



# WHO, UNODC, UNAIDS Technical Guide

for countries to set targets for universal access  
to HIV prevention, treatment and care  
for injecting drug users



**World Health  
Organization**



**UNODC**

United Nations Office on Drugs and Crime



**UNAIDS**  
JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS

UNHCR  
UNICEF  
WFP  
UNDP  
UNFPA  
UNODC  
ILO  
UNESCO  
WHO  
WORLD BANK

WHO Library Cataloguing-in-Publication Data.

WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users.

1.HIV infections - prevention and control. 2.HIV infections - therapy. 3.Acquired immunodeficiency syndrome - prevention and control. 4.Acquired immunodeficiency syndrome - therapy. 5.Substance abuse, Intravenous - complications. 6.Needle sharing - adverse effects. 7.Needle exchange programs. 8.National health programs. I.World Health Organization. II.World Health Organization. Regional Office for Europe. III.UNAIDS. IV.United Nations. Office on Drugs and Crime.

ISBN 978 92 4 159776 0

(NLM classification: WC 503.6)

**© World Health Organization 2009**

All rights reserved. Publications of the World Health Organization can be obtained from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: [bookorders@who.int](mailto:bookorders@who.int)). Requests for permission to reproduce or translate WHO publications – whether for sale or for non-commercial distribution – should be addressed to WHO Press, at the above address (fax: +41 22 791 4806; e-mail: [permissions@who.int](mailto:permissions@who.int)).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Printed in

# WHO, UNODC, UNAIDS Technical Guide

for countries to set targets for universal access  
to HIV prevention, treatment and care  
for injecting drug users



**World Health  
Organization**



**UNODC**

United Nations Office on Drugs and Crime



**UNAIDS**

JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS

UNHCR  
UNICEF  
WFP  
UNDP  
UNFPA

UNODC  
ILO  
UNESCO  
WHO  
WORLD BANK

EUROPE

2009

# ACKNOWLEDGEMENTS

This document was written by Martin C. Donoghoe (WHO Regional Office for Europe, Copenhagen); Annette D. Verster (WHO Department of HIV/AIDS, Geneva), and Bradley Mathers of the National Drug and Alcohol Research Centre, University of New South Wales and the Secretariat of the Reference Group to the United Nations on HIV and injecting drug use.

The authors gratefully acknowledge the following experts who contributed to the development of this *Guide*: Carlos Avila-Figueroa (UNAIDS, Geneva); Andrew Ball (WHO Department of HIV/AIDS, Geneva); Monica Beg (UNODC, Vienna); Katya Burns (AIDS Projects Management Group, Sydney and Geneva); Dave Burrows (AIDS Projects Management Group, Sydney and Geneva); Anindya Chatterjee (UNAIDS, Geneva); Nicolas Clark (WHO, Geneva); Matt Curtis (IHRD, OSI, USA); Jimmy Dorabjee (Centre for Harm Reduction, Melbourne); Paul Hardacre (Asian Harm Reduction Network, Chiang Mai); Robert Heimer (Yale School of Public Health, New Haven); Joumana Hermez (WHO Regional Office for the Eastern Mediterranean Cairo); George Loth (WHO EIP, Geneva); Rob Lyerla (UNAIDS, Geneva); Ligor Olinynyk (WHO Department of HIV/AIDS, Geneva); Alasdair Reid (UNAIDS Geneva); Keith Sabine (WHO, Geneva); Gray Sattler (UNODC, Bangkok); Yves Souteyrand (WHO Department of HIV/AIDS, Geneva); Igor Toskin (UNAIDS, Geneva); Lucas Wiessing (EMCDDA, Portugal); Gundo Weiler (WHO, Ukraine Country Office, Kiev); Paul Williams (UNODC, Vienna) and Daniel Wolfe (IHRD, OSI, USA). Special thanks to Matthew Hickman (Bristol University) who drafted an earlier version of this *Technical guide*, Louisa Degenhardt (National Drug and Alcohol Research Centre, University of New South Wales/ Secretariat of the Reference Group to the United Nations on HIV and injecting drug use), and to Cyril E. Pervilhac (WHO Department of HIV/AIDS, Geneva), who helped to start the project and contributed to the pilot testing of a draft of the *Guide* in the Baltics and Central Asia. This document was reviewed and edited by Bandana Malhotra (freelance medical editor, New Delhi).

The authors wish to thank the following country experts who, through their participation in the UNODC/WHO Technical Consultations on Setting Targets for Universal Access to HIV Prevention Treatment and Care for Injecting Drug Users in Estonia, Latvia, Lithuania and Poland (Vilnius, Lithuania, 23 March 2007) and Central Asia and Azerbaijan (Tashkent, Uzbekistan, 28–30 May 2007) contributed to the development and field-testing of the *Technical guide*. ESTONIA: Merike Rätsep, Ministry of Social Affairs of Estonia; Ms Kait Oole, National Institute for Health Development; Inge Ringmets, Department of Public Health; LATVIA: Ieva Tuca, AIDS and STI Prevention Centre Public Health Agency; Inga Brokere, AIDS and STI Prevention Centre Public Health Agency; Anda Lazdina, AIDS and STI Prevention Centre Public Health Agency; Marcis Trapencieris, Public Health Agency; LITHUANIA: Egle Pinceviciute, Vilnius Centre for Addiction Disorders; Mantas Gurevicius, Drug Control Department under the Government of Lithuania; Saulius Caplinskas, Lithuanian AIDS Centre; Irma Čaplinskienė, Lithuanian AIDS Centre; Oksana Strujeva, Lithuanian AIDS Centre; Catalina Elena Iliuta, Central and Eastern European Harm Reduction Network; Rima Vaitkiene, Secretary of the Ministry of

Health; Virginija Ambrazeviciene, Division of Foreign Affairs, Ministry of Health; Alvyda Naujokaite, Division of Personal Health Care, Ministry of Health; POLAND: Janusz Janiec, National Institute of Hygiene UNODC Project Office for the Baltic States Signe Rotberga; Agne Bajoriniene UNODC Project Office for the Baltic States, Vilnius, Lithuania; AZERBAIJAN: Arzu Guliyeva, UNAIDS; Esmira Almammadova, AIDS Centre; Afet Mammadova, Drug Treatment Centre; Rasul Efendiyev, GFATM. KAZAKHSTAN: Jadranka Mimica, UNAIDS; Alexei Ilnitski, UNAIDS; Madina Takenova, UNODC; Katrenova Aigul, MOH; Lolita Ganina, National AIDS Centre; Oleg Yusopov, National Research and Clinical Centre of Medical and Social Problems of Drug Abuse; Alexander Ramm, National Research and Clinical Centre of Medical and Social Problems of Drug Abuse; KYRGYZSTAN: Anara Salamatova, UNAIDS; Ainura Bekkoenova, UNODC; Mirlan Mamyrov, Prime Minister's Office; Erkin Bakiev, National AIDS Centre; TAJIKISTAN: Zaripov Gairat, HIV/AIDS Centre; Ozoda Salimova, HIV/AIDS Centre; Mutabara Vohidova HIV/AIDS Centre, Tajikistan; TURKMENISTAN: Annatach Mamedova, UNODC; Klychey Hudayberdi, HIV/AIDS Centre; Nuriyev Rejepbay, Drug Treatment Centre; UZBEKISTAN: Bakhtiyor Niyazmatov, MOH; Guzal Giyasova, National AIDS Centre; Maysara Gazieva, National AIDS Centre; Shavkat Akhmedov, National AIDS Centre; Irina Makarova, UNODC; James Callahan, UNODC; Mirzakhid Sultanov, UNODC; Nina Kerimi, UNODC; Kamran Niaz, UNODC; Katya Burns, UNODC; Alisher Makhkamov, UNODC; Iskander Ismailov, WHO; Aziz Khudoberdiev, UNAIDS; Olga Lyan, UNAIDS; Olga Lyan, UNAIDS; Komiljon Akhmedov, UNICEF; Galina Karmanova USAID; Rustam Alymov, USAID; Rakhima Nazarova, The Capacity Project; Kahramon Yuldashev, CAAP; Leah Hoffman, PSI; Azizbek Boltaev, CARHAP; Zulfia Tairova, CARHAP; Askar Akhmedov, CARHAP; Oysara Anarkulova, GFATM; Elena Mun, GFATM; Tatyana Nikitina, Inilish; Tursunoy Usmanova, Ishonch va Hayot; Oleg Mustafin, Drug Treatment Centre; Elena Popova, Drug Treatment Centre; Vladislav Khvan, AIDS Foundation East-West; Akmal Makhmatov, CAAP.

The authors also wish to thank the following experts who participated in the Technical Consultation to review this *Technical guide* (Barcelona, Spain, 11 May 2008): Michael Bartos, UNAIDS Secretariat, Geneva; Monica Beg, UNODC, Vienna; Dave Burrows, APMG, Australia; Nicolas Clarke, WHO, Geneva; Louisa Degenhardt, NDARC, Australia; Konstantin Dumchev, WHO Country Office, Ukraine; Dagmar Hedrich, EMCDDA, Portugal; Robert Heimer, Yale University, USA; Joumana Hermez, WHO EMRO Cairo; Ilham Maerrawi, REDUC, Brazil; Bradley Mathers, NDARC, Australia; Susie McLean, International HIV/AIDS Alliance, UK; Afarin Rahimi Movaghar, INCAS, Iran; Benjamin Phillips, NDARC, Australia; Robert Power, Burnet Institute, Australia; Mukta Sharma, WHO SEARO; Olga Varetska, International HIV/AIDS Alliance in Ukraine; Peter Vickerman, London School of Hygiene and Tropical Medicine, UK; Urban Weber, Global Fund, Switzerland; Gundo Weiler, WHO, Ukraine; Lucas Wiessing, EMCDDA, Portugal.

# Contents

Abbreviations and acronyms .....	4
1. Introduction .....	5
2. Interventions for HIV prevention, treatment and care among people who inject drugs .....	6
2.1 The comprehensive package .....	6
2.2 Universal access .....	9
3. The target-setting process .....	10
3.1 Environment .....	10
3.2 Denominator populations .....	10
3.3 Availability of interventions .....	12
3.4 Coverage of interventions .....	13
3.5 Quality of interventions .....	13
3.6 Potential impact of interventions .....	14
3.7 Data sources .....	15
3.8 Setting targets .....	15
3.9 Next steps: after setting targets .....	17
4. Framework for setting indicators and indicative targets .....	18
4.1 Needle and syringe programmes (NSP) .....	18
4.2 Drug dependence treatment .....	20
4.2a Opioid substitution therapy (OST) .....	20
4.2b Other drug dependence treatment .....	23
4.3 HIV testing and counselling (T&C) .....	25
4.4 Antiretroviral therapy (ART) .....	26
4.5 Prevention and treatment of sexually transmitted infections (STIs) .....	28
4.6 Condom programmes for IDUs and their sexual partners .....	29
4.7 Targeted information, education and communication (IEC) for IDUs and their sexual partners .....	30
4.8 Diagnosis and treatment of and vaccination for viral hepatitis .....	32
4.9 Prevention, diagnosis and treatment of tuberculosis (TB) .....	35
5. References .....	37

# ABBREVIATIONS AND ACRONYMS

---

AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
ATS	amphetamine-type stimulants
BSS	behavioural surveillance survey
CBT	cognitive-behavioural therapy
EC	European Commission
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
FHI	Family Health International
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
HAV	hepatitis A virus
HBV	hepatitis B virus
HCV	hepatitis C virus
HIV	human immunodeficiency virus
IDU	injecting drug user
IEC	information, education and communication
MERG	monitoring and evaluation reference group
NCPI	National Composite Policy Index
NSP	needle and syringe programme
OST	opioid substitution therapy
PITC	provider-initiated testing and counselling
PMTCT	prevention of mother-to-child transmission (of HIV)
SEARO	Regional Office for South-East Asia (of WHO)
STI	sexually transmitted infection
T&C	testing and counselling
TB	tuberculosis
UIC	unique identifier code
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session
UNODC	United Nations Office on Drugs and Crime
WHO	World Health Organization
WPRO	Regional Office for the Western Pacific (of WHO)

# 1. INTRODUCTION

This document provides technical guidance to countries on setting ambitious, but achievable national targets for scaling up towards universal access to HIV/AIDS prevention, treatment and care for injecting drug users (IDUs).

This document has been developed collaboratively by three United Nations (UN) agencies (the World Health Organization [WHO], United Nations Office on Drugs and Crime [UNODC] and Joint United Nations Programme on HIV/AIDS [UNAIDS]) and international experts in the field. It builds on previous UNODC<sup>1</sup> and UNAIDS<sup>2</sup> guidelines and adheres to the principles therein. It serves to provide more consistent methods of measuring and comparing countries' progress towards national targets to scale up comprehensive programmes for universal access to prevention, treatment, care and support for HIV/AIDS by 2010.<sup>3,4</sup> These aims are based upon the 2006 Political Declaration on HIV/AIDS at which countries committed to scale up towards universal access, and the earlier *Declaration of Commitment on HIV/AIDS*.<sup>5</sup> The UNAIDS Secretariat and its cosponsors supported the launch of this broader effort with more specific operational guidance to countries.<sup>3,4,6,7,76</sup>

This *Technical guide* provides countries with:

- ▶ A framework and process to set national targets
- ▶ A comprehensive package of core interventions for IDUs
- ▶ A set of indicators and indicative targets (or "benchmarks") to be used to set programmatic objectives, and monitor and evaluate HIV interventions for IDUs
- ▶ Examples of data sources.

