is it for? .....	6
What is this guidance about? .....	7
1 Recommendations .....	8
Recommendation 1 Consult with and involve users, practitioners and the local community .....	8
Recommendation 2 Collate and analyse data on injecting drug use .....	9
Recommendation 3 Commission both generic and targeted services to meet local need .....	10
Recommendation 4 Monitor services.....	11
Recommendation 5 Develop a policy for young people who inject drugs .....	11
Recommendation 6 Provide a mix of services.....	13
Recommendation 7 Provide people with the right type of equipment and advice .....	14
Recommendation 8 Provide community pharmacy-based needle and syringe programmes.....	15
Recommendation 9 Provide specialist (level 3) needle and syringe programmes.....	16
Recommendation 10 Provide equipment and advice to people who inject image- and performance-enhancing drugs.....	17
2 Who should take action?.....	19
Introduction .....	19
Who should do what at a glance.....	19
Who should take action in detail.....	19
3 Context .....	22
Background .....	22
Image- and performance-enhancing drugs .....	23
Young people who inject drugs.....	24
Government action.....	24
4 Considerations.....	26
5 Recommendations for research .....	31
6 Related NICE guidance.....	33

7 Glossary .....	34
Detached services.....	34
Drugs.....	34
Image-and performance-enhancing drugs.....	34
Injecting equipment .....	34
Low dead-space injecting equipment.....	35
Needle and syringe programmes .....	35
Outreach services.....	36
Poly-drug use .....	36
Secondary distribution .....	36
8 References.....	37
9 Summary of the methods used to develop this guidance .....	40
Introduction .....	40
Guidance development.....	40
Key questions .....	40
Reviewing the evidence .....	42
Policy review and consensus exercise .....	43
Cost effectiveness .....	44
Fieldwork.....	44
How the PHAC formulated the recommendations .....	44
10 The evidence .....	46
Introduction .....	46
How the evidence links to the recommendations.....	46
Economic modelling .....	47
Fieldwork findings .....	48
11 Gaps in the evidence.....	49
12 Membership of the Public Health Advisory Committee (PHAC) and the NICE project team .....	52
Public Health Advisory Committee .....	52

NICE project team ..... 53

Finding more information and resources .....55

Update information.....56

About this guidance.....57

    How was this guidance developed? ..... 57

    What evidence is the guidance based on? ..... 57

This guideline replaces PH18.

This guideline is the basis of QS23.

## Overview

This guideline covers needle and syringe programmes for people (including those under 16) who inject drugs. The main aim is to reduce the transmission of viruses and other infections caused by sharing injecting equipment, such as HIV, hepatitis B and C. In turn, this will reduce the prevalence of blood-borne viruses and bacterial infections, so benefiting wider society.

## Who is it for?

- Directors of public health
- Commissioners and providers of needle and syringe programmes and related services
- Professionals with a remit for infectious disease prevention
- Members of the public

## What is this guidance about?

This guidance makes recommendations on [needle and syringe programmes](#), including those provided by pharmacies and drugs services for adults and young people (including those under 16) who inject [drugs](#), including [image- and performance-enhancing drugs](#).

The main aim of needle and syringe programmes is to reduce the transmission of blood-borne viruses and other infections caused by sharing [injecting equipment](#), such as HIV, hepatitis B and C. In turn, this will reduce the prevalence of blood-borne viruses and bacterial infections, so benefiting wider society. Many needle and syringe programmes also aim to reduce the other harms caused by drug use and include:

- Advice on minimising the harms caused by drugs.
- Help to stop using drugs by providing access to drug treatment (for example, opioid substitution therapy).
- Access to other health and welfare services.

The guidance is for directors of public health, commissioners, providers of needle and syringe programmes and related services, and those with a remit for infectious disease prevention. (For further details, see [who should take action?](#)) In addition, it may be of interest to members of the public.

See also the Department of Health and Social Care's [Drug misuse and dependence: UK guidelines on clinical management](#), also known as the 'Orange Book', which provides advice to healthcare professionals on the delivery and implementation of a broad range of interventions for drug misuse, including those interventions covered in the present guideline.

# 1 Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in [your care](#).

[Making decisions using NICE guidelines](#) explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

## Recommendation 1 Consult with and involve users, practitioners and the local community

Health and wellbeing boards, directors of public health, commissioners and public health practitioners (see [who should take action?](#)) should:

- Involve the following when assessing the need for, and when planning, expanding or improving, a needle and syringe programme:
  - different groups of people who inject drugs (including both those who use a needle and syringe programme and those who don't)
  - under-represented groups, for example, young people and people from black and minority ethnic groups who inject drugs
  - families and carers of people who inject drugs
  - frontline workers in needle and syringe programmes, pharmacies and related services in the statutory, voluntary and private sectors.
- Consult local communities about how best to implement new or reconfigured needle and syringe programmes. Promote the benefits of the service. For example, explain how these programmes have helped prevent an HIV epidemic in the UK and that they provide a route into drug treatment. Also explain that they may help reduce drug-related litter, by providing safe disposal facilities such as drop boxes and sharps bins.

For further recommendations on how to work with communities, see the NICE guideline on [community engagement: improving health and wellbeing and reducing health inequalities](#).

## Recommendation 2 Collate and analyse data on injecting drug use

Health and wellbeing boards, directors of public health, commissioners and public health practitioners (see [who should take action?](#)) should:

- Regularly collate and analyse data from a range of sources (including data from Public Health England) to build reliable local estimates of the:
  - Prevalence and incidence of infections related to injecting drug use (for example, hepatitis C and bacterial infections) and other problems caused by injecting drug use (for example, number of people overdosing).
  - Types of drugs used and the numbers, demographics and other characteristics of people who inject, for example:
    - ◇ rates of [poly-drug use](#)
    - ◇ young people aged under 18 who are injecting, or being injected
    - ◇ people who inject [image- and performance-enhancing drugs](#) (this includes new cohorts of users, for example, of tanning agents and other image-enhancing drugs)
    - ◇ new psychoactive substance injectors
    - ◇ people who inject occasionally, for example, when they go to night clubs
    - ◇ other groups, such as men who have sex with men, ex-prisoners, sex workers or homeless people.
  - Number and percentage of injections covered by sterile needles and syringes in each of the groups identified above. (That is, the number and percentage of occasions when sterile equipment was available to use.)
  - Number and percentage of people who had more sterile needles and syringes than they needed (more than 100% coverage).
  - Number and percentage of people who inject drugs and who are in regular contact with a needle and syringe programme. (The definition of regular will vary depending on the needle and syringe programme user and the types of drugs they use.)

- Map other services that are commonly used by people who inject drugs, for example, opioid substitution therapy services, homeless services and custody centres.

## Recommendation 3 Commission both generic and targeted services to meet local need

Health and wellbeing boards, directors of public health and commissioners (see [who should take action?](#)) should:

- Ensure the results of consultation and data analysis (in recommendations [1](#) and [2](#)) inform the local joint strategic needs assessment.
- Commission a range of generic and targeted needle and syringe programmes to meet local need, based on these results. For example, ensure services are offered at a range of times and in a number of different locations. Take the geography and demographics of the area into account (for example, whether it is an urban or rural area). Targeted services should focus on the specific groups identified.
- Ensure services aim to be accessible and:
  - Increase the proportion of people who have more than 100% coverage (that is, the number who have more than 1 sterile needle and syringe available for every injection).
  - Increase the proportion of people who have been tested for [hepatitis B and C](#) and other blood-borne viruses (including HIV) in the past 12 months.
  - Increase the proportion of each group of people who inject drugs who are in contact with a needle and syringe programme.
  - Ensure syringes and needles are available in a range of sizes and at a range of locations throughout the area.
  - Encourage identification schemes (involving, for example, the use of coloured syringes).
  - Offer, and encourage the use of, [low dead-space injecting equipment](#).
  - Provide advice and information on services that aim to: reduce the harm associated with injecting drug use; encourage people to stop using drugs or to switch to a safer approach if one is available (for example, opioid substitution therapy); and address their other health needs. Where possible, offer referrals to those services.

