





# **HIV PREVENTION, TREATMENT, CARE AND SUPPORT FOR PEOPLE WHO USE STIMULANT DRUGS**

# **TECHNICAL GUIDE**



UNITED NATIONS OFFICE ON DRUGS AND CRIME Vienna

# HIV Prevention, Treatment, Care and Support for People Who Use Stimulant Drugs

**TECHNICAL GUIDE** 



UNITED NATIONS Vienna, 2019

Recommended citation

United Nations Office on Drugs and Crime. HIV Prevention, Treatment, Care and Support for People Who Use Stimulant Drugs. Technical Guide

UNODC; Vienna 2019.

#### © United Nations Office on Drugs and Crime 2019

The content of this document does not necessarily reflect the views of the United Nations Office on Drugs and Crime (UNODC) as well as of the World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS), or their Member States. The description and classification of countries and territories in this publication and the arrangement of the material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries, or regarding its economic system or degree of development.

Publishing production: English, Publishing and Library Section, United Nations Office at Vienna.

# Contents

	Acknowledgements1					
	Abbreviations and acronyms					
	Intro	Introduction				
Chapter 1.	Stimulant drugs, HIV and hepatitis, and key populations					
	1.1	Stimulant drugs				
	1.2	Stimulant drug use and risks of HIV/HBV/HCV transmission				
	1.3	Stimulant drug use and HIV/HBV/HCV transmission risks among key populations				
	1.4	The impact of criminal sanctions on HIV transmission among key populations				
Chapter 2.	Core	e interventions				
	2.1	Condoms, lubricants and safer sex programmes				
	2.2	Needle and syringe programmes and other commodities				
	2.3	HIV testing services				
	2.4	Antiretroviral therapy				
	2.5	Evidence-based psychosocial interventions and drug dependence treatments				
	2.6	Prevention, diagnosis and treatment of sexually transmitted infections, hepatitis and tuberculosis				
	2.7	Targeted information, education and communication				
	2.8	Overdose and acute intoxication prevention and management				
Chapter 3.	Care	e and support for people who use stimulant drugs37				
	3.1	Supporting adherence to antiretroviral therapy				
	3.2	Sexual and reproductive health care				
	3.3	Mental health care				
	3.4	Socioeconomic support				
Chapter 4.	Criti	ical enablers				
	4.1	Supportive laws and policies				
	4.2	Empowering the community and meaningful community engagement				
	4.3	Addressing stigma and discrimination44				
	4.4	Alternatives to arrest and incarceration45				
	4.5	Preventing and addressing violence				
	4.6	Closing compulsory drug detention and rehabilitation centres				

Chapter 5.	Implementation considerations47		
	5.1 Intersection between groups of people who use stimulant drugs and overlapping risks4	7	
	5.2 ChemSex and HIV prevention	8	
	5.3 Outreach work (including virtual settings)	9	
	5.4 Community-based interventions	9	
	5.5 Gender-responsive services	1	
	5.6 Young people who use stimulant drugs	2	
Annex	HIV harm reduction checklists for people who use stimulant drugs	_	
		-	
	1. Checklist for policymakers and managers55	5	
	2. Information for people who use stimulant drugs (without injecting)	6	
	3. Information checklist for people who inject stimulant drugs	6	
	4. Checklist for self-care and stimulant drug use	7	
	References	9	

# Acknowledgements

This guide was developed by the United Nations Office on Drugs and Crime (UNODC) in collaboration with representatives from the community of people who use drugs and international experts in the field.

Marcus Day and Mat Southwell coordinated the development of the guide under the supervision of Fabienne Hariga, Senior Expert, HIV/AIDS Section, UNODC. Other UNODC staff who made significant contributions include Gilberto Gerra, Chief, Drug Prevention and Health Branch; Monica Beg, Chief, HIV/AIDS Section and Global Coordinator for HIV/AIDS; and Monica Ciupagea, Expert on Drug Use and HIV and Civil Society Focal Point.

The guide builds on a discussion paper developed by Steve Shoptaw of the Departments of Family Medicine and Psychiatry and Biobehavioral Sciences, University of California Los Angeles, updated and enriched with the inclusion of scientific data from a comprehensive literature review prepared for UNODC by Anna Williams, and by the outcomes of the UNODC 2016 scientific consultation on HIV and stimulant drugs. The meaningful involvement of people who use drugs has been critical in the development and writing of this guide.

We give special thanks to the contributing writers: Luciano Colonna, Marcus Day, Brun González, Jean-Paul Grund, Alastair Hudson, Laura LeMoon, Russell Newcombe, Cheryl Overs, Les Papas, Shaun Shelly, Valentin Simionov, Mat Southwell and Pascal Tanguay. We also thank our reviewers: Ruth Birgin, Peter Blanken, Lee Hertel, Mark Kinzly and Jay Levy, as well as reviewers from other United Nations organizations, including Virginia MacDonald, Fabio Mesquita and Annette Verster (World Health Organization) and Boyan Konstantinov (United Nations Development Programme).

We thank the other experts who provided comments via an electronic consultation:

George Ayala, MPact Global Action for Gay Men's Health and Rights; Gavin Bart, Director, Division of Addiction Medicine, Hennepin Healthcare and Associate Professor of Medicine, University of Minnesota (United States); Adam Bourne, La Trobe University (Australia); Jamie Bridge, International Drug Policy Consortium (United Kingdom); Daniel Deimel, German Institute on Addiction and Prevention Research, Catholic University of Applied Science North-Rhine Westphalia (Germany); Don Des Jarlais, Icahn School of Medicine at Mount Sinai, New York City (United States); Andrew Doupe, HIV and legal consultant (Australia); Evanno Jerome, Paroles Autour de la Santé, Guadeloupe (Burkina Faso); Andrej Kastelic, Centre for Treatment for Drug Addiction, Ljubljana University Psychiatric Hospital and South Eastern European Adriatic Addiction Treatment Network (Slovenia); Igor Koutsenok, Department of Psychiatry, University of California San Diego (United States); Sherry Larkins, Integrated Substance Abuse Program, University of California Los Angeles (United States); Nicole Lee, Curtin University and 360Edge (Australia); Howie Lim, University of Malaysia (Malaysia); Helena Maria Medeiros Lima, Pontifícia Universidade Católica de São Paulo (Brazil); Ruth Morgan Thomas, Global Network of Sex Work Projects; Kevin Mulvey, Substance Abuse and Mental Health Services Administration (United States); Chris Obermeyer, Fulbright Public Policy Fellow, Ministry of Health of Ukraine (Ukraine); Emily Rowe, Harm Reduction International; Katie Stone, Harm Reduction International; Lucas Wiessing, European Monitoring Centre for Drugs and Drug Addiction.

We are also grateful to the experts who participated in three country consultations:

#### Ho Chi Minh City, Viet Nam, 5-6 December 2017:

Bình Dương; Dr Bùi Mình Kha, Provincial AIDS Centre Bà Ria – Vũng Tàu; Dr Bùi Thị Minh Hiền, FHI 360; Prof. Bùi Tôn Hiến, University of Labor and Social Affairs; Dr Cao Kim Thoa, Vietnam Authority of AIDS Control (VAAC); Cao Tan Thanh, VNPUD; Đặng Quốc Phong, VNMSM; Prof. Dr Đỗ Văn Dũng, Ho Chi Minh City University of Medicine and Pharmacy; Dr Hoàng Đình Cảnh, Vietnam Authority of AIDS Control (VAAC); Dr Huynh Thanh Hiển, Mental Health Hospital, Ho Chi Minh City; La Thị Hồng Lan, Đại học Y Dược Ho Chi Minh City; Lại Phước Thanh Huy, Provincial AIDS Centre Hồ Chí Minh; Lê Huỳnh Thị Cẩm Hồng, Ho Chi Minh City University of Medicine and Pharmacy; Lê Thành, G-link; Lê Thị Bích Huyển, VNSW; Mai Như Sơn, CBO Xuân Hợp – Đồng Nai; Mai Thị Hoài Sơn, Provincial AIDS Centre Ho Chi Minh; Nguyễn Anh Ngọc, G-link (MSM); Nguyễn Công Hậu Centre for Life Quality Promotion (LIFE); Dr Nguyễn Hồng Hải, Vietnam Authority of AIDS Control (VAAC); Nguyễn Hồng Phúc, Centre for Supporting Community Development Initiatives (SCDI); Nguyễn Ly Lai, Đại học Mở Ho Chi Minh City; Nguyễn Ngọc Phương, CBO MARS HCM City; Dr Nguyễn Quang Thông, Provincial AIDS Centre Cần Thơ; Dr Nguyễn Thu Trang, Hanoi Medical University; Nguyễn Thụy An My, VNSW; Dr Nguyễn Thùy Anh, Hanoi Medical University; Nguyễn Thùy Linh, Centre for Supporting Community Development Initiatives (SCDI); Nguyễn Viết Hùng, CBO Muối Trắng BR; Phạm Hồng Sơn, G3VN; Dr Phạm Thanh Thành, Provincial AIDS Centre Bình Thuận; Trần Mạnh Thắng, VNPUD; Trần Ngọc Du, Department of Labour, Invalids and Social Affairs HCM; Dr Trần Trung Tá, Provincial AIDS Centre Đông Nai; Vincent Trias, ESTHER; Trương Ngọc Phương Bình, Provincial AIDS Centre Bình Thuận; Trương Thị Nhung, Centre for Life Quality Promotion (LIFE); Võ Hoàng Nam, CBO Trăng Khuyết; Võ Hoàng Sơn, FHI 360; Dr Võ Thị Năm, Provincial AIDS Centre Cần Thơ; Vũ Thị Hiển, Centre for Supporting Community Development Initiatives (SCDI); Vũ Thị Tường Vi, Ho Chi Minh City University of Medicine and Pharmacy; Vũng Tàu.

### Brasília, Brazil, 14-15 December 2017:

Nara Araújo, UNAIDS; Irina Bacci, LGBTI National Alliance; Cláudio Barreiros, General Coordination of Mental Health, Alcohol and other Drugs, Ministry of Health; Francisco Bastos, Oswaldo Cruz Foundation (Fiocruz); Sandra Fergutz Batista, Brazilian Network of Harm Reduction and Human Rights (REDUC); Gustavo Camilo, Board of Articulation and Projects of the National Secretariat on Drug Policies (SENAD-MJSP); Maria Angélica Comis, Brazilian Platform of Drug Policies, and member of *Respire* Project of the Community and Cultural Centre É de Lei; Ana Carolina Conceição, General Coordination of Mental Health, Alcohol and other Drugs, Ministry of Health; Paula Dame, Department of Surveillance, Prevention and Control of STIs, HIV/AIDS and Viral Hepatitis, Ministry of Health; Marco Duarte, State University of Rio de Janeiro (UERJ); Cleiton Euzébio, UNAIDS; Liandro Lindner, Brazilian Harm Reduction Association (ABORDA); Leonardo Moreira, Coordination of Research and Training of the National Secretariat on Drug Policies (SENAD-MJSP); Dênis Petuco, Department of Surveillance, Prevention and Control of STIs, HIV/AIDS and Viral Hepatitis, Ministry of Health; Ministry of Health; Monique Prata, Central Sex Workers Union Confederation (CUTS); Marcelo Ryngelblum, Community and Cultural Centre É de Lei; Juma Santos, Latin American Network of People who use Drugs (LANPUD).

#### Kiev, Ukraine, 22-23 January 2018

*From Moldova:* Svetlana Doltu, AFI Moldova; Lilia Fiodorova, Dispensary Department, Republican Narcology Dispensary; Alexander Goncear, AIDS Centre; Ala Latco, Union for HIV Prevention and Harm Reduction; Veaceslav Mulear, GENDERDOC-M; Natalia Nicula, UNODC; Ruslan Poverga, NGO "Positive Initiative"; Roman Sandu, NGO "Zdorovoe Budushee"; Ion Turcanu, National Antidrug Commission.

*From Belarus:* Oleg Aizberg, Department of Psychiatry and Narcology, Belarusian Academy of Postgraduate Education; Alexei Alexandrov, Minsk Regional Clinical Centre "Psychiatry-Narcology"; Liudmila Buzel, Red Cross Belarus; Aliaksei Kralko, Republican Scientific and Practical Centre for Psychiatry and Addiction, Republican Centre for Narcological Monitoring and Preventology; Sergei Kryzhevich, Republican Social Public Association "Your Chance"; Alexandr Nevero, State Committee of Forensic Expertise, Republic of Belarus; Andrei Saladounikav, Main Directorate for Drug Control and Countering Trafficking in Human Beings, Ministry of Internal Affairs, Republic of Belarus; Alena Smirnova, Belarusian Association of UNESCO Clubs; Iryna Statkevich, Belarusian Public Association "Positive Movement"; Liudmila Truhan, UNODC Belarus.

From Ukraine: Olga Belyaeva, EACB; Yuri Bukovski, Antidrug Department, National Police; Andrei Chernyshev, Alliance Global; Olga Dudina, USAID; Sergii Dvoriak, Ukrainian Institute on Public Health Policy; Anna Garkusha, Users of Ukraine; Sergei Gartsev, Republican Social Public Association "Your Chance"; Natalia Isaeva, Legalife Ukraine; Evgen Krivosheev, Club Enei; Aleksei Kurmanaevski, Eurasian Network of People who use Drugs; Vyacheslav Kushakov, Alliance for Public Health; Igor Kyzin, Public Health Centre; Igor Kyzmenko, DUNews; Anna Martyniuk, VOLNA Convictus Ukraine; Vasili Melnichyuk, Antidrug Department, National Police; Ekaterina Mikhina, Club Enei; Natalia Nizova, Vice Premier Minister Adviser; Iryna Pashek, UNAIDS; Gennady Roshchupkin, Eurasian Coalition on Male Health; Sergei Rudoi, Deloitte; Natalia Salabai, UNAIDS; Sergii Shum, Ukrainian Monitoring and Medical Centre for Drugs and Alcohol, Ministry of Health; Vladimir Tymoshenko, EIH; Jacek Tyszko, UNAIDS; Vladimir Yarii, Kyiv City Narcological Clinical Hospital "Sociotherapy"; Oleksandr Zeziulin, Ukrainian Institute on Public Health Policy.

This publication was edited by James Baer.

# Abbreviations and acronyms

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral drug
ATS	Amphetamine-type stimulants
CS0	Civil society organization
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
HLM 2016	United Nations High Level Meeting on Ending AIDS (2016)
HTS	HIV testing services
IDUIT	Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical guidance for collaborative interventions (UNODC, 2017)
IEC	Information, education and communication
INPUD	International Network of People Who Use Drugs
LDSS	Low dead-space syringe
MDMA	Methylenedioxymethamphetamine (Ecstasy)
МІ	Motivational interviewing
MSMIT	Implementing comprehensive HIV and STI programmes with men who have sex with men: practical guidance for collaborative interventions (UNFPA, 2015)
NPS	New psychoactive substances
NSP	Needle and syringe programme
NSWP	Global Network of Sex Work Projects
OST	Opioid substitution therapy
PEP	Post-exposure prophylaxis
PMTCT	Prevention of mother-to-child transmission
PrEP	Pre-exposure prophylaxis
SDG	Sustainable Development Goal
STI	Sexually transmitted infection

SWIT	Implementing comprehensive HIV/STI programmes with sex workers: practical approaches from collaborative interventions (WHO, 2013)
ТВ	Tuberculosis
TRANSIT	Implementing comprehensive HIV and STI programmes with transgender people: practical guidance for collaborative interventions (UNDP, 2016)
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGASS 2016	United Nations General Assembly Special Session on the World Drugs Problem (2016)
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
WHO	World Health Organization

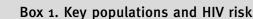
# Definitions

Amphetamine-type stimulants (ATS)	A group of drugs, mostly synthetic in origin, whose principal members include amphetamine, methamphetamine and MDMA. ATS are available in the form of crystals (methamphetamines), powder or formulated tablets. ATS can be taken orally, intranasally (snorted), smoked as a vapour (pipe), inserted anally or injected.
ChemSex	The use of any combination of crystal methamphetamine, mephedrone and GHB/GBL by men who have sex with men before or during sex, to facilitate sexual sessions lasting several hours or days with multiple sexual partners. ChemSex is a term used primarily in western Europe; in other parts of the world, the terms vary, e.g., "party and play" (PNP/PnP) in the United States of America, or "high-fun", "chem-fun" in Asia.
Coca paste	An intermediate product in the process of extracting cocaine hydrochloride from coca leaves. It is accessible in urban areas in Latin America and is known by many street names, such as pasta base, coca or paco. Coca paste is usually rolled into a cigarette mixed with tobacco and/or cannabis and smoked.
Cocaine	The main psychoactive alkaloid obtained from coca leaves. It is generally encountered in two forms which differ in their route of administration: cocaine hydrochloride, which is snorted, injected or inserted anally; and cocaine base, which is smoked.
Crack or freebase	Cocaine base (crystal) that is usually smoked in a pipe. It is made from powder cocaine hydrochloride by stripping it of the hydrochloride molecule. Inhalation of the heated vapours of cocaine base results in a quick onset of effects. Cocaine base may be returned to its salt base via the application of an acidic agent, to be injected.
Entactogen (or empathogen)	A substance that induces a condition that allows users to "make contact" with their own feelings and those of others.
Euphoriant	A substance that induces euphoria.
Hepatitis A (HAV)	A viral liver disease that can cause mild to severe acute illness. Hepatitis A is never chronic. HAV is transmitted through ingestion of contaminated food and water or through direct contact with an infectious person.
Hepatitis B (HBV)	A viral infection that attacks the liver and can cause both acute and chronic disease. The virus is transmitted through contact with the blood or other body fluids of an infected person. Chronic infection puts people at risk of death from cirrhosis and liver cancer. HBV can be prevented by a vaccine.

Hepatitis C (HCV)	A viral infection that attacks the liver and can cause both acute and chronic hepatitis, ranging in severity from a mild illness lasting a few weeks to a serious, lifelong illness. The most common mode of transmission is through exposure to small quantities of blood. HCV can also be transmitted sexually and can be passed from an infected mother to her infant.
Methamphetamine	A synthetic amphetamine-type stimulant drug, often in crystal form. It has many street names, including crystal, crystal meth, ice, meth, shabu, tina, tic and yaba.
New psychoactive substances (NPS)	UNODC defines new psychoactive substances as substances that are not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances but that may pose a public-health threat. Street names include "legal highs", "bath salts" or "research chemicals". According to the UNODC <i>World Drug</i> <i>Report 2017</i> , between 2009 and 2016 there were reports on 739 NPS, of which 36 per cent were stimulant drugs.
Opioids	"Opioids" is a generic term that refers both to opiates and their synthetic analogues. Opiates are naturally occurring alkaloids found in the opium poppy, such as morphine, codeine and thebaine, as well as their semi-synthetic derivatives, such as heroin, hydrocodone, oxycodone and buprenorphine. The term "opioids" also includes synthetic opioids, which are structurally diverse substances.
Serosorting	A person choosing a sexual partner known to be of the same HIV serostatus, often to engage in unprotected sex, in order to reduce the risk of acquiring or transmitting HIV.
Slamming	Injecting drug use in the context of ChemSex (mainly ATS and mephedrone), prevalent in some groups of men who have sex with men. Also referred to as blasting.
Stimulant	In reference to the central nervous system (CNS), any agent that activates, enhances or increases neural activity. Stimulants may also be called psychostimulants or CNS stimulants. They include amphetamine-type stimulants, cocaine, caffeine, nicotine etc.
Stimulant drug	In reference to the central nervous system, a substance that activates, enhances or increases neural activity by influencing levels and action of the dopamine, norepinephrine and serotonin neurotransmitters.
Strategic positioning (sero-positioning)	Among some men who have sex with men, the act of choosing a sexual position or practice depending on the HIV serostatus of one's partner. Typically, it means that a person living with HIV chooses to take the receptive position ("bottom") during unprotected anal sex with a partner believed to be HIV negative. The practice is based on the belief that it is less likely for HIV to be transmitted from a receptive partner to an insertive partner ("top") during unprotected anal sex.

## Introduction

In 2017 there were an estimated 1.8 million new HIV infections globally, and 47 per cent of these occurred among members of key populations – men who have sex with men, people who inject drugs, sex workers, transgender women and prisoners – and their sexual partners [1]. Members of key populations are estimated to be far more likely to be living with HIV than members of the general population (Box 1).



- People who inject drugs are 22 times more likely to be living with HIV than members of the general population
- Female sex workers are 13 times more likely than other women
- Men who have sex with men are 28 times more likely than other men
- Transgender people are 13 times more likely than adults in the general population
- Prisoners are 5 times more likely than adults in the general population

Sources: Global AIDS update 2018 (UNAIDS, 2018) [1]; for prisoners – Prevention gap report 2016 (UNAIDS, 2016) [2]. For prisoners, data are from 2015; for other key populations, data are from 2017.

Since the beginning of the HIV epidemic, the focus on HIV prevention, treatment and care among people who use drugs has concentrated on the needs of people who inject drugs, and mainly on those who inject opioids. However, data show that there are HIV-related risks associated with the use of non-injecting stimulant drugs, as well as with the unsafe injection of such drugs, including cocaine, amphetamine-type stimulants (ATS) (excluding MDMA),<sup>1</sup> and stimulant new psychoactive substances (NPS). Use of stimulant drugs has also been associated with higher risk of HIV transmission through unsafe sexual behaviours in certain subsets of key populations [3].

In 2015, the United Nations General Assembly adopted the Sustainable Development Goals (SDGs). SDG 3, "Ensure healthy lives and promote well-being for all at all ages", includes in its target 3.3 ending the epidemics of AIDS and tuberculosis by 2030 and combating hepatitis (among other diseases) [4]. The 2016-2021 UNAIDS Fast-Track strategy, aligned with the SDGs, articulates this aim with three targets: (1) the "90–90–90" treatment target (90 per cent of people living with HIV will get tested and know the result, 90 per cent of people who know they are living with HIV will be on treatment, and 90 per cent of those on treatment will have undetectable levels of HIV); (2) the prevention target of reducing the annual number of new HIV infections to 500,000; and (3) the zero discrimination target [5]. The Fast-Track strategy was adopted by Member States at the United Nations High Level Meeting on Ending AIDS in 2016 (HLM 2016)[6].