This framework could be applied by countries that wish to follow a systematic review process when setting, reviewing or adjusting targets for HIV prevention among IDUs. This *Technical guide* and the process outlined above are intended to assist agencies and individuals involved in planning programmes for universal access. They can also be used for other purposes such as preparing proposals for or reporting on programmes to various donor organizations including the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM), the European Commission (EC) or other multilateral and bilateral funding sources.

Although primarily intended for national target-setting, this *Guide* will also be useful in setting targets for regions in large countries (for example, states/provinces in China, provinces in Viet Nam, or oblasts in the Russian Federation), for smaller geographical areas such as cities and for specific settings such as prisons. It is important to define the scope of the areas or settings under consideration. While this *Technical guide* focuses primarily on IDUs, it may also be useful for setting targets for HIV interventions targeting problematic drug users who do not inject but who are at risk of starting to do so.

This version of the *Guide* represents an initial attempt to develop a framework for assessing countries' progress in delivering a comprehensive package of core interventions. This framework and the recommended target levels are based on the limited body of evidence currently available in this area. Over time, as more evidence becomes available and as experience is gained in the field from applying this framework, this *Guide* will be revised accordingly. A monitoring and evaluation reference group (MERG) convened by UNAIDS is in the process of further developing methods and guidelines for measuring the coverage and quality of HIV prevention and care services for at-risk populations, including IDUs. It is anticipated that these efforts will complement and enhance this *Technical guide*.

This *Technical guide* is scheduled to be reviewed and revised in 2010.

# 2. INTERVENTIONS FOR HIV PREVENTION, TREATMENT AND CARE AMONG PEOPLE WHO INJECT DRUGS

## 2.1 The comprehensive package

Preventing HIV transmission through injecting drug use is one of the key challenges to universal access in the health sector. A *comprehensive package* for the prevention, treatment and care of HIV among IDUs includes the following **nine interventions**:

1. Needle and syringe programmes (NSPs)
2. Opioid substitution therapy (OST) and other drug dependence treatment
3. HIV testing and counselling (T&C)
4. Antiretroviral therapy (ART)
5. Prevention and treatment of sexually transmitted infections (STIs)
6. Condom programmes for IDUs and their sexual partners
7. Targeted information, education and communication (IEC) for IDUs and their sexual partners
8. Vaccination, diagnosis and treatment of viral hepatitis
9. Prevention, diagnosis and treatment of tuberculosis (TB).

These nine interventions are included in the comprehensive package because they have the greatest impact on HIV prevention and treatment. There is a wealth of scientific evidence supporting the efficacy of these interventions in preventing the spread of HIV.<sup>8,77</sup>

### **Further information on the evidence in support of these interventions is available:**

- ▶ The WHO/UNODC Evidence for Action series and policy briefs:<sup>9</sup> <http://www.who.int/hiv/pub/idu/idupolicybriefs/en/index.html>
- ▶ Committee on the Prevention of HIV Infection among Injecting Drug Users in High-Risk Countries, Institute of Medicine. *Preventing HIV infection among injecting drug users in high-risk countries an assessment of the evidence*. Washington, DC, USA, The National Academies Press, 2006.<sup>77</sup>

With rare exceptions, studies consistently show that needle and syringe programmes (NSPs) result in marked decreases in HIV transmission, by as much as 33–42% in some settings.<sup>10–12</sup>

Opioid substitution therapy (OST), with methadone or buprenorphine, is highly effective in reducing injecting behaviours that put injectors at risk for HIV.<sup>13</sup> In addition, OST has been demonstrated to

improve both access and adherence to ART, and reduce mortality.<sup>14–16</sup>

HIV testing and counselling (T&C) is an important gateway to HIV treatment and care including ART. In some circumstances, provider-initiated HIV testing and counselling (PITC) for IDUs is recommended. WHO and UNODC are in the process of developing guidance on HIV T&C for most-at-risk populations, including prisoners and IDUs.

### **Guidance on counselling and testing is available:**

- ▶ WHO & UNAIDS. *Guidance on provider-initiated HIV testing and counselling in health facilities*. Geneva, WHO, 2007.<sup>17</sup>
- ▶ WHO Regional Office for South-East Asia (SEARO), WHO Regional Office for the Western Pacific (WPRO) & UNODC. *Guidance on testing and counselling for HIV in settings attended by people who inject drugs: improving access to treatment, care and prevention*. Manila, WHO WPRO, 2009 (in press)<sup>18</sup>

In general, IDUs have poorer levels of access to ART compared with non-IDUs, despite the fact that provision of ART to IDUs has population-wide health ben-

efits and despite evidence that IDUs can successfully undergo treatment and benefit from ART.<sup>19–21</sup>

The currently available evidence for the impact of other forms of drug dependence treatment on HIV risk behaviour is less compelling<sup>22</sup> but remains strongly recommended for countries where non-opioid drugs such as amphetamine-type stimulants

(ATS), cocaine and benzodiazepines are widely used. Such treatment should be evidence-based and might include cognitive-behavioural therapy (CBT)<sup>23</sup> and contingency management for amphetamine dependence.<sup>24</sup>

**Treatnet** ([www.unodc.org/treatment/index.html](http://www.unodc.org/treatment/index.html)),<sup>25</sup> the UNODC-supported international network of drug dependence treatment and rehabilitation resource centres, aims at improving the quality of drug dependence treatment through information exchange, cooperation among, and empowerment of, twenty selected resource centres representing all regions. The twenty centres and all the rest of the network's members are committed to the synthesis, demonstration and dissemination of good practices, and application of state-of-the-art approaches to effective treatment and rehabilitation of drug dependence.

Interventions to reduce the sexual risk behaviours of IDUs, including condom provision and improved access to sexual health services, generally have a more modest impact on HIV transmission than those that reduce injecting risk behaviours.<sup>26, 27</sup> However, the importance of such interventions is generally accepted; in particular with regard to condom provision, and prevention and treatment of STIs among female injectors, especially those who engage in sex work.<sup>78</sup>

and their sexual partners is relatively weak compared with that for NSPs and OST, it is included in the comprehensive package because, when combined with other measures, a more positive and sustained impact upon HIV risk behaviours can be achieved with these interventions.<sup>8, 28</sup>

Although the evidence base for targeted information, education and communication (IEC) for IDUs

IDUs may have increased risk of acquiring TB and in particular as a coinfection with HIV. In response, the comprehensive package also includes the prevention, diagnosis and treatment of TB.

**Guidance is available on providing TB services for IDUs:**

- WHO, UNODC, UNAIDS. *Evidence for Action Technical Papers. Policy guidelines for collaborative TB and HIV services for injecting and other drug users – an integrated approach*. Geneva, WHO, 2008.<sup>29</sup>

While each of these separate interventions is useful in addressing HIV prevention and care among IDUs, it is important to recognize that they form part of a package and have the greatest beneficial impact when delivered *together*.

effectiveness in a small number of countries where they have been implemented and evaluated.<sup>30, 31</sup>

A number of interventions have not been included in the comprehensive package because of the relative lack of evidence of their effectiveness or other considerations. These include supervised injection sites, which remain controversial, but are demonstrating

In addition, there are other interventions that are not included in the comprehensive package but are also important and should not be overlooked. For example, as is the case for non-injectors, it is critical to consider the prevention of mother-to-child transmission (PMTCT) in the case of HIV-positive pregnant women who may inject drugs.

**Guidance is available on the prevention of mother-to-child transmission:**

- WHO and partners. *Guidance on global scale-up of the prevention of mother-to-child transmission of HIV: towards universal access for women, infants and young children and eliminating HIV and AIDS among children*. Geneva, WHO, 2007.<sup>32</sup> Available at: [http://whqlibdoc.who.int/publications/2007/9789241596015\\_eng.pdf](http://whqlibdoc.who.int/publications/2007/9789241596015_eng.pdf)

Although this *Guide* focuses primarily on HIV prevention, these interventions also have utility with regard to the prevention of other bloodborne viruses; in

particular hepatitis C virus (HCV), which IDUs are at particular risk for acquiring.<sup>33</sup>

**For a discussion on access to HCV treatment in the United States and the European Union:**

- ▶ Wiessing L. The access of injecting drug users to hepatitis C treatment is low and should be improved. *Eurosurveillance*, 2001, 5 (31):pii=1709.<sup>34</sup>

**For an inventory of HCV treatment guidelines in Western Europe:**

- ▶ Reimer J et al. Guidelines for the treatment of hepatitis C virus infection in injection drug users: status quo in the European Union countries. *Clinical Infectious Diseases*, 2005, 40 (Suppl. 5):S373–S378.<sup>35</sup>

*Community-based outreach* is not included as a separate intervention in the comprehensive package. However, it is recommended as an extraordinarily effective method of accessing IDUs, an often difficult group to access.<sup>36</sup> Outreach is a highly effective means of delivering HIV/AIDS prevention interven-

tions such as NSPs, condom programmes and targeted IEC to IDUs, as well as a useful access point for the referral of IDUs to interventions such as OST and ART. Outreach is very strongly recommended as a method of service delivery and as an essential component of all HIV prevention and care programmes.

**Further information on outreach is available:**

- ▶ WHO. *Evidence for Action: effectiveness of community-based outreach in preventing HIV/AIDS among injecting drug users*. Geneva, World Health Organization, 2004.<sup>36</sup>
- ▶ UNAIDS. *Practical guidelines for intensifying HIV prevention*. Geneva, Switzerland, Joint United Nations Programme on HIV/AIDS, 2007.<sup>79</sup>

These interventions are also appropriate for *prisons* and other *closed settings* (for example, compulsory treatment and rehabilitation centres). The principle of equivalency of care<sup>37</sup> demands that prisoners are entitled, without discrimination, to the same stan-

dard of health care that is found in the outside community, including preventive measures and ART. The framework presented here can also be applied to evaluate and set targets for HIV prevention and care programmes in prisons.

**Guidance and further information on HIV prevention and treatment in prisons and other closed settings is available:**

- ▶ WHO. *Status paper on prisons, drugs and harm reduction*. Copenhagen, World Health Organization Regional Office for Europe, 2005.<sup>38</sup>
- ▶ WHO, UNODC, UNAIDS. *Evidence for action on HIV/AIDS and injecting drug use. Policy Brief: reduction of HIV transmission in prisons*. Geneva, WHO, 2004.<sup>12</sup>
- ▶ WHO, UNODC, UNAIDS. *Evidence for action technical papers. Effectiveness of interventions to address HIV in prisons*. Geneva, WHO, 2007.<sup>39</sup> Available at: [http://www.who.int/hiv/idu/OMS\\_E4Acomprehensive\\_WEB.pdf](http://www.who.int/hiv/idu/OMS_E4Acomprehensive_WEB.pdf)

## 2.2 Universal access

Universal access was adopted at the High-Level Meeting on HIV/AIDS in 2006 as a commitment to scale up national programmes for HIV treatment, prevention, care and support for all those who need it. While clearly an ambitious and desirable goal, universal access is also a concrete process driven by countries who have organized national consultations to identify critical obstacles to scaling up, and planned measures to address these.

Universal access encompasses the principles of equality, sustainability, comprehensiveness, accessibility and sustainability, which guide the development of interventions in the comprehensive package. These must:

- ▶ Be physically accessible (geographically distributed, e.g. available not only in major cities or unavailable in hard-to-reach locations such as prisons);
  - ▶ Be affordable (cost at the point of service should not be a barrier, e.g. patients should not have to pay for their treatment);
  - ▶ Be equitable and non-discriminatory (there should be no exclusion criteria except medical ones, e.g. OST should not be limited to only those IDUs who are HIV-infected or who have failed on other drug dependence treatment);
  - ▶ Be non-rationed (supply should be determined by need and not limited by cost or other considerations, e.g. NSPs with strict limits on the number of syringes provided to each client are less successful than those that do not impose such restrictions).<sup>40</sup>
- Access should not be restricted by sociodemographic or other criteria such as the following:
- ▶ Age: programmes should not have age restrictions, i.e. there should be no minimum age requirement for accessing services
  - ▶ Sex/gender, sexual orientation and sexual behaviour
  - ▶ Citizenship, nationality, country of origin, race/ethnicity, asylum-seeking status, or religion/religious convictions
  - ▶ Employment status and profession, including sex work, illegal employment, etc.
  - ▶ Confinement to a facility/setting, imprisonment, military service, health institution, orphanage, etc.
  - ▶ Health insurance status
  - ▶ Substance use status – for example, current injecting should not be a barrier to access.
- In addition, all interventions should be offered voluntarily in an enabling environment created by supportive legislation, policies and strategies.

# 3. THE TARGET-SETTING PROCESS

The following framework builds on the target-setting process for a comprehensive package of interventions for universal access, as laid out in earlier operational guidelines. It provides more programmatic guidance on the process of measuring and setting targets for the interventions of a comprehensive package.

