THE GLOBAL STATE OF HARM REDUCTION 2018

6TH EDITION

HARM REDUCTION INTERNATIONAL

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Contents

The Global State of Harm Reduction 2018

Written and edited by Katie Stone and Sam Shirley-Beavan

Acknowledgements

This report was made possible by the collaborative input of harm reduction organisations networks, drug user organisations, researchers, academics and advocates. Harm Reduction International would like to acknowledge the invaluable contribution of these individuals and organisations:

Asia: Zia Ziaurahman, UNODC; Saima Khan, UNAIDS; Choub Sok Chamreun, KHANA; Cherry Cheung, Hong Kong Narcotics Division; G Charanjit Sharma and Pemu Bhutia, India HIV/AIDS Alliance; Ignatius Praptoraharjo, Gadjah Mada University; Goro Koto, Japan Advocacy Network for Drug Policy; Augusto Nogueira, Assocation of Rehabilitation of Drug Abusers of Macau; Yatie Jonet, Malaysian AIDs Commission; Dr Khin Cho Win, UNAIDS; Anjay Kumar and Bishnu Sharma Coalition of Drug Users in Nepal; Patrick Angeles, NoBox; Pascal Tanguay; Nguyen Tam, Vietnam Ministry of Health; Semjidmaa Choijil, Japan Advocacy Network for Drug Policy; Kristina Mendoza, StreetLawPH; Khin Cho Win Htin.

Eurasia: David Otiashvili, Alternative Georgia/Eurasian Harm Reduction Association (EHRA); Igor Kouzmenko, ENPUD; Marian Ursan, Carusel; Igor Gordon, EHRA; M Ivanishvili; S Ibisevich; Yuliia Georgieva.

Western Europe: European Monitoring Centre on Drug Use and Drug Addiction; Josep Rovira Guardiola, ABD; Tessa Windelinckx, Needle Exchange Flanders; Dirk Schäffer, JES; Heino Stöver, Akzept; Stine Nielsen; Patrick Klein, Abrigado; Eberhard Schatz, Correlation; Ximene Rego, APDES; Martine Baudin, Première Ligne Association; Dominique Schori, Infodrog; Olivier Simon and Gabriel Guarassi, CHUV; René Akeret; Petra Baumberger, Fachverbund Sucht; Christopher Hicks, NAT; Zoe Carre and Niamh Eastwood, Release; Linda Montanari, EMCDDA; Susanna Ronconi, Antonella Camposeragna, Maria Stagnitta, Pino di Pino and Elise Fornero, Forum Droghe.

Caribbean: Clara Alibert, UNODC; Alexandra Rodriguez, Camila Gelpi-Acosta, Gladys Nieves Vásquez and Yesenia Aponte, El Punto en la Montaña.

Latin America: Diana Rossi and Paula Goltzman, Intercambios Argentina; Inés Mejía Motta; Isabel Pereira and Lucía Ramírez, Dejusticia; Saïd Slim Pasarán, Verter A.C.; Julián Quintero, Acción Técnica Social; Ernesto Cortés, ACEID; Juliana Moura Bueno; Mauricio Fiore, Cebrap; Francisco Bastos, FIOCRUZ.

North America: Benjamin Phillips, Harm Reduction Coalition; Shantel Davies, NASEN; Dr Bruce Trigg; Dr Sharon Stancliff; Eliza Wheeler; Nazlee Maghsoudi, Centre on Drug Policy Evaluation; Sandra Ko Hon Chu, Canadian HIV/AIDS Legal Network.

Oceania: Caitlin Hughes, UNSW; Paul Dietze, Burnet Institute; Lisa Maher, Kirby Institute; Alison Ritter, UNSW; David McDonald, Harm Reduction Australia; Kathryn Leafe, NZNEP.

Middle East and North Africa: Lina Brandt, MENAHRA.

Sub-Saharan Africa: Sylvia Ayon, KANCO; Kunal Naik, PILS; Andrew Scheibe, Shaun Shelley, Julie MacDonnell; Wamala Twaibu, UHRN; Adeolu Ogunrombi; Wilson Box; Betty Mombo; Massougi Thiandoum and Magatte Mbodj, ANCS; Magath Pouye, ANCS; Isidore Obot; Alix Zuinghedau, Alexandra Phaeton, Camille Sarret and Malik Samessekou, Coalition Plus; Nicolas Denis, Antoine Henry and Enzo Poultreniez, Aides; Charles Somé; Bernice Apondi and Chris Abuor, VOCAL Kenya; Mlewa Kalama, KANCO; Fabienne Hariga; John Ondiek, Haso Seychelles; Ancella Voets, Médecins Sans Frontières; Anna Versfeld; John Kimani, KENPUD; Aggey Aluso, OSIEA; Céline Grillon, Medicines du Monde.

Thanks also to the following people for input and guidance:

Naomi Burke-Shyne, Catherine Cook, Emily Rowe, Edward Fox, Gen Sander, Cinzia Brentari, Sarah Lowther, Olga Szubert, Giada Girelli, Rick Lines, Ashley Howard, Maria Pascale, Jamie Bridge, Ruth Birgin, Claire Mawditt, Gloria Lai, Anne Bergenstrom, Claudia Stoicescu, Anna Dovbakh, Olga Belyaeva, Marie Nougier, Daniel Wolfe, Sarah Evans, Joanne Csete, Ane Maria-Goretti, Anna Versfeld, Dagmar Hedrich, Machteld Busz, Vicki Hanson, Ana Martín Ortiz, Jasmine Tyler, Richard Elliot, Wendy Allison, John Ryan, Lisa Maher, Sarah Larney, Louisa Degenhardt, Joumana Hermez, Ahmed Sabry, Jallal Toufiq, Maziyar Ghiabi, the International Network of People who Use Drugs (INPUD), and the Women and Harm Reduction International Network (WHRIN).

The Global State of Harm Reduction benefits from the generous support of the MAC AIDS Fund, the Robert Carr Fund for Civil Society Networks, the Partnership to Inspire, Transform and Connect the HIV response (PITCH is a strategic partnership of Aidsfonds, the International HIV/AIDS Alliance and the Dutch Ministry of Foreign Affairs), and the Government of Switzerland Federal Office of Public Health; as well as the World Health Organization and the UN Office on Drugs and Crime. Harm Reduction International acknowledges the valuable support of Elton John AIDS Foundation and Open Society Foundations.

Designed by Mark Joyce
Copy-edited by Richard Fontenoy

Published by
Harm Reduction International
61 Mansell Street
Aldgate, London E1 8AN
United Kingdom
E-mail: office@hri.global
Website: www.hri.global

Suggested citation: Stone K, Shirley-Beavan S (2018) Global State of Harm Reduction 2018. Harm Reduction International: London.

HARM REDUCTION
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THE GLOBAL STATE
OF HARM REDUCTION 2018

Foreword by Maia Szalavitz

In 2018, harm reduction faces both major challenges and clear opportunities. While the biannual Harm Reduction Conference in the US, held this year in New Orleans, saw its largest number of attendees ever – over 2,000, according to its organisers – the toll of overdose death remained relentless. Various forms of illicitly-manufactured fentanyl are now the leading cause of overdose death in North America – a distressing statistic, especially for a form of drug that barely had any presence in the US and Canadian markets until the last four years.

The harm reduction movement itself is thriving: this year also saw Canada's well-attended Stimulus Harm Reduction Conference in Edmonton. In both the US and Canada, there is clear movement towards expanding needle and syringe exchange services, naloxone availability and, in the US, creating safe injection facilities (SIFs). Politically, while strong opposition remains – especially in the American South – the media, parents' organisations, most recovery advocates and even many politicians have finally recognised that harm reduction is essential to save lives.

The rise of illicit fentanyls themselves is just about the clearest case one can make for harm reduction: despite a literally poisonous supply, millions of people are still taking street opioids in an underground market that lacks quality control. It's hard to argue that anything short of providing a safer supply – both through traditional medications like methadone and buprenorphine and via prescription heroin, hydromorphone (Dilaudid) and perhaps others – will be able to end the crisis, if done to scale.

Indeed, while harm reduction itself and its ideas are strong, many people in the field are struggling in the face of so much death and so little access to the best tools to save lives. Naloxone, SIFs, syringe programmes and current medication treatments are all necessary – but far from sufficient. Progress towards racial and economic justice also remains too slow.

The death of harm reduction giant Dan Bigg, the man who brought naloxone out of the hospital and into the street, has been painful – as has the loss of so many other loved ones. Many harm reductionists are now traumatised by so much rapid loss.

In light of this situation in which real political progress has been made – but not quickly enough and always, in the US, facing a potential backlash from the Trump administration – we need to take good care of each other. Harm reduction doesn't just apply to the people who use drugs that people in the field work with – it applies to all of us. We need to bring the compassion and kindness and non-judgmental support we want for people who use drugs to ourselves, too.

Harm reduction has gone from an idea shared by hundreds in the late 1980s and 1990s to an international movement of thousands or more. The power of the idea that drug policy should focus on reducing harm rather than use remains unparalleled: more and more people recognise both the racism and the futility of the war on certain drugs and those who take them. More and more people are asking, "If drugs are really a public health issue, why are we still locking people up to try to solve it?" More are questioning the morality of "sending a message" by allowing people who take drugs to die preventable deaths.

Kindness will bring us through this time of darkness and into the light.

Maia Szalavitz
Author and journalist

Foreword by Ma. Inez Feria

Harm reduction works. This is no longer up for debate.

The evidence for harm reduction has only grown stronger over the years. Initiatives that emanate from a harm reduction framework – that prioritise health and welfare, guarantee human rights, and promote social justice – save lives.

But only when people are able to access them.

In the past few decades, Asia has made strides in increasing the availability of harm reduction services such as needle and syringe programmes (NSPs) and opioid substitution therapy (OST), as well as access to treatment for HIV and viral hepatitis. Significant progress has also been made in understanding the nuances of how people across Asia in different contexts experience psychoactive substances.

Where harm reduction services are available, access and retention rates in programmes remain low, and many areas that need these services simply do not have them. Further, emerging trends in drug use, and a better understanding of the needs of different populations who use drugs, means that new initiatives are required.

The region is witnessing an increase in amphetamine-type stimulant (ATS) use without an increase in harm reduction for these people. Services for ATS that are founded in the same harm reduction principles that allowed us to respond effectively to opiate and injecting drug use need to be developed and provided.

There is also greater recognition of the need for gender-sensitive and gender-responsive harm reduction services. Women have experiences with drug use and the drug trade that differ from men's. Especially, but not limited to, societies where women are idealistically painted as nurturing or pure, their involvement with drugs expose them to a greater degree of vulnerability to physical and sexual violence, exploitation and stigmatisation. In the criminal justice system alone, while women make up a smaller percentage of the prison population compared to men, they are the fastest growing group of prisoners. The enforcement of harsh drug policies is exacerbating this problem.

The steps required to develop harm reduction services for these different contexts have not changed: meet people where they are at; give honest and pragmatic information; create programmes and responses around their needs, rather than imposing unrealistic goals; and, ensure their meaningful involvement throughout the process.

Asia's progress in harm reduction will continue to be undercut if we don't address a prevailing and growing culture in many Asian countries, one that still believes in punishment as the most effective way to deal with any behaviour it deems deviant. Responses to drug-related issues continue to be couched in a repressively punitive social and policy environment. The call for drug-free societies grows louder, and with it, the dehumanisation of people who use drugs.

In the Philippines alone, where the current president has famously called for an all-out "war on drugs", the past two years has seen thousands of people killed and tens of thousands more deprived of liberty. Support for such zero-tolerance rhetoric has spread, with neighbouring countries adopting similar approaches. Compounded with diminishing funding for harm reduction in the region, these punitive environments risk us backsliding from the progress we have worked so hard for.

Yet, there are pockets of hope. Communities who recognise the negative consequences of dehumanising drug policies. People who are seeking better solutions, but are unable to find or understand them. People who are unable to reconcile which policies and services actually work with what they have been taught is good and bad.

The challenge falls on those of us pushing for progress and human rights to extend our reach and communicate to those outside the drug policy and harm reduction bubble. We must empower people to respond based on compassion and evidence instead of misguided idealism. It is imperative for us to keep developing and delivering services and programmes that are responsive to the needs of people who use drugs, and also to shift the prevailing mindset in many of our countries where they must thrive.

For young advocacy groups (like the one I am involved with) that must navigate such extreme social and political conditions, the *Global State of Harm Reduction* anchors us in a global context, and builds a foundation for the much-needed evidence and perspective to do our work.

Harm reduction reminds us that a deep respect for the value and dignity of each person drives all our actions. For decades, thousands of lives have been ruined in pursuit of an unrealistic drug-free goal. We are at a pivotal stage for drug policy in the region, and it falls on us to steer it in the right direction.

Ma. Inez Feria
NoBox Philippines

Introduction

In 2008, Harm Reduction International (HRI) released the first *Global State of Harm Reduction*, a report that mapped responses to drug-related HIV, viral hepatitis and tuberculosis (TB) around the world for the first time. The data gathered for the report provided a critical baseline against which progress could be measured in terms of the international, regional and national recognition of harm reduction in policy and practice.

Since 2008, the biennial report has become a key publication for researchers, policymakers, civil society organisations, UN agencies and advocates, mapping harm reduction policy adoption and programme implementation globally. Over the last decade, reports of injecting drug use and the harm reduction response have increased; harm reduction programmes are currently operating at some level in almost half of the 179 countries in the world where injecting drug use has been documented.

With patterns of drug use globally continuing to evolve, Harm Reduction International reached out in 2017 to civil society networks across the world to ask what they wanted to see in this report. The 2018 *Global State of Harm Reduction* report has a broader scope, containing information on:

- The number of people who inject drugs and the number of people imprisoned for drug use (where data is available).
- Needle and syringe programmes (NSP), opioid substitution therapy (OST), HIV and hepatitis C and TB testing and treatment for people who use drugs, in both the community and in prisons.
- The harm reduction response for people who use amphetamine-type stimulants, cocaine and its derivatives, and new psychoactive substances.
- Drug-checking in nightlife settings.
- Harm reduction for women who use drugs.
- Drug consumption rooms.
- Drug-related mortality and morbidity and the overdose response, as well as naloxone peer-distribution in the community and naloxone provision in prisons.
- Developments and regressions in funding for harm reduction.

This report and other *Global State of Harm Reduction* resources can be found at www.hri.global.

Methodology

The information presented in the two sections of the report was gathered using existing data sources. These include research papers and reports from intergovernmental organisations, multilateral agencies, international non-governmental organisations, civil society and harm reduction networks, organisations of people who use drugs, and expert and academic opinion from those working on HIV, hepatitis C, TB, drug use and harm reduction. Harm Reduction International also enlisted support from regional harm reduction networks and researchers to gather qualitative information on key developments[a] and to review population size estimates, prevalence data on HIV and viral hepatitis among people who inject/use drugs, and the extent of provision for needles and syringes, opioid substitution therapy, naloxone, drug-checking services and drug consumption rooms.

Quantitative data for the tables at the beginning of each chapter in Section 2 have been obtained from a variety of sources and are referenced in each regional update. These data reflect the most recent available estimates for each country at the time of the data collection exercise (March to November 2018). Where no source was available, the data were unpublished or their reliability were questioned by civil society organisations, researchers or other experts, we have sought expert opinion to identify additional sources and verify their reliability.

Data in many of the regional chapters have been sourced from two global systematic reviews, published in the *Lancet Global Health* in 2017, supplemented by national or regional experts.[1,2] These reviews identified the prevalence of injecting drug use; the socio-demographic characteristics of, and risk factors for people who inject drugs; the prevalence of blood-borne viruses;[1] and coverage of NSP, OST, HIV testing, ART and condom programmes.[2] The data from Western Europe and some countries in Eurasia has been sourced from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), unless otherwise stated in the text. Footnotes and references are provided for all estimates reported, together with any discrepancies in the data. Where information in the tables is outdated, we have provided footnotes with a year of estimate.

Figures published through international reporting systems, such as those undertaken by the United Nations Office on Drugs and Crime (UNODC), the World Health Organization and the Joint United

a A copy of *The Global State of Harm Reduction 2018* questionnaire can be obtained by contacting office@hri.global.

Nations Programme on HIV/AIDS (UNAIDS) may differ from those collated here due to the varying scope of monitoring surveys, reliability criteria and different regional classifications.

Regions have been largely identified using the coverage of regional harm reduction networks. Accordingly, this report examines Asia, Eurasia (Central and Eastern Europe and Central Asia), Western Europe, the Caribbean, Latin America, North America, Oceania, the Middle East and North Africa, and Sub-Saharan Africa. All regional updates have been peer reviewed by experts in the field (see Acknowledgements).

Data quality

In 2017, two global systematic reviews on the prevalence of injecting drug use and prevalence of HIV and hepatitis, and on the coverage of interventions to prevent and manage HIV and hepatitis, were published in the *Lancet Global Health*.[1,2] These reviews were welcomed by the international community as an independent source of data and analysis. For Western European countries and some countries in Eurasia, the EMCDDA has continued to be a crucial source of reliable data for this edition of the *Global State*, as in past editions. Other sources include global AIDS response progress reports submitted by governments to UNAIDS in 2016/2017/2018, data published by the UNODC in the *World Drug Report* in 2018, bio-behavioural surveillance reports, systematic reviews and academic studies.

We have sought input from harm reduction networks, researchers, academics and other experts to inform our reporting on the existence and coverage of harm reduction. Where no updates were available, data from *The Global State of Harm Reduction 2016*[3] has been included, with footnotes provided on dates of estimate where necessary.

Our data on epidemiology and coverage represent the most recent verifiable estimates available. However, a lack of uniformity in measures, data collection methods and definitions for the estimates provided make cross-national and regional comparisons challenging.

The significant gaps in the data are an important reminder of the need for a greatly improved monitoring and data reporting system on HIV and drug use around the world.

Limitations

The report aims to provide a global snapshot of harm reduction policies and programmes; as such it has limitations. It does not evaluate the quality of the services that are in place, although where possible it does highlight areas of concern.

While *The Global State of Harm Reduction 2018* aims to cover important areas for harm reduction, it focuses primarily on public health aspects of the response. The report does not document all the social and legal harms faced by people who use drugs, nor does it cover all the health harms related to illicit or licit substance use.

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Global Overview
1.1 Behind the Numbers

Global Overview

Behind the numbers

It is a decade since Harm Reduction International began compiling the *Global State of Harm Reduction*. While our coverage of harm reduction policies and services has evolved and broadened in scope, the same cannot always be said for harm reduction in practice around the world.

According to a 2017 systematic review in the *Lancet Global Health*, injecting drug use is present in 179 of 206 countries throughout the world, with HIV and hepatitis C prevalence 17.8% and 52.3% respectively among the 15.6 million people who inject drugs.[2]

Despite this heavy burden of diseases, effective harm reduction interventions that can help prevent their spread are severely lacking in many countries. The number of countries providing needle and syringe programmes (NSP) and/or opioid substitution therapy (OST) has more or less stagnated since 2014. Currently, just 86 countries implement NSP to varying degrees (a drop from the 90 that did so in 2016) and 86 have OST (a moderate uptick of six countries compared to two years ago).

Compounding this relative dearth of services is a funding crisis for harm reduction that rages in the low- and middle-income countries (LMICs) where injecting drug use is most prevalent. UNAIDS sounded the alarm in 2018 over the 20% shortfall in funding for the global HIV response. Our research found that when it comes to harm reduction in LMICs, this funding gap is close to an alarming 90%.[4] When juxtaposing global aspirations to end AIDS by 2030 and the vulnerability of people who inject drugs to contracting HIV, it is difficult not to question states' genuine political commitment to the agreed-upon goals.

Harm reduction is not just about commodities to address HIV and other blood-borne viruses. It encompasses a range of health and social services, policies and approaches that address the harms of illicit drug use and drug policy. To reflect this, the 2018 *Global State of Harm Reduction* is our most comprehensive yet, and includes for the first time dedicated sections for each region on harm reduction for amphetamine-type stimulants (ATS), overdose response and funding for harm reduction, as well as analyses of harm reduction for women.

ATS use is increasing around the world, and harm reduction interventions for people who use these substances remain underdeveloped. Drug-checking is having a relative boom in some regions, but only in certain settings (for example, festivals and night clubs). Drug consumption rooms in many countries, meanwhile, remain largely focused on serving people who inject drugs rather than including space for those who may smoke or snort drugs.

This says nothing of one of the most pressing crises in harm reduction today – fatal drug-related overdose. North America and parts of Western Europe continue to see overdose deaths climb, primarily those related to opioids and linked to polydrug use, while data in many regions fail to properly track these fatalities. Though naloxone – an opioid antagonist medicine that can reverse the effects of an overdose – is increasingly being deployed in the countries most affected by this crisis, it is not always placed in the hands of those who need it most, i.e. people who use drugs and their peers.

Finally, as with the diversification of interventions based on drug used, different populations are better served by tailored approaches. This report notes, in particular, the need for gender-sensitive services to address the acute vulnerability faced by women who use or inject drugs. Most services worldwide remain male-focused. This is compounded by the fact that women who use drugs face heightened levels of stigma because of unfair (and outdated) expectations of a woman's role in society. Sadly, the most vulnerable women who use drugs may be subject to intimate partner violence and are effectively excluded from any support services.

Underpinning the gaps in harm reduction is a political and legal environment in most countries that continues to demonise and/or criminalise people who use drugs. This manifests most brutally in countries that have pursued a bloody crackdown on the drug trade, notably the Philippines, where over 20,000 people have been killed (many the result of extrajudicial killings) since 2016.[5]

Hostile political and legal contexts ensure barriers for people wanting to access health and social services, and put some of the most vulnerable people in society at risk of incarceration. Prisons represent high-risk environments for the transmission of blood-borne viruses, yet there are even fewer harm reduction services on offer compared to those available in the community.

While this all paints a bleak picture of harm reduction worldwide, there are examples of innovation and perseverance in this report that give hope and demonstrate that progress is possible. It is important, too, to not overlook the fact that harm reduction has come a long way over the past two decades.

The evidence is clearly in favour of harm reduction. It is time that more countries acknowledge this and implement the services that are proven to advance public health and uphold human rights.

The Global Harm Reduction Response

Table 1.1.1: Countries or territories employing a harm reduction approach in policy or practice

Country or territory	Explicit supportive reference to harm reduction in national policy documents	At least one needle and syringe programme operational	At least one opioid substitution programme operational	At least one drug consumption room	At least one naloxone peer distribution programme operational	OST in at least one prison	NSP in at least one prison
ASIA							
Afghanistan	✓	✓	✓	×	✓	✓	×
Bangladesh	×	✓	✓	×	×	×	×
Bhutan	×	×	×	×	×	×	×
Brunei Darussalam	×	×	×	×	×	×	×
Cambodia	×	✓	✓	×	×	×	×
China	×	✓	✓	×	×	×	×
Hong Kong	×	×	✓	×	×	×	×
India	✓	✓	✓	×	✓	✓	×
Indonesia	×	✓	✓	×	×	✓	×
Japan	×	×	×	×	×	×	×
Laos	×	×	×	×	×	×	×
Macau	✓	✓	✓	×	×	✓	×
Malaysia	✓	✓	✓	×	×	✓	×
Maldives	×	×	✓	×	×	×	×
Mongolia	×	✓	×	×	×	×	×
Myanmar	✓	✓	✓	×	×	×	×
Nepal	✓	✓	✓	×	×	×	×
Pakistan	×	✓	×	×	×	×	×
Philippines	×	×	×	×	×	×	×
Singapore	×	×	×	×	×	×	×
South Korea	×	×	×	×	×	×	×
Sri Lanka	×	×	×	×	×	×	×
Taiwan	✓	✓	✓	×	×	×	×
Thailand	✓	✓	✓	×	×	×	×
Vietnam	✓	✓	✓	×	×	✓	×
EURASIA							
Albania	✓	✓	✓	×	×	✓	×
Armenia	✓	✓	✓	×	×	✓	✓
Azerbijan	×	✓	✓	×	×	×	×
Belarus	✓	✓	✓	×	×	×	×
Bosnia and Herzegovina	✓	✓	✓	×	×	✓	×
Bulgaria	✓	×	✓	×	×	✓	×
Croatia	✓	✓	✓	×	×	✓	×
Czech Republic	✓	✓	✓	×	×	✓	×
Estonia	✓	✓	✓	×	✓	✓	×
Georgia	✓	✓	✓	×	×	×[a]	×
Hungary	✓	✓	✓	×	×	×[a]	×
Kazakhstan	✓	✓	✓	×	×	×	×
Kosovo	✓	✓	✓	×	×	×	×
Krygyzstan	✓	✓	✓	×	×	✓	✓
Latvia	✓	✓	✓	×	×	✓	×
Lithuania	✓	✓	✓	×	×	×	×

a OST is available in prison, but for detoxification purposes only.

Country or territory	Explicit supportive reference to harm reduction in national policy documents	At least one needle and syringe programme operational	At least one opioid substitution programme operational	At least one drug consumption room	At least one naloxone peer distribution programme operational	OST in at least one prison	NSP in at least one prison
Macedonia	✓	✓	✓	×	×	✓	✓
Moldova	✓	✓	✓	×	×	✓	✓
Montenegro	✓	✓	✓	×	×	✓	×
Poland	✓	✓	✓	×	×	×[a]	×
Romania	✓	✓	✓	×	×	✓	×[b]
Russia	×	✓	×	×	×	×	×
Serbia	✓	✓	✓	×	×	✓	×
Slovakia	✓	✓	✓	×	×	×	×
Slovenia	✓	✓	✓	×	×	✓	×
Tajikistan	✓	✓	✓	×	×	×	✓
Turkmenistan	×	×	×	×	×	×	×
Ukraine	✓	✓	✓	×	✓	✓	×
Uzbekistan	✓	✓	×	×	×	×	×
WESTERN EUROPE							
Andorra	nk	nk	nk	×	nk	nk	nk
Austria	✓	✓	✓	×	×	✓	×
Belgium	✓	✓	✓	✓	×	✓	×
Cyprus	✓	✓	✓	×	×	✓	×
Denmark	✓	✓	✓	✓	✓	✓	×
Finland	✓	✓	✓	×	×	✓	×
France	✓	✓	✓	✓	×	✓	×
Germany	✓	✓	✓	✓	×	✓	✓
Greece	✓	✓	✓	×	×	✓	×
Iceland	✓	✓	✓	×	×	nk	nk
Ireland	✓	✓	✓	×	×	✓	×
Italy	✓	✓	✓	×	✓	✓	×
Luxembourg	✓	✓	✓	✓	×	✓	✓
Malta	✓	✓	✓	×	×	✓	×
Monaco	nk	nk	nk	×	nk	nk	nk
Netherlands	✓	✓	✓	✓	×	✓	×
Norway	✓	✓	✓	✓	✓	✓	×
Portugal	✓	✓	✓	×	×	✓	×
San Marino	nk	nk	nk	×	nk	nk	nk
Spain	✓	✓	✓	✓	×	✓	✓
Sweden	✓	✓	✓	×	×	✓	×
Switzerland	✓	✓	✓	✓	×	✓	✓
Turkey	×	×	✓	×	×	×	×
United Kingdom	✓	✓	✓	×	✓	✓	×
CARIBBEAN							
The Bahamas	✓	×	×	×	×	×	×
Dominican Republic	✓	✓	×	×	×	×	×
Guyana	×	×	×	×	×	×	×
Haiti	×	×	×	×	×	×	×
Jamaica	×	×	×	×	×	×	×

b NSPs are officially available in Romanian prisons, but are reported to be inaccessible to prisoners in reality.

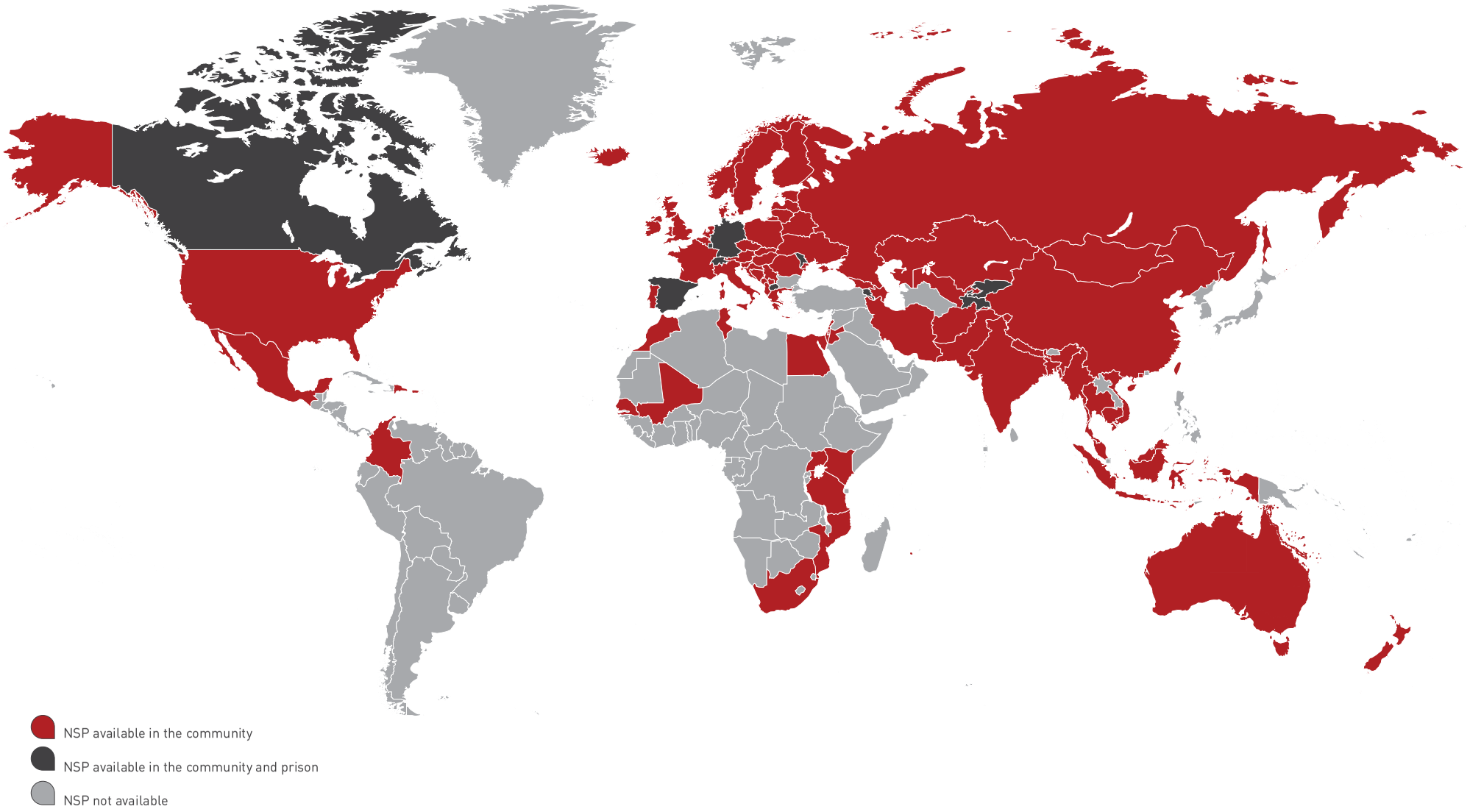
Country or territory	Explicit supportive reference to harm reduction in national policy documents	At least one needle and syringe programme operational	At least one opioid substitution programme operational	At least one drug consumption room	At least one naloxone peer distribution programme operational	OST in at least one prison	NSP in at least one prison
Puerto Rico	✓	✓	✓	×	×	✓	×
Suriname	×	×	×	×	×	×	×
LATIN AMERICA							
Argentina	✓	×	✓	×	×	×	×
Bolivia	×	×	×	×	×	×	×
Brazil	×	×	×	×	×	×	×
Chile	×	×	×	×	×	×	×
Colombia	✓	✓	✓	×	×	×	×
Costa Rica	✓	×	✓	×	×	×	×
Ecuador	✓	×	×	×	×	×	×
El Salvador	×	×	×	×	×	×	×
Guatemala	×	×	×	×	×	×	×
Honduras	×	×	×	×	×	×	×
Mexico	✓	✓	✓	×[c]	✓	×	×
Nicaragua	×	×	×	×	×	×	×
Panama	×	×	×	×	×	×	×
Paraguay	×	×	×	×	×	×	×
Peru	×	×	×	×	×	×	×
Uruguay	✓	×	×	×	×	×	×
Venezuela	×	×	×	×	×	×	×
NORTH AMERICA							
Canada	✓	✓	✓	✓	✓	✓	✓
United States	✓	✓	✓	×	✓	✓	×
OCEANIA							
Australia	✓	✓	✓	✓	✓	✓	×
Fiji	×	×	×	×	×	×	×
Kiribati	×	×	×	×	×	×	×
Marshall Islands	×	×	×	×	×	×	×
Micronesia	×	×	×	×	×	×	×
New Zealand	✓	✓	✓	×	×	✓	×
Palau	×	×	×	×	×	×	×
Papua New Guinea	×	×	×	×	×	×	×
Samoa	×	×	×	×	×	×	×
Solomon Islands	×	×	×	×	×	×	×
Tonga	×	×	×	×	×	×	×
Vanuatu	×	×	×	×	×	×	×
MIDDLE EAST AND NORTH AFRICA							
Algeria	×	×	×	×	×	×	×
Bahrain	×	×	✓	×	×	×	×
Egypt	✓	✓	×	×	×	×	×
Iran	✓	✓	✓	×	×	✓	×
Iraq	×	×	×	×	×	×	×
Israel	✓	✓	✓	×	×	✓	×
Jordan	×	✓	×	×	×	×	×

c Though no official DCRs operate in Mexico at the time of reporting, a facility exclusively serving women exists in Mexicali, Baja California.

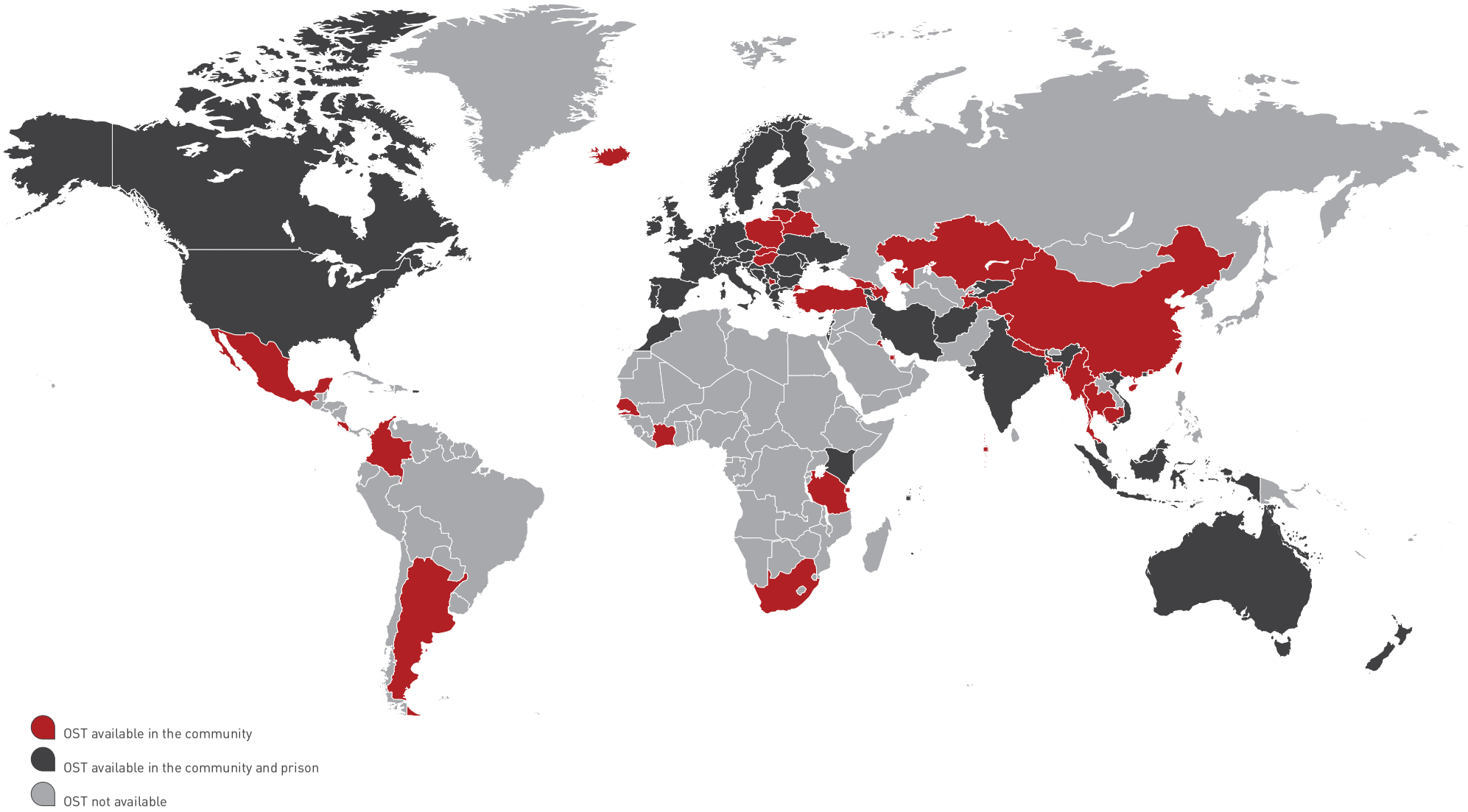
Country or territory	Explicit supportive reference to harm reduction in national policy documents	At least one needle and syringe programme operational	At least one opioid substitution programme operational	At least one drug consumption room	At least one naloxone peer distribution programme operational	OST in at least one prison	NSP in at least one prison
Kuwait	×	×	✓	×	×	×	×
Lebanon	✓	✓	✓	×	×	✓[d]	×
Libya	×	×	×	×	×	×	×
Morocco	✓	✓	✓	×	×	✓[d]	×
Oman	✓	×	×	×	×	×	×
Palestine	✓	✓	✓	×	×	✓	×
Qatar	×	×	×	×	×	×	×
Saudi Arabia	×	×	×	×	×	×	×
Syria	×	×	×	×	×	×	×
Tunisia	×	✓	×	×	×	×	×
United Arab Emirates	×	×	×[e]	×	×	×	×
Yemen	×	×	×	×	×	×	×
SUB-SAHARAN AFRICA							
Benin	×	×	×	×	×	×	×
Burkina Faso	×	×	×	×	×	×	×
Burundi	×	×	×	×	×	×	×
Côte d'Ivoire	×	×	✓	×	×	×	×
Democratic Republic of the Congo	×	×	×	×	×	×	×
Ghana	✓	×	×	×	×	×	×
Kenya	✓	✓	✓	×	×	✓	×
Lesotho	×	×	×	×	×	×	×
Liberia	×	×	×	×	×	×	×
Madagascar	×	×	×	×	×	×	×
Malawi	×	×	×	×	×	×	×
Mali	X	✓	×	×	×	×	×
Mauritius	✓	✓	✓	×	×	✓	×
Mozambique	X	✓	×	×	×	×	×
Nigeria	✓	×	×	×	×	×	×
Rwanda	×	×	×	×	×	×	×
Senegal	✓	✓	✓	×	×	×	×
Seychelles	✓	×	✓	×	×	✓[f]	×
Sierra Leone	×	×	×	×	×	×	×
South Africa	✓	✓	✓	×	×	×	×
Tanzania	✓	✓	✓	×	×	×	×
Tanzania (Zanzibar)	✓	×	✓	×	×	×	×
Togo	×	×	×	×	×	×	×
Uganda	×	✓	×	×	×	×	×
Zambia	✓	×	×	×	×	×	×
Zimbabwe	×	×	×	×	×	×	×
TOTALS	85	86	86	11	12	54	10

d OST in prisons is reported to be largely accessible.
e OST is available for detoxification only.
f The extent to which OST is available in practice in prisons is unknown.

Map 1.1: Global availability of needle and syringe programmes in the community and in prisons



Map 1.2: Global availability of opioid substitution therapy in the community and in prisons



Needle and syringe programmes (NSPs)

Since the *Global State of Harm Reduction* last reported, there has been a small decline in the number of countries implementing NSPs, from 90 in 2016 to 86 in 2018. This is in part due to the withdrawal of services in Latin American countries (such as Argentina and Brazil), where civil society organisations report there are no longer significant populations of people who inject drugs.

However, NSP services have ceased to operate due to changes in policy in Bulgaria, Laos and the Philippines, where punitive drug policies result in people who use drugs experiencing harsh criminalisation. On the other hand, three new countries in sub-Saharan Africa have adopted NSPs: Mali, Mozambique and Uganda.

According to the available data presented in this report, 29 countries have increased the number of NSP sites since 2016, while 15 have reduced the number of sites. In Eurasia, 10 of the 27 countries have expanded the number of NSPs in operation, while countries in Asia have seen the greatest decline in the number of services. However, it is important to note that while the data presented here represent the most reliable estimates available, these are not always recent, and considerable improvement in the availability of accurate and systematically captured data at national level is necessary to make this kind of monitoring more robust.

The existence of NSP sites in a country does not mean these sites are universally accessible to people who use drugs. Discrimination and stigma are frequently cited by networks of people who use drugs, civil society organisations and academics as reasons that people who use drugs might decline to access such services. This is particularly true among already stigmatised or marginalised groups, such as women who use drugs, men who have sex with men, homeless people, migrants, ethnic minorities and indigenous peoples. Geographic variation, where services are concentrated only in certain regions or exclusively in urban environments, is also a barrier to access identified in Oceania, sub-Saharan Africa and Western Europe.

Opioid substitution therapy (OST)

The number of countries in which OST is available has increased since 2016, from 80 to 86. The countries that have introduced or re-introduced OST since 2016 are: Cote d'Ivoire and Zanzibar (Tanzania) in sub-Saharan Africa; Bahrain, Kuwait and Palestine in the Middle East; and Argentina and Costa Rica in Latin America. OST remains entirely unavailable in a number of countries, most notably Russia, where OST is prohibited by law.

Data on the total number of sites offering OST in a country are often unavailable, for example in Western Europe, where there is considerable overlap with other medical services. However, according to the data that are available, 17 countries worldwide (eight of which are in Asia) have increased the number of OST sites operating since 2016. There are reported to be fewer OST sites in four countries than in 2016: Albania, Malaysia, Mexico and Serbia.

Where OST is available, methadone continues to be the most commonly prescribed substance, followed by buprenorphine; though in Oceania and Western Europe, buprenorphine-naloxone combinations are increasingly prevalent. Heroin-assisted therapy has been found to be highly effective in increasing adherence to OST, reducing use of illicit heroin and producing better health outcomes.[6] Despite this, it is currently only available in seven countries, all of which are in Western Europe or North America: Belgium, Canada, Denmark, Germany, the Netherlands, Switzerland and the United Kingdom.

As with NSPs, the geographic distribution of OST facilities is reported to be a barrier to access in Asia, the Middle East, North America and Western Europe. In some cases this is due to a scarcity of approved prescribers, as in Germany[7] and the United States.[8] A lack of specialised and accessible services for women and migrants also presents a barrier in all regions, as does stigma and discrimination towards people who use drugs.

Viral hepatitis and HIV

Globally, prevalence of hepatitis C antibodies among people who inject drugs is estimated to be 52.3%, prevalence of hepatitis B surface antigens is estimated to be 9.0%, and HIV prevalence is estimated to be 17.8%.[1] Non-injecting drug use, particularly inhalation of crack cocaine and cocaine paste, has also been shown to be associated with greater risks of viral hepatitis and HIV infection.[9-14] There is significant regional variation in prevalence of blood-borne viruses among people who inject drugs. For example, the early implementation of harm reduction approaches (such as NSPs and OST) is credited with maintaining low prevalence of HIV among people who inject drugs in Australia and Switzerland, among others.[15,16]

Integrating viral hepatitis and HIV care with harm reduction services, and in particular the use of peer workers in such services, is reported to be effective in increasing access to healthcare among people who

use drugs in Oceania and Western Europe. In other regions, including Eurasia, Latin America and sub-Saharan Africa, the integration of health services for blood-borne viruses is sporadic and reliant on civil society organisations.

Despite the World Health Organization target of eliminating both hepatitis C and hepatitis B by 2030, countries in each world region continue to restrict access to direct-acting antivirals for hepatitis C for people who inject drugs. *The Global State of Harm Reduction 2018* highlights new efforts to ease these restrictions. In Western Europe for example, only two countries retain restrictions on access to direct-acting antivirals for people who inject drugs (Cyprus and Malta).[17] High costs associated with treatment for both viral hepatitis and HIV, where not covered by national health insurance programmes, have been reported as a further – sometimes prohibitive – barrier to treatment.

In a positive step towards addressing the high cost of hepatitis C treatment for both individuals and national health systems, in November 2018 it was announced that the Medicines Patent Pool had signed a royalty-free licence agreement with pharmaceutical company AbbVie. The license will permit the development and sale of affordable generic direct-acting antivirals (glecaprevir/pibrentasvir) in 99 low- and middle-income countries and territories.[18]

Even where national policy dictates that people who use drugs should be able to access treatment, they continue to face stigma and discrimination from health professionals when they do so. These issues are exacerbated by a lack of specialised services for other marginalised populations, such as LGBTQIA+ and indigenous people.

Amphetamine-type stimulants (ATS), cocaine and its derivatives and new psychoactive substances (NPS)

For the first time, the *Global State of Harm Reduction* dedicates sections in each regional chapter to harm reduction programmes for use of ATS, cocaine and its derivatives, and NPS. In several regions, notably North America, Asia and sub-Saharan Africa, use of ATS is increasing, though the harm reduction response to ATS remains relatively underdeveloped. A recent report by Mainline, a Netherlands-based harm reduction organisation, provides the most comprehensive review of stimulant harm reduction programmes and practices to date. [19] These include: safer smoking kits for people who smoke drugs (including crack cocaine and methamphetamine); drug consumption rooms; substitution therapies; outreach and peer-based interventions; drop-in centres; housing first; and drug-checking services, among others.[19]

Drug-checking services are reported to operate in five of the world regions (Eurasia, Latin America, North America, Oceania and Western Europe). Such services aim to reduce the harm caused by high-purity and adulterated substances by ensuring that people who use drugs are aware of what is in the substance they are taking. They include on-site services at parties and festivals, fixed-site laboratories accessible by post, walk-in services and self-testing kits. In almost every case, with the notable exception of Canada, drug-checking services only receive private funding, meaning their ability to roll out large scale programmes to meet need is limited. In Canada, drug-checking services have increasingly been integrated into safe injection sites.

The use of cocaine and its derivatives continues to be a public health concern, particularly in Latin America and the Caribbean, where prevalence of use is highest and relatively few harm reduction programmes exist to address use of these substances.

NPS present an ongoing challenge to public health and drug policy. Synthetic cannabinoids appear to be the most widespread form of NPS, and have emerged as an issue among homeless and incarcerated populations. As with ATS, the harm reduction response remains limited; for example, to drug-checking services that can identity potency and adulteration.

Drug consumption rooms (DCRs)

Drug consumption rooms, also known as safe injecting facilities or safe injecting sites (SIFs/SISs), are professionally supervised healthcare facilities where people can consume drugs in a safe and non-judgmental environment. DCRs attract hard-to-reach populations who may usually use drugs in risky and unhygienic conditions, and reduce morbidity and mortality by providing a safe environment and training people on safer drug use.

Drug consumption rooms now operate in 11 countries around the world, with Belgium implementing its first facility in 2018. Australia, Canada, France, Spain, Switzerland and Norway have also opened new sites since 2016, with at least three further countries expected to open new facilities in 2019 (Ireland, Mexico and Portugal). In total, 117 sites operate at the time of reporting, compared with 90 in 2016. The increase since 2016 is mainly due to 24 new sites opening in Canada.

While many DCRs are focused on people who use opioids and reducing the incidence of opioid overdose, others also serve populations who inject or inhale amphetamines and cocaine derivatives. For example, in the Netherlands, a number of facilities cater primarily to people who inhale drugs, in accordance with the landscape of drug use in that country. In these circumstances they ensure safe equipment is being used, and can serve as a link between people who use drugs and other health services.

Overdose

In recent years, a worrying increase in fatal drug-related overdose has been observed in some world regions. The US now has the fastest annual percentage rise of drug-related fatal overdose ever recorded, with an increase of 21.4% between 2015 and 2016 alone.[20] In Canada, opioid-related deaths have also dramatically increased: 72% of deaths involved fentanyl or fentanyl analogues in 2016, and 81% of overdose deaths in Canada were linked to fentanyl.[20,21] Fentanyl and its analogues are highly potent synthetic opioids. Canada reports 92% of its opioid-related deaths as accidental/unintentional.[21] The worrying increase in opioid-related overdose deaths has been met with a public health response which broadly encompasses the principles of harm reduction, but to differing extents in the US and Canada.

Naloxone is a highly effective opioid antagonist used to reverse the effects of opioid overdose in minutes. The medicine, which can be delivered in various ways (intra-nasal, sublingual and buccal) can, however, only be effective if accessible.[61-64] In an evaluation of community opioid overdose prevention, researchers found 83-100% survival rates post-naloxone treatment, demonstrating that non-medical bystanders trained in community opioid prevention techniques were effectively able to administer naloxone.[61] In Canada, scaled up naloxone provision and the establishment of drug consumption rooms (DCRs) or safe injecting facilities (SIFs) have been critical to the overdose response. In the US, naloxone's status as a prescription medicine creates a barrier to distribution.[26,27]

In Western Europe, overdose deaths have also increased in number since 2016.[28] An estimated 84% of overdose deaths in the region involved opioids in 2016, almost two-thirds of which occurred in Germany, Turkey and the United Kingdom.[28,29] In Turkey for example, the number of drug-related deaths almost doubled from 2015 to 2016, with a particularly stark rise in deaths related to amphetamine-type substances and synthetic cannabinoids (synthetic cannabinoids were present in one third of cases in 2016).[30] In the UK, the number of drug-related deaths continued to be among the highest on record, with a 101% rise in deaths related to heroin and/or morphine from 2012 to 2017.[31,32] High numbers of drug-related deaths have also been observed in Norway and Sweden.[28] Naloxone peer-distribution programmes currently operate in four countries in Western Europe (Denmark, Italy, Norway and the UK)[g] with take-home doses available in a further four (Germany, France, Ireland and Spain) and plans in development for take-home naloxone in three more (Austria, Cyprus and Luxembourg).[35-37]

The emergence in Europe of fentanyl should instil greater urgency in preventing drug-related deaths. While Europe is not yet experiencing the prevalence of fentanyl or fentanyl analogues seen in North America, its rise as a public health concern and the high risk of overdose adds weight to already strong arguments for increasing the availability of naloxone and DCRs.[29]

In total, peer-distribution schemes, whereby individuals can pass on naloxone without each recipient requiring a personal prescription, operate in only 12 countries in the world.[h]

Prisons

Since 2000, the world prison population has grown by 20%, faster than the increase of the general population (18%).[38] During this period, while the male prison population has risen by 18%, the female prison population has increased by 50%.[38] Despite some momentum around decriminalisation, the global response to drugs remains predominantly punitive,[20] with approximately 83% of drug offences recorded by law enforcement for simple possession.[39] Imprisoning people for drug use is not only costly, it is demonstrated to be systematically discriminatory.[40]

Very few countries have a decriminalisation model that works well in practice. In other countries, only cannabis has been decriminalised or reduced to a minor offence, e.g. Georgia[41] and several US states (although the decriminalisation of cannabis is not *federally* sanctioned in the US).[42] In others, prison terms for drug possession have been replaced with monetary fines, such as in Kyrgyzstan, Ghana and

g In the United Kingdom, this refers to a programme in Glasgow.[33] In Norway, this refers to a multi-site pilot programme.[34]
h Afghanistan, India, Estonia, Ukraine, Denmark, Luxembourg, Norway, the United Kingdom, Mexico, Canada, the United States and Australia.