To achieve SDG target 3.3 and the UNAIDS Fast-Track strategy for ending AIDS by 2030, it is crucial to address the needs of people who use stimulant drugs who are at risk of HIV, with specific attention to the intersections among key populations. Ending the AIDS epidemic is only achievable if we ensure that the right people access the right services, delivered in the right place at the right time, leaving no one behind.

<sup>&</sup>lt;sup>1</sup>No evidence of increased risk for HIV related to the use of MDMA has been identified. This publication therefore does not cover this topic.

### Purpose of this guide

The purpose of this publication is to provide guidance on implementing HIV, hepatitis C (HCV) and hepatitis B (HBV) programmes for people who use stimulant drugs and who are at risk of contracting these viruses. It aims to:

- Increase awareness of the needs and issues faced by the affected groups, including the intersectionality among different key populations
- Provide implementation guidance to help establish and expand access to core HIV and hepatitis prevention, treatment, care and support services

It is a global document that should be adapted according to the specific context, including the type of stimulant drug used (cocaine, ATS or NPS) and the key populations involved, which vary considerably according to regions.

The present guide proposes a package of core interventions adapted from existing international guidance:

- WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users [7]
- WHO Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations – 2016 update [8]
- Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical guidance for collaborative interventions (the "IDUIT") [9]

It also incorporates guidance from the implementation tools for other key populations:

- Implementing comprehensive HIV/STI programmes with sex workers: practical approaches from collaborative interventions (the "SWIT") [10]
- Implementing comprehensive HIV and STI programmes with men who have sex with men: practical guidance for collaborative interventions (the "MSMIT") [11]
- Implementing comprehensive HIV and STI programmes with transgender people: practical guidance for collaborative interventions (the "TRANSIT") [12]

However, none of these guidance documents and tools addresses the specific needs of people who use stimulant drugs and are at risk for HIV and hepatitis B and C – hence the need for this publication.

### Audience

The guide is intended for use by policymakers, programme managers and service providers, including community-based organizations, at the national, regional or local levels, who undertake to address HIV prevention, treatment and care. It also provides useful information for development and funding agencies and for academia.

### Structure

The guide is divided into five chapters.

• Chapter 1 explains the nature and effects of stimulant drugs, the associated risks of HIV and hepatitis transmission, and the issues surrounding stimulant drug use and HIV and hepatitis risk in specific key populations and other vulnerable groups.

- Chapter 2 presents the package of core HIV interventions for key populations who use stimulant drugs.
- Chapter 3 describes approaches to care and support for people who use stimulant drugs, particularly in the context of HIV and hepatitis.
- Chapter 4 describes six critical enablers activities and strategies that are needed to ensure access
  to the interventions in the core package.
- Chapter 5 outlines further considerations for implementing programmes.

Within each chapter, further resources are listed. Case studies are provided throughout the guide to illustrate specific aspects of programmes that have been implemented in different countries.

There is also an annex presenting a series of checklists and other practical tools for policymakers and implementers.

### **Principles**

Two important overarching principles are stressed throughout this publication. The first is better integration of HIV, hepatitis B and C and sexually transmitted infection (STI) services for people who use stimulant drugs within existing HIV harm reduction services<sup>2</sup> and drug treatment services for people who inject drugs, and within sexual and reproductive health and other HIV services for key populations. The second is the meaningful involvement of people who use stimulant drugs, people living with HIV and other key populations in planning, implementing, monitoring and evaluating interventions. This is key to their success and sustainability.

Finally, the implementation of HIV-related services for people who use stimulant drugs should adhere to human-rights principles as described in the implementation tools mentioned above – the SWIT, MSMIT, TRANSIT and IDUIT.

### Methodology

In its June 2009 session, the UNAIDS Programme Coordinating Board (PCB) called upon "Member States, civil society organizations and UNAIDS to increase attention on certain groups of non-injecting drug users, especially those who use crack cocaine and ATS, who have been found to have increased risk of contracting HIV through high-risk sexual practices". UNODC therefore commissioned a review and organized a Global Expert Group Technical Meeting on Stimulant Drugs and HIV, held in Brazil in 2010. A discussion paper on HIV prevention, treatment and care among people who use (non-injecting) crack and cocaine or other stimulant drugs, particularly ATS, was developed in 2012.

In 2013 the UNODC HIV Civil Society Organization (CSO) group established a Stimulant Drugs and HIV working group, with representatives from civil society and experts on HIV and stimulant drugs. The group organized consultations with representatives of the community and CSOs, including on the margins of the International Harm Reduction Conference in Kuala Lumpur in 2015.

<sup>&</sup>lt;sup>2</sup> For the purposes of this guide, harm reduction is defined by the nine interventions of the "comprehensive package" of services detailed in the WHO, UNODC, UNAIDS Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users (see citation 7). These are: 1. Needle and syringe programmes; 2. Opioid substitution therapy and other drug dependence treatment; 3. HIV testing and counselling; 4. Antiretroviral therapy; 5. Prevention and treatment of sexually transmitted infections; 6. Condom programmes for people who inject drugs and their sexual partners; 7. Targeted information, education and communication; 8. Prevention, vaccination, diagnosis and treatment for viral hepatitis; 9. Prevention, diagnosis.

In December 2014, the Strategic Advisory Group to the United Nations on HIV and injecting drug use, consisting of representatives of networks and organizations of people who use drugs, academics, donors, implementers and United Nations organizations, recommended conducting a new literature review on stimulant drugs and HIV and hepatitis C. In 2015 UNODC, together with WHO and UNAIDS, defined the scope of this new literature review, and accordingly UNODC commissioned it to cover the extent, patterns and geographic distribution of injecting and non-injecting stimulant drug use (particularly crack, cocaine, ATS and stimulant NPS) in men who have sex with men, sex workers and other groups of stimulant drug users, and their possible link to HIV and hepatitis B and C vulnerability and transmission; and effective interventions for prevention, treatment and care of HIV and hepatitis B and C among people who use such stimulant drugs. The results of the literature review were published by UNODC in 2016 in five papers covering the following topics:

- Methodology and summary [3]
- ATS [13]
- Cocaine and crack cocaine [14]
- NPS [15]
- Treatment and prevention of HIV, HCV & HBV among stimulant drug users [16].

Subsequently, in the framework of preparations for the United Nations General Assembly Special Session on the World Drug Problem (UNGASS 2016) and the HLM 2016, UNODC organized a scientific consultation on HIV and drug use, including stimulant drugs. The papers relating to stimulant drugs presented at the Commission on Narcotic Drugs in March 2016 covered: cocaine and crack cocaine use and HIV in the United States; ATS and men who have sex with men in Asia; and antiretroviral therapy (ART) and stimulant drug use. The recommendations of the contributing scientists were summarized as part of a scientific statement presented in New York on the margins of the UNGASS 2016 and the HLM 2016 [17]. The statement stressed the need to address HIV among people who use stimulant drugs, including the structural, social and personal mediating factors for HIV transmission, such as polydrug use, STIs, mental health, homophobia, discrimination and punitive laws. The scientists recommended the provision of ART to all people using stimulant drugs living with HIV, and the implementation of new prevention tools such as pre-exposure prophylaxis (PrEP) and the use of social media for communication. The statement also emphasizes that with proper support for adherence, ART is effective among people living with HIV who use stimulant drugs.

In 2017, UNODC commissioned the development of the present publication, *HIV prevention*, *treatment, care and support for people who use stimulant drugs: an implementation guide.* Based on the results of the scientific reviews and of the expert group meetings, and on international guidance and country practices that have been identified as effective in meeting the needs of people who use stimulant drugs, a first draft of the document was developed under the guidance of the UNODC CSO Stimulant Drugs and HIV working group. The draft guide was reviewed by external peer reviewers, United Nations agency reviewers and community representatives through an electronic consultation and three face-to-face consultations held in Viet Nam (2017), Brazil (2017) and Ukraine (2018).

# Chapter 1

# Stimulant drugs, HIV and hepatitis, and key populations

The *World Drug Report 2019* estimates that about 29 million people used ATS in 2017, and 18 million used cocaine [18]. There is no estimate of the total number of people using NPS. The great majority of people who use stimulant drugs do so on an occasional basis which may be characterized as "recreational", and they will not develop dependence or any other health problem.

There is evidence that the prevalence of ATS use, particularly methamphetamines, is increasing in some regions, including North America, Oceania and most parts of Asia. In addition, between 2009 and 2016, there were reports of 739 NPS, of which 36 per cent were classified as stimulant drugs [19].

Only a small proportion of people who use stimulant drugs inject them; most smoke, snort or use them orally or anally. However, the *World Drug Report 2017* states that 30 per cent of people who inject drugs inject stimulant drugs, either as their drug of first choice or in addition to opiates.

Despite evidence showing that certain subgroups of people who use stimulant drugs are at greater risk of HIV, prevention, testing and treatment programmes for these population groups remain very limited in scope and scale across the globe, and their specific needs are often overlooked.

### **1.1 Stimulant drugs**

Stimulant drugs are chemically diverse substances that are similar in their capacity to activate, increase or enhance the neural activity of the central nervous system, resulting in a common set of effects in most people who use them, including increased alertness, energy and/or euphoria.<sup>3</sup>

This publication considers three types of stimulant drugs for which data have shown a link with increased HIV risk among some key populations:

 Cocaine: Found in various forms, e.g. smokable cocaine, crack cocaine, freebase, paste or pasta base, paco, basuco. Depending on the form, it may be sniffed or snorted, injected, ingested or inserted anally.

<sup>&</sup>lt;sup>3</sup> For more detailed information on different stimulant drugs and their effects, see: Terminology and information on drugs. Third edition. New York (NY), United Nations, 2016 (https://www.unodc.org/documents/scientific/Terminology\_and\_ Information\_on\_Drugs-3rd\_edition.pdf, accessed 15 January 2019).

- Amphetamine-type stimulants: Amphetamines and methamphetamines (excluding MDMA) are found in different forms, e.g. crystals (methamphetamines), powder or formulated tablets [20]. They are taken orally, smoked from a pipe, sniffed or snorted, inserted anally or injected in a solution.
- Stimulant new psychoactive substances: Found in various forms, e.g. synthetic cathinone, phenethylamines, aminoindanes and piperazines. They are sometimes referred to as "bath salts" [21][22].
   Depending on the form, NPS are taken orally, smoked, inserted anally or injected.

All types of stimulant drugs have common effects:

- *Mental:* Euphoria, raised libido, reduced appetite and sleep drives, enhanced perception, increased alertness, cognitive improvements and deficits (attention, working memory, long-term memory), emotional intensity and excitability, and increased confidence.
- *Behavioural:* Talkativeness, hypervigilance, hyperactivity, increased sociability, disinhibition, changes in sexual behaviour (including sexual sessions of longer than usual duration), faster reaction, and repetitive activity ("tweaking"); hyper-excitability, insomnia, restlessness, panic, erratic behaviour, and sometimes aggressive or violent behaviour [23].
- *Physical:* Increased heart rate (including palpitations), raised temperature (hyperthermia), circulatory changes (higher blood pressure, vasoconstriction), increased breathing rate, dry mouth, teeth-grinding, jaw-clenching/gurning, faster eye-movements, and dilated pupils.

The onset and duration of these effects vary according to the drug, its form, dosage, route of administration, the characteristics of the individual using it, and the context of use.

Chronic use of stimulant drugs can lead to psychological dependence; development of tolerance; destruction of tissues in the nose if snorted or sniffed; chronic bronchitis, which can lead to chronic obstructive pulmonary disease; malnutrition and weight loss; disorientation, apathy, confusion, exhaustion due to lack of sleep, and paranoid psychosis. During withdrawal there may be a long period of sleep and depression.

### Cocaine

Cocaine is generally encountered in two forms which differ in their route of administration: cocaine hydrochloride (HCL), a powder, which is snorted, injected or taken anally, and cocaine base (crack, freebase, or crystal) which is smokable and usually taken in a pipe. A third form, coca paste (pasta base, paco, coca pasta, etc.), is an intermediate product of the process of extraction of HCL from the coca leaves. Available mainly in Latin America, it is usually smoked in a cigarette.

Cocaine is a powerful stimulant whose effects diminish quickly, prompting the user to repeatedly administer additional doses. When snorted, cocaine produces a slow wave of euphoria, followed by a plateau and then a "come down" period.

In its smokable form, cocaine has a more intense and immediate effect. Severe anticipatory anxiety about the impending low may result in repeat dosing. This cycle may take around 5 to 10 minutes.

The use of cocaine is more prevalent in North and South America than in the rest of the world.

### Amphetamine-type stimulants (ATS)

Amphetamine and methamphetamine are synthetic drugs whose effects include euphoria, arousal and psychomotor activation. ATS can be taken orally, intranasally, smoked as a vapour (pipe), inserted anally or injected. Immediately after smoking or injecting, people experience a pleasurable "rush". Intranasal and oral ingestion produce a gradual euphoria or "come up".

Depending on the level of tolerance, the effects of methamphetamine may last four hours, or as long as 24 hours for someone new to the drug [24]. Some people who use methamphetamine may experience a feeling of invincibility, with an accompanying propensity to engage in high-risk behaviours, creating vulnerabilities to acquiring HIV [25]. The direct health impacts of ATS include insomnia and cardiovascular stress. Long-term negative effects may include dopamine physical dependence, psychological dependence, psychosis and paranoia, and depression.

Amphetamine and methamphetamine use is reported in all parts of the world.

#### Stimulant new psychoactive substances

There are a various types of new psychoactive substances (NPS), with different molecular structures, but the majority of stimulant NPS are synthetic cathinones, which have a similar molecular structure to cathinone found in the khat plant. Common synthetic cathinones include mephedrone, pentedrone, methylone or methcathinone. They fall into two main families: euphoriants and entactogens. NPS are taken orally, can also be snorted or inserted anally, and less frequently are injected. Stimulant NPS produce similar mental, physical and behavioural effects to traditional stimulant drugs such as cocaine, amphetamines and methamphetamines. Synthetic cathinones and other stimulant NPS are also used to improve sexual experience [26].

The use of synthetic cathinone such as mephedrone (sometimes called "bath salts") has recently emerged [18]. Studies from Hungary [27][28][29], Ireland [30][31], Israel [32], Romania [33] and the United Kingdom [34] suggest that due to a shortage in heroin supply and easy access to synthetic cathinone, a significant proportion of people who inject drugs have switched to injecting synthetic cathinone in recent years.

### 1.2 Stimulant drug use and risks of HIV/HBV/HCV transmission

The HIV/HBV/HCV risk associated with stimulant drug use is linked to a higher prevalence of unprotected anal and vaginal sex, and of sharing pipes, straws and injection equipment, in some groups of men who have sex with men, sex workers, people who inject drugs and people in prisons.

### Transmission risks through concurrent stimulant drug use and unprotected sex

Inconsistent condom use by people who use stimulant drugs has been identified as a prime means of contracting STIs, including HIV, particularly as a result of the concurrent use of stimulant drugs with frequent sexual activity of long duration with multiple partners or in groups. Stimulant drug use may also facilitate longer penetration (which can lead to condom breakages), and more intense acts such as fisting that increase the opportunity of anal and vaginal tears or bleeding.

### Transmission risks through sharing injection equipment

Injecting methamphetamine, cocaine or NPS entails a similar risk to injecting other drugs when needles and injecting equipment are shared. Given that many stimulant drugs have a shorter duration of action compared with opioids, people who inject stimulant drugs report a higher frequency of injecting, with compulsive re-injecting and a greater likelihood of sharing and reusing needles and syringes that may be contaminated [22][34]. HIV and HCV risk is also increased when cocaine or crack is coadministered with heroin, including injection of heroin and cocaine ("speedballing") [35].

Coexisting injecting drug use and unprotected sex further increases the likelihood of HIV and hepatitis transmission, especially in high-incidence communities. This pattern has been seen, for example, with the use of home-made ATS, such as *boltushka* in Ukraine. People who inject *boltushka* engage in high levels of injecting risk behaviours and in sexual risk behaviour post use. They are young and poor, and the great majority are already living with HIV [36].

### Hepatitis C transmission through straws or pipes

HCV is transmitted through blood or, less commonly, through sexual contact. HCV can be transmitted from a person living with hepatitis who has oral or nasal sores or lacerations through sharing of straws or pipes [37][38][39][40]. Compared with the general population, higher HCV prevalence rates, ranging from 2.3 to 17 per cent, have been observed among people who smoke or sniff stimulant drugs [41]. However, it is difficult to determine whether HCV transmission in these cases occurred through blood exposure, sexual activity, or both.

# 1.3 Stimulant drug use and HIV/HBV/HCV transmission risks among key populations

#### Men who have sex with men

There seems to be a clear association between ATS use among men who have sex with men and risk of HIV infection. Methamphetamine use has been associated with increased frequency of unprotected sex among some men who have sex with men, thereby increasing vulnerability to STIs, HBV and HIV [42][43][44][45]. Studies have indicated HIV prevalence rates among men who have sex with men who use methamphetamine ranging between 17 and 61 per cent, and HIV incidence ranging from 2.71 per 100 person-years [46] to 5 per 100 person-years [47].

The use of stimulant drugs by some men who have sex with men to facilitate sex (referred to as ChemSex)<sup>4</sup> has been linked to decreased condom use, sex with multiple partners and other high-risk sexual behaviours that increase likelihood of HIV and HCV transmission [48][49]. Increased sexual risk behaviours, including unprotected sex, coupled with potential anal or rectal trauma resulting from longer, more frequent and intense sexual encounters under the influence of drugs, could facilitate STI transmission among men who have sex with men, including HCV among men who have sex with men living with HIV. Risk-reduction strategies for HIV prevention such as serosorting<sup>5</sup> and strategic positioning<sup>6</sup> are inefficient for the prevention of other STIs, HBV or HCV. The association between ChemSex, drug use and sexually transmitted acute HCV infection among men living with HIV who have sex with men has been documented in several countries and regions [50].

ChemSex is mostly associated with non-injecting drug use, although some may also inject synthetic cathinones, amphetamines and methamphetamines (referred to as "slamming" or "blasting" within

<sup>&</sup>lt;sup>4</sup> "ChemSex" is a term used on geo-sexual networking apps by gay men in Europe (and adopted by the gay men's health sector) that refers to the use of any combination of drugs that includes crystal methamphetamine, mephedrone and/or GHB/GBL before or during sex to facilitate sexual sessions lasting several hours or days with multiple sexual partners. While drugs such as alkyl nitrites (poppers) have long played a minor role in the gay sex scene, ChemSex is less of a traditional sex and drugs issue; it has been adopted by a small but very sexually active group of men who are far more likely to contract HIV through this behaviour (due to high HIV prevalence within the population of men who have sex with men).

<sup>&</sup>lt;sup>5</sup>Serosorting is defined as a person choosing a sexual partner known to be of the same HIV serostatus, often to engage in unprotected sex, in order to reduce the risk of acquiring or transmitting HIV (WHO Guidelines: prevention and treatment of HIV and other sexually transmitted infections among men who have sex with men and transgender people: recommendations for a public health approach 2011)

<sup>&</sup>lt;sup>6</sup> Strategic positioning, also known as sero-positioning, is the act of choosing a different sexual position or practice depending on the HIV serostatus of one's partner. Typically, it means that a person living with HIV chooses to take the receptive position ("bottom") during unprotected anal sex with a partner believed to be HIV-negative. The practice is based on the belief that it is less likely for HIV to be transmitted from a receptive partner to an insertive partner ("top") during unprotected anal sex. (MSMGF technical bulletin series: serosorting and strategic positioning, 2012).

the context of ChemSex) [51], with a high level of sharing of injection equipment and consequently higher risks of HIV and HCV transmission [52][53][54]. Mephedrone use seems to have risen among men who have sex with men in the context of ChemSex [52].

The use of erectile dysfunction medications such as sildenafil is often reported among men who have sex with men who also consume methamphetamines and has been identified as increasing rates of unprotected sex and HBV, syphilis and HIV risks [46][48][55].

### People who inject drugs

Injecting stimulant drugs carries the greatest risk of acquiring HCV or HIV, due primarily to the sharing of contaminated needles and syringes. People who inject cocaine, ATS or heroin have a risk of acquiring HIV that is respectively 3.6, 3.0, and 2.8 times greater than people using stimulant drugs without injecting [56]. Outbreaks of HIV or hepatitis C among people who inject drugs, partly due to the increased use of synthetic cathinone as a replacement for heroin, have been reported in Greece [57], Hungary [29] and Romania [33][58].

People who inject stimulant drugs such as ATS show higher prevalence of sexual risk behaviours compared with people who inject opiates, and similar to non-injecting ATS users [59][60][61][62].

### Sex workers

Exchanging sex for crack cocaine or money has been associated with several HIV risk behaviours, such as having a greater number of clients per week [63], high levels of unprotected sex [64], sharing crack cocaine with clients [65] and heavier crack use, as well as structural vulnerabilities like homelessness and unemployment [66]. One study reported a higher HIV prevalence among those who exchange sex for drugs or money than among those who did not [67]. Individuals with drug dependencies who exchange sex for drugs may have reduced power and control over sexual interactions [68]. The use of methamphetamines by female sex workers has been associated with engaging in unsafe sex [69].

Female sex workers who use smokable cocaine are often homeless or poorly housed in economically depressed neighbourhoods, and have poor access to health services, including HIV services, as well as to prenatal and reproductive care and to social support. Sex workers, whether male, female or transgender, may be coerced into consuming drugs with their clients, increasing the risk of unprotected sex and violence.

Male, female and transgender sex workers face barriers to accessing and using services due to the multiple stigma surrounding drug use, sex work and sexual orientation, which are criminalized to varying degrees in many jurisdictions around the world.