For each of the nine interventions a series of indicators are described. These indicators are intended to assess the following:

- ▶ Availability
- ▶ Coverage
- ▶ Quality
- ▶ Potential impact

Indicative target levels for key indicators are also described.

As discussed above, maximum benefit is gained by implementing all nine parts of this comprehensive package together, and it is thus important to conduct ongoing monitoring and evaluation for each of these interventions. It is recognized, however, that countries are at different stages of establishing a comprehensive response, and that limitations may exist to how comprehensive the monitoring and evaluation process can be. It is advised that at least the first four of the nine interventions – NSP, OST, T&C and ART – be monitored as a minimum requirement.

To be able to define indicators and set targets, it is necessary to understand the environment in which these interventions are being conducted and to define the populations that the interventions are intended to target.

Where possible, gender-disaggregated data should be collected and reported for these indicators.

## 3.1 Environment

It is important to consider the context in which injecting drug use occurs and services for IDUs are delivered. This involves identifying structural, societal and other factors that may impede the successful delivery of these interventions, and working towards creating a more supportive environment.

People who inject drugs are commonly marginalized and subject to stigma, discrimination and, due to the illegality of drug use, legal sanctions. Structural factors such as changes in drug supply or injection practices can impact upon HIV transmission. Legal and law enforcement conditions can act as barriers to the

delivery and scaling up of HIV prevention services.

Means by which such barriers might be addressed include antidiscrimination legislation and ensuring that policing policy and practice does not impede the delivery of services.

A number of items included in the National Composite Policy Index (NCPI) of the UNAIDS United Nations General Assembly Special Session (UNGASS) HIV monitoring and reporting process relate to IDUs. These can be used to help identify such barriers and assess progress.<sup>7</sup>

## 3.2 Denominator populations

Many of the indicators described in this *Guide* comprise a numerator and denominator. Most of the denominators reflect defined populations that are the target of the intervention being assessed. Appropriate estimates should be used for the denominator for each of the interventions. These data, including national estimates of IDUs, need to be carefully reviewed and assessed in order to ensure that the denominators used in calculating the different target levels outlined in this *Guide* represent the population of interest in the numerator.

### ▶ Estimating the size of IDU populations

Many different definitions of injecting drug use exist in the literature and are useful in different circumstances, depending upon the context and what is being investigated. For example, it is important to consider “current” injecting drug use when planning NSPs. When trying to determine how many people in a population may have been exposed to HIV transmission via injecting drug use, it is more appropriate to look at “lifetime injecting drug use”, or those who have ever injected since HIV was first present in that location.

*For the purpose of reporting on the indicators described in this Guide, it is recommended that IDUs be defined as **those who have injected any time within the past 12 months**.*

In some countries, people may self-inject medicines for medical purposes. This practice is commonly referred to as therapeutic injection and is distinct from injecting drug use, which is the focus of this *Guide*. Those who have self-injected medicines for medical purposes only are not included in the definition of injecting drug use given above.

Determining the size of IDU populations can be challenging, particularly because they are a “hidden”

population. Indirect estimation methods such as multiplier and benchmark calculations, which make use of existing data sources (police arrests, drug

treatment, drug-related deaths) or capture–recapture methods are extremely useful, and guidance on these methods is available.

**Guidance on estimation methods is available:**

- ▶ UNODC. *Global Assessment Programme on drug abuse. Estimating prevalence: indirect methods for estimating the size of the drug problem*. Vienna, UNODC, 2003.<sup>41</sup>
- ▶ Hickman M et al. Estimating the prevalence of problematic drug use: a review of methods and their application. *UN Bulletin on Narcotics*, 2002, 54:15–32.<sup>42</sup>
- ▶ U.S. Department of Health and Human Services, Centers for Disease Control, GAP Surveillance Team. Most at risk populations sampling strategies and design tool. HSS-CDC, 2009 (in press).<sup>43</sup> Available at: <http://www.igh.org/surveillance>

Surveys of the general population such as household surveys generally underestimate the prevalence of injecting drug use because injectors are less likely to be included in the sample, and because drug injecting is an illicit and stigmatized behaviour, so respondents may be reluctant to disclose such use.

If a range of estimates is available for a defined IDU population, possibly derived by different estimation

processes, it is recommended that, every two years, a national expert group meeting be held of researchers and key informants from the government, non-governmental organizations (NGOs) and the private sector to determine and update the consensus numbers or range of numbers for the denominator population. These numbers or ranges can then be used by all researchers, government departments and others providing calculations related to those populations.

**The Reference Group to the United Nations on HIV and injecting drug use** undertakes reviews of the available literature to produce global and regional estimates of the number of people who inject drugs and the prevalence of HIV among this group. See [www.idurefgroup.com](http://www.idurefgroup.com) for more details on the Reference Group and to access reported country-level and global-level estimates of injecting drug use and HIV among injectors. See also Mathers et al. 2008<sup>44</sup> for a recent review of available data on IDU prevalence.

**▶ Estimating the size of the target population for different interventions**

Determining the size of the populations that different interventions intend to target can be challenging. It is critical to clearly define the population in question.

While an NSP may target all drug users who inject, OST programmes will target dependent opioid users including both injectors and non-injectors, and it is necessary to estimate the size of these populations when measuring the coverage of these interventions. Separate estimates of subpopulations (e.g. *problem drug users*<sup>\*</sup>, *problematic non-injectors*, *injectors of non-opioid drugs* as well as *injectors of opioid drugs*) are needed and, where relevant, used as denominator populations. The number of IDUs requiring access to ART and HCV, hepatitis B virus (HBV) and TB treatment and care must also be estimated. In many countries, IDUs have a disproportionately low

access to HIV/AIDS care and support. In most countries, current injectors are excluded from HIV interventions, in particular from ART.<sup>45</sup> It is thus important to determine what proportion of *current* IDUs requiring access to these interventions are in fact able to do so. “Current” drug injecting can be defined in many different ways but again, for the purpose of measuring these indicators, this can be defined as **those who have injected any time within the past 12 months**.

**▶ Gender disaggregation**

Female IDUs often face additional barriers to accessing HIV prevention and care services. For this reason, it can be useful to collect gender-disaggregated data and use these along with gender-specific denominator estimates to assess and monitor this disparity.

**Further details on denominator populations are provided in the outline for each indicator.**

\* The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) defines problem drug use as *injecting drug use or long duration/regular use of opiates, cocaine and/or amphetamines*.

### 3.3 Availability of interventions

A comprehensive approach should include all the interventions in the comprehensive package. However, the *mix* of interventions and *content* of each intervention will be context-specific. This can be determined by a thorough assessment and understanding of the local situation including:

- ▶ The types of services available
- ▶ Patterns of drug use and the types of drugs used (e.g. opioids, ATS, cocaine, benzodiazepines, etc.)
- ▶ Rate and frequency of injecting.

Accordingly, the indicators used to assess these interventions need to appropriately match each intervention.

In some countries, NSPs will include access to clean equipment and its safe disposal through fixed or mobile exchange programmes and/or through pharmacies where equipment is available free of charge. In many countries, pharmacy *sales* of injecting equipment are an important, and sometimes the most significant, source of clean injecting equipment accessible to IDUs.<sup>46,47</sup>

It is advisable for countries to differentiate between *modalities of delivery* and have, for example, a separate indicator for pharmacy sales. In countries where both modalities are available, it will be useful to have a measure of the proportion of syringes provided through NSPs and through pharmacy sales (note: pharmacy sales are measured separately and are different from pharmacy-based NSPs, which provide needles and syringes to IDUs free of charge and for the purpose of these indicators are included as NSPs). In addition, other modalities of delivery, such as vending machines or mobile van outlets<sup>48</sup> might be employed as alternative and important providers of clean equipment. Countries might also include indicators for these modalities.

OST is effective in treating opioid dependence and also in preventing HIV among opioid injectors. However, in countries with considerable numbers of problematic non-opioid (e.g. ATS, cocaine and benzodiazepine) users, *other drug dependence treatment* options should be included as essential interventions. These other forms of drug dependence treatment should be defined and described,

and such treatments should be evidence-based (e.g. CBT<sup>23</sup> and contingency management for ATS dependence).<sup>24</sup>

Indicators on availability measure whether an intervention is available to the IDU population. For most of the interventions, a simple measure of the presence or absence of an intervention is determined. In the case of ART for IDUs, the presence of criteria excluding IDUs from accessing ART is noted.

This simple measure of the presence of an intervention may be supplemented by a measure of the *extent* of availability. For most of the interventions in this *Guide*, this is determined by calculating the number of sites offering the intervention per 1000 IDUs. For example, in the case of NSPs, the indicator is defined as follows:

$$\frac{\text{Number of NSP sites}}{\text{Number of IDUs}/1000}$$

It is important to recognize that this measure provides only a crude indication of the extent of availability of an intervention – how well this level of availability “covers” a population of IDUs will be determined by the geographical distribution of both the services and the target population, and how easily accessible the services are for this group.

It is necessary to clearly define what is considered as a “site”. For example, the AIDS Projects Management Group considers distinct sites such as fixed sites or mobile units with a bus or a van as a single site; places where a mobile or outreach NSP stops are not considered as sites. Outreach teams are *not* sites except in the case where an outreach team is based in an office or clinic that is not operating as a fixed site. As discussed above, pharmacies are not counted as NSP sites unless they function as such by providing equipment free of charge. Pharmacies may be considered as sites of service delivery for other interventions, for example, if they dispense OST or ART, or if they provide HIV T&C or other relevant services.

This indicator describes the general level of availability of this intervention relative to the size of the target population. However, it does not account for aspects that determine accessibility such as the geographical location of the service and how easily members of the target population can get to the service.

### 3.4 Coverage of interventions

The term *coverage* can be used to describe various aspects of reach and the effectiveness of interventions.<sup>49</sup> In this *Guide*, coverage is used to describe the extent to which an intervention is delivered to the target population, that is, the proportion of the target population in need of an intervention who are actually provided with it.

Attempting to define coverage indicators poses many challenges. The denominator used in the measure of coverage of an intervention should be considered carefully. For example, available estimates of the number of IDUs in a country may not include people currently on treatment, which will impact on a measurement of what proportion of IDUs are reached by that treatment.

If coverage is defined as the number of individuals reached by an intervention, this could refer to any contact, rather than an *effective* contact. How often a person accesses a service is also important: an IDU reached once in a year by an NSP is qualitatively different from an IDU reached every day for a year by that NSP. In order to be effective, some interventions need near-daily reach, such as OST, while others such as T&C are not needed so frequently. Although subject to ongoing debate, current consensus is that regular reach of an NSP should be considered as access **at least once per month**.

It is also important to distinguish between the *number of clients* accessing a service and the *number of client contacts* for that service. A common problem in data collection is that programmes record the number of contacts with clients and then confuse this with the number of clients reached. To measure regular reach (rather than the number of contacts), an anonymous system of recording return visits is necessary. A common method is to provide each client with a *unique identifier code* (UIC). This enables a service to record patterns of attendance and, in particular, can reveal whether a client is reached regularly.<sup>50,51</sup> This can be even more accurately measured if the same UIC is used across different services.

Another method of measuring the coverage of an NSP is to calculate the *number of syringes distributed per IDU per year*. Difficulties regarding how to count needles and syringes have been reported. Some commonly used syringes are 1 ml or 2 ml needle-and-syringe units, while others are syringes to which additional needles need to be fitted. Some

countries report dramatically different numbers of needles and syringes distributed. In these circumstances, both numbers should be recorded.

### 3.5 Quality of interventions

Quality encompasses the *scope, completeness, effectiveness, efficiency* and *safety* of interventions. The quality of an intervention makes a vital difference to its impact on the epidemic.<sup>80</sup> For example, OST programmes delivering low-dose methadone will be far less effective and have less impact than those delivering higher dosages. OST provided in combination with psychosocial support is more effective and will have a greater impact.<sup>13,52</sup>

Assessment of quality is complex. However, here we propose relatively simple measures of whether quality standards are adhered to; that is, whether an intervention meets a defined standard. These quality standards can be set by UNODC/WHO/UNAIDS guidelines or by other authorities.<sup>53</sup>

For OST, additional measures are proposed which examine the dose provided and duration of treatment. The modalities and quality of drug dependence treatment other than OST vary greatly. However, quality guidelines are available for these different drug dependence treatments. Good practice guidelines for different interventions may be accessed via *Treatnet* ([www.unodc.org/treatment/index.html](http://www.unodc.org/treatment/index.html)).<sup>25</sup>

Quality guidelines for providing ART to IDUs, including recommended regimens that consider hepatotoxicity and drug–drug interactions, are also available.<sup>54</sup> IEC delivered through well-structured outreach is an effective HIV prevention strategy.<sup>36</sup> Simple indicators are proposed in this *Technical guide*. However, recognizing the need to distribute new and varied materials and messages at regular intervals, more complex quality indicators could also be developed locally.