- If applicable, commission [outreach](#) or [detached services](#) for areas where there are high levels of drug use or populations that do not use existing needle and syringe programmes.
- Promote needle and syringe programmes to groups that may be under-represented among those who use them, for example, club-drug injectors and people who inject image- and performance-enhancing drugs.
- Develop plans for needle and syringe disposal, in line with [Tackling drug-related litter: Guidance and good practice](#) (Department for Environment, Food and Rural Affairs 2013). Include the provision and disposal of sharps boxes for the safe disposal of needles. Consider providing public sharps bins (drop boxes) in areas where drug-related litter is common. Work with members of the local community, people who inject drugs and the local police service to agree the location for drop boxes.
- Commission integrated care pathways for people who inject drugs so that they can move seamlessly between the full range of services, including treatment services.

## Recommendation 4 Monitor services

Commissioners and providers of needle and syringe programmes, with support from public health practitioners, should:

- Collect data on service usage as follows:
  - All services should monitor the number and types of packs or equipment they distribute.
  - Specialist services should, where possible, collect more detailed data on: the amount and type of equipment distributed, the demographic details of the person who is injecting, along with details of their injecting practices and the drugs they are injecting (see recommendation 2). Practitioners should only ask for these details if they are confident it will not discourage the person from using the service.
- Ensure a local mechanism is in place to aggregate and analyse the data collected on at least an annual basis. Aim to build up a picture of injecting practices in the local area and how this may be changing over time. This data should be used as part of the collecting and analysing data process (see recommendation 2).
- Ensure local service use data are available, in anonymised form, for relevant national bodies and research units (for example, Public Health England).

## Recommendation 5 Develop a policy for young people

## who inject drugs

Directors of public health, children's safeguarding boards, commissioners and providers (see [who should take action?](#)) should:

- Develop and implement a local, area-wide policy on providing needle and syringe programmes and related services to meet the needs of different groups of young people aged under 18 (including young people under 16) who inject drugs.
- Ensure the policy details how local services will achieve the right balance between the imperative to provide young people with sterile injecting equipment and the duty to protect (safeguard) them and provide advice on harm reduction and other services. It should take account of:
  - the young person's capacity to consent ([Gillick competence](#))
  - the risks they face
  - the benefits of using services
  - the likelihood that they would inject anyway, even if sterile needles and syringes were not provided.
- Make the governance responsibilities of drug services and safeguarding boards clear. The safeguarding board should approve the local policy.
- Ensure the policy emphasises the need to provide young people with sterile injecting equipment. This should be provided as part of a broader package of care to meet their other health and social care needs, where possible. This is especially important for under-16s.

- Ensure the policy is responsive to the needs of young people in the local area. The developers of the policy should take into account:
  - Provision of specialist young people's substance misuse services, including specialist provision of needle and syringe programmes for those under 18 (including young people under 16).
  - How to encourage young people to ask for advice and help from staff providing the services (as well as providing them with needles, syringes and injecting equipment).
  - How to assess service users:
    - ◇ their age
    - ◇ the degree or seriousness of their drug misuse
    - ◇ whether the harm or risk they face is continuing or increasing
    - ◇ the general context in which they are using drugs.
  - The skills, knowledge and awareness that staff need to provide services. This includes ensuring staff are trained to assess whether young people are competent to consent (Gillick competence).
  - The potential for using pharmacies to provide young people with needles, syringes and injecting equipment, if they also encourage the young person to make contact with specialist services.
  - That parental or carer involvement should generally be encouraged, with the consent of the young person. Where this is not possible (or appropriate), the policy should include strategies to address their needs.
  - The role of needle and syringe programmes as part of a range of services for young people that includes seamless transition from youth to adult services.
- Ensure needle and syringe programmes aimed at young people who inject drugs implement all the recommendations in this guidance, not just those for young people.
- Regularly review the policy.

## Recommendation 6 Provide a mix of services

Health and wellbeing boards and commissioners (see [who should take action?](#)) should:

- Use pharmacies, specialist needle and syringe programmes and other settings and approaches to provide geographical and demographic coverage. Examples of other settings and approaches that could be used include: custody centres, sexual health services, [outreach](#) and [detached services](#). Provide a mix of the following levels of service to meet local needs:
  - Level 1: distribution of [injecting equipment](#) either loose or in packs, suitable for different types of injecting practice, with written information on harm reduction. (For example, telling people about specialist agencies, or giving them details about safer injecting practices, including how to prevent an overdose.)
  - Level 2: distribution of 'pick and mix' (bespoke) injecting equipment and referral to specialist services plus health promotion advice. (This includes advice and information on how to reduce the harms caused by injecting drugs.) Some level 2 services might also offer additional services, such as blood-borne virus testing or vaccination.
  - Level 3: level 2 plus provision of, or referral to, other specialist services (for example, specialist clinics, vaccinations, drug treatment and secondary care). See recommendation [9](#).
- Establish links and referral pathways between the different levels of service to promote integration and to share learning and expertise.
- Coordinate services to ensure testing for [hepatitis B and C](#) and other blood-borne viruses is readily available to everyone who uses a needle and syringe programme.
- Coordinate services to ensure injecting equipment is available at times, and in places, that meet the needs of people who inject drugs. For example, it may be appropriate to provide out-of-hours vending machines for groups that would not otherwise have access to services – or not at the time that they need them. (The location of these machines would need to be considered carefully and their use would need to be regularly monitored.) Another example would be to encourage pharmacies with longer opening hours to provide needles, syringes and other injecting equipment.
- Ensure services offering opioid substitution therapy also make needles and syringes available to their service users.

## Recommendation 7 Provide people with the right type of equipment and advice

Needle and syringe programme providers should:

- Provide people who inject drugs with needles, syringes and other [injecting equipment](#). The quantity provided should not be subject to a limit but, rather, should meet their needs. Where possible, make needles available in a range of lengths and gauges, provide syringes in a range of sizes and offer [low dead-space](#) equipment.
- Not discourage people from taking equipment for others ([secondary distribution](#)), but rather, ask them to encourage those people to use the service themselves.
- Ensure people who use the programmes are provided with sharps bins and advice on how to dispose of needles and syringes safely. In addition, provide a means for safe disposal of used bins and equipment.
- Provide advice relevant to the type of drug and injecting practices, especially higher risk practices such as injecting in the groin or neck.
- Encourage people who inject drugs to mark their syringes and other injecting equipment, or to use easily identifiable equipment, to reduce the risk of accidental sharing.
- Encourage people who inject drugs to use other services as well. This includes services that aim to: reduce the harm associated with this practice; encourage them to switch to safer methods, if these are available (for example, opioid substitution therapy), or to stop using drugs; and address their other health needs. Tell them where to find these services and refer them as needed.

## Recommendation 8 Provide community pharmacy-based needle and syringe programmes

Community pharmacies, coordinators and local pharmaceutical committees (see [who should take action?](#)) should:

- Ensure staff who distribute needles and syringes are competent to deliver the level of service they offer. As a minimum, this should include awareness of the need for discretion and the need to respect the privacy and confidentiality of people who inject drugs. It should also include an understanding of how to treat people in a non-judgmental way.
- Ensure staff providing level 2 or 3 services (see recommendation [6](#)) are competent to provide advice about the full range of drugs that people may be using. In particular, they should be able to advise on how to reduce the harm caused by injecting and how to prevent and manage an overdose.

- Ensure staff have received health and safety training, for example, in relation to blood-borne viruses, needlestick injuries and the safe disposal of needles, syringes and other injecting equipment.
- Ensure hepatitis B vaccination is available for staff directly involved in the needle and syringe programme.
- Ensure staff are aware of, encourage and can refer people to, other healthcare services including drug treatment services.
- Ensure pharmacy staff offer wider health promotion advice, as relevant, to individuals.

See also recommendation [Z](#).

## Recommendation 9 Provide specialist (level 3) needle and syringe programmes

Specialist needle and syringe programmes (including community pharmacies offering a level 3 service) should:

- Ensure a selection of individual needles, syringes and other [injecting equipment](#) is available.
- Provide sharps bins and advice on how to dispose of needles and syringes safely. In addition, provide a service for safe disposal of used equipment.
- Ensure staff are competent to deliver the service on offer. As a minimum, this should include awareness training on the need for discretion and the need to respect the privacy and confidentiality of people who inject drugs. It should also include training on how to treat people in a non-judgmental way.
- Ensure staff are competent to provide advice about the full range of drugs that people may be using, how to reduce the harm caused by injecting and how to prevent and manage an overdose.
- Ensure hepatitis B vaccination is available for staff directly involved in the needle and syringe programme.
- Offer comprehensive harm-reduction services. This includes: advice on safer injecting practices, assessment of injection-site infections, advice on preventing overdoses and help to stop injecting drugs.