Tunisia. However, reforms such as these need to be closely monitored, as at time of publication, the *minimum* fine for drug possession in Kyrgyzstan was the equivalent to 18 months' full-time salary.[43]

Prisons continue to represent high-risk environments for the transmission of blood-borne infections for a number of reasons. These include: the over-incarceration of populations (including people who use drugs) at greater risk of contracting HIV, hepatitis C and TB; risky behaviour in prisons, such as unsafe injecting drug use; inadequate healthcare and late diagnosis of disease; substandard prison conditions and overcrowding; poor ventilation and repeated prison transfers, which encourage transmission of viruses; and the absence of harm reduction services.[44,45] United Nations human rights mechanisms and the European Court of Human Rights [46] have commented on the fact that inadequate prevention or treatment of HIV, hepatitis C, TB or drug dependence meet the threshold of ill treatment and create conditions that aggravate the transmission of these diseases.[45,47]

Despite this, only 10 countries in 2018 implement needle and syringe programmes (NSPs) in at least one prison: Armenia, Canada, Germany, Kyrgyzstan, Luxembourg, Macedonia, Moldova, Spain, Switzerland and Tajikistan. In 2016, the *Global State* reported eight countries implementing programmes.[3] NSPs are entirely unavailable to prisoners in six out of the nine regions reviewed within this report.

At the time of publication, some form of opioid substitution therapy (OST) is provided in prisons in 54 countries,[i] and five countries (Afghanistan, Cyprus, Palestine, the Seychelles and Ukraine) began implementing this service since 2016. Although an increase is important progress, the quality of prison-based OST varies considerably and serious barriers, including stigma and discrimination, persistently impede access to this essential service where it does exist. OST in prison settings remains unavailable in Latin America, but this is often attributed to the low prevalence of opioid use in the region.

Availability, accessibility and quality of diagnostics, treatment and care for HIV, hepatitis C and TB in the world's prisons continue to fail to meet prisoners' needs in most countries.[48] At the same time, the fact that prisoners face a heightened risk of overdose following their release remains a very serious yet almost universally neglected issue in practice, with only five countries providing naloxone to prisoners on release: Estonia (all prisons), the United Kingdom (not routinely), the United States (two states), Canada (most prisons) and Norway (a pilot naloxone programme).

The provision of good-quality and accessible harm reduction, both inside and outside prisons, is not a policy option, but a legally binding human rights obligation.[49] It must be urgently prioritised – and resourced – by political leaders and prison authorities, and national, regional and international prison monitoring mechanisms should systematically examine issues relating to harm reduction during their prison visits.[47]

International policy and technical developments

Commission on Narcotic Drugs Ministerial Segment 2019

In 2009, member states at the Commission on Narcotic Drugs (CND) adopted the Political Declaration and Plan of Action,[50] which set the target "for States to eliminate or reduce significantly and measurably" illicit drug supply and demand within a decade.

In 2016, the UN General Assembly Special Session (UNGASS) on Drugs forged a new international agreement on drug policy. [51] The CND will convene a Ministerial Segment at its 62nd regular session in 2019[52] to take stock of implementation of the 2009 Political Declaration's commitments.[53]

The CND is yet to undertake a comprehensive review of the impacts of drug policies worldwide. However, the International Drug Policy Consortium's 2018 report *Taking Stock: A Decade of Drug Policy – A Civil Society Shadow Report* found that the targets and commitments made in the 2009 Political Declaration have not been achieved. [54] The report recommends that member states should identify more meaningful drug policy goals and targets in line with the 2030 Agenda for Sustainable Development, the 2016 UNGASS Outcome Document and international human rights commitments.

At the time of writing this report, it remains unclear what the objective is for member states as it relates to the outcome of the 2019 Ministerial Segment.

i *Asia*: Afghanistan, India, Indonesia, Macau, Malaysia, Vietnam. *Western Europe*: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom. *Eurasia*: Albania, Armenia, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Kyrgyzstan, Latvia, Macedonia, Moldova, Montenegro, Romania, Serbia, Slovenia, Ukraine. *Caribbean*: Puerto Rico. *North America*: Canada, the United States. *Oceania*: Australia, New Zealand. *Middle East and North Africa*: Iran, Israel, Lebanon, Morocco, Palestine. *Sub-Saharan Africa*: Kenya, Mauritius, the Seychelles.

Global HIV Prevention Coalition

The 2016 Political Declaration on HIV/AIDS noted with alarm the slow progress in reducing new HIV infections globally.[55] Most significant for harm reduction were two commitments in the declaration:

- A 75% reduction in new adult HIV infections to less than 500,000 annually by 2020.
- For 90% of people at risk of HIV infection, including key populations, to have access to comprehensive HIV prevention services.

In order to galvanise greater commitment and investment in HIV prevention to meet the 2020 targets, the Global HIV Prevention Coalition was established in October 2017, and UNAIDS and partners developed the Prevention 2020 Road Map.[56]

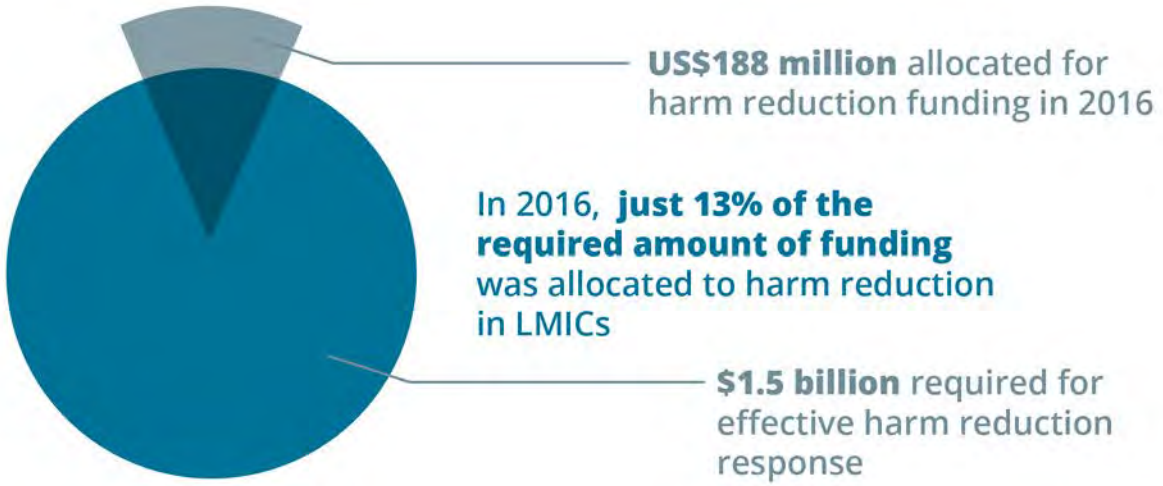
The road map provides the basis for a country-led movement to scale up HIV prevention programmes and is based on five prevention pillars. The second pillar is "combination prevention programmes for all key populations" and explicitly includes harm reduction services for people who use drugs. The road map is relevant for all low- and middle-income countries (LMICs), and focuses on 25 countries with high numbers of new infections in adolescents and adults in 2016.

Prevention scorecards were developed in order to summarise existing data on prevention progress in the priority countries. Harm Reduction International examined all 25 country scorecards[57] and concluded that 13 countries did not include data on HIV prevalence and nine did not include population estimates for people who inject drugs. It is crucial that all countries have population size estimates in order to set prevention targets and indicators for people who inject drugs.

Technical guidance

In 2017 and 2018, new guidance emerged with regard to key populations and specific groups of people who inject/use drugs, both from UN agencies and civil society

- In April 2017, a joint publication by the UN Office on Drugs and Crime, the World Health Organization, the International Network of People who Use Drugs, the Joint UN Mission on HIV and AIDS, the UN Development Programme, the UN Population Fund, the United States Agency for International Development and the President's Emergency Plan for Aids Relief was published under the title *Implementing Comprehensive HIV and HCV programmes with People Who Inject Drugs*.[58]
- In June 2017, the World Health Organization released an update to *Consolidated Guidelines on Person-centred HIV Patient Monitoring and Case Surveillance*.[59]
- In September 2017, the World Health Organization published an update to *Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations*.[60]
- In October 2017, the European Monitoring Centre for Drugs and Drug Addiction published *Health and Social Responses to Drug Problems: A European Guide*, providing a reference point for planning or delivering health and social responses to drug problems in Europe.[61]
- In November 2017, the European Monitoring Centre for *Drugs and Drug Addiction and Europol published Drugs and the Darknet: Perspectives for Enforcement, Research and Policy*.[62]
- In July 2018, the World Health Organization published new *Guidelines for the Care and Treatment of Persons Diagnosed with Chronic Hepatitis C Infection*.[63]
- In July 2018, the European Centre for Disease Control and the European Monitoring Centre for Drugs and Drug Addiction published a joint report on *Public Health Guidance on Prevention and Control of Blood-borne Viruses in Prison Settings*.[64]



A lost decade for harm reduction funding[j]

HRI's research in 2018 found that harm reduction funding in low- and middle-income countries (LMICs) is in crisis.[4] In 2016, US$188 million was allocated to harm reduction in LMICs – the same amount as in 2007[65] and just 13% of the US$1.5 billion that UNAIDS estimates is required annually by 2020 for an effective HIV response among people who inject drugs.[66]

International donor support, which comprises the majority of harm reduction funding in LMICs, is declining. Donor governments are shifting bilateral harm reduction funding to countries in favour of contributing to multilateral institutions focused on HIV, most notably the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund). Yet this does not protect funding for harm reduction, and support from the Global Fund – which accounted for two-thirds of all donor funding for harm reduction in LMICs in 2016 – was 18% lower in 2016 than in 2011.

Our research found that 10 governments appear to be investing significantly (i.e. over $1million annually) in their national harm reduction response.[k] While encouraging, domestic investment was identified in only 19 LMICs overall, meaning harm reduction remains dangerously dependent on international donors.

To help address the funding crisis, a response is needed on all fronts. National governments should critically evaluate their drug policy spending and redirect resources from ineffective drug law enforcement to harm reduction. Our 2016 modelling shows that just a 7.5% shift in resources could bring about a 94% drop in new HIV infections among people who inject drugs by 2030.[33]

International donors must collectively increase their support for harm reduction – particularly for priority interventions like NSP and OST – to fill the sizeable funding gap. Any transition from international to domestic funding has to be gradual, with a concrete plan in place to ensure that donor withdrawal does not result in the disruption of harm reduction services.

The Commission on Narcotic Drugs recognises this dire situation, and in Resolution 60/8 urged member states and donors to continue to provide bilateral and other funding to address the growing HIV/AIDS epidemic among people who inject drugs.[31]

Unless the funding landscape for harm reduction changes urgently, the goal to end AIDS by 2030 will be missed. People who use drugs, as with other key populations, are being forgotten in the global HIV response.

Human rights and harm reduction

Since 2016, an increasing number of UN bodies and mechanisms have recognised that the right to the highest attainable standard of health requires all member states to provide quality, evidence-based and gender-sensitive harm reduction services for people who use drugs.[l]

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j This section is a summary of key findings from Cook C and Davies C (2018) *The Lost Decade: Neglect for Harm Reduction Funding and the Health Crisis Among People who use Drugs*. London: Harm Reduction International. To read the full report, please visit www.hri.global/harm-reduction-funding.

k India, China, Vietnam, Iran, Malaysia, Kazakhstan, Georgia, Ukraine, Thailand and Myanmar.

l Key human rights mechanisms have reiterated this principle, such as: the Special Rapporteur on the right of everyone to the highest attainable standard of mental and physical health in December 2015, in: 'Open letter in the context of the preparations for the UN General Assembly Special Session on the Drug Problem (UNGASS), which will take place in New York in April 2016.'[49]

In March 2018, the Human Rights Council adopted a landmark resolution titled "Contribution of the Human Rights Council to the implementation of the Joint Commitment to effectively addressing and countering the world drug problem with regard to human rights".[67] This situates human rights as central to the development and evaluation of any drug policy, and calls for a comprehensive, balanced and health-centred approach to drugs.

The Human Rights Council also entrusted the Office of the High Commissioner for Human Rights with the drafting of a report on the implementation of the 2016 UNGASS Outcome Document. [51] The report, presented in September 2018, highlights best practices and human rights violations caused or enabled by repressive drug policies.[69] It notes harm reduction as an essential measure for people who use drugs, building on a growing body of literature and jurisprudence of human rights mechanisms.[69,70]

Notably, in late 2017 the Committee on Economic, Social and Cultural Rights (CESCR) expressed its concerns for the predominantly punitive approach of the Russian Federation towards people who use drugs, and condemned the absence of harm reduction programmes. The CESCR noted that "drug users tend to refrain from seeking medical treatment under the policy of criminalisation, which contributes to increased incarceration of drug users".[71]

Despite these developments, people who use drugs continue to endure a broad range of rights violations and abuses, and thus face significant obstacles in accessing health services.

The inherently discriminatory nature of punitive drug control measures was captured by the Special Rapporteur on Extreme Poverty and Human Rights, Professor Philip Alston, following his 2017 mission to the United States. In his scathing report, the Special Rapporteur blasted the country's "confused and counterproductive drug policies", condemning the predominantly punitive response to drug use and the "racial undertones" of this "urge to punish rather than assist the poor".[72]

Discrimination and prejudice, and ill-informed approaches to problematic drug use continue to result in systematic violations of the right to physical autonomy of people who use drugs, which also encompasses a right to refuse medical treatment. One manifestation of this violation is the implementation of drug courts.

Two recent reports critically reviewed the adequacy, effectiveness and cost-effectiveness of drug courts in the Americas, and questioned the alleged voluntary nature of the treatment imposed.[40,41] The studies revealed that in many cases court officials with no health expertise prescribe questionable forms of treatment to individuals who do not require it, while failing to address the needs of those who would actually benefit from treatment. As one report concludes, "drug courts aggressively insert the penal system into people's private and family lives and into their decisions about their health and medical care, reproducing and perpetuating the criminalisation of people who use drugs".[73]

Compulsory detention of people who use drugs remains virtually unopposed in many regions of the world. While these programmes vary, all are characterised by forms of ill-treatment, physical and mental abuse, denial of adequate food and water, poor sanitary conditions, imposition of treatment with no basis of scientific evidence, and sometimes sexual abuse and forced labour.

Compulsory drug detention centres are found in many countries in Asia – such as Laos, Cambodia, China, Malaysia,[74] Nepal[75] and Vietnam – where in 2017, almost 18,000 individuals were confirmed to be undergoing compulsory programmes under court orders.[76] Similar rights-violating programmes are reported in Latin America and the Caribbean, where many are kept in "comunidades terapeúticas", ostensibly providing treatment and rehabilitation while in practice imposing inhuman forms of drug treatment centred around deprivation and forced labour.

Finally, egregious human rights violations continue in the form of sentencing people to death for non-violent and often minor drug offences, the militarisation of anti-drug efforts, and campaigns of extrajudicial killings against people who use drugs. The brutal crackdown on drugs launched in the Philippines in 2016 continues unabated, with over 20,000 people killed since President Rodrigo Duterte came to office.[5] Bangladesh's prime minister called for a crackdown on drugs in May 2018, resulting in in over 260 suspected extrajudicial killings and tens of thousands of arrests.[77]

UN agencies and civil society continue to condemn human rights violations under the auspices of drug control. UN Human Rights Commissioner Michelle Bachelet stated in her first address to the Human Rights Council in September 2018 that: "Drug issues everywhere are best tackled through a focus on health, education and opportunities – not the death penalty, or death squads".[78]

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Regional Overview
2.1 Asia

Table 2.1.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in Asia

Country/territory with reported injecting drug use[a]	People who inject drugs	HIV prevalence among people who inject drugs(%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs (%)	Harm reduction response		
					NSP[b]	OST[c]	Peer-distribution of naloxone
Afghanistan	40,900 (13,500-80,000)[2]	4.4[3]	31.2[3]	6.6[3]	✓20[4,5]	✓8[4,5]	✓[4,5]
Bangladesh	26,186-33,067[6]	18.1[d][7]	39.6 - 95[e][7]	9.4[8]	✓21[9]	✓5[9]	nk
Bhutan[f]	nk	nk	nk	nk	x	x	x
Brunei Darussalam	nk	nk	nk	nk	x	x	x
Cambodia	4136[11]	15.2[11]	30.4[11]	nk	✓5[12]	✓2[13]	x[13]
China	2,564,000[14]	5.9-18.3[15]	67 (60.9 - 73.1)[8]	23.4[14]	✓814[16]	✓767[15]	nk
Hong Kong	nk	1[17]	nk	nk	nk	✓20[18]	nk
India	170,000-180,000[19]	9.9[8]	41[8]	10.2 (2.7-17.8)[8]	✓247[8]	✓212[19]	✓[g][20]
Indonesia	33,492[21]	28.6[22]	63.5[22,23]	2.9[24]	✓194[h][25]	✓92[26]	x
Japan	nk	nk	64.8 (55-74.5)[8]	3.2 (2-4.3)[8]	x[27]	x[27]	x[27]
Laos	1,317[28]	0.1[29]	nk	nk	x[28]	x	x
Macau	189[30]	1.3[29]	80.4[29]	10.7[29]	✓3[29]	✓4[29]	x[29]
Malaysia	120,000[31]	16.3[32]	67[8]	nk	✓692[33]	✓466[33]	x[33]
Maldives	793[34]	0[35]	0.7-0.8[36]	0.8[i][36]	x	✓2[36]	x
Mongolia	nk	nk	nk	nk	✓1[37]	x	x
Myanmar	93,000[38]	34.9[38]	56[38]	7.7[38]	✓271[39,40]	✓51[41]	nk
Nepal	52,174[42]	3.3[43]	38.1[43]	2.7[44]	✓26[43]	✓15[43]	x
Pakistan	37,137[45]	38.4[46]	84[47]	6.8[46]	✓28[46]	x[46]	nk
Philippines	25,500[48]	41.6[49]	70[8]	nk	x[48]	x[48]	x
Singapore	nk	2[50]	42.5[8]	nk	x	x	x
South Korea	nk	nk	54[8]	4[8]	x	x	x
Sri Lanka	218-423[51]	17[51]	2.3[52]	0[52]	x[52]	x[52]	x
Taiwan	60,000[j][53]	17.7[54]	41[8]	16.7[8]	✓1,254[55]	✓162[58]	nk
Thailand	71,000[56]	21[54]	89.8[5]	30.5[57]	✓14[58]	✓147[58]	nk
Vietnam	226,860[59]	9.5[59]	74.1[8]	19.5[8]	✓53[59]	✓285[59]	nk

nk – not known

a Countries with reported injecting drug use according to Larney et al. in 2017. The study found no reports of injecting drug use in North Korea.[1]
b All operational needle and syringe exchange programme (NSP) sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers. (P) = pharmacy availability.
c Opioid substitution therapy (OST), including methadone (M), buprenorphine (B) and any other form (O) such as morphine and codeine.
d Based on subnational data from Dhaka.
e Based on subnational data: 39.6% prevalence in Dhaka, 70-95% in north-western Bangladesh.
f There is no NSP or OST in Bhutan. In 2015 Bhutan was planning to pilot NSP and OST programmes with Global Fund investment, but updates concerning this are unavailable.[10]
g Naloxone peer distribution is limited to the state of Manipur.
h There are also numerous grass roots organisations in Indonesia that distribute needles and syringes that are not yet documented.
i Based on subnational data from Addu.
j This estimate is based on longitudinal data from two prison cohorts.

Map 2.1.1: Availability of harm reduction services

Harm reduction in Asia

Overview

Although the prevalence of injecting drug use in Asia is below the global average, an estimated 46% of the global population of people who inject drugs live in the region and approximately 30% live in East and South East Asia.[60] Overall, the level of harm reduction provision in the region has improved moderately since 2016, although there remain considerable challenges for the health and human rights of people who inject drugs. In particular, there is an alarming trend of increasingly punitive approaches to drugs, both in countries previously supportive of progressive drug policy reform and in states with questionable human rights records.[61]

Needle and syringe programmes (NSPs) are now available in 15 of the 25 countries in the region, having been discontinued in Laos and the Philippines since the Global State of Harm Reduction 2016. There has been a fall in the number of NSP sites in four countries (Bangladesh, Macau, Nepal and Pakistan), and an increase in the number of NSP sites in five countries (Afghanistan, India, Malaysia, Myanmar and Vietnam), with the greatest increases seen in Myanmar and Vietnam. The number of countries in which opioid substitution therapy (OST) is available appears to have remained stable, and there has been an increase in overdose prevention activities, which includes peer-distribution of naloxone in Afghanistan and India (see Table 2.1.1).

Considerable advocacy efforts to promote cost-free access to hepatitis C treatment in Asia have resulted in success in India,[62] Indonesia[63] and Malaysia.[64] Despite the concerted advocacy efforts of civil society organisations across the region, many Asian countries continue to offer inadequate hepatitis C treatment services. Direct-acting antiviral (DAA) medicines, which can cure hepatitis C in over 95% of cases,[65] remain prohibitively expensive in many countries.

There is an acknowledged correlation between the high HIV, hepatitis C and tuberculosis prevalence found in Asia and the increased health, social and legal risks faced by people who inject drugs.[66] The virological risks associated with unsafe injecting drug use are exacerbated by entrenched stigma, discrimination, criminalisation and imprisonment.[67,68]

A trend in the region is the increasing use of amphetamine-type substances (ATS), such as methamphetamine in the form of yaba. Prevalence of use of yaba has superseded the prevalence of opioids in many countries, such as Cambodia, Indonesia, Laos, Malaysia, Myanmar and Thailand.[69-71] Additionally, it has been observed that high use of ATS exists amongst already marginalised women that use drugs in the region, and that ATS use contributes to elevated HIV and hepatitis C risks in this population.[72] Many vulnerable populations, such as men who have sex with men, male-to-female transgender people and sex workers, are also reporting increased ATS and new psychoactive substance (NPS) use.[73] This use of ATS in conjunction with increased risky sexual behaviours could lead to greater incidence of HIV and viral hepatitis.[74] Harm reduction for ATS use involves a different set of approaches and is an emerging field,[75] particularly given the increase in use all over the globe. Myanmar is one of a few countries to have formalised guidelines for ATS harm reduction,[76] and Indonesia is currently in the formative stages of developing similar guidelines.[77]

A growing area of concern in the region is the number of women who use drugs and the lack of gender-sensitive harm reduction services.[78-80] This population faces heightened stigma, sometimes intensified by gender-based violence, which increases their risk for contracting blood-borne viruses.[81] Harm reduction and other drug services remain overwhelmingly either gender-neutral or male-focused, leaving the specific issues faced by women little served or understood.[81] Women also appear disproportionately affected by the "war on drugs", with increasing rates of conviction. In 2016, over 90% of women in prison in Indonesia and the Philippines were incarcerated for drug related offences.[82] In Thailand, drug-related offences accounted for 83% of all sentences for female prisoners, often involving methamphetamine.[82]

The war on drugs continues to be a political trope in the region, with state authorities aggressively persecuting people who use drugs in several countries. In January 2017, the Cambodian government of prime minister Hun Sen began mass arrests of people who use drugs, with more than 8,000 arrested by June of that year.[83] In Bangladesh, there have been over 200 reported extrajudicial killings for drug-related offences since May 2018.[84] Despite an international call for consideration at the International Criminal Court by civil society, the situation is exponentially worse in the Philippines. Official statistics show that the death toll from President Duterte's anti-drug campaign reached 4,500 in July 2018, but civil society organisations fear the true number could be as high as 20,000.[85,86]

In contrast, Thailand demonstrated leadership in law reform in 2017, reducing penalties for drug possession, trafficking and production, and abolishing the mandatory death penalty for selling drugs.[87]

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

In Asia, Afghanistan, Bangladesh, Cambodia, China, India and Pakistan distributed the highest amount of needles per person per annum (see Table 2.1.2). However, some reductions in services across the region have been influenced by declining donor support and shifting policies regarding people who use drugs and drug control.

There is a severe lack of support for NSP initiatives in many countries in the region, especially Brunei Darussalam, Hong Kong, Japan, Laos, the Maldives, the Philippines, Singapore, South Korea and Sri Lanka. Since the *Global State of Harm Reduction 2016*, NSPs have ceased to operate in Laos and the Philippines.[28] In the Philippines, there was no provision in law until 2018 that would allow for the implementation of NSPs, as the possession of injecting equipment and other paraphernalia fit or intended for drug use was illegal.[48] However, the HIV and AIDS Policy Bill passed by the legislature in May 2018 aims to strengthen the HIV response in the country.[88] While all explicit references to harm reduction, OST and NSP were removed before the bill received approval, it contains a commitment to evidence-based preventative measures for key affected populations, which includes people who inject drugs.[89,90] The only documented instance of NSP delivery in the Philippines was through the Big Cities Project implemented in Cebu, where needle distribution was included among the many services provided at the Cebu City Social Hygiene Clinic.[48] The project was able to operate as an academic research initiative.[91] However, it has closed since 2016 due to political pressure.[48]

In countries supportive of NSP implementation, service delivery models vary, from programmes delivered on an ad hoc basis to those predominately delivered by civil society organisations within outreach settings. Until March 2013, an NSP in India provided up to four needles and syringes in exchange for used equipment. However, clients reported returning used needles to be problematic, and subsequently the exchange component was discontinued, and needles and syringes were distributed without the requirement of returning used ones.[92] This predicament was also reported in the seven provinces in Indonesia facilitating NSP services.[93] Incorporating NSPs into other HIV prevention approaches, such as counselling and testing, was identified as a successful approach to linking people who inject drugs with HIV testing in India.[94] Malaysia has adopted a combined approach of fixed-site needle and syringe distribution in the form of a drop-in centre, as well as distribution by peer outreach workers.[95] The Ministry of Health channels funds to a national non-governmental organisation, the Malaysian AIDS Council, which apportions the funds for harm reduction work. Since 2015, the Malaysian AIDS Council has supported 11 civil society organisations in implementing the NSP in 20 fixed sites across 11 states in Peninsular Malaysia.[96] A breakdown of the number of needles distributed for people who use drugs per year by region can be seen in Table 2.1.2.

Table 2.1.2: Overview of needle distribution per person who injects drugs per year[K]

Country	Needles distributed per person who injects drugs per year
Afghanistan	159[54]
Bangladesh	158[98]
Bhutan	N/K
Brunei Darussalam	N/A
Cambodia	912[12]
China	204[99]
Hong Kong	N/A
India	250[20]
Indonesia	26[25]
Japan	N/A
Korea (Republic of)	N/A
Laos	N/A
Macau	N/K[l]
Malaysia	31[33]
Maldives	N/A
Mongolia	N/K
Myanmar	358[101]
Nepal	61[102]
Pakistan	178[46]
Philippines	N/A
Singapore	N/A
Sri Lanka	N/A
Taiwan	58[m][103]
Thailand	14[58]
Vietnam	76[20]

k WHO recommends a minimum of 300 needles/syringes per person per year.[97]
l According to data from the Macau Association of Rehabilitation for Drug Abusers (Associação Reabilitação Toxicodependentes Macau, ARTM) between 4,000-6,000 needles are distributed monthly; however, this is difficult to verify.[100]
m Based on distribution data from 2015.

In Vietnam, the commercial and social marketing sales of low dead space syringes was scaled up in 2012. However, despite the WHO global endorsement of low dead space syringes, the majority of all syringes sold or distributed in Vietnam continue to be high dead space syringes. Unsafe injecting practices – including needle sharing and use of high dead space syringes – as well as sexual transmission are contributing to an estimated 11,000 new HIV infections in Vietnam every year.[104]

Sustainable funding for harm reduction initiatives such as NSP continues to be contingent on advocating for ongoing support from donors. Initiatives funded by national healthcare systems could increase sustainability of harm reduction initiatives, such as in Indonesia where investment in NSPs is paid for by the government.

Opioid substitution therapy (OST)

In Asia, overall coverage of OST has remained relatively stable since the *Global State of Harm Reduction 2016*. In China there are 767 OST sites, in Malaysia 466, in Vietnam 285, in India 212, in Taiwan 162, in Indonesia 92, in Myanmar 51, in Nepal 15, in Afghanistan eight, in Bangladesh five, in Macau four and in Cambodia two. In Hong Kong and the Maldives, OST programmes operate despite the absence of NSPs.

Although coverage has stabilised, in some countries in the region such as China, Malaysia and Vietnam, where there is high prevalence of both HIV and drug use, adherence to OST has not always been optimal, with an overall retention rate of just 40%.[105] This may be due in part to extenuating factors such as geographical barriers to services, stigma, discrimination from providers, low income and political investment in OST programmes.[105-107]

Vietnam has demonstrated strong political will to implement and scale up OST programmes.[105] OST programmes were first piloted in Hai Phong province in 2008 and by mid-2015 these had expanded to reach over 35,000 people in 50 provinces across the nation. According to a study published in 2017, 44,479 people who inject drugs were enrolled in OST in 57 provinces in June 2016.[108] OST has also proven to be extremely cost-effective in Vietnam. Based on data from 2012-2015, funding a person who injects drugs to stay in a rehabilitation facility has been found to cost the local government VND₫19,670,000 (US$840), which is 2.5 times higher than the cost to the government for one OST patient over one year (VND₫7,880,000 or US$340, including cost of methadone).[109]

In a number of Vietnamese provinces, OST programmes collect fees from clients in order to cover costs, though patients identified as poor or disabled are exempted from paying. This co-payment scheme has been found to place significant financial burdens on patients, which may have long-term implications for adherence and enrolment.[110] There are also plans to introduce buprenorphine as an alternative treatment option in order to improve OST adherence rates.[108] In some provinces, access to OST services is impeded by geographical obstacles such as distance to OST service providers,[111] which can diminish the accessibility of OST clinics and result in lower adherence.[112]

OST programme implementation is championed in Nepal due to its status as an evidence-based public health intervention for people who inject drugs. Due to ongoing advocacy, from 2011 to 2016 the Ministry of Home Affairs gradually began to share responsibility for OST with the Ministry of Health. This responsibility allows for the provision of OST at public hospitals and by non-governmental organisations. In Nepal, OST has been elevated to the status of a national programme under the Ministry of Health, implemented in accordance with country-specific policy documents that align with internationally accepted standards.[113] One particularly successful service model in Nepal, SPARSHA, works alongside medical and social support teams to develop individual care plans that respect the needs and preferences of clients. This psychosocial approach is supplemented by the availability of multiple OST options, with both methadone and buprenorphine available. The service has continued relatively uninterrupted, even after the catastrophic earthquake of April 2015.[113] However, it is important to note that the government's financial contribution to the programme is negligible at present, despite discussions of greater government investment in 2016,[113] and much of the future for OST programmes in Nepal is uncertain.[43]

Despite an emerging shift from opioid use towards increasing amphetamine-type substance use among people who inject drugs,[74] there is still a clear need for OST services in the region. Ensuring adequate OST service provision in Asia will require robust political commitment, which should be embedded in a human rights and health-based approach to drug use.

Women who use drugs

Robust data on women who use drugs in the region is scarce, but it is estimated that Asia is home to half of the 3.8 million women worldwide who inject drugs.[114] There are also reported to be one 1 million women who use drugs in Afghanistan.[115] Gender disparity, poverty, intimate partner violence and unsafe sex work environments all contribute to the vulnerable condition of women who use drugs in Asia.[81] In Bangladesh, sex work and injecting drug use often coincide.[116] In Malaysia, gendered poverty exacerbates the lives of women who use drugs, and across Asia women in intimate partnerships with partners who use drugs often trade sex or engage in risky behaviours to maintain drug use.[117]

Women who use drugs are susceptible to numerous forms of violence, including non-partner assault, trafficking, sexual exploitation and intimate partner violence.[118] In Bangladesh and Malaysia, academic research has found that women who use drugs are more likely to be drawn into abusive relationships.[119,120] A recent study in Indonesia found that at least 60% of women who inject drugs were victim to some form of intimate partner violence. This figure is up to 24 times higher than the prevalence of partner violence among the general Indonesian female population.[118] A study in India found that 13% of women who use drugs had experienced gang rape.[121]

A small number of tailored harm reduction services (for example, a drop-in centre in the Seng Taung-Hpakant Township in Myanmar) provide primary health care, reproduction services and psychosocial counselling to promote safer injecting practices and safer sex for women who inject drugs.[122] In the Jhapa, Sunsari and Morang districts of eastern Nepal, there are 15 male rehabilitation and treatment centres, with only two designed for women.[123] To document harm reduction services for women, the Women and Harm Reduction Network (WHRIN), in collaboration with Harm Reduction International, conducted a survey in 2018.[124] It discovered that, while overall awareness of the issues facing women who use drugs is increasing, there is a glaring absence of women-specific harm reduction services and persistent stigma towards women seeking treatment.[125]

Although there are nascent grass roots movements operating in the region, such as the Indonesian Female Drug User Network,[72,126] greater advocacy for tailored harm reduction for women is needed throughout Asia.

Amphetamine-type substances (ATS) and new psychoactive substances (NPS)

Amphetamines remain the second most frequently used drug globally, with an estimated 35 million people using ATS in 2016,[127] 60% of them in Asia.[128] The region has seen a continuous rise in the use of ATS. High levels of injecting use of ATS have been reported in Cambodia, Indonesia, Malaysia and Thailand,[71] particularly within already vulnerable populations such as men who have sex with men (associated with use in sexual contexts in the Philippines and Singapore), female sex workers (and their clients) and transgender women.[74] In 2015, 94% of people in drug treatment facilities in Brunei Darussalam were methamphetamine users, and in Indonesia 28% people who use drugs sought treatment for ATS use.[129] In China in 2016, more than 60% of people who use drugs reported using methamphetamine.[130]

A recent study in Indonesia investigated the HIV status and associated risk behaviours of people who use crystal methamphetamine (known locally as "shabu") in six urban centres in the archipelago.[74] The study discovered that because of an increasing paucity of accessible injectable opioids (such as heroin), many people who inject drugs have shifted to ATS use.[74] Of the respondents engaged in the study, 65% were HIV positive.[74] The results from the study indicated that people who use ATS come from a variety of communities such as men who have sex with men, female sex workers and people who buy sex.[74] These trends are found in other countries in the region. For example, a study in Hong Kong found that 16.2% of men who have sex with men interviewed had used recreational ATS before or during sex in the past six months,[131] and a 2017 study in Cambodia found that 55% of a sample of sex workers living with HIV reported using ATS.[132]

The association between transmission of HIV and other blood-borne viruses and ATS use is increasingly acknowledged within contemporary public health discourse.[133] However, there is an alarming absence of programmes that support people who use ATS.[75] Many people who use ATS in Asia do not access traditional harm reduction services, such as NSPs, and do not identify themselves with opioid users. There continues to be minimal gender-specific harm reduction services or guidelines for supporting the needs of men who have sex with men and female sex workers who use drugs in the region.[75] An exception is a peer outreach project operated by the Karisma non-governmental organisation in Jakarta.[75] The project distributes safer smoking kits and informational leaflets on health and drug use to people who use stimulants in the area, as

well as linking them to physical and mental health services.[75]

There are public health concerns with regard to the emergence of new psychoactive substances, such as the rising prevalence of synthetic cannabinoid use in Indonesia and neighbouring nations. Although data on the prevalence of NPS use remains limited, a wide range of NPS have been identified in East and South East Asia.[127] A number of governments in the region have taken steps to categorise and control these emerging substances. In late 2015, the government of China placed 116 substances under control, and identified Hong Kong as a transit location for NPS export links.[127,134] In Indonesia, the National Anti-Narcotics Agency had identified a total of 56 NPS in the country as of March 2017.[129] Ketamine use continues to be significant in the region: East and South East Asia accounted for 97% of the total quantity of ketamine seized worldwide in 2015.[127]

Harm reduction service providers and policy makers are working to respond to the rise in use of ATS and NPS, but are still in the process of putting into practice evidence-based psychosocial and health support mechanisms to assist people who use these substances. A series of interventions for stimulant use, which may be relevant to Asia, are beginning to emerge worldwide, such as drug-checking facilities, housing programmes and safer smoking kits.[75] Approximately 500,000 people in Asia are undergoing treatment for amphetamine use, but more often than not this is as part of compulsory rehabilitation programmes.[127] A positive development for the region is the WHO Guidelines for Management of Methamphetamine Use Disorders in Myanmar, with a focus on treatment for methamphetamine use. Though primarily treatment-focused, the guidelines acknowledge the benefits of a harm reduction approach, in particular the availability of specific and pragmatic advice on methamphetamine use.[76]

Overdose, overdose response and drug consumption rooms (DCRs)

There is a paucity of data on the drug-related mortality and overdose rate in Asia, as no country routinely monitors drug-related overdose deaths. Additionally, overdose is often not reported within drug using communities by people who inject drugs.[135] Across the region, sufficient overdose response mechanisms are lacking. This is notwithstanding the fact that naloxone distribution initiatives that engage people who use opioids and their support networks have proven to be both effective in saving lives and cost-effective in many contexts around the world.[136]

Provision of naloxone, an opioid antagonist that can reverse the effects of overdose,[137] has been increasing throughout the region. In Afghanistan, naloxone is distributed by outreach workers in the field and provided at drop-in centres.[5] In Manipur, India, naloxone is distributed by non-governmental organisations, predominantly through trained outreach workers and peer educators; of note, Manipur reports the highest number of overdose cases.[20] Organisations in Manipur also run an overdose hotline.[20] In Malaysia, naloxone is only available in hospital settings and not in take-home form.[33]

Two countries that have taken significant steps in overdose prevention are Thailand and Vietnam. In Vietnam, naloxone provision programmes, including treatment education and overdose identification skills, are being implemented in Hanoi and Ho Chi Minh City.[138] A 2017 study on overdose incidence in Vietnam supports the critical need for provision of naloxone in non-clinical contexts. Of the respondents, around 70% had witnessed an overdose at one time.[138] Similar conditions have been reported in Thailand, with an estimated 68% of people who inject drugs having witnessed at least one overdose in their lifetimes.[139] In order to address this, the Servicing Communities with Opioid Overdose Prevention project has operated since 2014, facilitating access to naloxone in 19 Thai provinces.[139] However, due to diminishing funds for harm reduction efforts in Thailand, the future status of the project is precarious at best.[139]

Viral hepatitis

Blood-borne viruses, particularly viral hepatitis, are responsible for considerable mortality and morbidity among people who inject drugs in Asia.[127] People who use drugs in Asia have some of the highest rates of viral hepatitis globally.[127] In Asia, high prevalence of blood-borne viruses is exacerbated by many factors that include insufficient access to testing, lack of treatment, criminalisation of drug use, incarceration of people who inject drugs, lack of harm reduction services in prisons, social exclusion and discrimination from service providers.[140]

In contrast to the provision of anti-retroviral therapy for people living with HIV, governments have been reticent to invest in treatment for people living with hepatitis C. However, Bangladesh, Japan and Mongolia have been praised for their pledged support for the response to hepatitis C.[141] In Pakistan, direct-acting antivirals have been made accessible through the public sector.[142] In Indonesia, a community-led “buyer’s club” works with the

country's few doctors able to prescribe direct-acting antivirals to offer treatment at a lower cost than otherwise available.[143] From 2015 to 2017, the scheme supported 139 people to access 12-week courses of treatment.[143] Other successes in the region have included increased access for people who inject drugs in Malaysia, where the government acted to ensure the generic version of the direct-acting antiviral sofosbuvir could be imported,[64] and the Sajiwa prison in Manipur, India.[62] Treatment with direct-acting antivirals has also proven to be extremely effective in Thailand[144] and in five hospitals across three provinces in Vietnam.[145]

A growing evidence base indicates that early testing and initiation of hepatitis C treatment is more cost-effective in the long term.[146]

Tuberculosis (TB)

Although there were 2,965,311 reported cases of TB in South East Asia in 2017, treatment coverage remains steady at 64%.[147] Of the 30 nations with a high tuberculosis burden globally, 12 are located in Asia: Bangladesh, Cambodia, China, India, Indonesia, North Korea, Myanmar, Pakistan, Papua New Guinea, Philippines, Thailand and Vietnam.[147] Unfortunately, there continues to be a lack of robust regional data on TB prevalence among people who inject drugs in Asia since the *Global State of Harm Reduction 2016*.

High rates of TB among people who use drugs in the region, coupled with the punitive drug laws prevalent in many countries, lead to the frequent incarceration of individuals with TB, for example in Indonesia, Bangladesh and Thailand. This increases the risk of spreading TB infection due to depreciated life circumstances.[148] Testing and treatment coverage for TB is low, along with TB prevention measures for people who inject/use drugs in the region.

HIV and antiretroviral therapy (ART)

Prevalence of HIV among people who inject drugs in Asia is among the highest in the world.[149] For antiretroviral therapy to have an impact on HIV prevalence and life outcomes for people living with HIV, access and coverage at the national level must be addressed. For example, stigma and discrimination can dissuade people who inject drugs from accessing health services such as HIV testing and treatment.[27,150,151]

Access and availability to antiretroviral therapy is inconsistent across the region, and there is a lack of services to support adherence and prevent attrition rates among people who inject drugs. In 2017, 53% of the total number of people who were living with HIV in Asia accessed treatment.[152] However, the coverage and availability of treatment services for people who inject drugs was considerably lower.[152] For example, Cambodia ranks poorly on the cascade of care for people living with HIV. Although there are 67 sites providing antiretroviral therapy in Cambodia, only 270 of the estimated 58,321 people living with HIV in the country are receiving treatment.[13] Not only is coverage extremely low, extenuating circumstances affect access to antiretroviral therapy for people who inject/use drugs, especially those in detention for "rehabilitation". For example, people detained at the Prey Speu facility in Cambodia report they are not given access to HIV treatment or OST. Cambodian newspapers report a number of deaths, apparently for different or unknown causes, within the detention system.[153]

Singapore's draconian approach to drug use and people who use drugs unquestionably has an impact on the population's access to antiretroviral therapy.[154] Additionally, antiretroviral therapy can cost approximately US$1,000 per month, and newer drugs can cost around US$2,000.[155] This impacts negatively on access for people who inject drugs and decisions to undergo testing.[155] According to the city-state's Infectious Disease Act, failure to declare one's HIV status or even status as a person who injects drugs can have serious legal consequences.[156] In Japan, though antiretroviral therapy is available free of charge, individuals are reluctant to inform practitioners that they inject drugs as there is the high risk of being reported to police.[27] In Mongolia the predicament is similar, wherein people who inject drugs do not access testing nor treatment for HIV for fear of legal repercussions.[150] Although there are facilities to support people who use drugs during antiretroviral therapy initiation and beyond in Pakistan, uptake remains low as many physicians are reluctant to engage people who inject drugs in the treatment. This is due to anticipated adverse treatment outcomes that create a systemic caution around prescribing treatment to this population.[151]

Thailand provides an example of better practice, with a total of 3,567 people who inject drugs living with HIV currently accessing antiretroviral treatment. This represents 47.6% of the total estimated number of people who inject drugs living with HIV (7,499).[58] The situation in Vietnam, where 34% of people who use drugs are living with HIV, is also notable. Many one-stop services for people who use drugs in the country provide not only antiretroviral therapy but also OST.[157] In 2018, the Vietnamese government announced that the provision of essential harm reduction interventions, including new HIV testing services, will be expanded to 32 provinces and cities

across Vietnam.[158] In addition, health insurance, and the communication of its benefits, will reportedly be promoted for people who use drugs.[158] Bangladesh also scores relatively well across the cascade of care, with an estimated 45.5% of people who inject drugs and living with HIV currently accessing antiretroviral therapy.[98] A best practice service delivery model has been adopted in Dhaka, in a programme funded by Save the Children to introduce one-stop services and comprehensive drop-in centres.[159]

India has the second largest HIV treatment programme in the world, and promotes a one-stop service model incorporating NSP, OST and antiretroviral therapy for people who inject drugs who are living with HIV.[160] An estimated 57.9% of people eligible for inclusion in this scheme reported antiretroviral therapy initiation in such services in a study published in 2018.[94] The Indonesian Ministry of Health supports a "test and treat" service model, with 495 antiretroviral therapy dispensers across the archipelago.[93]

In Myanmar, a new policy of initiating antiretroviral therapy for every person living with HIV in every centre providing OST, which includes harm reduction organisations, has great potential to improve access to HIV treatment for people who use drugs.[40] However, the policy is not yet operational[161] and access remains impeded due to limited health literacy in rural and other affected communities, along with the stigma and discrimination attendant to drug use in the country.[40]

Harm reduction in prisons

In Asia, there was a 30.2% increase in the prison population between 2000 and 2016, compared to a 19.8% rise worldwide.[162] Since the *Global State of Harm Reduction 2016*, prison overcrowding has continued to be an issue across the region, but in South Asia it is particularly severe. In India, for instance, delays in the criminal justice system have caused some prisons to operate at more than two or three times their capacity.[163] In China, new judicial interpretations of drug laws have meant that smaller amounts of drugs are now being criminalised, and have led to the introduction of penalties for online activities related to the sale or distribution of drugs.[164,165]

A number of factors have led to the overall rise in prison populations in the region. Thresholds adopted to define who is a user and who is a dealer are rapidly becoming smaller in Asia. A punitive approach to drug policing in Cambodia and Thailand has also given rise to large numbers of individuals incarcerated for possession of small amounts of drugs.[166] Another cause of high prison populations are policies of so called "penal populism". For example in the Philippines, President Duterte's "war on drugs" has led to the detention of an estimated 142,000 people in facilities meant to house just 20,000 people.[167] Overcrowding has also been reported in Thailand, where Klong Prem prison detains 6,267 people serving sentences that range from 15 years to life, with 64% convicted of drug-related crimes.[168]

There continues to be a dearth of harm reduction services in prison contexts, as illustrated in Table 2.1.3.

Table 2.1.3: Provision of harm reduction in prisons a selection of Asian countries

Country	NSP	OST	ART	Naloxone
Afghanistan[5]	No	Yes, in 4 prisons	Yes	Yes
Bangladesh[9]	No	No	Yes	No
Cambodia[13]	No	No	Yes	No
India[20]	No	Yes	No	No
Indonesia[93]	No	Yes, in 11 prisons	Yes	No
Macau[29]	No	Yes, for those tapering off	Yes	No
Malaysia[33]	No	Yes	Yes	No
Mongolia[150]	nk	nk	nk	nk
Myanmar[40,161]	No	No	Yes	No
Nepal[43]	No	No	Yes	No
Vietnam[59]	No	Yes	No	No

nk = not known

Although no prisons in the region offer NSP, there are several prisons that continue to support people who use drugs and are living with HIV. Many offer harm reduction programmes that include antiretroviral therapy provision, and TB testing and treatment. Prison systems in two areas of India, Punjab and Tihar, offer testing and treatment of hepatitis C, as well as OST. In Tihar, prisoners can access OST at any time; however, in Punjab OST is only dispensed temporarily as part of drug detoxification.[20] Despite much advocacy in India, prison guidelines do not allow for NSPs or condom distribution.[169] In Tahir's 10 prisons, buprenorphine is given sublingually as daily directly-observed treatment.[170] In prisons in Vietnam, HIV prevention, treatment and care services as well as OST provision are being carried out at Phu Son prison and soon in Than Xuan prison.[171] In addition to these, only Indonesia and Malaysia currently offer OST in prisons in Asia.

Compulsory drug detention and rehabilitation

Compulsory drug treatment centres continue to proliferate across Asia, managed by law enforcement and other stakeholders, with individuals living in conditions comparable to prison settings.[172]

The detention and coercive treatment of people who use illicit drugs is currently a dominant approach in 11 countries in the region, including Cambodia, China, Indonesia, Laos, Malaysia, Myanmar, Philippines, Thailand and Vietnam.[173] This is despite a 2012 joint statement issued by 12 UN agencies calling for the closure of compulsory drug treatment centres[174] and a lack of evidence that such facilities even achieve their stated aims.[175] This trend appears to be escalating in Laos and Myanmar.[173] In Sri Lanka, conversations have begun on the establishment of compulsory drug treatment centres.[176] Elsewhere in South Asia, there is continued support for a more evidence-based approach incorporating treatment, prevention and care alongside other cost-effective harm reduction initiatives.[177]

In 2017, there were reports of mass arrests of people who use drugs by the counter-narcotics department in Kabul, Afghanistan, with 150 people who inject drugs captured and subjected to forced detention.[178] China continues to demonstrate that enforced rehabilitation has not been successful in achieving better health outcomes for people who use drugs. In 2016, it was reported that the estimated 240,000 people held in such facilities in the country made a total of 2.9 million hospital visits, more than 10 per individual, signalling their lack of capacity to prevent and address the negative health consequences associated with drug use.[179] Academic observers have questioned whether China's support for enforced rehabilitation approaches might be based on powerful bureaucratic interests, with these centres providing employment and funds for judicial and public security agencies.[180] In June 2018, China appeared to be considering joining in the harm reduction conversation by diversifying its drug treatment programme.[181] However, this diversification appears to be based on pseudo-scientific approaches such as "trans-cranial magnetic simulation" and "virtual reality addiction assessment".[182,183] In Thailand, authorities have incorporated forced participation in military-style training as part of the drug use treatment approach.[173,184]

High relapse rates after release from forced rehabilitation centres have been reported in China (98% returned to heroin use within a year) and Thailand (50% returned to injecting drug use within a year).[175,185] People who use drugs receive little access to basic healthcare within compulsory drug treatment centres in several countries in the region.[186] Other human rights abuses are continually documented in Cambodia, Laos and Myanmar.[187] In Cambodia, children who use drugs have been detained against their will and routinely beaten, with many reporting other abuses, including sexual abuse.[187] In the state of Kachin, Myanmar, people who inject drugs are reportedly detained in cell-like conditions in forced rehabilitation centres, receiving no medical care while suffering withdrawal symptoms.[172] There are also reports of widespread beatings, inhumane treatment and other human rights abuses.[188] A 2018 submission to the UN Human Rights Committee initiated by Harm Reduction International and the World Coalition Against the Death Penalty highlighted evidence that shows that many centres use forced drug testing, lack medical evaluation, use forced labour, detain people in unsanitary conditions, and that acts of sexual violence have become part of the culture of compulsory drug treatment centres in Asia.[189] In addition to this, UN agencies hosted a series of regional consultations resulting in recommendations that included the establishment of national transition committees to coordinate a move away from compulsory detention across judicial, public health and law enforcement divisions.[190]

There is mounting recognition that compulsory drug treatment centres are a counter-productive approach to achieving effective national health and social reintegration objectives, and slowly growing interest in transitioning from compulsory detoxification centres towards community-based treatment facilities. Community-based treatment facilities are proven to improve the life outcomes of people who use drugs overall.[58,191] However, strategies for facilitating successful transition from compulsory to community-based services will continue to be largely dependent on government priorities, and attitudes towards drug use and people who use drugs, as well as the availability of investment in these proven initiatives.