### **Transgender people**

The use of methamphetamines, smokable cocaine or cocaine among transgender women has been associated with higher risks of HIV transmission, mainly through sex [70][71]. For example, a survey conducted among transgender women in high-risk venues and on the streets of Los Angeles, United States, indicated that recent methamphetamine and/or smokable cocaine use was associated with a more than twofold higher risk of reported HIV-positive status [72].

### People living in prisons and other closed settings

People who use stimulant drugs, such as methamphetamine, in prisons are more likely to engage in a number of sexual risk behaviours, including use of methamphetamines in the context of sex and inconsistent use of condoms [73][74].

#### Women who use drugs

Women who use drugs face stigma and other barriers to accessing essential health and HIV services, including gender-based violence, fear of forced or coerced sterilization or abortion, or loss of child custody. Cross-cultural stigma associated with women vacating gender roles, such as caring for their family, being pregnant and being mothers of infants and children, is a major challenge [75]. Many women who use drugs face unequal power dynamics in relationships, and higher rates of poverty; these factors interfere with their ability to access reproductive health supplies, including condoms and other contraceptives [76].

#### People living with HIV

Although cocaine or methamphetamine use has a negative impact on the immune system, particularly among people living with HIV, the immunodepressive effect disappears when people living with HIV who use stimulant drugs adhere to antiretroviral therapy [77]. People living with HIV using stimulant drugs experience the worst HIV outcomes when they do not know they are living with HIV, or cannot access ART.

A review of the literature reports findings that psychological, behavioural and social factors all play a role, separately and in combination, in determining HIV outcomes in patients, their access to health services, and adherence to ART:

- In people living with HIV, regular methamphetamine use has measurable negative effects upon neuropsychological functioning (e.g. deficits in episodic memory, executive functions and information-processing speed) [78] over and above the negative neurocognitive effects caused by HIV and HCV [79]. This may impact their health-protective behaviour, health-services-seeking, access to HIV clinics and adherence to ART. In addition, HIV-specific traumatic stress and related negative affect are independently associated with greater stimulant-drug risk behaviours and reduced ART adherence [80].
- Cocaine and ATS have a negative impact on the immune system, increasing vulnerability to opportunistic diseases and accelerating the evolution of HIV among people who do not adhere to ART [77][81]. (See section 2.4 for more information on the interactions between ART and stimulant drugs).
- Some communities of people who use stimulant drugs are very marginalized, extremely poor and have few resources, including access to adequate nutrition, and this also impacts their access to services and consequently the evolution of HIV infection.

To reach people who frequently use stimulant drugs and retain them in effective HIV treatment regimes, access and adherence barriers related to HIV treatment must be accurately identified and addressed. When assessing why a patient who uses stimulant drugs is lost to follow-up, important factors that should be considered include stigma, discrimination, mental health, employment status, poverty, homelessness, migration, exposure to violence, incarceration, fear of criminalization, and family responsibilities. See chapter 4 for more information.

## **1.4 The impact of criminal sanctions on HIV transmission among key populations**

Stigma, discrimination and criminal sanctions against people who use drugs, men who have sex with men, transgender people, sex workers and people living with HIV have a direct impact on their ability and willingness to access and use HIV and other health services. These also impede the ability of

people from key populations to access the commodities or services needed to practise protective behaviours, including condom use, and to access sterile injecting equipment, HIV testing and HIV treatment.

A systematic review of 106 peer-reviewed studies published between 2006 and 2014 examined the association between criminal sanctions for drug use and HIV prevention and treatment-related outcomes among people who inject drugs [82]. While the studies were mainly conducted in North America and Asia, the findings highlighted that criminal sanctions were responsible for substantial barriers to HIV treatment and prevention interventions for people who inject drugs.

# Chapter 2

# **Core interventions**

Following an extensive literature review and technical consultations at country and global levels, expert participants in a number of consultations agreed on a package of eight core interventions for HIV prevention, treatment, care and support among people who use stimulant drugs and are at risk of HIV. These interventions have been adapted from the WHO/UNODC/UNAIDS Comprehensive Package for HIV and people who inject drugs, and from the WHO Consolidated Package for HIV and key populations [7][8].

- 1 Condoms, lubricants and safer sex programmes
- 2 Needle and syringe programmes (NSP) and other commodities
- 3 HIV testing services (HTS)
- **4** Antiretroviral therapy (ART)
- 5 Evidence-based psychosocial interventions and drug dependence treatments
- 6 Prevention, diagnosis and treatment of STIs, hepatitis and tuberculosis (TB)
- 7 Targeted information, education and communication (IEC) for people who use stimulant drugs and their sexual partners
- 8 Prevention and management of overdose and acute intoxication

The core interventions should be adapted to the specific needs of different key populations. An assessment of the population to be served will assist in providing the evidence needed to design a clientcentred package of services that responds to specific needs.

### 2.1 Condoms, lubricants and safer sex programmes

People who have sex while under the influence of stimulant drugs are more likely to engage in sexual risk behaviours, especially unprotected sex [83]. They may have reduced sexual inhibitions and a feeling of invincibility, which makes choosing or remembering to use a condom more challenging. Other factors that

can contribute to inconsistent condom use include lack of access to condoms and lubricants when needed, poor safe-sex negotiations skills, being on PrEP [84] and engaging in risk-reduction strategies such as serosorting or strategic positioning. These strategies have their limits in terms of risk for HIV transmission, particularly if people are under the influence of stimulant drugs, and they do not prevent transmission of other STIs including HBV and HCV.

The use of stimulant drugs may increase sexual risk behaviour and affect the capacity to negotiate and adhere to safer sex. Promoting the use of male and female condoms and appropriate lubricants remains a core HIV prevention strategy for people who use stimulant drugs and their sexual partners. Condoms offer protection against HIV, other STIs such as syphilis and gonorrhoea, and possible sexual transmission of HBV or HCV. Condoms can also prevent unintended pregnancy.

Condoms and lubricants should be available widely, and without charge. Targeted distribution of free condoms helps overcome the barriers associated with their cost and can help reinforce the social acceptability of condom use. Distribution of condoms and sex-education information by peers and outreach workers plays an important role, including in the street or party setting.

It is important to consider the variety of condoms available to meet key population preferences, and their distribution, to ensure wide availability of condoms and lubricant and access to them in places where people engage in stimulant drug use and sex concurrently. For example, in the case of sex-onpremises venues or nightclubs, simply making condoms available in the usual places, such as toilets or at the bar, is often not sufficient to ensure that people have them to hand when they need them. Consultation with the beneficiaries is critical to ensure easy access. Similarly, to ensure access to condoms in prisons, strategies must be tailored to each prison, based on its architecture, regime and the movements of prisoners within the prison.

Safer-sex education for people who use stimulant drugs should cover:

- Promotion of condoms and lubricant use
- · Information on sexual transmission of HIV, hepatitis and STIs
- Safe-sex negotiation strategies
- Information on strategies to reduce risks of HIV transmission (sero-sorting and strategic positioning), including their limitations
- Information on pre-exposure prophylaxis of HIV (PrEP)

### Box 2. Web information on harm reduction in the context of ChemSex

The website "Sleaze without consequences", created by the Dutch organizations Soa Aids Netherland and Mainline, provides information on reducing the risks of hepatitis, HIV and other STIs, and safer-sex information for men who have sex with men engaging in ChemSex.

The website includes information on what measures to take if the ChemSex party is taking place at one's own home (such as providing condoms, disinfectants etc.), and what commodities should be taken along when going to another place to have sex under the influence of methamphetamines, to reduce risks of HIV or hepatitis transmission.

### Further resources

The four key population implementation guides (the IDUIT, MSMIT, SWIT and TRANSIT) provide useful general information on condoms, lubricants and safer sex programming for people who inject drugs, men who have sex with men, sex workers and transgender people.



### 2.2 Needle and syringe programmes and other commodities

Due to the short duration of their effects, injection of stimulant drugs is frequently associated with rapidly repeated injecting, with some individuals reporting more than 20 injections a day. Injecting may take place in groups, and people may use several different stimulant drugs and other types of drug in the same session. These patterns of use increase the likelihood that non-sterile equipment will be used or shared, elevating the risk of HIV and hepatitis transmission.

The accessibility and design of needle and syringe programmes (NSPs) must take into account the nature of stimulant drugs and patterns of their use. People who inject stimulant drugs should be educated, encouraged and supported to acquire sufficient sterile syringes. NSP policies and protocols should allow people who inject stimulant drugs access to enough injecting equipment for themselves and their peers. One-for-one exchange or other forms of restricted access to needles and syringes are not recommended in any situation and are particularly unhelpful with people who inject stimulant drugs [85][86].

In the party and club scene, injecting stimulant drugs is more likely to take place outside the normal operating hours of HIV harm reduction services. NSPs and other community drug services do not always engage with the party and club scene, compounding the lack of service availability or HIV prevention messaging. This lack of access is particularly problematic for people who inject stimulant drugs, who would benefit from access to an NSP and other services.

Creative strategies can be used to make sterile needles and syringes available to people who inject stimulant drugs, particularly outside operating hours, and in the places where stimulant drugs are purchased or used. These may include satellite NSPs in projects or clinics for key populations, needle and syringe dispensing machines, secondary NSP, outreach programmes, safer clubbing initiatives, outreach at sex-on-premises venues (bars, saunas, clubs, etc.), outreach programmes at festivals, and community mobilization initiatives.

NSPs designed to address the needs of people who use stimulant drugs, including all key populations, are well positioned to provide an entry point to a coordinated cascade of services, starting with voluntary HTS. They can also offer information on how to reduce risks related to the use of drugs, distribute female and male condoms and lubricant, and provide route transition interventions (see below). Efforts to understand the context of an individual's drug use, their injecting equipment needs, and their concurrent sexual behaviours will help ensure that appropriate messaging is used.

NSPs should also provide education, advice and equipment to support safer injecting practices, including on the importance of hand hygiene, avoiding sharing any paraphernalia (filters, water) associated with injecting, and keeping even the smallest amounts of blood out of the space where drugs are prepared for injection. It is also important to provide syringe disposal bins or plastic bins or

containers for the safe disposal of used injecting equipment, which is key to preventing needle-stick injuries and reducing risk or inconvenience to the wider community associated with illicit drug injection.

Syringes with colour-coded barrels provide an example of a promising practice that supports people who inject stimulant drugs in group settings. Each participant is assigned a different colour and provided with syringes of that colour which he or she alone is to use. This can help reduce the accidental sharing of injecting equipment, particularly if it is reused. Evidence shows that injections with low dead-space syringes (LDSS) reduce the amount of blood in a used syringe compared with regular or high dead-space syringes. WHO recommends LDSS to reduce the risk of transmission of viral hepatitis in case sharing does take place [87].

#### Further resources

Guide to starting and managing needle and syringe programmes (WHO, UNAIDS, UNODC, 2007) [88] Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical guidance for collaborative interventions (the IDUIT) (UNODC, INPUD, UNDP, UNFPA, WHO, UNAIDS, USAID, 2017) [9]

Guidance on prevention of viral hepatitis B and C among people who inject drugs (WHO, 2012) [87]

#### **Route transition interventions**

Route transition interventions support people who use drugs to avoid initiation into injecting, or to encourage people who are injecting to transition to non-injecting routes of administration. Behavioural interventions, peer education interventions and the provision of commodities that support alternatives to injecting, such as pipes, mouthguards and aluminium foil, can be used to engage with people who inject heroin and/or stimulant drugs.



# Box 3. A harm reduction programme for people who smoke cocaine or methamphetamines in the Pacific North-West United States

The People's Harm Reduction Alliance (PHRA) is a peer-based harm reduction programme for people who use drugs in the Pacific North-West of the United States, established in 2007. In its first year, PHRA provided syringes and sterile injection equipment; however, the need to expand services to include people who smoke drugs became quickly apparent via the peer-based framework and feedback from clients. In 2008, PHRA launched a crack pipe programme to reach a different group of people who use drugs. The programme has become a point of contact for them to access additional services. In 2015, the programme was expanded to include methamphetamine pipes because participants informed PHRA that lack of access to pipes led them to inject more frequently than they would otherwise do.

Both pipe programmes have increased the inclusion of people who smoke crack and methamphetamine at PHRA and linked them to other essential health services. In 2016, PHRA expanded services for non-injectors further with a snorting programme.

### HIV and HCV prevention opportunities for people who smoke stimulant drugs

Crack cocaine, cocaine base and methamphetamine can be smoked in a pipe, offering access to the high-dose surging effect. The repeated use of heated crack pipes can cause blisters, cracking and sores on the tongue, lips, face, nostrils and fingers. It has been suggested that this may facilitate HCV transmission via unsterile paraphernalia (although this has not been clearly established). People smoking stimulant drugs in pipes do not require single-use equipment but will benefit from having personal (individual) smoking equipment, and messaging that pipes should not be shared. The same principle applies for straws used to inhale cocaine.

The distribution of pipes, mouthguards and other piping paraphernalia provides practical strategies for engaging stimulant drug smokers and reinforces the "Don't share pipes" message. The principles of distributing paraphernalia and engaging people who smoke stimulant drugs with messages about HIV and hepatitis prevention remain the same.



### Box 4. Example of content of kits for safer smoking

- Pipes
- Mouth- or lip guards a rubber band, rubber tubing, or sometimes specially produced
- · Stainless steel wool, used as gauze to suspend the crack cocaine inside the pipe
- Alcohol wipes to clean the pipe and reduce risks associated with sharing
- Lip balm containing vitamin E, to help protect and heal chapped or injured lips
- Sterile dressing to cover wounds or burns arising from smoking crack
- Sugar-free chewing gum which can help stimulate saliva production to protect teeth and reduce dental damage
- Condoms and lubricants to support safer sex practices
- Health promotion leaflets

### Safe tattooing

In some population groups who use stimulant drugs, unsafe tattooing is frequent and constitutes a risk for transmission of HCV. This is a particular issue in prisons where tattooing is prohibited and hidden and unhygienic tattooing is common. NSPs and other low-threshold services can offer safe tattooing information, training and safe equipment.

## 2.3 HIV testing services

HIV testing provides an opportunity to deliver HIV prevention messages and to link people to HIVprevention and other relevant health and support services. HIV testing services (HTS) are also the critical entry point to ART (see section 2.4). Given the evidence that individuals who are ARTadherent and have achieved viral suppression do not transmit HIV, HTS is a crucial component of HIV prevention programmes.

It is important to increase the opportunities for people who use stimulant drugs to access and use confidential, easy and convenient HIV testing that is linked to the provision of ART for those who test positive. Community-based rapid HIV testing provides an opportunity to deliver results immediately. This can be of particular importance with street- or venue-based people who use stimulant drugs, where the primary source of engagement may be outreach programmes brought to where they are,

rather than waiting for them to present at a specific testing location. Other outreach opportunities may also be used to distribute HIV self-test kits.

Regardless of the testing modality, it is important to have a protocol to assist people to get a confirmatory test if they test positive, and to access and successfully use HIV care and treatment services if needed, including immediate access to ART, post-exposure prophylaxis (PEP) or PrEP, as appropriate. All HIV testing must be voluntary, confidential and accompanied by post-test counselling, based on the specific HIV test result and the needs of the individual (see the WHO *Consolidated guidelines on HIV testing services*) [89]. On-site HIV testing can pose challenges, including the possible lack of confidentiality that comes especially with small, closed communities. Outreach workers and service providers need to ensure that HIV testing is always voluntary and that coercive use of self-test kits by third parties such as law enforcement or employers to test any individual (e.g., sex workers) is unacceptable.





Box 5. Increasing access to HIV testing for key populations in Brazil: Viva Melhor Sabendo

In 2014, the Department of Surveillance, Prevention and Control of STIS, HIV/AIDS and Viral Hepatitis of Brazil's Ministry of Health developed the "Viva Melhor Sabendo" (VMS) strategy. The strategy, implemented nationally in partnership with CSOs, aimed to increase access to HIV testing for key populations through rapid oral-fluid testing.

Voluntary, confidential and free HIV testing was offered in the locations where key populations live and socialize, including on the street, in the homes of female sex workers and transvestites *(travestis)*, saunas and gay cinemas, sex-work locations, bars, nightclubs, parties and drug-use scenes. Different strategies to establish contact were tested, but most opted for a one-on-one approach, emphasizing the necessary discretion in places such as sex-work points or the drug-use scene.

Community engagement was key to reaching these population groups at alternative times and places and outside health service structures. Trained peer educators conducted all activities and offered information on HIV prevention, diagnosis and treatment. Post-test counselling was offered to all individuals who underwent an HIV test. Those with a positive test result were referred to health services, and the CSOs were responsible for monitoring these individuals until confirmation of diagnosis and initiation of treatment.

Data on 43,000 individuals who participated in the VMS project between 2014 and 2016 showed that 43 per cent were women, 32 per cent heterosexual men, 20 per cent men who have sex with men, and 5 per cent transgender people or *travestis*. Prevalence of drug use was 62 per cent, and it was highest among heterosexual men (79 per cent) and among men who have sex with men (72 per cent). Among people who used drugs, 52 per cent received an HIV test for the first time, and 2.4 per cent of these tested positive.

### Further resources

Consolidated guidelines on HIV testing services (WHO, 2015) [89]

Guidelines on HIV self-testing and partner notification: supplement to consolidated guidelines on HIV testing services (WHO, 2016) [90]

More detailed guidance on community HIV testing and counselling can be found in the IDUIT, MSMIT, SWIT and TRANSIT.

### 2.4 Antiretroviral therapy

Antiretroviral therapy (ART) is the treatment of people living with HIV with medications that suppress the replication of the virus. Currently the standard treatment consists of a combination of antiretroviral drugs (ARVs), and it is indicated for all people living with HIV, irrespective of their CD4 count. ART reduces morbidity and mortality rates among people living with HIV, improves their quality of life and reduces risks of transmission of HIV. ARVs are also administered to some groups of people at risk for HIV acquisition either before exposure (PrEP) or after (PEP). ART is also needed for prevention of mother-to-child transmission of HIV.

Cocaine and ATS have been associated with faster disease progression in people living with HIV, due to weakening of the immune system by the drugs. However, if adherence is maintained, the effectiveness of ART is not reduced in people who use stimulant drugs: ART reduces viral load and improves immune function, just as it does for other people living with HIV [77].

All frontline practitioners and all people enrolled in ART must understand how the treatment works, possible interactions with stimulant drugs (including side-effects and the risk of overdose), and the benefits and limitations of ART.

Strategies to support adherence to ART, including peer and outreach support, are described in section 3.1.

### Side-effects of antiretroviral drugs and interactions with stimulant drugs

As with many medications, ARVs have been associated with various side-effects, including acute or chronic alterations of the renal function, or hepatic dysfunction. Some medications can cause side-effects in the central nervous system, such as depression.

Liver toxicity is one of the most commonly reported adverse consequences associated with ARVs. This can range from asymptomatic elevation of the liver enzymes to a hepatic failure. Risks for ARVrelated adverse consequences for the liver are higher in cases of cocaine use, excessive alcohol use, coinfection with HBV or HCV, fibrosis of the liver, concomitant treatment for TB and advanced age.

### Impact of stimulant drugs on antiretroviral drug serum level

Cocaine, mephedrone and methamphetamines interact with several ARVs, influencing the serum level of the medications and the risk of side-effects. As scientific knowledge progresses, new ARV regimens may be proposed, with the potential for interactions with the NPS that are frequently appearing on the market. The University of Liverpool provides a regularly updated website on HIV medication interactions, including the interaction of ARVs with stimulant drugs:

 $https://www.hiv-drug interactions.org/treatment\_selectors.$ 

### Impact of antiretroviral drugs on serum level of stimulant drugs

Serum levels of methamphetamines may increase up to three times when used by someone who is also taking protease inhibitors, especially ritonavir. Fatal cases attributed to inhibition of the metabolism of MDMA and amphetamines by ritonavir have been reported.

### Oral pre-exposure prophylaxis

Oral pre-exposure prophylaxis (PrEP) is the use of antiretroviral medications to prevent the acquisition of HIV infection by uninfected persons. WHO recommends daily oral PrEP as a prevention choice for people at substantial risk of HIV [91]; it can be stopped during periods of low or no risk. Taken as prescribed, PrEP can reduce the risk of getting HIV from sex with an HIV-positive person by more than 90 per cent [92]. PrEP has been effective in communities where the primary vector for transmission is sexual, such as men who have sex with men, and is therefore appropriate for people who use stimulant drugs. PrEP does not replace HIV prevention interventions, such as comprehensive condom programming for sex workers and men who have sex with men. It does not prevent transmission of hepatitis and other STIs.

Services for people who inject stimulant drugs should prioritize evidence-based comprehensive HIV prevention interventions, including NSP, condoms and lubricants. For men who have sex with men who use stimulant drugs and engage in high-risk sex, PrEP should always be proposed, whether or not the individual injects drugs.

Adherence to PrEP is essential, and it may be challenging for people using stimulant drugs for several days in a row. People who use stimulant drugs and engage in concurrent sex should be encouraged and supported to plan ahead to use condoms, lubricants and PrEP in combination, to ensure better protection against HIV and to prevent other STIs, including hepatitis C and B.

As with other prevention tools, the effectiveness of PrEP is optimized when interventions are implemented by, and in close consultation with, prospective beneficiary communities.

### Further resources

Implementation tool for pre-exposure prophylaxis (PrEP) of HIV infection (WHO, 2017) [93]

### Post-exposure prophylaxis

Post-exposure prophylaxis (PEP) is the administration of ARVs for a short term (one month) to prevent HIV infection after exposure to HIV through unprotected sex or contact with blood. PEP should be offered to all individuals who have potentially been exposed to HIV, whether through unprotected sex (including sexual assault), needle-stick injury or sharing drug injection equipment. It should be initiated as early as possible, ideally within 72 hours.

People who use stimulant drugs and engage in sex concurrently are known to often have multiple sexual partners. The chances of unprotected sex or condom failure are increased with stimulant drug use or with the increase in the number of partners. A participative stakeholder process should lead to the development of protocols for community access to PEP, from local to national levels, to ensure that the required medications are promptly accessible and are used by those who need them. People who use stimulant drugs and who access PEP regularly should be assessed as likely candidates for PrEP.