- Offer (or help people to access):
  - opioid substitution therapy and other drug treatments
  - treatment for injection-site infections
  - vaccinations and boosters (including those offering protection from hepatitis A, hepatitis B and tetanus)
  - testing and treatment for hepatitis B, hepatitis C and HIV
  - services for image- and performance-enhancing drug users
  - specialist substance misuse services and specialist youth services (for young people under 18 who inject)
  - other specialist clinics and services
  - psychosocial interventions
  - primary care services (including condom provision and general sexual health services, dental care and general health promotion advice)
  - secondary care services (for example, mental health services)
  - welfare and advocacy services (for example, advice on housing and legal issues).

## Recommendation 10 Provide equipment and advice to people who inject image- and performance-enhancing drugs

Commissioners, providers and public health practitioners (see [who should take action?](#)) should:

- Ensure needle and syringe programmes:
  - Are provided at times and in places that meet the needs of people who inject image- and performance-enhancing drugs. (For example, offer services outside normal working hours, or provide outreach or detached services in gyms.)
  - Provide the equipment, information and advice needed to support these users.
  - Are provided by trained staff (in line with recommendations 8 and 9).

- Ensure those level 2 and 3 programmes used by a high proportion of people who take image- and performance-enhancing drugs provide specialist services for this group. This is in addition to routine services set out in recommendations 6–9. It includes:
  - specialist advice about image- and performance-enhancing drugs
  - specialist advice about the side effects of these drugs
  - advice on alternatives (for example, nutrition and physical training can be used as an alternative to anabolic steroids)
  - information about, and referral to, sexual and mental health services
  - information about, and referral to, specialist image- and performance- enhancing drugs clinics, if these exist locally.

## 2 Who should take action?

### Introduction

The guidance is for directors of public health, commissioners and providers of needle and syringe programmes and related services, and those with a remit for infectious diseases. They could be working in local authorities, the NHS and other organisations in the public, private, voluntary and community sectors. This includes those working in: drug services, community pharmacies, local authorities and the wider public, voluntary and community sectors.

In addition, it will be of interest to people who inject drugs, their families and other members of the public.

### Who should do what at a glance

Who should take action?	Recommendation
Health and wellbeing boards	1, 2, 3, 6
Children's safeguarding boards	5
Local pharmaceutical committees	8
Directors of public health	1, 2, 3, 5
Commissioners	1, 2, 3, 4, 5, 6, 10
Providers of needle and syringe programmes	4, 7, 10
Public health practitioners	1, 2, 4, 10
Coordinators of community pharmacy-based programmes	8
Community pharmacies	7, 8, 9 (if relevant)
Specialist needle and syringe programmes	9

### Who should take action in detail

#### Recommendation 1

Health and wellbeing boards; commissioners of drug, infectious disease, pharmacy and primary

care services; directors of public health and public health practitioners whose remit includes needle and syringe programmes and infectious diseases

## **Recommendation 2**

Health and wellbeing boards; commissioners of drug, infectious disease, pharmacy and primary care services; directors of public health and public health practitioners whose remit includes needle and syringe programmes and infectious diseases

## **Recommendation 3**

Health and wellbeing boards; commissioners of drug, infectious disease, pharmacy and primary care services; directors of public health

## **Recommendation 4**

Health and wellbeing boards; commissioners and providers of needle and syringe programmes; public health practitioners whose remit includes needle and syringe programmes and infectious diseases

## **Recommendation 5**

Directors of public health; commissioners and providers of needle and syringe programmes; commissioners and providers of young people's services; commissioners of young people's specialist substance misuse services; children's safeguarding boards

## **Recommendation 6**

Health and wellbeing boards; commissioners of drug, infectious disease prevention, pharmacy and primary care services

## **Recommendation 7**

Needle and syringe programme providers

## **Recommendation 8**

Community pharmacies that run a needle and syringe programme, regardless of the level of service they offer (see recommendation [6](#)); coordinators of community pharmacy-based needle and

syringe programmes; local pharmaceutical committees

## **Recommendation 9**

Specialist needle and syringe programmes (including community pharmacies offering a level 3 service)

## **Recommendation 10**

Commissioners of needle and syringe programmes; providers of needle and syringe programmes; public health practitioners with a remit for needle and syringe programmes and for the prevention of infectious diseases

## 3 Context

### Background

Although it is difficult to estimate, figures suggest that the prevalence of opiate and crack cocaine injecting is in decline. The most recent figures (for 2010/11) suggest that an estimated 93,400 people inject opiates and/or crack in England (Hay et al. 2011). Prevalence seems to vary across regions.

In 2006, almost one-quarter (23%) of respondents to the 'Unlinked anonymous monitoring survey of people who inject drugs' (Public Health England 2013a) reported sharing needles and syringes in the previous 4 weeks. Almost half (45%) reported that they had shared filters, mixing containers and water within that time (Health Protection Agency et al. 2007).

Between 2001 and 2012, the number of people who injected drugs, and were in contact with specialist services that reported sharing needles and syringes, declined from 33% to 14%. The number who reported that they had shared filters, mixing containers and water declined to 34% (Public Health England (2013b).

The number of opiate-related (heroin or methadone) deaths has decreased over the years. However, over the past decade (2002–2010), they have accounted for around two-thirds of all drug-related deaths in the UK (Davies et al. 2012). Although not all opiate-related deaths occur in people who inject, it is thought that the vast majority do.

Sharing needles and syringes is a key route for transmitting blood-borne viruses among users. Sharing injecting equipment such as filters, mixing containers and water is also an important route of infection, particularly in the case of the hepatitis C virus. Data suggests that needle and syringe programmes are being accessed by increasing numbers of people who inject drugs across the UK. However, 'there remains a need to increase the amount of equipment distributed, with better targeting of this provision and education on appropriate needle and syringe cleaning techniques', according to Public Health England (Hepatitis C in the UK 2013 report).

Hepatitis C is still the most widespread infectious disease affecting people who inject drugs, with 49% of people in England testing positive for antibodies in 2012 (Public Health England 2013b). In contrast, HIV prevalence has remained relatively low among injecting drug populations over the last decade (Health Protection Agency 2012). In addition, the prevalence of hepatitis B infection

has declined (Health Protection Agency 2010).

## Image- and performance-enhancing drugs

Information is limited regarding the number of people using image- and performance- enhancing drugs. Anabolic steroid use is relatively widespread, with an estimated 59,000 people aged 16–59 years in England and Wales having used them in the past year ([Drug misuse: findings from the 2012 to 2013 Crime Survey for England and Wales](#)).

UK data suggest that the majority of people who use anabolic steroids inject them (Advisory Council on the Misuse of Drugs 2010), putting them at risk of bacterial and fungal infections and the transmission of blood-borne viruses.

The risk of blood-borne virus transmission among people who inject image- and performance-enhancing drugs may be lower than among groups who inject other drugs. However, a recent analysis estimated that the prevalence of HIV among men who inject these drugs is similar to that among people who inject psychoactive drugs. The study also showed that few of the men injecting performance- and image- enhancing drugs had ever had an HIV test. The authors urge targeted interventions for this group (Hope et al. 2013).

Users of image- and performance- enhancing drugs may represent a significant proportion of the people who use some needle and syringe programmes (Lenehan et al. 1996). There is evidence that people who inject steroids visit these services fewer times a year – collecting larger numbers of syringes in a single visit – than other users (McVeigh et al. 2003). Interviews with steroid injectors indicate that they often distribute injecting equipment among themselves ([secondary distribution](#)) (McVeigh et al. 2007).

In addition to anabolic steroids, increasing numbers of new products are being injected. These include growth hormone and novel drugs (such as those that claim to stimulate secretion of growth hormone), IGF-1 and analogues, and human chorionic gonadotrophin, which may enhance physical performance (Evans-Brown et al. 2012). They also include melanotans – products that claim to contain melanotan II (and to a lesser extent melanotan I). These are injected to look tanned and, in the case of melanotan II and bremelanotide, for their effect on sexual behaviour and function.

Although it is not known how many people use these new products, researchers have been alerted to their use in the general population through needle and syringe programmes seeking information after clients reported injecting these types of drugs (Evans-Brown et al. 2009).