Policy developments for harm reduction

There have been considerable shifts in policy in the region since the *Global State of Harm Reduction 2016*, many of which are counter-productive to harm reduction approaches. Punitive drug control messages are increasingly being used by politicians in order to consolidate power, in which people who use drugs are seen as morally culpable and against "Asian values".[192] The last two years have seen extrajudicial killings, mass arrests of people who use drugs and other human rights violations under the auspices of the "war on drugs", especially in Bangladesh, the Philippines and Sri Lanka.[193-195]

Despite advocacy from civil society organisations around the world,[193,196,197] the Bangladeshi home minister, Asaduzzaman Khan, is implementing a Philippines-style "war on drugs" using the Rapid Action Battalion.[198,199] This zero tolerance policy approach promotes short-term political benefits as opposed to more longer-term social benefits.[84,194] In June 2018, the UN High Commissioner on Human Rights condemned the government's crackdown, highlighting how people who use drugs now fear arrest or violence if they access essential health services.[200] A wealth of evidence from around the world emphatically demonstrates the devastating health impact of zero tolerance policies. The criminalisation of people who use drugs not only reduces their access to health services, but also limits the availability of safer drug paraphernalia, limits access to essential pain medication, disrupts treatment regimes, creates epidemics in vulnerable populations such as prisoners and sex workers, and increases the prevalence of practices associated with a higher risk of blood-borne disease transmission.[201-204]

In positive developments, Thailand's current drug policy is being revised to take a more health-based approach to drug use. A concrete indication of this change came with the announcement in 2016 that responsibility for drug treatment services would be moved by the end of 2018 from the Ministry of Home Affairs to the Ministry of Health.[205] The move away from criminal justice to public health management of drug use is a promising step towards the use of evidence-based and client-centred harm reduction programmes, and the increased meaningful involvement of people who use drugs in policy and service design.[205] This health-based approach is reinforced by amendments to the Thai Narcotics Act to reduce penalties for the possession, production, import and export of narcotics.[206]

A process of drug law reform took place in Indonesia in 2018, with Indonesia's new anti-narcotics chief, Heru Winarko, calling for an expansion of rehabilitation centres across the country.[207] Winarko announced his plan to move away from the proposed previous proposals to house people who use drugs in unsafe environments without adequate facilities.[207] While this is a positive development towards a more humane and health-centred approach, it is vital that drug treatment is only undertaken voluntarily, and based on international standards and evidence. In 2017, courts in Japan (which has some of the strictest drug control policies of any advanced democracy globally) have begun to show moderation in sentencing people who use drugs, signalling the opening of a space in which policy reform could be discussed.[208] In addition, there have been increasing incidences where Japanese courts have shown moderation, moving from harsh sentencing towards community rehabilitation.[208]

A drug law reform process is currently underway in Myanmar, where a new draft narcotics law (which explicitly refers to harm reduction and human rights) was released in 2017.[188] Myanmar has also embraced the UN Guiding Principles on Alternative Development within Myanmar's drug control policies.[188]

A revision of the Mekong Memorandum of Understanding between Laos, Myanmar, Cambodia, China, Vietnam and Thailand has adopted recommendations from the 2016 UN General Assembly Special Session on the Global Drug Problem, and acknowledges the importance of rights-based drug policy to the 2030 Agenda for Sustainable Development.[209] Additionally, the 2016-2025 ASEAN (Association of Southeast Asian Nations) Work Plan Against Drugs, adopted in 2016, has broadened the regional approach to drugs by including recommendations to engage departments with responsibility for education, health and social matters in the response to drug use.[210] However, it retains the ultimate goal of achieving a drug-free ASEAN.[210]

Civil society and advocacy developments for harm reduction

Civil society organisations in Asia have played a critical role in advocating for the availability, suitability and accessibility of harm reduction services in the region for decades.[211] The Asian Network of People who Use Drugs (ANPUD), which is

based in Bangkok, continues to be the coordinating resource body for local networks of people who use drugs. A focus of this group is advocacy within community organisations in local areas. In some countries where stigma and discrimination towards people who use drugs is increasing to dangerous levels, grass roots networks have reportedly been forced to go underground or suspend operations.[212]

In Indonesia, Persaudaraan Korban Napza Indonesia has been instrumental in ensuring the availability of hepatitis treatment in the country in the last year.[63] The Drug User Network, a Pakistani advocacy group for people who use drugs, continues to work to mobilise community leadership to influence policies, laws, programme funds and to promote actions that empower people who use drugs.[213]

The Japan Advocacy Network for Drug Policy (JANDP) is a multidisciplinary collective working to increase and strengthen the debate on drug policy alternatives in Japan .[27] Japan's international engagement on drugs has progressed since the *Global State of Harm Reduction 2016*.[27,211] JANDP gained membership of the New York Non-Governmental Organisation Committee on Drugs and is currently being considered for affiliation with the Vienna Non-Governmental Organisation Committee on Narcotic Drugs.[27] The Malaysian Welfare Association of Recovering Drug Users also continues to be active at the national level. In Myanmar, the National Drug Users Network of Myanmar and the Drug Policy Advocacy Group campaigned around the message of the Support. Don't Punish movement in 2018, and in 2017 produced a publication outlining best practice recommendations for health and human rights-based drug policies.[214,215] The Indian Drug Users Forum (IDUF), a national-level forum, endeavours to promote the meaningful involvement of people who use drugs. The IDUF been growing in membership and looks to influence policy and programme development consistently.[20]

In Afghanistan, there are informal networks of people who use drugs that are not affiliated with regional groups.[5] The Cambodia Network for Drug Users is still in its formative stages and ensures membership of women who use drugs, and works closely alongside law enforcement through a local civil society organisation, KHANA.[13] Nepal has a long history of drug user activism, with extensive networks. The lead organisation, Recovering Nepal, works alongside the Coalition of Drug Users, a non-abstinence-based all-inclusive drug user network[216] that includes women and transgender people who use drugs.[43] In Vietnam, the Vietnamese Network of People who Use Drugs continues to be active in advocacy and campaign work, including fostering the global Support. Don't Punish campaign.[217]n

Regionally, many major milestones have been accomplished under the guidance and technical support of the International Drug Policy Consortium. These include the active involvement and presence of civil society and drug user networks in scheduled side event sessions at the 61st Session of the Commission on Narcotic Drugs in Vienna in March 2018. The International Drug Policy Consortium, along with regional partners, also ensured that the human rights of people who use drugs and the importance of harm reduction as a public health measure were highlighted at the ASEAN Member State Meeting in Kuala Lumpur in May 2018.[61] Global campaigns such as Support. Don't Punish, as well as Harm Reduction International's flagship budget advocacy campaign, 10 by 20,[15] have been embraced by networks of people who use drugs in Asia. At the time of writing, there was limited information about the existence of networks in Bangladesh, Bhutan, Brunei Darussalam, China, Hong Kong, the Philippines, Laos, Macau, the Maldives, Mongolia, Singapore, Sri Lanka, South Korea and Taiwan.

Funding developments for harm reduction

Based on research conducted by Harm Reduction International into the funding landscape for harm reduction services in Asia in 2017-2018, it is evident that there is a paucity of funding for HIV prevention, treatment and care programmes for people who use drugs.[220-224] There is an overarching lack of political and financial support for harm reduction from most governments in Asia, and most initiatives rely heavily on international donors. In Indonesia, for example, 90% of harm reduction programmes have been funded by international donors to date, and these funds have been steadily reducing in recent years.[221]

The revised Global Fund Eligibility Policy states that all low- and middle-income countries are eligible to access funds, with upper middle-income countries that have high disease burdens being eligible to seek funding.[225] Fortunately for the region, the majority of Asian countries remain eligible to access funds under the new criteria. However, funds for harm reduction continue to diminish in the region overall.[226]

n Support. Don't Punish is a global advocacy campaign calling for better drug policies that prioritise public health and human rights. The campaign aims to promote drug policy reform, and to change laws and policies which impede access to harm reduction interventions.[218]

Adding to the harm reduction funding crisis is a lack of preparedness among governments to transition away from international donor support. Sustainability of harm reduction work in Asia will be largely contingent on domestic governments' willingness to bear financial responsibility for these programmes in the future. For example, Cambodia has seen international funding plummet since its status was upgraded to a lower middle-income country,[222] a shortfall that must be met by increased national investment. The government of Vietnam has increased domestic support for OST in recent years and is due to be fully funding these programmes in 2018.[223] In Thailand, there have also been positive steps taken by the government to address funding shortfalls for harm reduction.[224] However, in both Thailand and Vietnam, NSP provision is still heavily reliant on international donors, and civil society concerns remain as to whether plans and allocations will be realised as government priorities continue to shift.[43]

The funding situation in other countries in the region is also precarious. Afghanistan currently benefits from Global Fund and World Bank support for harm reduction services, with the Global Fund allocating US$8.9 million for 2017-2019.[5] However, as the World Bank slowly withdraws, support for harm reduction services will rely upon budget allocation from the subnational government.[5] In Myanmar, UN agencies (primarily UNAIDS, WHO and UNODC) have been involved in national efforts to support harm reduction. These developments include a National Strategic Plan on HIV/AIDS 2016-2020 and the development of a Global Fund funding request.[40] The WHO has advocated for increased government allocation for OST, and worked with the Myanmar government to draft a National Strategic Framework on Drug Treatment.[40] The development of a National Strategic Framework on Health and Drugs, including harm reduction as a core strategic approach to addressing health consequences of drugs use, is underway by the Ministry of Health and Sports.[161]

In Cambodia, outreach work and technical support for HIV-focused organisations continue to be supported by the Global Fund, which is predicted to end in 2020.[13] Nepal is facing a catastrophic funding crisis, with the German Corporation for International Cooperation (also known as GiZ) ending its support in 2016-2019.[43] The Bridging the Gaps project, funded by the Ministry of Foreign Affairs of the Netherlands in Nepal, will also be ending in December 2018, in conjunction with a gradual reduction in support from the Global Fund. With such swift donor withdrawal, the government of Nepal may be unable to commit to support harm reduction services at the same capacity in future.[43] Funding for harm reduction work in Japan is negligible, and JANDP only receives minimal funding from the Open Society Foundations for its advocacy activities.[27] The funding predicament in Mongolia is also dire, where the Global Fund stopped funding at the beginning of 2018.[150] There is a dearth of information on funding for harm reduction in Macau, and at the time of writing there are no funds supporting harm reduction work in the Philippines.[48] Advocacy work in the region will continue to be funded under the Global Fund Harm Reduction Advocacy in Asia project, with the India HIV/AIDS Alliance as Principal Recipient until the end of 2019.[227]

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Regional Overview
2.2 Eurasia

Table 2.2.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in Eurasia

Country/territory with reported injecting drug use	People who inject drugs	HIV prevalence among people who inject drugs(%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs (%)	Harm reduction response			
					NSP[a]	OST[b]	Peer-distribution of naloxone	DCRs
Albania	5,132[1]	0.5%[1]	28.8%[1]	11.5%[1]	✓2[2,3]	✓6[2]	x	x
Armenia	13,000[4]	5.4%[4]	42.7%[4]	nk	✓12[2,3]	✓4[2]	x	x
Azerbaijan	71,283[5]	9.7%[4]	62.1%[4]	10.4%[4]	✓17[4]	✓2[2]	x	x
Belarus	40,500[4]	25.6%[4]	58.3%[4]	11.2%[4]	✓34[2,3]	✓19[6]	x	x
Bosnia and Herzegovina	9,500-15,000[7]	0.3%[4]	39.9%[4]	0.5%[4]	✓5[8]	✓7[2](M,O)	x	x
Bulgaria	18,500[4]	1.7-3%[9]	57.8-68.5%[9]	6.6%[4]	x[10]	✓31[11]	x	x
Croatia	6,344[12]	0.5%[12]	38.3%[12]	0.9%[4]	✓142[13]	✓[13](M,O)	x	x
Czech Republic	47,000[4]	0.3%[4]	18.3%[4]	15.1%[4]	✓153[13]	✓[13](M,B,BN)	x	x
Estonia	8,500[4]	53.4%[4]	79.2%[4]	3-22%[14]	✓37[13]	✓9[2](M,B,BN)	✓[14]c	x
Georgia	52,700[15]	2.3%[16]	65-75%[16]	7.2%[4]	✓22[2]	✓18[2](M,BN)	x	x
Hungary	6,707[17]	0.2%[17]d	49.7%[17]	2.2%[4]	✓43[13]	✓15[2](M,BN)	x	x
Kazakhstan	120,500[18]	9.2%[4]	58.8%[4]	7.9%[4]	✓144[19]	✓10[19]	x	x
Kosovo	nke	nk	26.6%[20]	4.1%[20]	✓[2]	✓3[2]	x	x
Kyrgyzstan	28,500[4]	12.4%[4]	43.9%[4]	nk	✓40[21]	✓31[22]	x	x
Latvia	12,537[23]	6.5%[23]	52.5%[23]	3.8%[23]	✓25[13]	✓10[2](M,B,BN)	x	x
Lithuania	5,000[4]	8%[4]	41%[4]	10.5%[4]	✓14[13]	✓[13](M,B,BN)	x	x
Macedonia	nk	nk	64%[24]	nk	✓16[24]	✓16[24]	x	x
Moldova	12,000[4]	nk	50.1%[4]	5.7%[4]	✓28[25]	✓19[2]f	x	x
Montenegro	nk	0.2%[4]	43.4%[4]	nk	✓13[2]	✓5[2]	x	x
Poland	14,670[26]	3%[26]	58.7%[4]	4.9%[4]	✓36[13]	✓[26]	x	x
Romania	81,500[4]g	20.5%[4]	83.8%[4]	5.2%[4]	✓2[27]h	✓[28]	x	x
Russia	1,881,000[4]	30.4%[4]	68.7%[4]	9%[4]	✓20[4]	x	x	x
Serbia	29,000[4]	<1%[4]	25.9%[4]	3.6%[4]	✓2[29]	✓23[30]	x	x
Slovakia	20,000[4]	0.1%[4]	56.1%[4]	1.7%[4]	✓13[13]	✓[13](M,B,BN)	x	x
Slovenia	6,000[4]	0.5%[4]	30.5%[4]	3.4%[4]	✓102[13]	✓10[3](M,B,BN)	x	x
Tajikistan	23,100[31]	27%[4]	61.3%[4]	nk	✓51[32]	✓12[32](M)	x	x
Turkmenistan	nk	nk	nk	nk	x	x	x	x
Ukraine	319,500[4]	19.1%[4]	53.9%[4]	5.6%[4]	✓1,667[3]	✓174[33](M,B)	✓[34]	x
Uzbekistan	94,000[4]	7.3%[4]	21.8%[35]	nk	✓230[36]	x	x	x

nk – not known

a This includes all operational NSP sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers. (P) = needles and syringes reported to be available for purchase from pharmacies or other outlets.
b (M) = methadone, (B) = buprenorphine, (O) = any other form (including morphine and codeine).
c Naloxone can only be provided by medical personnel.
d Data from 2014; however, civil society report an increase in HIV diagnoses attributed to injecting drug use in 2018.
e Recent studies on drug use and the public health response have not been undertaken in Kosovo since 2008.
f Of these services, 13 are based in prisons.
g National estimates for the number of people who inject drugs in Romania vary widely among different international agencies. The figure cited represents the most recent from an independent study.
h An additional 9 NSPs operate in prisons in Romania. However, this service has never been utilised by people in prison. Please refer to prison section (p56).

Map 2.2.1: Availability of harm reduction services

Harm reduction in Eurasia

Overview

The region of Eurasia covers diverse countries, with varied levels and types of drug consumption. Every country in the region reports injecting drug use,[4] but, as in all other regions of the world, cannabis remains the most commonly used drug.[18,37] In Eurasia, there is a growing trend in the use of amphetamine-type stimulants (ATS) over the last decade.[37] In particular, the Czech Republic (and more recently, neighbouring countries) have been associated with the production of much of Europe's methamphetamine market, with stimulants reported as the primary drug injected in the Czech Republic, Hungary and Latvia.[38] Although injecting drugs as the primary route of administration has reduced *overall* in Eurasia over recent years, data also reveal a general upward trend in the use of ATS and new psychoactive substances (NPS) via other routes of administration (e.g. swallowing, snorting or smoking).[18,37]

The state of harm reduction in Eurasia has remained largely stable since 2016, with the exception of certain countries, namely Bosnia and Herzegovina, Bulgaria, Hungary and Romania, which have seen the closure/scaling back of harm reduction services. Harm reduction is still mentioned in national government policies in 26 of the 29 countries in the region.[i] Needle and syringe programmes are available in 27 of the 29 countries in the region, the notable change being the closure of NSPs in Turkmenistan and Bulgaria since the *Global State of Harm Reduction* last reported.

Opioid substitution therapy (OST) remains available in 26 of the 29 countries in the region. In Russia, which retains considerable influence in parts of the region, the government's punitive policies and practices towards drug use continues, with a national ban on OST and extremely limited NSP site provision, despite increasing rates of HIV[38] and hepatitis C in the country among people who inject drugs.[38] Ideology surrounding drug use in Russia, often entrenched in unscientific drug prevention and treatment measures which deny people access to essential medicines and services, has led to gross violations of a number of human rights, including exploitation by law enforcement officials, pain and suffering associated with withdrawal, and coerced confessions regarding drug use.[39,40] OST is also unavailable in Turkmenistan and Uzbekistan. Civil society in Russia and neighbouring countries continues to advocate for the implementation of the nine core harm reduction interventions recommended by the World Health Organization (WHO).[2]

Across the region, HIV transmission attributed to injecting drug use has seen a decline in some countries (detailed below). In contrast, Russia and Hungary have seen an increase in HIV prevalence,[38] and according to a 2018 report from UNAIDS, people who inject drugs account for 39% all of new HIV infections in the region.[41] In 2016, people accessing harm reduction services in Hungary reached their lowest level in seven years.[17] Ukraine bears the second largest HIV epidemic in the region, concentrated among key populations.[42] In many countries there also remains a distinct lack of integration of HIV testing and treatment services within harm reduction programmes.[2]

The funding crisis for harm reduction is having a negative impact on a number of countries in Eurasia.[43] Austerity, international donor retreat and poor political support for harm reduction are the primary factors underpinning this.[43] In some countries in Eurasia, the withdrawal of the Global Fund has left gaps in service provision that government support is yet to fill.[43] Civil society in the region reports the closure of community organisations and the closure of services. In some cases, the transition to government support impacts upon quality of services, such as poor-quality needles being supplied.[2,44] Often where harm reduction services do exist, they are not inclusive; for example, women experience greater difficulty in accessing services and very few, if any, adapted models of harm reduction service provision for women are in operation.[45] The role of NGOs and community-led service providers in harm reduction is still not supported by the majority of governments in the region of Eurasia.

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

The number of countries in Eurasia in which NSPs operate has reduced by one since the *Global State of Harm Reduction 2016*, with services currently available in 27 of the 29 countries. Notwithstanding this, restrictive opening hours, poor-quality equipment and stigma remain barriers to NSPs in many countries in the region.[2] In 2016, it was reported that Turkmenistan had two NSPs, but these services no longer exist. In 2017, due to the withdrawal of donor funding and the lack of government support, all NSPs in Bulgaria have closed down or ceased providing needles and syringes.[10] In 2016, the WHO adjusted

i Azerbaijan, Russia and Turkmenistan do not have harm reduction within any national policies.

its targets for high coverage syringe programmes, from its 2009 target of 200 syringes per person who injects drugs per year to a target of 300 syringes per person who injects drugs per year by 2030.[46] Increases and decreases in accessibility, availability and coverage of NSPs have been observed in Eurasia. When looking specifically at the number of sites providing NSPs, this increased in eight countries since the *Global State of Harm Reduction* reported in 2016 (Croatia, the Czech Republic, Estonia, Georgia, Latvia, Poland, Slovakia and Slovenia). In the Czech Republic, just short of 6.5 million syringes have been dispensed since 2007 and the number of people who use drugs accessing NSP services increased, with over 8,000 new clients in 2016 alone.[47] With injecting more frequently associated with methamphetamines rather than opioids in the Czech Republic (estimates suggest around 75% of needles procured are for methamphetamine use), a greater number of syringes are required due to the fact people who inject stimulants often inject more frequently. Syringes are accessible via vending machines in the Czech Republic[47][j] and Hungary.[13]

A number of countries in the region also have mobile NSPs or outreach programmes which deliver needles and syringes alongside other injecting equipment and, in many cases, healthcare services or referrals. In Estonia, two mobile NSP units began operating in 2018 via van, and combine HIV/hepatitis C/ tuberculosis and STI testing and treatment, although treatment for hepatitis C is not available.[48] In 2016, 2.1 million syringes were distributed via NSPs (at both mobile and fixed sites) in Estonia, and although regional coverage could be improved, overall satisfaction has been reported by people using the services.[48] In Slovakia between 2015 and 2016, an increase in the number of syringes distributed was reported which, similarly to the Czech Republic, is due to an increase in stimulant injecting.[49] Latvia and Hungary also report stimulants as the primary drug injected.[37] However, in Latvia NSP site provision has increased since 2016, whereas in Hungary, two key needle and syringe sites have been closed down.[17,50] The number of syringes distributed per person who inject drugs per year was already only 10% (n=30) of the recommended WHO standard of 300[46] prior to the closure of these services and concerns have been raised over the gradual increase in HIV among people who use drugs.[17,52] With the closure of all NSP services in Bulgaria there are similar fears.[10]

Decreases in NSP site provision have been also been observed in Serbia and Uzbekistan since the *Global State of Harm Reduction* last reported in 2016. In 15 countries (Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Kazakhstan, Kosovo, Kyrgyzstan, Lithuania, Macedonia, Moldova, Montenegro, Tajikistan, Russia and Ukraine) provision of NSP has remained stable. In Russia, there are reported to be 100,000 new HIV diagnoses each year, with a high proportion believed to be attributed to unsafe injecting drug use and a lack of harm reduction provision and funding.[38] Civil society in Kazakhstan reports poor-quality syringes distributed by government-funded programmes, leading to the potential for increased unsafe injecting.[2,44] In Romania, two NGOs provide NSPs; however, geographical coverage remains poor and services are only available in Bucharest and Ilfoy County.[28] In Ukraine, women experience a high level of stigma, discrimination and violence, making them harder to reach with NSP services.[45] Adapted services are therefore needed and are being advocated for by the Women's Harm Reduction International Network (WHRIN).[45]

Opioid substitution therapy (OST)

As reported in 2016, 26 countries in the region have some form of OST provision available for people who inject/use opioids. OST is prohibited in Russia, Turkmenistan and Uzbekistan, despite the WHO's recommendation that where injecting drug use occurs, the country must *prioritise* implementation of both OST and NSP as a public health concern.[51] Table 2.2.1 shows high rates of HIV and hepatitis C are reported for the 1.8 million people who inject drugs in Russia. To put the figures in perspective, between 2011 and 2016 the annual increase of HIV prevalence globally was 10% (including sub-Saharan Africa with the highest burden of disease). In Russia during the same period, HIV prevalence increased 75%.[52] Harm Reduction International's research found that while Russia accounts for 20% of all people who injects drugs in low- and middle-income countries (LMICs), investment in harm reduction is so low that it is equivalent to only 1% of all identified harm reduction funding in LMICs.[53]

Across the 26 countries in the region that offer OST, provision has been largely stable over the last two years; however, coverage varies considerably and is extremely low in some states.[2] Heroin assisted therapy (HAT) as a form of OST remains unavailable in Eurasia. In Romania, civil society reports a reduction of OST provision.[27] In Kosovo, less than 0.3% of the estimated number of people who inject drugs receive OST.[20] In Lithuania, OST can be prescribed via specialist centres and psychiatrists only, and the person must have health

j Vending machines do not supply needles and syringes free of charge.

insurance. [30,54] Methadone remains the most widely used form of OST in the region; however, the lack of take-home dosing in many countries due to rigid regulatory frameworks, the position of law enforcement officials and a lack of trust between service providers and attendees serve to exacerbate issues of access for people who inject drugs.[2]

Unlike NSP services, many governments fully fund OST provision in the region, including Azerbaijan, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Serbia, Slovakia, and Slovenia.[2] In Belarus and Georgia, government funding for OST has recently increased.[2] In Belarus, the state now funds OST provision, with the exception of the medication costs (funded through the Global Fund).[2] In 2017, Georgia began to fully fund all methadone programmes, covering approximately 6,000 people. An additional 1,200 people receive buprenorphine through the private system.[2,55] In Estonia, coverage of OST is considered stable and state funding for harm reduction services has been increasing; however, there are waiting lists for those initiating treatment.[48] In 2018, the government of Ukraine committed to fund and expand access of OST to over 10,000 people at 178 health-care facilities.[56]

In Kazakhstan, reduced Global Fund funding and limited political support has seen OST restricted to pilot programmes at 10 sites across three cities, with less than 1% of people who use drugs accessing the programme.[53] A repressive policy and legal environment, unequal coverage between rural and urban settings, stigma, and the requirement to abstain from illegal drugs all form barriers to access and adherence to OST. Earlier in 2018, the government of Kazakhstan threatened to close the country's OST programmes, highlighting the political vulnerability of the service. The prompt civil society advocacy response appears to have paused this decision.[57]

Amphetamine-type stimulants (ATS), cocaine and its derivatives, and new psychoactive substances (NPS)

Cannabis is the most commonly used drug in nearly every county in the region, but a growing trend in the use of amphetamine-type stimulants has emerged in Eurasia over the past decade.[37] In particular, the Czech Republic (and more recently, neighbouring countries) have been associated with much of Europe's methamphetamine market, with stimulants reported as the primary drug injected in the Czech Republic, Hungary and Latvia.[37] Although injecting drugs as the primary route of administration has declined in general over the last decade,[37] data in many countries reveal a general upward trend of ATS use via swallowing, snorting or smoking; for example, in Poland,[26] Estonia[14] (where amphetamines are the most commonly used stimulant), Lithuania[54] (with the city of Vilnius having the highest levels of methamphetamine residue detected in wastewater in the whole of the European Union) and Slovakia.[49]

A recent report by Mainline, a Netherlands-based harm reduction organisation, provides the most comprehensive review of stimulant harm reduction programmes and practices to date.[58] The report provides a literature review on various types of stimulants, routes of administration and harm reduction strategies, case studies from across the globe and reviews interventions specific to people who use stimulants. The potential health-related harms of stimulant use are different to those experienced by people who use opioids. People who use stimulants report feeling that they belong to different (social) networks of people who use drugs, meaning they may feel opioid-focused harm reduction services are irrelevant or inaccessible to them.[58] However, similarly to people who use opioids/inject drugs, there is no single intervention which is recommended, but a comprehensive body of interventions.[58] These include: safer smoking kits for people who smoke (crack cocaine and methamphetamines); prevention of sexual risk; female-focused interventions; drug consumption rooms; self-regulation strategies; substitution; outreach and peer-based interventions; drop-in centres; housing first; therapeutic interventions; and drug-checking services.[58]

Harm reduction responses for people who use stimulants, including cocaine and its derivatives, MDMA and psychedelics such as LSD (commonly referred to as "party drugs") are relatively limited in Eurasia. The response to ATS use in all countries in Eurasia is almost exclusively abstinence-based, the exceptions being harm reduction approaches in the Czech Republic and Poland.[2] In the Czech Republic, given the high proportion of people who inject methamphetamines, together with data that suggests more than half of people surveyed had ever shared their injecting equipment with peers,[47] many harm reduction programmes (including NSPs) distribute gelatine capsules as an oral alternative to injecting.[47] This simple and low cost approach can contribute to the reduction in risk of blood-borne viruses and of smoking with toxic materials.[59] The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) reports that there has been a steady increase in the number of people coming into contact with harm reduction services in the Czech Republic.[47] In Poland, a pilot project operating in

Warsaw offers drug-checking via pre-distribution of testing strips at clubs, festivals and events.[60] The project also procures samples from online shops, tests and evaluates the substance and shares information with people who use drugs.[60] In many cases, NPS are advertised as synthetic cannabinoids but contain synthetic opioids.[60] In a number of countries, a barrier to drug-checking services is the requirement that service providers obtain licences to possess and work with scheduled substances; many countries do not accept drug-checking as a valid reason to issue such licences.[61]

New psychoactive substances contribute to the growth in ATS use in Eurasia. In 2018, the United Nations Office on Drugs and Crime (UNODC) *World Drug Report* noted that 36% of all NPS on the global market were stimulants.[18] Since the *Global State of Harm Reduction* last reported in 2016, many countries in Eurasia report an increase in NPS use.[2] NPS can be swallowed, snorted, smoked or injected; but in most cases, injecting is associated with either synthetic stimulants or opioids.[2] In a number of cases, people using heroin or methamphetamine, specifically where these substances may be temporarily unavailable, will switch to a NPS.[2] Reasons for switching to NPS rather than traditional substances are often based on price, availability and less fear of detection of the substance by police and law enforcement officials.[2] NPS have been associated with younger people, representing a challenge to harm reduction programmes in terms of reach, particularly if young people are injecting and unaware of potential harms.[2,37]

In Hungary, a shift from injecting established drugs (such as heroin or amphetamines) to injecting NPS (namely synthetic cathinones similar to amphetamines and MDMA) has been observed in recent years.[17] Other NPS, consumed via different routes of administration (e.g. swallowing, snorting or smoking) have become popular among younger people and are increasing in use.[17] In 2018, the EMCDDA reported that, although the number of *new* psychoactive substances was down from the peak reached in 2015, around 400 new substances are reported each year.[37] NPS, mostly synthetic cannabinoids and cathinones, are mainly imported from the Czech Republic, Poland and Hungary, or arrive directly from countries in East Asia (mainly China).[49]

NPS present an evolving challenge to harm reduction practices and the harm reduction response fails to meet need in the region. Even in countries where there is political will for greater syringe distribution for people who inject stimulants/NPS, services are often unable to provide a sufficient number of syringes or syringes of good quality.[44]

Overdose, overdose response and drug consumption rooms (DCRs)

Overdose continues to account for the majority of morbidity and mortality associated with opioid drug use in Eurasia.[37] From estimates of drug use in the European Union (of which some countries in the Eurasia region of this report overlap), opioids were found in 84% of fatal overdoses.[37] In 2018, Estonia had the highest rate of fatal overdose of all the European Union countries, with fentanyl[k] found in the majority of these cases.[37] It is difficult to assess the true scale of overdose and morbidity and mortality, due to inconsistent reporting and differences in surveillance systems, which have led to systematic under-reporting of overdose-related death. In Lithuania, for example, the drug-induced mortality rate among adults between the ages of 15-64 was more than double the European average.[54] In Hungary, approximately one quarter of all drug-related deaths involved opioids, always found in combination with other substances.[17] Although in the Czech Republic a lower proportion of drug-induced deaths were recorded with opioids as the principal drug involved in 2015, the proportion of *prescribed* opioid-related death increased in 2016.[47] In Slovakia, similarly to many other countries in the region, although the number of drug-induced deaths is relatively small, approximately nine out of 10 were linked to opioids.[49]

Naloxone is a highly effective opioid antagonist used to reverse the effects of opioid overdose in minutes. The medicine, which can be delivered in various ways (intra-nasal, sublingual and buccal) can, however, only be effective if accessible.[62-65] In Estonia, a total of five service providers (in Harju County and Ida-Viru County) provide naloxone, but kits must be provided via medical personnel. People who use opioids and their relatives are trained in how to recognise an overdose, administer naloxone and provide first aid until the emergency services have arrived.[14] Between 2013 and 2016, 1,770 people had undergone naloxone training and 1,764 pre-filled syringe kits had been distributed.[48] Four hundred and sixty-six kits were issued to repeat clients, with 95% of the reason for requesting a repeat because the pre-filled syringe had been used to save someone's life.[48]

In Lithuania, a small-scale pilot naloxone initiative began in late 2016, but naloxone is given to

k Fentanyl and its analogues are synthetic opioids which can be 50 times more potent than heroin and 100 times more potent than morphine.

people only upon completion of a detoxification programme.[54] In 2013, two pilot naloxone programmes were launched in Kyrgyzstan and Tajikistan, where people who inject drugs were trained in overdose prevention and naloxone use.[66] Over the course of the pilot, 81.5% of participants in Kyrgyzstan and 59.3% of participants in Tajikistan reported receiving naloxone to reverse an overdose.[66] In Tajikistan, naloxone programmes remain operational, with people able to access the medication through harm reduction programmes.[2] In Ukraine, with funding from the Global Fund, naloxone is available through healthcare and social workers trained in overdose prevention and distributed via harm reduction programmes and outreach.[34] In Russia, organisations like the Andrey Rylkov Foundation provide naloxone to people who use drugs via outreach harm reduction programmes. In 2018, production of naloxone stopped in Russia and civil society reports they now face challenges in accessing the medicine.[67]

In many other countries in the region, naloxone is only available via a prescription.[2] Although emergency medical staff have access to the medication in all countries, for those most likely to witness an overdose, access is extremely limited.[2] Harm reduction programmes distribute naloxone in Belarus, Georgia, Estonia, Lithuania (to some degree), Kazakhstan and Kyrgyzstan.[2] However, overdose prevention (if undertaken in countries) is often fragmented due to a lack of funding, a lack of resources and a lack of awareness by states regarding the effectiveness of a life-saving medication.[2]

In 2018, there remain no drug consumption rooms (also known as overdose prevention sites) or safe injecting facilities in Eurasia.

Viral hepatitis

In 2016, the *Global State of Harm Reduction* reported that hepatitis C prevalence among people who inject drugs was over 50% in 16 countries in Eurasia (see Table 2.2.1) and the same is true in 2018. Since 2011, for example, the rate of hepatitis C infection among people who inject drugs in Hungary has doubled[17] and in 2014, a study in Latvia reported prevalence rates of 85.4% among people who inject drugs.[23] Few countries in the region have national hepatitis C treatment programmes, irrespective of action plans or policy statements.[2] Treatment for hepatitis C is often at a high financial cost to the person and not free at the point of access.[2] Where treatment is available, there are often restrictive criteria; for example, in Belarus and Kazakhstan, the state will only cover the cost of treatment if the person is co-infected with HIV.[2] In Hungary, while treatment is available and cost-neutral, long waiting lists restrict access.[2] In Estonia and Lithuania, treatment is only available at no cost to the person during the late stages of fibrosis.[2] In Estonia, hepatitis C treatment is provided primarily through health insurance; this represents a barrier for many people who use drugs who do not have private heath insurance.[48]

In the Czech Republic and Slovenia, treatment for the hepatitis C virus is available to all people who inject drugs via public health facilities, but access remains limited.[47,49] Access to hepatitis C testing and treatment in Lithuania, Moldova, and Romania is specifically limited to those who have state health insurance or are willing to cover the cost of testing and treatment themselves, and in Lithuania only four units in the whole country provide viral hepatitis testing.[54] In Ukraine, through funding provided by the Global Fund, hepatitis C treatment is available free of charge to key populations, including people who use drugs (the government funds treatment for the general population).[68,69] In Armenia, Russia and Tajikistan, hepatitis C treatment is only available to those who can cover the cost in full themselves.[2] In Latvia, Montenegro, Serbia and Albania, people who inject drugs are required to stop using drugs prior to receiving treatment for hepatitis C.[2]

Hepatitis C testing and treatment: the integrated care approach in Georgia

Georgia is the first country in the region to launch a nationwide hepatitis C elimination programme for people who inject drugs. The programme launched in April 2015, with partnership and technical assistance provided by the United States Centres for Disease Control and Prevention, and commitment from Gilead Sciences to donate direct-acting antivirals (DAAs).[70] As of March 2018, 31 sites for hepatitis C treatment were in operation throughout the country, being integrated into OST services in 2017, and NSPs in 2018.[2,55] To date, 500,000 people have been screened and just over 40,000 people enrolled in treatment.[55]

Civil society, researchers and public health advocates believe that Georgia's hepatitis C elimination programme will provide lessons for future hepatitis treatment programmes, particularly as treatment becomes more affordable and more countries seek to provide care and treatment services.[71]

Tuberculosis (TB)

Data on TB prevalence among people who inject/use drugs are often sparse, and without these it is difficult to assess the true prevalence of TB among this population in the region. Overall incidence of TB in countries within the European Union (Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) is low.[72] However, new cases of multi-drug resistant TB rates remain at the highest in Eurasia,[72] with Belarus, Moldova and Uzbekistan accounting for 35.8%, 31.1% and 44.6% of all cases of multi-drug resistant TB respectively.[72] Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Ukraine all had prevalence between 20-29%, whilst Armenia, Azerbaijan, Estonia and Latvia all had a prevalence rate of between 10-19% of multi-drug resistant TB.[72] The Russian Federation is a high-burden country that has seen rates of TB in decline, dropping 13% between 2013-2017.[73] However, Russia remains one of the three countries that account for almost half of the world's cases of multi-drug resistant TB.[73] Tuberculosis also remains the main AIDS-related cause of death among people living with HIV in Ukraine.[42]

The level of integration of TB into harm reduction programmes varies across the region, and theoretically TB screening and treatment is available across Eurasia. In Estonia, taking into account that tuberculosis remains a significant health challenge among people who live with HIV, free tuberculosis screening is provided on a regular basis for high-risk groups not covered by health insurance, including people who inject drugs.[14] In Romania, the treatment of TB and HIV infection is universally provided for anyone infected, but levels of access to treatment for chronic HCV infection remain low.[28]

The DETECT-TB (Early Detection and Integrated Management of Tuberculosis in Europe) project launched in 2016 aims to contribute to the decline and eventual elimination of TB in the European Union. The project emphasises the importance of the early diagnosis of vulnerable populations, including people who inject drugs and prisoners, and the sharing of best practices between programme countries. The project works through a network of partners in six states, two of which are in Eurasia (Bulgaria and Romania) using a mobile van.[74,75] Good practice notes that outreach to marginalised populations may help to mediate between these groups and formal health services.[76] Similar to other infectious diseases associated with injecting drug use, stigma and a lack of awareness also play a significant role in compounding the TB epidemic among people who inject drugs.[76-78]

HIV and antiretroviral therapy (ART)

In a 2018 UNAIDS report, 39% of all new HIV infections in Eurasia were due to injecting drug use.[41] However, transmission patterns vary from country to country. Notably, HIV attributed to injecting drug use has seen a decline in Poland and[26]l Latvia,[23] and in Estonia it is estimated that only 30 new HIV infections were associated with injecting drug use in 2016, lower than in previous years.[14] In Slovakia, only one case of HIV was linked to injecting drug use in 2016.[49] Overall, the proportion of new HIV infections linked to injecting drug use in Lithuania declined from more than 60% in 2010 to less than 30% in 2015, but increased to around 40% in 2016.[54] In Latvia, the number of new HIV infections over the last decade has remained stable among people who inject drugs; however, findings from a study among people who inject drugs in Riga (the country's capital) indicated that around a quarter tested positive for HIV.[23] This example illustrates the difficulty in assessing true rates of HIV among a heavily criminalised and stigmatised population. In Russia there has been a 75% increase in new HIV infections between 2011 and 2016.[38]

In many countries in the region, there also remains a distinct lack of integration of HIV testing and treatment services within harm reduction programmes.[2] Where integration of these services does exist, it often depends on ad-hoc collaboration between harm reduction services and specialised medical facilities.[2] In Lithuania, rapid HIV testing for people who use drugs now occurs in medical centres, whereas previously NGOs employed an outreach nurse to carry out testing.[2] Civil society organisations are concerned that this change may lead to reduced uptake amongst an already stigmatised and hard-to-reach population.[2] In 2016, a study in Kazakhstan and Kyrgyzstan found that a fear of being registered with the Narcological Register prevented people who use drugs from accessing healthcare services.[79] Further regulatory barriers to uptake of HIV testing and treatment have been noted in Armenia and Tajikistan, where NGOs are prohibited from performing rapid testing and treatment unless they hold a special medical licence. To bypass this, some NGOs collaborate with medical institutions to provide testing.[2]

To achieve the 90-90-90 target set by UNAIDS,[52] urgent scaling up of the nine core harm reduction interventions as recommended by the WHO is needed in the region,[51] particularly given rising rates of HIV attributed to unsafe injecting in countries like Russia, Turkmenistan and Uzbekistan.

l It is believed the transmission route remains unreported in a large proportion of new infections in Poland, meaning the data may not be representative.

Harm reduction in prisons

UNAIDS have estimated that 56-90% of people who inject drugs will be incarcerated at some stage in their lives.[80] In Eurasia, drug offences are a major contributor to high incarceration levels,[81] though the proportion of prisoners incarcerated for drug-related offences in the region varies. In a 2015 survey, more than one-third of prisoners in Slovenia reported ever having used a drug in their lifetime, with one in four stating they had used drugs in prison.[49] In Latvia, approximately 69% of prisoners had used drugs at some point in their life, with 40% having done so in the last month.[23] Drug use was also found to be more common among female rather than male prisoners.[23] In 2016, a survey conducted in Czech prisons found that more than half of those imprisoned had used an illicit drug prior to imprisonment, 41% of whom had used methamphetamine.[47] Injecting drug use also occurs within the prison setting, with around 7% of people injecting in prisons and 6% reporting sharing injecting equipment inside prisons in the Czech Republic.[47] At the time of publication, NSPs did not operate in prisons in the Czech Republic. In Russia, around 23% of people in prison have been convicted of drug-related offences.[82]

Needle and syringe programmes only operate in prisons in five of the 29 countries in the Eurasia region: Armenia (all prisons),[83] Kyrgyzstan (7 prisons),[21]m Macedonia (no details available),[84] Moldova (18 prisons),[85] Tajikistan (1 prison).[86]n Romania also operates NSPs in nine of its 45 prisons;[13] however, reports suggest the service has never been utilised[28] as prisoners must register formally for the programme.[84,87] Moldova is one of the only countries in the region that has scaled up its NSP provision since the *Global State of Harm Reduction* last reported in 2016, going from 13 prisons in 2016 to 18 in 2018.

Access to OST in prisons is stronger than access to needles and syringes, and is currently available in 18 countries: Albania,[88] Armenia,[83] Bosnia and Herzegovina,[89] Bulgaria,[9] Croatia,[12] the Czech Republic,[47] Estonia,[14,48] Georgia,[90] Kyrgyzstan,[21] Latvia,[23] Macedonia,[84] Moldova,[85] Montenegro,[2] Poland,[84]oRomania,[84] Serbia,[84]p Slovenia[91] and Ukraine. In 2016, the *Global State of Harm Reduction* reported that OST was available in Lithuania;[54] however, research in 2018 indicates that OST is only available when a person is in police custody and already enrolled in an OST programme. OST is discontinued when the person is transferred to prison.[54]

Although OST is provided in 18 countries, quality and accessibility vary considerably within and between countries. Estonia has OST available in all prisons.[48] Moldova's OST scale-up in prisons positions it as a regional leader; services are implemented via 10 non-governmental organisations and the Department of Penitentiary Institutions.[85] In Slovenia, the most recent data from 2016 indicates that around two-thirds of prisoners who were using opioids accessed OST.[92] In Georgia, OST is only available in three out of the country's 15 prisons, and is provided for detoxification purposes only, for a maximum of three months.[2] This approach is the same in Poland and is entwined within an abstinence-based framework.[84] Both models are insufficient to be deemed harm reduction; however, the existence and provision of the service must be noted. In Hungary, OST is reportedly available, but is primarily provided as a form of detoxification treatment.[17] In the Czech Republic, the *initiation* of OST only occurs on an exceptional basis, but is provided to people who accessed it prior to imprisonment and is available at six prisons in the country. At the time of writing, only 63 people were receiving OST in the Czech Republic.[47,92] In Montenegro, Serbia, Albania and Latvia, OST cannot be initiated within the prison, but is available as a continuation of medication.[2]

As reported in 2016, a blanket prohibition remains on OST in Russia, Turkmenistan and Uzbekistan, both in prisons and in the broader community. OST also remains unavailable in prisons in Azerbaijan,

Belarus, Hungary, Kazakhstan, Kosovo, Lithuania, Slovakia and Tajikistan. Research has indicated that prisoners are more likely to be exposed to blood-borne viruses in the prison setting,[93,94] and reports of injecting drug use in prisons are found worldwide.[95] A recent systematic review looking at the risk of HIV acquisition among people with a history of incarceration found that being incarcerated for drug offences as an injecting drug user was associated with an 81% increase in HIV acquisition risk.[96]

The continuity of access to needle and syringe programmes and OST between the broader community and prisons is important in preventing transmission of blood-borne viruses and avoidable deaths in people who inject drugs and those who use opioids.[97] A 2016 ruling by the European Court of Human Rights determined that denying OST treatment to a prisoner while in detention violates Article 3 of the European Convention on Human Rights, which prohibits inhuman or degrading treatment.[98]

m Figure from 2014.
n Figure from 2014.
o However, this is only available for detoxification.
p OST cannot be initiated in prison, only delivered as a continuation of treatment.

People who inject drugs are also most vulnerable to overdose on release from prison,[100-103] yet naloxone is reportedly unavailable to prisoners post-release in every country in the region, bar Estonia. Since September 2013, a take-home naloxone programme has been available in the two most affected counties of Estonia and in 2015 the programme was extended to prisoners before release.[14,48]

HIV testing and treatment is available in prisons in all countries in Eurasia, although the regulation, quality and coverage of these services vary considerably.[2] Hepatitis C testing, treatment and care in the region's prisons is scarce, which typically reflects the situation outside prisons.[2] Only a few countries offer hepatitis C treatment in all prisons: Slovakia,[84] Slovenia[84] and Estonia.[48] In Hungary and Ukraine, hepatitis C treatment is available in less than half of prisons.[84] In Georgia, prisoners have had access to DAAs since the launch of the 2015 elimination strategy, with 2,753 people accessing treatment.[103] Hepatitis C treatment is reportedly unavailable for people in prisons in Bosnia and Herzegovina, Croatia, Macedonia and Poland.[84]

Civil society reports that in most countries, condoms are not available or available to only a limited extent in prisons.[2] Although Estonia offers OST and naloxone, condoms for people in prison remain inaccessible.[48] Since August 2017, a pilot condom distribution programme has been operating in one prison in the Czech Republic (prior to which condoms were only available in canteens in prisons and in some private visiting rooms).[92] Under the pilot programme, four condom vending machines were installed in bathrooms/toilets, together with adjusted disposal bins for dangerous and infected waste. Four-thousand condoms were distributed in the first 12 months, resulting in the extension of the pilot programme and with a proposal for implementation of similar pilots in other prisons in the country in 2018/2019.[92]

Policy developments for harm reduction

Twenty-six of 29 countries in Eurasia have national HIV or drug policies that include explicit references to harm reduction. The three countries which do not include harm reduction in national policy remain the same as reported in 2016: Azerbaijan, Russia and Turkmenistan. At least three countries (Albania, the Czech Republic and Estonia) have harm reduction as one of the four main pillars of their national Drugs Strategy.[1,47] Despite the implementation of harm reduction services in many countries in the region, for the vast majority of countries, the policy environment is dominated by punitive drug policies focused on supply reduction and criminalisation. Within this policy environment, hostility towards harm reduction is common. National legislation on drugs in the former Soviet states set low thresholds for possession offences, leading to prison sentences that are disproportionate in length to the associated drug arrest.[2]

In 2016, the *Global State of Harm Reduction* reported that Armenia and the Czech Republic had decriminalised the possession of small quantities of drugs.[104] Although the use and possession of a small amount of drugs in Armenia is not a criminal offence, the administrative fine for possession remains so high that many cannot afford to pay and instead are arrested for non-payment.[2] In the Czech Republic, the low prevalence of both HIV and hepatitis C (the latter in relation to the region) among people who inject drugs has been attributed to sustained and scaled up provision of harm reduction services in combination with decriminalisation.[105] In January 2017, Lithuania criminalised possession of small quantities of illicit drugs. Prior to this date, possession of small quantities had been an administrative offence, rather than a criminal sanction. This caused hundreds of people to be imprisoned.[106] The Eurasian Harm Reduction Association (EHRA) conducted an assessment in Lithuania, finding that over €25 million was spent by the state on imprisoning people for drug possession.[107] In 2018, Kyrgyzstan stated drug use would be decriminalised under the new Criminal Code; however, the implementation and impact of reforms need to be further assessed as at present the minimal fine for drug possession is the equivalent to 18 months' salary.[108]

In 2017, a report was submitted to the UN Committee on Economic, Social and Cultural Rights (CESCR) which addressed a number of human rights violations in Estonia regarding the enjoyment of social rights among women who use drugs and/or living with HIV in Estonia.[109]

Civil society and advocacy developments for harm reduction

Civil society organisations continue to form an important part of the harm reduction movement in Eurasia, as service providers, campaigning groups and advisory bodies to governmental agencies. In many countries, NGOs deliver harm reduction

services and either make referrals to healthcare services or provide testing and treatment for a number of communicable infections.[2] A regional network, the Eurasian Harm Reduction Association (EHRA), forms the hub of 250 harm reduction organisations and activists from 29 countries in Eurasia, and works to create a favourable environment for sustainable harm reduction programmes, non-repressive drug policies and a good standard of living for people who use drugs.[111] Country-based drug user networks also exist in Estonia, Macedonia, Georgia, Azerbaijan, Kyrgyzstan and Montenegro.[2,48] The Belarusian national OST organisation Your Chance,[108] the Lithuanian drug users' organisation Yang Wave[108,111] and the Ukrainian Network of Women who Use Drugs have also recently been established.[45] In Kazakhstan, a collective of people who use drugs has been formed, with representatives active in national harm reduction and healthcare advocacy.[108]

Drug policy reform has become an important issue in Georgia, and has been a prominent theme in political debate for the last two years.[2] Drug policy in Georgia is among the harshest in the region, with possession of any amount (for any purpose) a punishable offence attracting long prison sentences.[2] In addition, mandatory drug testing on the street has become a flagship intervention for law enforcement in the country.[2] The Georgian National Drug Policy Platform (a coalition of 41 NGOs) developed a series of legislative amendments aimed at changing the current drug-related legislation, and decriminalising drug use and possession of small amounts for personal use.[55] In June 2017, a group of MPs from the parliamentary majority submitted the amended bill to parliament. Hearings of the proposed legislative amendments revealed a polarising attitude, both among decision makers and the general public, with the amendments still under review at the time of publication.[2] The Georgian National Drug Policy Platform is an example of the coordinated and consolidated work of civil society, drug user activists, drug-related service provider organisations, human rights groups, clinicians, researchers, politicians and other interested groups.[2]

Funding developments for harm reduction

A 2017 report by Harm Reduction International found that a number of countries in Eurasia are experiencing a funding crisis for harm reduction, with particularly grave situations in Bulgaria, Romania, Poland and Hungary.[43] Austerity, international donor retreat and poor political support for harm reduction are the primary factors underpinning the continued funding crisis.[43] In 2016, a study on the allocated funding of HIV prevention and treatment for people who inject drugs in eight countries in the region (Armenia, Belarus, Bulgaria, Georgia, Kazakhstan, Kyrgyszstan, Moldova and Ukraine) found that across Eurasia there was diversity in domestic and donor resourcing for services.[112] Bulgaria, for example, allocated just 4% of its budget to HIV services for people who inject drugs, whereas Georgia allocated 40%.[112]

A 2018 report by Harm Reduction International also highlights the impact of Global Fund retreat on harm reduction funding and service provision.[53] Several countries that have been heavily reliant on the Global Fund for their harm reduction responses have seen dramatic reductions in their allocations for the period 2017-2019.[53] For example, on a per-year basis, Moldova's 2017-2019 allocation represented a 43% drop from 2014-2016.[113] Kazakhstan had relied on the Global Fund for a large proportion of its harm reduction funding, with much of this paying for needle, syringe and condom provision.[53] When Kazakhstan gained upper middle-income status, this (combined with its low overall HIV prevalence) led to the country's ineligibility for Global Fund grants in the 2014-2016 allocation period. Although the national government also provided support to NSP sites, only 4.7% of the country's total HIV budget went towards prevention activities, and only 2.7% targeting people who inject drugs.[53] In 2018, threats to OST services have escalated in Kazakhstan, with the government considering ceasing their operation.[53,114] There are also reports from civil society of poor-quality syringes being distributed by the government, leading to the potential for unsafe and risky injecting behaviours.[2,44] The example of Kazakhstan illustrates the political vulnerability of harm reduction programmes, and has prompted civil society action to hold the government to account.[53]

In Poland, Georgia, Belarus and Estonia, state allocations for HIV programmes, including harm reduction, have been increasing since the *Global State of Harm Reduction* last reported.[2,48] In Poland, a government decision to allocate funding to harm reduction from monies accumulated from gambling taxation has reportedly led to an increase for both harm reduction and drug treatment in the country.[2] Here, harm reduction programmes are co-financed by local governments and the National Bureau for Drug prevention.[26]

Central to the challenge of ensuring the sustainability and quality of harm reduction in the region is the lack of political acceptance for harm reduction.