### Further resources

*Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection. Recommendations for a public health approach - Second edition* (WHO, 2016) [162]

# 2.5 Evidence-based psychosocial interventions and drug dependence treatments

The impact of a drug is determined by the complex interactions between the substance, set (the mindset of the individual) and setting (the context), which mediate the drug's effect and its associated impact on the individual, including the move towards dependent or high-risk drug use [94]. The great majority of people who use stimulant drugs do so on an occasional basis that may be characterized as "recreational", and they will not develop dependence. This group has little need for high-intensity interventions. This section provides an overview of possible interventions, mainly psychosocial ones, that show effectiveness specifically for reducing risk behaviours and provide support for people who regularly use stimulant drugs, including people living with HIV. The treatment of cocaine or ATS drug dependence requires time-intensive approaches that are not addressed here. Unlike the treatment of opioid dependence, there are currently no substitution medications available to treat dependence on cocaine or ATS [95][96]. Some emerging practices around dispensing dexamphetamine as a substitute for cocaine or methamphetamine dependence have shown early promise, but further research is needed.

Behavioural interventions, self-regulation coaching and psychosocial counselling can support HIV/HCV prevention and treatment objectives for people who use stimulant drugs, while also contributing to longer-term and broader health and wellness goals. There is evidence that brief interventions that concentrate on providing information about safe behaviours and harm mitigation are effective in moderating drug-related harms [97] and maintaining ART adherence for those who are living with HIV [98].

Motivational interviewing, contingency management and brief interventions for dependence to stimulant drugs can reduce drug-related high-risk sexual behaviours and increase adherence to ART and PrEP.

Addressing the potential risks associated with the nexus of drug use and HIV requires individual, structural and combination approaches [99]. Psychosocial services such as motivational interviewing, brief interventions, contingency management and cognitive behavioural therapy are critical to effectively support HIV prevention and treatment among people who use stimulant drugs. Some of these approaches are described below. A 2016 review of psychosocial interventions for stimulant drug-use disorders found that all showed improved retention in ART compared with no intervention, although no single intervention showed a sustained benefit over the others [100].

Psychosocial services should be based on principles of community inclusion and participation, peer support and the needs of the individual. When developing HIV prevention interventions, it is important that sexual partners of people who use stimulant drugs be included in the process, focusing on the HIV risks that are associated with drug use and concurrent sexual behaviours.

### Motivational interviewing

Motivational interviewing is a person-centred, semi-directive approach for exploring motivation and ambivalence in order to facilitate self-motivational statements and behavioural changes. It consists in establishing a partnership between the provider and the individual and enabling the individual to become aware of the discrepancy between their present situation and their own values. The technique relies on four principles: express empathy, develop discrepancy, roll with resistance and support self-efficacy. These can easily be used by trained non-specialist staff, including outreach workers, in formal or informal counselling, IEC and other conversations. Motivational interviewing generally requires just one or two sessions. The success of motivational interviewing has led to its implementation as a "catch-all" approach to eliciting change in areas such as medication compliance, smoking cessation and diet and exercise [101]. A 2012 Cochrane review suggested that motivational interviewing could reduce risky sexual behaviour, and in the short term lead to a reduction of viral load in young people living with HIV [102]. Research has shown that motivational interviewing can reduce the incidence of unprotected anal intercourse among men who have sex with men [103], as well as levels of drug use [104].

### **Brief interventions**

Brief interventions are short, often opportunistic interactions in which a health worker provides targeted information and advice to individuals during other activities such as distributing sterile injecting equipment or conducting an HIV test. Brief interventions have been shown to reduce drug use as well as associated risks and sexual risk behaviours. Meta-analyses suggest that there is little difference in the outcomes between longer, more intensive interventions and brief interventions, and the latter are likely to be more practical and cost-effective options, with few barriers to implementation [105].

### **Contingency management**

Contingency management is an approach that incentivizes people with rewards such as cash that are contingent on achieving a set of pre-defined outcomes. Contingency management has been shown to have a moderate yet consistent effect on drug use across different classes of drugs [106]. The effectiveness of contingency management supports the idea that small, regular rewards motivate people to modify behaviours that could be considered harmful. Positive regard, and the client's own expressed belief in their ability to achieve goals, are a critical factor in improving agreed-upon outcomes.

#### Cognitive behavioural therapy

Cognitive behavioural therapy (CBT) is a structured approach to counselling that assumes that behaviours are learned and reinforced as a result of cognitive constructs and deficits in coping. The aim of CBT is to "unlearn" behaviours considered unhelpful, such as HIV risk behaviour or certain patterns of drug-taking. While results appear to be sustained over a period, CBT is intensive and time-consuming, and demands specialist practitioners and individual treatment [107].

### Mindfulness

Mindfulness can be defined as the ability to focus open, non-judgemental attention on the full experience of internal and external phenomena, moment by moment. Positive outcomes – including reducing drug use and risk behaviours, and in relapse prevention – have been documented from mindfulness training as part of approaches to reduce harm, including for people who use stimulant drugs [108][109][110].

### Opioid substitution therapy and stimulant drug use

People receiving opioid substitution therapy (OST) for heroin or other opioid dependence may use stimulant drugs because of OST-triggered fatigue, inability to experience pleasure, or the desire to remain connected to the community of people who use drugs. OST is not designed to counter stimulant drug use, and the concurrent use of stimulant drugs while on OST should not be viewed as a breach, nor should it lead to the reduction or discontinuation of OST. The benefits of OST are independent of stimulant drug use [111]. Existing OST providers should be sensitized to this and trained to use the opportunities afforded by regular OST and client engagement to support the delivery of interventions included in this guidance.

#### Further resources

mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings (WHO, 2010) [112] Therapeutic interventions for users of amphetamine-type stimulants (WHO, 2011) [113] Harm reduction and brief interventions for ATS users (WHO, 2011) [114] Guidelines for the management of methamphetamine use disorders in Myanmar (Ministry of Health and Sports, Myanmar, 2017) [115] Guidance for working with cocaine and crack users in primary care (Royal College of General Practitioners, 2004) [116] Principles of drug dependence treatment (UNODC, WHO, 2008) [117] Drug abuse treatment and rehabilitation: a practical planning and implementation guide (UNODC, 2003) [118] TREATINET quality standards for drug dependence treatment and care services (UNODC, 2012) [111] Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence (WHO, 2009)[163] Treatment of stimulant use disorders: current practices and promising perspectives. Discussion paper (UNODC, 2019)[164]

# 2.6 Prevention, diagnosis and treatment of sexually transmitted infections, hepatitis and tuberculosis

Screening people who use stimulant drugs for infectious diseases, such as sexually transmitted infections (STIs), HBV, HCV and TB, is a crucial part of a comprehensive approach. Along with HIV, these infections are often associated with the use of illicit substances, and they may co-occur with stimulant drug use.

#### Prevention, diagnosis and treatment of sexually transmitted infections

Unsafe sex can lead to acute STIs, which can cause infertility and severe illness. Several STIs, particularly those involving genital or perianal ulcers, may facilitate the sexual transmission of HIV infection. Sex workers, transgender people and men who have sex with men are often at increased risk of STIs such as syphilis, gonorrhoea, chlamydia and herpes. It is therefore important to offer information, male and female condoms and lubricant, and screening, diagnosis and treatment of STIs and possibly HPV vaccine to people using stimulant drugs who are vulnerable to STIs and HIV.

#### Further resources

*Resources on sexually transmitted and reproductive tract infections* (WHO webpage providing clinical, policy and programmatic, monitoring and evaluation and advocacy guides) [119]

#### Prevention, vaccination, diagnosis and treatment of hepatitis B and C

People who inject stimulant drugs are at heightened risk of acquiring HBV and HCV because of frequent injecting and sharing of injection equipment. The risk of sharing equipment is higher when injecting happens in communal settings. HCV is much more virulent than HIV and can survive outside the body at room temperature, on environmental surfaces, for up to three weeks [120], making it more easily transmitted through the sharing of syringes and other injecting paraphernalia. Key populations who use stimulant drugs should be offered hepatitis B or hepatitis A-B vaccination, access to prevention commodities, and voluntary screening and treatment of HBV and HCV.

#### Prevention

NSPs and community mobilization initiatives should distribute relevant equipment, including low dead-space syringes, for injecting, smoking and snorting (see section 2.2). Male and female condom programming is also part of hepatitis B and C prevention interventions as well as sexual and reproductive health services. Education should include messages on the risks of serosorting, and of intense sexual practices involving potential trauma of the mucosa for HCV acquisition and transmission among people living with HIV [50].

#### Hepatitis A and B vaccination

Key populations should be offered the series of HBV immunizations. WHO recommends:

- Offering people the rapid hepatitis B vaccination regimen (days 0, 7 and 21-30).
- Providing people who inject drugs with incentives in order to increase hepatitis B vaccination adherence, at least for the second dose. Even partial immunization confers some immuno-protection. [87]

Hepatitis A (HAV) immunization or combined HAV-HBV immunization should be offered to men who have sex with men and people using stimulant drugs [121].

Immunization should be easily accessible and offered at locations and venues frequented by people who use stimulant drugs, such as drop-in centres, NSPs and other community service outlets.

#### Screening for HBV and HCV

Voluntary screening for HBV and/or HCV should be offered to people who use stimulant drugs at risk of these infections. Testing and diagnosis of HBV and HCV infection is an entry point for accessing both prevention and treatment services. Early identification of persons with chronic HBV or HCV infection enables them to receive the necessary care and treatment to prevent or delay the progression of liver disease. Rapid tests for hepatitis C allow for better access to diagnosis, including community-based testing.

#### Treatment of chronic hepatitis C or B

All people with chronic hepatitis C should receive treatment. With an 8- to 12-week course, directacting antivirals (DAAs) cure more than 95 per cent of persons with HCV infection, reducing the risk of death from liver cancer and cirrhosis. For chronic hepatitis B, antiviral treatment can slow down the progression of cirrhosis and reduces the risk of liver cancer [162].

People who are actively injecting drugs have been shown to adhere to HCV treatment regimens as wellas any other population, particularly when social, emotional and practical support are provided [122]. All people who use stimulant drugs living with HCV should therefore be offered access to direct-acting antivirals without discrimination.

#### Further resources

*Guidance on prevention of viral hepatitis B and C among people who inject drugs* (WHO, 2012) [87] *Guidelines for the screening, care and treatment of persons with chronic hepatitis C infection* (WHO, 2016) [123] *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection. Recommendations for a public health approach - Second edition* (WHO, 2016) [162]

#### Prevention, diagnosis and treatment of tuberculosis

In 2016, 10.4 million people fell ill with TB. It is a leading killer of people living with HIV: in 2016, 40 per cent of HIV deaths were due to TB [124].

Transmission of TB is easily facilitated through airborne particulates, such as by kissing, coughing, sneezing or shouting. TB is easily spread in prisons and other closed settings, and in crowded and poorly ventilated spaces, such as are often found in poor communities or among homeless people.

People who inject drugs are at increased risk of TB, irrespective of their HIV status, and TB is a leading cause of mortality among people who inject drugs who also have HIV infection [125]. People who use drugs who do not inject have also been found to have increased rates of TB. Certain subgroups of stimulant drug users, such as those who use stimulant drugs regularly for days at a time, may be immuno-deficient from lack of sleep and food, facilitating TB transmission. It is therefore important to include TB prevention, screening and treatment in communities and services.

#### Further resources

*Integrating collaborative TB and HIV services within a comprehensive package of care for people who inject drugs: consolidated guidelines (WHO, 2016) [125]* 

#### 2.7 Targeted information, education and communication

To reduce the risk of acquiring STIs or HIV, people who use stimulant drugs need knowledge and support. Information, education and communication (IEC) provides information, motivation, education and skills-building to help individuals adopt behaviours that will protect their health.

Effective communication for health targeting people who use stimulant drugs requires addressing two challenges:

- Crafting messages that can overcome long-standing distrust and fear.
- Finding effective means of reaching people who use stimulant drugs with life-saving messages and materials.

Key to meeting these challenges is meaningful engagement with the target audience of people who use stimulant drugs. Communities should be represented at every stage of IEC development, including the overall strategy and concept, and the development, testing, dissemination and evaluation of messages. Working with the community will help ensure that tools and materials are accurate and will be trusted

and used. Recipients of IEC who have invested their own ideas and time in it will be more likely to stand behind the results and be active participants, not only in their own health but in health promotion in their community.

Materials must be easily understandable and to the point. Interactive materials on a digital platform can tailor messaging to the specific situation of the service user and are often helpful in maintaining attention. On the other hand, traditional printed materials have the advantage of not requiring computer, phone or Internet access. They also provide an opportunity for outreach workers or other programme staff distributing the materials to interact with the service users, and a means for service users to easily share information with others. Given the variety that exists among people who use stimulant drugs, messaging should take into account the sex, gender, sexual orientation, age and setting of recipients of IEC. Literacy levels, social and community inclusion or exclusion, and other cultural and societal variables must also be considered.

#### Using information technology to support behavioural interventions

Online and social media can be a cost-effective manner of reaching targeted audiences. A local assessment can show where using these technologies will be advantageous and appropriate. Free WiFi at drop-in centres and other community points of congregation provides opportunities for access and use. Where people who use stimulant drugs have smartphones, websites and apps can be deployed just as they have been to reach other key populations.

The use of technology has shown promising results in promoting sexual health or adherence to ART in different settings, including resource-limited settings [126][127]. Web-based applications provide an opportunity to reach a large audience at any time and provide information on health and available services. They also allow for online outreach and interactions with people who wish to discuss problems or have questions.

However, when the information relates to drug use, or other criminalized behaviours, the use of some digital media raises concerns about the anonymity of the contacts, and possible risks related to law enforcement must be addressed. Working with communities and low-threshold service providers will help inform the local potential for digital materials and campaigns and help ensure the security of people accessing information.



## Box 6. Web-based health-check screening tool for people who use ATS in Australia

Web-based health-check tools for people who use stimulant drugs (ketamine, mephedrone and methamphetamine) were developed by a peer-based organization in Australia with the support of St Vincent's Health Australia.

See also section 2.1, box 2.

#### Further resources

The European Centre for Disease Prevention and Control (ECDC) has developed guidance documents for the effective use of social media. While the tools were developed for Europe, and specifically for reaching men who have sex with men, they provide guidance on the relative advantages of different media, such as Facebook, online outreach, Google Ads, SMS and YouTube, that may be useful in other contexts.

*Effective use of digital platforms for HIV prevention among men who have sex with men in the European Union/European Economic Area: an introduction to the ECDC guides* (ECDC, 2017) [128]

#### 2.8 Overdose and acute intoxication prevention and management

Very high doses of stimulant drugs consumed in a short amount of time can trigger acute respiratory distress, chest pain, palpitations or myocardial infarctions [112]. In extreme cases this can result in cardiac arrest. The first signs of stimulant drugs intoxication are hyperactivity, rapid speech and dilated pupils.

In the case of polydrug use, overdose can be the result of the combination of stimulants with other drugs including opioid or sedative drugs.

The treatment of stimulant drugs intoxication is symptomatic and requires regular monitoring of blood pressure, pulse rate, respiratory rate and temperature (figure I.).

Serotonergic syndrome is caused by an excess of serotonin in the central nervous system associated with the use of ATS. It can result in uncontrollable muscle spasms, tremor, seizures, psychosis, high blood pressure, high body temperature >40 $^{\circ}$ C (hyperthermia) and release of myoglobin from muscles and blood clotting in vessels (disseminated intravascular coagulation), which may lead to severe diseases and potentially death.

People who use stimulant drugs need to be informed on how to reduce the risks of acute intoxications (see the Information checklist for self-care and stimulant drugs in the annex). For people on PrEP, ART or hepatitis treatment, information should be provided on the interactions and possible risks of cocaine and ATS use to serum levels (see section 2.4).

People who use stimulant drugs should be trained to recognize overdoses, provide first aid, including cardiopulmonary resuscitation (CPR) and call immediately for emergency professional assistance if they witness an overdose.

#### Further resources

Harm reduction and brief interventions for ATS users (WHO, 2011) [114] mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings (WHO, 2010) [112] Community management of opioid overdose (WHO, 2014) [166]

#### Figure I. Management of emergency cases of intoxication with stimulant drugs

Is the person in a state of acute stimulant intoxication or overdose?

- Dilated pupils
- Excited, racing thoughts, disordered thinking, paranoia
- Recent use of cocaine or other stimulants
- Raised pulse and blood pressure
- Aggressive, erratic or violent behaviour

Adapted from: WHO mhGAP intervention guide - version 2.0 (2016)

- ----> Urgent call the ambulance or take the person to an emergency clinic
- ----> Make the person drink a lot of fluid
  - For health-care workers:
- ----> Give diazepam 5-10 mg orally or i.v. in titrated doses until the person is calm and lightly sedated
- ----> During the post-intoxication phase, be alert for suicidal thoughts or actions

If the person has chest pain, tachyarrhythmias or other neurological signs:

----> Transfer to hospital

# Chapter 3

# Care and support for people who use stimulant drugs

To improve health outcomes and limit transmission of HIV, HCV, HBV and TB, it is essential that prevention and treatment programmes are accessible, that treatment regimens are adhered to, and that sex and drug use are made safer by protective interventions.

The specific care and support provided should take into account different types of stimulant drug use, different population groups, and varying economic, legal and social contexts.

Offering access to social services and support services, including peer-to-peer support services and outreach services, is essential in order to provide people living with HIV who use stimulant drugs with the resources to adhere to ART and prevent HIV transmission.

#### 3.1 Supporting adherence to antiretroviral therapy

Many people who use stimulant drugs do not access the health services, education, care and social support services they need, and people living with HIV who use stimulant drugs are too frequently not accessing antiretroviral therapy (ART). A study in Cambodia among female sex workers found that those who used stimulant drugs were 91 per cent less likely to be retained in HIV care than those who did not use stimulant drugs [129]. Women who use stimulant drugs and are living with HIV who are also mothers or pregnant face multiple stigmas, as well as serious physical, social and economic challenges to accessing sexual and reproductive health care. Therefore, at pre- and postnatal clinics attention should be given to ensuring access to ART as part of a comprehensive prevention of mother-to-child transmission (PMTCT) programme.

To ensure access to ART for people who use stimulant drugs, services must be user-friendly, genderresponsive, non-judgemental, physically accessible and flexible enough to be adapted to the needs and lifestyle of people who use stimulant drugs. Outreach workers, including trained peer educators, play an important role in helping people living with HIV who use stimulant drugs to begin and adhere to ART. For example, they can accompany the individual to the ART clinic and serve as a navigator, guiding the person across the relevant health services and to services outside the health sector, such as housing or legal services.

To respond to the specific challenges raised by people living with HIV who frequently use stimulant drugs, innovative IEC strategies are needed. For example, the use of text messages on mobile phones

reminding patients to take their treatment has been shown to improve patient outcomes in resourcelimited settings [130], and this could be applied to people who use stimulant drugs (see box 7).

Combining services can also increase access to ART. This could mean providing men who have sex with men living with HIV and their potential partners with counselling on safer sex and drug use, along with rapid access to non-judgemental testing, access to PEP and to PrEP (for partners), and rapid referrals to STI and HIV treatment. Accurate knowledge about HIV treatment has been shown to lead to better adherence and to safer sex behaviours.

People living with HIV who use stimulant drugs should be supported to adhere to ART by psychosocial interventions (see section 2.5), participating in group support activities, mobilizing support networks and, if possible, discussing their stimulant drug use with a supportive health professional. They should not be excluded from services because they continue using drugs, but the interactions of those drugs with ART should be explained to them to encourage them to reduce the risks.

## Box 7. Text messaging reduces HIV risk behaviours among methamphetamine-using men who have sex with men

Social support	Informational support	"Did he give you a STI? Here's where to go."
		"Take care of your body, get vaccinated for hep A and B."
	Emotional support	"Screw your partner, not your life."
		"You're worth a new needle."
	Instrumental support	"ATS brings you down, meds bring you up."
		"Pack your socks with condoms and lube."
Health belief	Health threat	"You could have a STD drip?"
		"ATS can take your teeth."
	Health behaviours to reduce risk	"Don't be a statistic, take your meds."
		"Inject clean, an abscess is a hot mess."
	Awareness of health risks	"50% of men with Chlamydia have no symptoms."
		"Using ATS in public can be risky."
Social cognitive	Self-regulation skills	"Weekends getting longer and longer?"
		"Don't have an open sores relationship."
	Self-efficacy	"Say 1 <sup>st</sup> thing you're positive. You can do it."
		"You can take your meds, even when you party."

Theory-based messaging content was delivered several times each day by peer health educators to methamphetamine-using men who have sex with men in Los Angeles County, United States. The two-week intervention pilot of Project Tech Support was mediated by health educators, with up to four text-message conversations per day, consisting of up to 20 text messages each way per conversation. Significant reductions in methamphetamine use and sexual risk behaviours were found at two-month follow-up evaluations.

Source: Reback et al, 2012 [131]

#### Further resources

Further information on community-led outreach to specific key populations can be found in the IDUIT, MSMIT, SWIT and TRANSIT.

Differentiated service delivery for HIV: A decision framework for differentiated antiretroviral therapy delivery for key populations (IAS, 2018) [167]

International AIDS Society (IAS) special website on Differentiated Service Delivery https://www. iasociety.org/Differentiated-Service-Delivery.

#### 3.2 Sexual and reproductive health care

People who use stimulant drugs need access to sexual and reproductive health information and services, including STI diagnosis and treatment, family planning, and screening and treatment for cervical and/ or rectal cancers.

The anal administration of stimulant drugs increases the risks of anorectal trauma, especially when coupled with long, intense sexual sessions.

Pregnant and nursing women living with HIV need non-discriminatory access to pre- and postnatal clinics, PMTCT services for HIV, syphilis and hepatitis, and information and support during pregnancy and after delivery.