The quality of HIV/AIDS T&C is subject to current debate. Access to voluntary counselling and testing is an important part of HIV programmes in all settings. WHO and UNAIDS have published guidelines on PITC,<sup>17,79</sup> where it is recommended that in all epidemic settings, adults, adolescents or children who present in clinical settings with signs and symptoms or medical conditions suggestive of HIV infection including TB be recommended PITC. In settings with generalized epidemics, T&C should be recom-

mended to all those who present at a health facility. In concentrated and low-level epidemic settings, PITC could be offered at services for most-at-risk populations. WHO and UNODC are developing specific guidance for countries with concentrated epidemics among specific populations including IDUs. Some basic quality measures must ensure that HIV testing is voluntary, conducted with consent and includes counselling.<sup>18</sup> In some countries, IDUs, particularly when in prison, are often compulsorily tested without consent.

Another important aspect of quality is *client satisfaction* or the *user-friendliness* of the intervention. This information can be gathered by conducting client surveys that assess clients' satisfaction with

staff and whether the services are available when needed, etc.

Programme staff who are well trained and supported improve the quality of programmes. Locally defined indicators that include this aspect could also be developed.

The operational characteristics of an intervention can have an important impact on the quality. For example, differences in the operational characteristics of NSPs, particularly restrictions on the number of syringes distributed per client, can impact effectiveness. It has been demonstrated that NSPs with less restrictive policies contribute to higher levels of coverage and lower levels of injection-related HIV risk behaviour.<sup>40</sup>

#### **Examples of guidelines for the delivery of different interventions:**

- ▶ WHO. Chapter 5 - HIV/AIDS treatment and care for injecting drug users; Chapter 6 – Management of hepatitis C and HIV coinfection; Chapter 7 – Management of hepatitis B and HIV coinfection. In: *HIV/AIDS treatment and care: clinical protocols for the WHO European Region*. Copenhagen, WHO Regional Office for Europe, 2006.<sup>54</sup> Available at: <http://www.euro.who.int/Document/E90840.pdf>
- ▶ WHO, UNAIDS, UNODC. *A guide to starting and managing needle and syringe programmes*. Geneva, WHO, 2007.<sup>51</sup>
- ▶ WHO. *Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence*. Geneva, WHO, (in press). Available at: [http://www.who.int/substance\\_abuse/en/index.html](http://www.who.int/substance_abuse/en/index.html)<sup>55</sup>
- ▶ WHO. *Operational guidelines for the management of opioid dependence in the South-East Asia Region*. New Delhi, WHO Regional Office for South-East Asia, 2008. Available at: [http://www.who.int/hiv/topics/idu/drug\\_dependence/OSTguidelinesSEA.pdf](http://www.who.int/hiv/topics/idu/drug_dependence/OSTguidelinesSEA.pdf)<sup>56</sup>
- ▶ WHO, UNAIDS. *Guidance on provider-initiated testing and counselling in health facilities*. Geneva, WHO, 2007. Available at: [http://whqlibdoc.who.int/publications/2007/9789241595568\\_eng.pdf](http://whqlibdoc.who.int/publications/2007/9789241595568_eng.pdf)<sup>17</sup>
- ▶ WHO SEARO, WHO WPRO, UNODC. *Guidance on testing and counselling for HIV in settings attended by people who inject drugs: improving access to treatment, care and prevention*. Manila, WHO Regional Office for the Western Pacific, 2009 (in press).<sup>18</sup>
- ▶ UNAIDS. *Practical guidelines for intensifying HIV prevention*. Geneva, Switzerland, Joint United Nations Programme on HIV/AIDS, 2007.<sup>79</sup>

## 3.6 Potential impact of interventions

This *Technical guide* is not primarily concerned with measuring the impact of interventions. However, basic impact data for each of the essential interventions are extremely useful.

HIV *incidence* gives the best indication of the impact of HIV prevention interventions but is generally difficult to collect. Mathematical modelling can be used to estimate HIV incidence.<sup>57</sup>

It may take some time for data on HIV *prevalence* to reveal changes in infection risk, but these can be a useful indicator in the longer term. An understanding and assessment of the surveillance system is necessary to allow for meaningful interpretation of the data; for example, increases in the number of IDUs could be the result of better sentinel surveillance in this group; decreases could be the result of increased stigmatization and reluctance of IDUs to be tested. In addition, when access to HIV treatment and care is available to IDUs, HIV prevalence can be seen to increase as the life expectancy of HIV-positive IDUs increases even if the incidence of HIV infection remains stable or decreases.

Model projections suggest that HIV transmission can be reduced by interventions that reduce injecting frequency and sharing. Case studies suggest that high coverage of HIV prevention interventions for IDUs may avert or delay potential HIV epidemics among IDUs and their spread to the general population.<sup>58,81</sup>

In this *Technical guide*, additional impact indicators are proposed that examine changes in injecting-related behaviours such as sharing of injecting equipment and frequency of injecting. These impact indicators are listed in the *Guide* under different interventions. It is important to recognize, however, that observed changes in these behaviours will invariably be due to multiple factors and a combination of interventions. In most cases, observed changes are unlikely to be attributable to a single isolated intervention.

### 3.7 Data sources

The data required for the indicators presented in this *Technical guide* can be gathered from multiple sources. In most countries, these data are not collected by a single agency and in most cases are not centrally organized or collated. Having a single, national-level agency that is supported to collate and report national data on a regular basis is advantageous.

Data collected by services – *programme data* – can be used to determine the number of occasions service has been provided and the number of individuals in contact with a service. In the case of NSPs and condom programmes, this would mean the number of items distributed. It is recommended that a census date be set to determine the number of individuals in OST and other treatment programmes at a single point in time. Monitoring and evaluation of services can provide data for indicators that measure the quality of interventions offered; for example, to assess whether appropriate guidelines are followed.

*Behavioural surveillance surveys* (BSS), such as the Family Health International (FHI) BSS, can be undertaken to provide information on HIV risk behaviours such as condom use and safe injecting practices, and are useful in measuring the impact of interventions. The FHI BSS<sup>59</sup> is recommended. Sentinel surveillance of IDUs can be undertaken to monitor the prevalence of HIV infection among IDUs.

Infectious disease registration systems may be able to provide data on registered cases of HIV, AIDS and viral hepatitis.

#### **Guidelines on gathering and interpreting sentinel surveillance data are available:**

- ▶ UNAIDS, WHO Working Group on Global HIV/AIDS and STI Surveillance. *Guidelines for second generation HIV surveillance: the next decade*. Geneva, WHO, UNAIDS, 2000. Available at: [www.who.int/hiv/pub/surveillance/en/](http://www.who.int/hiv/pub/surveillance/en/) (accessed on 31 December 2008).<sup>60</sup>

### 3.8 Setting targets

No universal formula for target-setting exists. Limited evidence is available to assist in defining minimum levels of coverage or thresholds required for interventions to achieve a desired impact.

A plethora of factors can affect the extent of HIV risk behaviours and levels of HIV transmission among IDUs; these factors influence the minimum level of coverage required in a given context. For example, in settings with high levels of HIV among IDUs, higher levels of coverage with HIV prevention interventions such as NSPs are likely to be required.<sup>61</sup>

Mathematical modelling has demonstrated that the earlier in an epidemic an intervention is introduced, the more effective it can be in controlling the spread of HIV.

In order to set firm coverage-level targets, consideration of these variables is required. This evidence may be difficult to collect but an absence of such data should not impede the response. Useful targets can be set by acknowledging that greater levels of coverage are clearly superior to lower levels.

Reflecting on these difficulties and gaps, the indicative target levels presented in this *Technical guide* are based on current expert consensus, and coverage levels achieved in those countries that have had the greatest impact on reducing or avoiding high levels of HIV infection among IDUs. Different indicative targets, expressed as a range, are provided for each intervention.

In light of the indicative targets levels proposed in this *Technical guide*, countries should set their own targets for each intervention with reference to the situation in their country. Each country should agree

on a credible measure of the target population and decide on ambitious but realistic targets for the interventions of the package. The targets selected should allow programmes to know whether they are

making a difference to the epidemic, with the lower ranges having less of an impact on the epidemic than the higher ranges.

## Target-setting for NSP coverage

The challenges in determining target levels for coverage of NSPs illustrates the complexity around the task of target-setting, given the current state of evidence available. There is no level of coverage that has been universally agreed upon as sufficient for all situations. Some have suggested that NSP coverage rates of 20–33% are sufficient;<sup>49</sup> others have suggested that “high coverage sites” are those where 50% of IDUs have been reached by one or more HIV prevention programmes.<sup>6</sup>

Some authorities recommend that IDUs should use a new sterile needle and syringe for every injection.<sup>43</sup> This requires knowledge of the frequency of injection, which is likely to vary between IDUs; in particular, between IDUs who inject different substances. For example, some studies have found that IDUs who use heroin inject more frequently than ATS injectors, while others have found that in some instances, for example, during binge use, ATS users inject more frequently.<sup>62–64</sup>

Some researchers have defined coverage as being the number of syringes obtained by a client in a month measured against the number of injections in that month self-reported by that client.<sup>40,65</sup> They have observed that distribution of more than one syringe per injection per injector actually conferred the greatest benefit.<sup>65</sup>

In contrast, mathematical modelling<sup>57,61</sup> and observational studies in developed countries,<sup>66</sup> which have examined the impact of NSPs on HIV transmission, have suggested that the distribution of *fewer* syringes than the equivalent of “one syringe per injection” can still reduce HIV transmission rates. These lower coverage levels are thought to have been effective because other conditions were in place, namely, sufficient breadth of programmes available; sufficient quality of programmes and sufficient credible education delivered regularly. In the case of some countries, such as Australia and the United Kingdom, HIV prevention programmes, including NSPs, were also introduced aggressively at an early stage of the HIV epidemic among IDUs with the result that background HIV prevalence rates remained relatively low.

It is important to recognize that other contextual factors and behaviours also influence HIV transmission and will therefore have a bearing on the NSP coverage levels needed. For example, reusing a syringe after another person has used it is clearly more risky than a person reusing a syringe that only he or she has used. In each of these two cases, education around reusing injecting equipment may have different impacts upon HIV prevention. Lower levels of NSP coverage may be sufficient to sustain an effective response to HIV prevention if clean injecting equipment is also available from other sources, such as pharmacies, from other injectors, or purchasing them from street dealers. The type of drug being injected may also affect the extent of injecting risk and have implications for the coverage levels required. For example, some comparisons of the level of injecting *risk* between ATS injectors and those injecting other drugs have found greater sharing of equipment among ATS than heroin injectors.<sup>67,68</sup> In other sites no such differences were found.<sup>62</sup>

### Examples of target-setting in the field<sup>69</sup>

Two UNODC/WHO Technical Consultations on Setting Targets for Universal Access to HIV Prevention Treatment and Care for Injecting Drug Users in Estonia, Latvia, Lithuania and Poland (Vilnius, Lithuania, 23 March 2007) and Central Asia and Azerbaijan (Tashkent, Uzbekistan, 28–30 May 2007) contributed to the development and field-testing of this *Technical guide*.

Denominator populations of IDUs were available for most of the countries involved in the field-testing; however, the quality of these data was variable. Availability of services varied considerably – for example, in some Central Asian countries, OST had not yet been introduced. In many countries access was limited, for example, by geographical location (in many countries essential interventions were available only in the major cities and/or unavailable in hard-to-reach locations such as prisons); affordability (for example, in some countries patients were expected to pay for OST or other ancillary services); equity and discrimination (most countries had exclusion criteria other than medical ones, e.g. OST was limited to those above a certain age or to those IDUs who are HIV-infected or who have “failed” other drug dependence treatment); and rationing (supply of services was limited by cost or other considerations and not determined by need). The quality of the programmes was also variable and many programmes in this region are rooted in a philosophy and approach geared towards abstinence from drug use.

Field-testing of this *Guide* revealed the value of discussing and reaching a national consensus on targets in the wide range of interventions that comprise the comprehensive package. Overall, there is a tendency to select realistic and achievable targets that fall short of the levels necessary to have an impact on the HIV epidemic. For example, the current coverage of OST in three countries varied between 2% and 5%, rated as “low-level coverage” but the planned coverage targets ranged between 7% and 20% by 2010, which can at best be rated as “medium-level coverage”. The targets for NSPs were much more ambitious, ranging between 5% and 40% in 2007 with very ambitious targets for 2010 ranging between 25% for one and 60% for four other countries. The last target is rated as “high-level coverage”. The discrepancy between the targets for these two interventions in these countries may be explained by the different supportive environments, with more political support for implementation and scaling up of NSPs than for OST.

### 3.9 Next steps: after setting targets

Once targets have been set, they need to be operationalized and monitored. This requires an *operational plan* and a *monitoring and evaluation framework* based on these targets.

**Guidance on operationalization, and monitoring and evaluation of interventions is outside the scope of this Guide but can be found in the following documents:**

- ▶ WHO. *Guide to starting and managing needle and syringe programmes*. Geneva, WHO, 2007. Available at: [http://www.who.int/hiv/idu/Guide\\_to\\_Starting\\_and\\_Managing\\_NSIP.pdf](http://www.who.int/hiv/idu/Guide_to_Starting_and_Managing_NSIP.pdf)<sup>51</sup>
- ▶ WHO. *Guidelines for psychosocially-assisted pharmacotherapy for the management of opioid dependence*. Geneva, WHO, (in press).<sup>55</sup>
- ▶ UNODC. *Drug abuse treatment and rehabilitation: a practical planning and implementation guide*. Vienna, UNODC, 2003.<sup>70</sup> Available at: [http://www.unodc.org/pdf/report\\_2003-07-17\\_1.pdf](http://www.unodc.org/pdf/report_2003-07-17_1.pdf)

# 4. Framework for setting indicators and indicative targets

Although primarily for **national target-setting**, the *Guide* will also be useful in setting targets for regions in large countries. The geographical scope should be determined and made explicit.