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Regional Overview
2.3 Western Europe

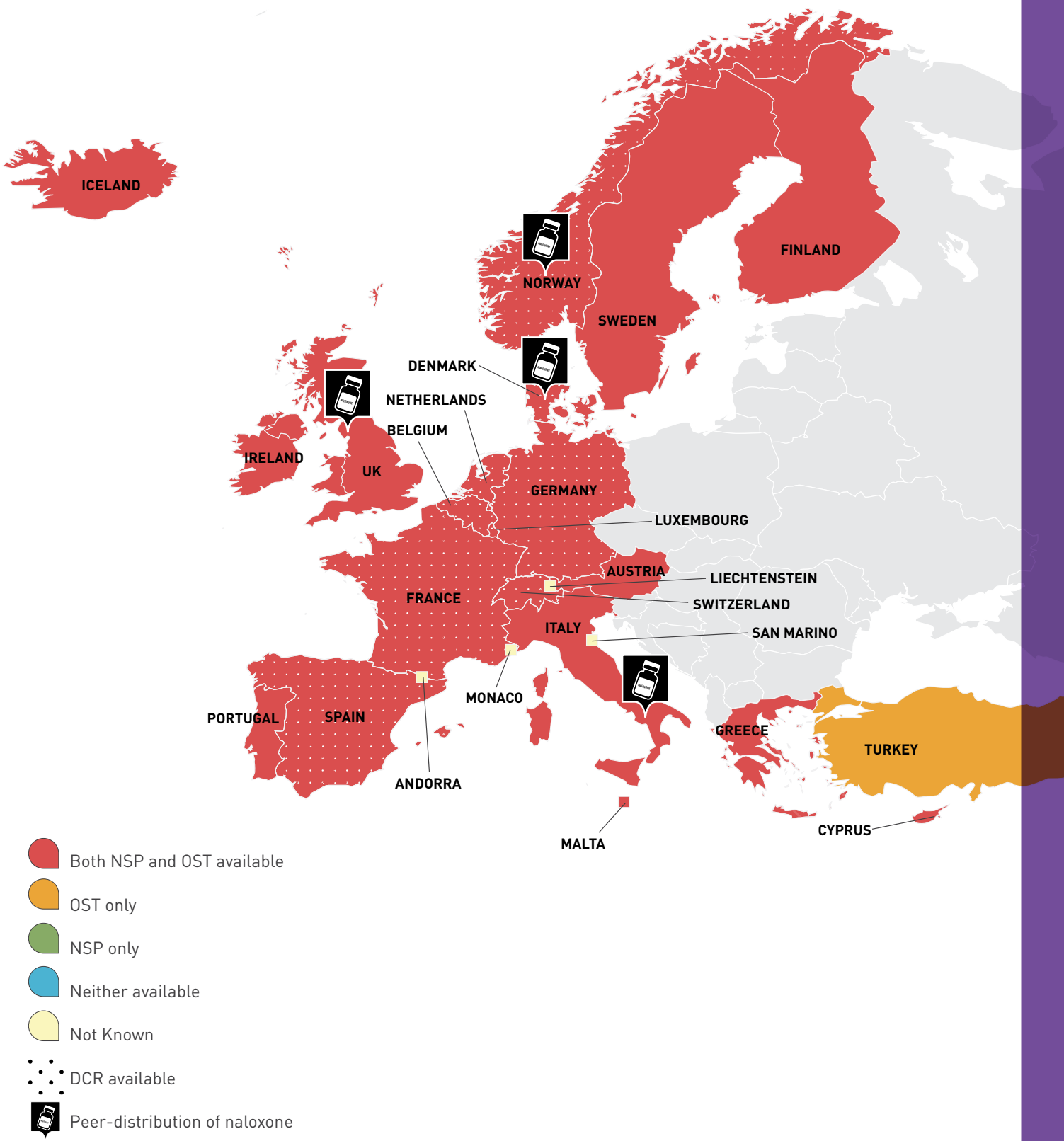
Table 2.3.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in Western Europe

Country/ territory with reported injecting drug use	People who inject drugs[1]a	HIV prevalence among people who inject drugs(%)[1]a	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)[1]a	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs(%)[1]a	Harm reduction response			
					NSP[b][1]	OST[c][1,2]	Peer-distribution of naloxone	DCRs[c]
Andorra	nk	nk	nk	nk	nk	nk	x	x
Austria	12,000-17,000[3]	4	38	4.4[e]	✓39	✓(B, M,O)	x	x
Belgium[f]	23,828	10.5	22	5.6	✓116	✓(B, H,M)	x[4]	✓1[g][8]
Cyprus	126	1.5	43.3	1.5	✓2	✓(B, O)[9]	x	x
Denmark	nk	nk	52.5[h]	nk	✓	✓(B, H,M)	✓[10]	✓5[11]
Finland	15,611[i]	1.2[j]	74[k]	nk	✓53	✓(B, M,O)	x	x
France	108,607[lm]	4.7[n]	63.8[o]	0.81[p]	✓509	✓(B, M)	x[q][12]	✓2[13]
Germany	nk	1.6-9.1[r]	62.6-73[s]	0.4-1.2[t]	✓[u]	✓(B, H,M,O)	x[15]	✓24[14,15]
Greece	4,173	5.1	63.5	1.6	✓13	✓(B, M)	x	x
Iceland	nk	nk	45[16]	nk	✓[16]	✓[16]	x	x
Ireland[v]	1,151[3] w	6	41.5	0.5	✓	✓(B, M)	x[x][17]	x
Italy	nk	28.8	56.6	nk	✓66[18]	✓(B, M,O)	✓[18]	x
Liechtenstein	nk	nk	nk	nk	nk	nk	x	x
Luxembourg	1,467[y]	13.2	nk	nk	✓11	✓(B, M,O)	x	✓1[19]
Malta	688[3]z	1.2	46.3	nk	✓8	✓(B, M)[20]	x	x
Monaco	nk	nk	nk	nk	nk	nk	x	x
Netherlands	840[aa]	3.8[ab]	57	0[ac]	✓175	✓(B, H,M,O)	x	✓24[21]
Norway	8,888[ad]	1.5	nk	0.9[ae]	✓51	✓(B, M)	✓[22]	✓2[22]
Portugal	13,162	14.3	82.2	2	✓2,099	✓(B, M)	x	x
San Marino	nk	nk	nk	nk	nk	nk	x	x
Spain[af]	11,048[ag]	31.5	66.5	10.5	✓838	✓(B, M)	x	✓16[23]
Sweden	8,021[ah]	7.4[ai]	96.8[aj]	nk	✓10	✓(B, M)[24]	x	x
Switzerland	42,000[3]ak	10-12[25]	42.1[25]al	nk	✓	✓(B, H,M,O)	x	✓14[26]
Turkey	12,733[am][27]	nk	39.8[an]	3.9[ao]	x	✓(B, M,O)	x	x
United Kingdom	122,894[ap]	0.9[aq]	51-58[28,29]ar	0.4[as]	✓606[at]	✓(B, H,M,O)	✓au[31,32]	x

nk – not known

a Unless otherwise stated, data is from 2016.
b All operational needle and syringe exchange programme (NSP) sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers. (P) = pharmacy availability.
c Opioid substitution therapy (OST), including methadone (M), buprenorphine (B), (H) medical heroin (diamorphine) and any other form (O) such as morphine and codeine. Figures for the number of sites are often not available in Western Europe due to a variety of service providers, which includes general practitioners.
d Drug consumption rooms, also known as supervised injecting sites.
e Based on subnational data from 2016.
f People who inject drugs population estimate refers to lifetime injecting drug use and is based on national data from 2015. Infectious disease prevalence estimates based on subnational data from the Flemish community from 2015.
g One drug consumption room operates in Liège with the approval of local government, though no national legislation permits such facilities.[5-7]
h Year of estimate: 2008.
i Year of estimate: 2012.
j Based on subnational data from 2014.
k Year of estimate: 2014.
l Derived from treatment data based on self-reported injecting in the last three months.
m Year of estimate: 2015.
n Year of estimate: 2015.
o Based on subnational data from 2011.
p Based on subnational data from 2011.
q While take-home naloxone is available in France, it can only be acquired with a personal prescription.
r Based on subnational data from 2013-2014.
s Based on subnational data from 2013-2014.
t Based on subnational data from 2013-2014.
u A total of 172 syringe dispensing machines operate in Germany, but the total number of NSPs is unavailable.[14,15]
v Year of estimates: 2010.
w Year of estimate: 2015.
x While take-home naloxone is available in Ireland, it can only be acquired with a personal prescription.
y Year of estimate: 2015.
z Year of estimate: 2015.
aa Year of estimate: 2015.
ab Based on subnational data.
ac Based on subnational data.
ad Year of estimate: 2015.
ae Based on subnational data from 2015.
af Year of estimates: 2015.
ag Estimate derived from treatment data and relates to people reporting injecting in past year.
ah Years of estimate: 2008-2011.
ai Based on subnational data from 2013.
aj Based on subnational data from 2013.
ak Year of estimate: 2015.
al Year of estimate: 2011.
am Based on a subnational estimate and number of high-risk opioid users, including but not exclusively people who inject drugs.
an Year of estimate: 2015.
ao Year of estimate: 2015.
ap Years of estimate: 2004-2011.
aq Based on data from England and Wales only.
ar Hepatitis C prevalence among people who inject drugs is 51% in England, Wales and Northern Ireland, and 58% in Scotland.
as Based on data from England, Northern Ireland and Wales only.
at This figure does not include NSPs in England due to a lack of national data.
au In the United Kingdom, peer-distribution of naloxone is limited to a small number of projects.

Map 2.3.1: Availability of harm reduction services



Harm reduction in Western Europe

Overview

The state of harm reduction in Western Europe has remained largely stable since the *Global State of Harm Reduction* last reported in 2016. From a global perspective, the region has an extensive harm reduction response to illicit drug use, with a wide range of services adapted to the needs of people who inject drugs operating in almost all countries. Despite this, there remains room for improvement.

As reported in 2016, opioid substitution therapy (OST) is available in all countries in Western Europe for which there is data on harm reduction services, and needle and syringe programmes (NSPs) are available in every country except Turkey. In this respect, Western Europe is one of the regions in the world with the widest availability of these key harm reduction services. Within countries, experiences have varied. In Spain and the Netherlands, the number of syringes distributed has reduced since 2016 in line with decreases in the population of people who inject drugs in those countries,[32,33] while elsewhere in the region (for example in Ireland and Sweden) programmes have been expanded and more syringes have been distributed over the period.[24,34] Expansions of existing NSP programmes have also incorporated the increasing use of syringe dispensing machines, for example in Cyprus and the United Kingdom.[9,35,36]

A rising concern in Western Europe is overdose deaths, which have increased in number since 2016.[1] An estimated 84% of overdose deaths in the region involved opioids in 2016, and almost two thirds occurred in Germany, Turkey and the United Kingdom.[1,37] As part of the public health response to this, 89 drug consumption rooms (DCRs) exist in Western Europe, with Belgium opening its first facility in 2018. However, at the time of publication no DCRs existed in the UK. Naloxone, an opioid antagonist that can reverse the effects of overdose, is available to medical personnel in most countries in the region. However, take-home naloxone, in accordance with World Health Organization recommendations, is only available in eight countries (Denmark, France, Germany, Ireland, Italy, Norway, Spain and the UK), and peer-distribution networks are only permitted in four (Denmark, Italy, Norway and the UK). An emerging phenomenon of fentanyl presence in drug-related deaths in England and Wales makes overdose responses even more vital, and is a development that must be monitored closely across the region.[38]

Interventions targeted at the use of amphetamine-type stimulants (ATS) and new psychoactive substances (NPS) form an increasing proportion of harm reduction services in Western Europe. This includes needle and syringe programmes and DCRs, which in some locations provide facilities specifically for inhaled or injected consumption of ATS.[23,39] On-site drug-checking services at parties and festivals have expanded greatly since 2016, and are now available in at least seven countries (France, Italy, Luxembourg, the Netherlands, Portugal, Spain, Switzerland and the UK) to address harms caused by high-purity and adulterated substances. However, in many countries drug-checking services continue to suffer from a lack of legal and financial support from the state. Beyond drug-checking, the harm reduction response to new psychoactive substances, such as synthetic cannabinoids and synthetic cathinones, remains stunted.

Controlling infectious diseases among people who inject drugs remains a primary driver of harm reduction in the region. Unrestricted universal access to direct-acting antivirals for hepatitis C is only available in 10 out of 25 countries (see viral hepatitis section below), with most countries placing limitations on access based on either disease stage or injecting drug use.[13,18,23,40,41] Incidence of HIV among people who inject drugs halved between 2007 and 2016, though injecting drug use was still responsible for 5% of new HIV infections in the European Union (EU) in 2016.[37] People who inject drugs continue to face formal and informal barriers to testing and treatment for blood-borne diseases. Stigma, self-stigma and criminalisation all contribute to lower testing and access to treatment among people who inject drugs than the general population[18,42], and migrants, women and people in rural areas are reported to face compounded barriers.[15,43]

The policy environment has continued to progress gradually in favour of harm reduction. At least 17 of the 25 countries in the region have policy documents supportive of harm reduction, and the EU has renewed and expanded its commitment to harm reduction through the Action Plan on Drugs 2017-2020.[44] Perhaps the most significant development in the region was in Italy, where harm reduction programmes were for the first time included in the Livelli Essenziali di Assistenza, the package of basic services that must be guaranteed across the country.[18] While policy has progressed in the region, funding for harm reduction remains a key concern. The funding landscape varies across the continent, from near-crisis in Greece to sustainable and sufficient investment in harm reduction in the Netherlands.[45] In all countries of Western Europe, however, the transparency of state investment in harm reduction is insufficient or poor, with investment rarely disaggregated from other

spending.[45] Civil society organisations across the region have warned that the sustainability of harm reduction services and funding remains vulnerable to changes in the political make-up of national and local governments.[18,45]

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

The number of countries in Western Europe in which NSPs operate is unchanged since the *Global State of Harm Reduction 2016*, with services available in all countries except Turkey (and no data on Andorra, Liechtenstein, Monaco and San Marino). However, individual countries in the region have experienced both increases and decreases in availability and coverage.

Austria, Belgium, Finland, Ireland, Luxembourg, Portugal and Sweden have all seen increases in the number of syringes distributed over recent years.[24,34,40,46-49] In Sweden, low threshold NSPs now operate in eight council areas, compared with three in 2015, and changes in legislation effective from March 2017 have facilitated the establishment of new NSPs.[24] In Luxembourg, a new mobile outreach service was launched in November 2017.[49] In Ireland, NSPs operate through fixed-site facilities, outreach services and pharmacies, where packs are distributed containing injecting equipment for between three and 10 injections, with an average of 1,614 people using the services per month.[34] Since 2016, syringe dispensing machines have been introduced in Cyprus, meaning that they are now available in at least six countries in the region (Cyprus, Denmark, France, Germany, Luxembourg and the United Kingdom).[9,11,15,36,49,50] Though there has been an increase in the number of NSPs operating in the Flemish areas of Belgium, and from 2014 to 2016 the total number of syringes distributed annually increased to 1.1 million, 80% of people who inject drugs in the country claim to know other people who use drugs who do not use NSPs.[47] This is a clear indication that, despite successes in increasing coverage, more outreach work is necessary to ensure that all people who inject drugs have access to sterile injecting equipment.

In other countries in the region, distribution of needles and syringes has decreased over recent years. In some cases, such as in Spain and the Netherlands, this is the continuation of a long-term trend attributed to a reduction in heroin use and injection in general, as well as the success of harm reduction programmes.[32,33] Due to budget cuts in Italy, the number of harm reduction services offering NSPs fell from 106 in 2012 to 66 in 2015, a negative trend that civil society organisations expect will continue unless the new Livelli Essenziali di Assistenza is implemented properly.[18,51] Though the proportion of people sharing needles in England, Wales and Northern Ireland appears to have fallen from 23% in 2006 to 17% in 2016, a survey of people who inject drugs in the United Kingdom found that only 46% indicated that service provision was adequate in 2016.[28,30] Civil society organisations in the UK report that there has been no government effort to expand coverage to address this deficiency.[30,52]

A recurrent issue in the implementation of NSPs in Western Europe is the geographical distribution of services within countries. For example, six of Italy's 20 regions have no NSPs (though civil society organisations expect this to improve over the coming years), and coverage is decreasing in southern Portugal even while it increases elsewhere in the country.[18,42,51] There are no NSPs in the German-speaking part of Belgium.[47] In Austria, Greece and Spain, people who use drugs living in rural areas have difficulty accessing harm reduction services that are primarily located in provincial capitals and other large cities.[23,46,53] In Berlin and North-Rhine Westphalia in Germany, syringe dispensing machines have been effective in providing access to these populations,[14,15] a model which could be introduced elsewhere in Western Europe.

A further concern is whether current NSPs are meeting the needs of all groups of people who inject drugs. For example, in Portugal and the United Kingdom, it is unclear whether the needs of people who inject performance- and image-enhancing drugs are being met in harm reduction services focused on people who inject opioids.[31,42] Similarly, men who have sex with men are forming an increasing proportion of people who inject drugs (up from 4.4% in the United Kingdom in 2006 to 7.9% in 2016) and have a distinct profile from other people who inject drugs; for example, being more likely to inject methamphetamines or ketamine, and more likely to share syringes.[28] In England and Wales, injection of crack cocaine is also an increasing phenomenon, up from being reported by 35% of people who inject drugs in 2006 to 53% in 2016.[28] Some efforts have been made to create services for specific groups of people who inject drugs; for example, an NSP for women who inject drugs in Malta.[20] Also of note, in 2015 a Health Service Executive Ireland review recommended that the contents of injection packs be better adapted to the needs of people

using the equipment by including a wider range of paraphernalia, such as sterile spoons, filters and foil.[34,54]

Opioid substitution therapy (OST)

In the European Union and Norway there were 636,000 people receiving OST in 2016, corresponding to approximately half of people who are dependent on opioids in these countries.[37] This is a small decrease of 1.2% since 2016 and a decrease of 10% since 2010.[55] Coverage in most countries has been largely stable over the last two years, with no serious contractions or expansions in access.

Methadone remains the most commonly prescribed medication for OST across the region, and is especially dominant in outreach services such as those in Portugal.[42] A buprenorphine-naloxone combination (sold under the brand name Suboxone) forms a growing proportion of OST in Germany, Italy and Spain, and is the main substitution medicine in Finland. However, the cost to the patient is higher in Spain and it is only available in high-threshold facilities in Portugal.[23,42] In Germany and Switzerland, slow-release morphine is also available for OST. [14,15,26,39,56,57]

Heroin-assisted therapy (HAT), the prescription of medical heroin (diamorphine) for OST, continues to be available in six countries in the region: Belgium, Denmark, Germany, the Netherlands, Switzerland and the United Kingdom.[2,14] A pilot programme using diamorphine also started recently in Luxembourg[19] and in 2018 the Norwegian government announced a diamorphine trial that will begin in 2020.[58] Implementation varies by country, but HAT is generally reserved, as in Denmark, for people who use opioids for whom other substitution therapies have not been successful.[2,11] Studies and trials in Belgium, as well as elsewhere in the region and the world, have found that HAT can be highly successful among this population in that it produces greater adherence than other forms of OST, reduces street heroin use and criminal involvement, and leads to better health outcomes.[59] In the UK, HAT remains available, but civil society organisations report that there are fewer prescribing doctors than in 2012, and that services are reluctant to prescribe diamorphine because of the high cost.[31] In Switzerland, the availability of HAT in the French-speaking region is poor, and there is no HAT in the Italian-speaking region.[26]

A key barrier to the successful implementation of OST programmes is that they often continue to target abstinence from illicit drug use rather than harm reduction. Even low-threshold OST programmes in Luxembourg require abstinence from all illicit drugs while undergoing therapy, as do higher-threshold services in Portugal.[19,42] On the other hand, new regulations in Germany (driven by harm reduction organisations and people who use drugs) have changed the official objective of OST from striving for abstinence from all illegal substances to striving for abstinence from heroin only.[14] While this is still problematic for some people who use drugs, it represents a significant step in the right direction. In the United Kingdom, civil society organisations report that some OST clients are being forced to reduce their dosage to a sub-optimal level, and can be subject to drug testing.[30,31] This appears to be the result of a lack of funding combined with clinical guidelines and key performance indicators that lack commitment to a harm reduction framework.[30,31] A 2018 United Kingdom government report into drug-related deaths indicated that the role of sub-optimal doses of methadone in opioid overdose deaths requires greater attention and research.[60]

Migrants also frequently experience difficulties in accessing OST, as reported in Belgium and Switzerland.[4,57] Conversely, OST was included in new guidelines on basic medical care in Italy in 2017, ensuring that it is officially available to all in the country, including non-citizens and undocumented migrants (though civil society organisations report some issues in access for these populations in practice).[18] In Germany, people living in rural areas are often forced to travel 30 to 50km in order to access OST due to the low number of physicians who apply to be authorised to prescribe substitution medication. A 2017 revision of the legal framework seeks to address this issue.[14] Further barriers to accessing OST in the region include age restrictions, limited opening hours and long waiting lists, all of which contribute to limiting the proportion of people who inject drugs able to access OST.[4,14,31,42] A 2018 Freedom of Information request to the Northern Irish government found that the average waiting time for OST in Belfast is 29 weeks.[61] In particular, women are reported to face more restrictions than men, including a lack of childcare at OST services, hostile and judgemental attitudes from health professionals, and an absence of women-specific services.[31,42,62]

A Swedish study published in 2017 found that people who have received OST are four times more likely to die from a drug-related death during periods away from treatment than while on treatment.[63] This emphasises the need to reduce barriers to OST adherence, such as stigma and the requirement to abstain from illegal drugs.

Amphetamine-type stimulants (ATS) and new psychoactive substances (NPS)

Use of ATS in Western Europe has stabilised over the last two years following a decline since the early 2000s.[37] However, consumption varies considerably between countries in the region. For example, last-year prevalence of MDMA use among people aged 15-34 ranges from 0.2% in Portugal to 7.4% in the Netherlands.[37] Evidence from across Europe suggests ATS are primarily used by young people (with a mean age of 23 years) in party contexts.[18,64]

As with ATS, prevalence of NPS use varies by country and substance. Synthetic cannabinoids, often referred to as "Spice," are the most prevalent category of NPS in Western Europe, with high prevalence reported in France, Germany, Spain, Sweden and the United Kingdom.[65] For example in 2016, prevalence of use among students in Germany was 6%.[65] The potential harms from synthetic cannabinoids vary considerably with the strength of particular strains. These can include severe seizures, psychosis and heart attacks, and there have been several outbreaks of fatal poisoning, including in Manchester in the United Kingdom in 2018.[65] The harm reduction response to synthetic cannabinoids in Western Europe appears to be limited to providing information on the potential risks of use, such as that provided by Release in the United Kingdom.[66]

NPS are also present in party contexts. In the Netherlands, almost one quarter of young adults in the nightlife scene have used 4-FA, a stimulant associated with around 8% of drug-related health incidents in the country.[av][67] In Italy, 3.5% of people aged 15-19 have ever used an NPS, mostly hallucinogens such as DMT at psychedelic trance parties.[18] This figure increases to 11.9% when including synthetic cannabinoids.[18] Across the region, a significant barrier to data collection and harm reduction for NPS is that use is often unintentional or people do not know what they are taking.[18,23,26,42] For example, the Be Aware On Night Pleasure Safety (BAONPS) drug-checking project has found that one third of NPS samples collected in Italy do not contain what was expected.[18] This has been found to be a particular issue with online purchases.[18] For this reason, drug-checking services offer an opportunity to people who use these substances to ensure they are aware of the contents and the potential harms they may cause.

Drug-checking services operate in at least nine countries in the region: Austria, France, Italy, Luxembourg, the Netherlands, Portugal, Spain, Switzerland and the United Kingdom. Services operated by civil society organisations have served people who use drugs in Italy for many years, and since 2016 now do so with support from public institutions in some regions.[18] In the region of Piedmont, drug-checking has been included as an essential public health service in regional guidelines.[18] The Loop in the UK and the Pipapo project in Luxembourg offer on-site drug-checking services at festivals,[31,68] while the Drug Information and Monitoring System (DIMS) in the Netherlands is a national network of permanent testing facilities that offers consumers the chance to check their drugs anonymously.[69] In Switzerland, on-site drug-checking services are now operated with local government approval at nightclubs and festivals in Basel, Bern, Zürich and since 2018, Geneva.[26] In Bern and Zürich, walk-in services are offered on a weekly and twice-weekly basis respectively.[70]

Drug-checking services offer harm reduction for both high-purity and highly adulterated substances, though the former category appears to be more prevalent in Western Europe. For example, DIMS has found that the average dose per MDMA pill increased 27% from 123mg in 2012 to 156mg in 2016.[69] The strongest pill checked by DIMS in 2016 contained 266mg of MDMA, more than twice the maximum dose recommended by harm reduction organisations.[69] In one year from 2015-2016, the average MDMA content of samples checked in Zürich rose by 27% from 120mg to 152mg.[71] DIMS has found that common adulterants include substances such as PMMA, which can cause an overdose at lower doses than MDMA.[69]

Legal and regulatory issues related to the handling of illegal substances continue to be a barrier to drug-checking services. For example, the Danish national health board has declined to permit drug-testing services, pending evidence from the United Kingdom and the Netherlands.[72] Though legislation allowing for drug-checking exists in Portugal, it is restricted to on-site testing and samples cannot be removed to a laboratory for further checks.[42] The geographically isolated nature of some festivals with heavy ATS and NPS use in Portugal has also been identified as a barrier to harm reduction programmes.[42] A lack of state funding for drug-checking has also been highlighted as a major obstacle to carrying out these projects, for example in Italy and Portugal.[18,42]

In addition to drug-checking services, other harm reduction interventions exist in Western Europe to address ATS and NPS use. Informational projects run by civil society organisations or groups of people

av There were 456 health incidents related to 4-FA in 2016, two of which were fatal.[67]

who use drugs operate in several countries to ensure people who use drugs are aware of the potential risks and best practices.[4,14,31] Ensuring that water and calm spaces are accessible at parties and festivals forms part of the harm reduction response in the Netherlands and elsewhere.[21] To reduce the harm caused by inhaling MDMA and cocaine, organisations in Italy provide "safer sniffing kits". These include paper straws to prevent nasal damage, chewing gum and sweets to prevent excessive teeth grinding, and water and fruit juice to prevent dehydration.[18]

Though routine data collection in Western Europe often does not differentiate between amphetamine and methamphetamine use, there is some evidence that methamphetamine use has increased over recent years in some populations in the region.[37] Civil society organisations in both the United Kingdom and the Netherlands report that there has been a rise in the prevalence of methamphetamine and NPS use among men who have sex with men, sometimes associated with use in sexual contexts.[30,67,73] While data on this relatively recent phenomenon (known as "chemsex") is generally unavailable and the extent of these practices may be overstated,[31,74,75] a sharp rise was observed in men who have sex with men accessing health services for issues related to methamphetamines, GHB and mephedrone from 2005-2012.[30,73] From the available data, it is impossible to determine if this is related to drug use in sexual contexts or other factors.[76] Nevertheless, there is a clear demand in the UK from patients in sexual health clinics for harm reduction measures associated with the use of these substances, which may include NSPs and other services adapted to the needs of this population.[77] For example, the Dean Street Clinic in London offers an NSP together with informal counselling and advice specifically tailored to men who have sex with men who use drugs in sexual contexts.[31,78]

Chem-Safe, a website operated from Spain by Energy Control since 2017, aims to provides online harm reduction information to men who have sex with men who use drugs in sexual contexts.[79,80] The anonymity and confidentiality provided by an online platform is considered particularly important, given the sensitive nature of the information and service users who may be stigmatised because of their sexual orientation, HIV status or drug use.[80] Despite early successes in accessing this population, Chem-Safe currently has no ongoing financial support and relies on the uncompensated work of the project's coordinator.[80]

People who inject amphetamines are able to access NSPs and most drug consumption rooms in the region. Furthermore, facilities in Germany, Switzerland and Catalonia, Spain specifically serve people who inhale drugs such as methamphetamines.[15,23,39] However, civil society organisations in Portugal and the United Kingdom report that an emphasis in harm reduction facilities on people who use opioids can discourage people who inject ATS from accessing them, indicating the need for tailored harm reduction services for people who use ATS.[31,42]

Cocaine remains the most commonly used illicit stimulant in Western Europe.[37] There appear to be marked differences in consumption patterns and behaviours between different populations of people who use cocaine in the region, particularly between those who use powder cocaine and those who use crack.[18,37] Most datasets in the region do not distinguish between crack and powder cocaine use, making the observation of trends in use of each form challenging.[37]

Harm reduction for cocaine use varies considerably according to differing patterns of use. For people who use powder cocaine recreationally, drug-checking services can have a significant impact in identifying high-purity and dangerously adulterated samples. Purity of cocaine has increased significantly in samples checked in Zürich, with the average cocaine content rising from 41.7% in 2009 to 76.7% in 2016.[81] An increase in purity has also been observed in the Netherlands.[67] Harm reduction for crack use appears to be mostly absent from Western Europe, though innovations providing sterile inhalation equipment to prevent the spread of infectious diseases are being implemented in Ireland, in development in Spain and in demand in Portugal.[23,42,54,82] Portuguese civil society organisation GIRUGaia operates a harm reduction outreach programme in Porto providing clients, 90% of whom use crack, with legal support and assistance in attending court appointments.[42] The harm reduction response to crack use in Western Europe is significantly smaller than the response to opioid use, in part because of lower prevalence. The European Monitoring Centre for Drugs and Drug Addiction have highlighted the need for more research to establish best practices in harm reduction in this area.[83]

Overdose, overdose response and drug consumption rooms (DCRs)

According to data covering the European Union, Norway and Turkey, there were 9,138 overdose deaths in the region in 2016, approximately 84% of which involved opioids.[1] Drug-related deaths have steadily declined in some countries (such as Spain,

Denmark and Portugal),[1,23] and increased in others, with almost two thirds of drug-related deaths taking place in just three countries: Germany, Turkey and the UK.[37] In Germany, there were 1,333 drug-related deaths in 2016, up 40% compared with 2012.[1] In Turkey, the number of drug-related deaths almost doubled from 2015 to 2016, with a particularly stark rise in deaths related to amphetamine-type substances and synthetic cannabinoids (synthetic cannabinoids were present in one third of cases in 2016).[84]

In the UK, the number of drug-related deaths continued to be among the highest on record with 3,756 in 2017, and experienced a 101% rise in deaths related to heroin and/or morphine from 2012 to 2017.[30,38] The situation is particularly grave in Scotland, where 2017 was the fourth consecutive year that drug-related deaths have been the highest on record (934 deaths).[85] In 2017, there were five times as many deaths from drug use as from traffic accidents in the country.[85,86] According to official statistics, 87% of these deaths involved opioids and 59% involved benzodiazepines; in all but 52 cases, more than one drug was found in the body.[85] High numbers of drug-related deaths have also been observed in Scandinavia.[1]

In 2014, the European Harm Reduction Network published a report recommending the widespread implementation of overdose prevention sites, also known as drug consumption rooms (DCRs), and naloxone distribution in order to counter the rise in opioid use across the region.[87] As of 2018, implementation has been highly varied.

Eight countries in the region (Belgium, Denmark, France, Germany, the Netherlands, Norway, Spain and Switzerland) now host a total of 89 DCRs. Since the *Global State of Harm Reduction* last reported, new facilities have opened in Belgium, France, Spain, Switzerland and Norway, with Belgium being the only new country to open such a facility. Lisbon is preparing to open its first three DCRs: a mobile facility in 2018 and two fixed-site DCRs in 2019.[8,42] Plans and legislation exist for a facility in Dublin[88] and for a second drug consumption room in Luxembourg.[19] In Belgium, a DCR in Liège has operated since September 2018 with the support of local officials, but is not officially sanctioned at the national level.[5-8] Civil society organisations, harm reduction service providers and people who use drugs succeeded in winning the support of the Scottish Parliament for the establishment of a DCR in Glasgow in 2018, in response to the high number of drug-related deaths, high HIV prevalence among people who inject drugs, and concern over public injecting and publicly discarded injecting equipment in the city. However, the Scottish government's proposal for a DCR was blocked by the United Kingdom government.[30,31,89]

In 2016, 1,717 people used DCRs in Luxembourg,[49] 3,110 people used DCRs in Spain,[33] and 7,155 people used DCRs in Denmark.[11] Four DCRs in Frankfurt, Germany oversee 200,000 injections annually,[15] and the DCR in Oslo, Norway has supervised more than 300,000 injections since opening.[22]

Western European DCRs are increasingly adapting to the needs of people who use drugs. For example, two mobile DCRs operate in Berlin in order to access harder-to-reach populations. [14,90] In Luxembourg and Switzerland, all DCRs permit the consumption of drugs through inhalation as well as injection,[39,49] and three rooms specifically for inhalation exist in Spain.[aw][23] This enables not only people who inject drugs, but also people who smoke cocaine, heroin and methamphetamines to benefit from the enhanced safety and supervision in DCRs. In the Netherlands, DCRs mainly target people who smoke their substances (in line with the breakdown of drug use in the country and harm reduction information promoting smoking over injecting).[80] As well as providing safer equipment and a safer environment for drug use, DCRs in the Netherlands increasingly offer integrated social services to clients, which include warm meals, recreational activities and employment-oriented projects.[80] In Basel and Zürich in Switzerland, feasibility studies are currently being carried out into providing drug-checking services in DCRs.[26]

While DCRs operate in many cities of the Netherlands,[32,56] in other countries regional variation in service provision presents a barrier to access for people who inject drugs. For example, only two of Spain's 19 autonomous communities (Catalonia and the Basque Country) have DCRs,[23] leaving people who inject drugs elsewhere in the country (including in Madrid) without such services. Only eight of Switzerland's 26 cantons have a DCR, with fewer available in the French- and Italian-speaking regions.[26] Similarly, only six of Germany's 16 states offer DCRs.[14,90] In Bavaria, the state government has consistently rejected calls from civil society to introduce DCRs, despite a high number of drug-related deaths in its major cities, such as Munich, Augsburg and Nuremberg.[15]

By law, in Luxembourg and some regions of Germany, DCRs exclude people on OST.[14,19] However,

aw Inhalation rooms in Spain always share a site with injection rooms.

since 2016 two German states (Hesse and North-Rhine Westphalia) have amended state laws to allow access to people on OST.[14] Migrants are also often unable to access services, particularly undocumented migrants, for example in Dutch DCRs.[80] In several countries, access is also limited to people over the age of 18.[19]

A 2016 qualitative study of the experience of people who use drugs in Danish DCRs found that the facilities provide the population with a safe place in which they are protected from police and others in the community. The non-judgmental interaction with staff and peers was reported to have helped forge a sense of social acceptance and trust that made them more likely to be comfortable when referred to other health services. This was identified as the most important feature of DCRs for people who inject drugs, and paves the way for overdose prevention and greater access to general healthcare.[91]

World Health Organization guidelines recommend that all people likely to witness an overdose, not only medical professionals but also people who inject drugs, their family and their peers, should have access to naloxone, an opioid antagonist that can reverse the effects of overdose.[92] Evidence from Norway suggests that take-home naloxone distribution programmes are effective in ensuring naloxone reaches these populations and ensuring that naloxone is present at a target proportion of witnessed overdoses.[93] A new, more concentrated nasal spray form of naloxone was approved by the European Commission in November 2017.[37] These nasal forms have the advantage of reducing injuries and may be perceived as being easier to use.[94]

Naloxone peer-distribution programmes currently operate in four countries in Western Europe (Denmark, Italy, Norway and the UK)[ax] with take-home doses available in a further four (Germany, France, Ireland and Spain). Plans are in development for take-home naloxone in three more countries (Austria, Cyprus and Luxembourg).[9,19,46] Peer-distribution programmes for naloxone have existed in Italy since 1991, and people who inject drugs are heavily involved through both training and policy-making.[18,96] The national health system in Italy is able to access large amounts of relatively low-cost naloxone by buying in bulk for distribution to healthcare facilities, pharmacies and harm reduction services.[96] In Norway and Ireland, take-home naloxone pilots have recently been extended,[22,34,94,97] while in Catalonia, Spain over 7,000 people (including people who use or have used drugs, prisoners, families and professionals) have been trained in naloxone delivery and more than 9,500 doses have been distributed.[23] An increase in drug-related deaths has led to the implementation of small-scale naloxone distribution in some German states, where nasal sprays have been approved and are reimbursable by health insurance since September 2018.[14,15] In France, nasal spray, approved in 2017 and initially only given out by emergency services and hospitals during a trial phase, is now also being distributed in all harm reduction services, with those who have undergone OST prioritised due to the higher risk of overdose.[13] In Belgium, a recent pilot of naloxone peer-distribution was closed down due to legal issues, with naloxone only permitted for use by medically trained personnel.[4]

While take-home naloxone is available in the United Kingdom, research from Release found that 9% of local authorities in England were not supplying it in 2017, and only 12 naloxone kits were distributed for every 100 people who use opioids in 2016/17.[31,98] Barriers to access in parts of the country include requirements that people who use opioids have a prearranged appointment, are assessed by a naloxone provider or are referred into a service providing naloxone.[31,98] Additionally, people under the age of 18 are given access to naloxone on a more limited basis than adults.[31,99] Despite this, a successful peer-distribution network for naloxone exists in north-eastern Glasgow, and more than 40,000 naloxone kits have been distributed in Scotland, Northern Ireland and Wales.[100] In Wales alone, naloxone is reported to have been used in 1,654 overdoses from 2009-2017, with all but 23 (98.6%) incidents ending without fatality.[101]

The emergence in Europe of fentanyl, a highly potent synthetic opioid, should instil greater urgency in preventing drug-related deaths. While Europe is not yet experiencing the level of fentanyl use seen in North America, its rise as a public health concern and its high risk of overdose adds weight to already strong arguments for increasing the availability of naloxone and DCRs.[37] From 2016 to 2017, fentanyl- and fentanyl analogue-related deaths increased by 80% in England and Wales, though the total number of deaths remained relatively small (106).[38] New, non-injectable formulations of naloxone (such as nasal spray) may facilitate its use in a wider range of settings, for example by bystanders not used to injecting.[37] In order to address the current rise in overdose deaths, a combination prevention approach including naloxone, DCRs, OST and drug-checking services should be encouraged across Western Europe.[96]

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ax In the United Kingdom, this refers to a programme in Glasgow.[95] In Norway, this refers to a multi-site pilot programme.[93]

Viral hepatitis

The prevalence of hepatitis C antibodies varies widely across Western Europe, with reported prevalence among people who inject drugs ranging from 22% in Belgium to 96.8% in Sweden (as shown in Table 2.3.1). Data from the European Union and Norway indicates that prevalence is higher among older people who inject drugs, demonstrating the accumulation of risk over years of potential exposure.[37] Overall, the availability and quality of national-level data on viral hepatitis among people who inject drugs is poor.

With the advent of new direct-acting antivirals, capable of curing 95% of cases, prevalence of hepatitis C is projected to fall over the coming years.[102] However, there is some evidence that prevalence of hepatitis C has grown since 2012 in the United Kingdom, where 92% of new infections occur among people who inject drugs; and[28,30] there was an outbreak of hepatitis C among people who inject drugs in Northern Ireland in 2016.[28] While prevalence of viral hepatitis is expected to decrease in the region in future, morbidity and mortality is projected to rise,[103] highlighting the need for ongoing interventions to address the viral hepatitis epidemic.

Though viral hepatitis screening is available to people who inject drugs for free or at a nominal cost in most of the region, several countries report low uptake of testing. For example, in Italy only 27% of people who inject drugs have ever been tested for hepatitis C[18] and approximately half of people living with hepatitis C in the UK are unaware of their condition.[28] From 2012-2016, the number of tests undertaken rose by 23.7% in the UK, in part thanks to policy changes such as the adoption of routine opt-out testing of people who inject drugs in Wales.[28,30] In Switzerland, accessing other harm reduction services, such as NSP and OST, is linked to a greater likelihood of being tested for hepatitis C: levels of testing are lowest among people who inject drugs who do not access any other services.[26]

Previously, the high cost of direct-acting antivirals has led to limitations being placed on eligibility for treatment under national and private health insurance schemes; for example, caps on the number of patients or prioritisation of those with advanced liver damage. These costs have fallen over the last two years, and as of 2018 only four countries in the region enact these restrictions on access to treatment (Austria, Belgium, Greece and Switzerland).[56,103] A recent study by the European Monitoring Centre for Drugs and Drug Addiction found only two Western European countries officially continue to restrict access to hepatitis C treatment for people currently using drugs (Cyprus and Malta).[104] In Denmark (from November 2018),[105] France, Germany, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain, the treatment is officially available to all people who inject drugs living with hepatitis C, regardless of the state of the disease.[13,18,23,40,41,103] In Austria and the Netherlands, guidelines state that people who inject drugs and people on OST should be actively sought out to receive treatment.[32,46] In Iceland, the Treatment as Prevention programme focused efforts on treating people who inject drugs with free direct-acting antivirals in order ultimately to achieve hepatitis C elimination, and saw a 65% reduction in hepatitis C prevalence among people who inject drugs accessing addiction treatment from 2015-2017.[106]

Despite advances in accessibility, cost remains a significant barrier to hepatitis C treatment for people who inject drugs, particularly for those without health insurance in insurance-based health systems (such as in Germany, Luxembourg and Switzerland).[15,19,39] In September 2018, the European Patent Office dismissed a challenge to Gilead Science's patent on sofosbuvir, a key component of hepatitis C treatment. The ruling allows Gilead Science to continue charging extremely high costs for patented direct-acting antiviral treatments as the production of generic alternatives in Europe remains a violation of the patent.[107] Stigma and discrimination, related to a lack of knowledge and awareness among both health professionals and people who inject drugs, has also been cited as a barrier to treatment across the region.[18,42,56,108] People currently using drugs also face exclusion from hepatitis C treatment by health professionals, even where this is explicitly against national guidelines (for example in Germany and Portugal).[14,42] The result is that many people living with hepatitis C go without treatment, even though it is available to them. For example in the UK, no health authority outside London regularly meets its quota of people treated with direct-acting antivirals.[30]

Modelling studies for three settings in the United Kingdom underline the importance of direct-acting antiviral treatment in combination with harm reduction interventions in preventing hepatitis C among people who inject drugs. One suggests that without OST, new infections would rise by 483% by 2030.[109] Scaling up current NSP and OST services could achieve a 90% reduction in incidence.[109] This must be combined with awareness-raising campaigns and proactive testing to reduce stigma and ensure everyone who requires treatment receives it, as recommended by people living with hepatitis C in a 2017 survey.[108] Direct-acting antivirals present an opportunity to eliminate hepatitis C in Western

Europe. However, this can only be achieved by ensuring that all people at risk of hepatitis C have access to preventative services, testing and treatment.

Tuberculosis (TB)

Incidence of TB in Western Europe is generally low, ranging from 2.4 cases per 100,000 in Iceland and 4.5 per 100,000 in Greece, to 18 per 100,000 in Turkey and 23 per 100,000 in Portugal.[110] These cases are predominantly concentrated among certain groups, such as recent migrants, prisoners and people who inject drugs.[110] The level of integration of TB into harm reduction programmes also varies across the region, with good integration in Belgium, the Netherlands, Spain and Switzerland, and little integration in Italy and Portugal.[4,18,21,23,56,103] Good practice notes that outreach to marginalised populations may help to mediate between these groups and formal health services.[42] Similar to other infectious diseases associated with injecting drug use, stigma and a lack of awareness also play a significant role in compounding the TB epidemic among people who inject drugs.[18,42,56]

The DETECT-TB (Early Detection and Integrated Management of Tuberculosis in Europe) project launched in 2016 aims to contribute to the decline and eventual elimination of TB in the European Union. Its objectives state the importance of the early diagnosis of vulnerable populations, including people who inject drugs and prisoners, and the sharing of best practices between programme countries. The project works through a network of partners in six states, four of which are in Western Europe (Italy, the Netherlands, Sweden and the United Kingdom).[111]

HIV and antiretroviral therapy (ART)

Across the EU, 5% of new HIV infections in 2016 were due to injecting drug use, a proportion that has remained low and stable for a decade. [37] Overall, new HIV cases among people who inject drugs in the region have declined 51% from 2007-2016.[37] However, in Cyprus, Denmark, Luxembourg, Malta, Spain and Sweden there were increases in the number of new HIV cases among people who inject drugs from 2015-2016.[9,11,20,24,33,49] Challenges remain in ensuring that people who inject drugs receive timely and adequate treatment: in 2016, half of new HIV infections among people who inject drugs were diagnosed late (when the immune system had already sustained damage) and 13% of AIDS diagnoses were from HIV infections due to injecting drug use.[37] Early diagnosis and treatment offers people living with HIV a normal life expectancy; health systems must ensure that people who inject drugs are able to benefit from these services on the same basis as the general population.

Organisations in Spain, Switzerland and the United Kingdom attribute the region's success in maintaining low HIV prevalence among people who inject drugs to the implementation of harm reduction interventions, notably NSPs and OST, early in the HIV epidemic.[23,30,31,112] A 2017 Swiss study found that harm reduction programmes in the country had prevented 15,903 new HIV infections up to the end of 2015, and warned that an abrupt closure of services would result in a significant outbreak of HIV.[112] Similarly, civil society organisations in the UK have noted that the continued low prevalence of HIV relies on access to harm reduction services, and that further investment in these services is required.[30] In recent years, outbreaks of HIV in Greece, Ireland, Luxembourg and the UK have demonstrated the importance of continued provision of harm reduction services.[52,113,114]

While prevalence of HIV among people who inject drugs in the United Kingdom as a whole is estimated at 0.9%, the prevalence in Glasgow is 20-25%, with more than 100 of Glasgow's 400-500 people who inject opioids thought to be living with HIV.[52] The outbreak began rapidly in 2015 and has been durable, with similar numbers of new infections each year from 2015 to 2017.[52,115] In 2016, provision of low-dead space syringes (associated with a lower risk of blood-borne virus transmission) was rolled out in Scotland, and a new NSP was opened at Glasgow Central railway station.[28,52] The new NSP became Scotland's busiest, serving 2,000 individuals and providing more than 40,000 sterile injecting kits over the course of its operation.[52] However, it was closed just 14 months after opening, with the building's owner citing the fact that used injecting equipment was being left nearby in public areas as the reason.[52] Civil society organisations cite the closure of the Glasgow Central NSP as a major factor in the failure to control the HIV epidemic in the city.[30]

HIV testing and treatment is available to people who inject drugs on the same basis as the general population in much of the region, covered either by health insurance or public health services.[4,23,30,42] Coverage of ART is generally very high, with 80-90% of people living with HIV receiving treatment in most countries.[116] Pre-exposure prophylaxis is increasingly available in Western Europe; for example, Portugal launched a pilot programme for men who have sex with men in 2017.[42]

People who inject drugs continue to face formal and informal barriers to HIV treatment in Western

Europe. A decreasing trend in people who inject drugs accessing HIV testing has been noted in Italy, while in the UK, people who inject drugs are less likely to access treatment after HIV diagnosis than the general population.[18,30] Homelessness, poverty and social isolation, as well as stigma and discrimination (often based on the criminalisation of drug use), are also reported as key barriers to accessing HIV treatment for people who inject drugs in Italy and Portugal.[18,30,42] The unequal geographic distribution of service providers within countries also forms a barrier to people who inject drugs living in underserved regions. For example, in some areas of Portugal a lack of integration between harm reduction services and hospitals means that people who inject drugs are less likely to access treatment.[42] In addition to these informal barriers, some people who inject drugs face higher formal barriers to treatment. For example, the UK recently introduced higher charges for undocumented migrants accessing health services, and civil society organisations also report that migrants in Germany may also face difficulties in accessing services.[15,30]

Under the new Italian national AIDS plan, non-governmental organisations are increasingly able to offer community-based HIV services, and have seen good uptake of their services. HIV self-testing kits also became available in 18,000 Italian pharmacies.[18] Community-based and outreach services are essential to ensuring that people who inject drugs can access HIV treatment. Furthermore, it is necessary for these community-led services to have resilient referral mechanisms, in order for people testing positive for HIV to be effectively linked with care.

Harm reduction in prisons

Drug-related offences continue to be a major contributor to incarceration in Western Europe. In all but four countries in the region (Luxembourg, Malta, Portugal and Spain), simple possession of even a small amount of illegal drugs can lead to a prison sentence.[117] The proportion of prisoners incarcerated for drug-related offences varies across the region, from 8% in Turkey to 33% in Italy.[27] Civil society organisations across the region continue to campaign for decriminalisation of personal drug use and possession, for example during the 2018 elections in Italy.[4,18] In the United Kingdom, Release launched a smartphone app in 2017 which serves as a guide to self-representation for drug possession offences, assisting people who use drugs to navigate the criminal justice system and avoid punitive penalties.[31,118]

Portugal decriminalised personal possession and use of all drugs in 2001, with positive effects on the health and wellbeing of people who use drugs in the country.[119] However, a 2018 community-led report by the International Network of People Who Use Drugs (INPUD) raised several concerns about the use of Portugal as a model for advocacy.[119] The report expressed concerns over the continuation of stigma, discrimination and abstinence-oriented interactions people who use drugs have with health professionals, as well as about the absence of full legalisation of drugs, which means that people who use drugs still encounter the dangers of obtaining substances on the illicit market.[119]

Across Western Europe, drug use in prisons is prevalent. For example, according to the most recent available data (from 2010-2014), 32.9% of prisoners in Belgium, 34% in Portugal and 42% in Norway report having used illicit drugs at some point while incarcerated.[1] Cannabis is the most used drug in Western European prisons; however, 13.3% of Belgian prisoners, 9.4% of Portuguese prisoners and 31.4% of Spanish prisoners report having used heroin at some point while incarcerated.[1] In addition, prevalence of blood-borne infections such as viral hepatitis and HIV are known to be significantly higher among people with a history of incarceration.[37,120] This information clearly demonstrates the need for harm reduction services in prisons.

A notable development since 2016 has been the rapid emergence of new psychoactive substance (NPS) use in prisons. In particular, the use of synthetic cannabinoids in prisons is an issue of concern in Germany, Sweden and the United Kingdom.[31,121] At least 58 deaths in British prisons have been attributed in part to NPS use, for example through psychotic episodes, suicide and/or drug poisoning.[122] Non-fatal overdoses related to NPS have also been reported in Germany and Italy.[121] Responses to these issues in Western European prisons remain focused on supply reduction, drug testing and smoking bans.[121]

Access to harm reduction services in prisons varies significantly between and within countries in the region. For example, services appear to be widespread in Spain, with service coverage similar in prison to in the community.[23] Conversely, no harm reduction services are available in Turkish prisons.[84] Ensuring that all prisoners have access to harm reduction services is essential in order for states to be compliant with their right to health obligations, as prescribed under Article 12 of the International Covenant on Economic, Social and Cultural Rights.

As reported in the *Global State of Harm Reduction 2016*, NSP provision in prisons is inadequate, with only four countries in Western Europe providing such programmes. These are: Spain (all prisons), Switzerland (15 out of 117 prisons), Luxembourg (one of two prisons) and Germany (one female prison in Berlin).[14,19,26,123,123] In Italy, a pilot programme was launched by the Ministry of Health in 2017 to distribute safe injecting equipment to prisoners on release from four prisons.[18]

The continuity of access to OST between the broader community and prisons is particularly important in preventing overdose deaths in people who use opioids, as well as helping to reduce high-risk injecting behaviour.[124] In all countries in the region except Turkey, Iceland and the Western European microstates,[ay] OST is available to prisoners. However, OST is very often available on more limited terms than in the broader community. For example, in Flanders, Belgium OST is only available to those who began the therapy outside prison.[4] In Malta and Portugal, prisoners in certain prisons must be transferred to external medical facilities before they can commence OST, raising a barrier to access as they rely on prison authorities for travel.[20,42] OST provision in prisons can also vary within countries. For example, 30% of Swiss prisons provide no OST at all.[26] Similarly, in Ireland, only 11 out of 14 prisons provide OST.[34] In the UK, regulations state that OST should be available on the same basis as in the broader community.[126] However, in practice its availability can depend on the authorities at each prison, and data is generally unavailable on the extent to which it is accessible.[31]

A 2016 ruling by the European Court of Human Rights determined that denying OST treatment to a prisoner while in detention violates Article 3 of the European Convention on Human Rights, which prohibits inhuman or degrading treatment.[127] Every country in Western Europe is currently subject to the convention, and therefore is obliged to provide OST in prisons.