#### 3.3 Mental health care

People who use stimulant drugs may have a wide range of mental health needs related to the drugs themselves, to stress or other personal situations, linked to HIV infection or to some ARVs. High doses of stimulant drugs and extended periods of using, long periods without sleep, and periods of malnourishment can result in paranoia, severe depression or attempted suicide, especially after the effects of stimulant drugs wear off. Dependence and chronic use of methamphetamines is probably associated with "methamphetamine psychosis", which requires emergency mental health care.

#### 3.4 Socioeconomic support

Socioeconomic support as part of the psychosocial milieu is often minimized, but it is at the core of a comprehensive HIV prevention programme. Services should strive to create an environment that facilitates protective behaviours, ART adherence and achieving viral suppression. For example, people who are without stable accommodation are more likely to engage in a variety of HIV-risk-related behaviours [132] and to have a detectable viral load [99]. The provision or facilitation of housing and other social services has been shown to have a significant positive impact on both HIV and drug-related measures [133]. Employment has also been shown to improve outcomes [134].

## Box 8. Comprehensive social and health support to homeless people using crack: the De Braços Abertos Programme

Launched in January 2014 by the municipality of São Paulo, Brazil, the De Braços Abertos ("With Open Arms") programme aimed to socially reintegrate people using crack and homeless people living in an area of the city known as Cracolândia ("Crackland"), and to restore their quality of life. The area was experiencing high rates of violence, and an increasing number of people were using crack in the street.

In contrast to the long-standing attempt to restore public security through a repressive approach, the project adopted a health-oriented and human-rights-based approach, focusing on addressing the rights of people to housing, food, income and health. All beneficiaries were offered three meals a day, training and a small weekly allowance of 130 reais (USD 40) in exchange for 20 hours of work such as gardening or street-cleaning. A mobile unit (tent) was established in the area, offering health care, social assistance, workshops and socio-cultural activities, according to the demands of the community.

Health care included low-threshold drug treatment provided by a multidisciplinary team. All women could access gynaecological services. Rapid testing for HIV and syphilis was provided through the mobile clinic, and people who tested positive (4 per cent for HIV and 26 per cent for syphilis) were referred for treatment. Drug-dependence treatment supported participants in increasing their self-care and reducing substance use at their own pace and by their own choice. The programme had a strong community- and peer-based component that allowed it to develop services tailored to the needs of the community, such as safer spaces for crack/cocaine smoking.

The programme rapidly demonstrated a positive impact, delivering more than 10,000 health interventions within two months, and leading to a reduction of 50-70 per cent in crack use among participants. At the same time, public safety improved significantly in the area, with a 50 per cent reduction in the number of crimes observed during the first six months of the programme.

By December 2014, the programme had assisted 500 people, of whom 50 were living with their families again, 20 had a formal employment contract, 42 had been trained and were working in the public park, and 80 were receiving mental health care. Many beneficiaries reported that stable housing and employment improved their quality of life, minimizing conflict and reducing problematic use of crack. The evaluation also highlighted that community-based interventions with a strong peer-education component were essential to address the cultural specificities and the needs of the communities.

#### Further resources

mHGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings (WHO, 2010) [112]

*Guidelines for the management of methamphetamine use disorders in Myanmar* (Ministry of Health and Sports, Myanmar, 2017) [115]

Harm reduction and brief interventions for ATS users (WHO, 2011) [114]

Good practice guide for employing people who use drugs (International HIV/AIDS Alliance, CoAct, 2015) [135]

# Chapter 4

## **Critical enablers**

Critical enablers are strategies, activities and approaches that are necessary to support the effectiveness and efficiency of core programme interventions. They are based on the insight that provision of services for people who use stimulant drugs often occurs within a legal and policy environment that fosters significant levels of stigma, discrimination, fear and violence, sometimes exacerbated by poverty and racism. These factors increase vulnerability to HIV and hepatitis by creating barriers to accessing health services, which results in low access to information, low uptake of HIV prevention services, late HIV testing, late treatment and low adherence to treatment. Critical enablers are needed to address the following issues:

- Structural barriers such as criminal sanctions for non-disclosure of HIV status, HIV exposure
  or transmission, drug use, same-sex relations or sex work create a fear of arrest and prosecution
  that prevents some people who use stimulant drugs from accessing health services.
- Forced abortions and forced sterilization of women who use stimulant drugs, and fears of losing child custody, deter women, pregnant women and mothers from seeking health services, including sexual and reproductive health services and child care.
- Young people who use stimulant drugs, if minors, may face legal barriers to accessing HIV services related to the age of consent.
- In many countries, laws or policies consider possession of HIV prevention commodities such as needles and syringes or condoms as evidence of using drugs or engaging in illegal sex work. This increases vulnerability to HIV by discouraging people from using sterile injection equipment or condoms.

This chapter considers six critical enablers. The adoption of supportive practices by law enforcement officers, the police and prison officers, and access to justice are cross-cutting issues for all these enablers.

#### Further resources

IDUIT, MSMIT, SWIT and TRANSIT Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations – 2016 revision, Chapter 5: Critical enablers (WHO, 2016) [8]

#### 4.1 Supportive laws and policies

All relevant United Nations bodies have endorsed a comprehensive package for HIV prevention and treatment for people who inject drugs as described in the *WHO/UNODC/UNAIDS technical guide* [7], which lists needle and syringe programmes as the first priority intervention. The comprehensive package is also reflected in the UNGASS 2016 Outcome Document [136], which calls for "effective measures aimed at minimizing the adverse public health and social consequences of drug abuse, including appropriate medication-assisted therapy programmes, injecting equipment programmes, as well as antiretroviral therapy and other relevant interventions that prevent the transmission of HIV, viral hepatitis and other bloodborne diseases associated with drug use".

National and subnational laws and policies should be reviewed and, where necessary, reformed to ensure they are supportive of interventions to improve the health of people who use drugs, including those who use stimulant drugs.

Effectively addressing drug use as a public-health issue requires that criminal justice sanctions be removed or mitigated so that they do not create more social and health problems for people who use drugs, their families and, by extension, the wider community. Alternatives to incarceration and punishment for drug use or drug possession for personal consumption would substantially reduce the structural barriers to the provision of health care, including HIV services for people who use stimulant drugs.

Supportive laws that do not impose criminal sanctions on key populations will also reduce the risks undertaken by peer outreach workers and other health workers delivering education, outreach, community mobilization, NSPs, condoms, and other recommended low-threshold HIV services.

Laws and policies should make provisions against stigma and discrimination within health and social sectors. They should allow for the distribution of HIV and hepatitis prevention information along with specialist drug paraphernalia – such as needles and syringes and the extended range of injecting equipment, and straws, crack or methamphetamine pipes for stimulant drugs – to reduce the risks of HIV or hepatitis transmission.

#### Box 9. Reforming drug policy through a consultative process in Myanmar



While opium use is a significant issue in Myanmar, the country is also one of the largest methamphetamine producers in the world. It has an estimated 80,000 people who inject drugs (mainly heroin), 30 per cent of whom are living with HIV. There is a lack of reliable data on methamphetamine use, but it has been identified as a growing health problem, and the number of people seeking treatment has increased for each of the last six years.

Until 2017, the government of Myanmar implemented a repressive drug-control plan aiming at achieving a "drug-free country". The policy addressed drug use primarily as a crime, and people who used drugs were sentenced to imprisonment (making up 48 per cent of the country's 70,000 prisoners) or could be sent to compulsory treatment centres. People who use drugs in Myanmar face high levels of stigma and social exclusion, and have poor access to health services.

In 2015 UNODC supported a consultation on amending Myanmar's Narcotic Drugs and Psychotropic Substances Law. The changes suggested by the participants included removing compulsory registration for drug users, switching from imprisonment to drug treatment, reducing penalties for minor offences and including the harm reduction approach in the law. United Nations also recommended removing the death penalty for drug-related criminal offences. In September 2016, after an intergovernmental meeting and briefing for Members of Parliament, a roadmap to revise the drug policy was developed under the leadership of the Central Committee for Drug Abuse Control (CCDAC), which invited interested CSOs to take part in the process. More than 150 governmental and nongovernmental organizations, stakeholders and experts from sectors including health and social care, law enforcement, academia, education, psychology and rural development provided input through three rounds of consultation.

The new policy was launched by the Government and UNODC on 28 February 2018. It references international best practices and is aligned with the approach of the UNGASS 2016. The policy recommends a health-based approach with a focus on prevention and harm reduction, and it advocates that "structural reform is required to reduce the negative consequences associated with drug use and to promote alternatives to imprisonment for drug offenses." The policy identifies that drug services need to be expanded to address methamphetamine use and other drug-related harms, and that community-based treatment and services for people who use drugs should be increased. It also proposes transitioning from mandatory to voluntary drug treatment systems.

See also: Myanmar's National drug control policy (Ministry of Health, Myanmar, 2018) [137]

# 4.2 Empowering the community and meaningful community engagement

Health policies and programmes are more effective and have a more positive impact on health outcomes when affected populations take part in their development [138]. Community empowerment is the process whereby people who use drugs, and other key populations, are supported to address for themselves the structural constraints to health, human rights and well-being that they face, and improve their access to services, including to reduce the risk of acquiring HIV and HCV, and to provide treatment and care for those living with HIV, HCV and other health problems. Community action can:

- Mobilize demand for services
- Increase access for people who are difficult to reach through formal health systems
- Support health systems strengthening
- Mobilize political leadership
- Change social attitudes and norms
- Create an enabling environment that promotes equal access to services

The 2016 United Nations Political Declaration on Ending AIDS affirms the critical role of communities in advocacy, participation in the coordination of HIV responses and service delivery. It further recognizes that community responses to HIV must be scaled up, and that at least 30 per cent of services should be community-led by 2030. Similarly, the UNGASS 2016 Outcome Document recommends intensifying the meaningful participation of CSOs, and supporting and training them (136). Figure II. provides an overview of the role of the community in the response to HIV and HCV.

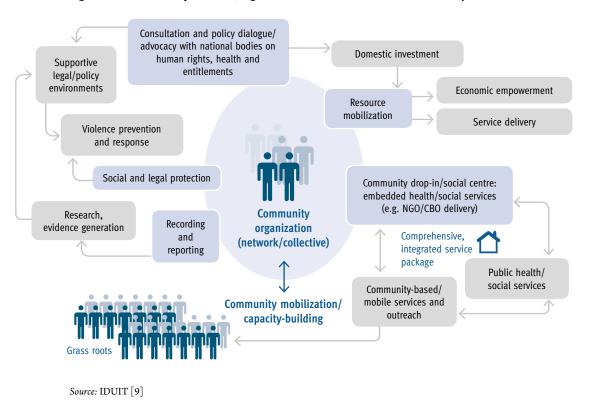


Figure II. A community-focused, rights-based framework for HIV and HCV prevention

#### 4.3 Addressing stigma and discrimination

When people who use drugs are also members of other key populations, they are likely to face additional stigma and discrimination from wider society and their local communities, as well as self-stigma. They may also be stigmatized within their own key population community, if drug use is viewed disapprovingly by their peers.

Stigma and discrimination against people who use stimulant drugs occurs in the general community, the health sector (including in HIV and drug-treatment services), law-enforcement agencies and the judicial system. Interventions to reduce stigma and discrimination need to be developed tailored to each of these sectors. Suggested activities include:

- Assess the extent and nature of stigma and discrimination against key populations who use stimulant drugs, among health professionals, social services, community-based and other low-threshold HIV services, and the police. Engage with communities of people who use drugs to understand and define their needs for services.
- Sensitize health- and social-care professionals to reduce stigma and discrimination against people who use stimulant drugs.
- Build the capacity of health workers, including community health workers, to address the specific needs of people who use stimulant drugs. Within services for people who use stimulant drugs, this means building capacity to provide information tailored to the needs of different key

populations. At clinics serving men who have sex with men, sex workers or transgender people, or medical facilities for people in prisons, it means building capacity to provide HIV prevention information and services specific to the context of stimulant drug use. In both cases, services should be user-friendly and adapted to the lifestyle, gender and age of the population they serve (with regard to opening hours, outreach, mobile clinics, etc.).

- Sensitize police on the crucial role their attitude and practices play in the response to the HIV epidemic among key populations, and build their capacity to adopt supportive practices.
- Provide legal literacy and legal aid through low-threshold services to raise the awareness of people who use drugs on their rights and access to legal aid to address family, employment, housing or criminal law cases.
- Support community-based organizations to develop and implement effective approaches to
  reducing stigma and discrimination within key populations, including self-stigma, and to support
  individuals in challenging stigma and discrimination.

#### Further resources

Training manual for law enforcement officials on HIV service provision for people who inject drugs (UNODC, 2014) [139]

Joint United Nations statement on ending discrimination in health-care settings (2017) [140]

#### 4.4 Alternatives to arrest and incarceration

People should not be incarcerated for using drugs. It is ineffective and expensive and deters people who use stimulant drugs from accessing the health services they need. People who use stimulant drugs should instead be diverted to health promotion or drug services, including HIV prevention and treatment services.

Law enforcement, and especially police, plays a key role in the lives of people who use stimulant drugs. Capacity-building, partnership-building and sensitization training are key strategies to support law-enforcement agencies to adopt policies and practices which facilitate access to evidence- and human-rights-based HIV services.

Forming a partnership between police and HIV harm reduction services, including drug treatment services, and communities of people who use drugs and other key populations can be effective in establishing a diversion scheme to prevent people who use drugs from being arrested. Guidance on how to establish these services is provided in the *Practical guide for civil society HIV service providers among people who use drugs: improving cooperation and interaction with law enforcement officials* (UNODC, INPUD, LEAHN, 2016)[141].

Providing legal aid to people who use stimulant drugs who have been arrested, including through the assistance of paralegals, can also prevent incarceration and facilitate diversion to alternative measures in the case of minor non-violent crime.

#### 4.5 Preventing and addressing violence

Physical, sexual or psychological violence, including gender-based violence, against highly stigmatized population groups is common and increases the vulnerability of key populations to HIV [142][143]. Women who use drugs, sex workers and transgender women, are particularly vulnerable to violence,

including domestic violence and violence by police. Discriminatory laws banning same-sex contact fuel homophobic violence, which also creates barriers to accessing and using services.

In sex-work premises, the use of stimulant drugs increases the risk of violence against sex workers, including forcing them to use drugs. Under the influence of drugs, sex workers have a reduced ability to assess the safety of situations and to negotiate safer sex.

Measures should be taken to prevent violence and to protect people from being exposed to violence. These can include sensitization and training of police officers; environmental measures such as street lighting; and offering access to safe houses, child care and self-defence for people vulnerable to violence. Community-led initiatives, such as hotlines, are more effective to support victims of violence, including for crisis response.

People who have been the victim of violence should have access to health services such as sexual and reproductive health and HIV services, including PEP, as well as social-protection services, psychological support and legal aid, as needed.

#### 4.6 Closing compulsory drug detention and rehabilitation centres

Compulsory drug detention and rehabilitation centres are used in a number of countries to hold men, women and children suspected of using drugs. Other compulsory detention centres are designed to hold people who have engaged in sex work and children who have been victims of sexual exploitation.

The violation of human rights involved in forced detention without judicial review is compounded by other reported characteristics of these centres, such as poor conditions, forced labour, physical and sexual violence, and lack of access to health care, including HIV prevention and treatment services.

United Nations agencies have advocated in a joint United Nations statement for States to close these centres and to make available voluntary, evidence-informed and rights-based health and social services in the community, including community-based HIV harm reduction services [144]. The provision of community service orders and other non-custodial sentences should be accompanied by the health and human services that people need.

#### Further resources

IDUIT, MSMIT, SWIT and TRANSIT

*Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations – 2016 revision,* Chapter 5: Critical enablers (WHO, 2016) [8]

Advocacy guide: HIV/AIDS prevention among injecting drug users (WHO, UNAIDS, UNODC, 2004) [145] Joint statement on compulsory drug detention and rehabilitation centers. United Nations, 2012 [168]

# Chapter 5

# Implementation considerations

HIV, HCV, HBV, STI and TB interventions for people who use stimulant drugs must be accessible and tailored to the specific needs and concerns of key populations. These may vary according to the drugs that are used, the modes of administration, the settings where drug use occurs, and other concurrent risks and vulnerabilities, and the range of possible communication channels.

Drug use is often a collective activity. Stimulant drug use is associated with other communal activities such as participation in clubs, festivals and sex parties, or at sex-work venues. The transmission of HIV or other bloodborne viruses is therefore largely contingent on communal behaviours and social norms that exist within a wider risk environment. The sexual transmission of HIV among people who use stimulant drugs can be influenced by rules or rituals within a group or subpopulations.

Programmes for people who use stimulant drugs need to consider each population subgroup, both in terms of interventions related to substance use and sexual risk, and to service delivery approaches. Effective programmes for people who use stimulant drugs therefore require detailed, disaggregated data by target population groups for a solid assessment of needs. Undertaking a community consultation with people who use stimulant drugs in different geographic areas and settings (or virtual spaces) provides an opportunity to better understand, document and plan responses to the needs of the group.

#### 5.1 Intersection between groups of people who use stimulant drugs and overlapping risks

Effective HIV programming to address HIV and stimulant drug use requires cooperation and integration between service providers for people who use drugs and other key populations. It also requires overcoming external stigma, including cross-stigmatization among groups.

Services for key populations often operate in silos and lack the resources to address the needs of people outside their specific group. A challenge in delivering HIV services to members of key populations who use stimulant drugs is providing confidential and appropriate services, resources and information by their peers or other providers that are relevant to all the various behaviours they engage in, e.g., using stimulant drugs and practising sex work, or men who have sex with men using stimulant drugs. Most services for men who have sex with men, sex workers or transgender people do not have the specific HIV prevention component needed for people who use crack, amphetamines or methamphetamines. Conversely, HIV harm reduction programmes for people who use drugs mostly lack services responsive to the needs of other key populations. For example, most participants in a study of ChemSex among gay men in London, reported that they had never encountered HIV harm reduction information that related specifically to venues that cater for sex on their premises [146].

The intersectionality between drug use (including injecting drug use) and sex indicates a clear need to integrate drug-related HIV prevention interventions for men who have sex with men who use drugs into sexual health services, and targeted sexual health interventions into HIV harm reduction services, including NSPs.

Correspondingly, NSPs should emphasize information on the risks for sexual transmission of HIV among people who inject drugs, in particular those who inject stimulant drugs.

Although this guide focuses on stimulant drugs, it is important to bear in mind that polydrug use (i.e., the use of stimulant drugs alongside other drugs such as opiates) is common.

HIV service providers and prison authorities should work together to ensure that people who use drugs have access to the same essential services in prison that are available in the community and to ensure continuity of treatments and care between community and prisons. The recommended package of 15 essential HIV interventions<sup>7</sup> for people in prisons is detailed in the UNODC policy brief *HIV prevention, treatment and care in prisons and other closed settings: a comprehensive package of interventions* (2013) [147].

#### 5.2 ChemSex and HIV prevention

There is a need for expanded availability and access to HIV harm reduction and sexual health services that are welcoming of men who have sex with men and capacitated to address the psychosocial and physical needs related to ChemSex. This includes recruiting members of this community to conduct outreach prevention services on site. Addressing ChemSex within HIV harm reduction approaches and strategies also requires the meaningful participation of the community to ensure that materials developed are relevant and appropriate. The following topics may be appropriate for IEC materials:

- Safer drug use and HIV harm recognition
- Safer sex
- · Consent, respect for others and reducing sexual exploitation
- Transmission of STIs, HIV, HCV and HBV
- Sexual satisfaction and safety
- Dealing with drug-related emergency situations
- · HIV-related stigma and issues associated with HIV status disclosure and/or drug use
- · Community and social networking opportunities that do not include drugs and sex

<sup>&</sup>lt;sup>7</sup> The 15 interventions are: 1. Information, education and communication; 2. Condom programmes; 3. Prevention of sexual violence; 4. Drug dependence treatment, including opioid substitution therapy; 5. Needle and syringe programmes; 6. Prevention of transmission through medical or dental services; 7. Prevention of transmission through tattooing, piercing and other forms of skin penetration; 8. Post-exposure prophylaxis; 9. HIV testing and counselling; 10. HIV treatment, care and support; 11. Prevention, diagnosis and treatment of tuberculosis; 12. Prevention of mother-to-child transmission of HIV; 13. Prevention and treatment of sexually transmitted infections; 14. Vaccination, diagnosis and treatment of viral hepatitis; 15. Protecting staff from occupational hazards.

Peers delivering health services should work with managers of commercial establishments that allow sex on their premises to facilitate the development and promotion of sex- and drug-related HIV prevention policies and procedures. Training may include how to recognize and help those in distress from their drug use.

Injecting drug use in the context of ChemSex ("slamming") is practised by small numbers of people, but they are difficult to reach since injecting drugs is often a taboo subject within these communities [148]. Specific strategies need to be developed to overcome this challenge for delivering appropriate HIV prevention messages or commodities.

#### **Outreach work (including virtual settings)** 5.3

In order to reach populations of people who use stimulant drugs in highly stigmatized environments that make them difficult to reach with mainstream services, there is a need for outreach procedures that are non-judgemental and culturally competent.

Through outreach, many interventions can be made accessible, including information, HTS, counselling, condoms and lubricants, sterile injection equipment and safer-sex commodities, social support and referrals to relevant health and social services. Services provided will vary according to the setting (street, clubs, festival, sex-work venues, prisons, etc.) and the specific risks of the people who use stimulant drugs in these settings.

Outreach workers may be professionals, but outreach is often more effective when conducted by trained members of the stimulant drug-using community or the relevant key population. For example, specialist peer educators can provide HIV prevention information or commodities at a festival.

Safe spaces and drop-in centres can be established on a temporary or fixed basis, according to the setting, to give people who use stimulant drugs a place to relax, rest and access information, condoms and lubricants, and commodities for the safe use of drugs, as well as counselling and rapid HIV tests. In some settings such as clubs or festivals, temporary mobile booths and facilities can be set up.