## 4.1 Needle and syringe programmes (NSPs)

### Availability

---

**4.1.1 Do NSPs (including pharmacy sites providing no-cost needles and syringes) exist?**

Response: Yes/No

**4.1.2 Are pharmacy sales of needles and syringes available?**

Response: Yes/No

**4.1.3 NSP sites (including pharmacy sites providing no-cost needles and syringes) per 1000 IDUs**

Data source: Programme data

Numerator: Number of NSP sites (including pharmacy sites providing no-cost needles and syringes)

Denominator: (Number of IDUs)/1000

Target: Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

**4.1.4 Pharmacy sales sites per 1000 IDUs**

Data source: Programme data

Numerator: Number of pharmacy sites selling syringes

Denominator: (Number of IDUs)/1000

Target: Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

### Coverage

---

Three coverage indicators are presented. The availability of data may dictate which of these indicators can be measured.

**4.1.5 Percentage of IDUs regularly reached by NSPs**

Data source: Programme data

Numerator: Number of IDUs who accessed an NSP once per month or more in the past 12 months

Denominator: Number of IDUs

Targets: Low:  $\leq 20\%$

Medium:  $>20\text{--}\leq 60\%$

High:  $>60\%$

Comment: The numerator should count individual clients and not the number of contacts or occasions of service recorded by NSP services. The high target level is based on a retrospective analysis of the coverage required to reverse the HIV/AIDS epidemic among IDUs in New York<sup>71</sup>

#### 4.1.6 Percentage of IDUs reached by NSPs in the past month

Data source:	Programme data
Numerator:	Number of IDUs who accessed an NSP in the past 1 month
Denominator:	Number of IDUs
Targets:	Low: $\leq 20\%$ Medium: $>20 - \leq 60\%$ High: $>60\%$
Comment:	The numerator should count individual clients and not the number of contacts or occasions of service recorded by NSP services.

#### 4.1.7 Syringes distributed per IDU per year

Data source:	Programme data
Numerator:	Number of syringes distributed in the past 12 months
Denominator:	Number of IDUs
Targets:	Low: $\leq 100$ per IDU per year Medium: $>100 - \leq 200$ High: $>200$
Comment:	These levels are based upon studies in developed country settings investigating the levels of syringe distribution and impact on HIV transmission. <sup>57,66</sup> Note that the levels required for the prevention of HCV are likely to be much higher than those presented here. In most cases only data on the number of syringes distributed via NSPs but not pharmacy sales will be available.

## Quality

#### 4.1.8 Percentage of NSP sites adhering to WHO guidelines on NSP<sup>51</sup>

Data source:	Programme monitoring and evaluation
Numerator:	Number of NSP sites adhering to WHO guidelines <sup>51</sup>
Denominator:	Number of NSP sites
Targets:	Low: $\leq 50\%$ Medium: $>50 - \leq 80\%$ High: $>80\%$

#### 4.1.9 Percentage of NSP sites adhering to UNAIDS best practice recommendations for HIV prevention among IDUs<sup>6</sup>

Data source:	Programme monitoring and evaluation
Numerator:	Number of NSP sites adhering to UNAIDS best practice guidelines <sup>6</sup>
Denominator:	Number of NSP sites
Targets:	Low: $\leq 50\%$ Medium: $>50 - \leq 80\%$ High: $>80\%$

#### 4.1.10 Percentage of occasions when clients access an NSP and receive IEC

Data source:	Programme data
Numerator:	Number of occasions when clients access an NSP and receive IEC (i.e. the number of client contact events at an NSP that involve the client receiving IEC)
Denominator:	Total number of NSP occasions of service
Targets:	Low: $<20\%$ Medium: $\geq 20 - <40\%$ High: $\geq 40\%$

#### 4.1.11 Percentage of occasions when clients access an NSP and receive condoms

Data source:	Programme data
Numerator:	Number of occasions when clients access an NSP and receive condoms (i.e. the number of client contact events at an NSP that involve the client receiving condoms)
Denominator:	Total number of NSP occasions of services
Targets:	Low: <20% Medium: ≥20–<40% High: ≥40%

### Potential impact indicators

---

#### 4.1.12 Increase in percentage of IDUs reporting the use of sterile injecting equipment the last time they injected

Data source:	Behavioural surveillance surveys (e.g. FHI BSS for IDUs). This indicator is also a core indicator of the UNGASS on the HIV reporting process for monitoring the <i>Declaration of Commitment on HIV/AIDS</i> <sup>7</sup>
Numerator:	Number of respondents reporting the use of sterile injecting equipment the last time they injected drugs
Denominator:	Number of respondents who report having injected in the past month

#### 4.1.13 Reduction in prevalence of HIV among IDUs

Data source:	HIV sentinel surveillance among IDUs
Numerator:	Number of IDUs with HIV in sample
Denominator:	Number of IDUs in sample

## 4.2 Drug dependence treatment

### 4.2a Opioid substitution therapy (OST)

OST is available in many forms; the most commonly used are methadone and/or buprenorphine. In countries where a range of substitution medications are used, all of them should be included when measuring these indicators. OST for non-injecting opioid-dependent people is also considered in this *Guide* as transition to injecting among this group is not uncommon<sup>72</sup> and hence treatment for opioid dependence reduces the likelihood of initiation to injecting and can be considered an HIV prevention strategy.

### Availability

---

#### 4.2a.1 Is OST available?

Response:	Yes/No
-----------	--------

#### 4.2a.2 OST sites per 1000 opioid injectors

Data source:	Programme data
Numerator:	Number of OST sites
Denominator:	(Number of opioid injectors)/1000
Target:	Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

#### 4.2a.3 OST sites per 1000 opioid-dependent people

Data source:	Programme data
Numerator:	Number of OST sites
Denominator:	(Number of opioid-dependent people including injectors and non-injectors)/1000
Target:	Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

## Coverage

---

### 4.2a.4 Percentage of opioid-dependent people on OST at census date

Data source:	Programme data
Numerator:	Number of people on OST at census date
Denominator:	Number of opioid-dependent people (including both injectors and non-injectors)
Target:	Low: $\leq 20\%$ Medium: $<20-\leq 40\%$ High: $>40\%$
Comment:	High target level based on levels of coverage achieved in countries with well-established OST programmes

### 4.2a.5 Ratio of number of people on OST against number of opioid injectors

Data source:	Programme data
Numerator:	Number of people on OST at census date
Denominator:	Number of opioid injectors
Targets:	Low: $\leq 0.2$ Medium: $<0.2-\leq 0.4$ High: $>0.4$
Comment:	High target level based on levels of coverage achieved in countries with well-established OST programmes

### 4.2a.6 Percentage of opioid injectors on OST

Data source:	Programme data
Numerator:	Number of IDUs on OST at census date
Denominator:	Number of opioid injectors
Targets:	Low: $\leq 20\%$ Medium: $<20-\leq 40\%$ High: $>40\%$
Comment:	High target level based on levels of coverage achieved in countries with well-established OST programmes

## Quality

---

### 4.2a.7 Percentage of OST sites adhering to WHO guidelines<sup>55,56</sup>

Data source:	Programme monitoring and evaluation
Numerator:	Number of OST sites adhering to WHO guidelines <sup>55,56</sup>
Denominator:	Number of OST sites
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 80\%$ High: $>80\%$

### 4.2a.8 Percentage of OST programmes providing psychosocial support

Data source:	Programme monitoring and evaluation
Numerator:	Number of OST sites/programmes offering psychosocial support to all OST patients
Denominator:	Number of OST sites/programmes
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 80\%$ High: $>80\%$

#### 4.2a.9 Percentage of patients in OST receiving recommended maintenance dose

Data source:	Programme data
Numerator:	Number of patients on OST who receive a maintenance dose >60 mg of methadone or 12 mg of buprenorphine
Denominator:	Number of patients on OST at census date
Targets:	Low: ≤50% Medium: >50–≤80% High: >80%
Comment:	Evidence suggests that maintenance doses of 60–120 mg methadone or 12–24 mg buprenorphine are optimal. <sup>55</sup>

#### 4.2a.10 Percentage of individuals currently on OST who have been on OST continuously for the past 12 months

Data source:	Programme data
Numerator:	Number of individuals completing at least 6 months of continuous treatment on OST in the past 12 months
Denominator:	Number of OST treatment slots at census date
Targets:	Low: ≤50% Medium: >50–≤80% High: >80%
Comment:	Evidence suggests that >6 months' duration of OST is optimal. <sup>55</sup>

#### 4.2a.11 Average duration of treatment on OST

Data source:	Programme data
Target:	6 months or longer

#### 4.2a.12 Average maintenance dose of OST

Data source:	Programme data
Targets:	60 mg of methadone per day or 12 mg of buprenorphine

### Potential impact indicators

---

#### 4.2a.13 Percentage of IDUs receiving OST reporting the use of sterile injecting equipment the last time they injected

Data source:	Behavioural surveillance surveys (e.g. FHI BSS for IDUs)
Numerator:	Number of respondents who report using sterile injecting equipment the last time they injected drugs
Denominator:	Number of respondents currently receiving OST who report having injected in the past month
Comment:	This measure provides an indication of the impact of this intervention on those receiving it. While it is listed as an "impact indicator" it could also be considered as an indicator to assess the quality of the intervention.

#### 4.2a.14 Reduction in the frequency of injection

Data source:	Behavioural surveillance surveys (e.g. FHI BSS for IDUs)
Numerator:	Number of IDUs injecting once per day or more
Denominator:	Number of IDUs receiving OST in sample

*Or alternatively:*

Data source:	Behavioural surveillance surveys (e.g. FHI BSS for IDUs)
Numerator:	Mean number of injections per IDU per week
Sample:	IDUs receiving OST
Comment:	These measures provide an indication of the impact of this intervention on those receiving it. While they are listed as "impact" indicators they could also be considered as indicators to assess the quality of the intervention.

**4.2a.15 Reduction in prevalence of HIV among IDUs**

Data source:	HIV sentinel surveillance among IDUs
Numerator:	Number of IDUs in sample testing positive for HIV
Denominator:	Number of IDUs in sample

**4.2b. Other drug dependence treatment**
**Availability**


---

**4.2b.1 Which of the following drug dependence interventions are available?**

- a) Drug detoxification services (includes inpatient and outpatient services but does **not** include compulsory or forced detoxification)
- b) Rehabilitation programmes (includes inpatient and outpatient services but does **not** include compulsory or forced rehabilitation)
- c) CBT
- d) Contingency management
- e) Psychosocial support and counselling
- f) Peer-based support groups (e.g. Narcotics Anonymous)
- g) Other interventions – *these should be specified*

**4.2b.2 Treatment sites per 1000 IDUs**

Data source:	Programme data
Numerator:	Number of sites offering each intervention
Denominator:	(Number of IDUs)/1000
Target:	Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

**Coverage**


---

**4.2b.3 Ratio of IDUs on treatment**

Data source:	Programme data
Numerator:	Number of IDUs on specified treatment/intervention at census date
Denominator:	Number of IDUs
Targets:	Low: $\leq 0.1$ Medium: $>0.1 - \leq 0.3$ High: $> 0.3$

**Quality**


---

**4.2b.4 Percentage of treatment sites adhering to recognized guidelines<sup>70</sup>**

Data source:	Programme monitoring and evaluation
Numerator:	Number of treatment sites adhering to recognized guidelines <sup>70</sup>
Denominator:	Number of treatment sites
Targets:	Low: $\leq 50\%$ Medium: $>50 - \leq 80\%$ High: $> 80\%$

#### 4.2b.5 Percentage of individuals in voluntary rather than compulsory treatment

Data source:	Programme monitoring and evaluation
Numerator:	Number of individuals on non-compulsory treatment
Denominator:	Number of individuals on treatment
Targets:	100% voluntary treatment is desirable
Comment:	The numerator should include all those on voluntary treatment. Individuals who are under a compulsory treatment order (for example, those diverted to compulsory treatment in the community as an alternative to incarceration) should also be included in the numerator as should prisoners who are receiving treatment while in prison. Individuals who have been incarcerated for the purpose of treatment, for example, in compulsory treatment camps, should not be included in the numerator.

### Potential impact indicators

---

#### 4.2b.6 Percentage of IDUs receiving non-OST treatment reporting the use of sterile injecting equipment the last time they injected

Data source:	Behavioural surveillance surveys (e.g. FHI BSS for IDUs)
Numerator:	Number of respondents who report using sterile injecting equipment the last time they injected drugs
Denominator:	Number of respondents receiving the intervention who report having injected in the past month
Comment:	This measure provides an indication of the impact of this intervention on those receiving it. While it is listed as an “impact indicator” it could also be considered as an indicator to assess the quality of the intervention.