The period after release from prison is a particularly high-risk time for opioid overdose, due to lower tolerance after a period of abstinence or low dosage, making the availability of naloxone vital.[37] Four countries (Denmark, France, Norway and the UK) provide naloxone to prisoners on release.[128] While the practice is not universal in the UK (for example, only half of Welsh prisons distribute take-home naloxone), 1,355 naloxone kits were distributed by Scottish and Welsh prisons alone in 2016-2017.[az][101,129] Naloxone is also available in some prisons in the Netherlands, Switzerland and an estimated 82% of prisons in Italy, but can only be used by medical personnel and is not given to prisoners on release.[21,32,57] Pilot projects delivering naloxone kits and training directly to prisoners while incarcerated have operated since 2016 in Italy and Norway, with evidence from Norway suggesting that naloxone training and provision has significantly increased prisoners' awareness of overdose prevention measures.[18,90,130] Studies in the UK clearly demonstrate that increasing provision of take-home naloxone on release from prison would prevent overdose deaths among prisoners, their peers and the wider community, and therefore it should be a priority for prison health authorities across the region.[131]

With HCV prevalence considerably higher among prisoners than the general population, the EU must urgently scale up testing and treatment among prisoners if it hopes to eliminate the virus. [37,132] HIV prevalence is also alarmingly high among prisoners in Western Europe: prevalence is 9.5 times higher among prisoners than the general population in Ireland and 13.5 times higher in Spain.[133] A recent overview of hepatitis C and harm reduction services in prisons found that all Western European countries studied offered hepatitis C treatment in prisons. However, it also found a distinct lack of data on the extent of treatment coverage in prisons in these countries.[123] HIV testing and treatment are broadly available in prisons across the region, with Italy, Portugal and the UK all routinely testing incoming prisoners for HIV.[18,30,42] However, implementation of these services is sometimes inadequate or uneven within countries. This gap between policy and implementation risks leaving behind a key population in viral hepatitis and HIV control, in clear violation of individuals' fundamental human rights.

Policy developments for harm reduction

At least 17 of the 25 countries in Western Europe have adopted national drug or addiction strategies that express support for harm reduction.[ba] In at least five of these countries (Cyprus, Germany, the Netherlands, Portugal and Switzerland), harm reduction forms a pillar of national drug policy separate from treatment and

ay Andorra, Liechtenstein, Monaco and San Marino. In total, the four countries are estimated to hold fewer than 100 prisoners.[125]
az Data for England and Northern Ireland is unavailable.
ba Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Ireland, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Switzerland and the United Kingdom.

rehabilitation.[9,32,39,40,90,134] In Turkey, the National Anti-Drug Strategy Paper contains no reference to harm reduction.[84] National plans for the response to HIV and viral hepatitis also frequently include references to the role of harm reduction. For example, the new HIV policy documents introduced since 2016 in Italy, Luxembourg and Portugal include harm reduction as a key element of the response.[18,19,42]

Several countries and entities in the region have introduced new drug policy documents since 2016. An independent evaluation of the European Union Action Plan on Drugs 2013-2016 found that harm reduction was lagging behind other pillars of the EU Drug Strategy 2013-2020, noting that there was more significant opposition to this element of the strategy from certain member states.[135] Following this evaluation, the EU adopted the Action Plan on Drugs 2017-2020. The new plan includes emphasis on scaling up harm reduction, with reference to OST, NSPs, naloxone peer-distribution, DCRs and drug-checking.[44]

In Italy, harm reduction is not mentioned in the National Action Plan on Drugs, which has not been updated since 2010.[18] However, harm reduction interventions were included in 2017 for the first time in the Livelli Essenziali di Assistenza, the package of basic health services that must be guaranteed across the country; as of 2018, civil society organisations are in negotiations for the implementation of this policy.[18] In 2018, the health ministry of the Piedmont region of northern Italy created new harm reduction guidelines in collaboration with civil society organisations. The new document includes drug-checking as a basic health service, and is considered by civil society organisations to be Italy's most advanced policy plan for harm reduction.[18]

In 2017, the United Kingdom adopted a new National Drugs Strategy for the first time since 2010,[30] which mentions OST and NSPs, but only uses the term "harm reduction" in reference to tobacco.[30,31,136] New clinical guidelines brought in alongside the new strategy are comparatively more supportive of evidence-led policy, and give a greater role to harm reduction.[30,126]

On the international stage, Western European governments have been largely supportive of harm reduction agendas. The Irish delegation at the Commission on Narcotic Drugs in 2018 made a statement supportive of harm reduction,[137] and a joint EU statement (also supported by Norway and Liechtenstein) in the same forum later in 2018 was strongly supportive of shifting to a human rights and health-centred response to drugs.[138] Civil society organisations in Germany, Italy, the Netherlands and Spain have also highlighted that their respective governments have been vocally supportive of harm reduction in international fora.[15,18,21,23]

Civil society and advocacy developments for harm reduction

Civil society organisations continue to form an important part of the harm reduction movement in Western Europe, as service providers, campaigning groups and advisory bodies to governmental agencies. In several countries, civil society cooperation in harm reduction is led by national harm reduction networks, such as the English Harm Reduction Group in the United Kingdom[31] and Suchtverband Leutzebuerg in Luxembourg.[19] Akzept is a national umbrella organisation for harm reduction in Germany, and has published alternative drug and addiction reports in response to official government documents.[14,15] In Italy, the Rete Italiana Riduzione del Danno (ITARRD) is an informal organisation of approximately 200 individuals, including professionals, activists, researchers, people who use drugs and harm reduction groups.[18] Though no national harm reduction network exists in Switzerland, regional networks exist in most cantons.[26,39]

A longstanding European regional network of civil society organisations working in the field of drugs and harm reduction received a grant in 2018 from the European Commission and began to operate under the name Correlation – European Harm Reduction Network.[8,21] Correlation works to improve international collaboration on harm reduction through a network of focal points in each country.[21] In November 2018, the European Harm Reduction conference was held in Bucharest, Romania.[21]

Networks of people who use drugs exist at a national level in several countries, including Germany and Portugal, and at a local or regional level in Spain and the UK.[14,15,23,31,42] These groups often work in association with the European Network of People who Use Drugs (EuroNPUD), which was launched in 2011 to coordinate advocacy strategies in the European Union and its neighbourhood.[42,139]

Civil society organisations in Western Europe have organised advocacy campaigns on a national and international basis. Internationally coordinated campaigns, such as Support. Don't Punish, International Overdose Awareness Day and World AIDS Day have been used for harm reduction

advocacy purposes in several countries, including Portugal and Spain.[23,42] Campaigns aiming to directly influence national policy since 2016 have included Belgian movements in favour of decriminalisation (such as 1921 in Wallonia and Smart on Drugs in Flanders);[4] campaigns by Release in the UK in favour of drug consumption rooms and improving naloxone provision;[31] ITARRD's Harm Reduction Works, Let it Work! (La Riduzione di Danno Funziona, Facciamola Funzionare!) campaign pressing for increased political and financial support in Italy;[18] and civil society campaigns for drug consumption rooms and increased funding in Portugal.[42] Additionally, there have been several civil society-led events, such as a conference dealing with ATS use (among other topics) in Berlin called NIGHTS: Stadt Nach Acht (NIGHTS: City After Eight),[14] and an annual training event on harm reduction and recreational drug use in Switzerland.[26]

In Germany, Portugal, Spain and Switzerland, civil society organisations have been regularly and systematically involved in policy consultations at both regional and national levels; for example, the Portuguese National Harm Reduction Network (R3) has an ongoing informal relationship with the government drug and addiction agency, and met with the Secretary of State for Health in 2017.[42] In 2018, the Swiss Federal Office of Public Health launched an Expert Group on Harm Reduction, bringing with it greater involvement of civil society in the policy development process;[26] however, some actors have expressed concern at a lack of representation of people who use drugs in government consultations with civil society.[57] Though civil society organisations in Italy and the United Kingdom have been regularly involved in national policy consultations on harm reduction and drug policy in the past, they report that this cooperation has reduced in recent years. In the UK, civil society was not consulted in the development of the 2017 National Drugs Strategy, and in Italy non-governmental service providers now only participate in policy processes sporadically.[18,31]

Significant civil society advocacy successes have occurred in Western Europe since 2016. In Italy, civil society organisations lobbied the national government to include harm reduction in the National HIV Plan 2017-2019, resulting in specific reference to harm reduction interventions and indicators in the final plan.[18,140] In Portugal in 2018, the Agência Piaget para o Desenvolvimento (APDES) succeeded in securing a non-binding resolution in the Portuguese parliament for the full funding of harm reduction programmes.[42] A coalition of civil society organisations in the United Kingdom successfully campaigned to have drug-related deaths included as an indicator of public health outcomes for local authorities, where previously the main indicator of drug policy success was completed treatments.[30,31] These examples demonstrate the concrete progress that has been made in the region through the dedication of civil society actors to the cause of harm reduction, and can serve as an example to actors elsewhere in the region and across the world of the impact on national policy that is possible through targeted campaigns.

Funding developments for harm reduction

A 2017 report by Harm Reduction International found that certain parts of the European Union are experiencing a funding crisis for harm reduction.[45] This crisis is observed to be more serious outside Western Europe; however, in several countries of the region, particularly Greece, concerns were raised. Six Western European countries (Belgium, France, Germany, Ireland, the Netherlands and the United Kingdom) were assessed to have a high levels of government investment in harm reduction, providing over 90% of funding (see Table 2.3.2).[45]

Trends in harm reduction investment since 2016 vary across the region. Belgium is the only country in which funding for harm reduction is reported to have increased over recent years, though civil society organisations there still note that gaps remain in the public health response to illicit drug use.[45] In the Netherlands, civil society organisations report that the level of investment has remained stable since 2016 and the quality and availability of services is sufficient.[21,45] Elsewhere in the region, the long-term effects of European austerity since the economic and financial crisis continue to be felt. In Germany, Greece, Ireland and the UK, investment in harm reduction has fallen over recent years due to broader budget cuts.[45] In the United Kingdom, funding for harm reduction and prevention fell by 8% from the 2015/2016 financial year to 2016/2017, a disproportionately greater cut than in other areas of public health.[30,31] In Ireland, harm reduction interventions now operate with 30% less investment that in 2009.[45] Civil society organisations have expressed concerns that these reductions in funding will lead to rising HIV and hepatitis C incidence among people who inject drugs, among other drug-related harms.[45]

Local, regional and national government bodies provide the majority of investment for harm reduction in Western Europe. For example, all funding for NSPs and OST in Belgium, Germany, Luxembourg, Sweden; 95% of harm reduction

funding in Italy; and 80% of funding in Portugal and Greece come from either national or local governments.[18,19,42,45] In Belgium and Germany, state funding is sourced from a mixture of national and regional or city-level governments, while in Switzerland all harm reduction funding comes from the cantonal and city governments.[26,39,45] Significantly, implementation of harm reduction services, though state-funded, is often left to non-governmental organisations, as in Greece, Norway and Switzerland.[26,45] Where funding cuts result in threats of service closure, it is essential that emergency funding (such as from the European Commission) is made available to sustain these programmes. However, emergency funding must be available without cumbersome application processes or the requirement to match funding.[45] A potential model for this is the Norway NGO Fund, where local civil society is involved in the management of grants.[45]

Harm Reduction International's research also highlighted poor transparency on harm reduction investment across the region (see Table 2.3.2). No country in Western Europe received a positive rating for the transparency of their harm reduction investment, and Greece and Italy were given the lowest rating. Levels of budgetary disaggregation vary across Western Europe, and rarely allow identification of harm reduction investment in wider budgets. Where harm reduction services are managed locally, a lack of national-level data collection also contributes to a lack of transparency, for example in Germany, Switzerland and the United Kingdom.[45,57] Small improvements have been noted; for example, eight of the 20 regions of Italy currently disaggregate harm reduction investment from other spending.[18,45]

In Western Europe, there is limited data on the proportion of total state drug spending that is invested in harm reduction. From what little information is available, it is clear that harm reduction investment is dwarfed by spending on drug law enforcement. In Italy, an estimated €1.1 billion is spent on drug law enforcement annually, including €953 million on prisons, while the United Kingdom spent an estimated £1.6 billion on drug law enforcement in 2014/2015.[18,141]

The sustainability of harm reduction investment in the EU has been recorded by Harm Reduction International as ranging from fairly certain to extremely insecure.[45] The continuing impact of austerity policies in certain countries threatens the effectiveness of harm reduction services. This has had the greatest impact in Greece, where cuts to harm reduction services put the country at risk of public health emergencies.[45] In the UK, civil society organisations anticipate further reductions in harm reduction investment over the coming years, driven by increasingly limited resources available to local authorities for overall spending and the fact that they are not obliged to provide any drug services.[30,45] The European Monitoring Centre for Drugs and Drug Addiction has highlighted the role of austerity and cuts to the budgets of drug-related health initiatives in the rise of public health emergencies.[142]

Table 2.3.2: Harm reduction funding in selected Western European countries at a glance[45]bb

Country	Harm reduction coverage	Transparency of spending data	Government investment in harm reduction	Civil society view on the sustainability of funding
Greece				
Italy				
Sweden				
Portugal				
Finland				
United Kingdom				
Ireland				
Belgium				
France				
Germany				
The Netherlands				

bb This table uses a traffic light system designed to provide an at-a-glance indication of the health of harm reduction funding, and first appeared in a 2017 report from Harm Reduction International entitled Harm Reduction Investment in the European Union.[45]

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Regional Overview
2.4 Caribbean

Table 2.4.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in the Caribbean

Country/territory with reported injecting drug use[a]	People who inject drugs	HIV prevalence among people who inject drugs(%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs(%)	Harm reduction response[i]			
					NSP[b]	OST[c]	Peer-distribution of naloxone	DCRs[d]
The Bahamas	0[2]	nk	nk	nk	x	x	x	x
Dominican Republic	<1,359[e][3]	3.2[f][3]	22.8[g][4]	nk	✓2[5,6]	x[h]	x	x
Guyana	nk	nk	nk	nk	x	x	x	x
Haiti	nk	nk	nk	nk	x	x	x	x
Jamaica	nk	nk	nk	nk	x	x	x	x
Puerto Rico	28,000[7]	11.3[i][8]	78.4 - 89[j][10,11]	nk	✓6[9]	✓(M,B)[9]	x	x
Suriname	nk[k][12]	nk	nk	nk	x	x	x	x

nk – not known

a Countries with reported injecting drug use according to Larney et al. in 2017. The study found no reports of injecting drug use in Antigua and Barbuda, Barbados, Cuba, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines or Trinidad and Tobago.[1]
b All operational needle and syringe exchange programme (NSP) sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers. (P) = pharmacy availability.
c Opioid substitution therapy (OST), including methadone (M), buprenorphine (B) and any other form (O) such as morphine and codeine.
d Drug consumption rooms, also known as supervised injecting sites.
e There are an estimated 56,632 people who use illegal drugs in the Dominican Republic, less than 2.4% of whom are reported to be people who inject drugs.
f Estimate from 2012 for people who use drugs.
g Based on data from 2008.
h A pilot programme offering OST with a buprenorphine-naloxone combination operated in the Dominican Republic from mid-2017 to mid-2018; however, this project has now closed.
i Based on subnational data from 2015.
j Based on subnational data from 2006-2015. Civil society organisations report that there is no effective system monitoring viral hepatitis infection among people who inject drugs in Puerto Rico.[9]
k A 2008 government study estimated that 0.3% of Suriname's estimated 1,000 people who use drugs are people who inject drugs.

Map 2.4.1: Availability of harm reduction services

Harm reduction in the Caribbean

Overview

Since 2016, the harm reduction response to illicit drug use appears to have remained relatively stable in the Caribbean. Given the devastating effects of Hurricanes Irma and María in 2017 on several islands in the region, this stagnation should not be over-emphasised. That harm reduction services, particularly in Puerto Rico, continue to be available to people who use drugs can be viewed as a success and can be attributed to the dedication of civil society organisations in the region.

Puerto Rico and the Dominican Republic remain the only territories in the region in which injecting opioid use is regularly reported. With scarce data on injecting drug use elsewhere in the Caribbean, it is impossible to make an authoritative judgement on its prevalence. However, from the limited data available, injection appears to be rare.[13-15] Cocaine and its derivatives tend to be the second most widely used illicit substances after cannabis, and their use is overwhelmingly associated with inhalation rather than injection.[13-15]

As in 2016, needle and syringe programmes (NSPs) are only available in the Dominican Republic and Puerto Rico, in response to the presence of injecting drug use in those territories. These NSPs are exclusively provided by civil society organisations in both countries, who rely wholly on funding from international donors.[5,9] Also as reported in 2016, opioid substitution therapy (OST) is only currently available in Puerto Rico, where it is provided by both state and private actors.[9] In mid-2017 an OST pilot was initiated in the Dominican Republic; however, it is due to be closed in late 2018.[5,6] Despite reports of a rising number of overdoses in Puerto Rico since 2016, the response to overdose remains limited and hindered by legal barriers. No drug consumption rooms exist in the region, and naloxone is only available on a limited basis in Puerto Rico and only in major hospitals in the Dominican Republic.[6,9] Legislation to liberalise access to naloxone in Puerto Rico is currently being considered by the Puerto Rican assembly.[9]

The Caribbean is home to a limited, nascent harm reduction response to the use of cocaine and its derivatives. The informal use of cannabis as a substitution therapy, or to counter certain side-effects of crack cocaine use, has been documented in Jamaica and Saint Lucia.[16,17] Data on the use of new psychoactive substances and amphetamine-type stimulants is virtually absent, and no harm reduction response has been recorded.

Infectious diseases are largely divorced from drug use in policy documents published by Caribbean governments, with little or no acknowledgement of the intersection between HIV, viral hepatitis, tuberculosis and illicit drug use. For example, only six of the 17 countries in the region make any reference to people who use drugs in their latest national HIV policy plans (the Dominican Republic, Jamaica, Puerto Rico, Saint Lucia, Suriname, and Trinidad and Tobago).[3,12,18-21]

Despite the existence of some harm reduction programmes, the response to drug use in the Caribbean continues to be dominated by rehabilitation and abstinence-centred interventions. As reported in the *Global State of Harm Reduction 2016*, and is evident from data published over the past two years, there are reports of people being held in rehabilitation centres against their will.[22,23] The problem is particularly grave in the Dominican Republic and Puerto Rico.[24,25] In the latter, 85% of treatment facilities are privately operated with little or no independent or state oversight, while only one of every six treatment centres in the Dominican Republic is authorised by the state.[23]

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

Due to the low reported prevalence of injecting drug use, NSPs are absent from most countries and territories of the Caribbean. For example, the Bahamas, Saint Lucia, and Saint Kitts and Nevis report no injecting drug use, and therefore no NSPs exist.[2,20,26] In only a few countries has injecting drug use been found to have a significant role in the transmission of blood-borne diseases in the region, these being Puerto Rico, the Dominican Republic and, to a lesser extent, Cuba and Barbados.[27]

NSPs only operate in Puerto Rico and the Dominican Republic. A 2013 study found that 38% of people reporting active heroin injecting in the Dominican Republic had shared needles.[25] Evidence from both countries also suggests that NSPs play a role in linkage to healthcare for people who use drugs but do not inject.[27]

In both the Dominican Republic[l] and Puerto Rico[m], NSPs are exclusively provided by civil society and private organisations. Two organisations in the Dominican Republic and four in Puerto Rico deliver services distributing sterile injecting equipment, condoms and antiseptic liquid.[5,9] Since the *Global State of Harm Reduction* last reported, an outreach-led NSP was established by COIN as a pilot in August 2017 in the Capotillo and La Zurza areas of Santo Domingo in the Dominican Republic, with plans to expand into other areas with populations of people who inject drugs.[28] As of late 2017, 32 people who inject drugs were regularly accessing the programme.[28] Outreach is also central to the projects run by Intercambios and El Punto en la Montaña in Puerto Rico, who reach out to people who inject drugs in housing projects, on the streets, in private homes and in abandoned buildings.[9]

COIN in the Dominican Republic and Intercambios and El Punto en la Montaña in Puerto Rico all train and employ current or former people who inject drugs to act as outreach NSP workers.[5,6,28] Evidence from elsewhere in the world has found that such peer-led outreach programmes have a greater ability to reach marginalised groups, as well as providing enhanced acceptance, self-esteem, community inclusion and empowerment among clients.[29] A further means of lowering barriers to accessing NSPs is the use of 24-hour syringe dispensing machines: the first of which in the United States was established by Iniciativa Comunitaria in Puerto Rico in 2009.[30]

As a further effort to tailor services to the needs of people who inject drugs, El Punto en la Montaña in Puerto Rico collects feedback from clients.[9] Since 2007 until the time of reporting, the project has enrolled 1,534 individuals, all of whom were at the time of enrolment injecting drugs on a daily basis.[9] According to data collected from these clients, 92% were men.[9] This appears to be in line with the population of people who inject drugs on the island, 90% of which has been found to be men in both rural and urban environments.[10,11] Only half of people accessing the service had a high school diploma, a third were homeless and 100% were living in poverty.[9] Notably, 80% were living with hepatitis C and 6% were living with HIV.[9] More than half (55%) of participants self-report sharing injection paraphernalia, including needles, syringes, cookers, water and cotton.[9]

Opioid substitution therapy (OST)

With illicit opioid use low or non-existent in much of the Caribbean, OST is often not a priority in the harm reduction response to illicit drug use.[2,14,31] A recent systematic review of access to harm reduction interventions found that just 8% of people who inject drugs in the Caribbean are enrolled in OST.[32] This may be a reflection of the fact that cocaine is the most commonly injected drug in the region, rather than opioids.

As reported in the *Global State of Harm Reduction 2016*, Puerto Rico remains the only territory or country in the Caribbean in which OST is available. Data from 2013 to 2014 notes a 3.2% prevalence among the adult population of illicit opiate use in the last 12 months, with 0.58% prevalence of heroin/opium use and 0.21% methadone use (from the available data it is unclear what accounts for the remaining opiate use).[33] In addition, according to Intercambios, one quarter of people in Puerto Rico have a legal prescription for opioid-based medication.[34] The Administration of Mental Health and Anti-Addiction Services (Administración de Servicios de Salud Mental y contra la Adicción, ASSMCA) is the Puerto Rican government agency responsible for OST, and operates six clinics, three mobile units and two satellite clinics across the island providing methadone maintenance therapy.[9,35] ASSMCA's eligibility criteria make accessing their services impossible for people under the age of 18 or people without a formally diagnosed opioid use "disorder".[35]

These government-led OST services are supplemented in Puerto Rico by private actors. Iniciativa Comunitaria and the Migrant Health Centre both provide buprenorphine-based OST at clinics on the island.[36,37] The Migrant Health Centre's clinic at Mayaguez integrates OST, NSP, HIV and viral hepatitis services on the same site.[36] These programmes are generally funded either by the national insurance scheme, Mi Salud, or the Puerto Rican government's Section 330 programme.[9]

No recent estimates were found for the prevalence of opioid use in the Dominican Republic, with the only available data over a decade old. A pilot OST programme operated in the Dominican Republic from mid-2017 until late 2018, funded by the Spanish Agency for International Development Cooperation and managed by UNODC with the support of COIN, UNAIDS, the National Council on Drugs and the national HIV programme (CONAVIHSIDA).[5,22] The

l These are Mesón de Dios and COIN (Centro de Orientación y de Investigación Integral, Centre for Comprehensive Guidance and Research), though the service operated by Mesón de Dios is reportedly only intermittent.[6]
m Intercambios Puerto Rico, Iniciativa Comunitaria, Migrant Health Centre Inc. and El Punto en la Montaña.

programme offered therapy with a buprenorphine-naloxone combination to reduce risk behaviours related to HIV, hepatitis C and other infectious diseases.[5] Over the 12 months of operation, 70 people who inject drugs were involved in the pilot.[5] The pilot was discontinued when the government's temporary approval for the importation of buprenorphine-naloxone came to an end,[5] pending further approval and investment when results from the programme have been presented to the government.[6]

Amphetamine-type stimulants (ATS), cocaine and its derivatives and new psychoactive substances (NPS)

The Caribbean's position on a major trafficking route between South America and North America, and the practice of using cocaine as payment in kind, has contributed to access to cocaine and its derivatives in the region.[27,38] In 2016, average lifetime prevalence of cocaine use among secondary school students across 13 Caribbean countries was recorded as 2.4%, with 2.2% prevalence of crack cocaine.[15] The highest prevalence figure for cocaine was in Antigua and Barbuda (3.3%); for crack cocaine it was in Saint Kitts and Nevis (3.4%).[15] Crack cocaine is most commonly inhaled, often in combination with cannabis (the Caribbean's most used illicit drug).[15,27] Use of ecstasy and ATS appears to be considerably lower than use of cocaine derivatives,[15] except for in Puerto Rico, where last-year prevalence of amphetamine use was 2.5% compared with 2.2% last-year prevalence of cocaine derivative use.[39] Data on NPS use in the Caribbean is unavailable.[5]

Few harm reduction programmes operate for people who use cocaine and its derivatives in the Caribbean. The use of improvised smoking equipment for crack cocaine is a potential source of harm, such as the practice of "bullino" in Cuba, whereby makeshift pipes are made from soft drink cans.[40,41]] Ensuring that people who smoke crack cocaine have access to safer smoking equipment has been shown to reduce harm caused by lesions, burns and respiratory problems.[42] Additionally, crack cocaine use has been associated with transmission of HIV and hepatitis C.[43] Pipe distribution programmes ensure people do not share equipment (a practice associated with the transmission of hepatitis C) and have been shown elsewhere to be related to reducing other health problems related to crack cocaine use.[44,45] In the absence of widespread injecting drug use and demand for NSPs, the implementation of such programmes in the Caribbean should be a priority in addressing health concerns among people who use drugs.

There is some evidence for the use of cannabis as a harm reduction measure for crack cocaine use in the Caribbean. In Jamaica, a 2002 study reported that cannabis is used in the community to alleviate negative side-effects associated with smoking crack cocaine, such as paranoia and weight loss.[17] A 2007 Saint Lucian study found that 73% of people using crack cocaine also used cannabis, and 38% said that cannabis could be used as a substitution for crack cocaine.[46] The use of cannabis as a substitution therapy for crack cocaine has been found to be effective in qualitative and longitudinal studies in Canada and the United States.[47,48] There remains a need for further research to explore the efficacy of cannabis as a harm reduction measure for people who use cocaine and its derivatives.

Overdose, overdose response and drug consumption rooms (DCRs)

The overdose response in the areas of the Caribbean where opioids are more commonly used is severely lacking. No drug consumption rooms exist in any country or territory. Naloxone, a highly effective opioid antagonist used to reverse the effects of overdose, is only authorised for use by medical professionals in Puerto Rico and only in major hospitals in the Dominican Republic.[6,9,49]

Data on overdoses is not collected in the same way in Puerto Rico as in the rest of the United States, making a comparative assessment of the situation in the territory difficult. However, civil society organisations report a significant increase in opioid overdose since Hurricane María hit the island in September 2017.[50] Fentanyl, a synthetic opioid up to 50 times more potent than heroin, is reportedly present in an increasing number of overdoses, with Intercambios reporting two to three fentanyl overdoses per week in the cities of Caguas and Fajardo in February 2018.[50] Intercambios has also been testing used injecting equipment for fentanyl since Hurricane María, and has found that it is present in 77% to 90% of cases.[50]

Restrictions on the availability of naloxone in Puerto Rico make it unlawful for civil society organisations to ensure, as recommended in World Health Organization guidelines,[51] that anybody likely to witness an overdose has access to the medicine. In Puerto Rico, there is no legal protection for peers, friends or family using naloxone to save a life.[50] Despite these restrictions, Intercambios continues to train people who use drugs in the use of naloxone, though they are unable to distribute the drug itself.[50] El Punto en la Montaña have been working with local police and mayors to educate them about naloxone and overdose prevention in Puerto Rico.[9]

Following advocacy by civil society organisations, a bill is currently in the Puerto Rican legislative assembly to create and implement an island-wide overdose prevention programme, including naloxone provision, and a Good Samaritan law to protect those who call the emergency services in case of overdose.[9,50] On Overdose Awareness Day (31 August) 2018, the governor of Puerto Rico introduced plans for a new opioid overdose prevention task force to be led by the Administration of Mental Health and Anti-Addiction Services (Administración de Servicios de Salud Mental y Contra la Adicción) and including civil society representation.[9,50]

Viral hepatitis

Hepatitis C prevalence among people who have injected drugs in the last year in the Caribbean is estimated at 47.6%, with 16.7% of all people living with hepatitis C reporting last-year injecting drug use.[52] High prevalence of both hepatitis C and hepatitis B has also been observed among people who use drugs but do not inject, associated with sharing paraphernalia and indirectly linked to unprotected sex.[27] Despite a lack of any systematic monitoring system,[9] prevalence of hepatitis C among Puerto Ricans who inject drugs has been estimated at 78.4% in rural areas and 89% in San Juan.[10,11] El Punto en la Montaña have found that approximately half of people who inject drugs living with hepatitis C are not aware of their status, enhancing the risk of transmission.[9] Among all people living with hepatitis C, a recent global systematic review estimated that only 18% in Puerto Rico and 10% in the Dominican Republic are diagnosed.[52]

In Puerto Rico, there is no publicly funded treatment of hepatitis C for people who inject drugs, with the Department of Health imposing a requirement for six months of abstention from drug and alcohol use before treatment.[53] Hepatitis C treatment is not covered by the Mi Salud state insurance programme.[53]

In an effort to increase the number of people aware of their hepatitis C status in Puerto Rico, El Punto en la Montaña has collaborated with the University of Nebraska-Lincoln in the VAS One (Vida Acción Salud, Life Action Health) research project since 2015.[9] The project, funded by the National Institute for Drug Abuse, provides testing to people who inject drugs living in rural areas. [9,54] Some civil society organisations in Puerto Rico, such as the Puerto Rico Community Network for Clinical Research on AIDS, integrate viral hepatitis testing with HIV testing.[9]

In only five Caribbean countries, of the 17 in the region, is care for both hepatitis C and hepatitis B publicly funded: Cuba, the Dominican Republic, Dominica, Jamaica, and Trinidad and Tobago.[55] People who inject drugs face further barriers, including discrimination by health authorities and professionals, and burdensome time commitments.[9]

Tuberculosis (TB)

As reported in the *Global State of Harm Reduction 2016*, there is a dearth of up-to-date information on TB services for people who inject drugs. The highest general population incidence is in Haiti, with 181 cases per 100,000 people in 2017, followed by Guyana (86), the Dominican Republic (45) and Belize (36).[56] Haiti also has the region's highest HIV/TB co-infection incidence at 20 per 100,000,[56] and in 2017 was among four countries (with Brazil, Mexico and Peru) that account for 62% of new TB infections in the Americas.[57,58] More research is necessary to determine the extent to which people who use drugs are affected by TB in the Caribbean, and the extent to which they receive treatment.

HIV and antiretroviral therapy (ART)

From 2010 to 2017, the Caribbean saw an 18% reduction in new HIV infections and a 23% reduction in AIDS-related deaths.[59] Almost 90% of new diagnoses are confined to just four countries: Cuba, the Dominican Republic, Haiti and Jamaica.[59] Despite this progress, only 64% of people living with HIV in the Caribbean are aware of their status.[60] Approximately 1% of new infections across the region in 2017 were due to injecting drug use.[59]

In most countries of the region, few new HIV infections are associated with injecting drug use. For example, only 0.2% of new HIV cases in Jamaica in 2015 were among people who inject drugs.[61] However, non-injecting drug use has been observed to be indirectly related to HIV transmission, through the disinhibiting effect of some drug use on sexual risk behaviours such as condom use.[27] Prevalence studies in Jamaica and Saint Lucia have found high prevalence of HIV among people living on the streets who use drugs but do not inject, and have found that this population overlaps with other key populations for HIV, such as men who have sex with men, sex workers and transgender people.[18,20,38,62,63] In Jamaica, the National Council on Drug Abuse operates an outreach programme to people living on the streets, providing counselling, linkage to mental and physical healthcare, hygiene items (such as toothbrushes, sanitary products and body wash) and clothing.[62] It is unclear to what extent this outreach is done within a harm reduction framework without the ultimate aim of abstinence.

People who use drugs are consistently left out as a key population in HIV reporting and planning in the Caribbean. Despite being a small proportion of new infections, they remain a group at high risk of infection. Stigma and discrimination play a significant role in limiting access to HIV testing and treatment, with evidence that a large proportion of people across the Caribbean demonstrate discriminatory attitudes towards people who inject drugs.[59] Only four countries (Puerto Rico, Saint Lucia, Suriname, and Trinidad and Tobago) make any reference to the stigma faced by people who use drugs in national HIV policy documents, and only Puerto Rico's document recommends concrete actions that can be taken to address this barrier to healthcare.[12,19-21] The continued criminalisation of people who use drugs also contributes to discouraging this population from accessing treatment.[5]

HIV transmission in Puerto Rico is mostly related to injecting drug use.[24] In 2015, it was estimated that 11.3% of people who inject drugs in Puerto Rico were living with HIV;[8] El Punto en la Montaña report that 6% of all people registered by their NSP are living with HIV.[9] In 2015, it was found that 89.5% of people who inject drugs in San Juan had ever been tested for HIV and 42.4% had been tested in the last year.[8] Of those tested in the previous year, more than half (50.7%) were tested in a non-clinical setting (such as an outreach centre, mobile unit, NSP or family planning clinic).[8]

In Puerto Rico, there are no restrictions on access to antiretroviral therapy for people actively using drugs.[9] In the Dominican Republic, people who inject drugs are able to access antiretroviral therapy, however staff are not trained in the specific needs of this population, meaning many people who inject drugs are alienated by the healthcare system.[5] In September 2018, UNODC and UNDP launched a training plan for health personnel in the provision of comprehensive HIV treatment and care for people who inject drugs.[5]

Several organisations in Puerto Rico provide specialised HIV care for people who inject drugs. These include rapid testing offered by Iniciativa Comunitaria,[37] and integrated NSP, OST and HIV services at the Migrant Health Center in Mayaguez.[36] The Community Network for Clinical Research on AIDS hosts the Tod@s project targeted at young people (aged 13 to 29) with no limitations placed on access for people who inject drugs, offering rapid HIV testing, referrals and specialised services for people living with HIV.[64] In the Dominican Republic, the COIN NSP integrates HIV treatment, and is able to enrol clients in antiretroviral therapy.[28]

Harm reduction in prisons

People who use drugs in the Caribbean consistently face criminalisation and the risk of imprisonment, despite movement towards decriminalisation of cannabis in certain countries (see below). For example, in the Bahamas suspicion of drug possession is legal grounds for property searches without a warrant,[65] and Law No. 50-88 on Drugs and Controlled Substances in the Dominican Republic classifies a trafficker as any person in possession of any quantity of opium derivatives.[5] Since 2017 in the Dominican Republic, at least 60 people who use drugs have reported being arrested without having committed an offence, and young people report being charged with drug possession when not carrying any illegal substances.[22,66]

There were an estimated 109,176 people imprisoned in the Caribbean in 2016, a 22% increase in the prison population since 2005.[67,68] Prisons in several countries in the Caribbean are reported to lack adequate hygiene and medical facilities[65,69-71] and prisons across the region are consistently severely overcrowded, including the world's most overcrowded prison system in Haiti which operates at 454% capacity.[65,66,69,71-74] This combination creates an environment in which drug-related harms, such as the transmission of HIV, HCV and TB, are amplified rather than reduced.[75]

No prison in the Caribbean offers access to sterile injecting equipment, and only one prison in the region, in Puerto Rico, provides OST in prison.[5,9] The lack of access to OST has been identified by civil society organisations as a form of cruel and unusual punishment, and a violation of the right to health.[76] Hepatitis C treatment is not available in Puerto Rican prisons.[9,77]

Drug treatment courts have operated in the Caribbean since the early 2000s, and now operate in five countries and territories (Barbados, the Dominican Republic, Jamaica, Puerto Rico, and Trinidad and Tobago) with two further countries implementing pilot programmes (the Bahamas and Belize).[78] These programmes seek to divert people charged with minor, non-violent drug offences away from the penal system and into drug treatment services, and tend to focus on abstinence.[78] An almost complete lack of data collection in the region makes it impossible to assess whether drug courts achieve their set objectives; however, drug courts in other parts of the world have been criticised as biased towards those least in need of treatment and ineffective in supporting people to improve their health outcomes.[78]

Another issue in the Caribbean is the prevalence of forced rehabilitation centres, often associated with drug treatment courts.[23] A 2016 Open Society Foundations report raised concerns over such facilities, reporting that people who use drugs in both the Dominican Republic and Puerto Rico are involuntarily interned without committing any crime, subjected to physical and psychological abuse, and to cruel, dehumanising and humiliating treatment.[23] The centres, often operated by religious organisations, reportedly force those admitted to sell products on the street for little to no pay, and refuse to provide medical care for either opioid withdrawal symptoms or minor illness.[23] No evidence has been presented for the effectiveness of these rehabilitation centres in achieving their stated aims of reducing drug use and drug-related crime, and they have been condemned as violating fundamental human rights by the UN Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, and the UN Special Rapporteur on health.[79]

2017 Atlantic hurricane season

The 2017 Atlantic hurricane season saw two category five hurricanes in the Caribbean, Irma and María. The worst-affected islands were Puerto Rico, Dominica, and Antigua and Barbuda, with all experiencing widespread destruction of infrastructure, including hospitals, across the islands. In Dominica, 80% of buildings were damaged by Hurricane María;[80] on the island of Barbuda, Hurricane Irma damaged 90% of buildings and all 1,800 residents were evacuated to Antigua.[81]

Puerto Rico experienced unprecedented devastation when Hurricane María hit in September 2017,[9] and the effects on harm reduction services were debilitating. The broader healthcare system, already drained of financial and human resources by austerity and emigration over the preceding decade, was brought to the brink of collapse. Local media estimate that ten doctors left the island every day in the months following Hurricane María, and a survey indicated that one third of deaths in the wake of the hurricane can be attributed to interrupted healthcare.[82] Ten days after the storm, only nine of the island's 69 hospitals had been reconnected to the electricity network.[83] Thousands of Puerto Ricans remained without power until August 2018, 11 months later.[84]

El Punto en la Montaña in Puerto Rico was forced to scale back its harm reduction services due to a lack of shipments of supplies arriving from the mainland United States.[85] Sterile water and bleach became scarce on the island, making even last-resort methods of needle sterilisation unavailable.[85] The organisation reports that the frequency of sharing needles and other injecting paraphernalia increased 27% in the wake of the hurricane.[9] The US Jones Act restricts permission for ships travelling between domestic ports, and the federal government's refusal to provide a long-term waiver of the law for Puerto Rico has reportedly exacerbated shortages of essential equipment for harm reduction.[86,87] Since Hurricane María, there has also been a dramatic increase in the detection of fentanyl on the island,[50] bringing concern due to the high overdose risk it presents.

Economic and social crises are known to effect patterns of drug use and infectious disease transmission,[27] including increasing the prevalence of illicit substance use, according to evidence from previous disasters in the region (such as Hurricane Katrina in 2004 and the 2010 Haitian earthquake) – meaning harm reduction commodities and interventions remain critical.[88-90] In Puerto Rico in particular, the failure of the US government to respond to the crisis adequately represents an extreme abdication of duty to its citizens, including those who use drugs.

Policy developments for harm reduction

Formal policy plans across the Caribbean do not take a harm reduction approach to drug use. Only two countries in the region have drug policy documents that make any reference to harm reduction, the Bahamas and the Dominican Republic. Both do so without specific mention of interventions or clear commitments, instead making passing reference to a health-led approach to drug use and acknowledging the work of civil society organisations.[91,92] Elsewhere, any reference to reducing harm among people who use drugs is explicitly set in a rehabilitation and abstinence-focused framework, for example in Guyana,[93] or harm reduction is not mentioned at all (for example in Belize, Grenada, and Trinidad and Tobago).[94-96] The Organization of American States' Plan of Action on Drugs 2016-2020 makes no reference to harm reduction, and only refers once to the need to address HIV among people who inject drugs.[97]

Limited progress has been made in the decriminalisation of cannabis since 2016. Following decriminalisation in Jamaica in 2015,[98] the prime minister of Antigua and Barbuda announced his intention to decriminalise the drug in 2018.[99] In Puerto Rico, cannabis was legalised for medical purposes in 2017; however, the recreational decriminalisation bill reported by the *Global State of Harm Reduction 2016* has not been passed.[100]

In the Dominican Republic, Law No. 50-58 on Drugs and Controlled Substances makes possession of any quantity of opioids or LSD a trafficking offence, with no differentiation of possession for personal use (threshold amounts apply for other substances).[6,101] In response to this, UNODC and UNDP have supported the development of a proposal to revise the law and consider the decriminalisation of drug use.[5] The proposal was finalised in late 2018, and will form a basis for future advocacy for drug law reform.[6] In the wake of the UN General Assembly Special Session on Drugs (UNGASS) in 2016, a national strategy working group is now operating in Santo Domingo on the implementation of UNGASS recommendations, including promoting a public health approach to drug use.[5]

Cuba has consistently been heavily in favour of drug prohibition, with the state failing even to acknowledge the presence of illicit drugs other than cannabis on the island, despite incontrovertible evidence of use of cocaine derivatives.[40,102] According to a recent report by the Igarapé Institute, Cuba's increasing openness to international trade may lead to a greater presence of illicit substances on the island, and in turn may necessitate an alternative approach to drug use.[40] Small movements towards a public health-led approach are apparent in Cuba. For example, the National Drug Commission advocates prevention and treatment of people who use drugs over repression, and the Centre for Academic Development on Drug Dependence (Centro para el Desarrollo Académico sobre Drogodependencias) is reported to have begun to explore harm reduction initiatives at a symposium in May 2017.[40]

Civil society and advocacy developments for harm reduction

Harm reduction services in both the Dominican Republic and Puerto Rico are largely carried out by civil society organisations.[5,9] These organisations also engage in advocacy activities. In the Dominican Republic, this has included a Support. Don't Punish campaign organised by COIN around International Day Against Drug Abuse and Illicit Trafficking, as well as advocating for a redistribution of government funds from ineffective law enforcement spending to harm reduction, in line with Harm Reduction International's 10 by 20 campaign.[5]

In Puerto Rico, El Punto en la Montaña leads advocacy campaigns on access to viral hepatitis treatment, decriminalisation of people who use drugs, and the approval of the Good Samaritan law currently in front of the Puerto Rican assembly.[9] The viral hepatitis campaign achieved national media attention and the creation of a National Hepatitis C Coalition, while the decriminalisation campaign has established links with local law enforcement.[9] El Punto en la Montaña has also disseminated promotional material raising awareness of the harms caused by stigma towards people who use drugs, and worked with the American Civil Liberties Union to assist people who use drugs to understand their rights and access justice.[9]

Though no network of people who use drugs operates in the Caribbean, an island-wide harm reduction network exists in Puerto Rico (Coalición Puertorriqueña de Reducción de Daños, CoPuReDa).[9] A regional Network of Outreach Centres and Harm Reduction in the Caribbean was founded in 2002, and has continued to meet up to 2018.[5]

Funding developments for harm reduction

Investment for civil society organisations providing harm reduction services in the region is largely provided by private foundations and international donors. For example, El Punto en la Montaña in Puerto Rico receives support from Open Society Foundations, MAC AIDS Fund and the Drug Policy Alliance, as well as a number of other national and international foundations.[9] Civil society organisations report that there are limited funding opportunities beyond a small set of institutions, and that the continual need to re-apply for funding represents a considerable burden.[9] In the Dominican Republic, UNODC supports TREATNET technical training, which, though primarily focused on treatment package design for treatment centres, also includes harm reduction and OST.[5]

National government funding in the Caribbean is focused on supply reduction and rehabilitation programmes. For example, the Surinamese National Strategic Plan on Drugs 2011-2015 (the

latest iteration) assigned 41% of its budget to law enforcement and just 0.1% to the HIV response, with no other allocation for harm reduction.[103] Similarly, fines collected in the Dominican Republic for drug offences are channelled into drug programmes, with 40% spent on drug control, 15% on rehabilitation and no money allocated to harm reduction.[5] In total, less than US$0.04 is spent on harm reduction per person who injects drugs in the Dominican Republic.[104] The Puerto Rican government funds inpatient treatment facilities, which are mostly faith-based and operate without any qualitative evaluation.[50]

The funding environment for harm reduction, and health more broadly, is made even more challenging in Puerto Rico by its relationship with the rest of the United States. For example, the federal government funds only 19% of Puerto Rico's Medicaid[n] (known as Mi Salud) costs, compared with an average of 70% across the 50 states.[105] This is particularly stark as 49% of Puerto Ricans were eligible for Medicaid before Hurricane María in September 2017, a figure which is likely to have risen considerably in the past year.[105] Since the establishment of the Financial Oversight and Management Board for Puerto Rico by the US government in 2016, the board has imposed millions of dollars of further cuts on the island's healthcare system.[9] Medicaid is the only health insurance available to people who inject drugs in Puerto Rico,[9] and as such any cuts represent a significant threat to the health and wellbeing of the population of the island.

n Medicaid is a joint programme between federal and state governments in the United States which assists people with limited income with the cost of healthcare.

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Regional Overview
2.5 Latin America

Table 2.5.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in Latin America

Country/territory with reported injecting drug use	People who inject drugs	HIV prevalence among people who inject drugs(%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)[1]	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs (%) [1]	Harm reduction response[i]			
					NSP[a]	OST[b]	Peer-distribution of naloxone	DCRs[c]
Argentina	8,144[1]	3.5[2]	4.8[3]	1.6[3]	x[d][4]	✓(1)(M)[4]	x	x
Bolivia	nk	nk	nk	nk	x	x	x	x
Brazil	nk[e]	9.9 [f][5]	nk	nk	x[d][4,6]	x	x	x
Chile	nk	nk	nk	nk	x	x	x	x
Colombia	14,893[7]	5.5[8]	31.6[8]	nk	✓[9]	✓(M)[9]	x[g]	x
Costa Rica	nk[h]	nk	nk	nk	x	✓(1)(M)[9]	x	x
Ecuador	nk	nk	nk	nk	x	x	x	x
El Salvador	nk	nk	nk	nk	x	x	x	x
Guatemala	nk	nk	nk	nk	x	x	x	x
Honduras	nk	nk	nk	nk	x	x	x	x
Mexico	164,157[i][13]	4.4 [14]	96[k][15]	0.2[3]	✓6[l][19]	✓(6) (M) [12,16]	✓[12]	x[m]
Nicaragua	nk	nk	nk	nk	x	x	x	x
Panama	5,714[17]	nk	nk	nk	x	x	x	x
Paraguay	nk	nk	9.8[18]	nk	x	x	x	x
Peru	nk	nk	nk	nk	x	x	x	x
Uruguay	nk	nk	nk	nk	x[d][4]	x	x	x
Venezuela	nk	nk	nk	nk	x	x	x	x

nk – not known

a All operational needle and syringe exchange programme (NSP) sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers. (P) = pharmacy availability.
b Opioid substitution therapy (OST), including methadone (M), buprenorphine (B) and any other form (O) such as morphine and codeine.
c Drug consumption rooms, also known as supervised injecting sites.
d In Argentina, Brazil and Uruguay, needle and syringe programmes previously operated when injecting cocaine use was more prevalent. However, as injecting drug use declined, these programmes have since closed or been redirected towards harm reduction for non-injecting drug use.[4]
e Unpublished data from a national household survey coordinated by Francisco Bastos found very little evidence of injecting drug use in Brazil.
f Based on data collected in 2009 in eight Brazilian cities
g Between 2015-2017, naloxone peer distribution networks existed in Colombia, but the programme was closed in January 2018.
h Civil society organisations indicate that injecting drug use is minimal in Costa Rica.[10]
i Based on data from 2011 National Addiction Survey. There may be limitations to the representativeness of this data, as household surveys are known to exclude people living outside traditional households, such as people who are homeless or incarcerated.[11] Civil society organisations believe that this figure may be an overestimate, with the true number of people who inject drugs in the country being around 30,000.[12]
j Based on data collected in 2006-2007.
k Based on data collected in 2005.
l Of these, four NSPs operate year-round and two for six months per year.
m Though no official DCRs exist in Mexico, a small facility exclusively serving women exists in Mexicali, Baja California.[12]

Map 2.5.1: Availability of harm reduction services

Harm reduction in Latin America

Overview

There are approximately 4.5 million people who use illicit drugs excluding cannabis in Latin America,[n] and levels of injecting drug use are very low compared with other regions.[3] This is largely due to the fact that injecting opioid use has been confined to the US-Mexico border and Colombia, and is not widespread elsewhere.[19,20] In other parts of the region, cocaine injection has historically been more common than opiate injection, but currently is relatively rare.[1,6] Conversely, Latin America has the world's highest levels of smokable cocaine use,[21] and this is therefore the focus of much of the harm reduction effort in the region. Innovative harm reduction responses in the region are also increasingly tailored towards people who use amphetamine-type substances (ATS), in line with growing prevalence of ATS use in the region.

Data on drug use in Latin America, especially injecting drug use, is scarce and there is a clear need for more research in this field. Civil society organisations report that states in the region do not regularly or systematically collect data on injecting drug use and people who use drugs, meaning that policies are often built on minimal, inaccurate and out-of-date evidence that has little relation to reality.[22] Based on the limited data available, prevalence of HIV, hepatitis C and tuberculosis are all higher among both people who inject drugs and non-injecting drug users than the general population. However, prevalence varies considerably across the region, as demonstrated in Table 2.5.1.

Latin America and the Caribbean is the only world region in which use of cocaine derivatives is greater than that of opioids.[3] Almost all the world's coca leaf cultivation takes place in just three Latin American countries – Bolivia, Colombia and Peru – and prevalence of the use of cocaine and its derivatives in the region is among the highest in the world.[3,21] Harm reduction programmes for people who use non-injectable cocaine derivatives are in place in several countries in the region, with a particular focus on use of the smokable forms of crack cocaine and cocaine paste.[o] For example, the Casa Masantonio project in Buenos Aires, Argentina and the Casa Normal project in Rio de Janeiro, Brazil both offer advice and support on accommodation, employment and legal proceedings to people who use cocaine derivatives.[2,24] Elevated prevalence of HIV and other blood-borne diseases have been observed among crack and cocaine paste users, and have been associated with higher-risk sexual practices.[25-27] The Casa Masantonio project, funded by the city of Buenos Aires, also offers HIV, hepatitis C, tuberculosis and syphilis treatment to cocaine paste users free of charge.[24]

In recent years a slight increase in opiate use across Latin America has coincided with an increase in opium poppy cultivation in Mexico, Colombia and Guatemala.[3,19] In 2016, a small population of people injecting opiates was identified for the first time in Mexico City.[20] However, opiate use remains uncommon outside northern Mexico and Colombia.[12,19,20] Harm reduction programmes for people who inject drugs, including opioid substitution therapy (OST) and needle and syringe programmes (NSP), operate in the Mexican and Colombian cities where injecting drug use is most prevalent. Developments since 2016 have been mixed: some NSP services in Mexico have been expanded to open year-round, but sites in Bogotá and Dosquebradas in Colombia have been closed.[12,16,23]

A range of harm reduction services for ATS and new psychoactive substances (NPS) have been implemented in Latin America. Since 2012, the Colombian Échele Cabeza (Use Your Head) project has operated drug-checking services at festivals and raves to test samples of ATS and NPS for purity.[28,29] Between 2012 and 2015, the organisation saw a 25% reduction in adulterated samples and a 50% reduction in emergency room visits due to ATS use in Bogotá, which civil society organisations attribute in part to the success of harm reduction interventions.[30] However, in 2016 the incoming mayor of Bogotá ended support for these projects.[16] Similar services, supplemented by hydration points, staff training workshops and awareness-raising campaigns, also now operate in Argentina, Brazil, Mexico and Uruguay.[4,31]

There are examples from recent years of progress towards less punitive drug policies in Latin America. Colombia's supreme court ruled that individuals should not be automatically criminalised for possession of illicit drugs for personal use in 2012, and Uruguay became the first country to legalise cannabis for non-medical use in 2013.[32,33] However, since 2016, concerning political developments have restricted harm reduction programmes and space for civil society engagement with governments.[34] For example, a new government in Brazil has explicitly

n This is a cumulative figure based on UNODC estimates of the number of opioid, cocaine and amphetamine users in Latin America, and does not account for poly-drug use.
o Also known as basuco, paco, base paste or oxi, cocaine paste is an intermediate product in the production of cocaine. It is marketed as a cheaper alternative to cocaine in South America.

rejected harm reduction as a response to illicit drug use and closed successful programmes, replacing them with abstinence-based, rehabilitation and law enforcement-led projects.[6,35] The election of Iván Duque as president in Colombia in June 2018 was met with concern by civil society organisations who fear a resurgence of prohibitionist policies.[22] Similar developments have occurred in local government, with newly elected city-level administrations in Bogotá, Colombia and São Paulo, Brazil also rolling back harm reduction projects.[4,16,36] In several other countries in the region, such as El Salvador and Guatemala, the response to drug use continues to be dominated by abstinence-centred programmes, often led by non-specialist and religious organisations.[37,38] Across the region, rehabilitation centres continue to operate with little or no oversight by health authorities, meaning that the human rights of people who use drugs can be neglected with impunity.[22]

With reductions in funding from some donors in the region, including the Global Fund, the funding landscape for harm reduction in Latin America is increasingly difficult. With some exceptions, such as the Colombian government taking responsibility for funding certain NSPs, national governments have failed to meet the funding shortfall left by the departure of these international donors.[22,39] An additional funding challenge for programmes in Latin America is that internationally funding for harm reduction is largely drawn from HIV prevention budgets. As injecting drug use is low, many harm reduction programmes do not have an HIV component and therefore have limited funding opportunities.[9,12,16]

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

Although the prevalence of injecting drug use is low, the Latin America and the Caribbean region has one of the lowest per user rates of needle distribution in the world. Where injecting drug use has been identified, only between 0.1-0.5 needles are distributed per person per year, compared with the World Health Organization (WHO) recommendation of 200.[40] Since the *Global State of Harm Reduction* last reported, developments in the region have been mixed. NSPs are known to operate in Colombia and Mexico, but in other countries with very low prevalence of injecting drug use, such as Costa Rica, they are largely deemed unnecessary.[6,10]

Outside Colombia and Mexico, injecting cocaine was prevalent two decades ago and has been more common than opiate injecting; however, levels today are very low. Cocaine injection is associated with a higher risk of blood-borne infection transmission, due to the greater frequency of injection.[41] In parts of the region where cocaine injection has been prevalent, for example in Argentina, Brazil and Uruguay, NSPs have served these populations. However, as injecting drug use in these countries declined to minimal levels, these services closed or were redirected towards harm reduction for non-injecting drug use.[4,42] This therefore represents a decline in the need for NSP services for this population, rather than a decline in harm reduction service provision.