It is not known how many people in the United Kingdom use drugs such as botulinum toxin or dermal fillers to reduce the appearance of wrinkles and lines but a number of factors suggest that there may be considerable interest in these types of products among the general population (Evans-Brown et al. 2012).

## Young people who inject drugs

Prevalence of drug injecting is higher among the 25–34 age group (17.9 per 1000) than the 15–24 age group (6.9 per 1000) (Davies et al. 2010). It is not known how many people under 18 in England and Wales are involved.

Data from the National Treatment Agency suggest that in 2011/12, 156 young people aged 17 or under who were in drug treatment were currently injecting drugs, and 257 of this same group had experience of injecting. This is a decrease from 2010/11.

Data from the 'Unlinked anonymous monitoring survey of people who inject drugs' (Public Health England 2013a) suggest that in 2011, out of 2838 participants, 0.6% were under 18 (n=16) and 23% reported first injecting before age 18 (n=509). These numbers will represent a minority of young people who inject drugs, because UK evidence suggests that only 25% of this group are in treatment at any one time (Hickman 2004). It also suggests the proportion in treatment may be smaller for those under 18.

Evidence also suggests that among young people, vulnerable groups are more likely to inject drugs. This includes:

- young offenders and those who are homeless or involved in sex work (Cusick et al. 2003)
- those excluded from school (Melrose 2004)
- young people with parents with drug or alcohol problems (Advisory Council on Misuse of Drugs 2003)
- those who are, or have been, in care (Ward et al. 2003).

## Government action

The government's 2010 [drug strategy](#) aims to reduce illicit and other harmful drug use. It also encourages an integrated approach to supporting people who want to recover from drug use.

Although the strategy places an emphasis on recovery, it specifically states that needle and syringe programmes, alongside treatment, can help: 'reduce the harms caused by dependence such as the spread of blood-borne viruses like HIV'.

Prevention of drug-related deaths and blood-borne viruses is also cited in the strategy as one of the eight 'best practice outcomes' that are key to successful delivery in a recovery-oriented system.

## 4 Considerations

The Public Health Interventions Advisory Committee (PHIAC) for the original NICE guidance on needle and syringe programmes (NICE public health guidance 18, 2009) took account of a number of factors and issues when developing the recommendations. Many of these are still relevant (see 4.1 to 4.7 below) and informed the discussions of the Public Health Advisory Committee (PHAC) responsible for updating the guidance. In addition, PHAC took account of a number of additional factors and issues (see 4.8 to 4.19 below).

Please note: this section does **not** contain recommendations. (See [recommendations](#).)

- 4.1 Needle and syringe programmes (NSPs) need to be considered as part of a comprehensive substance-misuse strategy that covers prevention, treatment and harm reduction.
- 4.2 The remit of this guidance was to consider the optimal provision of NSPs, not whether or not these programmes should be provided. Evidence from systematic reviews shows that NSPs are an effective way to reduce many of the risks associated with injecting drugs.
- 4.3 The ethical issues and social values related to NSPs were discussed in some depth. The Public Health Interventions Advisory Committee (PHIAC) noted that it is difficult to meet the health needs of people who inject drugs without appearing to condone or 'normalise' drug use, especially in young people. It also noted that NSPs cannot reduce all of the potential harms associated with injecting drug use. Furthermore, NSPs might have disadvantages. For example, they may deter people who inject drugs from using safer drug taking methods or from stopping taking drugs altogether. On the other hand, NSPs can provide a means of contact with people who inject drugs and, hence, opportunities for harm reduction as well as support to help them stop injecting. NSPs can also help reduce blood-borne infections among people who inject drugs, to the benefit of society at large. After considering these issues at some length PHIAC felt that, on balance, recommendations on the optimal provision of NSPs were justified.
- 4.4 Most published research was conducted in the USA. However, PHIAC judged that some of the evidence was applicable to England and could be used to

inform the recommendations.

4.5 The coverage provided by NSPs has been defined in a number of ways. The World Health Organization (2007) uses 3 definitions of 'coverage':

- percentage of injections 'covered' by sterile needles and syringes
- number of needles and syringes supplied to each injecting drug user per year
- percentage of injecting drug users in regular contact with NSPs.

PHIAC used the first definition above to describe 'coverage': that is, 'coverage' in this guidance means the percentage of injections for which sterile equipment was available to use.

4.6 Local communities need information about the aims of an NSP and evidence of its effectiveness when proposals are put forward for siting one in their neighbourhood.

4.7 PHIAC emphasised the important 'gateway' function that NSPs may perform in bringing people who inject drugs into contact with a range of services. In particular, NSPs may bring them into contact with services that may help by:

- emphasising the dangers of overdosing (about 1% of people who inject drugs die of an overdose each year)
- encouraging people to switch to less harmful forms of drug taking
- encouraging people to opt for opioid substitution therapy
- encouraging people to stop using drugs
- encouraging people to be tested and treated for hepatitis C and HIV
- encouraging people to address their other health needs.

The Public Health Advisory Committee (PHAC) took account of a number of additional factors and issues when developing the updated recommendations, as follows.

4.8 PHAC noted that only a small amount of evidence had been published since the previous guidance, especially in relation to young people's drug use and the use

of image- and performance- enhancing drugs. Furthermore, most of this evidence came from outside the UK. In response, Committee members' used their own knowledge and experience to apply the evidence to England and add further detail to the recommendations.

- 4.9 PHAC noted the need to balance the number of people who have a sterile needle and syringe for each injection (coverage), with the number of people in direct contact with the NSP. Overall, members felt it was more important to achieve high rates of coverage, because this is the biggest predictor of sterile needle and syringe use. On this basis, the Committee felt that it was acceptable to knowingly provide equipment for secondary distribution (whereby drug users pass on sterile needles and syringes to others).
- 4.10 Some evidence suggests that 100% coverage among 60% of the population is enough to slow the spread of blood-borne viruses and bacterial infections among people who inject drugs. However, higher coverage rates will have more of an impact. On this basis, PHAC retained the target of more than 100% coverage, as set out in the recommendations made in NICE public health guidance 18. The Committee also noted the need to monitor coverage rates for different sub-populations – not just for the overall population.
- 4.11 PHAC noted that needle and syringe vending machines seem to be used by a different type of injector to needle and syringe programmes, notably young people and others at very high risk from injecting drugs. The Committee considered that they were a good way of providing additional, out-of-hours services – but not as a cheaper alternative to staffed NSP services.
- 4.12 PHAC discussed the distinction between people who regularly inject drugs and those who inject occasionally. The evidence was not clear enough to make a specific recommendation for the latter. However, the Committee agreed that it was important to provide occasional users with a service.
- 4.13 PHAC discussed at length the potential conflict between safeguarding young people and vulnerable adults who inject drugs and the need to provide them with harm reduction services, including sterile needles and syringes. The Committee was clear that a balance needed to be struck. It noted the need for competent professionals with skills in delivering needle and syringe programmes and with expertise in assessing young people from a safeguarding

perspective. Members felt that, with adequate support, this could fall within the remit of both specialist workers and many community pharmacists.

- 4.14 PHAC discussed how parents and carers could be consulted and involved when their children are using needle and syringe programmes. However, the Committee did not have enough evidence to make a recommendation on how to do this.
- 4.15 PHAC noted that a focus on recovery (that is, encouraging people to stop taking drugs completely) should not compromise the provision of needle and syringe programmes and any associated harm-reduction initiatives.
- 4.16 PHAC discussed the lack of information available about the needs of specific populations of people who inject, for example club-drug users or men who have sex with men. It also discussed innovative ways of reaching them to reduce the harms associated with injecting (see research recommendation [5.2](#)).
- 4.17 PHAC discussed the need for a national monitoring system to systematically gather and aggregate data on people who use needle and syringe programmes. It heard that Public Health England's Needle Exchange Monitoring System (NEXMS) was not well used. PHAC did not consider any evidence to allow a judgment on this matter.
- 4.18 PHAC was satisfied that the provision of [low dead-space injecting equipment](#) was justified if its price was the same as, or only marginally higher than, other equipment.
- 4.19 PHAC was aware of plans to make Naloxone more available for treating opiate overdose. However, it was not possible to make a recommendation on this due to the current status of the drug and lack of evidence of the effectiveness of providing it through needle and syringe programmes.
- 4.20 PHAC considered a summary of the findings from the health economic modelling undertaken for the original guidance. This showed that providing people who inject opioid drugs with sterile [injecting equipment](#) is estimated to be cost effective from an NHS/personal social services (PSS) perspective (that is, excluding the costs of crime). It is similarly cost effective from a societal perspective. If the indirect 'gateway' effects of needle and syringe programmes

– of increasing the proportion of people who inject drugs who take up opioid substitution therapy, or take part in other drug treatment – are included, a fall in the number who inject drugs is likely. This would, in turn, lead to a reduction in crime. If that is the case, modelling shows that these programmes are likely to be cost effective in the longer term. However, the figures in relation to the size of the 'gateway effect' are subject to considerable uncertainty, as are figures relating to any effect that an increase in needle and syringe programmes will have on the number of people injecting drugs.

