

PUBLIC HEALTH INTERVENTION GUIDANCE

SCOPE

1 Guidance title

Needle and syringe programmes: providing injecting equipment to people who inject drugs

1.1 Short title

Needle and syringe programmes

2 Background

- a) The National Institute for Health and Clinical Excellence ('NICE' or 'the Institute') has been asked by the Department of Health (DH) to produce public health intervention guidance on the optimal provision of needle exchange schemes among injecting drug users.
- b) This guidance will support a number of related policy and guidance documents including:
 - 'Better prevention, better services, better sexual health – the national strategy for sexual health and HIV' (DH 2001)
 - 'Drug misuse' (Audit Commission 2004)
 - 'Getting ahead of the curve: a strategy for combating infectious diseases (including other aspects of health protection)' (DH 2002)
 - 'Hepatitis C – action plan for England' (DH 2004)
 - 'Models of care for treatment of adult drug misusers: update 2006' (National Treatment Agency 2006)
 - 'Best practice guidance for commissioners and providers of pharmaceutical services for drug users' (National Treatment Agency 2006)

- 'Reducing drug-related harm: an action plan' (DH 2007).
- c) This guidance will provide recommendations for good practice, based on the best available evidence of effectiveness, including cost effectiveness. It is aimed at commissioners, professionals and managers with public health as part of their remit working within the NHS, local authorities and the wider public, private, voluntary and community sectors. It is particularly aimed at primary care trusts (PCTs) and professionals responsible for services that supply injecting equipment. It will also be of interest and relevance to people who inject drugs, their families and carers.
- d) The guidance will complement NICE guidance on: community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people; drug misuse; infection control; managing opioid dependence; treating chronic hepatitis B; treating mild chronic and chronic hepatitis C. For further details, see section 6.

3 The need for guidance

- a) There are estimated to be around 140,000 people injecting heroin or crack cocaine in England (0.42% of those aged 15 to 64) (Health Protection Agency 2007). This figure does not include people who inject other illicit substances such as amphetamines, cocaine or benzodiazepines. People who inject anabolic steroids are also excluded from this figure: the 'British crime survey 2006/2007' estimated that most of the 32,000 people aged 16–59 who were estimated to have taken anabolic steroids in the past year injected themselves (Murphy and Roe 2007). (Note: all these figures may substantially underestimate the true number of people who are injecting drugs [personal communication, Health Protection Agency].)
- b) In England, 23% of people who inject drugs and who participated in the Unlinked Anonymous Prevalence Monitoring Programme reported direct sharing of injecting equipment in the 4 weeks of the survey.

Furthermore, 45% of people who currently inject drugs say they share filters, mixing containers and flushing water (Health Protection Agency 2007).

- c) HIV, hepatitis B and C can be spread by using and sharing contaminated syringes and other injecting equipment and, in recent years in England and Wales, their prevalence has generally increased among people who inject drugs (Health Protection Agency 2007). By the end of 2006, 4.2% of those diagnosed with HIV in England (3325 cases) were thought to have acquired it through injecting drugs. In 2003, approximately 34% of people in England with hepatitis B were thought to have acquired it through injecting drugs. By the end of 2006, it is estimated that over 90% of the 8346 people per annum in England who contract hepatitis C acquire it by injecting drugs. (In 2006, 44% of people who inject drugs in England had hepatitis C [Health Protection Agency 2007].) There is a geographical variation in the prevalence of these infections. For example, in 2006, 4% of people who inject – or used to inject – drugs in London were HIV-positive compared to 0.65% elsewhere in England [Health Protection Agency 2007].)
- d) A range of bacterial infections, including group A streptococci, are reported among people who inject drugs. These infections are spread as a result of using non-sterile injecting equipment or from injecting contaminated drugs (Health Protection Agency 2007). The risk of death among people who inject drugs is estimated to be over 13 times higher than for the general population (when matched for age and gender) (Hulse and English 1999).
- e) The accessibility and availability of services that supply injecting equipment (along with harm-reduction interventions) varies widely across England. There is also wide variation in the number of people who use the services – and how often (National Treatment Agency 2007). Evidence suggests that these services are the only contact that some anabolic steroid users will have with health services (McVeigh et al. 2003).

- f) In England and Wales in 2003/4, class A drug use cost an estimated £15.4 billion in economic and social terms. The annual cost incurred by health and social services for each person using drugs (and as a result of drug-related death and crime) was estimated at between £11,800 and £44,000. It will cost an estimated £23 million to provide the lifetime treatment needed by all those infected with HIV in any given year as a result of intravenous drug use (there are approximately 130 new cases a year). The lifetime treatment of all those who are infected in any given year with hepatitis C and hepatitis B, as a result of intravenous drug use, will cost an estimated £608,500 and £580,600 respectively (Gordon et al. 2006).