Mobile-phone and Internet applications can also be used, when appropriate and when confidentiality can be ensured, to reach larger numbers of people who use stimulant drugs, including those who are members of key populations, through group or individual contacts.

#### Further resources

Evidence for action: effectiveness of community-based outreach in preventing HIV/AIDS among injecting *drug users* (WHO, 2004) [149]

Training guide for HIV prevention outreach to injecting drug users (WHO, 2004) [150]

#### 5.4 **Community-based interventions**

The meaningful involvement of people who use stimulant drugs, in both the design and the implementation of an intervention, is critical for the service to be effective. Communities have unique expertise about their situation and needs that is required, together with scientific expertise, for the provision of effective and accessible services. The development and quality monitoring of HIV prevention, testing and treatment services by groups of people who use drugs, together with representatives of other relevant key populations, can help ensure the effectiveness of services tailored to meet the needs of people who use stimulant drugs.

For example, in the United Kingdom in the 1990s, a peer initiative called the Crack Squad partnered with the Royal College of General Practitioners to explore drug-taking practices and risk exposure, health needs and services, using the experiences of people using crack cocaine. This helped overcome the gap in professional knowledge and supported the development of new national guidelines, such as information checklists, to drive forward services for people who use crack and cocaine [116].

#### **Delivering services**

Groups of people who use drugs can deliver HIV and HCV prevention and testing services, support and linkages to ART and other health services. They can also document human-rights violations, undertake individual advocacy, engage in high-level representation and advocacy, and monitor the quality of services. Problems of community credibility and privileged access can be particularly challenging when targeting key populations who use stimulant drugs. Outreach workers who are not from these communities, or who no longer use stimulant drugs, will have reduced network access, insight, credibility and impact. However, the quality and impact of outreach is not only defined by the status of the worker; the nature of the community engagement is also critical. Approaches can be broadly divided into provider-client approaches, modelled after traditional outreach, and network-based models.

- Provider-client approaches: Examples are peer education [151], peer counselling [152] and peer leaders [153]. These three models have in common that a relatively small number of participants with specific characteristics (e.g., age, gender, status) are selected by project staff, receive training, and work within the hierarchical structure of traditional service organizations. They are asked to make a significant and sustained commitment to an often emotionally demanding, stressful and low-paid job.
- Network-based (peer-driven) model: In this approach, a much larger number of community members are asked to make a far smaller commitment. In a peer-driven intervention, participants are educated on a small body of HIV prevention knowledge and subsequently receive small incentives for educating a limited number of peers and encouraging them to pass on the same information to people they know. From being clients, they are turned into brokers of information [154].

Secondary distribution of HIV prevention commodities<sup>8</sup> is perhaps the best example of harnessing the potential of network-based interventions Secondary distribution can be an effective model for making NSPs available outside regular office hours or specialist settings, and in community networks where stimulant drugs are used but people are not normally reached by traditional NSPs. Secondary NSP also provides a vehicle for delivering injecting equipment into commercial or community settings used by people engaged in sex work.

Other examples of network-based approaches include:

- In the Czech Republic, secondary NSP has been used to bring sterile injecting equipment to a population of people who inject methamphetamine who are highly suspicious of NSPs traditionally used by people who inject opiates.
- A peer-driven intervention approach was used in Ukraine with people who use the home-baked version of methamphetamine called *Vint*, to reach a large number of people with HIV prevention messages and commodities and influence community norms.

Community initiatives have also been successful in addressing emerging drug trends and new risk behaviours. The first "crack pipe" distribution scheme was developed in New York, United States, by a

<sup>&</sup>lt;sup>8</sup> Secondary distribution describes a process whereby a community member receives needles and syringes from a programme to distribute to a group of people who inject drugs.

peer-based initiative linked to Yale University, and was then further championed in Canada and other settings by peer-led initiatives. Elsewhere, people who use stimulant drugs have developed homemade pipes that avoid exposure to the toxins from plastics or paint that have been associated with harms such as "black lung". Identifying, testing and promoting such peer innovations provides opportunities to validate street equipment that supports HIV harm reduction, and also fosters rules and rituals such as not sharing pipes.

Peers can also play a critical role in the provision of community-based testing and of ART services for all key populations to improve retention and adherence to ART. Peers may provide information on treatment, support the distribution of ART, including delivery in the community, provide psychosocial support and trace clients who have missed appointments, and provide support to address stigma, discrimination, and legal and social barriers [155].

Similar models of community organization could be translated to different communities of people who use stimulant drugs, such as sex workers, transgender people, and men who have sex with men, including those who engage in ChemSex. Reaching these populations requires reaching out to community members and empowering and rewarding their participation and mobilization. The use of drugs by these individuals can alienate them from mainstream organizations representing the rights of their population. Community mobilization and organization become priorities to meet the needs for these groups to be represented.

#### Further resources

Further information on community-led outreach to specific key populations can be found in the IDUIT, MSMIT, SWIT and TRANSIT.

Differentiated service delivery for HIV: A decision framework for differentiated antiretroviral therapy delivery for key populations (IAS, 2018) [167]

International AIDS Society (IAS) special website on Differentiated Service Delivery https://www.iasociety.org/Differentiated-Service-Delivery

#### 5.5 Gender-responsive services

When considering implementation issues, it is critical that services be responsive to the needs of women, men and transgender people, taking into account gender-based themes such as:

- Patterns of use, and types of stimulant drug used
- Places where stimulant drugs are used
- · The effects of relationship networks on stimulant drug use
- Differential access to drugs
- Exchanging sex for drugs
- · Perceived class and educational disparities
- How stimulant drug use affects lifestyle and behaviour towards family members and friends, including being subjected to physical and psychological violence
- Access to sexual and reproductive health services, including pre- and post-natal care, and PMTCT for pregnant and nursing women

HIV harm reduction services for women who use drugs must be adapted to meet their specific needs, including for sexual and reproductive health care, child care, and support for women who have been victims of violence, including sexual violence [156].

For more information on services responsive to women, see *Addressing the specific needs of women who inject drugs: practical guide for service providers on gender-responsive HIV services* (UNODC, 2016) [156].

#### 5.6 Young people who use stimulant drugs

Reaching young people (aged 10-24 years) [157] who use stimulant drugs who are vulnerable to HIV, STIs and hepatitis requires the development of age-specific strategies. Often, young people who use stimulant drugs have less information on the drugs and their associated risks. They face higher stigma and discrimination, including specific legal barriers related to age of consent, and lower access to services that in any case are often not adapted to their needs. To protect the health of young key populations who use stimulant drugs, it is crucial that services are tailored to their needs. This includes:

- A comprehensive health package, including comprehensive HIV harm reduction, sexual and reproductive health care and mental health care, in a format that is attractive to their age group and gender
- Youth-friendly, community- and peer-based and decentralized services in locations where young people who use stimulant drugs live or can easily attend, such as recreational settings or youth community centres
- · Support and information provided by peers, and through the Internet and social media

## Box 10. Innovative strategies for HIV interventions among young people who use stimulant drugs in Viet Nam

Viet Nam is experiencing both an HIV epidemic and an increase in the use of methamphetamines that is affecting different groups of key populations. Young people are the population group most affected by HIV risks related to drug use.

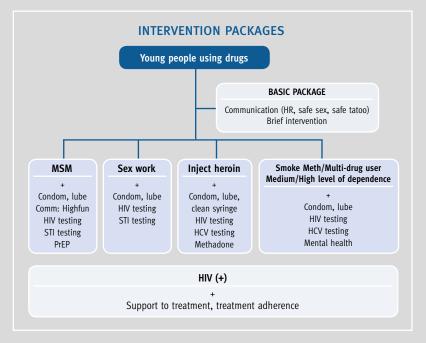
Responding to the realization that traditional approaches towards HIV and injecting drug use were not effective among young people who use drugs, Viet Nam in 2017 launched a new strategy, "Saving the Future", for the benefit of 8,000 young people (16-24 years old) who use drugs (including young men who have sex with men, sex workers and transgender people) in a number of cities. The main objective of the project is to enhance the quality of HIV interventions among these young people.

The project started with a baseline assessment of HIV, HCV and drug use among young people, to understand factors associated with the transition to drug injection and with HIV/HCV infection. Methamphetamine was the most prevalent drug used by the participants (71 per cent); heroin use was reported by 18 per cent of them, mostly older participants who used it to mitigate the effects of methamphetamine. All the young people who used methamphetamine reported sharing pipes. People reported being more likely to engage in group sex and unprotected sex under the influence of methamphetamine; between 35 per cent and 60 per cent experienced depression or dependence. Most of them reported using drugs in groups and spending three to five hours a day on Internet-based social media. However, the social links they established were very superficial.



Based on these results a new package of interventions is being developed. The project aims to strengthen the capacity of key population organizations to engage with young members and implement innovative interventions. A further goal is to increase the involvement and leadership of young people who use drugs. Differentiated approaches are being developed to address specific subgroups. A counselling guideline has been adapted specifically for young people who use stimulant drugs, as part of the basic package of interventions.

The project started in 2017 and will be evaluated in 2019. Between July and November 2017, 2,750 young people who use drugs were reached, of whom 2,270 received an HIV test, while 397 were referred to STI clinics and 120 were tested for hepatitis. Participants reported a low



level of awareness about HIV and HCV and other risks related to drugs, and frequent risk behaviours, including low use or misuse of condoms and sex in groups, including unprotected ChemSex ("high-fun"). Young people who use stimulant drugs are difficult to reach and follow up, preferring contacts via telephone or social media rather than face to face.

Source: Centre for Supporting Community Development Initiatives (SCDI), Viet Nam

#### Further resources

HIV and young people who inject drugs: technical brief (WHO, Interagency Working Group on Key Populations, 2015) [158]

*HIV and young men who have sex with men: technical brief* (WHO, Interagency Working Group on Key Populations, 2015) [159]

HIV and young people who sell sex: technical brief (WHO, Interagency Working Group on Key Populations, 2015) [160]

HIV and young transgender people: technical brief (WHO, Interagency Working Group on Key Populations, 2015) [161]

# Annex

# HIV harm reduction checklists for people who use stimulant drugs

#### 1. Checklist for policymakers and managers

- ▶ Needle and syringe programmes (NSPs) should provide access to adequate supplies of injecting equipment that respond to the rapid, repeated and collective patterns of injecting associated with the use of stimulant drugs.
- ▶ NSPs should avoid one-for-one exchange, capping supplies of injecting equipment to individual clients or other protocols that restrict access to injecting equipment to people who inject stimulant drugs.
- ▶ NSPs should actively consider strategies such as needle vending machines, secondary NSP, community outreach or needle-pack schemes in clubs, free-party or sex-party settings, in order to provide easy access to injecting equipment outside traditional working hours and in settings where people buy and take stimulant drugs.
- Services should proactively promote access to male and female condoms, water-based lubricants, safer-sex advice and access to HIV and STI testing, and where appropriate PEP and PrEP.
- Services should offer access to harm reduction commodities such as crack or methamphetamine pipes, aluminium foil, safer snorting kits or gel capsules, to support noninjecting routes of administration as an alternative to injecting stimulant drugs. These are also effective engagement strategies with people who use stimulant drugs.
- Services should offer self-control coaching to support safer patterns of drug use and safer sex.

# 2. Information for people who use stimulant drugs (without injecting)

И	Avoid sharing straws or pipes, because of the risk of transmitting hepatitis C.
Ы	Always have with you and use condoms and lubricants if you are sexually active.
Ы	Remain hydrated and look after your lips during a session. Dehydration and the heat trans- ferred from the pipe can cause your lips to crack and become bloody, which creates a route for HCV transmission.
Ы	Make sure you use a pipe without chips or breaks, as these can increase the risk of lip dam- age and transmitting hepatitis C.
Ы	Mouthpieces for crack pipes, which can be as simple as rubber tubing cut to 2cm length, rubber bands overlapped or rubber sparkplug casings (from vehicle engines), can help reduce risks if you need to share your pipe with another person.
Ы	If you use a lighter or blowtorch to smoke methamphetamine or crack, you may burn your fingers, nose or face, and it is easy not to notice these burns at first due to the anaesthetic qualities of cocaine or general intoxication.
Ы	Snorting stimulant drugs can damage the inside of the nose. Nasal douching – flushing saline solution or water into the nostrils and blowing out – helps remove the drug residue after a session.
Ы	Straws or "tooters" for snorting stimulant drugs should not be shared, due to the risk of transmitting hepatitis C.
Ы	Smoking flakes of crack in a cigarette of rolled cannabis can temper the rush from the crack and stretch the rock for multiple hits.

### 3. Information checklist for people who inject stimulant drugs

N	Avoid sharing needles, syringes and other injecting equipment. Source adequate supplies of sterile injecting equipment in advance of a using session. Consider your own needs and the needs of people you will be injecting with, and stock up in case your session runs longer than initially planned.
Ы	Source the right size of needle and type of injecting equipment to minimize the damage to your veins.
Ы	Wash your hands and injecting sites with soapy water before preparing and administering an injection to reduce the risk of a bacterial contamination and a "dirty hit" (severe flu-like symptoms that come on suddenly after a contaminated injection).
И	Research the drugs you are taking to understand the best method of preparing them for injection. Many stimulant drugs dissolve easily in water and do not need heating (cocaine

hydrochloride, amphetamine sulphate, methamphetamine, mephedrone and methcathinone) or mixing with an acidifier. Some stimulant drugs, such as ketamine, are easily damaged by heating. Crack cocaine needs to be broken down slowly and meticulously with an acidifier before injection.

- Rotate your injection sites to give your veins time to recover and heal between injecting sessions. This is particularly important with cocaine, which is a local anaesthetic and numbs the injecting site after the first injection.
- Using low dead-space syringes means there is less blood residue in the syringe, which reduces risk of transmitting an infection in case of accidental sharing.
- Use syringes with coloured plungers to help reduce accidental sharing during long and sustained injecting sessions, particularly if reusing becomes a necessity.
- Dispose of injecting equipment safely to reduce the chance of needle-stick injuries, accidental sharing and injuries to family members, friends, neighbours and the wider community.
- Solution Solution

- Consider using methamphetamine or crack cocaine via a pipe, as this can have similar effects to injecting, and it limits damage to the veins from repeated injecting and/or the use of acidifiers when preparing crack cocaine for injection.
- Check you have access to commodities that support taking drugs without injecting, so that you have an alternative if you run out of sterile injecting equipment, or if your veins would benefit from a break.
- Always have with you and use condoms and lubricants if you have sex.

#### 4. Checklist for self-care and stimulant drug use

- Safer dosing Before taking a new batch of stimulant drugs, it is sensible to take a smaller test dose to establish the strength of the drug.
- Dose management is a key strategy for reducing the negative consequences of high-dose use associated most commonly with the injection and piping of stimulant drugs. Reducing doses can limit risks of overheating, heart attacks and mental health problems.
- Repeated patterns of using Using for several days in a row increases the severity of the "come-down" and can cause a "crash", in which exhaustion, serotonin and dopamine depletion, sleep deprivation and the additional pressure on the body lead to a long and deep pattern of sleep. Be aware of your physical limits and plan beforehand to end a session before you are likely to reach your limit.

- ▶ *Hydration* Stimulant drugs cause the body to heat up and the body sweats to reduce its core temperature. It is important to remain hydrated to help drug residue pass safely through the body. Drinking water is a key strategy to reduce harm for people who use stimulant drugs.
- Hygiene Cleaning your teeth, showering or at least washing your hands and face are important for skin care and a general sense of well-being after long sessions of taking stimulant drugs.
- ▶ *Eating* Taking stimulant drugs places additional demands on your body, and it is important to stock up with slow-burning carbohydrates before a planned using session. Eating food before you go to sleep after a stimulant drug-using session also helps the body recover and regenerate. Finding foods like fruit, yogurts or energy bars that you can eat during a session reduces the risk of exhaustion sickness that can result from long runs of using stimulant drugs.
- Solution Get informed There are an increasingly diverse array of NPS on the market, and it is important to research the drugs you are planning to take. You can seek advice from experienced peers in person or via online forums, or you can research your NPS on specialist websites, in order to make informed decisions about your choice of drugs, dosing and drug mixing.

#### References

- Global AIDS update 2018. Miles to go: closing gaps, breaking barriers, righting injustices. Geneva, Joint United Nations Programme on HIV/AIDS, 2018 (http://www.unaids.org/sites/default/files/media\_ asset/miles-to-go\_en.pdf, accessed 15 January 2019).
- 2. Prevention gap report. Geneva, Joint United Nations Programme on HIV/AIDS, 2016 (http://www. unaids.org/en/resources/documents/2016/prevention-gap, accessed 15 January 2019).
- 3. Systematic literature review. Risk and transmission of HIV, HCV & HBV among stimulant drugs users: a review of the evidence (A). Part 1/5: methodology and summary. Vienna, United Nations Office on Drugs and Crime, 2017 (http://www.unodc.org/documents/hiv-aids/2017/1\_Stim\_HIV\_Syst\_Lit\_rev\_Part\_1\_methodology\_and\_summary.pdf, accessed 15 January 2019).
- General Assembly Resolution A/RES/70/1 Transforming our world: the 2030 Agenda for Sustainable Development. New York (NY), United Nations, 2015 (http://www.un.org/en/development/desa/ population/migration/generalassembly/docs/globalcompact/A\_RES\_70\_1\_E.pdf, accessed 15 January 2019).
- UNAIDS 2016–2021 Strategy: on the Fast-Track to end AIDS. Geneva, Joint United Nations Programme on HIV/AIDS, 2015 (http://www.unaids.org/sites/default/files/media\_asset/20151027\_UNAIDS\_ PCB37\_15\_18\_EN\_rev1.pdf, accessed 15 January 2019).
- General Assembly Resolution A/70/L.52 Political declaration on HIV and AIDS: on the fast track to accelerate the fight against HIV and to ending the AIDS epidemic by 2030. New York (NY), United Nations, 2016 (http://www.unaids.org/sites/default/files/media\_asset/2016-political-declaration-HIV-AIDS\_en.pdf, accessed 15 January 2019).
- WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users – 2012 revision. Geneva, World Health Organization, 2012 (http://apps.who.int/iris/bitstream/10665/77969/1/9789241504379\_eng.pdf, accessed 15 January 2019).
- Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations 2016 update. Geneva, World Health Organization, 2016 (https://www.who.int/hiv/pub/guidelines/keypopulations-2016/en/, accessed 15 January 2019).
- Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical guidance for collaborative interventions. Vienna, United Nations Office on Drugs and Crime, 2017 (http://www.unodc.org/documents/hiv-aids/publications/Implementing\_Comprehensive\_HIV\_and\_ HCV\_Programmes\_with\_People\_Who\_Inject\_Drugs\_PRACTICAL\_GUIDANCE\_FOR\_ COLLABORATIVE\_INTERVENTIONS.pdf, accessed 15 January 2019).
- Implementing comprehensive HIV/STI programmes with sex workers: practical approaches from collaborative interventions. Geneva, World Health Organization, 2013 (https://www.who.int/hiv/pub/ sti/sex\_worker\_implementation/en/, accessed 15 January 2019).
- 11. Implementing comprehensive HIV and STI programmes with men who have sex with men: practical guidance for collaborative interventions. New York (NY), United Nations Population Fund, 2015 (https://www.unfpa.org/publications/implementing-comprehensive-hiv-and-sti-programmes-men-who-have-sexmen, accessed 15 January 2019).
- Implementing comprehensive HIV and STI programmes with transgender people: practical guidance for collaborative interventions. New York (NY), United Nations Development Programme, 2016 (https:// www.unfpa.org/publications/implementing-comprehensive-hiv-and-sti-programmes-transgender-peoplepractical-guidance, accessed 15 January 2019).
- Systematic literature review on HIV and stimulant drugs use (A). Part 2/5: ATS and HIV risk and transmission. Vienna, 2017, United Nations Office on Drugs and Crime (http://www.unodc.org/ documents/hiv-aids/2017/2\_Stim\_HIV\_Syst\_Lit\_Rev\_Part\_2\_ATS.pdf, accessed 15 January 2019).
- Systematic literature review on HIV and stimulant drugs use (A). Part 3/5: cocaine use and HIV risk and transmission. Vienna, 2017, United Nations Office on Drugs and Crime (http://www.unodc.org/ documents/hiv-aids/2017/3\_Stim\_HIV\_Syst\_Lit\_Rev\_Part\_3\_Cocaine\_and\_Crack-Cocaine.pdf, accessed 15 January 2019).