- 4.21 PHAC noted that there are insufficient data relating to young people aged under 18 who inject drugs to populate the economic model. However, PHAC thought that the findings are unlikely to differ significantly from people over that age. In fact, the benefits of needle and syringe programmes are probably greater for this group because they are more likely to reuse or share equipment. The marginal costs of extending provision to young people aged under 18 would be lower than the average cost for existing users.
- 4.22 PHAC noted that there are insufficient data to allow useful modelling for people who inject image- and performance-enhancing drugs. The incidence of hepatitis C virus is probably lower in this group than among groups using other types of drugs because the substances used do not cause such acute withdrawal effects. As the need to inject may be less urgent, users probably have more time to obtain a sterile needle (and can think more clearly about where to get one). Also, many of these drugs are not controlled under the Misuse of Drugs Act/Regulations, or have lesser penalties for use than opiates and stimulants. As a result, users will not be deterred from associating with a supplier of sterile needles. The cost of recommending that all people from this group use existing programmes would be relatively small. However, there is insufficient evidence to determine whether it is cost effective to develop dedicated services for this group.

## 5 Recommendations for research

The Public Health Advisory Committee (PHAC) recommends that the following research questions should be addressed. It notes that 'effectiveness' in this context relates not only to the size of the effect, but also to cost effectiveness and duration of effect. It also takes into account any harmful/negative side effects.

All the research should aim to identify differences in effectiveness among groups, based on characteristics such as socioeconomic status, age, gender and ethnicity.

- 5.1 How can needle and syringe programmes encourage specific groups of people who inject drugs to use the service effectively? Examples include: those who have recently started injecting; women; sex workers; ex-prisoners; people who are homeless; people who occasionally inject drugs; and people who inject novel psychoactive drugs.
- 5.2 What are the most effective and cost effective ways of delivering needle and syringe programmes to:
  - young people aged under 18
  - users of image- and performance- enhancing drugs?
- 5.3 What type of behaviour-change interventions delivered by needle and syringe programmes are effective in promoting safer drug use practices and reducing the incidence of overdose (apart from providing needles, syringes and other injecting equipment)?
- 5.4 What types of injecting equipment (including low dead-space syringes), paraphernalia and non-injecting equipment (for example, crack pipes or foil) effectively and cost effectively reduce the harm associated with injecting drug use?
- 5.5 Do needle and syringe programmes have any unintended consequences:
  - Do they increase the uptake, frequency and length of injecting drug use?

- Does the provision of disposal facilities (for example, drop-boxes) affect the amount of drug-related litter in an area?
- Do they have a negative impact on the local community, for example, in terms of crime rates or the fear of crime?

More detail identified during development of this guidance is provided in gaps in the evidence.

## 6 Related NICE guidance

- [Drug misuse prevention: targeted interventions](#) (2017) NICE guideline NG64
- [Hepatitis B and C testing: people at risk of infection](#) (2012) NICE guideline PH43
- [Drug misuse in over 16s: opioid detoxification](#) (2007) NICE guideline CG52
- [Drug misuse in over 16s: psychosocial interventions](#) (2007) NICE guideline CG51
- [Naltrexone for the management of opioid dependence](#) (2007) NICE technology appraisal guidance 115
- [Methadone and buprenorphine for the management of opioid dependence](#) (2007) NICE technology appraisal guidance 114
- [Peginterferon alfa and ribavirin for the treatment of mild chronic hepatitis C](#) (2006) NICE technology appraisal guidance 106
- [Adefovir dipivoxil and peginterferon alfa-2a for the treatment of chronic hepatitis B](#) (2006) NICE technology appraisal guidance 96
- [Interferon alfa \(pegylated and non-pegylated\) and ribavirin for the treatment of chronic hepatitis C](#) (2004) NICE technology appraisal guidance 75

## 7 Glossary

### Detached services

Workers from needle and syringe programmes deliver services away from the main venue.

### Drugs

The term 'drugs' is used in this guidance to mean: opioids (for example, heroin); stimulants (for example, cocaine) either separately or in combination (speedballing); novel psychoactive substances ('legal highs', for example, mephedrone); image- and performance-enhancing drugs (see below); and other drugs (for example, ketamine).

### Image-and performance-enhancing drugs

The term 'image- and performance- enhancing drugs' is used in this guidance to mean any substance injected with the intention of enhancing image or performance (except under medical supervision). It includes:

- anabolic steroids, growth hormone and novel drugs (such as those that stimulate secretion of growth hormone, IGF-1 and analogues, and human chorionic gonadotrophin)
- melanotans, bremelanotide, botulinum toxin and dermal fillers.

### Injecting equipment

The equipment supplied by needle and syringe programmes is regulated by a [2003 amendment](#) to The Misuse of Drugs Act (2001). A [Home Office circular](#) on the supply of drug injecting paraphernalia (Home Office 2003) clarifies that, in addition to needles and syringes, needle and syringe programmes may also supply:

(a) swabs

(b) utensils for the preparation of a controlled drug (that would include articles such as spoons, bowls, cups, dishes)

(c) acidifiers

(d) filters

(e) ampoules of water for injection.

In July 2013, the Home Office issued a [written statement](#) that it had accepted the advice of the Advisory Council on the Misuse of Drugs to allow for the lawful provision of foil by drug treatment providers. This is subject to the strict condition that it is part of structured efforts to get people into treatment and off drugs.

## Low dead-space injecting equipment

Low dead-space injecting equipment seeks to limit the amount of (potentially contaminated) blood that remains in the equipment after it has been used, by reducing the amount of 'dead space' it contains. It is believed that this may reduce the risk of transmission of infectious diseases among people who share injecting equipment.

## Needle and syringe programmes

Needle and syringe programmes (NSPs) supply needles and syringes for people who inject drugs. In addition, they often supply other equipment used to prepare and take drugs (for example, filters, mixing containers and sterile water). The majority of needle and syringe programmes are run by pharmacies and drug services. They may operate from fixed, mobile or outreach sites.

The main aim of needle and syringe programmes is to reduce the transmission of blood-borne viruses and other infections caused by sharing injecting equipment. Many also aim to reduce the other harms caused by injecting drug use and provide:

- advice on safer injecting practices
- advice on minimising the harm done by drugs, including image- and performance- enhancing drugs
- advice on how to avoid and manage an overdose
- information on the safe handling and disposal of injecting equipment
- access to blood-borne virus testing, vaccination and treatment services

- help to stop injecting drugs, including access to drug treatment (for example, opioid substitution therapy) and encouragement to switch to safer drug taking practices, if these are available
- other health and welfare services (including condom provision).

## Outreach services

Workers from drug and needle and syringe programmes go out and encourage people to use the service.

## Poly-drug use

Using more than one drug at the same time (although not necessarily in the same syringe). This practice is common among people who inject drugs. For example, people who use image- and performance-enhancing drugs often use one drug to enhance or counter the effects of another. They refer to this practice as 'stacking'.

## Secondary distribution

Where someone collects needles, syringes and other injecting equipment from the needle and syringe programme on behalf of others.

## 8 References

Advisory Council on the Misuse of Drugs (2013) ACMD further advice on foil. London: Advisory Council on the Misuse of Drugs

Advisory Council on the Misuse of Drugs (2010) Consideration of the anabolic steroids. London: Advisory Council on the Misuse of Drugs.

Advisory Council on the Misuse of Drugs (2003) Hidden harm – responding to the needs of children of problem drug users. London: Advisory Council on the Misuse of Drugs.

Cusick L, Martin A, May T (2003) Vulnerability and involvement and in drug use and sex work. London: Home Office.