4 The guidance

Public health guidance will be developed according to NICE processes and methods. For details see section 5.

This document is the scope. It defines exactly what this guidance will (and will not) examine, and what the guidance developers will consider. The scope is based on a referral from the DH (see appendix A).

4.1 Populations

4.1.1 Groups that will be covered

People who inject drugs including:

- opioids (for example, heroin), stimulants (for example, cocaine) and other illicit substances
- prescribed methadone and other opiate substitutes
- non-prescribed anabolic steroids and other performance and image enhancing drugs (PIED).

4.1.2 Groups that will not be covered

- People who take drugs but do not inject themselves (including those who used to inject themselves).

- People who inject drugs that have been prescribed for a medical condition (except methadone and other opiate substitutes).

4.2 *Activities*

4.2.1 *Activities that will be covered*

- a) Needle and syringe programmes that supply needles, syringes and the other injecting equipment used to prepare and take illicit drugs (for example, filters, mixing containers, sterile water).
These may be provided by: specialist drug treatment services, pharmacies, mobile/outreach facilities, accident and emergency departments, police custody suites, hostels, GP surgeries, voluntary agencies and gyms.
- b) Harm reduction interventions provided by needle and syringe programmes. These may include the provision of information and advice (including face-to-face advice) on safer injecting practices (including the prevention of injection-site infections, blood-borne viral infections and overdoses) and safe disposal of used equipment.

4.2.2 *Activities that will not be covered*

Interventions related to drug use that are not linked to needle and syringe programmes.

4.3 *Key questions and outcomes*

The following overarching questions will be addressed:

Question: 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: 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: 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: 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 (OST)?

Expected outcomes:

- Reduction in the incidence and prevalence of blood-borne viral infections (such as, HIV, hepatitis B and C).
- Reduction in injecting site bacterial infections.
- Reduction in morbidity and mortality among people who inject drugs.
- Changes in self-reported injecting behaviour, the number of needle packs supplied or returned and other intermediate outcomes. (The link between these intermediate outcomes and quality-adjusted life years [QALYs] will be modelled.)

4.3.1 Potential considerations

It is anticipated that the Public Health Interventions Advisory Committee (PHIAC) will consider the following issues in developing the guidance.

- The level of coverage and optimum mix of services required according to local demographics, geography and patterns of drug use.
- The impact that the provider, site and size of setting can have on effectiveness and cost effectiveness. For example, the following could be compared: specialist drug services, police custody suites, accident and emergency departments, mobile/outreach facilities, hostels, vending machines, prisons and small versus large pharmacies.
- Whether availability (opening times) and accessibility influence effectiveness and cost effectiveness, and whether different services are

required in urban versus rural areas or for different groups (and for different people within those groups).

- The impact that the type of injecting equipment supplied can have on effectiveness and cost effectiveness. This includes looking at the number and size/type of needles and syringes supplied and the availability of equipment such as syringe markers and other ways of preventing people from accidentally sharing needles.
- Whether the provision of additional harm-reduction equipment such as filters, mixing containers and sterile water increases effectiveness and cost effectiveness.
- Whether a returns policy on used equipment ('one-for-one exchange' or 'returns always required') increases effectiveness and cost effectiveness.
- Any adverse consequences of needle and syringe programmes. For example, do services that supply injecting equipment encourage increased drug consumption or the unsafe disposal of injecting equipment?
- Whether the staff skill mix, their level of training and competence influences the effectiveness and cost effectiveness of services.
- Whether the availability of additional harm-reduction services increases the effectiveness and cost effectiveness of services. These additional services may include: advice and information on safer injecting practices, treatment for injection-site infections, onsite vaccination services, testing for hepatitis B, C and HIV and pre- and post-diagnostic counselling.
- Whether the format of advice and information influences effectiveness and cost effectiveness. For example, is it better to give advice verbally or in printed format?
- Whether services that promote – or refer people to – a range of additional support services are more effective and cost effective. These include: drug and alcohol treatment and support services and opiate substitution therapy (for those wishing to reduce their drug use or who want to stop using or

injecting altogether); specialist support for those engaged in high-risk injecting methods (for example, femoral injecting or speedballing); and emergency referrals to secondary care. It also includes: GP registration referral to primary care services (including dental care, general health advice, well-woman clinics, sexual health advice and condom distribution) and the promotion of welfare, housing and legal advice services.