#### 4.2b.7 Reduction in the frequency of injecting

Data source:	Behavioural surveillance surveys (e.g. FHI BSS for IDUs)
Numerator:	Number of IDUs injecting once per day or more
Denominator:	Number of IDUs receiving intervention in sample

*Or alternatively:*

Data source:	Behavioural surveillance surveys (e.g. FHI BSS for IDUs)
Numerator:	Mean number of injections per IDU per week
Sample:	IDUs receiving intervention
Comment:	These measures provide an indication of the impact of this intervention on those receiving it. While they are listed as “impact” indicators they could also be considered as indicators that assess the quality of the intervention.

#### 4.2b.8 Reduction in the prevalence of HIV among IDUs

Data source:	HIV sentinel surveillance among IDUs
Numerator:	Number of IDUs in the sample testing HIV-positive
Denominator:	Number of IDUs in the sample

## 4.3 HIV testing and counselling (T&C)

### Availability

---

#### 4.3.1 Is T&C available for IDUs?

Response: Yes/No

#### 4.3.2 T&C sites per 1000 IDUs

Data source: Programme data  
 Numerator: Number of sites offering T&C for IDUs  
 Denominator: (Number of IDUs)/1000  
 Target: Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

### Coverage

---

#### 4.3.3 Percentage of IDUs who received an HIV test in the past 12 months and know the results

Data source: Behavioural surveillance surveys (e.g. FHI BSS for IDUs). This indicator is also a core indicator of the UNGASS on the HIV reporting process for monitoring the *Declaration of Commitment on HIV/AIDS*.<sup>7</sup>

Numerator: Number of IDUs in the sample tested for HIV during the past 12 months and who know their results

Denominator: Number of IDUs in the sample

*Or alternatively:*

Data source: Programme data

Numerator: Number of IDUs who have been tested for HIV during the past 12 months and who received the results

Denominator: Number of IDUs in the sample

Targets: Low:  $\leq 40\%$   
 Medium:  $>40\text{--}\leq 75\%$   
 High:  $>75\%$

### Quality

---

#### 4.3.4 Percentage of sites adhering to WHO guidelines on T&C<sup>17,18</sup>

Data source: Programme monitoring and evaluation

Numerator: Number of sites offering T&C and adhering to WHO guidelines<sup>17,18</sup>

Denominator: Number of T&C sites

Targets: Low:  $\leq 50\%$   
 Medium:  $>50\text{--}\leq 80\%$   
 High:  $>80\%$

Comment: The delivery of HIV/AIDS T&C is subject to current debate. WHO and UNAIDS have published guidelines on PITC, where it is recommended that countries with generalized epidemics offer T&C to all who attend health facilities (WHO/UNAIDS PITC *Guidelines*).<sup>17</sup> WHO and UNODC are developing specific guidance for countries with concentrated epidemics among specific populations including IDUs. Some basic quality measures must ensure that HIV testing is voluntary, conducted with consent and includes counselling. In some countries, IDUs, particularly when in prison, are often compulsorily tested without consent.

---

## Potential impact indicators

---

### 4.3.5 Increase in percentage of IDUs aware of their HIV status

Data source:	Behavioural surveillance surveys (e.g. FHI BSS for IDUs) that include HIV testing of participants
Numerator:	Number of participants who were aware of their status confirmed by testing
Denominator:	Number of participants

### 4.3.6 Increase in percentage of IDUs testing HIV-positive referred and assessed for ART

Data source:	Programme data
Numerator:	Number of IDUs testing HIV-positive referred and assessed for ART
Denominator:	Number of IDUs testing HIV-positive

## 4.4 Antiretroviral therapy (ART)

### Availability

---

#### 4.4.1 Is ART available to people who are active IDUs (i.e. being an active IDU is not an exclusion criterion for receiving ART)?

Response:	Yes/No
-----------	--------

### Coverage

---

#### 4.4.2 Percentage of HIV-positive IDUs receiving ART

Data source:	Programme data; HIV prevalence data
Numerator:	Number of IDUs receiving ART
Denominator:	Number of HIV-positive IDUs for whom ART is indicated
Targets:	Low: $\leq 25\%$ Medium: $>25\text{--}\leq 75\%$ High: $>75\%$
Comment:	<p>Some programme data or registration systems for ART may not indicate whether a patient receiving ART is an IDU so alternative data sources may be required to determine the numerator. It is desirable to determine the number of HIV-positive IDUs requiring ART. However, if this information is not available, the number of all HIV-positive IDUs could be used instead. It should also be noted that using HIV registration data is likely to underestimate of the number of HIV-positive IDUs, given that many HIV-positive IDUs may be undiagnosed. Estimating the number of HIV-positive IDUs using a measure of HIV prevalence among IDUs and an estimate of the total number of IDUs can also be problematic, given the uncertainty of both the HIV prevalence and IDU estimates. A decision on which method to use to determine the denominator for this indicator should consider the relative limitations of both methods and the data available in that particular country context.</p> <p>Indicative coverage targets for ART are subject to much debate. ART coverage of 100% is generally not feasible. The highest coverage achieved in high-income countries is 75–80% and therefore here coverage of over 75% is considered high-level coverage.</p>

#### 4.4.3 Ratio of IDUs in receipt of ART

Data source:	HIV registration data, ART programme data and treatment surveys
Numerator:	Number of IDUs receiving ART/total number receiving ART
Denominator:	Number of HIV-positive IDUs attributed to injecting drug use/total number of HIV cases
Targets:	≥1 desirable
Comment:	This indicator is a measure of the equity of access to ART for IDUs who are HIV-positive compared with that for all HIV-positive people. Commonly, IDUs have poorer levels of access to ART compared with non-IDUs, despite evidence that provision of ART to IDUs has population-wide health benefits and despite evidence that IDUs can successfully undergo treatment and benefit from ART. <sup>19-21</sup>

### Quality

---

#### 4.4.4 Percentage of sites adhering to WHO guidelines on ART<sup>54</sup>

Data source:	Programme monitoring and evaluation
Numerator:	Number of ART sites adhering to WHO guidelines on ART <sup>54</sup>
Denominator:	Number of ART sites
Targets:	Low: ≤50% Medium: >50–≤80% High: >80%

### Potential impact indicators

---

#### 4.4.5 Decreased AIDS cases and AIDS-related mortality among IDUs

Data source:	HIV/AIDS register data
Indicator:	a) Number of AIDS cases among HIV-positive IDUs b) Number of AIDS-related deaths among IDUs

---

## 4.5 Prevention and treatment of sexually transmitted infections (STIs)

Sexual health services for IDUs may be provided by organizations or services that offer a number of services to IDUs or by mainstream sexual health services that can be accessed by IDUs. It may be difficult to gather data on IDUs accessing mainstream sexual health services as these services may not collect data on the status of injecting drug use among their clients.

### Availability

---

#### 4.5.1 Are there sites offering STI screening and treatment for IDUs?

Response: Yes/No

#### 4.5.2 STI intervention sites per 1000 IDUs

Data source: Programme data  
Numerator: Number of sites offering STI screening and treatment to IDUs  
Denominator: (Number of IDUs)/1000  
Target: Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

### Coverage

---

#### 4.5.3 Percentage of IDUs screened for STIs in the past 12 months

Data source: Programme data  
Numerator: Number of IDUs screened in the past 12 months  
Denominator: Number of IDUs

*Or alternatively*

Data source: BSS with questions on exposure to interventions  
Numerator: Number of IDUs screened in the past 12 months  
Denominator: Number of IDUs in sample  
Targets: Low:  $\leq 20\%$   
Medium:  $>20-\leq 50\%$   
High:  $>50\%$

### Quality

---

#### 4.5.4 Percentage of sites adhering to WHO guidelines on STI screening and treatment<sup>73</sup>

Data source: Programme monitoring and evaluation  
Numerator: Number of STI intervention sites adhering to WHO guidelines<sup>73</sup>  
Denominator: Number of STI intervention sites  
Targets: Low:  $\leq 50\%$   
Medium:  $>50-\leq 80\%$   
High:  $>80\%$

#### 4.5.5 Percentage of IDUs diagnosed with STI who received treatment

Data source: Programme data  
Numerator: Number of IDUs receiving STI treatment in the past 12 months  
Denominator: Number of IDUs diagnosed with an STI in the past 12 months  
Targets: Low:  $\leq 50\%$   
Medium:  $>50-\leq 80\%$   
High:  $>80\%$

## Potential impact indicators

---

### 4.5.6 Decrease in the number of STIs

Data source:	Programme data
Numerator:	Number of IDUs diagnosed with an STI in the past 12 months
Denominator:	Number of IDUs tested for STI in the past 12 months

*Or alternatively*

Data source:	BSS
Numerator:	Number of IDUs who self-reported symptoms of an STI in the past 12 months
Denominator:	Number of participants who reported that they had sexual intercourse in the past 12 months

## 4.6 Condom programmes for IDUs and their sexual partners

### Availability

---

#### 4.6.1 Are there condom distribution programmes targeting IDUs and their sexual partners?

Response:	Yes/No
-----------	--------

#### 4.6.2 Condom programme outlets per 1000 IDUs

Data source:	Programme data
Numerator:	Number of condom programme sites
Denominator:	(Number of IDUs)/1000
Target:	Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)
Comment:	Condom programme outlets include those where condoms are available free of charge.

### Coverage

---

#### 4.6.3 Free condoms distributed each year per IDU

Data source:	Programme data
Numerator:	Number of free condoms distributed in the past 12 months
Denominator:	Number of IDUs
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 100\%$ High: $>100\%$

### Quality

---

#### 4.6.4 Percentage of condom programme distribution sites adhering to UNFPA guidelines<sup>74,75</sup>

Data source:	Programme monitoring and evaluation
Numerator:	Number of condom programme sites adhering to UNFPA guidelines <sup>74,75</sup>
Denominator:	Number of STI intervention sites
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 80\%$ High: $>80\%$

---

## Potential impact indicators

---

### 4.6.5 Increase in the percentage of IDUs reporting the use of a condom the last time they had sexual intercourse

Data source:	BSS (e.g. FHI BSS for IDUs). This indicator is also a core indicator of the UNGASS on the HIV reporting process for monitoring the <i>Declaration of Commitment on HIV/AIDS</i> <sup>7</sup>
Numerator:	Number of respondents who reported that a condom was used the last time they had sex
Denominator:	Number of respondents who reported having had sexual intercourse in the past month

### 4.6.6 Decrease in the number of STIs

Data source:	Programme data
Numerator:	Number of IDUs diagnosed with an STI in the past 12 months
Denominator:	Number of IDUs tested for STI in the past 12 months

Or alternatively

Data source:	BSS
Numerator:	Number of IDUs who self-reported symptoms of an STI in the past 12 months
Denominator:	Number of participants who reported having had sexual intercourse in the past 12 months

## 4.7 Targeted information, education and communication (IEC) for IDUs and their sexual partners

### Availability

---

#### 4.7.1 Is targeted IEC for IDUs available?

Response:	Yes/No
-----------	--------

#### 4.7.2 Number of sites offering targeted IEC for IDUs per 1000 IDUs

Data source:	Programme data
Numerator:	Number of sites offering targeted IEC for IDUs
Denominator:	(Number of IDUs)/1000
Target:	Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

#### 4.7.3 Percentage of sites accessed by IDUs offering targeted IEC for IDUs

Data source:	Programme data
Numerator:	Number of NSP sites, drug treatment sites and sexual health services for IDUs offering targeted IEC for IDUs
Denominator:	Number of NSP sites, drug treatment sites and sexual health services for IDUs
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 90\%$ High: $>90\%$

#### 4.7.4 Number of different targeted materials on injecting drug use distributed per IDU per year

Data source:	Programme data
Numerator:	Number of targeted materials on injecting drug use distributed in the past 12 months
Denominator:	Number of IDUs

## Coverage

---

### 4.7.5 Percentage of IDUs reached by IEC

Data source:	Programme data
Numerator:	Number of IDUs who received IEC in the past 12 months
Denominator:	Number of IDUs
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 90\%$ High: $>90\%$

### 4.7.6 Percentage of occasions when clients accessed an NSP and received IEC

Data source:	Programme data
Numerator:	Number of occasions when clients accessed an NSP and received IEC (i.e. the number of client contact events at an NSP that involved the client receiving IEC)
Denominator:	Total number of NSP occasions of services
Targets:	Low: $<20\%$ Medium: $\geq 20-<40\%$ High: $\geq 40\%$

## Quality

---

### 4.7.7 Percentage of sites adhering to WHO guidelines on targeted IEC for IDUs<sup>51</sup>

Data source:	Programme monitoring and evaluation
Numerator:	Number of sites adhering to WHO guidelines <sup>51</sup>
Denominator:	Number of sites offering targeted IEC for IDUs
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 80\%$ High: $>80\%$

## Potential impact indicators

---

### 4.7.8 Increase in the percentage of IDUs reporting the use of sterile injecting equipment the last time they injected

Data source:	BSS (e.g. FHI BSS for IDUs). This indicator is also a core indicator of the UNGASS on the HIV reporting process for monitoring the <i>Declaration of Commitment on HIV/AIDS</i> <sup>7</sup>
Numerator:	Number of respondents who reported using sterile injecting equipment the last time they injected drugs
Denominator:	Number of respondents who reported having injected in the past month

### 4.7.9 Increase in the percentage of IDUs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission

Data source:	BSS (e.g. FHI BSS for IDUs). This indicator is also a core indicator of the UNGASS on the HIV reporting process for monitoring the <i>Declaration of Commitment on HIV/AIDS</i> <sup>7</sup>
Numerator:	Number of IDUs in sample with HIV
Denominator:	Number of IDUs in sample

## 4.8 Diagnosis and treatment of and vaccination for viral hepatitis

### Availability

---

#### 4.8.1 Is HAV vaccination available for IDUs?

Response: Yes/No

Comment: Programmes may vary depending upon the prevalence of HBV and HAV.