Davies C, English L, Lodwick A et al. (2010) United Kingdom drug situation: annual report to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) 2010. London: UK Focal Point on Drugs, Department of Health.

Davies C, English L, Stewart C et al. (2012) United Kingdom drug situation: annual report to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) 2012. Liverpool: UK Focal Point on Drugs, Liverpool John Moores University

Evans-Brown M, Dawson RT, Chandler M et al. (2009) Use of melanotan I and II in the general population. *British Medical Journal* 338: b566.

Evans-Brown M, McVeigh J, Perkins C et al. (2012) Human enhancement drugs: the emerging challenges to public health. Liverpool: North West Public Health Observatory, Centre for Public Health, Liverpool John Moores University.

Hay G, Rael dos Santos A, Millar T (2011) National and regional estimates of the prevalence of opiate and/or crack cocaine use, 2010–11: a summary of key findings. London: National Treatment Agency for Substance Misuse.

Health Protection Agency (2012) United Kingdom. New HIV diagnoses to end of December 2012. [Accessed 10 July 2013]

Health Protection Agency (2010) Shooting up: infections among injecting drug users in the United

Kingdom 2009. London: Health Protection Agency.

Health Protection Agency, Health Protection Scotland, National Public Health Service for Wales et al. (2007) Shooting up: infections among injecting drug users in the United Kingdom, 2006. London: Health Protection Agency

Hickman M, Higgins V, Hope V et al. (2004) Injecting drug use in Brighton, Liverpool, and London: best estimates of prevalence and coverage of public health indicators. *Journal of Epidemiology and Community Health* 58: 766–71

HM Government (2003) The Misuse of Drugs Act: 2003 (amendment) (no.2) regulations 2003

Home Office (2012) Drug misuse declared: findings from the 2011/12 British Crime Survey for England and Wales. London: Home Office.

Home Office (2003) Home Office circular 035/2003 Supply of drug injecting paraphernalia. London: Home Office

Hope VD, McVeigh J, Marongiu A et al. (2013) Prevalence of, and risk factors for, HIV, hepatitis B and C infections among men who inject image and performance enhancing drugs: a cross-sectional study. *British Medical Journal Open* 3: e003207

Lenehan P, Bellis MA, McVeigh J (1996) A study of anabolic steroid use in the North West of England. *Journal of Performance Enhancing Drugs* 1: 57–70

McVeigh J, Beynon C, Bellis MA (2003) New challenges for agency based syringe exchange schemes: analysis of 11 years of data (1991–2001) in Merseyside and Cheshire, United Kingdom. *International Journal of Drug Policy* 14: 399–405

McVeigh J, Chandler M, Beynon C et al. (2007) The injectors that harm reduction forgot. Poster presented at the 18th International Conference on the Reduction of Drug Related Harm, 13–17 May 2007, Warsaw, Poland.

Melrose M (2004) Fractured transitions: disadvantaged young people, drug taking and risk. *Probation Journal* 51: 327–41

Public Health England, Centre for Infectious Disease Surveillance & Control and Microbiology Services (2013a). Unlinked anonymous monitoring survey of people who inject drugs in contact

with specialist services: data tables. London: Public Health England.

Public Health England (2013b) Hepatitis C in the UK 2013 report. London: Public Health England.

Ward J, Henderson Z, Pearson G (2003) One problem among many: drug use among care leavers in transition to independent living Home Office Research Study. London: Home Office

World Health Organization (2007) Guide to starting and managing needle and syringe programmes. Geneva: World Health Organization

## 9 Summary of the methods used to develop this guidance

### Introduction

The reviews include full details of the methods used to select the evidence (including search strategies), assess its quality and summarise it.

The minutes of the Public Health Advisory Committee (PHAC) meetings provide further detail about the Committee's interpretation of the evidence and development of the recommendations.

### Guidance development

The stages involved in developing updates of public health programme guidance are outlined in the box below.

1. Update proposal prepared
2. Expert meeting to discuss update proposal
3. Stakeholder consultation on update proposal
4. Final update decision made
5. Evidence reviews undertaken and submitted to PHAC
6. PHAC produces draft recommendations
7. Draft guidance (and evidence) released for consultation and for field testing
8. PHAC amends recommendations
9. Final update guidance published on website
10. Responses to comments published on website

### Key questions

The key questions were established as part of the scope. They formed the starting point for the reviews of evidence and were used by the PHAC to help develop the recommendations. The overarching questions for the original guidance were:

**Question 1:** What level of coverage should needle and syringe programmes provide to keep HIV

prevalence low and to reduce the prevalence of hepatitis C among people who inject drugs?

**Question 2:** What type of needle and syringe programmes are effective and cost effective in reducing the transmission of blood-borne viruses and preventing injecting- site bacterial infections among people who inject drugs?

**Question 3:** Which additional harm-reduction services offered by needle and syringe programmes are effective and cost effective in reducing the transmission of blood-borne viruses and preventing the occurrence of injecting-site bacterial infections among people who inject drugs?

**Question 4:** Are needle and syringe programmes more effective and cost effective if they are offered in parallel with, or alongside, services that provide opiate substitution therapy?

These questions were used to update the original review of the evidence.

Subsidiary questions for the guidance update included:

1. What types of needle and syringe programme are effective and cost-effective for reducing the prevalence of HIV, hepatitis C and other blood-borne viruses, and morbidity and mortality relating to injecting drug use in people who inject image- and performance-enhancing drugs?
2. Which additional harm-reduction services offered by needle and syringe programmes are effective and cost-effective for reducing the prevalence of HIV, hepatitis C and other blood-borne viruses, and morbidity and mortality relating to injecting drug use in people who inject image- and performance-enhancing drugs?
3. What do people who inject image- and performance-enhancing drugs identify as suitable types of needle and syringe programme, and what do they believe to be a suitable level of coverage of needles, syringes and other types of injecting equipment?
4. What are their views and perspectives on, and experiences of, different types of needle and syringe programme?
5. How do the key harms associated with injecting drug use among people under 18 differ from those for older populations who inject drugs?
6. What are the barriers to service use among young people who inject drugs?

7. What are the social factors shaping patterns of use, perceptions of risk, harm, benefit and pleasure, and help-seeking (especially the use of needle and syringe programmes) among young people who use drugs?

## Reviewing the evidence

### Evidence reviews for the original guidance

Two [reviews of the evidence](#) were conducted for the original guidance:

- 'Injecting equipment schemes for injecting drug users: qualitative evidence review'
- 'A review of the effectiveness and cost-effectiveness of needle and syringe programmes for injecting drug users'

### Economic modelling for the original guidance

The results of economic modelling are reported in:

- [Assessing the cost-effectiveness of interventions linked to needle and syringe programmes for injecting drug users: an economic modelling report](#)

### Evidence reviews for the update

Two [reviews of the evidence](#) were conducted:

- Update of NICE guidance PH18 on needle and syringe programmes: PIEDs review
- Update of NICE guidance PH18 on needle and syringe programmes: qualitative and quantitative review updates

### Identifying the evidence

Several databases were searched between January and March 2013 for all types of study published from 1990 onwards. See [Update of NICE guidance PH18 on needle and syringe programmes: PIEDs review](#) and Injecting drug use among young people – risk, harm and factors affecting access to services: a systematic review of the evidence. They were also searched for all types of study published from 2008 onwards. See [Update of NICE guidance PH18 on needle and syringe programmes: qualitative and quantitative review updates](#).

In addition, a call for evidence via the NICE website was used to generate further studies

## Selection criteria

Inclusion and exclusion criteria for each review varied and details can be found in the [Supporting evidence](#).

## Quality appraisal

Included papers were assessed for methodological rigour and quality using the NICE methodology checklist, as set out in [methods for the development of NICE public health guidance](#). Each study was graded (++ , + , -) to reflect the risk of potential bias arising from its design and execution.

### Study quality

++ All or most of the checklist criteria have been fulfilled. Where they have not been fulfilled, the conclusions are very unlikely to alter.

+ Some of the checklist criteria have been fulfilled. Those criteria that have not been fulfilled or not adequately described are unlikely to alter the conclusions.

- Few or no checklist criteria have been fulfilled. The conclusions of the study are likely or very likely to alter.

## Summarising the evidence and making evidence statements

The review data was summarised in evidence tables (see the reviews in [supporting evidence](#)).