- Systematic literature review on HIV and stimulant drugs use (A). Part 4/5: NPS and HIV risk and transmission. Vienna, 2017, United Nations Office on Drugs and Crime (http://www.unodc.org/ documents/hiv-aids/2017/4\_Stim\_HIV\_Syst\_Lit\_Rev\_Part\_4\_-\_New\_Psychoactive\_Substances.pdf, accessed 15 January 2019).
- 16. Systematic literature review on HIV and stimulant drugs use (B). Part 5/5: treatment and prevention of HIV, HCV & HBV among stimulant drugs users. Vienna, 2017, United Nations Office on Drugs and Crime (http:// www.unodc.org/documents/hiv-aids/2017/5\_Stim\_HIV\_Syst\_Lit\_rev\_Part\_5\_Prevention\_ and\_treatment.pdf, accessed 15 January 2019).
- Science addressing drugs and HIV: state of the art. 2nd scientific statement: March 2016. Vienna, United Nations Office on Drugs and Crime, 2016 (http://www.unodc.org/documents/hiv-aids/2016/2nd\_ Scientific\_Statement\_-\_March\_2016.pdf, accessed 15 January 2019).
- World Drug Report 2019. Booklet 2: global overview of drug demand and supply. United Nations, 2019 (https://wdr.unodc.org/wdr2019/en/drug-demand-and-supply.html, accessed 15 July 2019).
- World Drug Report 2017. Booklet 4: market analysis of synthetic drugs. Vienna, United Nations Office on Drugs and Crime, 2017 (https://www.unodc.org/wdr2017/field/Booklet\_4\_ATSNPS.pdf, accessed 15 January 2019).
- Karila L, Weinstein A, Aubin H-J, Benyamina A, Reynaud M, Batki SL. Pharmacological approaches to methamphetamine dependence: a focused review. *British Journal of Clinical Pharmacology*. 2010;69(6):578-92 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2883750/, accessed 15 January 2019).
- The challenge of new psychoactive substances. Vienna, United Nations Office on Drugs and Crime, 2013 (https://www.unodc.org/documents/scientific/NPS\_2013\_SMART.pdf, accessed 15 January 2019).
- 22. UNODC Early Warning Advisory on new psychoactive substances [website]. Vienna, United Nations Office on Drugs and Crime (https://www.unodc.org/LSS/Home/NPS, accessed 15 January 2019).
- Deimel D, Stöver H, Hösselbarth S, Dichtl A, Graf N, Gebhardt V. Drug use and health behaviour among German men who have sex with men: results of a qualitative, multi-centre study. *Harm Reduction Journal*. 2016;13:36. (https://doi.org/10.1186/s12954-016-0125-y, accessed 15 January 2019).
- Lee N, Johns L, Jenkinson R, Johnston J, Connolly K, Hall K et al. Clinical treatment guidelines for alcohol and drug clinicians. No 14: methamphetamine dependence and treatment. Fitzroy (Australia), Turning Point Alcohol and Drug Centre Inc., 2007 (http://nceta.flinders.edu.au/files/2814/3130/6037/ Clinical\_Treatment\_Guidelines\_for\_Alcohol\_\_Drug\_Clinicians\_No.\_14.pdf, accessed 15 January 2019).
- Friedman H, Newton C, Klein TW. Microbial infections, immunomodulation, and drugs of abuse. *Clinical Microbiology Review*. 2003;16:209-19 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC153143/, accessed 15 January 2019).
- 26. Johnson PS, Johnson MW. Investigation of "bath salts" use patterns within an online sample of users in the United States. *Journal of Psychoactive Drugs*. 2014;46(5):369-78. doi:10.1080/02791072.2014.962717.
- Csák R, Demetrovics Z, Rácz J. Transition to injecting 3,4-methylene-dioxy-pyrovalerone (MDPV) among needle exchange program participants in Hungary. *Journal of Psychopharmacology*. 2013;27(6):559-63. doi:10.1177/0269881113480987.
- 28. Rácz J, Csák R, Lisznyai S. Transition from "old" injected drugs to mephedrone in an urban micro segregate in Budapest, Hungary: a qualitative analysis. *Journal of Substance Use*. 2015;20(3):178-86. doi:10.3109/146 59891.2014.895872.
- Tarján A, Dudás M, Gyarmathy VA, Rusvai E, Tresó B, Csohán Á. Emerging risks due to new injecting patterns in Hungary during austerity times. *Substance Use & Misuse*. 2015;50(7):848-58 (https://www.researchgate.net/publication/273637824\_Emerging\_Risks\_Due\_to\_New\_Injecting\_Patterns\_in\_Hungary\_During\_Austerity\_Times, accessed 15 January 2019).
- Giese C, Igoe D, Gibbons Z, Hurley C, Stokes S, McNamara S et al. Injection of new psychoactive substance snow blow associated with recently acquired HIV infections among homeless people who inject drugs in Dublin, Ireland, 2015. *Eurosurveillance*. 2015;20(40) (https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2015.20.40.30036, accessed 15 January 2019).
- Van Hout MC, Bingham T. "A costly turn on": patterns of use and perceived consequences of mephedrone based head shop products amongst Irish injectors. *International Journal of Drug Policy*. 2012;23(3):188-97. doi:10.1016/j.drugpo.2012.01.008.
- 32. Katchman E, Ben-Ami R, Savyon M, Chemtob T, Avidor B, Wasserman A et al. Successful control of a large outbreak of HIV infection associated with injection of cathinone derivatives in Tel Aviv, Israel. *Clinical*

*Microbiology and Infection.* 2017;23(5):336e5-e8 (https://www.sciencedirect.com/science/article/pii/S1198743X1630564X, accessed 15 January 2019).

- Botescu A, Abagiu A, Mardarescu M, Ursan M. HIV/AIDS among injecting drug users in Romania. Report
  of a recent outbreak and initial response policies. Lisbon, European Monitoring Centre for Drugs and Drug
  Addiction, 2012 (http://b.aids-bg.com/files/downloads/statistics/HIV\_outbreak\_Romania\_2012.pdf,
  accessed 15 January 2019).
- 34. Shooting up: infections among people who injected drugs in the UK, 2015. London, Public Health England, 2016 (https://webarchive.nationalarchives.gov.uk/20180911151429/https://www.gov.uk/ government/publications/shooting-up-infections-among-people-who-inject-drugs-in-the-uk, accessed 15 January 2019).
- 35. Battjes RJ, Pickens RW, Haverkos HW, Sloboda Z. HIV risk factors among injecting drug users in five US cities. AIDS. 1994;8(5):681-7.
- Chintalova-Dallas R, Case P, Kitsenko N, Lazzarini Z. Boltushka: a homemade amphetamine-type stimulant and HIV risk in Odessa, Ukraine. *International Journal of Drug Policy*. 2009;20(4):347-51 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2823117/, accessed 15 January 2019).
- WHO hepatitis C fact sheet [website]. World Health Organization, 2018 (http://www.who.int/mediacentre/factsheets/fs164/en/, accessed 15 January 2019).
- Fischer B, Powis J, Firestone-Cruz M, Rudzinski K, Rehm J. Hepatitis C virus transmission among oral crack users: viral detection on crack paraphernalia. *European Journal of Gastroenterology and Hepatology*. 2008;20(1):29-32.
- 39. Fernandez N, Towers CV, Wolfe L, Hennessy MD, Weitz B, Porter S. Sharing of snorting straws and hepatitis C virus infection in pregnant women. *Obstetrics and Gynecology*. 2016;128(2):234-7. doi:10.1097/AOG.000000000001507.
- Caiaffa WT, Zocratto KF, Osimani ML, Martinez PL, Radulich G, Latorre L et al. Hepatitis C virus among non-injecting cocaine users (NICUs) in South America: can injectors be a bridge? *Addiction*. 2011;106(1):143-51. doi:10.1111/j.1360-0443.2010.03118.x.
- Scheinmann, R, Hagan H, Lelutiu-Weinberger C, Stern R, Des Jarlais DC, Flom PL et al. Non-injection drug use and hepatitis C virus: a systematic review. *Drug and Alcohol Dependence*. 2007; 89(1):1-12 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1892753/, accessed 15 January 2019).
- 42. Vu NTT, Maher L, Zablotska I. Amphetamine-type stimulants and HIV infection among men who have sex with men: implications on HIV research and prevention from a systematic review and meta-analysis. *Journal of the International AIDS Society*. 2015;18(1):19273 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4302169/, accessed 15 January 2019).
- Gorbach PM, Holmes KK. Transmission of STIs/HIV at the partnership level: beyond individual-level analyses. *Journal of Urban Health*. 2003;80(Suppl.3):iii15-iii25 (https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3456259/, accessed 15 January 2019).
- 44. Rajasingham R, Mimiaga MJ, White JM, Pinkston MM, Baden RP, Mitty JA. A systematic review of behavioral and treatment outcome studies among HIV-infected men who have sex with men who abuse crystal methamphetamine. *AIDS Patient Care and STDs*. 2012;26(1):36-52 (https://www.ncbi.nlm.nih. gov/pmc/articles/PMC3248609/, accessed 15 January 2019).
- 45. Parry CD, Plüddeman A, Myers B, Wechsberg WM, Flisher AJ. Methamphetamine use and sexual risk behaviours in Cape Town, South Africa: a review of data from 8 studies conducted between 2004 and 2007. *African Journal of Psychiatry*. 2011;14(5):372-6 (https://www.researchgate.net/publication/51901762\_Methamphetamine\_use\_and\_sexual\_risk\_behaviour\_in\_Cape\_Town\_South\_Africa\_A\_review\_of\_data\_from\_8\_studies\_conducted\_between\_2004\_and\_2007, accessed 15 January 2019).
- 46. Prestage G, Jin F, Kippax S, Zablotska I, Imrie J, Grulich A. Use of illicit drugs and erectile dysfunction medications and subsequent HIV infection among gay men in Sydney, Australia. *Journal of Sexual Medicine*. 2009;6(8):2311-20. doi: 10.1111/j.1743-6109.2009.01323.x.
- 47. Ackers M-L, Greenberg AE, Lin CY, Bartholow BN, Goodman AH, Longhi M et al. High and persistent HIV seroincidence in men who have sex with men across 47 U.S. cities. *PLoS ONE*. 2012;7(4):e34972 (https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0034972, accessed 15 January 2019).
- Rawstorne P, Digiusto E, Worth H, Zablotska I. Associations between crystal methamphetamine use and potentially unsafe sexual activity among gay men in Australia. *Archives of Sexual Behavior*. 2007;36(5):646-54. doi:10.1007/s10508-007-9206-z.

- Fairbairn N, Kerr T, Milloy M-J, Zhang R, Montaner J, Wood E. Crystal methamphetamine injection predicts slower HIV RNA suppression among injection drug users. *Addictive Behaviors*. 2011;36(7):762-3 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3081981/, accessed 15 January 2019).
- Chan DP, Sun HY, Wong HT, Lee SS, Hung CC. Sexually acquired hepatitis C virus infection: a review. *International Journal of Infectious Diseases*. 2016;49:47-58 (https://www.ijidonline.com/article/S1201-9712(16)31073-6/fulltext, accessed 15 January 2019).
- 51. Glass R, Hope VD, Tanner C, Desai M. 'Slamming' among men who have sex with men accessing general drug services, in response to Schmidt, AJ et al., 2016, Illicit drug use among gay and bisexual men in 44 cities: findings from the European MSM Internet Survey (EMIS). *International Journal of Drug Policy*. 2017;49:24-5. doi:10.1016/j.drugpo.2017.07.028.
- Stuart D. Sexualised drug use by MSM: background, current status and response. *HIV Nursing Journal*. 2013;13(1):6-10 (https://www.researchgate.net/publication/285738167\_Sexualised\_drug\_use\_by\_ MSM\_Background\_current\_status\_and\_response, accessed 15 January 2019).
- 53. Bui H, Zablotska-Manos I, Hammoud M, Jin F, Lea T, Bourne A et al. Prevalence and correlates of recent injecting drug use among gay and bisexual men in Australia: results from the FLUX study. *International Journal of Drug Policy*. 2018;55:222-30. doi:10.1016/j.drugpo.2018.01.018.
- Kirby T, Thornber-Dunwell M. High-risk drug practices tighten grip on London gay scene. *Lancet World Report*. 2013;381(9861):101-2 (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)60032-X/fulltext, accessed 15 January 2019).
- Fisher DG, Reynolds GL, Ware MR, Napper LE. Methamphetamine and viagra use: relationship to sexual risk behaviours. *Archives of Sexual Behaviour*. 2011;40(2):273-79 (https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3047702/, accessed 15 January 2018).
- 56. Tavitian-Exley I, Vickerman P, Bastos FI, Boily MC. Influence of different drugs on HIV risk in people who inject: systematic review and meta-analysis. *Addiction*. 2015;110(4):572-84. doi:10.1111/add.12846.
- 57. Fotiou A, Micha K, Paraskevis D, Terzidou M, Malliori M, Hatzakis A et al. HIV outbreak among injecting drug users in Greece. An updated report for the EMCDDA on the recent outbreak of HIV infections among drug injectors in Greece, 31 October 2012. Lisbon, European Monitoring Centre for Drugs and Drug Addiction, 2012 http://www.emcdda.europa.eu/attachements.cfm/att\_191984\_EN\_HIV\_update\_Greece\_2012.pdf, accessed 15 January 2019).
- Niculescu I, Paraschiv S, Paraskevis D, Abagiu A, Batan I, Banica L et al. Recent HIV-1 outbreak among intravenous drug users in Romania: evidence for cocirculation of CRF14\_BG and subtype F1 strains. *AIDS Research and Human Retroviruses*. 2015;31(5):488-95 (https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC4426324/, accessed 15 January 2019).
- Lorvick J, Bourgois P, Wenger LD, Arreola SG, Lutnick A, Wechsberg WM et al. Sexual pleasure and sexual risk among women who use methamphetamine: a mixed methods study. *International Journal of Drug Policy*. 2012;23(5):385-92 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3466046/, accessed 15 January 2019).
- Semple SJ, Patterson TL, Grant I. The context of sexual risk behaviour among heterosexual methamphetamine users. *Addictive Behaviours*. 2004:29(4):807-10. doi:10.1016/j.addbeh.2004.02.013.
- Braine N, Des Jarlais DC, Goldblatt C, Zadoretzky C, Turner C. HIV risk behaviour among amphetamine injectors at U.S. syringe exchange programs. *AIDS Education and Prevention*. 2005;17(6):515-24. doi:10.1521/aeap.2005.17.6.515.
- Peck JA, Shoptaw S, Rotheram-Fuller E, Reback CJ, Bierman B. HIV-associated medical, behavioural, and psychiatric characteristics of treatment-seeking, methamphetamine-dependent men who have sex with men. *Journal of Addictive Diseases*. 2005;24(3):115-32, (http://chipts.ucla.edu/wp-content/uploads/ downloads/2012/02/Peck\_MedicalConsequences\_Oct2005.pdf, accessed 15 January 2019).
- Duff P, Tyndall M, Buxton J, Zhang R, Kerr T, Shannon K. Sex-for-crack exchanges: associations with risky sexual and drug use niches in an urban Canadian city. *Harm Reduction Journal*. 2013;10:29 (https://www. ncbi.nlm.nih.gov/pmc/articles/PMC3833173/, accessed 15 January 2019).
- Patterson TL, Semple SJ, Fraga M, Bucardo J, De La Torre A, Salazar J et al. Comparison of sexual and drug use behaviours between female sex workers in Tijuana and Ciudad Juarez, Mexico. Substance Use & Misuse. 2006;41(10-12):1535-49 (https://www.researchgate.net/publication/6791560\_Comparison\_of\_Sexual\_ and\_Drug\_Use\_Behaviors\_Between\_Female\_Sex\_Workers\_in\_Tijuana\_and\_Ciudad\_Juarez\_Mexico, accessed 15 January 2019).

- Shannon K, Kerr T, Bright V, Gibson K, Tyndall MW. Drug sharing with clients as a risk marker for increased violence and sexual and drug-related harms among survival sex workers. *AIDS Care*. 2008:20(2):228-34. doi:10.1080/09540120701561270.
- Edwards JM, Halpern CT, Wechsberg WM. Correlates of exchanging sex for drugs or money among women who use crack cocaine. *AIDS Education and Prevention*. 2006;18(5):420-29. doi:10.1521/ aeap.2006.18.5.420.
- Bastos FI, Bertoni N. Pesquisa Nacional Sobre o Uso de Crack. Rio de Janeiro (Brazil), Instituto de Comunicação e Informação Científica e Tecnológica em Saúde/Fundação Oswaldo Cruz (FIOCRUZ), 2014 (https://www.arca.fiocruz.br/bitstream/icict/10019/2/UsoDeCrack.pdf, accessed 15 January 2019).
- Khan M, Berger A, Hemberg J, O'Neill A, Penniman Dyer T, Smyrk K. Non-injection and injection drug use and STI/HIV risk in the United States: the degree to which sexual risk behaviors versus sex with an STI-infected partner account for infection transmission among drug users. *AIDS and Behavior*. 2013;17(3):1185-94 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3923515/, accessed 15 January 2019).
- 69. Maher L, Phlong P, Mooney-Somers J, Keo S, Stein E, Page K et al. Amphetamine-type stimulant use and HIV/STI risk behaviour among young female sex workers in Phnom Penh, Cambodia. *International Journal of Drug Policy*. 2011;22(3):203-9 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3104095/, accessed 15 January 2019).
- 70. Santos GM, Rapues J, Wilson EC, Macias O, Packer T, Colfax G et al. Alcohol and substance use among transgender women in San Francisco: prevalence and association with human immunodeficiency virus infection. *Drug and Alcohol Review.* 2014;33(3):287-95. doi:10.1111/dar.12116.
- Sevelius JM, Reznick OG, Hart SL, Schwarcz S. Informing interventions: the importance of contextual factors in the prediction of sexual risk behaviors among transgender women. *AIDS Education and Prevention.* 2009;21(2):113-27 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4535696/, accessed 15 January 2019).
- Reback CJ, Fletcher JB. HIV prevalence, substance use, and sexual risk behaviors among transgender women recruited through outreach. *AIDS and Behavior*. 2014;18(7):1359-67 (https://www.ncbi.nlm.nih. gov/pmc/articles/PMC4535696/, accessed 15 January 2019).
- 73. Cartier JJ, Greenwell L, Prendergast ML. The persistence of HIV risk behaviours among methamphetamine-using offenders. *Journal of Psychoactive Drugs*. 2008;40(4):437-46 (https://www.ncbi.nlm.nih.gov/ pmc/articles/PMC3286359/, accessed 15 January 2019).
- Steinberg JK, Grella CE, Boudov MR, Kerndt PR, Kadrnka CM. Methamphetamine use and high-risk sexual behaviours among incarcerated female adolescents with a diagnosed STD. *Journal of Urban Health*. 2011:88(2):352-64 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3079043/, accessed 15 January 2019).
- 75. Brecht ML, O'Brien A, von Mayrhauser C, Anglin MD. Methamphetamine use behaviors and gender differences. *Addictive Behaviors*. 2004;29(1):89-106.
- 76. Position statement: condoms and HIV prevention. Geneva, United Nations Population Fund, World Health Organization, Joint United Nations Programme on HIV/AIDS, 2004, updated 2009 (www.who.int/ hiv/pub/condoms/20090318\_position\_condoms.pdf, accessed 15 January 2015).
- 77. Shoptaw S, Stall R, Bordon J, Kao U, Cox C, Li X et al. Cumulative exposure to stimulants and immune function outcomes among HIV-positive and HIV-negative men in the multicenter AIDS cohort study. *International Journal of STD & AIDS*. 2012;23(8):576-80 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576843/, accessed 15 January 2019).
- 78. Scott JC, Woods SP, Matt GE, Meyer RA, Heaton RK, Atkins JH et al. Neurocognitive effects of methamphetamine: a critical review and meta-analysis. *Neuropsychology Review*. 2007;17(3):275-97. doi:10.1007/ s11065-007-9031-0.
- Cherner M, Letendre S, Heaton RK, Durelle J, Marquie-Beck J, Gragg B et al. Hepatitis C augments cognitive deficits associated with HIV infection and methamphetamine. *Neurology*. 2005;64(8):1343-7. doi:10.1212/01.WNL.0000158328.26897.0D.
- Carrico AW, Johnson MO, Colfax GN, Moskowitz JT. Affective correlates of stimulant use and adherence to anti-retroviral therapy among HIV-positive methamphetamine users. *AIDS and Behavior*. 2010;14(4):769-77 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2891867/, accessed 15 January 2019).

- Cook JA, Burke-Miller JK, Cohen MH, Cook RL, Vlahov D, Wilson TE et al. Crack cocaine, disease progression, and mortality in a multicenter cohort of HIV-1 positive women. *AIDS*. 22(11):1355-63 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2645902/, accessed 15 January 2019).
- DeBeck K, Cheng T, Montaner JS, Beyrer C, Elliott R, Sherman S et al. HIV and the criminalisation of drug use among people who inject drugs: a systematic review. *The Lancet HIV*. 2017;4(8):e357-74 (http:// thelancet.com/journals/lanhiv/article/PIIS2352-3018(17)30073-5/fulltext, accessed 15 January 2019).
- Bousman CA, Cherner M, Ake C, Letendre S, Atkinson JH, Patterson TL et al. Negative mood and sexual behavior among non-monogamous men who have sex with men in the context of methamphetamine and HIV. *Journal of Affective Disorders*. 2009;119(1-3):84-91 (https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3051049/, accessed 15 January 2019).
- Holt M, Lea T, Mao L, Kolstee J, Zablotska I, Dick T et al. Community-level changes in condom use and uptake of HIV pre-exposure prophylaxis by gay and bisexual men in Melbourne and Sydney, Australia: results of repeated behavioural surveillance in 2013–17. *The Lancet HIV*. 2018:5(8):PE448-E456. doi:10.1016/S2352-3018(18)30072-9.
- Hyshka E, Strathdee S, Wood E, Kerr T. Needle exchange and the HIV epidemic in Vancouver: lessons learned from 15 years of research. *International Journal of Drug Policy*. 2012;23(4):61-70 (https://www. ncbi.nlm.nih.gov/pmc/articles/PMC3392518/, accessed 15 January 2019).
- Guide to starting and managing needle and syringe programmes. Geneva, World Health Organization, 2007 (https://www.who.int/hiv/pub/idu/needleprogram/en/, accessed 15 January 2019).
- Guidance on prevention of viral hepatitis B and C among people who inject drugs. Geneva, World Health Organization, 2012 (http://www.who.int/hiv/pub/guidelines/hepatitis/en/, accessed 15 January 2019).
- Guide to starting and managing needle and syringe programmes. Geneva, World Health Organization, 2007 (https://www.who.int/hiv/pub/idu/needleprogram/en/, accessed 15 January 2019).
- Consolidated guidelines on HIV testing services. Geneva, World Health Organization, 2015 (https://www. who.int/hiv/pub/guidelines/hiv-testing-services/en/, accessed 15 January 2019).
- Guidelines on HIV self-testing and partner notification: supplement to consolidated guidelines on HIV testing services. Geneva, World Health Organization, 2016 (https://www.who.int/hiv/pub/vct/hiv-selftesting-guidelines/en/, accessed 15 January 2019).
- Guideline on when to start antiretroviral therapy and on pre-exposure prophylaxis for HIV. Geneva, World Health Organization, 2015 (http://www.who.int/hiv/pub/guidelines/earlyrelease-arv/en/, accessed 15 January 2019).
- HIV basics: PrEP [website]. Atlanta (GA), Centers for Disease Control and Prevention (https://www.cdc. gov/hiv/basics/prep.html, accessed 15 January 2019).
- Implementation tool for pre-exposure prophylaxis (PrEP) of HIV infection. Geneva, World Health Organization, 2017 (https://www.who.int/hiv/pub/prep/prep-implementation-tool/en/, accessed 15 January 2019).
- 94. Zinberg NE. *Drug, set, and setting: the basis for controlled intoxicant use*. New Haven (CT), Yale University Press, 1984.
- Pérez-Mañá C, Castells X, Torrens M, Capellà D, Farre M. Efficacy of psychostimulant drugs for amphetamine abuse or dependence. *Cochrane Database of Systematic Reviews*. 2013;9:CD009695 (https://www. cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009695.pub2/full, accessed 15 January 2019).
- Castells X, Cunill R, Pérez-Mañá C, Vidal X, Capellà D. Psychostimulant drugs for cocaine dependence. *Cochrane Database of Systematic Reviews*. 2016;9:CD007380 (https://www.cochranelibrary.com/cdsr/ doi/10.1002/14651858.CD007380.pub4/full, accessed 15 January 2019).
- 97. Colfax, G, Santos GM, Chu P, Vittinghoff E, Pluddemann A, Kumar S et al. Amphetamine-group substances and HIV. *The Lancet.* 2010;376(9739):458-74. doi:10.1016/S0140-6736(10)60753-2.
- Malta M, Magnanini MM, Strathdee SA, Bastos FI. et al., 2010. Adherence to antiretroviral therapy among HIV-infected drug users: a meta-analysis. *AIDS and Behavior*. 2010;14(4):731-47 (https://www.researchgate.net/publication/23485019\_Adherence\_to\_Antiretroviral\_Therapy\_Among\_HIV-Infected\_Drug\_ Users\_A\_Meta-Analysis, accessed 15 January 2019).
- Degenhardt L, Mathers B, Vickerman P, Rhodes T, Latkin C, Hickman M. Prevention of HIV infection for people who inject drugs: why individual, structural, and combination approaches are needed. *The Lancet*. 2010;376(9737):285-301 (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)60742-8/fulltext, accessed 15 January 2019).