Needle and syringe programmes have operated in Colombia since 2014, in the cities of Cúcuta, Cali, Pereira, Dosquebradas and Bogotá.[4,16] The sites have served over 2,000 individuals during the course of their operation.[16] Though the sites in Bogotá and Dosquebradas closed in late 2017, NSPs still operate in Cali, Cúcuta and Pereira. However, services are intermittent due to unreliable revenue streams and cash flow issues.[4,16,23] In Pereira, civil society organisations report that opening hours, dress codes and locations for sites have been heavily regulated, and people who use drugs are required to provide official identification in order to receive safe injecting materials.[16,22,23] No NSP services exist in Medellín due to significant local government opposition, despite this being the Colombian city with the highest population of people who use drugs.[16]

According to a study carried out by Verter in Mexico, there are six active NSPs, at least one of which exclusively serves women who inject drugs.[12] These sites have seen an expansion in their services since 2016: four now operate year-round, whereas before 2016 all but two only operated for six months of the year.[12] All are run by civil society organisations, such as Verter and PrevenCasa, and funded by the national HIV prevention body.[12] In Tijuana, an unusually high prevalence of use of high dead-space syringes has been noted.[43] These are associated with a greater risk of blood-borne virus transmission through syringe-sharing than low dead-space syringes, due to the larger volume of blood left in the needle after injection.[43,44] To address the risk of blood-borne virus transmission in this particularly high-risk group, the Tijuana NSP operated by PrevenCasa distributed approximately 50,000 syringes to the estimated 10,000 people who inject drugs in the city in 2015.[45] This remains considerably below the WHO recommendation of 200 needles per person who injects opiates.

A primary barrier to accessing NSPs in Mexico is law enforcement. Despite the possession of needles and syringes being legal, police are known to destroy needles when interacting with people who inject drugs, therefore decreasing the effectiveness of NSPs and increasing the risk of unsafe practices such as needle-sharing.[12,45] To ensure the effectiveness of NSP programmes in Mexico, greater cooperation between health services and law enforcement is necessary. Other key barriers to access to NSPs include the fact that syringes provided by the government are not the gauge preferred by people who inject drugs, and government funding is limited to nine months of the year.[23]

From 2015 to 2018, Verter has operated three sites specifically serving women who inject drugs in Mexico, funded by a private women's rights foundation, Fondo Semillas. The programme, called Las Colectas, provides sexual and maternal health services, and support and care groups. Across the three cities, 100 women are estimated to attend the services regularly, and there are plans to share experiences with other organisations with the aim of expanding the service.[12]

Despite the low prevalence of injecting drug use in the region, there is still a clear need for NSPs to facilitate safe injecting practices among those who do inject drugs. A recent government study found that 41% of people who inject drugs in Colombia had shared a needle in the preceding six months.[7] In Argentina the figure is 32% for those who had ever injected drugs in their lives.[1]

Opioid substitution therapy (OST)

Latin America has one of the lowest levels of OST provision per person who injects drugs in the world,[40] with OST available in Colombia, Costa Rica, Argentina and Mexico.[4,9,10,12,16,22,46] This lack of provision reflects the low prevalence of opioid use in the region.

OST is publicly available in Colombia, in the form of 10mg and 40mg methadone pills.[9,16,22] However, significant barriers to accessing OST in the country have been noted, and it is increasingly used as part of a detoxification process rather than for harm reduction.[9] Demand for OST outstrips the capacity of the few existing facilities, formal identification is necessary to join the state health insurance programme, there are long waiting times for appointments with specialists, and many medical practitioners and patients still consider methadone therapy to be a case of replacing one addiction with another.[22] Women who inject drugs have been known to be excluded from OST centres, where some practitioners consider them to be difficult patients and even a distraction to the rehabilitation of men.[22] Additionally, stocks of methadone in the country have been known to encounter difficulties in reaching communities, leading to people who use opioids reverting to sourcing heroin or unregulated methadone from the black market.[16,23]

In Mexico, methadone is also available for OST. However, it can only be purchased privately at a cost to the person, and is only available at six centres in the three cities where injecting drug use is most concentrated: Tijuana, Mexicali and Ciudad Juárez.[12] Since 2016, methadone clinics in Nogales and San Luis Río Colorado have been closed due to a lack of government funding.[12] In Argentina, OST is available in both public and private institutions in Buenos Aires.[4] In Costa Rica, a single facility provides OST to a small number of people, including pain and palliative care patients, and healthcare professionals who use non-prescription opioids.[10]

Amphetamine-type stimulants (ATS), cocaine and its derivatives, and new psychoactive substances (NPS)

Harm reduction in nightclubs and festivals

In five Latin American countries (Argentina, Brazil, Colombia, Mexico and Uruguay), harm reduction interventions have been developed for the use of amphetamine-type substances (ATS) and new psychoactive substances in nightclubs and festivals.

Since 2012, Colombian NGO Acción Técnica Social has operated its Échele Cabeza (Use Your Head) drug-checking project at festivals and raves.[29] To date, the project has tested over 4,000 samples, with 75% of 2CB samples, 12% of ecstasy pills and 13% of MDMA powders testing negative for any trace of the expected drug.[16,28] Over 80% of service users chose not to consume samples that had tested negative, and from 2012-2017 the organisation saw a 25% reduction in adulterated samples and a 50% reduction in emergency room visits due to ATS use in Bogotá, which they attribute in part to the drug-checking service.[30] However, due to a lack of state funding, the project can only operate where private actors are willing to pay for the service, meaning that the most at-risk populations cannot access the services.[4,16]

Following the deaths of five young people due to stimulant use at a rave in 2016, civil society organisations

in Argentina successfully lobbied the city government in Buenos Aires to support them to carry out harm reduction interventions at festivals and raves.[4] Since early 2018, Proyecto Atención en Fiestas (PAF!) has been financially backed by the city and national governments to attend 28 events, where it has distributed informational flyers, condoms, fruit and sweets.[4,56] A motion was unanimously passed by the municipal council in Rosario to allow state-sanctioned testing of pills in bars and nightclubs, but was rejected by the city's executive.[57,58]

Drug-checking and information services have been operating in several Brazilian cities since 2011, in coordination with the Brazilian Harm Reduction Association (ABORDA).[4,59,60] Civil society organisations report that at least 31 such initiatives operate in the country, though they receive no public financial support and rely on volunteers and private funding.[4] In Uruguay, a drug-checking facility operated at an electronic music rave for the first time in 2016,[61] and the National Drugs Board has provided funding for harm reduction measures (including hydration points, specialised training for staff and awareness-raising campaigns).[62] Drug-checking programmes are also operated in Mexico by the ReverdeSer Colectivo, where ATS use has increased significantly in the last ten years.[4,12,63]

The World Drug Report 2017 notes that the use of hallucinogenic new psychoactive substances is increasing in South America, in particular derivatives of the psychedelic 2CB, a series of compounds whose use is associated with harmful and life-threatening intoxications.[3] In both Chile and Colombia, evidence has been found that samples sold as LSD actually contained 2CB.[3] The Échele Cabeza programme in Colombia found that 33% of LSD samples tested negative for LSD.[28]

Harm reduction services in nightclubs and festivals, particularly drug-checking, have been shown to be an effective way to reduce harm and deaths caused by illicit drugs. The introduction, expansion and funding of such projects has the potential to save many lives, and should therefore form part of the national drug strategy for all countries in the region.

Latin America has high prevalence of use of three forms of coca leaf derivatives: cocaine powder, crack cocaine and cocaine paste.[19] Crack cocaine and in particular cocaine paste are reported to be the most commonly used substances among many socio-economically deprived people who use drugs in Latin America.[21] Use of cocaine paste has been noted across South America, having previously been confined mostly to Colombia and Peru.[16,47] A 2015 study by the Organisation of American States found that crack cocaine use was higher in Central America, with general population prevalence in the region of approximately 0.3%.[19] Brazil is thought to be home to more crack users than any other country in the world, with an estimated 370,000 in 2014,[36] while Colombia is the world's largest cocaine powder producer and has the lowest-priced cocaine powder in the world (€5.40/gram).[3,48]

A key issue highlighted by harm reduction organisations is purity. Acción Técnica Social have found that only 4% of powder cocaine samples they tested at raves and festivals in 2017 contained more than 75% cocaine, and 5% contained no cocaine at all.[28] Frequent adulterants include levamisole, caffeine, local anaesthetics and dairy products.[16] Similarly, a 2015 study of the purity of smokable cocaine found proportions of adulterated samples ranging from 28.2% in Chile to 89.5% in Uruguay. Adulterated samples most often contained phenacetin, a local anaesthetic considered to have carcinogenic properties. Other common adulterants included caffeine and analgesics such as aminopyrine, paracetamol and lidocaine.[49]

A diverse range of facilities aiming to reduce and mitigate the consequences of crack and cocaine paste use, rather than eliminate it, exist across Latin America.[50] These range from low-threshold harm reduction services providing food, shelter and basic hygiene in Costa Rica[10] to more extensive programmes among people who use crack and cocaine paste in Argentina, Brazil and Uruguay. The Casa Masantonio project, opened in 2016 in Buenos Aires, Argentina, provides people who use cocaine paste with HIV, hepatitis C, tuberculosis and syphilis testing and treatment, as well as advice related to accommodation, employment, relationships and legal proceedings.[24] This is all provided free of charge, funded by the city of Buenos Aires.[4] As of May 2018, it had an adherence rate of 92%.[4] A similar service for crack and alcohol users, Casa Normal, opened in 2018 in Rio de Janeiro, Brazil.[4] In Colombia, an initiative reducing harm among people smoking cocaine paste previously operated in Bogotá, but was closed in early 2017 by the new mayor.[16] Acción Técnica Social in Colombia has developed an as-yet unfunded project to distribute safer pipes to cocaine paste users, and to use coca leaves for substitution therapy.[16] Pilot projects have operated in Brazil, Colombia and Uruguay using cannabis as a means of controlling crack cocaine use.[34]

A recent report from Mainline, a Netherlands-based harm reduction organisation, highlighted projects that view the use of cocaine derivatives as a symptom of wider social challenges, and implement a harm reduction approach. The Atitude project in four cities in the Brazilian state of Pernambuco is fully financed by the state government to assist people who use crack cocaine.[51] It provides four services. An outreach service in areas with a high level of drug-related crime offers information, water, condoms and family counselling. Night shelters and drop-in centres provide around 30 clients per day with a space to sleep, wash and attend workshops, as well as eat two meals per day. Intensive shelters offer stays of up to six months with joint meals, housekeeping tasks and participation in groups and workshops, where people can acquire skills which can be used in the labour market. One intensive shelter is for use only by women and transgender women who use drugs, with a focus on those threatened by violence, who are pregnant or who are mothers. Finally, Atitude offers an independent social housing programme, which provides accommodation at low rent for up to one year, and also includes a monthly food parcel.[51] In evaluations of the project, Atitude's clients report increased self-care, strengthened family relations, increased sociability and protection against violence, and a feeling of being welcomed and respected.[51,52] These effects are particularly strong among those enrolled in the social housing programme.[51] Substance use is not permitted within the project's facilities, as this would risk closure of the project, but clients are permitted to leave the building to use drugs, and are not excluded for ongoing drug use.[51] While providing a positive experience to clients able to access the service, Atitude is consistently over-subscribed and cannot provide services to all people who use crack cocaine who need them.[51] Staff are also concerned that current political developments in Brazil may create a considerably more challenging legal and financial environment for the project in the future.[51]

Another project, Achique de Casavalle, provides support for social and labour-market integration to people who use cocaine paste in Montevideo, Uruguay. Funded by a mixture of city, state and national government bodies, the project provides a low-threshold drop-in centre, where service users prepare and eat meals together, can access personal hygiene and therapeutic services, and attend group leisure activities, as well as employment-oriented courses including computer use, carpentry and construction.[51] Like Atitude, Achique de Casavalle focuses on increasing the self-esteem, independence and autonomy of its clients. However, it also suffers from a lack of resources: there is no computer or internet connection on site, and it lacks the staff necessary to accompany clients to referral services. Staff at the project also report that access for women is insufficient. Many women who use cocaine paste in the area are mothers, but Achique de Casavalle is unable to accommodate children.[51]

In the 2016 edition of the *Global State of Harm Reduction*, it was reported that the De Braços Abertos (Open Arms) project in so-called Crâcolandia, a stigmatising name for the open crack scene in São Paulo, Brazil, was to be closed under the city's new mayor, João Doria.[29] Since then, De Braços Abertos has been replaced by the new Redenção (Redemption) project. Whereas De Braços Abertos provided health, employment and accommodation support to people who use crack with no precondition of abstinence or treatment,[29] Redenção rejects the harm reduction approach.[4] There have been reports that it requires that participants abstain from crack use and undergo mandatory drug tests or face eviction from the programme, though civil society organisations report that this has not yet happened.[53,54] In its first eight months, Redenção saw an adherence rate of just 17%.[55] In early 2017, there was a significant armed police operation to clear Crâcolandia. Local health workers have been recorded as saying that this operation increased mistrust of state services among people who use drugs, meaning they are less likely to access remaining health and harm reduction services.[36] Projects similar to De Braços Abertos continue to operate elsewhere in Brazil, but many across the country have faced similar repressive government action since the 2016 municipal elections.[6]

Overdose, overdose response and drug consumption rooms (DCRs)

Since the *Global State of Harm Reduction* last reported in 2016, opioid overdose response mechanisms in Latin America have stalled or reversed. Naloxone, a highly effective opioid receptor antagonist used to reverse the effects of an overdose, had previously been available outside hospitals in Paraguay, Colombia and Mexico.[12,22,64] Despite being on the WHO List of Essential Medicines,[65] there is no indication it remains available in Paraguay in any context. In Colombia, a naloxone peer-distribution programme operated by Acción Técnica Social saved 70 lives from 2014 to 2017, and included peer training in naloxone use and distribution.[16] However, this programme was discontinued in 2017 due to Ministry of Health regulations stating that naloxone is only available for use in hospitals.[16,22] New Ministry of Health guidelines on naloxone were due to be published in 2017, but there is no sign of their publication.[16,22]

In Mexico since 2016, naloxone has been made available in Tijuana, Mexicali, San Luis Río Colorado and Ciudad Juárez. In Mexicali and San Luis Río Colorado, Verter has established peer distribution networks for naloxone, and La Casa del Centro has created a network in Tijuana.[12,23] At the time of publication, distribution of naloxone has been minimal, with only 200 doses distributed in Verter's programmes.[12]

Naloxone's availability remains highly limited across the region. The primary barriers to its distribution are a lack of funding and restrictive legislation.[12,22] Naloxone has been shown to be highly effective in reducing overdose deaths, particularly when doses and training are made accessible in the community.[66] For this reason, peer distribution of naloxone, such as the limited programme in Mexico, should form part of the harm reduction programme in those areas in the region where opiate use is prevalent.

Although no state-sanctioned drug consumption rooms exist in the region, a small facility run by Verter in Mexicali, Mexico provides a safe space for women to inject drugs as part of the Las Colectas project.[12] The facility is limited to those already involved in other Las Colectas programmes for women who inject drugs.[12] Civil society organisations note that they expect the region's first official drug consumption room to open in Mexicali in 2018,[12] and that debates were held on their implementation in the Colombian congress in 2017.[9,22] However, during the 2017 presidential campaign, the new president of Colombia, Iván Duque, committed to blocking the introduction of such facilities.[16]

Viral hepatitis

Data on viral hepatitis among people who inject drugs is sparse and largely outdated in Latin America. Hepatitis C prevalence among people who inject drugs in the region has been recorded ranging from 6.7% in Bogotá, Colombia to 96% in two cities in Mexico, with a pooled regional prevalence of 49% according to a 2015 systematic review based on research carried out between 2000 and 2013.[7,67] This is in line with the worldwide estimated prevalence of hepatitis C among people who inject drugs of 50%.[67,68] The same systematic review estimated hepatitis B prevalence of 3.3% among people who inject drugs in the region.[67,68]

The integration of viral hepatitis services with HIV and harm reduction services remains sporadic in Latin America. In northern Mexican cities where injecting drug use is more common, state-funded hepatitis C diagnostics and treatment are available to people who injects drugs[12]. By contrast in Colombia, hepatitis C services are only intermittently integrated with HIV and harm reduction services.[9,16]

Four Brazilian studies published since 2016 have found evidence suggesting people who use crack and cocaine paste are also more vulnerable to viral hepatitis infection. Studies have suggested that this is associated with sharing pipes (with blood transferred from bleeding lips or gums) as well as higher-risk sexual practices.[25-27,69,70] The Casa Masantonio project in Buenos Aires, Argentina opened in 2016, and integrates hepatitis C treatment into harm reduction services for cocaine paste users.[24]

The need to address viral hepatitis among people who use drugs is clear from Table 2.5.1. It is essential that diagnosis and treatment is routinely integrated into harm reduction services, and that more data is collected on viral hepatitis prevalence among people who use drugs.

Tuberculosis (TB)

TB incidence in Latin America is generally high and stable. For example, in 2016 there were 117 cases per 100,000 people in Peru and 42 per 100,000 in Brazil, representing only minimal declines since 2014.[71] Although data on TB prevalence among key populations is lacking, research suggests higher prevalence among people who inject drugs and prisoners than the general population.[3,72]

TB testing and treatment is generally available across the region; for example it is offered free of charge or on state insurance in Brazil, Argentina and Peru.[24,73,74] However, targeted TB services for people who use drugs are lacking. TB diagnosis and treatment is not integrated into HIV or harm reduction programmes for people who inject drugs in Colombia or Mexico.[12,16] As with viral hepatitis, cocaine paste and crack use is associated with higher TB prevalence. The Casa Masantonio project in Buenos Aires, Argentina, integrates TB in its work with cocaine paste users.[24]

HIV and antiretroviral therapy (ART)

In Latin America, new HIV infections among the general population have plateaued since 2010 having previously been declining, though small decreases were noted in 2015 and 2016.[39] There is considerable variation in trends across the region: Colombia and Nicaragua both saw decreases of over 10% in the number of new HIV infections between 2010-2016; Chile, Costa Rica, Guatemala and Honduras all saw increases of more than 10%.[39]

Of particular concern for HIV response in the region is the case of Venezuela. Since the escalation of the deep political and economic crisis in 2015, HIV prevention has largely collapsed, with 95-100% of hospitals holding no stock of antiretroviral drugs and the government unable to supply even basic means of prevention such as condoms.[75,76] Isolated and indigenous communities have been particularly affected, with HIV prevalence of around 10% and rising by 10% each year in some communities, with no state capacity to respond to the epidemic.[77]

Data on HIV among people who inject drugs is scarce. A Colombian study published in 2017 estimated HIV prevalence among people who inject drugs in the country at 5.5% (compared with the general population prevalence of 0.4%).[8,78,79] In several countries, including Costa Rica, Mexico and Colombia, ART is unavailable or limited for people currently using drugs despite being available to the general population, with a lack of adherence cited as a reason.[9,10,12] This is in contrast to evidence from several studies suggesting there is no clear link between drug use and ART adherence, particularly when the person is receiving OST.[80-82] Additionally, in Colombia people must provide formal identification in order to access ART, making people who use drugs less likely to access services for fear of criminal repercussions and social stigma.[16] Recent developments in the region have made pre-exposure prophylaxis and post-exposure prophylaxis for HIV – courses of medication that can reduce the chances of HIV infection either before or after exposure to the virus – available to key populations such as men who have sex with men. However, neither is currently available to people who inject drugs anywhere in the region.[39]

High HIV prevalence has been found among crack and cocaine paste users as well as people who inject drugs. A 2017 study found prevalence of 2.8% among people who use crack in Goiás, Brazil, compared with a national general population prevalence of 0.6%.[69,79] It is suggested that this is associated with pipe-sharing and higher-risk sexual behaviour, as has been shown by studies in Mexico and Brazil.[25–27] HIV treatment is integrated into harm reduction services for cocaine paste users in the Casa Masantonio project in Buenos Aires, Argentina;[24] however, outside this example, the population remains underserved in terms of a specialised response to HIV.

Harm reduction in prisons

As of 2016, there were approximately 1.4 million people incarcerated in Latin America, with a total incarceration rate of 242 per 100,000.[83] This population has grown over the past decade, but the growth of the population incarcerated for drug offences has been significantly faster. In Brazil from 2006-2014, the general population grew 8%, the prison population grew 55% and the population of people imprisoned for any drug offence grew 267%.[84] In Colombia from 2000-2015 the figures are 19%, 142% and 289% respectively.[84] In Argentina from 2002-2014 they are 13%, 49% and 127%.[84] It is estimated that 20% of the region's prisoners have been detained for drug-related offences.[84] The specific drugs involved vary by country. For example, in Colombia the most common is cocaine (47% of cases), while in Mexico and Brazil it is marijuana (62% of cases in both).[84,85]

Though drug use and/or possession for personal use is decriminalised in some Latin American countries, these laws are often not implemented by law enforcement at street level.[84,86,87] In practice, consumption and possession for personal use remain criminalised. Across the region, it is estimated that 25% of those in prison for drug offences in Latin America are there for crimes related to consumption.[84,85]

Of particular concern is the rapid increase in the number of women incarcerated for drug offences. In Latin America, women are more likely than men to be convicted of non-violent drug offences, occupy low levels in the drug trade and tend to be primary caregivers.[84,88] For example, since 1991, the number of female prisoners in Colombia has increased by 5.5 times (compared with 2.9 times for men) and 93% of women in prison are thought to be mothers.[89] As a result of this trend, which is replicated across the region, a phenomenon has been noted in Argentina and Bolivia of children of women incarcerated for drug offences living inside detention centres with their mothers.[90,91] Approximately 600 children as old as 12 were living in Bolivian prisons with one or both parents in 2017.[92] A recent Inter-American Commission on Human Rights report recommended that states take gender into account in the judicial treatment of women who use drugs and women in the drugs trade, in order to limit the wider effects of incarceration on children and families.[88]

The region has a high proportion of prisoners in pre-trial detention.[84,88] In some countries, for example Mexico, pre-trial detention is obligatory for all drug offences (including possession and consumption). In others, such as Costa Rica, where pre-trial detention is not obligatory, it is often extended for drug offences.[84,93] This practice of applying compulsory pre-trial detention to a specific category of offence has been condemned by the Inter-American

Commission on Human Rights, on the grounds that it frequently represents a punishment disproportionate to the crime committed.[88]

Many Latin American prisons are characterised by overcrowding, violence, and scarce hygienic and medical resources.[84,86,94] HIV, hepatitis C and TB prevalence are all elevated among Latin American prisoners compared with the general population, with health risks also transferred to non-prisoners who visit or work in prisons.[84] A recent study of prisoners in Argentina found an HIV prevalence of 2.68%, rising to 44.6% among prisoners with a lifetime incidence of injecting drug use. This pattern was mirrored in the prevalence of both hepatitis C and hepatitis B.[72]

Access to harm reduction services for people who inject drugs in prisons is severely limited; currently no country in Latin America offers NSP or OST in prison. Prior to 2016, NSP services operated in two Mexican prisons (in San Luis Río Colorado and Mexicali).[12] As of 2018, however, neither Mexico nor Colombia, where NSP and OST are available to the general population, offer NSP or OST in prisons.[12,16,22] Condoms, HIV testing and ART are available in both Mexican and Colombian prisons, but hepatitis C treatment is available in neither.[12,16]

As in the continent at large, injecting drug use is largely absent from prisons in most countries in the region.[10] However, use of cocaine (as powder, crack and paste) has been documented in the region's prisons.[10,72,95] Harm reduction services for people who use cocaine are also largely absent in this setting.

Since 2012, drug treatment courts have operated in several countries in the region, with the aim of removing people who use drugs from the penal system. This option officially is available only to first-time offenders with diagnosed drug dependence, though it is frequently used for people accused of simple possession.[94] However, an emphasis on abstinence and drug testing limits both the efficacy and the harm reducing potential of these programmes.[94] The Inter-American Commission on Human Rights has noted that the use of drug courts in parts of the region has resulted in the criminalisation of drug possession or use, rather than providing a public health alternative to the criminal process.[96]

As noted in the *Global State of Harm Reduction 2016*,[29] privately run (though sometimes publicly funded) forced rehabilitation centres that violate the human rights of people who use drugs exist in several countries in Latin America. This continues despite the practice being condemned by the UN Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, and the UN Special Rapporteur on health. In most, medication for withdrawal and even trained medical staff are unavailable.[97]

Policy developments for harm reduction

In 2016, the *Global State of Harm Reduction* reported that Latin America was experiencing a shift away from a punitive approach to drug use and towards a model favouring harm reduction.[29] Policy developments in favour of harm reduction in the region have slowed or stalled over the past two years, though. In Brazil, a new government came to power in 2016, and in 2018 implemented a new drug strategy explicitly rejecting the harm reduction approach and closing several programmes.[6,98] At both a national and a local level, similar developments have been seen in Argentina, Colombia and in São Paulo, Brazil.[4,16,52]

Despite these setbacks, harm reduction continues to progress in other parts of the region. In January 2017, the Costa Rican government, with the involvement of civil society groups, published a National Harm Reduction Model as part of national drug policy, with the explicit objective of implementing harm reduction services.[10,99] Costa Rica has promoted harm reduction on the world stage, with statements in favour during the UN General Assembly Special Session on Drugs in 2016 and a side-event on harm reduction at the Commission on Narcotic Drugs in 2018.[10,100] In Mexico, a commitment to harm reduction was included in the government's 100 day action plan on HIV prevention submitted to UNAIDS in 2018.[101]

The Colombian national government remained supportive of harm reduction programmes up to 2018, and the Ministry of Health has developed guidelines on harm reduction (including the distribution of naloxone). However, the publication of these guidelines has been delayed without explanation.[16,22] The peace deal signed in 2016 between the Colombian government and the Fuerzas Armadas Revolucionarias de Colombia (FARC) guerrilla group includes a commitment to take a human rights and public health approach to illicit drug consumption, and specifically references the role of harm reduction.[103] Despite this, civil society organisations report that few policy steps have been taken to implement the peace agreement, and a 2017 reform to the police code introduced new sanctions for those found in possession of illicit drugs.[16,22]

The election of Iván Duque as president of Colombia in June 2018 has cast further doubt on the future position of the Colombian government. Though Duque has a history of supporting harm reduction programmes, including a bill to introduce drug consumption rooms, his presidential campaign focussed heavily on a law enforcement-oriented approach to drugs.[22,104] This included criminalising possession for personal use, rejecting harm reduction programmes and opposition to the 2016 peace deal.[16,104]

The political pendulum

Since 2016, harm reduction in Latin America has been shown to be highly vulnerable to electoral outcomes, and to changes in public opinion at the local and national level. The pendulum effect brought on by changes in local or national administrations can make long-term planning and consistent service delivery difficult.

The case of Crâcolandia, São Paulo's massive open drug scene, is representative of this issue. Local elections occurring every four years have triggered overhauls of the local government's approach to crack use in the city. The abstinence and rehabilitation-centred Recomeço project operated under state government control before 2012, when it was joined by the city government-funded, harm reduction-led De Braços Abertos project from 2014-2016.[4,29,54] Since 2016, De Braços Abertos has been replaced by Redenção in a return to abstinence-focused projects.[4,53] Civil society organisations identify these swings between administrations in favour of and against harm reduction as a reason for Crâcolandia's resilience.[36] Civil society programmes operating while state-led harm reduction is absent are interrupted when the state enters their space, and are unable to build legitimacy.[36] The progress made under the state-led De Braços Abertos project, particularly in establishing trust between healthcare workers and Crâcolandia residents, was lost once the project was closed and civil society organisations fear it will be difficult to regain.[36,55] In this way, swings between political positions (not only the direction of political travel) have had a negative impact on the delivery of harm reduction programmes. This process has been mirrored in other parts of Brazil, where the national government, installed in 2017, has turned away from harm reduction and closed the majority of state-sponsored programmes.[6,98]

Cyclical changes in levels of political commitment have also had an impact in Colombia. At times when local governments are in favour of harm reduction, state agencies operate the programmes with no operational input from civil society (sometimes as a result of donor conditions stating that services must be provided directly by the state).[16] This means that civil society groups are unable to build operational capacity, and therefore cannot provide services when the pendulum swings and the programmes are closed by the state.[16] In Bogotá, a recent change in city government has led to the closure of NSP and OST programmes, with civil society ill-equipped – both financially and operationally – to fill the gap.[16] This has left people who inject drugs in the city without harm reduction services.

Presidential elections in 2018 in Brazil, Colombia and Mexico have had the potential to advance or reverse harm reduction in each country, with leading candidates on both sides of the debate in all three elections.[9,105-107] Civil society organisations have expressed concern that as long as there is no consensus among the political class on the benefits of harm reduction, there will always be a degree of uncertainty about their financial and legal sustainability.[36] This is particularly relevant at a time when international donors are withdrawing from the Latin America region.

Civil society and advocacy developments for harm reduction

The Latin American Conference on Drug Policy continues to provide a forum for civil society to network, share experiences of best practice and develop advocacy strategies for harm reduction.[52] The seventh iteration of the event was held in Mexico City in conjunction with the Mexican Conference on Drug Policy in October 2018, and sought to assess the current challenges in Latin American drug policy, the strength of the global reformist movement and proposals for the future of drug policy in the region.[108]

Latin American regional meetings have taken place to discuss broadening the definition of harm reduction to include the wider social consequences of drug policies[4]. These three meetings, held in Argentina, Uruguay and Brazil, have established a network of activists, academics and government officials that acts as a collaborative group, updating its members on progress and setbacks of the harm reduction movement across Latin America.[4,109] The first meeting, held in Buenos Aires with participation

from Argentina, Brazil, Uruguay and Paraguay, produced a document that was widely distributed among different harm reduction groups in the region, sharing experiences in harm reduction implementation.[109] The third of these meetings, held in Rio de Janeiro, produced the Letter from Manguinhos, calling for the protection of harm reduction programmes in the face of a growing wave of conservative politics and drug policy in Latin America. It also called for the inclusion of wider social issues into the harm reduction arena, such as the way drug policies have been used to target marginalised populations (e.g. women, indigenous peoples, black, LGBTI and youth).[4,110]

Civil society groups, including Intercambios with support from the International Drug Policy Consortium, successfully opposed an amendment to the Argentinian National Mental Health Law that would have removed the obligation for the government to treat addiction as a mental health issue in Argentinian law, allowing for an expansion in the use of involuntary detention (either in prison or mental health facilities) for people who use drugs.[4,111,112] Also in Argentina, an open letter was written in 2016 by 253 magistrates urging the government to enact a drug policy based on principles of human rights and harm reduction, rather than criminalisation and law enforcement.[4,113]

The Latin American Network of People who Use Drugs (LANPUD) was founded in 2012 and continues to advocate on behalf of people who use drugs in the region, including signing the Letter from Manguinhos in 2017.[110] In Brazil, two harm reduction networks, ABORDA (Associação Brasileira de Redução de Danos, Brazilian Harm Reduction Association) and REDUC (Rede Brasileira de Redução de Danos e Direitos Humanos, Brazilian Harm Reduction and Human Rights Network), have worked to create national networks of people who use drugs,[6] complementing the work of LANPUD.[29] A new Brazilian initiative launched in 2017, Intercambiantes, seeks to maintain a network of information on harm reduction programmes, conferences and meetings, publications, at the intersection of mental health and drug use[4]. The Black Initiative for a New Drug Policy and the National Network of Anti-Prohibitionist Feminists aim to broaden the debate about drug policy to include the specific impacts on the black community and women respectively.[4,114]

Although the Mexican Network for Harm Reduction has not been through any major developments since 2016, a meeting of civil society organisations in the country was held to present harm reduction proposals to the national HIV prevention body.[12] In Argentina, 22 organisations from five provinces created a network, launched on 26 June 2017, to advocate for the decriminalisation of drug users, less strict sentencing for low-level drug crime and drug policy focused on health outcomes and harm reduction.[4] This was followed up in 2018 with a campaign based on the principles of Support. Don't Punish, highlighting the specific problems faced by women who use drugs.[115]

Civil society groups in both Colombia and Costa Rica have been advocating for harm reduction policies. Colombian organisations have actively contributed to United Nations meetings supporting changes and reforms in drug policy,[9] while in Costa Rica, the new national harm reduction model was developed with the participation of civil society.[10] The Costa Rican Association for Study and Intervention on Drugs (ACEID), has used the Support. Don't Punish campaign to organise various high-level meetings with policy makers on the need for drug policy reform and harm reduction, and in 2016 held a workshop for NGOs working with the Global Fund on harm reduction.[10] Colombian civil society groups remain optimistic that they are in a stronger position to oppose the new presidential administration's prohibitionist agenda than they were under the similarly inclined presidency of Álvaro Uribe two decades ago.[16]

In April 2018, Colombian organisation Acción Técnica Social held its third Semana Psicoactiva (Psychoactive Week) conference on public policy to address psychoactive substances, with a strong emphasis on harm reduction. The conference brought together projects from across the Americas.[16] Discussions and workshops were held on themes such as heroin use in Latin America, the role of psychoactive substances in the transmission of sexually transmitted diseases, and substance analysis of new psychoactive substances.[116]

Funding developments for harm reduction

As reported in the 2016 edition of the *Global State of Harm Reduction*, the Global Fund and Open Society Foundations (OSF) have been the significant international donors funding harm reduction programmes in Latin America.[4] Both funded NSPs and OST in Mexico and Colombia before 2016; however, since 2016 the Global Fund has gradually withdrawn funding.[9,12,16,22] While efforts have been made by donors and civil society to ensure alternative sustainable funding is found, these have sometimes been unsuccessful. For example, in Cali and Pereira, Colombia, harm reduction measures have been funded by a combination of the Ministry of Health, National Drug Fund, local government

funding and OSF, since the withdrawal of the Global Fund. However, in other cities, such as Bogota and Dosquebradas, harm reduction programmes have been closed.[22] Under the revised Global Fund Eligibility Policy, Argentina, Brazil and Mexico remain ineligible for funding.[4,117]

Civil society organisations in Colombia have raised concerns that the requirement for Global Fund resources to be managed by the state leads to bureaucratic delays and inefficiency. For example, non-governmental organisations only received their funding for 2017 in July of that year, meaning that they had only six months to achieve targets intended for the entire year.[16] They also fear that the explicit involvement of the state in all projects may dissuade people who inject drugs from accessing services.[16] Reducing barriers for civil society organisations to access funds directly may help to alleviate these issues.

A key funding issue reported by civil society organisations is a focus on HIV programmes by both international donors and national governments. For example in Colombia, Global Fund support has prioritised programmes with an explicit HIV-prevention dimension (such as NSPs), leaving few financing opportunities for forms of harm reduction without an HIV focus.[22] In Mexico, the only state funding for harm reduction comes through the national HIV programme; this means that harm reduction organisations compete with those working with other key populations, such as men who have sex with men and sex workers. The result is that, on average, only five harm reduction projects per year receive government funding.[12] In Costa Rica, Global Fund support for harm reduction is only available for projects working with people who inject drugs, despite high HIV prevalence among people who use smokable cocaine, meaning that this population has no access to harm reduction services and abstinence-based models prevail.[10]

With respect to national government investment, Resolution 518/2015 in Colombia allowed territories to pay for harm reduction measures from the Public Health Fund. However, the amount available is insufficient and there are other priorities that compete for these funds.[9] Similar issues have been faced in Costa Rica, where the national harm reduction model states support for civil society organisations, but no funding has been made available.[10] There is a clear, urgent and demonstrated need for declarations of political support for harm reduction programmes to be accompanied by financial support.

As international donors withdraw from the region, the trend has been an increase in the proportion of harm reduction funding provided by national governments. When harm reduction services were first implemented in Colombia, 90% of funding came from international donors and 10% from national government; today civil society organisations estimate that 75% is from international donors and 25% from national government.[9,16] However, national funding consistently falls short of what international donors have previously provided, leaving services without a sustainable source of financing and unable to provide continuous services to vulnerable populations.[16]

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Regional Overview
2.6 North America

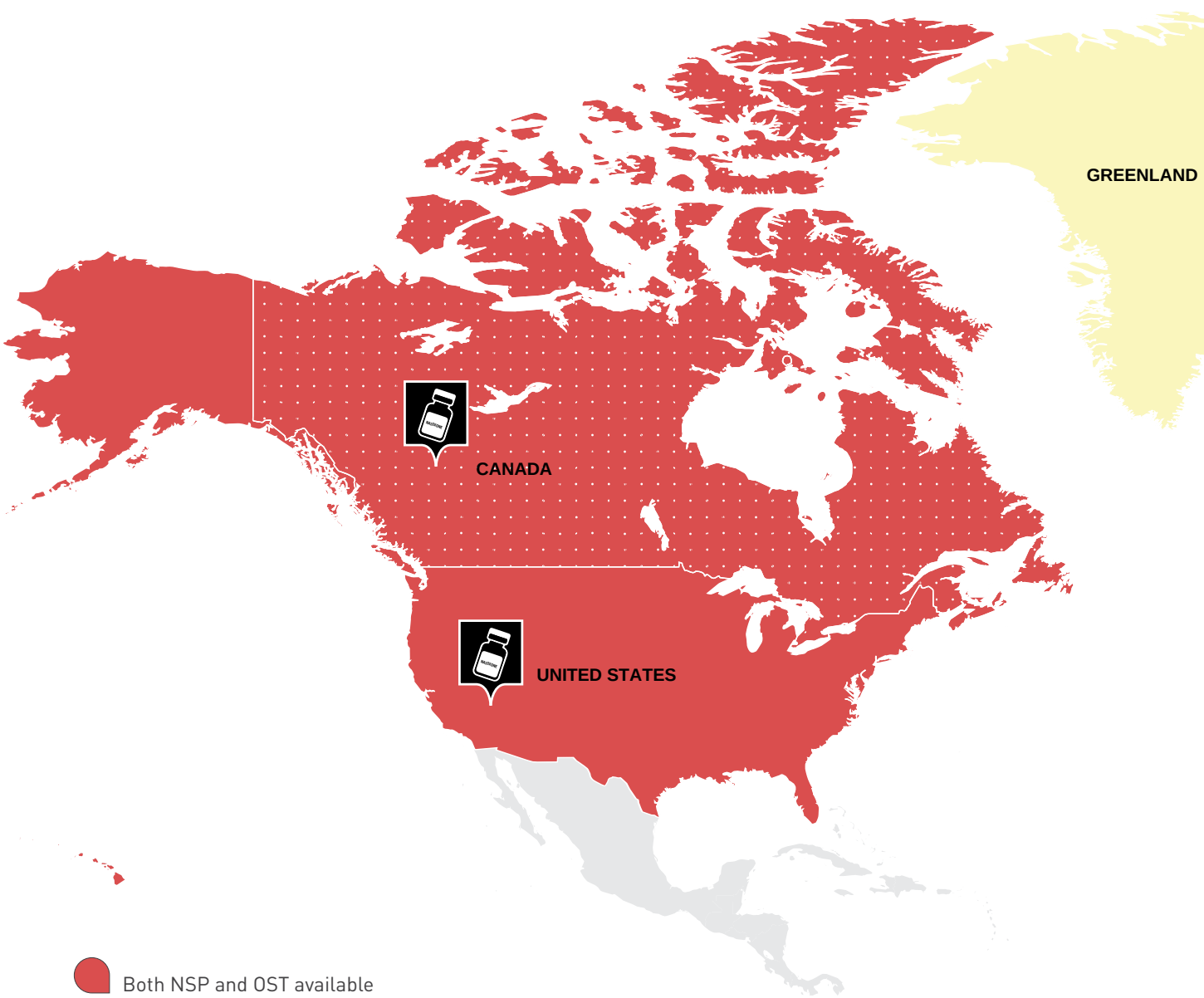
Table 2.6.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in North America

Country/territory with reported injecting drug use[a]	People who inject drugs	HIV prevalence among people who inject drugs(%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs(%)	Harm reduction response[i]			
					NSP[b]	OST[c]	Peer-distribution of naloxone	DCRs[d]
Canada	90,000 (72,000-108,000)[1]	11%[2]	68%[3]	nk	✓[4,18]	✓[4,18] (M,B,BN,O)	✓[4,18]	✓26[4]
United States	2,248,500[5]	8.7%[5]	53.1%[5]	4.8%[5]	✓335[6] e	✓[15] (M,B,BN,O)	✓[15]	x

nk – not known

a There are no identified reports of injecting drug use in Greenland.
b The number in brackets represents the number of operational NSP sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers.
c The number in brackets represents the number of operational OST sites, including publicly and privately funded clinics, and pharmacy dispensing programmes. (M) = methadone, (B) = buprenorphine, (BN) = buprenorphine-naloxone combination, (O) = any other form (including morphine and codeine).
d DCR = drug consumption room, also referred to as a safer injecting facility (SIF), a safe injecting site (SIS) or an overdose prevention site (OPS).
e These services operate in 44 of the 50 states, as well as in Puerto Rico. However, the number in Table 2.6.1 does not include Puerto Rico and civil society state that the actual figure in the table is higher as it does not include NSPs which operate clandestinely.

Map 2.6.1: Availability of harm reduction services



Harm reduction in North America

Overview

North America is estimated to have 17% of the total number of people who inject drugs in the world, and the highest prevalence of past-year opioid use.[7] During 2015, an estimated 47.7 million people in the United States (US) used illicit drugs or used prescription drugs for non-medical purposes, 2% of which were stimulants,[8] the second most commonly used drugs after cannabis in the region.[7] In Canada, 13% of people had used at least one illicit drug in the past year,[f] an increase of 2% since 2013.[9]

The prevalence of opioid use is particularly high in North America, and the region continues to experience the world's highest drug-related mortality per capita.[7] The US now has the fastest annual percentage rise of drug-related fatal overdose ever recorded, with an increase of 21.4% between 2015-2016 alone.[7] In Canada, opioid-related deaths have also dramatically increased: 72% of deaths involved fentanyl or fentanyl analogues in 2016, and 81% of overdose deaths in Canada were linked to fentanyl.[7,10] Fentanyl and its analogues are synthetic opioids which can be 50 times more potent than heroin and 100 times more potent than morphine. Canada reports 92% of its opioid-related deaths as accidental/unintentional.[10] The worrying increase in opioid-related overdose deaths has been met with a public health response which broadly encompasses the principles of harm reduction, but to differing extents in the US and Canada.

Needle and syringe programmes (NSPs) have been scaled up in the US and Canada overall. In Canada, provinces and territories are responsible for providing public health harm reduction services such as NSPs, and therefore information is not tracked at the national level.[11] However, it is estimated that 94.5% of people who inject drugs used sterile injecting equipment at last injection. In the US, 335 NSPs operate across the country,[6][g] an increase of 91 in total and a 37.3% rise in programmes since the *Global State of Harm Reduction* last reported.[12] OST provision is less well established in the US and was only available in 8.5% of all facilities, both public and private, which can provide the medication.[h][13] In Canada OST is available in all ten provinces (but there is no national-level figure for the total number of sites across the country).

Scaled up naloxone provision and the establishment of drug consumption rooms (DCRs) or safer injecting facilities (SIFs) have been critical to the overdose response in this region. In 2016, the Canadian Ministry of Health replaced the National Anti-Drug Strategy with the Canadian Drugs and Substances Strategy, which includes harm reduction as one of its four core pillars.[14] This ushered in a number of developments in harm reduction, including a regulatory amendment making naloxone[i] available without prescription (enabling pharmacies and others to proactively distribute the medicine to those who might experience or witness an opioid overdose) and new front-line harm reduction interventions.[14] At the time of publication there were 26 supervised consumption sites granted licenses in Canada, a scale up of 24 since the *Global State of Harm Reduction* last reported.[4]

In the US, community-based naloxone programmes are in operation, but the greatest barrier to distribution is its status as a prescription medication, making wider peer/community distribution more complex.[15][16] In September 2018, the governor of San Francisco rejected legislation which would have authorised the establishment of the first SIF in the US.[17] Other US cities that have recently voiced support for the implementation of DCRs include New York City, Seattle, Denver, Ithaca (NY) and Philadelphia.[15]

A noteworthy harm reduction development in this region is the increased availability of fentanyl testing strips, which have been distributed nationally in the US since 2016 through harm reduction programmes and activists,[15] and are available at harm reduction sites and within some DCRs operating in Canada.[4,18] Drug-checking services have been funded on a pilot basis by the Canadian government and operate to varying extents across the region for opioids and other drugs, such as MDMA, methamphetamines, cocaine and LSD.

Given that North America has the highest annual prevalence of amphetamine-type stimulant (ATS) use in the world,[7,8] the harm reduction response for people who use stimulants continues to fall short of need, and there remains a need to support the development, evaluation and expansion of harm reduction interventions specific to ATS use.[19,20] There is one best practice harm reduction programme for people who stimulants in Toronto [19] (please see ATS section, p.9).

Although certain harm reduction interventions have been scaled up in the community, provision of harm reduction in prisons continues to be

f Year: 2015.
g This figure does not include Puerto Rico. Please refer to the Caribbean chapter (p81) for information on Puerto Rico.
h Estimates based on data gathered between 2006 and 2016.
i Naloxone is a highly effective opioid antagonist used to reverse the effects of opioid overdose in minutes.

woefully inadequate, falling far short of meeting both international human rights and public health standards.[21] In the United States, one in nine arrests are for drug possession,[22] and 47% of people incarcerated in federal prison are sentenced for drug offences.[23]

This regional chapter highlights a distinction between the United States and Canada. Under the current US administration, the "War on Drugs" and abstinence-focused rhetoric drive punitive approaches, disproportionate criminal penalties and resistance to harm reduction interventions (including SIFs and naloxone distribution). This punitive approach further manifests in involuntary confinement and forced treatment (in places like Massachusetts, Pennsylvania, New Jersey and Wisconsin) and discriminatory criminalisation of black and Latinx[j] people for drug-related offences.[24,25] Even given the difficult political climate, civil society organisations all over the United States continue to promote and practise evidence-based harm reduction. In contrast, the Canadian government has publicly, politically and financially committed to and endorsed harm reduction.

As in every other part of the globe, there remains a distinct lack of harm reduction services for women in the region.[26,27] Women who use drugs face a range of gender-specific barriers to accessing harm reduction programmes and healthcare services and, in some states in the US, may face prosecution for child abuse for using drugs while pregnant, or may have their children removed by the state on grounds of drug use alone. [28,29]

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

NSPs operate in both Canada and the US, with the US seeing an increase in the number of states operating these services since 2016. The US now has 335 NSPs operating across the country,[6][k] an increase of 91 in total since 2016,[12] equalling a 37.3% rise in programmes. The US also saw its first NSP vending machine open in Las Vegas in 2017.[30] The increase in NSPs is a result of the federal government changing its position on NSPs, leading to a partial repeal of the ban on federal funding for this service. While the use of federal funds to purchase sterile needles or syringes to inject illicit drugs remains prohibited, the Consolidated Appropriations Act 2016 enables federal funds to be allocated to other aspects of NSPs, including HIV and HCV testing, naloxone provision, human resources, rent and other expenditures needed to keep them in operation.[15,31] The partial repeal of the ban on federal funding has had the most impact across the Appalachian region and in the Southern states.[15] In the Appalachian region in 2013, prior to the government changing its legal position on NSPs, only one service was operational, with NSPs illegal in Kentucky and North Carolina.[32] Since the partial repeal of the ban, both Kentucky and North Carolina have legalised NSPs; there are now 53 NSPs in operation across these two states. [32] North Dakota, Montana and Michigan have also seen an increase in NSPs.[15] Although NSP coverage has improved in some states, provision of this service overall remains patchy, with other states, such as Iowa, having only one registered NSP in operation.[6]

The United States saw annual HIV diagnoses among people who inject drugs decrease by approximately 48% between 2008 and 2014.[33] Of note, however, is a shift in trends in injecting drug initiation and unsafe injecting practices. Overall heroin use, for example, has increased more than 114% among white people,[15,33] and 46% of new injectors (people who have been injecting drugs for a period of five years or less) are reported to practice unsafe injection, such as the sharing or reusing of needles and syringes.[33]

Large hard-to-access rural areas are often neglected, and major gaps in service provision exist in the Mountain, South and Midwest regions of the US, where there is sometimes no NSP access at all.[15] These states, due to sanctions and funding, leave people with no safety net, and rural outreach is often a tricky and costly pursuit when not utilising peers and community health workers.[15] Pregnant or parenting women are also often fearful of seeking services from NSPs due to stigma and punishment, which forms a major barrier for them. While targeted efforts to reach women exist, they are limited and often small-scale.[26] Awareness and cultural relevance of NSPs also remain issues, which not all services are addressing. The vast majority of messaging and materials cater to people who inject opioids, unintentionally excluding populations which would benefit from harm reduction tailored to ingestion techniques, particularly given the changing cohort of people who use opioids in the United States.[15]

In Canada, provinces and territories are responsible for providing public health prevention services, such

j Latinx is the gender-neutral alternative to Latino, Latina and Latin@.
k This figure does not include Puerto Rico. Please refer to the Caribbean chapter (p81) for information on Puerto Rico.

as NSPs.[11] It is estimated that 94.5% of people who inject drugs used sterile injecting equipment at last injection.[34] Barriers to access remain, especially in northern, rural and remote communities (where there is a lack of access to healthcare more broadly, especially for people who use drugs), with a disproportionate impact on the many Indigenous (First Nations, Métis and Inuit) communities who reside in northern, rural and remote regions of Canada.[4] Some municipalities have also passed discriminatory zoning bylaws that prevent NSPs and other harm reduction services from operating in certain areas, thus imposing geographical barriers.[4]

Opioid substitution therapy (OST)

OST provision is available in both the United States and Canada. In the US, approximately 2.1 million people had used either medically prescribed or illicit opioids during the course of 2015. During the same period, 411,331 people accessed OST services.[35]l OST in the US is available in the form of methadone, buprenorphine and naltrexone.[15]m It was estimated that between 2006 and 2016, OST was only available in 8.5% of all facilities, both public and private, that can provide this medication in the United States.[35]

Methadone is more strictly regulated through federal and state laws in the United States, and although it is available both publicly and privately, 64% of people who received methadone in 2016 received it from a private facility.[35] Buprenorphine is more widely available, with access broadened in 2016 when President Obama signed into law Section 303 of the Comprehensive Addiction Recovery Act (CARA).[37] This law extended buprenorphine prescribing privileges to nurse practitioners and physician assistants, following the successful completion of 24 hours of training. Physicians who dispense buprenorphine must qualify for a physicians' waiver and complete eight hours of training.[37,38] Although the law enables the extension of OST services, in practice 28 states prohibit nurse practitioners from prescribing buprenorphine unless they are working in collaboration with a doctor who has a federal licence, and half of all the counties in the US do not have a single physician with a licence.[39]

There are, however, pockets of good practice emerging, with the state of Vermont integrating hub-and-spoke models of OST provision.[15,40,41] This model uses regional hubs offering daily OST support together with local spokes, including doctors, nurses and counsellors for people using opioids or transitioning to OST who can oscillate between the two, subject to need.[41] Vermont now has the highest capacity for OST in the USA, seeing a 64% increase in physicians able to prescribe buprenorphine, and a 50% increase in people seen per (waivered) physician.[40] A small study in New York demonstrated harm reduction service providers are the preferred site of buprenorphine provision for 51% of people who use opioids.[13] Expanding prescribing authority to harm reduction service providers across the US could best meet user preferences and significantly increase access.