The findings from the reviews were synthesised and used as the basis for a number of evidence statements relating to each key question. The evidence statements were prepared by the external contractors (see [supporting evidence](#)). The statements reflect their judgement of the strength (quality, quantity and consistency) of evidence and its applicability to the populations and settings in the scope.

## Policy review and consensus exercise

Several databases and key websites were searched in January 2013 for policy documents from 1990 onwards. In addition key websites were searched. In addition, a consensus development exercise was conducted through a series of interviews, a 1-day meeting and a subsequent Delphi study. See [Analysis of national and local policy and protocols on the delivery of needle and syringe programme services to young people under 18: policy review and consensus development exercise](#).

## Cost effectiveness

See [supporting evidence](#) for details of the cost effectiveness evidence used to support the original guidance. No additional analyses were undertaken for this update.

## Fieldwork

Fieldwork was carried out to evaluate how relevant and useful NICE's recommendations are for practitioners and how feasible it would be to put them into practice. It was conducted with: commissioners, criminal justice workers, needle and syringe programme providers and workers in specialist needle and syringe programmes for young people, pharmacies and public health staff.

The fieldwork comprised a focus group and interview analysis carried out by AddAction Research and Development.

The main issues arising are set out in section 10 under [fieldwork findings](#). Or see [Needle and syringe programme fieldwork](#).

## How the PHAC formulated the recommendations

At its meetings in June, July and December 2013, the Public Health Advisory Committee (PHAC) considered the evidence and cost effectiveness to determine:

- whether there was sufficient evidence (in terms of strength and applicability) to form a judgement
- where relevant, whether (on balance) the evidence demonstrates that the intervention or programme/activity can be effective or is inconclusive
- where relevant, the typical size of effect (where there is one)
- whether the evidence is applicable to the target groups and context covered by the guidance.

PHAC developed recommendations through informal consensus, based on the following criteria:

- Strength (type, quality, quantity and consistency) of the evidence.
- The applicability of the evidence to the populations/settings referred to in the scope.
- Effect size and potential impact on the target population's health.

- Impact on inequalities in health between different groups of the population.
- Equality and diversity legislation.
- Ethical issues and social value judgements.
- Cost effectiveness (for the NHS and other public sector organisations).
- Balance of harms and benefits.
- Ease of implementation and any anticipated changes in practice.

Where possible, recommendations were linked to evidence statements (see the [evidence](#) for details). Where a recommendation was inferred from the evidence, this was indicated by the reference 'IDE' (inference derived from the evidence).

# 10 The evidence

## Introduction

The [evidence statements](#) from 2 reviews conducted for the original guidance and 2 reviews conducted for the updated guidance are provided by external contractors. In addition, they provided consensus statements from the policy review and consensus development exercise.

This section lists how the evidence statements and the consensus statements link to the recommendations and sets out a brief summary of findings from the economic analysis and the fieldwork.

This section also sets out a brief summary of findings from the [economic analysis](#) conducted for the original guidance.

## How the evidence links to the recommendations

The evidence statements are short summaries of evidence, in a [review, report or paper](#) (provided by an expert in the topic area). Each statement has a short code indicating which document the evidence has come from.

**Evidence statement E6.2b** indicates that the linked statement is numbered 6.2b in the review, 'A review of the effectiveness and cost-effectiveness of needle and syringe programmes for injecting drug users' (conducted for the original guidance). **Evidence statement Q3.3a** indicates that the linked statement is numbered 3.3a in the review, 'Injecting equipment schemes for injecting drug users: qualitative evidence review' (conducted for the original guidance). **Evidence statement U2b** indicates that the linked statement is numbered 2b in the review, 'Update of NICE guidance PH18 on needle and syringe programmes: qualitative and quantitative review updates'. **Evidence statement Y10** indicates that the linked statement is numbered 10 in the review, 'Injecting drug use among young people – risk, harm and factors affecting access to services: a systematic review of the evidence'.

Where a recommendation is not directly taken from the evidence statements, but is inferred from the evidence, this is indicated by IDE (inference derived from the evidence).

**Recommendation 1:** evidence statements Q3.2a, Q3.3b, Q3.3c, Q3.3d, Q3.4a, Q3.6a, Q3.6b; IDE

**Recommendation 2:** evidence statements E7.1b, E7.1c, U1a, U1b, Y13, IDE

**Recommendation 3:** evidence statements E5.1a, E5.1b, E5.1c, E6.3b, E6.3c, E7.1a, E7.1b, E7.1c, Q3.3a, Q3.3b, Q3.3d, Q3.4a, Q3.4c, Q3.6a, U2c, U3c, U8; IDE

**Recommendation 4:** IDE

**Recommendation 5:** Y5, Y6; Consensus statements from table 1 of the policy review and consensus development

**Recommendation 6:** evidence statements E5.1a, E5.1b, E5.1c, E6.3b, E6.3c, E6.4b, E7.1a, E7.1b, Q3.3c, Q3.3d, Q3.4b, Q3.5a, U2b; IDE

**Recommendation 7:** evidence statements E5.1a, E5.1b, E6.3b, E6.3c, E7.1a, E7.1b, Q3.3a, U2e, U3a, U3b, U6; IDE

**Recommendation 8:** evidence statements E5.1c, E6.3b, E6.3c, E7.1a, E7.1b, Q3.3b, Q3.4b, Q3.6b, U5, U7, Y14; IDE

**Recommendation 9:** evidence statements E6.3b, E6.3c, E7.1a, E7.1b, Q3.3b, Q3.3c, Q3.4b, Q3.6b, U7; IDE

**Recommendation 10:** IDE from 'Update of NICE guidance PH18 on needle and syringe programmes: PIEDs review'

## Economic modelling

The analyses for the original guidance estimated that needle and syringe programmes used as a channel for treating injecting drug users for chronic hepatitis C were cost effective. They can reduce the costs for society of drugs misuse by:

- improving the health of people who inject drugs
- ensuring the disease cannot be passed on after treatment.

The modelling showed that if only health costs and benefits are counted, then a needle and syringe programme that increased coverage by 25% in a city with a high incidence of hepatitis C virus was cost effective (estimated ICER £11,400). However, an increase in coverage by 12.5% was not cost effective (estimated ICER £31,600). For a low-incidence city, the estimated ICER for an increase in

coverage of 25% was £11,800, whereas for an increase of 12.5% the ICER was estimated as £26,100.

If the costs to the criminal justice system are included, the modelling showed that a 12.5% increase in coverage for a high-incidence city was not cost effective (estimated ICER £38,700). But if coverage increased to 25%, the estimated ICER fell to £19,900. For a low-incidence city, for a 12.5% increase in coverage the ICER was £29,300, and for a 25% increase in coverage the ICER was £12,300.

Needle and syringe programmes can also help reduce the number of people who are injecting drug users by acting as a 'gateway' to opiate substitution therapy. So these programmes may help reduce the costs of drug-related crime. When these indirect ('gateway') effects were modelled, it showed that a 13.5% increase in the rate of referral to opiate substitution therapy resulted in ICERs of between dominant and £17,000, depending on prevalence.

The modelling found that overall, it is cost effective to give users more than one free needle per successful injection, if the cost of reaching them is not excessive and if use of this service increases by more than about 25% as a result.

Full details can be found in [Assessing the cost-effectiveness of interventions linked to needle and syringe programmes for injecting drug users: an economic modelling report](#).

There were no additional analyses undertaken for the updated guidance.

## Fieldwork findings

Fieldwork aimed to test the relevance, usefulness and feasibility of putting the recommendations into practice. The PHAC considered the findings when developing the final recommendations. For details, go to [fieldwork](#).

Fieldwork participants who work with people who inject drugs were very positive about the recommendations and their potential to improve needle and syringe programmes. Many participants stated that the new recommendations about young people and about people who inject image- and performance-enhancing drugs were much needed and would be very useful.

## 11 Gaps in the evidence

The Public Health Advisory Committee (PHAC) identified a number of gaps in the evidence related to the programmes under examination, based on an assessment of the evidence. These gaps are set out below.