- 100. Minozzi S, Saulle R, De Crescenzo F, Amato L. Psychosocial interventions for psychostimulant misuse. Cochrane Database of Systematic Reviews. 2016(9):CD011866. doi:10.1002/14651858.CD011866.pub2.
- 101. Dunn C, Deroo L, Rivara FP. The use of brief interventions adapted from motivational interviewing across behavioral domains: a systematic review. *Addiction*. 2001;96(12):1725-42 (https://onlinelibrary.wiley. com/doi/abs/10.1046/j.1360-0443.2001.961217253.x, accessed 15 January 2019).
- 102. Mbuagbaw L, Ye C, Thabane L. Motivational interviewing for improving outcomes in youth living with HIV. Cochrane Database of Systematic Reviews. 2012;9:CD009748 (https://www.cochranelibrary.com/ cdsr/doi/10.1002/14651858.CD009748.pub2/full, accessed 15 January 2019).
- 103. Parsons JT, Lelutiu-Weinberger C, Botsko M, Golub SA. A randomized controlled trial utilizing motivational interviewing to reduce HIV risk and drug use in young gay and bisexual men. *Journal of Consulting* and Clinical Psychology. 2014;82(1):9-18 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3935799/, accessed 15 January 2019).
- 104. Smedslund G, Berg RC, Hammerstrøm KT, Steiro A, Leiknes KA, Dahl HM et al. Motivational interviewing for substance abuse. *Cochrane Database of Systematic Reviews*. 2011;5:CD008063 (https://www. cochranelibrary.com/cdsr/doi/10.1002/14651858.CD008063.pub2/full, accessed 15 January 2019).
- 105. Meader N, Li R, Des Jarlais DC, Pilling S. Psychosocial interventions for reducing injection and sexual risk behaviour for preventing HIV in drug users. *Cochrane Database of Systematic Reviews*. 2010;1:CD007192 (https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD007192.pub2/full, accessed 15 January 2019).
- 106. Dutra L, Stathopoulou G, Basden SL, Leyro TM, Powers MB, Otto MW. A meta-analytic review of psychosocial interventions for substance use disorders. *American Journal of Psychiatry*. 2008;165(2):179-87 (https://ajp.psychiatryonline.org/doi/full/10.1176/appi.ajp.2007.06111851, accessed 15 January 2019).
- 107. Kiluk BD, Carroll KM. New developments in behavioral treatments for substance use disorders. *Current Psychiatry Reports.* 2013;15(12) (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3878068/, accessed 15 January 2019).
- 108. Chiesa A, Serretti A. Are mindfulness-based interventions effective for substance use disorders? A systematic review of the evidence. Substance Use & Misuse. 2014;49(5):492-512. doi:10.3109/10826084.20 13.770027.
- Glasner-Edwards S, Mooney LJ, Ang A, Chokron Garneau H, Hartwell E, Brecht M-L et al. Mindfulnessbased relapse prevention for stimulant dependent adults: a pilot randomized clinical trial. *Mindfulness*. 2017;8(1):126-35 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5300086/, accessed 15 January 2019).
- 110. Bayles C. Using mindfulness in a harm reduction approach to substance abuse treatment: a literature review. International Journal of Behavioral Consultation and Therapy. 2014;9(2):22-5 (https://www.researchgate. net/publication/273063462\_Using\_Mindfulness\_in\_a\_Harm\_Reduction\_Approach\_to\_Substance\_ Abuse\_Treatment\_A\_Literature\_Review, accessed 15 January 2019).
- 111. TreatNet quality standards for drug dependence treatment and care services. Vienna, United Nations Office on Drugs and Crime, 2012 (https://www.unodc.org/docs/treatment/treatnet\_quality\_standards.pdf, accessed 15 January 2019).
- 112. mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings. Geneva, World Health Organization, 2010 (http://www.who.int/mental\_health/publications/ mhGAP\_intervention\_guide/en/, accessed 15 January 2019).
- 113. Therapeutic interventions for users of amphetamine-type stimulants. Manila, World Health Organization Regional Office for the Western Pacific, 2011 (http://www.wpro.who.int/hiv/documents/docs/ Brief4forweb\_7DF1.pdf?ua=1&ua=1, accessed 15 January 2019).
- 114. Harm reduction and brief interventions for ATS users. Manila, World Health Organization Regional Office for the Western Pacific, 2011 (http://www.who.int/hiv/pub/idu/ats\_brief2.pdf, accessed 15 January 2019).
- 115. Guidelines for the management of methamphetamine use disorders in Myanmar. Ministry of Health and Sports, Republic of the Union of Myanmar, 2017 (https://idpc.net/publications/2018/01/guidelines-forthe-management-of-methamphetamine-use-disorders-in-myanmar, accessed 15 January 2019).
- 116. Ford C. Guidance for working with cocaine and crack users in primary care. London, Royal College of General Practitioners, 2004 (http://www.rcgp.org.uk/-/media/Files/CIRC/Clinical-resources-S/ RCGP-Guidance-working-with-cocaine-and-crack-users-in-primary-care-2004xx.ashx?la=en, accessed 15 January 2019).

- 117. Principles of drug dependence treatment. United Nations Office on Drugs and Crime, World Health Organization, 2008 (https://www.unodc.org/documents/drug-treatment/UNODC-WHO-Principles-of-Drug-Dependence-Treatment-March08.pdf, accessed 15 January 2019).
- 118. Drug abuse treatment and rehabilitation: a practical planning and implementation guide. Vienna, United Nations Office on Drugs and Crime, 2003 (https://www.unodc.org/pdf/report\_2003-07-17\_1.pdf, accessed 15 January 2019).
- 119. Sexually transmitted and reproductive tract infections [website]. Geneva, World Health Organization (https://www.who.int/reproductivehealth/publications/rtis/en/, accessed 15 January 2019).
- 120. Hepatitis C question and answers for the public [website]. Atlanta (GA), Centers for Disease Control and Prevention (https://www.cdc.gov/hepatitis/hcv/cfaq.htm, accessed 15 January 2019).
- 121. Hepatitis A fact sheet [website]. Geneva, World Health Organization, 2018 (http://www.who.int/en/ news-room/fact-sheets/detail/hepatitis-a, accessed 15 January 2019).
- 122. Mravčík V, Strada L, Reimer J, Schulte B. Hepatitis C treatment uptake and adherence among injecting drug users in the Czech Republic. *Epidemiology, Microbiology, Immunology.* 2014;63(4):265-9 (https://www.prolekare.cz/casopisy/epidemiologie/2014-4-9/vstup-do-lecby-a-adherence-k-lecbe-vhc-u-injekcnich-uzivatelu-drog-v-cr-50669?hl=en, accessed 15 January 2019).
- 123. Guidelines for the screening, care and treatment of persons with chronic hepatitis C infection updated version, April 2016. Geneva, World Health Organization, 2016 (https://www.who.int/hepatitis/publications/hepatitis-c-guidelines-2016/en/, accessed 15 January 2019).
- 124. Tuberculosis fact sheet [website]. Geneva, World Health Organization, 2018 (http://www.who.int/mediacentre/factsheets/fs104/en/, accessed 15 January 2019).
- 125. Integrating collaborative TB and HIV services within a comprehensive package of care for people who inject drugs: consolidated guidelines. Geneva, World Health Organization, 2016 (http://www.who.int/tb/publications/integrating-collaborative-tb-and-hiv\_services\_for\_pwid/en/, accessed 15 January 2019).
- 126. Noar SM, Black HG, Pierce LB. Efficacy of computer technology-based HIV prevention interventions: a meta-analysis. AIDS. 2009;23(1):107-15 (https://journals.lww.com/aidsonline/fulltext/2009/01020/ Efficacy\_of\_computer\_technology\_based\_HIV.15.aspx, accessed 15 January 2019).
- 127. Young SD, Swendeman D, Holloway IW, Reback CJ, Kao U. Use of technology to address substance use in the context of HIV: a systematic review. *Current HIV/AIDS Reports*. 2015;12(4):462-71 https://www.ncbi. nlm.nih.gov/pmc/articles/PMC4749410/, accessed 15 January 2019).
- 128. Effective use of digital platforms for HIV prevention among men who have sex with men in the European Union/European Economic Area: an introduction to the ECDC guides. Stockholm, European Centre for Disease Prevention and Control, 2017 (https://ecdc.europa.eu/sites/portal/files/documents/Effective-use-digital-platforms-HIV-prevention-EU-EEA.pdf, accessed 15 January 2019).
- 129. Muth S, Len A, Evans JL, Phou M, Chhit S, Neak Y et al. HIV treatment cascade among female entertainment and sex workers in Cambodia: impact of amphetamine use and an HIV prevention program. Addiction Science & Clinical Practice. 2017;12:20 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5584046/, accessed 15 January 2019).
- 130. Lester R, Ritvo P, Mills EJ, Kariri A, Karanja S, Chung M et al. Effects of a mobile phone short message service on antiretroviral treatment adherence in Kenya (WelTel Kenya1): a randomised trial. *The Lancet.* 2019;376(9755):1838-45. doi:10.1016/S0140-6736(10)61997-6.
- 131. Reback CJ, Ling Grant D, Fletcher JB, Branson CM, Shoptaw S, Rohde Bowers J et al. Text messaging reduces HIV risk behaviors among methamphetamine-using men who have sex with men. *AIDS and Behavior*. 2012;16(7):1993-2002 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4878815/, accessed 15 January 2019).
- 132. Muthulingam D, Chin J, Hsu L, Scheer S, Schwarcz S. Disparities in engagement in care and viral suppression among persons with HIV. *Journal of Acquired Immune Deficiency Syndromes*. 2013;65(1):112-19 (https://journals.lww.com/jaids/fulltext/2013/05010/Disparities\_in\_Engagement\_in\_Care\_and\_Viral.17.aspx, accessed 15 January 2019).
- 133. Milloy, M-J, Marshall BDL, Montaner J, Wood E. Housing status and the health of people living with HIV/ AIDS. Current HIV/AIDS Reports. 2012:9(4):364-74 (https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3693560/, accessed 15 January 2019).
- 134. Robertson MJ, Clark RA, Charlebois ED, Tulsky J, Long HL, Bangsberg DR et al. HIV seroprevalence among homeless and marginally housed adults in San Francisco. *American Journal of Public Health.* 2004;94(7):1207-17 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448423/, accessed 15 January 2019).

- Good practice guide for employing people who use drugs. Hove (UK), International HIV/AIDS Alliance, 2015 (https://www.aidsalliance.org/assets/000/001/840/Employing\_FINAL\_original.pdf?1445009816, accessed 15 January 2019).
- 136. Outcome document of the United Nations General Assembly Special Session on the World Drug Problem: our joint commitment to effectively addressing and countering the world drug problem. New York (NY), United Nations, 2016 (https://www.unodc.org/documents/postungass2016/outcome/V1603301-E.pdf, accessed 15 January 2019).
- 137. National Drug Control Policy. Ministry of Health, Republic of the Union of Myanmar, 2018 (https://www. unodc.org/documents/southeastasiaandpacific/2018/02/Myanmar\_Drug\_Control\_Policy.pdf, accessed 15 January 2019).
- Potts H. Accountability and the right to the highest standard of health. Colchester (UK), University of Essex Human Rights Centre, 2008 (http://repository.essex.ac.uk/9717/1/accountability-right-highestattainable-standard-health.pdf, accessed 15 January 2019).
- 139. Training manual for law enforcement officials on HIV service provision for people who inject drugs. Vienna, United Nations Office on Drugs and Crime, 2014 (https://www.unodc.org/documents/hiv-aids/ Lemanual/LE\_Manual\_presentations\_and\_annexes.pdf, accessed 15 January 2019).
- 140. Joint United Nations statement on ending discrimination in health care settings [website]. Geneva, World Health Organization, 2017 (https://www.who.int/news-room/detail/27-06-2017-joint-united-nations-statement-on-ending-discrimination-in-health-care-settings, accessed 15 January 2019).
- 141. Practical guide for civil society HIV service providers among people who use drugs: improving cooperation and interaction with law enforcement officials. Vienna, United Nations Office on Drugs and Crime, 2016 (https://www.unodc.org/documents/hiv-aids/2016/Practical\_Guide\_for\_Civil\_Society\_HIV\_Service\_Providers.pdf, accessed 15 January 2019).
- 142. World report on violence and health. Geneva, World Health Organization, 2002 (http://www.who.int/ violence\_injury\_prevention/violence/world\_report/en/, accessed 15 January 2019).
- 143. Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence. Geneva, World Health Organization, 2013 (http://www.who. int/reproductivehealth/publications/violence/9789241564625/en/, accessed 15 January 2019).
- 144. Joint statement: compulsory drug detention and rehabilitation centers. United Nations, 2012 (http://files. unaids.org/en/media/unaids/contentassets/documents/document/2012/JC2310\_Joint%20 Statement6March12FINAL\_en.pdf, accessed 15 January 2019).
- Advocacy guide: HIV/AIDS prevention among injecting drug users. Geneva, World Health Organization, 2004 (https://www.who.int/hiv/pub/idu/iduadvocacyguide/en/, accessed 15 January 2019).
- 146. Bourne A, Reid D, Hickson F, Torres Rueda S, Weatherburn P. The Chemsex Study: drug use in sexual settings among gay and bisexual men in Lambeth, Southwark & Lewisham. London: Sigma Research, London School of Hygiene and Tropical Medicine, 2014 (https://www.lambeth.gov.uk/sites/default/files/ ssh-chemsex-study-final-main-report.pdf, accessed 15 January 2019).
- 147. HIV prevention, treatment and care in prisons and other closed settings: a comprehensive package of interventions. Vienna, United Nations Office on Drugs and Crime, 2013 (https://www.who.int/hiv/pub/ prisons/interventions\_package/en/, accessed 15 January 2019).
- 148. Ahmed AK, Weatherburn P, Reid D, Hickson F, Torres-Rueda S, Steinberg P et al. Social norms related to combining drugs and sex ("chemsex") among gay men in South London. *International Journal of Drug Policy*. 2016;38:29-35 (http://researchonline.lshtm.ac.uk/3112628/, accessed 15 January 2019).
- 149. Evidence for action: effectiveness of community-based outreach in preventing HIV/AIDS among injecting drug users. Geneva, World Health Organization, 2004 (https://www.who.int/hiv/pub/idu/e4a-outreach/en/, accessed 15 January 2019).
- 150. Training guide for HIV prevention outreach to injecting drug users. Geneva, World Health Organization, 2004 (https://www.who.int/hiv/pub/idu/hivpubidu/en/, accessed 15 January 2019).
- 151. Parkin S, McKeganey N. The rise and rise of peer education approaches. *Drugs: Education Prevention & Policy.* 2000;7(3):293-310. doi:10.1080/09687630050109961.
- Hilfinger Messias DK, Moneyham HL, Vyavaharkar M, Murdaugh C, Phillips KD. Embodied work: insider perspectives on the work of HIV/AIDS peer counselors. *Health Care for Women International*. 2009;30(7):572-94. (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2729058/, accessed 15 January 2019).

- 153. Latkin CA, Hua W, Davey MA. Factors associated with peer HIV prevention outreach in drug-using communities. AIDS Education and Prevention. 2004;16(6):499-508 (https://guilfordjournals.com/doi/ abs/10.1521/aeap.16.6.499.53794, accessed 15 January 2019).
- 154. Smyrnov P, Broadhead RS, Datsenko O, Matiyash O. Rejuvenating harm reduction projects for injection drug users: Ukraine's nationwide introduction of peer-driven interventions. *International Journal of Drug Policy*. 2012;23(2),141-7. doi:10.1016/j.drugpo.2012.01.001.
- 155. Differentiated service delivery for HIV: a decision framework for differentiated antiretroviral therapy delivery for key populations. Amsterdam, International AIDS Society, 2018 (http://www.differentiatedservicedelivery.org/Portals/0/adam/Content/2a0WxWUHfUKtul1mKWdmGQ/File/Decision%20 Framework%20Key%20Population%20Web.pdf, accessed 15 January 2019).
- 156. Addressing the specific needs of women who inject drugs: practical guide for service providers on gender-responsive HIV services. Vienna, United Nations Office on Drugs and Crime, 2016 (https://www.unodc.org/documents/hiv-aids/2016/Addressing\_the\_specific\_needs\_of\_women\_who\_inject\_drugs\_Practical\_guide\_for\_service\_providers\_on\_gender-responsive\_HIV\_services.pdf, accessed 15 January 2019).
- 157. Young people most at risk of HIV: a meeting report and discussion paper from the Interagency Youth Working Group, U.S. Agency for International Development, the Joint United Nations Programme on HIV/AIDS (UNAIDS) Inter-Agency Task Team on HIV and Young People, and FHI. Research Triangle Park (NC), FHI, 2010 (http://data.unaids.org/pub/basedocument/2010/2010\_ypmar\_en.pdf, accessed 15 January 2019).
- 158. HIV and young people who inject drugs: technical brief. Geneva, World Health Organization, 2015 (http://apps.who.int/iris/bitstream/handle/10665/179865/WHO\_HIV\_2015.10\_eng.pdf?sequence=1, accessed 15 January 2019).
- 159. HIV and young men who have sex with men: technical brief. Geneva, World Health Organization, 2015 (http://apps.who.int/iris/bitstream/handle/10665/179867/WHO\_HIV\_2015.8\_eng.pdf?sequence=1, accessed 15 January 2019).
- 160. HIV and young people who sell sex: technical brief. Geneva, World Health Organization, 2015 (http://apps.who.int/iris/bitstream/handle/10665/179868/WHO\_HIV\_2015.7\_eng.pdf?sequence=1, accessed 15 January 2019).
- 161. HIV and young transgender people: technical brief. Geneva, World Health Organization, 2015 (http://apps.who.int/iris/bitstream/handle/10665/179866/WHO\_HIV\_2015.9\_eng.pdf?sequence=1, accessed 15 January 2019).
- 162. Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection. Recommendations for a public health approach - Second edition (WHO, 2016) (https://apps.who.int/ iris/bitstream/handle/10665/208825/9789241549684\_eng.pdf;jsessionid=7A8D2949C0412903C8629 SA3B6BCE893?sequence=1)
- 163. Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence. Geneva, World Health Organization, 2009 (https://www.who.int/hiv/pub/idu/opioid/en/, accessed 15 July 2019).
- 164. Treatment of stimulant use disorders: current practices and promising perspectives. Discussion paper, Vienna, United Nations Office on Drugs and Crime, 2019 (https://www.unodc.org/documents/ drug-prevention-and-treatment/Treatment of PSUD for website 24.05.19.pdf, accessed 15 July 2019).
- 165. Guidelines for the care and treatment of persons diagnosed with chronic hepatitis C virus infection. Geneva, World Health Organization, 2018 (https://www.who.int/hepatitis/publications/hepatitis-c-guidelines-2018/en/, accessed 15 July 2019).
- 166. Community management of opioid overdose. Geneva, World Health Organization, 2014 (https://www.who.int/substance\_abuse/publications/management\_opioid\_overdose/en/, accessed 15 July 2019).
- 167. Differentiated Service Delivery for HIV: A Decision Framework For Differentiated Antiretroviral Therapy Delivery For Key Populations. The last mile to universal access. Amsterdam, International AIDS Society, 2018 (http://www.differentiatedservicedelivery.org/Portals/0/adam/ Content/2a0WxWUHfUKtul1mKWdmGQ/File/Decision%20Framework%20Key%20Population%20 Web.pdf, accessed 15 July 2019).
- 168. Joint statement on Compulsory drug detention and rehabilitation centres. United Nations, 2012 (http://files.unaids.org/en/media/unaids/contentassets/documents/document/2012/JC2310\_Joint%20 Statement6March12FINAL\_en.pdf, accessed 15 July 2019).



Vienna International Centre, P.O. Box 500, 1400 Vienna, Austria Tel.: (+43-1) 26060-0, Fax: (+43-1) 263-3389, www.unodc.org