#### 4.8.2 Is HBV vaccination available for IDUs?

Response: Yes/No

Comment: Programmes may vary depending upon the prevalence of HBV and HAV.

#### 4.8.3 Is HCV treatment available for IDUs?

Response: Yes/No

Comment: Hepatitis C treatment is expensive and currently not available in many countries.

#### 4.8.4 Is HBV treatment available for IDUs?

Response: Yes/No

#### 4.8.5 Number of sites offering HBV vaccination for IDUs per 1000 IDUs

Data source: Programme data

Numerator: Number of sites offering targeted HBV vaccination for IDUs

Denominator: (Number of IDUs)/1000

Target: Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

#### 4.8.6 Number of sites offering HAV vaccination for IDUs per 1000 IDUs

Data source: Programme data

Numerator: Number of sites offering targeted HAV vaccination for IDUs

Denominator: (Number of IDUs)/1000

Target: Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

#### 4.8.7 Number of sites offering HCV treatment for IDUs per 1000 IDUs

Data source: Programme data

Numerator: Number of sites offering targeted HCV treatment for IDUs

Denominator: (Number of IDUs)/1000

Target: Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

#### 4.8.8 Number of sites offering HBV treatment for IDUs per 1000 IDUs

Data source: Programme data

Numerator: Number of sites offering targeted HBV treatment for IDUs

Denominator: (Number of IDUs)/1000

Target: Context-specific (should consider geographical distribution of the target population and other local factors influencing accessibility)

## Coverage

### 4.8.9 Percentage of IDUs referred for HBV vaccination

Data source:	Programme data
Numerator:	Number of IDUs referred for HBV vaccination in the past 12 months
Denominator:	Number of IDUs
Targets:	Low: $\leq 20\%$ Medium: $>20-\leq 40\%$ High: $>40\%$

### 4.8.10 Percentage of IDUs completing course of HBV vaccination

Data source:	Programme data
Numerator:	Number of IDUs who, in the past 12 months, completed the course of HBV vaccination
Denominator:	Number of IDUs who were due to complete course of HBV vaccination in the past 12 months
Targets:	Low: $\leq 30\%$ Medium: $>30-\leq 60\%$ High: $>60\%$

### 4.8.11 Percentage of IDUs diagnosed with and receiving treatment for HBV

Data source:	Programme data
Numerator:	Number of IDUs diagnosed with and receiving treatment for HBV in the past 12 months
Denominator:	Number of IDUs diagnosed HBV-positive and requiring treatment in the past 12 months
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 80\%$ High: $>80\%$

### 4.8.12 Percentage of IDUs completing treatment for HBV

Data source:	Programme data
Numerator:	Number of IDUs completing HBV treatment in the past 12 months
Denominator:	Number of IDUs who were due to complete HBV treatment in the past 12 months
Targets:	Low: $\leq 30\%$ Medium: $>30-\leq 60\%$ High: $>60\%$

### 4.8.13 Percentage of HCV-positive IDUs receiving treatment for HCV

Data source:	Programme data
Numerator:	Number of IDUs receiving treatment for HCV in the past 12 months
Denominator:	Number of HCV-positive IDUs
Targets:	Low: $\leq 5\%$ Medium: $>10-\leq 15\%$ High: $>15\%$

### 4.8.14 Percentage of IDUs completing treatment for HCV

Data source:	Programme data
Numerator:	Number of IDUs completing HCV treatment in the past 12 months
Denominator:	Number of IDUs who were due to complete HCV treatment in the past 12 months
Targets:	Low: $\leq 30\%$ Medium: $>30-\leq 60\%$ High: $>60\%$

## Quality

---

### 4.8.15 Percentage of sites adhering to guidelines on HAV/HBV vaccination

Data source:	Programme monitoring and evaluation
Numerator:	Number of sites offering HAV/HBV vaccination and adhering to relevant national and international guidelines (such as Prevention of hepatitis A, B and C and other hepatotoxic factors in people living with HIV; <i>Clinical protocols for the WHO European Region</i> , chapter 8 <sup>54</sup> )
Denominator:	Number of sites offering HAV/HBV vaccination
Targets:	Low: $\leq 50\%$ Medium: $>50\text{--}\leq 80\%$ High: $>80\%$

### 4.8.12 Percentage of sites adhering to guidelines on HBV treatment

Data source:	Programme monitoring and evaluation
Numerator:	Number of sites offering HBV treatment and adhering to relevant national or other guidelines (such as Management of hepatitis B and HIV coinfection; <i>Clinical protocols for the WHO European Region</i> , chapter 7 <sup>54</sup> )
Denominator:	Number of sites offering HBV treatment
Targets:	Low: $\leq 50\%$ Medium: $>50\text{--}\leq 80\%$ High: $>80\%$

### 4.8.13 Percentage of sites adhering to guidelines on HCV treatment

Data source:	Programme monitoring and evaluation
Numerator:	Number of sites offering HCV treatment and adhering to relevant national or other guidelines (such as Management of hepatitis C and HIV coinfection; <i>Clinical protocols for the WHO European Region</i> , chapter 6 <sup>54</sup> )
Denominator:	Number of sites offering HCV treatment
Targets:	Low: $\leq 50\%$ Medium: $>50\text{--}\leq 80\%$ High: $>80\%$

## Potential impact indicators

---

### 4.8.14 Decreased morbidity and mortality due to viral hepatitis among IDUs

Data source:	HAV/HBV/HCV register data; programme records
Indicator:	a) Number of HCV-related deaths among IDUs b) Number of IDUs experiencing HAV/HBV/HCV-related morbidity

## 4.9 Prevention, diagnosis and treatment of tuberculosis (TB)

### Availability

---

#### 4.9.1 Percentage of sites providing services for IDUs and implementing a TB infection control policy

Data source:	Programme data
Numerator:	Number of sites providing services for IDUs and implementing a TB infection control policy
Denominator:	Number of sites providing services for IDUs
Targets:	Low: $\leq 20\%$ Medium: $>20-\leq 40\%$ High: $>40\%$

#### 4.9.2 Percentage of sites providing services for IDUs that have onsite TB diagnosis and treatment services

Data source:	Programme data
Numerator:	Number of sites providing services for IDUs that have onsite TB diagnosis and treatment services
Denominator:	Number of sites providing services for IDUs
Targets:	Low: $\leq 20\%$ Medium: $>20-\leq 40\%$ High: $>40\%$

#### 4.9.3 Is TB preventive therapy available for IDUs?

Response:	Yes/No
-----------	--------

#### 4.9.4 Percentage of sites providing services for IDUs that provide TB preventive therapy

Data source:	Programme data
Numerator:	Number of sites providing services for IDUs that provide TB preventive therapy
Denominator:	Number of sites providing services for IDUs
Targets:	Low: $\leq 20\%$ Medium: $>20-\leq 40\%$ High: $>40\%$

### Coverage

---

#### 4.9.5 Percentage of IDUs with TB status assessed

Data source:	Programme data
Numerator:	Number of IDUs in whom TB status assessed in the past 12 months
Denominator:	Number of IDUs
Targets:	Low: $\leq 20\%$ Medium: $>20-\leq 40\%$ High: $>40\%$

#### 4.9.6 Percentage of IDUs started on TB preventive therapy in the past 12 months

Data source:	Programme data
Numerator:	Number of IDUs started on TB preventive therapy in the past 12 months
Denominator:	Number of IDUs
Targets:	Low: $\leq 30\%$ Medium: $>30-\leq 60\%$ High: $>60\%$

#### 4.9.7 Percentage of IDUs completing TB preventive therapy

Data source:	Programme data
Numerator:	Number of IDUs completing TB preventive therapy in the past 12 months
Denominator:	Number of IDUs who started TB preventive therapy and were due to complete therapy in the past 12 months
Targets:	Low: $\leq 30\%$ Medium: $>30-\leq 60\%$ High: $>60\%$

#### 4.9.8 Percentage of IDUs diagnosed with TB and started on treatment in the past 12 months

Data source:	Programme data
Numerator:	Number of IDUs started on treatment for TB in the past 12 months
Denominator:	Number of IDUs diagnosed with TB in the past 12 months
Targets:	Low: $\leq 60\%$ Medium: $>60-\leq 90\%$ High: $>90\%$

#### 4.9.9 Percentage of IDUs completing treatment for TB

Data source:	Programme data
Numerator:	Number of IDUs completing TB treatment in the past 12 months
Denominator:	Number of IDUs who started TB treatment and were due to complete treatment in the past 12 months
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 85\%$ High: $>85\%$

## Quality

---

#### 4.9.10 Percentage of sites adhering to WHO guidelines on TB prevention, diagnosis and treatment<sup>29</sup>

Data source:	Programme monitoring and evaluation
Numerator:	Number of sites offering TB prevention, diagnosis and treatment, and adhering to WHO guidelines <sup>29</sup>
Denominator:	Number of sites offering TB prevention, diagnosis and treatment
Targets:	Low: $\leq 50\%$ Medium: $>50-\leq 80\%$ High: $>80\%$
Comment:	Recent guidance is available on TB/HIV prevention, treatment and care for IDUs. <sup>29</sup>

## Potential impact indicators

---

#### 4.9.11 Reduced TB-related morbidity and mortality among IDUs

Data source:	TB register data; programme records
Indicator:	a) Number of TB-related deaths among IDUs b) Number of IDUs experiencing TB-related morbidity

#### 4.9.12 Ratio of TB among IDUs compared with the general adult population

Data source:	TB registration data
Numerator:	Prevalence of TB among IDUs
Denominator:	Prevalence of TB among adult general population
Targets:	$\leq 1$ desirable

## 5. REFERENCES

1. United Nations Office on Drugs and Crime. Expert Group Meeting on measuring and increasing coverage of HIV/AIDS prevention and care services for IDUs. Vienna, UNODC, October 2005.
2. Joint United Nations Programme on HIV/AIDS. *Towards universal access: assessment by the Joint United Nations Programme on HIV/AIDS on scaling up HIV prevention, treatment, care and support*. New York City, United Nations, 2006.
3. Joint United Nations Programme on HIV/AIDS. *Considerations for countries to set their own national targets for AIDS prevention, treatment, and care*. Geneva, UNAIDS, 2006.
4. Joint United Nations Programme on HIV/AIDS. Section 4: Setting ambitious targets. In: *Operational guidance on setting national targets for moving towards universal access*. Geneva, UNAIDS, 2006:13–18.
5. United Nations. *Declaration of Commitment on HIV/AIDS – United Nations Special Session on HIV/AIDS. Adopted by the UN General Assembly Twenty-sixth special session, 25–27 June, 2001*. New York, United Nations, 2001. Available at: <http://www.un.org/ga/aids/coverage/index.html> (accessed on 7 January 2009).
6. Joint United Nations Programme on HIV/AIDS. *High coverage sites: HIV prevention among injecting drug users in transitional and developing countries: case studies*. Geneva, UNAIDS, 2006.
7. Joint United Nations Programme on HIV/AIDS. *Monitoring the Declaration of Commitment on HIV/AIDS: guidelines for construction of core indicators, 2008 reporting. United Nations General Assembly Special Session on HIV/AIDS*. Geneva, UNAIDS, 2007.
8. Ball A, Weiler G, Beg M, Doupe A. WHO Evidence for action for HIV prevention, treatment and care among injecting drug users. *International Journal of Drug Policy*, 2005, 16(Suppl. 1):S1–S6.
9. World Health Organization. *Evidence for action series (E4A). Policy briefs and technical papers on HIV/AIDS and injecting drug users*. Geneva, WHO, 2008. Available at: <http://www.who.int/hiv/pub/idu/idupolicybriefs/en/index.html> (accessed on 31 December 2008).
10. Wodak A, Cooney A. Do needle syringe programs reduce HIV infection among injecting drug users: a comprehensive review of the international evidence. *Substance Use and Misuse*, 2006, 41:777–813.
11. World Health Organization. *Evidence for action on effectiveness of needle syringe programmes in HIV prevention*. Geneva, WHO, 2004.
12. World Health Organization, United Nations Office on Drugs and Crime, Joint United Nations Programme on HIV/AIDS. *Evidence for action on HIV/AIDS and injecting drug use. Policy brief: reduction of HIV transmission in prisons*. Geneva, WHO, 2004.
13. World Health Organization. *Evidence for action: effectiveness of drug dependence treatment*. Geneva, WHO, 2004.
14. Metzger DS et al. Human immunodeficiency virus seroconversion among intravenous drug users in- and out-of-treatment: an 18-month prospective follow-up. *Journal of Acquired Immune Deficiency Syndromes*, 1993, 6:1049–1059.
15. Moatti JP et al. Adherence to HAART in French HIV-infected injecting drug users: the contribution of buprenorphine drug maintenance treatment. *AIDS*, 2000, 14:151–155.
16. Spire B, Lucas GM, Carrieri MP. Adherence to HIV treatment among IDUs and the role of opioid substitution treatment (OST). *International Journal of Drug Policy*, 2007, 18:262–270.
17. World Health Organization, Joint United Nations Programme on HIV/AIDS. *Guidance on provider-initiated HIV testing and counselling in health facilities*. Geneva, WHO, 2007.
18. World Health Organization Regional Office for South-East Asia, World Health Organization Regional Office for the Western Pacific, United Nations Office on Drugs and Crime Regional Centre for East Asia and the Pacific. *Guidance on testing and counselling for HIV in settings attended by people who inject drugs: improving access to treatment, care and prevention*. Manila, WHO Regional Office for the Western Pacific, 2009 (in press).
19. Long EF et al. Effectiveness and cost-effectiveness of strategies to expand antiretroviral therapy in St. Petersburg, Russia. *AIDS*, 2006, 20:2207–2214.
20. Bollerup AR et al. Access to HAART for injecting drug users in the WHO European Region, 2002–2005. Eighteenth International Conference on the reduction of drug related harm. Warsaw, Poland, 2007.