- Whether effectiveness and cost effectiveness varies according to the diversity of the population. For example, does it vary according to the user's age, gender or ethnicity, which drugs they inject, the injecting environment and whether or not they are homeless?
- How people who inject drugs view services that supply injecting equipment, what motivates them to use such services and what experiences they have of those services.
- How the families and friends of people who inject drugs and the wider public view services that supply injecting equipment.
- Whether it is effective and cost effective to encourage people who inject (or used to inject) drugs to deliver injecting equipment to their peers.
- Cost effectiveness modelling should be dynamic and will take into account the fact that someone who takes drugs and has an infection can infect others. It will consider the three major diseases that affect people who take drugs: HIV, hepatitis B and hepatitis C. The disease pathway (including treatment) will need to be modelled. In addition, assumptions will be made about how intermediate outcomes impact on health-related quality of life and mortality. (These outcomes include reductions in self-reported injecting behaviour and increases in the number of needle packs supplied or returned.) The costs and benefits will be analysed from both an NHS and a government sector perspective.
- QALYs is the usual way of measuring the health benefits of an intervention when comparing the cost effectiveness of different health services. However, it might not be necessary to convert outcomes to QALYs when

comparing two different services and it is envisaged that most studies will report outcomes which cannot readily be translated into a QALY framework.

4.4 Status of this document

This is the final scope, incorporating comments from a 4-week consultation which included a stakeholder meeting on 9 November 2007.

5 Further information

The public health guidance development process and methods are described in 'Methods for development of NICE public health guidance' (NICE 2006) available at www.nice.org.uk/phmethods and 'The public health guidance development process: An overview for stakeholders, including public health practitioners, policy makers and the public' (NICE 2006) available at www.nice.org.uk/phprocess

6 Related NICE guidance

Community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people. NICE public health guidance 4 (2007). Available from: www.nice.org.uk/PHI004

Drug misuse: opioid detoxification. NICE clinical guideline 52 (2007). Available from: www.nice.org.uk/CG052

Drug misuse: psychosocial interventions. NICE clinical guideline 51 (2007). Available from: www.nice.org.uk/CG051

Methadone and buprenorphine for the management of opioid dependence. NICE technology appraisal 114 (2007). Available from: www.nice.org.uk/TA114

Naltrexone for the management of opioid dependence. NICE technology appraisal 115 (2007). Available from: www.nice.org.uk/TA115

Adefovir dipivoxil and peginterferon alfa-2a for the treatment of chronic hepatitis B. NICE technology appraisal 96 (2006). Available from:

www.nice.org.uk/TA096

Peginterferon alfa and ribavirin for the treatment of mild chronic hepatitis C. NICE technology appraisal 106 (2006). Available from:

www.nice.org.uk/TA106

Interferon alfa (pegylated and non-pegylated) and ribavirin for the treatment of chronic hepatitis C. NICE technology appraisal 75 (2004). Available from:

www.nice.org.uk/TA075

Infection control: prevention of healthcare-associated infection in primary and community care. NICE clinical guideline 2 (2003). Available from:

www.nice.org.uk/CG002

Appendix A Referral from the Department of Health

The Department of Health asked the Institute to:

‘Produce public health intervention guidance to encourage the optimal provision of needle exchange schemes amongst injecting drug misusers.’

Appendix B References

Audit Commission (2004) Drug misuse. London: Audit Commission.

Department of Health (2001) Better prevention, better services, better sexual health – the national strategy for sexual health and HIV. London: Department of Health.

Department of Health (2002) Getting ahead of the curve: a strategy for combating infectious diseases (including other aspects of health protection). London: Department of Health.

Department of Health (2004) Hepatitis C – action plan for England. London: Department of Health.

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Gordon L, Tinsley L, Godfrey C et al. (2006) The economic and social costs of class A drug use in England and Wales, 2003/04. In Singleton N, Murray R, Tinsley L. editors Measuring different aspects of problem drug use: methodological developments [online]. Available from: www.homeoffice.gov.uk/rds/pdfs06/rdsolr1606.pdf

Health Protection Agency (2007) Shooting up: infections among injecting drug users in the United Kingdom 2006. London: Health Protection Agency.

Hulse G, English D (1999) The quantification of mortality resulting from the regular use of illicit opiates. *Addiction* 94 (2): 221–229.

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 (5–6): 399–405.

Murphy R, Roe S (2007) Drug misuse declared: findings from the 2006/07 British Crime Survey. London: Home Office. Available from www.homeoffice.gov.uk/rds/pdfs07/hosb1807.pdf

National Treatment Agency (2006) Models of care for treatment of adult drug misusers: update 2006. London: National Treatment Agency.

National Treatment Agency/Royal Pharmaceutical Society of Great Britain (2006) Best practice guidance for commissioners and providers of pharmaceutical services for drug users. London: National Treatment Agency.

National Treatment Agency for Substance Misuse (2007) The NTA's 2005 survey of needle exchanges in England. London: National Treatment Agency.