Upselling OST: the state of America

In the United States, corporate sub-markets have mushroomed around OST, creating additional financial implications for access. The requirement for people to undertake urine test analysis, which must show evidence only of the prescribed substance (i.e. buprenorphine or methadone) to continue OST medication, is not uncommon in the US.[15] Urine testing has become big business, with clinic-owned laboratories rapidly appearing in treatment centres billing around US$4,000 per test.[42] Given that people may be tested either daily or a few times a week, these costs (either in terms of Medicare or private health insurers) soon soar, with private labs often making 2,375% of the government rate (US$80.00) per test.[42] On top of this is the regulatory framework behind urine testing, which states that for every test a doctor must sign a requisition, providing a note that the person's urine should be tested for illicit/licit drugs.[42] In some cases doctors charge a fee for the requisition of between US$3,000-$8,000 per month for each person or facility.[42]

It is widely known and acknowledged that retention in both methadone and buprenorphine treatment are associated with substantial reductions in risk for all causes of death and overdose mortality.[43] OST has also be shown to be effective in self-reported abstinence from street opioids[44] and has a positive impact on drug-related HIV risk behaviours (making it both a treatment and a harm reduction approach).[45] Yet coverage of existing programmes in the US remains substantially below the levels recommended by international guidance.[35,46]

In September 2017, the US Food and Drug

l This figure does not include the number of people using extended release naltrexone for detoxification.
m As naltrexone requires people to stop using opioids and to undergo a detoxification programme, and its links to overdose mortality since last injection remain unclear,[36] it will not be covered within the body of this report.

Administration (FDA) released a safety announcement stating that buprenorphine and methadone should not be withheld from people taking benzodiazepines or other drugs that depress the central nervous system (CNS).[47] Although combined use can increase the risk of serious side-effects, the FDA concluded that withholding OST causes greater harm, and that risks can be reduced through careful management by healthcare professionals.[47]

In Canada, OST is available in the forms of methadone, buprenorphine, buprenorphine/naloxone combinations (for example, Suboxone) and injectable prescription heroin known as heroin-assisted therapy (HAT).[4,18] OST is available in all 10 provinces in Canada through a variety of models, including government-funded programmes, private clinics and family practice; but the total number of sites is unknown due to a lack of aggregated national surveillance.[4,18]

In Ontario, Canada's largest province, the number of people receiving OST has increased from 6,000 in 2000 to over 40,000 in 2016,[48] highlighting the scaling up of services. However, even with the increases in provision, a number of barriers to accessing OST remain. These include a lack of treatment providers, particularly in rural and remote areas; burdensome requirements such as weekly clinic visits (not required by treatment standards); a lack of OST integration into primary care services; unaffordable clinic fees; and until March 2018, the requirement for physicians to obtain an exemption from the federal Controlled Drugs and Substances Act (CDSA) to prescribe methadone.[4,18] Policy developments to reduce barriers to the implementation of HAT have taken place in Canada. For example, in 2015 the Supreme Court in British Columbia ruled that people who were receiving HAT as part of a clinical trial (at time of publication the only mode of accessing HAT in Canada) would be able to continue receiving the medication outside a research setting.[49] Although clinical trials have illustrated significant positive outcomes, including a reduction in street heroin use of 70%, HAT had not been expanded outside research settings at the time of reporting.[18] In March 2018, the Canadian government took measures to facilitate access to OST by removing regulatory barriers to the prescription of methadone and heroin-assisted therapy (HAT). These amendments removed the requirement for physicians to apply for a CDSA exemption to obtain and prescribe methadone, and allow both physicians and nurse practitioners to administer methadone and HAT outside of hospital setting.[50]

Amphetamine-type stimulants (ATS), cocaine and its derivatives, and new psychoactive substances (NPS)

North America has the highest annual prevalence of amphetamine-type stimulant use in the world, with 2% of 15-64 year olds using a stimulant in the past year.[7,8] Stimulants, including cocaine and the non-medical use of prescription stimulants such as Ritalin, were used by nearly 11 million people in the United States in 2015.[8]n In Canada, although prevalence of past-year use of at least one illicit drug had increased by 2% (from 11% in 2013 to 13% in 2015), the number of people in Canada reporting using a stimulant in the past year remained unchanged at 1%.[9]

As in other regions of the world, ATS use is generally increasing, including within the market of new psychoactive substances (NPS), with 36% of all NPS on the global market being stimulants.[7] And although there are a small handful of harm reduction services for people who use stimulants, there remains a serious need to support the development, evaluation and expansion of harm reduction interventions specific to ATS.[19,20] This need is apparent when looking at the increase in emergency room visits related to the use of methamphetamine (rising from 68,000 in 2007 to 103,000 in 2011) in the US,[51] and rates of drug overdose deaths involving (psycho)stimulants, which increased 23% between 2008 and 2015.[8] The rise in ATS use in the US, particularly methamphetamines, is not adequately covered by the harm reduction response.[20,19]

A recent report by Mainline, a Netherlands-based harm reduction organisation, provides the most comprehensive review of stimulant harm reduction programmes and practices to date.[19] The report provides a literature review on various types of stimulants, routes of administration and harm reduction strategies; seven case studies from across the globe; and reviews interventions more specific to people who use stimulants. The potential health-related harms of stimulant use are different to that experienced by people who use opioids. People who use stimulants report feeling that they belong to different (social) networks of people who use drugs, meaning they may feel opioid-focused harm reduction services are irrelevant or inaccessible to them.[19] However, similar to people who use opioids/inject drugs, there is no single intervention which is recommended but a comprehensive body

n During 2015, 4,828,000 people used cocaine in the past year, 1,713,000 used methamphetamine and 5,251,000 misused prescription stimulants.

of interventions.[19] These include: safer smoking kits for people who smoke crack cocaine and/or methamphetamines; prevention of sexual risk; female-focused interventions; drug consumption rooms; self-regulation strategies; substitution; outreach and peer-based interventions; drop-in centres; housing first; therapeutic interventions; and drug-checking services.[19]

In the US, a small handful of the above interventions exist. DanceSafe is one popular harm reduction and peer-based education intervention which offers a drug-checking service (EcstatsyData.org) and the only publicly accessible laboratory analysis of ecstasy data in the US.[52] It also provides testing kits to purchase online, including for methamphetamines, opioids, MDMA and psychedelics such as LSD, as well as fentanyl test strips. [52] One of the central issues for drug-checking services is they often have to overcome legal challenges around licences to possess and work with scheduled substances, with many countries still not accepting drug-checking as a valid argument to issue an exemption.[53] The limited programmes that exist in the US do not meet need and are underfunded. With a steadily increasing prevalence of ATS use in the United States,[54] it is clear that comprehensive, accessible harm reduction services are much needed.

In Canada, the harm reduction response for people who use ATS is a little more established, and over recent years federal and provincial governments have scaled up drug-checking services in the country.[4,18] These services are more recently funded by the federal government and operate at a number of supervised injection and overdose prevention sites (see DCR section).[18] Although much of the emphasis on the scaling up and adoption of new harm reduction services has been in response to the opioid crisis,[18] drug-checking services throughout the country also target other subpopulations of people who use drugs and some technologies (e.g. fentanyl test strips) are available for purchase.[55] In late 2017, Health Canada committed to authorising and funding pilot projects providing drug-checking services at supervised consumption sites in British Columbia and Ontario.[56] British Columbia has also funded publicly available anonymous drug-checking services, acknowledging that some overdose deaths are caused by fentanyl contamination of non-opioid drugs such as cocaine.[4]

Other harm reduction programmes for stimulant users have also been established in Canada, such as COUNTERfit in Toronto, a best practice example of a harm reduction programme for people who smoke either crack cocaine or methamphetamine.[19] COUNTERfit has around 73% of service users using ATS and around 90% of service users engaging in polydrug use.[19] Operating since 2000, COUNTERfit was the first in Canada to address the needs of non-injectors by distributing kits for safer crack and methamphetamine smoking.[19] The programme's success comes in meeting the health and social needs of people who use drugs via a number of access points: a fixed site; mobile outreach services offering an out-of-hours delivery service; and at the homes of trained service users within their network via community or agency-based satellite services.[19] In 2017, the programme distributed 67,500 crack stems to service users, reaching approximately 150 people every day.[19] People can order both sterile needles and injecting equipment alongside smoking equipment for free. The programme also offers a women's harm reduction programme and an aboriginal support group, recognising the unique needs and challenges of both groups.[19] The majority of COUNTERfit's funding comes from Ontario's Ministry of Health and Long Term Care, with some financial support from the municipal government of Toronto.[19]

Other harm reduction interventions, such as cannabis as a means of reducing the frequency of crack cocaine consumption, have also been made available in Canada,[57] but predominantly as research/pilot studies. The first federally sanctioned supervised inhalation services opened in Lethbridge and Calgary, Alberta in 2018.[58]

While there is less evidence on harm reduction interventions for people who use stimulants than for opioid users, new research and the handful of harm reduction programmes for stimulant users are showing promising results.[19] More research, including into some of the strategies highlighted in the 2018 Mainline report, better monitoring of impact, and sharing of best practices and funding for inclusive harm reduction services for people who use stimulants (including cocaine and its derivatives) are much needed in North America.[20,19]

Overdose, overdose response and drug consumption rooms (DCRs)

In a 15-year period (2000-2015), the US saw almost 600,000 fatal overdoses.[60] This is the equivalent to a population the size of Baltimore disappearing. In 2016, 63,632 people died from a drug overdose in the US, 66.4% of which involved opioids.[59] In New York City alone, a fatal overdose occurs every seven hours.[59] There are more annual deaths from an opioid overdose in New York than fatal car accidents, suicides and homicides combined.[60]

Important developments have taken place in response to the unprecedented number of overdose-related deaths in North America. Naloxone is a highly effective opioid antagonist used to reverse the effects of opioid overdose in minutes. The medicine, which can be delivered in various ways (intra-nasal, sublingual and buccal) can, however, only be effective if accessible.[61-64] Many community-based naloxone programmes in the US are in operation, some staffed by individuals who identify as peers or having lived experience with drug use, and some via formal peer-distribution where people are given large quantities of the medicine to distribute through their personal networks.[15] The greatest barrier to distribution, however, is the fact that naloxone remains a prescription medication in the US, meaning wider peer/community distribution can only operate with a medical gatekeeper who can procure a licence to purchase the medicine with the authority to distribute it under a standing order.[15] Civil society organisations and activists have been remarkable in overcoming these challenges, with an estimated 1 million doses of naloxone distributed across the US via community-based programmes in 2017.[15] Naloxone programmes have expanded in at least seven states (including Nevada, Iowa, North Dakota, Virginia, Michigan, Texas, Florida and New Hampshire) and several indigenous communities in Minnesota and Wisconsin have begun naloxone distribution, including establishing the first tribal-approved contracts to purchase and distribute the medicine.[15] In 2017, the state of New York implemented a naloxone co-payment assistance program (N-CAP) through a New York State Department of Health access initiative, the first and only subsidised programme for naloxone obtained at pharmacies in the United States. This means that in over 2,000 pharmacies in New York state, a person can pick up naloxone treatment valued at US$40 (including nasal spray, intranasal and intramuscular) at no cost to the individual.[65]

In an evaluation of community opioid overdose prevention, researchers found 83-100% survival rates post-naloxone treatment, demonstrating that non-medical bystanders trained in community opioid prevention techniques were effectively able to administer naloxone.[61] Yet in some states, public health funding for naloxone is being diverted from services for people who use drugs into the purchase of naloxone for law enforcement officers.[15] Efforts to expand naloxone to first responders is vital, but should not supersede community-based peer-distribution.

Inflammatory media reports in the US also represent a barrier to the roll out of naloxone; for example, false narratives on naloxone-resistant fentanyl, stories of "narcan parties" and allegations of first responders' exposure to fentanyl (by air or skin) resulting in "overdose" have the effect of transforming an essential medicine into a fabricated moral hazard.[15]

Similarly to the US, Canada has witnessed a dramatic increase in opioid-related deaths. In 2017, 3,987 opioid-related deaths were recorded, 72% of which involved fentanyl or fentanyl analogues.[10] Canada is larger than the US in terms of landmass and has just one tenth of the US population. Canada's response to the overdose crisis has been multifaceted. As noted above, the Canadian federal government removed many barriers to accessing naloxone in 2016;[4,18] now, instead of requiring a prescription for each individual in need of naloxone, pharmacies are able to proactively distribute naloxone to those who might experience or witness an opioid overdose.[66]

In May 2017, a new law (Bill C-37) was passed in Canada which included amendments to the Controlled Drugs and Substances Act to streamline and simplify the application process for opening supervised consumption sites, and 26 sites were approved at the time of publication.[4,67] Across Canada, grass roots leaders have established pop-up overdose prevention sites (OPS) to better respond to the high rates of overdose, and use the language of OPS to convey the importance of these interventions to the community at large.[18] These new pop-up OPS originated in Vancouver in response to delays from the government, with members of the community setting up a tent in an alley in the Downtown Eastside area and stocking it with needles and naloxone, enabling people to inject safely.[68] Activists in Toronto and Ottawa followed suit, providing unsanctioned spaces for people to use drugs in the presence of others (including healthcare and harm reduction volunteers) and providing naloxone.[4,69] In April 2016, in response to the alarming rise in overdose deaths, British Columbia's minister of health declared a public health emergency under the provincial Public Health Act. By December 2016, the health minister had signed a ministerial order to activate overdose prevention services as a means to provide temporary safe spaces for people who use drugs to be monitored in the case of an overdose. Since this order, at least 25 of these facilities have been established across the province.[4] In other provinces, such as Ontario (which saw 850 opioid-related deaths in 2016),[70] unsanctioned OPS were established by communities in response to the overdose crisis in 2017.[4] However, a recent change in the Ontario provincial government – led by a premier who has publicly stated his opposition to overdose prevention services – means the future of these in the province is unclear.[4]

In Vancouver, Sister Space, a women-only overdose prevention site, also opened in 2018 and is the first female-only space where women can access NSPs and overdose prevention.[27] In late 2017, the federal government announced that Health Canada would authorise emergency overdose prevention sites for those provinces and territories that requested them; the Ontario government formally requested approval, with eight approved sites operating in the province at time of publication.[4] OPS sites currently operate in four provinces (British Columbia, Alberta, Ontario and Quebec), with the first federally-sanctioned supervised inhalation service opening in Alberta in 2018.[18]

Another harm reduction measure designed to contribute towards addressing the overdose crisis in North America is drug-checking services. The rise in fatal overdoses in the region is driven partly by prescribing practices and in part by a surge in fentanyl contamination of the street drug market, a synthetic opioid significantly more potent than heroin. Prescribing practices over the last decade have been postulated as resulting in people seeking out illicit opioids for pain relief once their prescription has been retracted, and receiving fentanyl or fentanyl-laced drugs which are much stronger than the person is used to and therefore contributing heavily to fatal overdose rates.[15,60] In the United States, fentanyl deaths have increased by 540% in three years.[71] Given this, in 2016 harm reduction service providers and activists began distributing fentanyl testing strips,[15] shown to be an effective overdose prevention strategy within the community of people who use drugs.[72] Testing strips, like all harm reduction interventions, are dependent on funding; although several programmes in the US have received monies to provide this service, others are forced to raise private funds (some through crowdfunding sites) to sustain their activity.[15]

When the *Global State of Harm Reduction* last reported in 2016, there were no safer injection facilities (SIFs) in the US. Since then, momentum has been building around SIFs, with several cities supporting policies on the implementation of these spaces, including New York, San Francisco, Seattle, Denver and Philadelphia.[15] At time of publication, no sanctioned SIFs were operating in the US, although at least one facility was operating "underground" in the country.[73] In September 2018, the governor of San Francisco rejected legislation which would have authorised the establishment of the first SIF in the US.[17,74]

The US and Canada both have Good Samaritan laws, which protect people from arrest or prosecution for drug possession when they call for help in the event of an overdose, and support a legal and policy environment conducive to harm reduction. In the US, 40 states and the District of Columbia have now enacted some form of Good Samaritan laws.[75] In May 2017, the Good Samaritan Drug Overdose Act was passed in Canada, amending Canada's Controlled Drugs and Substances Act to exempt a person from being charged or convicted of the offence of possession of drugs when emergency help is sought for an overdose, and evidence of drug possession was obtained or discovered as a result of the person having sought assistance or having remained at the scene.[4] Seeking emergency help could include calling 911, leaving the scene to call 911 or leaving the scene to locate emergency medical assistance.[4] The increase in drug-induced homicide laws undermines the provision of Good Samaritan laws in the US.

Viral hepatitis

Viral hepatitis continues to disproportionately affect people who inject drugs in North America. In the United States an estimated 4.4 million people are living with a chronic viral hepatitis infection, with the number of new hepatitis C infections increasing rapidly, prior progress in reducing new hepatitis B infections stalling and hepatitis-related deaths increasing.[76] Injecting drug use continues to be the most common risk factor for acquiring hepatitis C through unsafe injecting practices such as the sharing or reusing of needles and syringes, and between 2010 and 2014 a 350% increase in hepatitis C among people who inject drugs was seen in the US[76] In a research paper examining trends in incidence of acute hepatitis C among young people, 88% of the 34 reporting states in the US observed a higher incidence of acute hepatitis C in 2012 than 2006, with 75% (n=635) of interviewees reporting injection drug use.[77] Diagnosing and treating people who inject drugs improves health outcomes and prevents transmission of hepatitis viruses to others; however, links to hepatitis C care and treatment remain poor.[15,76]

A central issue in the US is the criteria limiting access to hepatitis C treatment for people who inject drugs via Medicaid[o] programmes.[78] Currently, the most effective treatment for hepatitis C is direct-acting antivirals (DAAs), but patient access is often subject to fibrosis stage, abstinence from drugs and alcohol, and prescriber eligibility (which can be limited to

o Medicaid is a joint federal and state programme that may assist with medical costs for people with limited income and resources.

certain categories of specialist practitioners).[78] Although efforts have been made to eliminate these restrictions, 24 states continue to have restrictive Medicaid treatment policies that require a period of abstinence before receiving treatment, and 18 states have no laws authorising syringe exchange programmes.[79] Access to needles and syringes is a public health strategy used to reduce the risk of infection from blood-borne viruses such as hepatitis.

In Canada, it is estimated that between 220,697 and 245,987 people were living with chronic hepatitis C in 2011.[80] Similar to the US, unsafe injecting practices such as the reusing or sharing of needles and syringes is considered the most significant mode of hepatitis C transmission in the country,[3] with 54-70% of hepatitis C infections contracted via this route of transmission.[81] However, whereas in the US rates of hepatitis C are steadily increasing, in Canada the rate of reported cases of hepatitis C have decreased from 40.2 per 100,000 in 2005 to 29.3 per 100,000 in 2014[p] with public health interventions, such as NSP and OST provision, believed to have impacted hepatitis rates among people who inject drugs.[3]

Although Canada does not have a national policy on hepatitis C, testing and treatment are theoretically available to people who use drugs, with at least eight provinces and territories removing a fibrosis stage requirement for hepatitis C treatment (including British Columbia, Ontario, Quebec, Saskatchewan, Manitoba, Alberta, Yukon Territory and Prince Edward Island).[4] While coverage of testing and treatment is difficult to assess in Canada due to a lack of centralised data, civil society reports that in practice, access remains a challenge for many.[4] In Newfoundland, for example, people who use drugs have been disqualified from accessing hepatitis C treatment.[4] In a national sample of people who inject drugs, 20.2% of people who tested positive for hepatitis C were unaware of their status[82] and only 15.3% of those who knew their status were taking medications prescribed for hepatitis C.[82] A primary deterrent to seeking testing and treatment among people who use drugs in the country remains the fear of stigma and discrimination in healthcare settings, and the variable degree to which hepatitis C testing and treatment is integrated into harm reduction or HIV programmes.[4]

Tuberculosis (TB)

Data on TB prevalence, prevention, treatment and care among people who inject/use drugs in the region continues to be scarce, limiting the effectiveness of policies and programmes designed to address this issue and making it difficult to provide a useful overview of the situation in the region. In Canada, around 1,600 new cases of TB are diagnosed each year, with TB rates higher among Indigenous populations.[83] There are multiple reasons for this, including poor housing conditions, higher rates of malnutrition and reduced access to medical care, highlighting the health and socio-economic disparities often seen in these populations.[84]

Similar to all regions of the world, people who use drugs in North America have increased rates of TB infection, particularly if they are living with HIV.[85] When TB treatment is integrated with HIV, hepatitis C and OST, improved outcomes for each condition have been observed, as well as improved adherence and retention in tuberculosis treatment for those living with TB.[85] International standards require a coordinated and integrated response to the needs of people who use drugs in order to provide universal access to prevention, treatment and care services at all entry points.[86]

Antiretroviral therapy (ART)

In the United States, an estimated 1,122,900 people were living with HIV at the end of 2015, with an estimated 38,500 new HIV infections that year, 9% attributed to injecting drug use.[89] Among all populations in the US, the estimated number of new infections declined between 2011 and 2015. However, for the 1.1 million people thought to be living with HIV, only 48% of people were retained in continuous HIV care, and only 49% of people had achieved viral suppression.[87] In Canada, an estimated 63,111 people are living with HIV, with 2,165 new infections reported in 2016.[88] Among the estimated new infections, approximately 244 were among people who inject drugs, accounting for 11.3%.[88] At the end of 2016, 81% of those diagnosed with HIV were estimated to be on treatment, and 91% of people on treatment had suppressed viral load.[88] In First Nation communities, of the individuals known to be living with HIV, 77% were on treatment and 75% of those in treatment had achieved viral suppression.[88]

People who inject drugs continue to be at high risk of transmitting or acquiring HIV for several reasons, including laws criminalising the possession and use of drugs, the resulting high rates of incarceration, and variable access to sterile syringes and injecting equipment. Research has also highlighted a new generation of heterosexual people who inject

p Significantly higher rates of hepatitis C than the national average of 29.3 have been observed in British Columbia, Alberta, Saskatchewan, Ontario, Nova Scotia, Prince Edward Island, Yukon and the Northwest Territories.

drugs sharing needles and increasingly interested in methamphetamine.[89] The changing trends in injecting drug use, particularly in terms of methamphetamine injecting, has the potential to increase vulnerability to transmission of HIV in the US.[89] One study found that among men who have sex with men who admitted sharing injecting equipment, their last sharing partner had been a woman in 31% of cases and a heterosexual man in 14% of cases.[89]

In Canada and the US, although access to HIV testing and treatment are available for everyone, people who use drugs continue to have trouble accessing these services.[4] Persistent stigma and discrimination sadly remain, but other systemic factors such as a lack of secure housing, a lack of access to healthcare services (particularly in rural and remote areas) and poverty appear as central barriers to ART initiation and adherence among this population.[4,15]

Harm reduction in prisons

As the *Global State of Harm Reduction* reported in 2016, the US continues to have the second highest rate of incarceration in the world, with 698 people incarcerated per 100,000.[91] To put this in context, the global average is 144. Nowhere in the world do we see the human consequences of the "war on drugs" as starkly as in the United States, with one in nine arrests – one every 25 seconds – being for drug possession,[22] and 47% of people incarcerated in federal prisons sentenced for drug offences.[23]

In 2010, Michelle Alexander stated "nothing has contributed more to the systematic mass incarceration of people of color in the United States than the war on drugs".[92] Research clearly illustrates the vastly unequal consequences across racial groups that the "war on drugs" has perpetuated. Although rates of drug use and sales are similar across racial and ethnic lines, black and Latinx[q] people are far more likely to be criminalised for a drug-related offence than white people.[25] Prosecutors are twice as likely to pursue a mandatory minimum sentence for black people as for white people charged with the same offence.[25] One in nine black children has an incarcerated parent, with the rates one in 28 and one in 57 for Latinx children and white children respectively; and 40% of those incarcerated in a state or federal prison for drug violations are black, 37% Latinx.[25]

A 2015 estimate of the cost of "hyperincarceration" stated that each year the US spends $80 billion on imprisoning people;[92] however, a later study noted that for every dollar spent on correctional costs, incarceration generates an additional ten dollars in social costs, bringing the aggregate burden per year to $1 trillion.[93] Although it is clear there is an unmanageable trend for over-incarceration and punishment for people who use drugs, former US attorney general Jeff Sessions rescinded the 2013 Cole Memo (which allowed federal prosecutors to choose not to prosecute marijuana offences in the states that allow adults to consume it) as well as the Smart on Crime initiative, which addressed racial disparities and disproportionate drug sentencing.[94]

In Canada, prison numbers are considerably lower than the US, with 106 people incarcerated per 100,000.[90] However, similarly to the United States there is an over-representation of racialised communities entering the prison system, particularly the Indigenous population.[95] Between 2007 and 2016, although the general prison population in Canada increased by just under 5%, the Indigenous prison population increased by 39%, and incarcerated Indigenous prisoners were much more likely to experience segregation in solitary confinement (36.5%).[95]

Imprisoning people for drug use is not only costly and systematically discriminatory, it also appears one of the most counterproductive criminal sanctions, as drug use continues within the prison setting.[96,97] In 2014, the World Health Organization estimated that every sixth prisoner is thought to be using drugs in prisons.[97] A study undertaken in 2015 in Baltimore found that incarceration did not only fail to curtail injecting drug use among former injectors, but that longer periods of incarceration were actually associated with increases of injecting among former injectors.[98] Between 2012 and 2017 the percentage of positive drug tests via random urine analysis in Canadian prisons fluctuated between 5.6%-6.3%, despite significant investments in detection and surveillance to stop drugs from entering prisons.[95]

Despite evidence of drug use in prisons and the clear need for harm reduction in these settings, provision continues to be extremely limited, falling far short of meeting international human rights and public health standards.[21] HIV prevalence among prisoners in the United States is 3-5 times greater than the general population,[99,100] and 20-26% of people living with HIV/AIDS in the US will have spent time in the correctional system at one point in their life.[101] Prevalence of HCV among prisoners is also much higher than the general population, with the largest population of HCV-positive inmates in the world found in North America (553,500-784,000).[102]

q Latinx is the gender-neutral alternative to Latino, Latina and Latin@.

Tuberculosis has also been reported to be up to 100 times higher among prisoners,[103] with 29 cases per 100,000 in local jail inmates, 8 per 100,000 in state prisons, and 25 per 100,000 in federal prisons in the United States.[104] Prisons continue to represent high-risk environments for the transmission of blood-borne infections for a number of reasons. These include: the over-incarceration of vulnerable and disadvantaged groups who are more likely to suffer from poor health; the criminalisation of people who use drugs; risky behaviour in prisons, such as unsafe injecting drug use; inadequate health care and late diagnosis of disease; substandard prison conditions and overcrowding; poor ventilation and repeated prison transfers which encourage transmission of viruses; and the absence of harm reduction services.[103,105]

Although the US has the largest prison population in the world, critically needed harm reduction programmes, such as NSPs, remain unavailable in 2018. In June 2018, Canadian civil society had a breakthrough success in their advocacy for NSPs in prisons, with a prison needle exchange programme authorised to begin operating in one men's federal prison and one women's federal prison, where people are serving a sentence of two or more years, and plans to roll-out the initiative across all federal prisons the coming years.[106,107] Details of the new programme, however, reveal serious deficiencies that will likely curtail prisoners' access, and civil society advocates will continue to push for a better model that reflects the principle of healthcare equivalency.[4]

OST in the form of methadone or buprenorphine remains available in only a small number of American state prisons,[r] meaning coverage for those who have been incarcerated remains extremely poor.[15] OST is a vital service to offer in the prison setting, given that between 24-36% of people who use heroin will pass through the prison system at one point in their life,[108] and the fact that this population is also between 8 and 129 times more likely to overdose in the first two weeks post-release from prison.[109] It is estimated that nearly 90% of people currently receiving OST outside prisons in the US would have their treatment removed if incarcerated.[110] Of the existing OST programmes in state prisons in the US, many have severe restrictions (i.e. only pregnant women, or a continuation of treatment rather than initiation), with Rhode Island and New Mexico an exception to this rule. In Rhode Island, where OST is available to people in prison in the form of methadone, buprenorphine or naltrexone, there has been a 61% decrease in post-incarceration overdose deaths among those recently released.[111] The evidence is abundantly clear, yet provision of this medication across the majority of the US remains wholly inadequate, with just 40 local/county jails/state and federal prisons providing this service out of 5,000 facilities.[39]

In Canada, OST has been available within some prison settings since 1999. OST initiation and continuation is available in all 43 of the country's federal prisons.[4] However, in provincial and territorial prisons in Canada, OST availability varies, with most provinces offering OST continuation but some not offering initiation, citing difficulties with locating treatment providers, fear of diversion, short length of incarceration, and a lack of staffing and resources, leaving inadequate provision for people who use drugs.[4,18] Harm reduction measures such as OST are also not implemented to the same extent in women's prisons.[27]

At the time of publication, naloxone provision in US prisons was available in New York State and New Mexico, and on release only. New York State's Overdose Education and Naloxone Distribution Program was a result of a joint collaboration between the Harm Reduction Coalition, the New York State Department of Health and the New York State Department of Corrections and Community Supervision, and at the end of 2017 over 20,000 people within the prison setting had been trained to use naloxone.[15] In mid-2018, the New Mexico Corrections Department began a naloxone programme similar to the New York model, whereby people are trained whilst incarcerated and offered naloxone on release.[15] In Canada, a take-home naloxone programme began in federal prisons in British Columbia in November 2016, and has since been expanded country-wide, with 4,950 kits expected to be supplied to prisoners on release between 2017 and 2020.[112] The programmes are aimed at inmates who are already on OST or who have a history of opioid use. In federal prisons in Canada, healthcare and some correctional staff also have access to naloxone.[4] However, the situation varies in provincial and territorial prisons.[4]

Research has indicated that prisoners are more likely to be exposed to blood-borne viruses in the prison setting,[102,113] and reports of injecting drug use in prisons are found worldwide.[114] In prisons in the United States, only 37.9% of people newly diagnosed with HIV were linked to HIV services within 90 days.[115] In Canada, voluntary HIV testing and treatment is offered in all federal, provincial and territorial prisons.[4] The estimated HIV prevalence among people who are in federal prison has declined

r Arizona, California, Connecticut, District of Columbia, Florida, Illinois, Maryland, New Mexico, New York, Pennsylvania, Vermont and Washington.

in Canada, going from 2.02% in 2007 to 1.2% in 2017, with 94% of people known to have HIV receiving ART treatment.[116] Disruptions to treatment occurring during transfers between institutions and to/from the community remain a challenge.[4]

In Canada, it is estimated that around one in four prisoners have hepatitis C.[117] Voluntary testing is offered in all federal, provincial and territorial prisons,[4] with the treatment budget for this population in federal prisons increasing fourfold since 2010 (CAN$16.5 million between 2017-2018).[118] All federal prisoners diagnosed with hepatitis C in Canada are eligible for treatment, regardless of fibrosis stage.[4] In the United States, recent analysis suggests that only around 10% of the prison population who have chronic hepatitis C can access medication.[119] Studies also indicate that hepatitis C testing is limited for people who use drugs, and that treatment for people in prisons is uncommon.[120]

TB diagnostics and treatment is available for people who use drugs in prisons in both Canada and the United States.[4,15] However, it is unclear the extent and ease of access. Condoms are only available in prisons and jails in three American states: Vermont (since 1992), Mississippi (since 1992 and limited to married prisoners receiving conjugal visits) and California (since 2014), as well as several other cities.[121] In Canada, condoms are available in all federal prisons, although barriers to access have been reported, including as a result of inconsistent stock or condoms only being available through healthcare staff.[4]

Policy developments for harm reduction

Since the *Global State of Harm Reduction* last reported, important harm reduction policy developments have taken place in both the United States and Canada. On 22 July 2016, President Obama signed into law Section 303 of the Comprehensive Addiction and Recovery Act (CARA) in the United States.[37] This law aimed to improve access to certain harm reduction interventions, such as overdose prevention medication and access to OST.[122] That same year also saw the 21st Century Cures Act signed into law, which over a nine year period (beginning in 2016), would authorise US$500 million to cover the costs of accelerating medical product development and bring new innovations and advances to people who need them,[123] having the potential to improve provision of OST and naloxone.[15] The amendment to the longstanding federal funding ban on NSP also occurred in 2016, with the US government changing its position on NSPs, resulting in a partial repeal of the ban on federal funding for this service. While the use of federal funds to purchase sterile needles or syringes to inject illicit drugs remains prohibited, the Consolidated Appropriations Act 2016 enables federal funds to be allocated to other aspects of NSPs, including HIV and HCV testing, naloxone provision, human resources, rent and other expenditures needed to keep NSPs in operation.[15,31] In the two years since CARA's initiation and the partial repeal of the ban on funding, NSP services in the US have increased.[15] Although OST in the form of buprenorphine is more widely available due to the extension of prescribing privileges, over half of US states continue to prohibit nurse practitioners from prescribing OST.[39]

In 2016, the Canadian Ministry of Health reformed the National Anti-Drug Strategy to become the Canadian Drugs and Substances Strategy, which includes harm reduction as one of its four core pillars.[14] This new strategy led to the adoption of regulatory amendments to make naloxone[s] available without prescription (enabling pharmacies to proactively distribute the medicine to those who might experience or witness an opioid overdose); supported new front-line harm reduction interventions to reduce the risk of blood-borne viruses and sexually transmitted infections resulting from sharing drug use equipment and other related behaviours; created a streamlined application process for communities that wish to open supervised consumption sites; noted the importance of harm reduction to federally funded health services for Inuit and First Nations communities; and endorsed public education, awareness and monitoring programmes before and after legalising and regulating cannabis.[14] Prior to May 2017, organisations seeking to operate supervised consumption services without the risk of criminal prosecution were required to apply for an exemption from Canada's Controlled Drugs and Substances Act by the federal Ministry of Health.[4] Without this exemption, people who use drugs and staff members were at risk of criminal charges for drug possession. In May 2017, Bill C-37 repealed the 26 onerous conditions required for exempting new supervised consumption sites, making the establishment of supervised consumption services more feasible.[18]

At the international level, Canada has also been vocal in its support for harm reduction. At the Commission on Narcotic Drugs in March 2018, Canada led efforts resulting in the first-ever resolution on stigma against

s Naloxone is a highly effective opioid antagonist used to reverse the effects of opioid overdose in minutes.

people who use drugs.[4,18,124] In contrast, the current US administration favours a "war on drugs" rhetoric and harsher sanctions for people who use drugs, despite their lack of effectiveness. Since January 2017, the US president called for the death penalty for people who sell drugs.[125], a tougher stance on minimum mandatory sentences for drugs and greater use of drug-induced homicide laws.[125]

Civil society and advocacy developments for harm reduction

Since the *Global State of Harm Reduction* last reported in 2016, important civil society events have taken place in both Canada and the US.

In October 2018, approximately 2,000 delegates convened at the 12th National Harm Reduction Conference in New Orleans. The conference is the only national multidisciplinary conference focused on improving the health of people who use drugs.[126] In May 2017, the 25th Harm Reduction International Conference took place in Montréal.[127] It was one of the largest conferences in the international series to date, with approximately 1,000 delegates from over 70 countries. During the conference, people who use drugs protested during a speech by the then Canadian minister of health under the banner "They Talk, We Die", in reference to the growing overdose rates in the country and the lack of adequate harm reduction provision.[128] With overdose deaths remaining the leading cause of mortality among people who use drugs in Canada, an annual National Day of Action on the Overdose Crisis was established in 2017.[18]

Canada's Drug Futures Forum took place in Ottawa in 2017, where more than 120 researchers, policy-makers, public health officials, law enforcement professionals, drug users and community organisers met to examine the future of Canada's domestic and international drug policies.[129] The four focus points of the conference were international control and management of drugs; decriminalisation, regulation and harm reduction; integrating policing and public health; and strategies for health and social equity in drug policies.[129]

Within the US, federal government engagement with harm reduction organisations or drug user groups appears to be minimal.[15] In Canada, people who use drugs and harm reduction organisations are increasingly being included at both federal and provincial levels in the development of harm reduction and drug policies.[18]t

In Canada, advocacy towards the decriminalisation of drug possession for personal use made notable progress, with two major federal parties (the New Democratic Party and the Liberal Party of Canada) passing policy resolutions endorsing the decriminalisation of drugs for personal use.[4]

Drug user networks also operate at the national level, although they are not active among all communities throughout Canada.[18] The Canadian Association of People who Use Drugs[130] is part of the wider umbrella network of the International Network of People who Use Drugs (INPUD).[131] In the US, the National Urban Survivors Union, a grass roots coalition of drug users (both former and active) dedicated to ensuring respect and social justice for the community, operates in San Francisco and North Carolina,[132] and is affiliated with the North American Network of People who Use Drugs (NANPUD). NANPUD is a national peer-based organisation working to promote drugs user rights to health and address the harm created by the "war on drugs" at both national and international level.[15]

Several organisations in Canada, including the Pivot Legal Society, the Canadian HIV/AIDS Legal Network, the Canadian Drug Policy Coalition and Aboriginal Legal Services, advocate for law and policy reform in relation to harm reduction and drug policy. Some also provide direct legal assistance and information for people who use drugs.[4,18]

Funding developments for harm reduction

In 2016, the *Global State of Harm Reduction* reported on the repeal of the federal funding ban on NSPs in the US, one of the most important funding developments in the region. While some progress is documented above, civil society leaders report that practical access to this funding has been difficult and roll out has not been to scale. It is hoped that in the next five years the federal funding ban modification could lead to a doubling or tripling of public funding for NSPs across the country.[15]

In Canada, funding for harm reduction has increased at both the national and provincial levels, including through the Substance Use and Addictions Program administered by Health Canada, which provides CAN$26.3 million yearly to address substance use problems through treatment, prevention,

t The extent to which this engagement is meaningful and not tokenistic remains ambiguous.

harm reduction and health promotion.[133] The federal government also established a new Harm Reduction Fund, administered by the Public Health Agency of Canada, which will invest CAN$30 million between 2018 and 2022 to support harm reduction projects.[134] These funds significantly contribute to the harm reduction response, yet Canada still does not consistently meet international recommendations for coverage of services, and could improve its adherence to its international human rights commitments.

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Regional Overview
2.7 Oceania

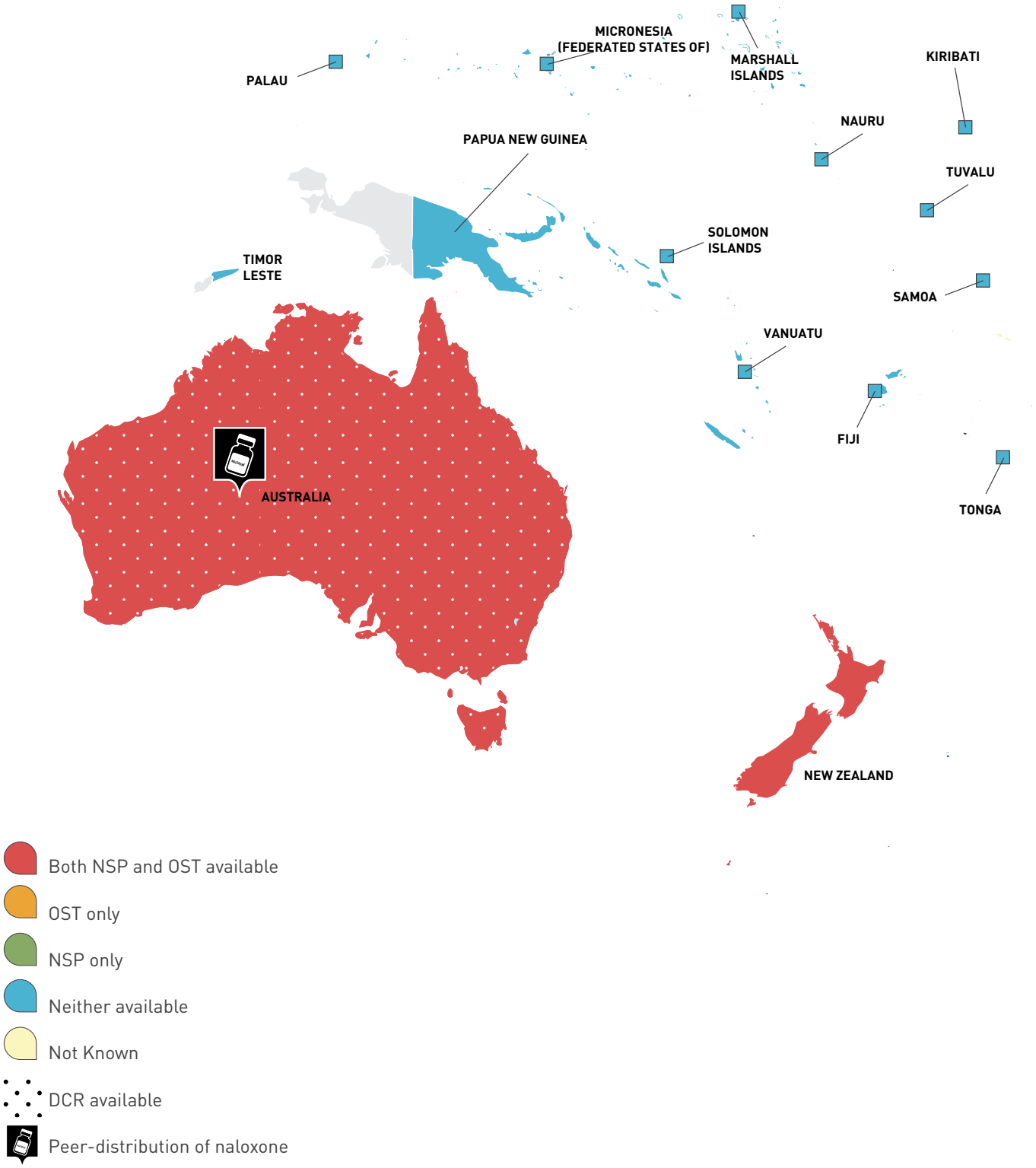
Table 2.7.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in Oceania

Country/territory with reported injecting drug use[a]	People who inject drugs	HIV prevalence among people who inject drugs(%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs(%)	Harm reduction response[i]			
					NSP[b]	OST[c]	Peer-distribution of naloxone	DCRs[d]
Australia	93,000 (68,000-118,000)[1]	2.1[2]	49[2]	4.0[3]	✓ (6,327[e])[4]	✓(2,732)[f] (B, M)[5]	✓[6]	✓2[6]
Federated States of Micronesia	nk	nk	nk	nk	x	x	x	x
Fiji	nk	nk	nk	nk	x	x	x	x
Kiribati	nk	nk	nk	nk	x	x	x	x
Marshall Islands	nk	nk	nk	nk	x	x	x	x
New Zealand	15,000-20,000[7,8]	0.2[7]	52-84[7]	nk	✓(213[g])[8]	✓(B, M)[9]	x	x
Palau	nk	nk	nk	nk	x	x	x	x
Papua New Guinea	nk	nk	nk	nk	x	x	x	x
Samoa	nk	nk	nk	nk	x	x	x	x
Solomon Islands	nk	nk	nk	nk	x	x	x	x
Timor Leste	nk	nk	nk	nk	x	x	x	x
Tonga	nk	nk	nk	nk	x	x	x	x
Vanuatu	nk	nk	nk	nk	x	x	x	x

nk – not known

a Countries with reported injecting drug use according to Larney et al 2017. The study found no reports of injecting drug use in Nauru or Tuvalu.
b All operational needle and syringe exchange programme (NSP) sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers. (P) = pharmacy availability.
c Opioid substitution therapy (OST), including methadone (M), buprenorphine (B) and any other form (O) such as morphine and codeine.
d Drug consumption rooms, also known as supervised injecting sites.
e 2,422 pharmacies, 784 secondary sites and 323 syringe dispensing machines.
f This refers to the number of dosing points in the country.
g 190 pharmacies and 23 peer-based needle programmes.

Map 2.7.1: Availability of harm reduction services



Harm reduction in Oceania

Overview

The prevalence of injecting drug use in Oceania is above the global average, and there are an estimated 113,000 people who inject drugs in the region (based on data from Australia and New Zealand).[1,7,10] As a result, harm reduction for injecting drug use forms a significant proportion of the region's harm reduction services. While opioids have historically been the dominant substances used by people who inject drugs in the region, methamphetamine injection has seen a considerable rise since 2010 in both Australia and New Zealand, to the point where methamphetamines are now the most common category of drugs last injected in Australia (though methadone injection remains most common in New Zealand).[8,11] This is, in part, the result of a significant shift in usage patterns of methamphetamines from powder to more commonly injected crystal forms.[5,10] This has coincided with a reduction in the prevalence of heroin use from 2000-2015 across the region.[10] However, heroin remains a commonly used drug among people who inject drugs in the region.[5]

A key limitation in collating an overall picture of the state of harm reduction in Oceania is the highly variable availability and quality of data across the region. Few of the Pacific Island countries and territories report any drug use at all (with the exception of cannabis use). However some, such as Fiji, acknowledge that this may be due to a lack of investigation rather than prevalence.[12,13] Conversely, the data collection systems in place in Australia are of very high quality. Through the Australian Needle and Syringe Program Survey, the National Opioid Pharmacotherapy Statistics, and other regular surveillance and monitoring publications, government, academic and non-governmental organisations collect detailed information on patterns of drug use and service utilisation in the country.[2,5]

While the provision of harm reduction services is relatively extensive in Australia and New Zealand, no new evidence has been found for any such services anywhere else in the region since the *Global State of Harm Reduction 2016*. There is a noted trend in the Pacific Island countries and territories for people to be sent to New Zealand or Australia for general health treatment.[14] Needle and syringe programmes (NSPs) and opioid substitution therapy (OST) are available in both Australia and New Zealand, with services largely stable since 2016 and no major expansions or contractions. With regard to OST, a significant trend is the expansion in the prescription of buprenorphine-naloxone combinations, with the aim of reducing administration through injection (in non-medical contexts) and diversion to the black market.[5,9] A notable advance in the region is the opening of Australia's second drug consumption room (DCR)[h] in Melbourne in 2018, joining the facility established in Sydney in 2001.[6,15] These DCRs both only serve people who inject drugs, including people who inject crystal methamphetamines, and do not permit consumption by other routes of administration (such as inhalation).[15,16]

Amphetamine-type stimulants increasingly figure in harm reduction services in Australia and New Zealand. In addition to people who access NSPs and DCRs, services also respond to the wider use of stimulants at festivals and parties. Instances of multiple overdoses at festivals involving high-purity MDMA and new psychoactive substances (NPSs) in Australia, and up to 45 deaths from NPS use in New Zealand, from 2017 to 2018 have drawn a new focus to harm reduction services aimed at this population.[8,17,18] Australia's first trial of a pill-checking service was held at one festival in April 2018, and KnowYourStuffNZ has operated pill-testing services at festivals in New Zealand since 2014 in conjunction with the New Zealand Drug Foundation.[15,19] However, in both countries legal barriers, such as limitations on programmes operating in public spaces like city centres, prevent these projects from being rolled out further.[17]

While harm reduction services in Australia and New Zealand are relatively extensive and widely available, concern has been shown that some vulnerable sub-populations may have difficulty accessing these services. Women, indigenous people and the LGBTQIA+ community all face greater stigma added to that already experienced by people who use drugs, and suffer from a lack of services focused on their specific needs.[20-23] Indigenous people and gay and bisexual men in particular are more likely than the general population to report high-risk drug use practices, such as syringe sharing and frequent injection.[3,24,25] Where services exist for specific populations, such as those operated for LGBTQIA+ people by the AIDS Council of New South Wales, evidence shows that they can be effective in improving access and health outcomes.[22,26] These often involve the use of peer workers and campaigns targeted at practices prevalent among specific groups.[26-28]

The prevalence of HIV in the general population and among people who inject drugs is observed to be very low in the region, and anti-retroviral therapy (ART) and pre-exposure prophylaxis (PrEP) are widely

h Known as medically supervised injection facilities in Australia.

available in Australia and New Zealand.[6,29] The early and effective implementation of NSP has been identified as a key factor in the successful prevention of an HIV epidemic among people who inject drugs.[30] However in both countries, prevalence of exposure to hepatitis C among prisoners and people who inject drugs is high and is a concern for public health.[3,7,31,32] To respond to this, in 2015 Australia became the first country in the world to provide free (or heavily subsidised) access to direct-acting antivirals without restrictions on disease stage, provider type or ongoing drug use, including for prisoners and people who use drugs, with the aim of eliminating hepatitis C.[6,23] This has seen a large increase in the number of people receiving treatment for hepatitis C, including people who inject drugs.[15,33]

Developments in harm reduction implementation

Needle and syringe exchange programmes (NSPs)

NSPs are widespread in both Australia and New Zealand, where there are significant numbers of people who inject drugs, but are largely absent in the rest of the region. According to national reports submitted by the respective ministries of health to the Joint United Nations Programme on HIV/AIDS, (UNAIDS) there is no evidence of injecting drug use in Fiji, Marshall Islands, Nauru, Samoa, Solomon Islands, Tonga or Tuvalu.[12,13,34-38]

A total of 3,627 NSP sites operate in Australia, 2,422 (67%) of which are based in pharmacies.[4] In 2016/2017, Australian NSPs distributed 49 million needles at an average of 631 needles per person who regularly injects drugs, a small decrease from 638 needles per person who regularly injected drugs in 2015/2016.[4] Syringe-dispensing machines (vending machines that dispense needles and syringes for free or at a nominal cost) are widespread in Australia, with 323 operational across the country.[4,15] Their number tripled from 2008-2017, and the majority (64%) are located outside major cities, where access to NSPs in primary care facilities or pharmacies can be more difficult.[4] Since 2016, Australian Capital Territory, Northern Territory and Tasmania have all passed legislation to decriminalise peer distribution of sterile injecting equipment, to increase access and coverage among the most hard-to-reach populations.[15,17] While peer-distribution remains criminalised in other states, a recent state parliamentary committee report in Victoria recommended removing the ban in the interests of preventing the transmission of blood-borne viruses.[17]

New Zealand was the first country in the world to have a national state-sponsored needle and syringe programme, which now operates from 190 pharmacies and 23 peer-based services.[8,39] Together, these services distribute more than 3.5 million pieces of equipment annually (approximately 233 per person who injects drugs), and are permitted by law to facilitate secondary distribution by distributing needles and syringes to key contacts.[8] The peer-based services include mobile units and are staffed by paid workers with life experience of injecting drug use, who are able to offer advice on safe injecting and refer people to health services as appropriate.[28] As such, they provide not only harm reduction for blood-borne viruses, but a broader psychosocial peer-led outreach programme. Evidence suggests that these types of programme have a greater ability to reach marginalised groups, as well as providing enhanced acceptance, self-esteem, community inclusion and empowerment among these populations.[28] The New Zealand Needle Exchange Programme is currently in discussions with the Ministry of Health to scale up the programme, with a particular objective of hepatitis C elimination.[8]

According to data collected in Australian NSPs, methamphetamines (41%) are now the most commonly reported category of last drugs injected in the country, followed by heroin (30%).[2] In contrast, the proportion of people reporting heroin as their last injected drug remained stable (29% in 2013 and 30% in 2017).[2] For methamphetamines, the proportion rose from 29% in 2013 to 41% in 2017.[2] Similar changes have been noted in New Zealand NSPs, where an increase in the injection of methamphetamines has also been observed, though methadone remains the most reported injected drug.[8] Other drugs injected in the region include pharmaceutical opioids such as morphine and anabolic steroids.[4,8,11] An emerging trend in Australia (though not yet in New Zealand) is the prevalence of pharmaceutical fentanyl injection, a highly potent opioid that 8% of Australian people who inject drugs reported using in a 2018 study using data from 2014.[40] Compared with participants who injected pharmaceutical opioids other than fentanyl, this group were significantly more likely to identify as indigenous Australian, inject daily or more frequently, inject in public and to have overdosed in the past year.[40]

In New Zealand, a common barrier to people who inject drugs accessing NSPs is geography, with low coverage in some rural and isolated areas of the country.[8] In order to address this, the New Zealand Needle Exchange Programme is in the process of launching an online NSP.[8] This platform will offer people who inject drugs the opportunity to

purchase injecting equipment anonymously online alongside additional features, such as a pop-up offering an instant messaging conversation with a harm reduction worker, aimed at replicating the experience of visiting a harm reduction service in person.[8] Economic barriers are also a consideration in increasing coverage, as the government only covers 85% of the cost of syringe distribution, leaving clients to pay the remaining 15% themselves.[8] The New Zealand Needle Exchange Programme reports that addressing this barrier is a key priority, as it contributes to the re-use and sharing of injecting equipment.[8]

An ongoing concern in Australia is the existence of barriers to accessing NSP services for certain subpopulations. The proportion of people who inject drugs in the country who identify as Aboriginal and Torres Strait Islander is thought to have increased from 12% in 2012 to 18% in 2017,[2,11] but there is a dearth of services specifically adapted to this population (see box).[6,17] Among women and LGBTQIA+ people who inject drugs, there has been noted a perception of stigma and discrimination, resulting in a reluctance to access NSPs.[21,27] Peer outreach programmes have had some success in reaching women who inject drugs and supporting them to access NSPs, however these projects are not widespread.[21] There are also NSP services specifically serving LGBTQIA+ people who inject drugs, such as those operated by the AIDS Council of New South Wales.[26] There is evidence that such targeted services can address fears of discrimination and stigma, and lead to greater improvements in wellbeing and health outcomes.[27]

The clear need for widespread and accessible NSPs in Australia is indicated by a small reported increase in the proportion of people attending NSPs reporting receptive syringe sharing in the last month, from 15% in 2013 to 18% in 2017.[2,3] Among certain subpopulations the rate is higher, with syringe sharing in the last year reported by 28% of Aboriginal and Torres Strait Islander people attending NSPs in 2016.[3] Among a small sample of men who have sex with men receiving treatment for methamphetamine dependence, 41% reported syringe sharing in the last six months.[22] Key reasons given by people who inject drugs for sharing injecting equipment are a lack of transport and the inconvenience of attending an NSP, a fear of identification as a person who uses drugs and language barriers.[15,41] For NSP programmes to achieve their potential, these issues must be addressed and services must be provided to ensure the inclusion of marginalised populations.