1. There is a lack of evidence about how many people inject drugs within different subgroups. This includes a lack of evidence about the number of young people who inject drugs and the number of people who inject image and performance enhancing drugs.
2. There is a lack of evidence about the injecting behaviours of different subgroups of young people and users of image and performance enhancing drugs. There is also a lack of evidence on how these groups use needle and syringe programmes and the effectiveness and cost effectiveness of providing needle and syringe programmes to these groups.
3. There is a lack of UK-based research on how best to target and tailor needle and syringe programmes to meet the needs of particular groups (such as young people who inject drugs, people who inject image- and performance-enhancing drugs and people who have recently started injecting drugs). For example, there is a lack of data on the effectiveness of using any of the following approaches with these groups: needle and syringe vending machines, specialist clinics, outreach or detached schemes.
4. There is a lack of evidence on how people who inject drugs perceive needle and syringe programmes and what encourages or discourages them from using the services. This may be particularly true for occasional users and use of image- and performance-enhancing drugs.
5. There is a lack of evidence on how to prevent people who are at high risk of injecting drugs (for example, those who smoke drugs) from moving from non-injecting to injecting drug use. This includes a lack of information about their needs and views.
6. There is a lack of evidence about the effectiveness (or otherwise) of providing needle and syringe programmes to children and very young people who are injecting drugs. This includes a lack of evidence about their specific needs.
7. There is a lack of evidence about the likelihood of children living with people who inject drugs becoming regular injectors themselves.

8. There is a lack of UK-based research on how the carers and families of people (including young people) who inject drugs and people who inject image and performance enhancing drugs view needle and syringe programmes. This includes a lack of evidence on how to get them involved with the programmes.
9. There is a lack of evidence about related behaviours that may occur among people who inject image and performance enhancing drugs, for example, poly-drug use or increased sexual activity.
10. There is a lack of UK-based research on the effectiveness and cost-effectiveness of prison-based needle and syringe programmes.
11. There is a lack of UK-based research into the potential unintended consequences of needle and syringe programmes. For example, there is a lack of evidence on whether or not they encourage people to inject more frequently.
12. There is a lack of standardised outcome measures for needle and syringe programmes in relation to safe injecting practices and the incidence and prevalence of blood-borne viruses, overdoses and wound infections. In particular, there is a lack of information regarding young people who inject drugs and people who inject image and performance enhancing drugs.
13. There is a lack of evidence on whether drug users who are referred to opioid substitution therapy programmes from needle and syringe programmes continue to attend after the first meeting.
14. There is a lack of evidence on the effectiveness of peer interventions that aim to prevent risky injecting practices and encourage people to use needle and syringe programmes.
15. There is a lack of evidence to determine whether secondary distribution increases risky injecting behaviour, and whether it increases or decreases the likelihood of people who inject coming into contact with a needle and syringe programme.
16. There is a lack of evidence on whether needle and syringe programmes encourage people to switch to safer injecting practices.
17. There is a lack of evidence about the impact that training needle and syringe programme staff can have on its effectiveness.

The Committee made 5 recommendations for research into areas that it believes will be a priority

for developing future guidelines. These are listed in [recommendations for research](#).

## 12 Membership of the Public Health Advisory Committee (PHAC) and the NICE project team

### Public Health Advisory Committee

NICE has set up several Public Health Advisory Committees (PHACs). These standing committees consider the evidence and develop public health guidance. Membership is multidisciplinary, comprising academics, public health practitioners, topic experts and members of the public. They may come from the NHS, education, social care, environmental health, local government or the voluntary sector. The following are members of PHAC A:

#### Chair

**Susan Jebb**

Professor of Diet and Population Health, University of Oxford

#### Core members

**Amanda Sowden**

Deputy Director, National Institute for Health Research (NIHR) Centre for Reviews and Dissemination, University of York

**Chris Packham**

Associate Medical Director, Nottinghamshire Healthcare NHS Trust

**Joyce Rothschild**

Independent Education Consultant

**Lucy Yardley**

Professor of Health Psychology, University of Southampton

**Mireia Jofre Bonet**

Professor of Health Economics, City University, London

**Toby Prevost**

Professor of Medical Sciences, King's College London

**Alison Lloyd**

Community Member

## Topic members

**Adam Mackridge**

Senior Lecturer in Pharmacy Practice, Liverpool John Moores University

**Fortune Ncube**

Consultant Epidemiologist/Head of Blood-borne Virus Section, HIV & STI Department, National Centre for Infectious Disease Surveillance and Control (CIDSC), Public Health England

**Paul Wells**

Peer Reviewer, Healthcare Inspectorate Wales Substance Misuse Peer Review Team; Former General Manager, Coventry and Warwickshire Partnership NHS Trust

**Tony Margett**

Substance Misuse Manager, East Riding of Yorkshire Council

**Vicky Fenwick**

Public Health Programme Manager, West Sussex County Council; Planning Group member, National Needle Exchange Forum

**April Wareham**

Community Member

## Expert co-optees

**Joseph Kean**

Team manager, The Bridge Project; Senior Trainer/Consultant, Nine Zero Five

## NICE project team

**Mike Kelly**

Director, Centre for Public Health

**Simon Ellis**

Associate Director

**Chris Carmona**

Lead Analyst

**James Jagroo**

Analyst

**Suzi Peden**

Analyst (until July 2013)

**Louise Millward**

Analyst (from July 2013)

**Alastair Fischer**

Technical Adviser Health Economics

**Emma Doohan**

Project Manager

**Rukshana Begum**

Coordinator

**Sue Jelley**

Senior Editor

**Rebecca Boucher and Susan Burlace**

Editors

## Finding more information and resources

You can see everything NICE says on needle and syringe programmes in our interactive flowchart on [needle and syringe programmes](#).

To find out what NICE has said on topics related to this guideline, see our web page on [drug misuse](#).

NICE has produced [tools and resources](#) to help you put this guideline into practice. For general help and advice on putting NICE guidelines into practice, see [resources to help you put guidance into practice](#).

## Update information

**March 2014:** This guidance replaces the original NICE guideline on needle and syringe programmes published in 2009. It supports the commissioning and provision of needle and syringe programmes, including those provided by pharmacies and drugs services. The guidance has been extended to include young people aged under 18 (including those under 16) and users of image- and performance-enhancing drugs.

### Minor updates since publication

**March 2019:** Some links and standard text were updated.

# About this guidance

## How was this guidance developed?

The recommendations are based on the best available evidence. They were developed by the Public Health Advisory Committee (PHAC).

Members of the PHAC are listed in [Membership of the Public Health Advisory Committee and the NICE project team](#).

For information on how NICE public health guidance is developed, see the NICE [public health guidance process and methods guides](#).

## What evidence is the guidance based on?

### Original guidance

The [evidence](#) used to develop the original guidance included:

- Evidence reviews:
  - 'Injecting equipment schemes for injecting drug users: qualitative evidence review'
  - 'A review of the effectiveness and cost-effectiveness of needle and syringe programmes for injecting drug users'.
- Economic modelling:
  - 'Assessing the cost-effectiveness of interventions linked to needle and syringe programmes for injecting drug users: an economic modelling report'.

### Updated guidance

The [evidence](#) that the PHAC considered included:

- Evidence and policy reviews:
  - Review 1: 'Update of NICE guidance PH18 on needle and syringe programmes: qualitative and quantitative review updates', was carried out by Liverpool John Moores University. The principal authors were: Lisa Jones, Geoff Bates and Jim McVeigh.
  - Review 2: 'Update of NICE guidance PH18 on needle and syringe programmes: PIEDs review', was carried out by Liverpool John Moores University. The principal authors were: Geoff Bates, Lisa Jones and Jim McVeigh.
  - Review 3: 'Injecting drug use among young people – risk, harm and factors affecting access to services: a systematic review of the evidence' was carried out by the London School of Hygiene and Tropical Medicine. The principal authors were: Lucy Platt, Bethan McDonald, Neil Hunt, Adam Fletcher and Tim Rhodes.
  - Policy review and consensus development exercise: 'Analysis of national and local policy and protocols on the delivery of needle and syringe programme services to young people under 18: policy review and consensus development exercise', was carried out by the London School of Hygiene and Tropical Medicine. The principal authors were: Neil Hunt and Lucy Platt.
- The fieldwork report 'Needle and syringe programme fieldwork' was carried out by AddAction and Tiny Spark project.

In some cases the evidence was insufficient and the PHAC has made recommendations for future research. For the research recommendations and gaps in research, see [recommendations for research](#) and [gaps in the evidence](#).

ISBN 978-1-4731-0490-7

## Accreditation