21. Donoghoe MC et al. Access to highly active antiretroviral therapy (HAART) for injecting drug users in the WHO European Region 2002–2004. *International Journal of Drug Policy*, 2007, 18:271–280.
22. Farrell M et al. Effectiveness of drug dependence treatment in HIV prevention. *International Journal of Drug Policy*, 2005, 16:S67–S75.
23. Baker A et al. Brief cognitive behavioural interventions for regular amphetamine users: a step in the right direction. *Addiction*, 2005, 100:367–378.
24. Rawson RA et al. A comparison of contingency management and cognitive-behavioural approaches for stimulant-dependent individuals. *Addiction*, 2006, 101:267–274.
25. United Nations Office on Drugs and Crime. *Treatnet: International network of drug dependence treatment and rehabilitation resource centres*. Vienna, UNODC, 2008. Available at: [www.unodc.org/treatment/index.html](http://www.unodc.org/treatment/index.html) (accessed on 31 December 2008).
26. Des Jarlais DC, Semaan S. Interventions to reduce the sexual risk behaviour of injecting drug users. *International Journal of Drug Policy*, 2005, 16:S58–S66.
27. Donoghoe MC. Sex, HIV and the injecting drug user. *Addiction*, 1992, 87:405–416.
28. Aggleton P, Jenkins P, Malcolm A. HIV/AIDS and injecting drug use: information, education and communication. *International Journal of Drug Policy*, 2005, 16:S21–S30.
29. World Health Organization, United Nations Office on Drugs and Crime, Joint United Nations Programme on HIV/AIDS. *Evidence for action technical papers. Policy guidelines for collaborative TB and HIV services for injecting and other drug users – an integrated approach*. Geneva, WHO, 2008.
30. Fischer B et al. Drug use, risk and urban order: examining supervised injection sites (SISs) as governmentality. *International Journal of Drug Policy*, 2004, 15:357–365.
31. Small W et al. Public injecting settings in Vancouver: physical environment, social context and risk. *International Journal of Drug Policy*, 2007, 18:27–36.
32. World Health Organization. *Guidance on global scale-up of the prevention of mother-to-child transmission of HIV: towards universal access for women, infants and young children and eliminating HIV and AIDS among children*. Geneva, WHO, 2007.
33. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *Hepatitis C and injecting drug use: impact, costs and policy options. EMCDDA Scientific Monograph no 7*. Lisbon, EMCDDA, 2004.
34. Wiessing L. The access of injecting drug users to hepatitis C treatment is low and should be improved. *Eurosurveillance*, 2001, 5:pii=1709.
35. Reimer J et al. Guidelines for the treatment of hepatitis C virus infection in injection drug users: status quo in the European Union countries. *Clinical Infectious Diseases*, 2005, 40 (Suppl. 5):S373–S378.
36. World Health Organization. *Evidence for action: effectiveness of community-based outreach in preventing HIV/AIDS among injecting drug users*. Geneva, WHO, 2004.
37. United Nations Office on Drugs and Crime, World Health Organization, Joint United Nations Programme on HIV/AIDS. *HIV/AIDS prevention, care, treatment and support in prison settings: a framework for an effective national response*. Vienna, UNODC, 2006.
38. World Health Organization. *Status paper on prisons, drugs and harm reduction*. Copenhagen, WHO Regional Office for Europe, 2005.
39. World Health Organization, United Nations Office on Drugs and Crime, Joint United Nations Programme on HIV/AIDS. *Evidence for action: comprehensive review of effectiveness of interventions addressing HIV in prisons*. Geneva, WHO, 2007.
40. Bluthenthal RN et al. Examination of the association between syringe exchange program (SEP) dispensation policy and SEP client-level syringe coverage among injection drug users. *Addiction*, 2007, 102:638–646.
41. United Nations Office on Drugs and Crime. *Estimating prevalence: indirect methods for estimating the size of the drug problem*. Vienna, UNODC, 2003.
42. Hickman M et al. Estimating the prevalence of problematic drug use: a review of methods and their application. *UN Bulletin on Narcotics*, 2002, 54:15–32.
43. United States Department of Health and Human Services, Centers for Disease Control and Prevention (HHS-CDC), Global AIDS Program (GAP) Surveillance Team. Most at risk populations sampling strategies and design tool, 2000.

44. Mathers BM et al. Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review. *The Lancet*, 2008, 372:1733–1745.
45. Lert F, Kazatchkine MD. Antiretroviral HIV treatment and care for injecting drug users: an evidence-based overview. *International Journal of Drug Policy*, 2007, 18:255–261.
46. Sarang A, Stuijckte R, Bykov R. Implementation of harm reduction in central and eastern Europe and central Asia. *International Journal of Drug Policy*, 2007, 18:129–135.
47. Sarang A, Rhodes T, Platt L. Access to syringes in three Russian cities: implications for syringe distribution and coverage. *International Journal of Drug Policy*, 2008, 19(Suppl.):S25–S36.
48. Islam MM, Conigrave KM. Assessing the role of syringe dispensing machines and mobile van outlets in reaching hard-to-reach and high-risk groups of injecting drug users (IDUs): a review. *Harm Reduction Journal*, 2007, 4:14. Available at: <http://www.harmreductionjournal.com/content/4/1/14> (accessed on 31 December 2008).
49. Sharma M, Burrows D, Bluthenthal R. Coverage of HIV prevention programmes for injection drug users: confusions, aspirations, definitions and ways forward. *International Journal of Drug Policy*, 2007, 18:92–98.
50. Alliance for Open Society International. Unique Identifier Code, DDRP Best Practice Collection, 2007. Accessed via: [http://www.aidsprojects.com/uploads/File/UIC\\_Eng\(1\).pdf](http://www.aidsprojects.com/uploads/File/UIC_Eng(1).pdf)
51. World Health Organization. *Guide to starting and managing needle and syringe programmes*. Geneva, WHO, 2007.
52. World Health Organization, United Nations Office on Drugs and Crime, Joint United Nations Programme on HIV/AIDS. *Position paper: substitution maintenance therapy in the management of opioid dependence and HIV/AIDS prevention*. Geneva, WHO, 2004.
53. Verster AD, Buning E. *Methadone guidelines*. Amsterdam, EuroMethwork, 2000.
54. World Health Organization. HIV/AIDS treatment and care for injecting drug users. In: *HIV/AIDS treatment and care. Clinical protocols for the European Region*. Copenhagen, WHO Regional Office for Europe, 2006.
55. World Health Organization. *Guidelines for psychosocially-assisted pharmacological treatment of opioid dependence*. Geneva, WHO (in press).
56. World Health Organization Regional Office for South East Asia. *Operational guidelines for the treatment of opioid dependence in the South-East Asia region*. New Delhi, WHO Regional Office for South East Asia, 2008.
57. Vickerman P et al. Model projections on the required coverage of syringe distribution to prevent HIV epidemics among injecting drug users. *Journal of Acquired Immune Deficiency Syndromes*, 2006, 42:355–361.
58. Brown T, Peerapatanapokin W. The Asian Epidemic Model: a process model for exploring HIV policy and programme alternatives in Asia. *Sexually Transmitted Infections*, 2004, 80:19.
59. Family Health International. *Behavioural surveillance surveys (BSS): guidelines for repeated behavioural surveys in populations at risk for HIV*. Family Health International, 2000. Available at: <http://www.fhi.org/NR/rdonlyres/ezscxathgcvhxzmwxjlfgl4mezcmep6ogzqy3l-byf5ighmb6k2swbgar32xup6yh5sykj6ii2kwp/bssguidelinesfullenhv.pdf> (accessed on 31 December 2008).
60. Joint United Nations Programme on HIV/AIDS and World Health Organization Working Group on HIV/AIDS and STI Surveillance. *Guidelines for second generation HIV surveillance*. Geneva, WHO, 2000. Available at: [http://www.who.int/hiv/pub/surveillance/en/cds\\_edc\\_2000\\_5.pdf](http://www.who.int/hiv/pub/surveillance/en/cds_edc_2000_5.pdf) (accessed on 31 December 2008).
61. Vickerman P et al. Model projections for the impact of different interventions on the transmission of HIV and HCV amongst injecting drug users in different settings. 2008 (unpublished report).
62. Zule WA et al. An ethnographic comparison of HIV risk behaviors among heroin and methamphetamine injectors. *American Journal of Drug and Alcohol Abuse*, 1999, 25:1–23.
63. Kaye S, Darke S. A comparison of the harms associated with the injection of heroin and amphetamines. *Drug and Alcohol Dependence*, 2000, 58:189–195.
64. Degenhardt L et al., on behalf of the Reference Group to the UN on HIV and injecting drug use. *The global epidemiology of methamphetamine injection: a review of the evidence on use and associations with HIV and other harm*. Sydney, National Drug and Alcohol Research Centre, University of New South Wales, 2007.

65. Bluthenthal RN et al. Higher syringe coverage is associated with lower odds of HIV risk and does not increase unsafe syringe disposal among syringe exchange program clients. *Drug and Alcohol Dependence*, 2007, 89:214–222.
66. Heimer R. Community coverage and HIV prevention: assessing metrics for estimating HIV incidence through syringe exchange. *International Journal of Drug Policy*, 2008, 19 (Suppl. 1):S65–S73.
67. Braine N et al. HIV risk behavior among amphetamine injectors at U.S. syringe exchange programs. *AIDS Education and Prevention*, 2005, 17:515–524.
68. Lorvick J et al. Sexual and injection risk among women who inject methamphetamine in San Francisco. *Journal of Urban Health*, 2006, 83:497–505.
69. AIDS Projects Management Group, UNODC. *Measuring coverage of HIV prevention and care services for injecting drug users*. Vienna, UNODC, 2009 (in press).
70. United Nations Office on Drugs and Crime. *Drug abuse treatment and rehabilitation: a practical planning and implementation guide*. Vienna, UNODC, 2003.
71. Des Jarlais DC, Friedman SR. Fifteen years of research on preventing HIV infection among injecting drug users: what we have learned, what we have not learned, what we have done, what we have not done. *Public Health Reports*, 1998, 113 (Suppl 1):182–188.
72. Neaigus A et al. Transitions to injecting drug use among noninjecting heroin users: social network influence and individual susceptibility. *Journal of Acquired Immune Deficiency Syndromes*, 2006, 41:493.
73. World Health Organization. *Guidelines for the management of sexually transmitted infections*. Geneva, WHO, 2003.
74. United Nations Population Fund. *Condom programming for HIV prevention: a manual for service providers*. New York, UNFPA, 2005.
75. United Nations Population Fund. *Condom programming for HIV prevention. An operations manual for programme managers*. New York, UNFPA, 2005.
76. Joint United Nations Programme on HIV/AIDS. *Operational guidance on considerations for countries to set their own national targets for HIV prevention, treatment, and care*. Geneva, UNAIDS, 2006.
77. Committee on the Prevention of HIV Infection among Injecting Drug Users in High-Risk Countries, Institute of Medicine. *Preventing HIV infection among injecting drug users in high-risk countries an assessment of the evidence*. Washington, DC, USA, The National Academies Press, 2006.
78. United Nations Population Fund, World Health Organization, PATH. *Condom programming for HIV prevention: an operations manual for programme managers*. New York, UNFPA, 2005.
79. Joint United Nations Programme on HIV/AIDS. *Practical guidelines for intensifying HIV prevention*. Geneva, Switzerland, UNAIDS, 2007.
80. Medlin C, Balkus J, Padian N. *Report to the UNAIDS HIV Prevention Reference Group on developing minimum quality standards for HIV prevention interventions*. Geneva, UNAIDS, 2008.
81. Commission on AIDS in Asia. *Redefining AIDS in Asia: crafting an effective response*. New Delhi, India, Oxford University Press, 2008.



ISBN 978 92 4 159776 0



9 789241 597760