Opioid substitution therapy (OST)

OST coverage in Australia has remained stable since the *Global State of Harm Reduction 2016*, with only a small 3% increase in the number of prescribers from 2015/2016 to 2016/2017 and no major changes in implementation.[6,15] In 2016/2017, there were 3,074 prescribers and 2,732 dosing points, with 89% of these being pharmacies.[5] Each dosing point serves an average of 17 clients, with 70% serving fewer than 20 and only 7% serving more than 50 clients.[5] The dosing points with the highest number of clients tend to be in correctional facilities and private clinics.[5] The number of people accessing OST has remained stable since 2010, and in 2017 was estimated at 49,792 people.[5,15] Two-thirds of these were male and 10% identified as Aboriginal or Torres Strait Islander.[5] The median age of people receiving OST was 42 years, an increase of two years since 2016 and reflecting an increasing number of people over 60 and a decreasing number of people under 30 accessing the therapy.[5]

Heroin is the primary drug of dependence reported by 38% of people receiving OST in 2017.[5,11] Oxycodone, morphine, codeine and methadone were each reported as the primary drug of use in around 5% of people (38% of people declined to report their primary drug of dependence).[5] In Australia over the last two decades, a move has been noted from prescribing "weak" opioids to "strong", longer-acting opioids for chronic pain conditions.[42] Research has linked this to an increase in hospital admissions for overdose and treatment for opioid use.[42] In Samoa, non-injecting opiate use is the main form of illicit drug use.[13] However, no OST is available in Samoa or any other Pacific Island country.

In New Zealand and Australia, both methadone and buprenorphine are widely available.[5,9,15] Since 2016, doctors are increasingly prescribing combined buprenorphine-naloxone for OST with the intention of deterring injecting use and diversion.[5,9] Naloxone is poorly absorbed in pill form, but can lead to an unpleasant withdrawal when injected.[5,9] In Australia, methadone still accounts for 60% of all OST, though in 2017 buprenorphine-naloxone was prescribed more than buprenorphine alone for the first time.[5] Currently in Australia, buprenorphine-naloxone and methadone are generally only available as a take-home, unsupervised medication after at least three months of therapy, and often longer.[43] This represents a barrier for people in remote areas and increases costs (for example travel). Research has indicated that take-home unsupervised buprenorphine-naloxone is effective in maintaining people in OST, and poses less of a risk of diversion or unsafe use than methadone.[44]

Access to OST in New Zealand and Australia is generally good, but civil society organisations report that substantive barriers remain.[8,15,20,21] While medication for OST is provided for free in Australia, clients enrolled in private programmes (which represent the bulk of OST providers) still have to pay a minimum of AU$35 per week in prescription costs, which may deter enrolment and retention among people on low incomes.[45,46] In New Zealand, OST is also provided for free, but service users risk losing access to the therapy if they continue to use other drugs (including alcohol) in a way deemed unsafe by service providers.[47] Women also face particular barriers to accessing OST: for example, greater stigma; fear of inter-partner violence or abandonment; and fear of loss of child custody.[21] While a few specialised maternal health services for women on OST exist in Australia, harm reduction services are generally seen to target men who inject drugs, despite women being a significant minority of people who inject drugs.[20,21] Civil society organisations report that women are less likely than men to enrol in OST, although studies have shown they are more likely to access OST at an earlier age and to adhere to therapy once enrolled.[21,48]

The effectiveness of OST in preventing viral hepatitis and HIV infection among people who inject drugs is well documented.[49,50] OST has also been shown to be highly cost-effective: for every dollar spent on OST in Australia, it is estimated that AU$4-7 are saved in reductions on healthcare and crime spending.[45] Trials in the use of peer workers in OST clinics (people with experience of illicit opioid use and/or currently receiving OST) have shown that they can create a safer and more caring environment for both clients and regular staff, improving both retention and enrolment in OST among vulnerable populations.[51]

Amphetamine-type stimulants (ATS) and new psychoactive substances (NPS)

In the Pacific Island countries and territories, amphetamine use was reported to be rising in 2009, but little research has been undertaken since then.[14] In order for an effective harm reduction effort to be mounted in the Pacific Islands, further research into drug use in the region is vital. From 2013-2016, Australia saw a significant overall decline in amphetamine and methamphetamine use, driven mainly by a decline in use among people in their 20s.[52] However, there has been an increase in the use of crystal methamphetamine (also known as “ice” in Australia or “P” in New Zealand), which has replaced powder as the main form of use of the drug.[10,52] From 2010-2016, the proportion of people who use methamphetamines/amphetamines reporting crystal methamphetamine as their main form rose from 22% to 57%, with the proportion using powder amphetamine as their main form falling from 51% in 2010 to 22% in 2016.[52] This is also reflected in trends in the method of administration, with smoking (more common in crystal methamphetamine use) accounting for 42% of use and snorting only 16%.[52] Among people who use crystal methamphetamine, the portion injecting rose from 9.4% in 2013 to 19.2% in 2016.[52]

Use of the crystal form of methamphetamine is associated with a higher likelihood of progressing to heavy use and injection than other forms.[53] Civil society organisations are disseminating harm reduction information to target populations, but some civil society actors report concern that the national strategy is focused more on abstinence than on harm reduction.[6] There is also concern that the purity of methamphetamine has increased significantly since 2009.[54]

In a 2013 Australian household survey, last-year prevalence of methamphetamine use was significantly higher among gay and bisexual men (9.7%) than among heterosexual men (2.5%), associated with use in sexual contexts.[22,25] In these contexts, methamphetamine use is linked with an increased likelihood of engaging in high-risk sexual and drug-taking practices associated with HIV and viral hepatitis transmission (for example condomless sex, multiple sexual partners and injecting drug use).[22] Among Australian gay and bisexual men who inject drugs, 86% report injecting crystal methamphetamine and 41% report sharing injecting equipment.[22,55] There is a need for harm reduction services tailored specifically to gay and bisexual men to address barriers to access, such as stigma and a perception that health workers have inadequate specific knowledge of substance use among this population.[22]

The AIDS Council of New South Wales is an example of one of the few LGBTQIA+-specific organisations offering harm reduction services. These include acceptance therapy, cognitive behavioural therapy and motivational interviewing, with the understanding that the goal of interventions is not necessarily abstinence from drug use.[22,26] These services are available in person in three cities (Sydney, Lismore and Newcastle) and over Skype or telephone anywhere in New South Wales.[26]

Overall amphetamine and methamphetamine use has been stable in New Zealand since 2011, with total population prevalence of use at around 0.8%, equal to around 31,000 adults.[56] In 2018, the Ardern government and Housing New Zealand, the state housing agency, abandoned its policy of testing state-owned houses for traces of methamphetamine.[57]

This policy was based on a misinterpretation of scientific evidence and a belief that living in a house contaminated by methamphetamine use was harmful to health. It led to over 400 houses being falsely declared unfit for habitation and an unconfirmed number of people who use methamphetamines being evicted from social housing and charged for decontamination.[58,59]

Use of ecstasy has remained relatively stable in Australia since 2013, but remains well below the peak of use in 2007.[52] However, Students for Sensible Drug Policy report that Australia still has the highest per capita use of ecstasy in the world.[17] Several mass overdose incidents associated with high-purity MDMA and NPSs such as GHB (a stimulant that has particularly high risks when combined with alcohol) have occurred over the past two years at public events and festivals.[17] For example in 2017, 25 people were hospitalised during the Electric Parade festival in Melbourne after taking what is believed to have been GHB.[60]

These events, and reports in Australia of ecstasy pills containing large amounts of methamphetamine and toxic substances such as rat poison,[61] demonstrate the need for people who use these drugs to know the strength and contents of what they are taking. With 70% of ecstasy pills taken at clubs, bars, live music events or raves,[62] there is a clear advantage in taking harm reduction measures at these venues. KnowYourStuffNZ has operated a free pill-testing service at festivals since 2014, and has seen the proportion of samples that test negative for what the consumer expected fall from 80% in 2014/2015 to 30% in 2016/2017.[19,63] Common adulterants for MDMA included cathinones (60%) and n-ethylpentylone (16%), an NPS associated with frequent re-dosing, sleeping problems and paranoia.[63,64] During the testing process, staff provided tailored harm reduction advice, and more than half of clients intended not to take a substance that had tested negative.[63]

Australia's first pill-testing service at a dance music festival took place in April 2018, with the support of the Australian Capital Territory (ACT) government, local health and police authorities, festival organisers and the venue at the University of Canberra.[15] The trial screened two potentially lethal samples of n-ethylpentylone, the first time the drug had been detected in Australia, and found that more than half of samples tested contained no psychoactive substances at all.[65] The trial will continue at other events in the ACT.[65,66] Surveys have indicated high demand for these services in Australia, with 90% of people who use stimulants at public events saying they would use such a service.[67] Notably, 90% said they would not use the service if there was a risk of arrest, and 93% were willing to pay up to AU$5 for this potentially lifesaving service.[67]

Outside the Australian Capital Territory, pill-testing services still face legal barriers. In New Zealand, KnowYourStuffNZ and the New Zealand Drug Foundation acknowledge that they operate in a legal grey area which restricts the expansion of their pill-testing project into city centres and nightclubs.[17] For this reason, other harm reduction interventions for drug use at parties remain the predominant forms in Australia and New Zealand. Dancewize began its activities in 2012 in Melbourne, Australia, offering peer education to reduce harm from drug use at dance parties, festivals and night clubs, and since 2016 has expanded to new territories.[6,68] The AIDS Council of New South Wales offer harm reduction services at LGBTQIA+ events, such as peer education and break areas,[26] and the Victorian government recently recommended interventions at dance parties and festivals, such as cool-down areas, messages about spiking and peer-based education.[17] While these services are certainly valuable, the greatest opportunity for reducing harm from adulterated and high-strength substances lies in the large-scale roll out of pill-checking projects.[69]

A further emerging issue in New Zealand is the use of NPSs, which has increased in the country since 2016.[8] Since July 2017, up to 45 deaths have been attributed to the synthetic cannabinoid category of NPS.[70] Synthetic cannabinoid use is mostly prevalent among already marginalised groups, and therefore requires a tailored harm reduction response which so far has been mostly absent from New Zealand.[71]

The regional prevalence of cocaine use in Oceania is 1.5%, primarily in Australia and New Zealand.[10] In Australia alone, prevalence is 2.1% (five times the global average) and there are thought to be around 500,000 individuals who have used cocaine at least once in the last 12 months.[10,52] The availability of cocaine appears to be increasing in some parts of New Zealand.[8] Despite the large number of people who use cocaine in the region, the quantity consumed and frequency of consumption by individuals is thought to be low and civil society organisations report that the harm related to cocaine use is not a primary concern.[6,10]

Overdose, overdose response and drug consumption rooms (DCRs)

Australia is now home to two DCRs, known in the country as medically supervised injection facilities. The DCR in Sydney, in operation since 2001, was joined in July 2018 by a second DCR in Melbourne (currently under a two-year trial).[6,15] The Sydney DCR has registered 1.1 million injections since its inception, sees approximately 600 individuals per month (155 per day) and is open 80 hours per week.[15] The centre in Melbourne is expected to be used by up to 300 people per day.[72] Civil society organisations have raised concerns that the Australian DCRs offer no specific times or services for women.[20,21]

The DCR in Sydney allows the injection of crystal methamphetamine as well as heroin, and methamphetamines currently represent an estimated 20% of injections in the facility.[15] The Melbourne DCR is also expected to permit the injection of both crystal methamphetamine and heroin.[16] While methamphetamines are far less associated with overdose than opioids, these centres allow methamphetamine injection in order to combat the transmission of blood-borne viruses among all people who inject drugs.[17] Political opposition is a cause for concern for the Melbourne DCR, as representatives of the main opposition parties in Victoria have said that they would shut down the facility if they were to gain power in the state.[16] Despite permitting methamphetamine injection, these DCRs remain unable to serve people who smoke methamphetamines. A campaign was launched by civil society actors in 2016 to introduce drug consumption rooms serving this population, but no such facility has yet been opened in Australia.[73]

In Australia, take-home naloxone is now available in all states, though with varying coverage. Peer distribution networks for naloxone operate in some states, but not all.[6] In 2016, naloxone was rescheduled to allow over-the-counter purchase in pharmacies.[15] However, at AU$70 per dose, it is inaccessible to the majority who need it, and most still rely on the lower-cost alternative of receiving a prescription from a medical practitioner.[17] Australian civil society organisations have raised concerns that the reach of naloxone programmes is insufficient and that they suffer from a lack of funding.[17] In New Zealand, civil society organisations are working with the Ministry of Health to make naloxone available in NSPs and OST services, but take-home naloxone is not currently widely available.[8]

Viral hepatitis

Hepatitis C prevalence among people who inject drugs attending Australian NSPs has declined from 57% in 2015 to 49% in 2017.[3] In New Zealand, prevalence among people with lifetime prevalence of injecting drug use is estimated to be 57%.[7] Injecting drug use is the primary driver for hepatitis C infection across the region; for example, 83% of people living with hepatitis C in New Zealand report a history of injecting drug use.[3,31]

In 2015, Australia became the first country in the world to provide free or heavily-subsidised direct-acting antivirals for hepatitis C to the whole population, including people who use drugs and prisoners, at any stage of the disease.[6] This has led to record numbers of Australians being treated for hepatitis C, with 43,360 individuals initiating treatment from March 2016 to June 2017, compared with around 2,500 per year before the reforms.[15,33] The impact of integrated viral hepatitis services in harm reduction projects has been positive in both Australia and New Zealand. NSPs have been shown to reduce hepatitis C infection among people who inject drugs by 25% since their introduction in New Zealand, and by between 15% and 43% between 2000 and 2010 in Australia (averting up to 77,000 cases).[74,75] Enrolment in OST in Australia has been shown to reduce injecting behaviours that increase the risk of blood-borne virus infection and to increase detection of hepatitis C among people who use the service.[49,76]

While access to hepatitis C treatment in Australia is officially universal, certain groups experience barriers to participation. Perceived stigma from health workers, a lack of information on direct-acting antivirals and bad experiences with previous interferon-based medication all deter people who use drugs from accessing services.[6] Studies in New South Wales have found that the use of peer workers in OST services can contribute to the more effective treatment of marginalised populations, by preparing clients for hepatitis C treatment and testing.[51] The rate of hepatitis C prevalence among young Aboriginal and Torres Strait Islander people is estimated to be 6.3 times higher than among young non-indigenous Australians, and increased by 50% from 2012-2016 while the rate among young non-indigenous Australians decreased by 14%.[3] The development of culturally appropriate harm reduction interventions for this population has been identified as a possible means of addressing this gap, which is associated with higher rates of receptive syringe sharing and incarceration among Aboriginal and Torres Strait Islander people.[3,77]

With the introduction of universal access to new direct-acting antivirals, Australia is now targeting the elimination of hepatitis C as a public health concern in the country.[17,78] It is a realistic target that will require the continued implementation of extensive harm reduction services, such as NSPs and OST, as well as a concerted effort to ensure they are accessible to all sectors of the population.[78]

In New Zealand, significant moves have been made towards reducing barriers to hepatitis treatment and testing for people who inject drugs and integrating these services with OST. Hepatitis C clinics, operating as partnerships between hospitals and NSPs, exist in Auckland, Christchurch and Dunedin, and all NSPs are now visited by specialist hepatitis nurses on a fortnightly or monthly basis.[8] A number of new hepatitis clinics for people who inject drugs were opened in 2017 and 2018, and rapid hepatitis C testing has been piloted in NSPs with results showing that this integration is an effective way of engaging with people who inject drugs.[8]

Tuberculosis (TB)

In the general population, TB incidence remains low and stable in most of the region. Compared with the global incidence rate of 140 cases per 100,000 people, Australia (6.1), New Zealand (7.3), Samoa (7.7) and Tonga (8.6) have exceptionally low rates, according to 2017 figures.[79] These countries also have approximately 90% treatment coverage.[79] However, there are elevated TB incidence rates in Kiribati (566), Timor Leste (498) and Papua New Guinea (432), where treatment coverage is below 80%.[79] Data for TB incidence or prevalence among people who inject drugs is unavailable.

In Australia, TB diagnosis and treatment is available to people who inject drugs and people in detention. However, civil society organisations report that perceived stigma from health care workers towards people who inject drugs acts as a barrier to these people accessing treatment.[6]

HIV and antiretroviral therapy (ART)

Prevalence of HIV among the general population and people who inject drugs in Oceania is low, and ART and pre-exposure prophylaxis[i] are widely available in both Australia and New Zealand.[6,29] In Australia, prevalence of HIV among people who inject drugs attending NSPs was low and stable from 2012 to 2017, ranging from 1.4% to 2.1% over this period, and injecting drug use was responsible for just 1% (14 cases) of new diagnoses in 2016.[2,3] In New Zealand, just one case of HIV transmission through injecting drug use was recorded in 2016, though the overall incidence rate saw a small increase from 2015.[29]

Civil society and academic institutions attribute the very low rates of HIV prevalence among people who inject drugs in Oceania to the success of NSPs.[29,30] In particular, they credit the early implementation of NSPs at a time when the prevalence of HIV was low and NSPs were therefore effective in preventing, rather than responding to, an HIV epidemic among people who inject drugs.[30] The leadership at the New Zealand Needle Exchange Programme reports that there are no significant barriers to access to HIV testing and treatment for people who inject drugs in New Zealand.[8]

In Australia, increases in HIV prevalence have been noted over the past decade among the Aboriginal and Torres Strait Islander population, though rates remain low.[3] According to surveys carried out in Australian NSPs from 2012 to 2016, injecting drug use is the source of a higher proportion of HIV infections among Aboriginal and Torres Strait Islander people (14%) than non-indigenous Australians (3%), and from 2013 to 2017 HIV prevalence among Aboriginal and Torres Strait Islander people attending NSPs rose from 1.3% to 3.6%.[2,3] There are calls for the development of culturally appropriate clinical management and support for Aboriginal and Torres Strait Islander people living with HIV to prevent further increases.[3]

Harm reduction in prisons

The overall prison population in Oceania was 54,726 in 2016, and with the majority in Australia (35,949) and New Zealand (8,906).[80] The rate of incarceration was 140 per 100,000 people, comparable to the global average of 144.[80] Palau is notable for having the highest incarceration rate in the region, with 343 of every 100,000 people imprisoned, while the Solomon Islands have the region's lowest figure at just 56 per 100,000.[81] Since 2000, the prison population in Oceania has grown proportionately more than any other region in the world, with a 59.1% increase compared with a 25.2% increase in the general population of the region.[80] Of even greater concern, the female prison population has doubled over the same period.[80]

In Fiji, Palau, Marshall Islands, Papua New Guinea, Timor-Leste and Samoa, serious concerns have been raised about overcrowding, a lack of sanitation and a lack of distinction between pre-trial detention and

i A course of medication that can reduce the chances of HIV infection before exposure to the virus.

the detention of those convicted of crimes.[82,83,83-87] For example, prisons in Timor-Leste were found to operate at more than 200% capacity and there was no separation between pre-trial and post-trial detainees.[87] Prisons in Australia and New Zealand generally meet international standards on these metrics.[81]

The number of people imprisoned for drug offences rose 18% from June 2016 to June 2017, and this population makes up 15% of those incarcerated in Australia.[88] An estimated 45% of adult detainees report that alcohol or other drug use contributed to their detention and 67% report using an illicit drug in the 12 months prior to their entry into the detention system.[23] More than half of those in detention are thought to have a history of injecting drug use.[89] For these reasons, prisoners are considered a priority population under the Australian National Drug Strategy 2017-2026.[23] In New Zealand, a 2016 study from the New Zealand Department of Corrections found that 87% of prisoners in the country have a lifetime diagnosis of a substance use disorder.[90]

A primary concern in Australian prisons is an epidemic of hepatitis C. Overall prevalence of hepatitis C in Australian prisons is estimated to be 31%, rising to 56% among prisoners who inject drugs. Further, more than two-thirds of female prisoners who inject drugs are thought to be living with hepatitis C.[23,32] These rates represent an overall increase in hepatitis C prevalence among prisoners since 2013.[23] Because of this, prisoners were also considered a priority population in the National Hepatitis C Strategy 2014-2017, and hepatitis C treatment, including direct-acting antivirals, is available and federally funded in prisons.[91] However, the strategy was poorly implemented and unevenly applied between states and territories.[91] Unsafe injecting practices, such as syringe sharing, have been noted to increase upon entry to Australian prisons,[92] demonstrating the need for access to safe injecting equipment in order to prevent the transmission of viral hepatitis. Lotus Glen prison in Queensland was declared Australia's first hepatitis C-free prison in May 2017, an indication of the efficacy of direct-acting antiviral treatment in prisons.[93,94]

There are no NSPs in Australian prisons,[6,15] despite the inclusion of prisoners as a key population in the national drug plan. This has been identified as a significant obstacle to controlling the hepatitis C epidemic.[91] In the *Global State of Harm Reduction 2016*, it was reported that the government of Australian Capital Territory had approved the country's first prison NSP in Canberra, only for the proposal to be blocked by the prison officers' union.[95] While the territory's government remains supportive, no further progress has been made.[6,96] In the absence of NSPs, Fincol, a hospital-grade disinfectant that can be used to clean syringes, is the only means of sterilising injecting equipment available to those incarcerated in Australia.[97] However, the use of Fincol is not sufficient to control the hepatitis C epidemic and cannot be considered a replacement for NSPs. There is limited data on the efficacy of Fincol in reducing the transmission of blood-borne viruses in practice, and people who inject drugs report that the need to avoid being caught by prison officers while injecting means that in practice syringes often go unwashed between uses.[97] Furthermore, people who inject drugs in prisons report deprioritising washing, with hepatitis C becoming a normalised condition in most Australian prisons.[97]

OST is available in prisons in both Australia and New Zealand; however, access is more limited than in the general population.[6,8,47] In New Zealand, OST is only available to prisoners who had initiated OST prior to incarceration (except in one prison where OST can be initiated).[8] In Australia, the availability of OST can vary considerably between prisons in different states and territories, but where it is available it is on the same basis as in the general population; in 2017 there were 33 dosing points and 3,248 clients undergoing OST in Australian prisons.[5,6,15] Since 2016, prisons in Queensland have begun providing OST.[15] In both countries, OST initiated outside prison can be continued while the person is detained.[6,47]

Studies from around the world indicate that the period immediately following release from prison is associated with the highest risk of death due to opioid use, largely due to the risk of overdose; this is especially true in the first month after release.[98] Australian studies have found that OST provision in prison and, importantly, immediately following release contribute to significantly lower mortality risk.[99] Therefore, the availability of OST in prisons should be maximised to the fullest extent possible.

Naloxone availability in prisons in Oceania is limited. In Australia, it is only available to health staff.[6] It is not made directly available to prisoners in Australia or New Zealand, either while incarcerated or on release, though civil society organisations in Western Australia have advocated for this.[8,15] The introduction of naloxone that is directly available to prisoners in Oceania, while in detention and on release, would play a significant role in lowering overdose deaths among these populations.

Indigenous peoples and harm reduction

Indigenous peoples in Oceania, specifically the Aboriginal and Torres Strait Islander population in Australia and the Māori population in New Zealand, consistently show worse health outcomes than other ethnic groups in the region.[100,101] This inequality has persisted since the arrival of European settlers in the 19th century, and has been shown to exist controlling for socio-economic factors.[101]

Indigenous groups are over-represented among people who inject drugs. In Australia, 18% of people who injected drugs attending NSPs in 2017 identified as Aboriginal and Torres Strait Islander people, up from 12% in 2016.[11] Aboriginal and Torres Strait Islander people were also more likely to report receptive syringe sharing (28%) than non-indigenous Australians (17%),[3] and in 2017 accounted for 10% of all people receiving OST in Australia.[5] Māori people in New Zealand have previously been shown to be 3.4 times more likely to use amphetamines than non-Māori people, and to be significantly more likely to use crystal methamphetamines than other groups.[102,103]

The higher prevalence of injecting drug use and high-risk drug-taking practices are reflected in a range of data sources. From 2012 to 2016, the prevalence of hepatitis C increased by 50% among young Aboriginal and Torres Strait Islander people while the prevalence among young non-indigenous people fell by 14%.[3] This leaves Aboriginal and Torres Strait Islander youth with a prevalence 6.3 times higher than young non-Aboriginal and Torres Strait Islander people.[3] Though HIV prevalence is low among all groups in Australia, it has increased among the Aboriginal and Torres Strait Islander populations over the past decade.[3] Among Aboriginal and Torres Strait Islander people who inject drugs attending Australian NSPs, HIV prevalence was estimated at 3.6% in 2017, up from 1.3% in 2013, compared with 1.9% prevalence in 2017 among non-Aboriginal and Torres Strait Islander people who injected drugs.[2] From 2012-2016, injecting drug use accounted for 14% of new HIV diagnoses among Aboriginal and Torres Strait Islander people, but only 3% for non-indigenous Australians.[3] In New Zealand, Māori people are known to have a particularly high prevalence of hepatitis B.[104]

These patterns are compounded by other socio-economic inequities, notably disproportionate incarceration of indigenous people. Despite forming only 16% of the New Zealand population, Māori people accounted for 58% of those incarcerated in New Zealand in 2016/2017.[105] Aboriginal and Torres Strait Islander people in Australia are even more over-represented in prisons, accounting for 2% of the general population and 28% of those incarcerated in March 2018.[106]

These stark statistics have led to calls from government and civil society for health and harm reduction services specifically tailored to the indigenous populations of Oceania.[6,17,107] Such services could mitigate the impacts of discrimination and distrust of Western health practices, and provide culturally appropriate services for indigenous conceptualisations of health.[101,107,108]

In both New Zealand and Australia, health services specifically serving these populations do exist, and have been established by national policy documents.[107,109] However, harm reduction interventions tailored to indigenous peoples are limited. Though substance use facilities exist for Aboriginal and Torres Strait Islander people in Australia, they tend to focus on alcohol use, and only a minority of the treatments offered (31%) use a harm reduction approach, with most focused on abstinence or controlling substance use.[109] The introduction of harm reduction services, especially NSPs, which incorporate Aboriginal and Torres Strait Islander and Māori practices and conceptualisations of health, could have a significant impact on the prevalence of blood-borne diseases and drug-related harm among these populations.

Policy developments for harm reduction

The Australian and New Zealand governments remain supportive of harm reduction interventions both within the countries and externally, for example through vocal support for harm reduction at the UN Commission on Narcotic Drugs.[6,8] Harm reduction forms one of the three pillars of Australia's National Drug Strategy 2017-2026 (alongside demand reduction and supply reduction), while New Zealand's National Drug Policy 2015-2020 also explicitly supports harm reduction and a people-centred system of interventions.[6,23,74] Harm reduction is also mentioned in Australia's national HIV and hepatitis C strategies.[15] No evidence has been found of policy documents declaring explicit support for harm reduction in the region outside these two countries.

With the passage of the Narcotic Drugs Amendment Act in October 2016, Australia legalised the cultivation of cannabis for medical and scientific purposes, though licenses will be restricted to people with business experience and no criminal convictions in the past five years.[15] A bill for the legalisation of medicinal cannabis is currently in front of the New Zealand Parliament, and part of the coalition agreement between the current ruling parties committed them to a referendum on cannabis legalisation before the next parliamentary election.[8]

An inquiry into drug law reform by the Parliament of Victoria was published in 2018. It made several recommendations for the reform of drug policy, including treating personal drug use as a health issue rather than a criminal one; removing laws prohibiting the distribution of sterile injecting equipment and non-injecting drug paraphernalia; government-facilitated pill-testing at music festivals; and a review of threshold quantities for distinguishing between trafficking and personal possession.[15,17]

Civil society and advocacy developments for harm reduction

There is a strong civil society movement for harm reduction in Australia, with both a national harm reduction network (Harm Reduction Australia) and a national network of people who use drugs (Australian Injecting and Illicit Drug Users Leagues, AIVL). AIVL has secured renewed government funding since 2016, is affiliated to regional equivalent organisations in each state and territory, and is considered a key partner by the national government in the development of drug policy.[6,15]

Students for Sensible Drug Policy was established in Australia in 2016.[15] The organisation operates through university-affiliated chapters, of which there are currently four with a further nine seeking affiliation with their university.[110] SSDP forms part of the consortium that delivered the pill-testing trial in April 2018 at the University of Canberra.[15]

Several significant advocacy campaigns have been launched in Oceania since 2016. The Just One Life campaign by the Ted Noffs Foundation and the Time to Test campaign by Unharm have both advocated for the implementation of pill-testing at music festivals.[15] The Sniff Off campaign, led by David Shoebridge of the New South Wales Green Party, has pushed for an end to the use of sniffer dogs for drug detection, claiming that it is an ineffective drug control mechanism and a violation of civil liberties.[111] This claim is supported by evidence of the ineffectiveness of the use of sniffer dogs as both a deterrent and a harm reducing measure.[112] In June 2018, security at a Sydney music festival refused entry to anyone drawing the attention of sniffer dogs, regardless of whether they were found to be in possession of illicit drugs, drawing criticisms from Shoebridge and other civil society actors that this was a serious abuse of police power.[113]

Civil society organisations in Oceania have participated in movements that have been successful in reversing harmful government policy on drugs. In 2017, an Australian government proposal to subject welfare recipients to drug tests was delayed due to legislative and civil society opposition.[114] Civil society organisations condemned the policy as ineffective, costly and having unintended consequences including driving criminality, and demonising welfare recipients and people who use drugs.[115] It was also criticised for the disproportionate effect it would have on indigenous people and women.[21] In New Zealand, civil society, particularly the New Zealand Drug Foundation, led opposition to the eviction of tenants from methamphetamine-contaminated housing, a policy which has now been reversed by the new administration.[8]

In addition to these campaigns, the first New Zealand Harm Reduction Conference was held in October 2018, organised by the New Zealand Needle Exchange Programme, and all of the major conferences on drugs in Australia have significant streams on harm reduction.[6,8]

Funding developments for harm reduction

In both New Zealand and Australia, all investment in harm reduction services and advocacy comes from the national and state governments.[6,8] In Australia, a commitment to harm reduction investment is included in the National Drug Strategy. The federal government and all nine states and territories provide funding; however, the precise volume is unknown as no updates have been made available since 2015.[6] As reported in the *Global State of Harm Reduction 2016*, these figures showed that harm reduction accounts for only 2.1% of Australian government spending on drugs, compared with 66%

on law enforcement and 21.3% on treatment.[j][95,116] Research shows that law enforcement is ineffective in addressing drug use.[117,118] Redirecting a small proportion of ineffective law enforcement spending towards harm reduction would enable evidence-based harm reduction services to be expanded to meet need.[6]

Similarly, New Zealand has seen little change in funding for harm reduction since 2016, and despite campaigns by civil society organisations, spending on drug policy remains predominantly focused on law enforcement.[8] Data on harm reduction investment as a whole remains unavailable, but it is estimated that NSPs in New Zealand were funded to the value of NZ$4.5m in the 2017/2018 financial year.[8] Drug checking projects in New Zealand receive no government funding and are entirely financed by public donations.[119]

j It should be noted that 12% of government spending on treatment was for OST. However, it is impossible to disaggregate spending on OST for harm reduction from spending on OST for treatment.

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Regional Overview
2.8 Middle East and North Africa

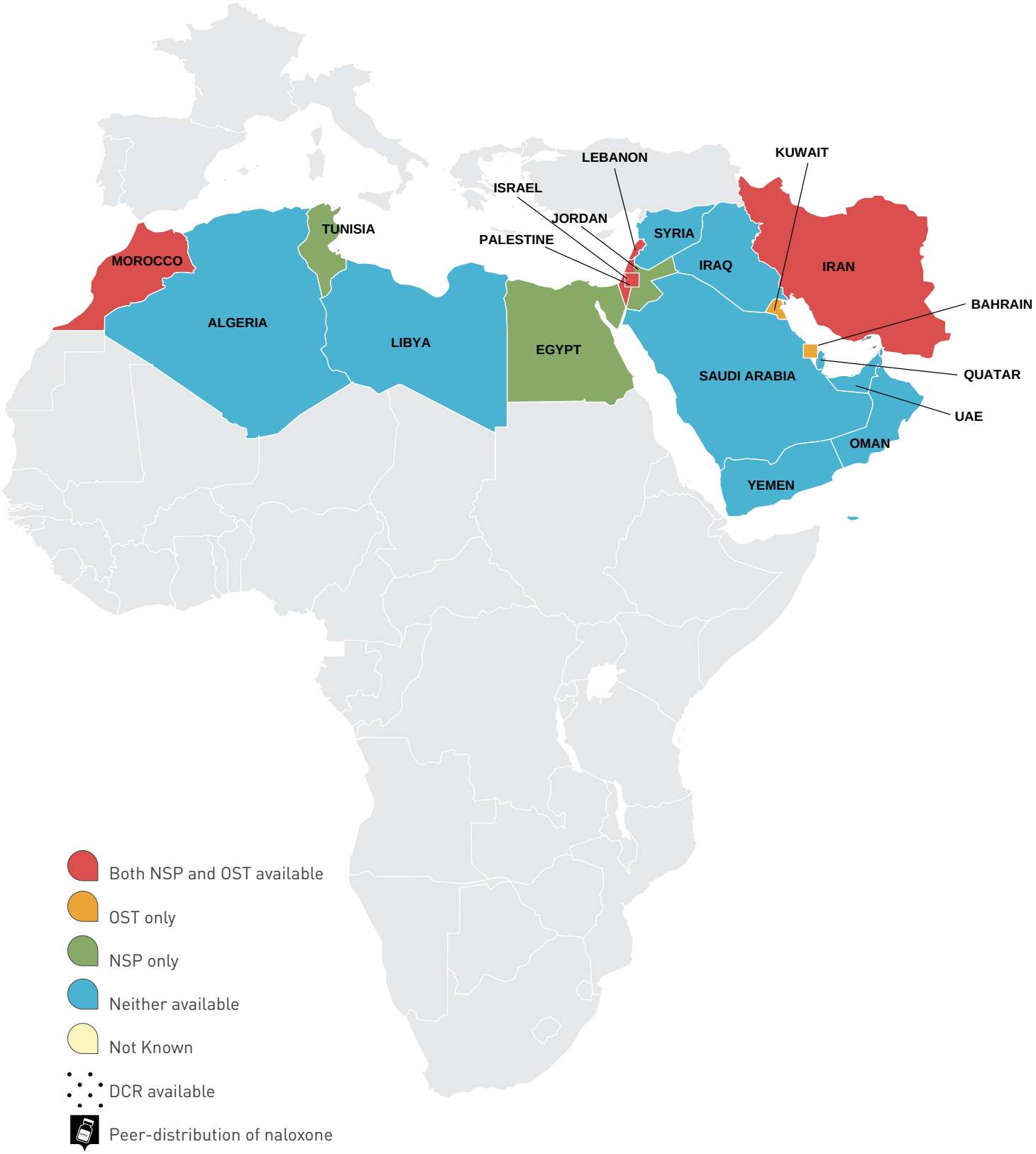
Table 2.8.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in the Middle East and North Africa

Country/territory with reported injecting drug use[a]	People who inject drugs[b][2]	HIV prevalence among people who inject drugs(%)[c][2]	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs (%)	Harm reduction response			
					NSP[d]	OST[e]	Peer-distribution of naloxone[1]	DCRs[f]
Algeria	21,050	6.5	nk	nk	x[g]	x	x	x
Bahrain	2,000	3.9[4]	nk	nk	x[2]	✓[h][5]	x	x
Egypt	93,000	2.4[6]	nk	nk	✓(9)[i][2]	x	x	x
Iran	185,000[7]	13.8[8]	52.2[7]	30.9[9]	✓(580)[2]	✓(7,016)[2]	x	x
Iraq	18,750	0.6	nk	nk	x	x	x	x
Israel	nk	nk	45.3[10]	5[11]	✓(5)[12]	✓[13]	x	x
Jordan	4,240	0.6	nk	nk	✓(10)[2]	x	x	x
Kuwait	3,510	0.6	nk	2[11]	x	✓(1)[2]	x	x
Lebanon	3,200	0.9[6]	28[9]	2[14]	✓(2)	✓(10)[2]	x	x
Libya	6,800	87.1[8]	94.5[15]	4.5[15]	x	x	x	x
Morocco	3,000-18500[2,6]	7.1[6]	57[16]	nk	✓(6)[2]	✓(7)[2]	x	x
Oman	4,110	0.6	nk	4.8[11]	x	x[j][3]	x	x
Palestine	5,000	nk	40.3[9]	0.6[17]	✓(2)[2]	✓(1)[2]	x	x
Qatar	2,220	0.6	nk	nk	x	x	x	x
Saudi Arabia	10,000	3.5[18]	77.8[10]	7.7[19]	x	x	x	x
Syria	10,000	nk	40.8[9]	0.5[20]	x	x	x	x
Tunisia	11,000	3.9[8]	29.1[9]	3.0[11]	✓(25)[2]	x	x	x[k]
United Arab Emirates	9,250	0.6	nk	nk	x	x[l][2]	x	x
Yemen	7,030	0.6	nk	nk	x	x	x	x

nk – not known

a There have been reports of injecting drug use in every country in the region according to Larney et al. in 2017.[1]
b As accurate data on estimates in the MENA region is scarce, unless otherwise referenced, numbers represent extrapolations made according to estimations from similar country contexts by the Middle East and North Africa Harm Reduction Association (MENAHRA).[2]
c HIV prevalence in Algeria, Iraq, Jordan, Kuwait, Oman, Qatar, United Arab Emirates and Yemen are made by MENAHRA according to similarities with other countries where national estimations are unavailable.[2]
d All operational needle and syringe exchange programme (NSP) sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers. (P) = pharmacy availability.
e Number of opioid substitution therapy (OST) sites.
f Drug consumption rooms, also known as supervised injecting sites.
g Civil society organisations in Algeria are reported to distribute needles and syringes; however, purchasing needles and syringes from pharmacies is difficult because some pharmacists refuse to sell them to people who inject drugs or do not have sufficient stocks in remote places.[3]
h Bahrain has begun piloting OST programmes.[5]
i NSPs were widely available within the governorate of Minya in 2014 to 2016 by two local civil society organisations, through funding from MENAHRA; however, these programmes have been halted since mid-2016 due to governmental disapproval.[3]
j Currently there is no OST programme in Oman; however, OST has recently been included in national policy documents. During the past two years, many OST advocacy campaigns and training workshops have been conducted. Financial constraints are one of the main barriers in delaying the implementation of OST.[3]
k In 2017, it was reported that several safe injection sites were operated by a civil society organisation in Tunisia, including a site exclusively serving women. However, it is unclear if these services are still in operation.
l OST is available in the United Arab Emirates for detoxification only.

Map 2.8.1: Availability of harm reduction services



Harm reduction in the Middle East and North Africa

Overview

In a recent systematic review, injecting drug use was reported in every country in the Middle East and North Africa region.[21] There are an estimated 349,500-437,000 people who inject drugs in the region,[2,10] 96.2% of whom reportedly use opioids as their main drug (compared with 14.2% for stimulants).[m][10] Heroin is the most commonly used substance in the region (used by an estimated 63.9% of people currently using drugs), followed by cannabis (46.2%)[n] and cocaine (32.8%).[23] While use of amphetamine-type substances has long been established in the Middle East, recent evidence indicates that use is increasing is certain countries (such as Jordan and Syria) and that use is increasingly prevalent in North Africa.[24]

Despite the prevalence of drug use in the region, the implementation of needle syringe programmes (NSPs) remains extremely low, with between one and four needles distributed per individual per year in the region. The provision of opioid substitution therapy (OST) is also low (see table 2.8.1). The Middle East and North Africa is one of just two regions in the world where AIDS-related deaths continue to rise. It is estimated that 57% of all new adult HIV infections in the region are among people who inject drugs.[25] Nevertheless, access to harm reduction services, including HIV testing and treatment, is lacking among people who use drugs or inject drugs in the region.[2] This lack of harm reduction and health services for people who use drugs is at risk of being further aggravated by the absence of positive changes in investment and political commitment to harm reduction in the region.[26]

Harm reduction services in the region are predominately provided by civil society across the region, with governments playing a small role in some countries.[23] Five countries (Israel, Iran, Lebanon, Morocco and Palestine) have incorporated harm reduction strategies into the national HIV frameworks, and eight countries (Algeria, Bahrain, Egypt, Jordan, Libya, Oman, Syria and Tunisia) refer to people who inject drugs as populations requiring specific health services.[2] There is an absence of robust data on people who use drugs living with HIV and accessing antiretroviral therapy.[21] There have also been large cut backs and closures of harm reduction services in some countries: Egypt and Oman have ceased to provide harm reduction services since 2016,[2] and Jordan has been forced to severely restrict service provision due to an ongoing funding crisis.[3]

Countries in the region are faced with substantial challenges which impair their ability to effectively implement national HIV prevention programmes, including a drastic decline in HIV and harm reduction funding exacerbated by the fact many countries in the region rely on singular funding sources.[27] Other challenges for addressing blood-borne diseases among people who use drugs include an absence of effective surveillance systems, a paucity of quality and accessible services, and prevailing stigma and discrimination. Regional instability caused by the ongoing civil wars in Iraq, Libya, Syria and Yemen also contribute to communities' access to quality lifesaving harm reduction services.[27]

This fragile socio-political environment has caused unprecedented mass movements of people across and beyond the region, with growing cohorts of refugees, internally displaced people and migrants subsisting in poor living conditions that have an impact on their mental and physical health. The UN Office on Drugs and Crime (UNODC) reports this has precipitated an increase in drug consumption and trafficking, and the region has seen a rise in income generation through the production and selling of drugs.[24,28] In addition to this regional socio-political instability, the Middle East and North Africa Harm Reduction Association reports that gender disparity and engendered cultural norms lead to women in the region, especially women who use drugs, being less likely to access health services.[23] There is also a paucity of HIV and harm reduction services for people who use drugs in closed settings, such as those in displacement camps and in prison contexts.[29] Experienced or anticipated stigma are also reported as barriers to accessing health care for people who use drugs, particularly in Egypt, Morocco and Tunisia.[23]

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

All 19 countries in the region are reported to be home to populations of people who inject drugs, but the provision of NSPs is inconsistent. Despite having been first introduced in the region over 15 years ago, NSPs are still only available in eight countries, and no new countries have implemented NSPs since the *Global State of Harm Reduction 2016*. Where they exist, NSPs have seen some growth. Tunisia and Jordan

m The regional proportion of people who inject drugs reporting opioids or stimulants as their main drug does not account for polydrug use and may be based on varying methodologies.[10]
n Cannabis consumption is thought to be widespread in the region and this figure may represent an underestimate due to underreporting.[22]

have seen the greatest expansions in NSP service provision since 2016. Jordan began implementing NSPs in five governorates in 2013, and as of 2018 has expanded to include a further 10.[2] Morocco and Palestine also increased the number of NSP sites in each country.[30] Unfortunately, due to ongoing challenges, Egypt's NSP programme ceased in 2016.[2]

In Iran, there is evidence supporting the effectiveness of access to sterile syringes in reducing syringe sharing practices and syringe reuse among people who inject drugs.[31] With 580 state-supported NSP sites across the country, Iran is an outlier in the region;[2] elsewhere NSPs remain remarkably limited in scope and coverage, and there is little governmental support and public acceptability.[3]

Challenges to NSP provision in the region include limited funding, poor political commitment and support, protracted bureaucratic procurement processes and regional instability.[2] The Middle East and North Africa remains the region with the lowest NSP coverage globally (0.5 syringe/people who inject/year).[32] Pharmacies continue to be the most accessible source of sterile syringes, particularly in Iran, Jordan and Tunisia,[33] though there are legal barriers and communities report persistent stigmatisation of people who inject drugs from pharmacy staff in many countries.[34] With the exception of Iran, and to a lesser extent Morocco, there is a lack of a supportive legal and socio-cultural environment for NSPs, and the possession of syringes by people who inject drugs can often lead to prosecution.[35]

Opioid substitution therapy (OST)

Opioid substitution therapy as harm reduction is currently provided in at least seven countries in the region, with methadone distributed in Iran, Israel, Morocco and Palestine, and buprenorphine provision in Iran, Israel, Kuwait and Lebanon.[2,13] Prior to 2010, Iran and Israel were the only countries in the region which provided OST for people who use opioids.[2,13] Since that time, Morocco (in 2010), Lebanon (in 2012), Palestine (in 2014) and Kuwait (in 2015) have initiated OST.[2] Since 2016, Bahrain has launched an OST pilot.[5] OST has also been available in the United Arab Emirates since 2012; however, it is only available for detoxification at the National Rehabilitation Centre and is not available to foreign workers, who make up the majority of the population.[2,22] Oman is also currently considering moves to initiate OST service provision.[3]

Iran incorporated OST into its national policy in 2003 and is leading the way in service provision, with over 7,000 centres providing OST to more than 650,000 people who use drugs.[2,36] In 2011, Lebanon adopted a take-home buprenorphine pilot programme; however, provision is limited to authorised psychiatrists working within pre-registered treatment settings. The results of the evaluation of the first pilot in Lebanon supported expanding the access to buprenorphine in Lebanon and other Middle Eastern and North African countries, and is an encouraging step towards continued service provision for people who use drugs.[5]

The availability of publicly funded low-threshold methadone maintenance therapy services in Iran has increased through Ministry of Health drop-in centres since the *Global State* last reported. Methadone, buprenorphine and tincture of opium are used for opioid maintenance treatment in Iran; coverage of OST has also increased since 2016.[3] The main barriers to OST in the country include geographical obstacles for people in rural settings and costs incurred with accessing the service, although since 2010 insurance coverage for OST services has been provided for in national law.[3] Since 2014, the Iranian Drug Control Headquarters has allocated funding to implement insurance for opioid substitution therapy services.[3]

In Lebanon, three new OST prescribing centres have opened: one in the Bekaa, one in Beirut and one in a coastal town near Tripoli.[3] Although coverage is increasing, imposed weekly urine screening tests for people who use drugs dissuade many from accessing the service.[3]

Legal and political constraints limit the provision of OST in many parts of Palestine, with a paucity of services available in the West Bank and the Gaza Strip, and extremely limited psychosocial services supporting adherence to the programme.[3] In the United Arab Emirates, potential challenges and obstacles for adherence to OST for eligible people who use drugs include concerns about being forced into diversion programmes, poly-substance use (particularly the high levels of benzodiazepines), unstable housing conditions and geographical barriers.[3]

Amphetamine-type stimulants (ATS), cocaine and its derivatives, and new psychoactive substances (NPS)

Although there is a lack of robust data on the variety of drugs used within the Middle East and North Africa, polydrug use is prevalent. Among people currently using drugs, the most commonly used drugs include heroin (in Egypt and Morocco), cannabis (mostly in Lebanon, followed by Tunisia and

Morocco) and cocaine (especially in Morocco and Lebanon).[23] Other types of drugs being consumed include MDMA (predominately in Lebanon), methamphetamine (with the highest usage reported in Iran and Lebanon) and benzodiazepines in Tunisia.[23,37] Use of tramadol and Tamol in Egypt are also continuing or emerging trends.[23] Prescription drugs were used by 22.7% of people who drugs in the region.[23] Lebanon has witnessed an increase in the use and sale of synthetic cannabinoids.[38] Use of khat, a natural stimulant with a long history of use in the region, is reportedly increasing in countries such as Yemen, Oman and Saudi Arabia.[39]

Fenethylline, a stimulant commonly referred to by the brand name Captagon, is the Arabian Peninsula's most consistently consumed narcotic substance,[40] particularly in Saudi Arabia where use is reported to be high among young men.[41] Captagon is reported to be easily accessible, and available in e-commerce within the United Arab Emirates, Syria, Iraq and Turkey, and widely available on the darknet.[41]

Globally, there is a lack of harm reduction services that are responding to the needs of people who use ATS and NPS, and the Middle East and North Africa is no exception. Iran piloted a number of programmes to support people who use ATS and NPS in 2014/2015; for example, needle and syringe programmes for people who use ATS, safer methamphetamine use kits and education about drug use.[42] An evaluation of this programme published in 2017 found that harm reduction services focused on people who use ATS improved health outcomes for this population.[42]

Overdose, overdose response and drug consumption rooms (DCRs)

Although there continues to be little available data on overdose in the Middle East and North Africa, there have been some positive developments addressing overdose since the *Global State of Harm Reduction 2016*. Lebanon, in part influenced by effective advocacy by civil society, has continued to demonstrate a commitment to overdose prevention. This has included lobbying healthcare providers not to report patients to law enforcement when they access health services for drug overdose symptoms.[3]

Availability of naloxone, an opioid antagonist capable of reversing the effects of overdose, is reported to be low across the Middle East and North Africa. Overdose prevention programmes are being carried out in Algeria, Egypt, Palestine and Tunisia in formal medical settings; however, access in all countries is reported to be minimal, and often limited to information and education rather than medical assistance.[3] Syria supports one facility capable of addressing overdose with naloxone; however, this service is heavily over-burdened and under-funded.[3] There were no reported peer-distributed naloxone programmes in the Middle East and North Africa region at the time of reporting.

Overdose prevention programmes are not available (the main barrier being regulations and national instability) in Jordan, Libya, Oman and Morocco, although Morocco has started discussions on developing an overdose response framework.[3] In the United Arab Emirates, overdose prevention programmes are not currently available; however, harm reduction advocates are currently lobbying to make naloxone kits available to emergency and first responder staff, as well as family members of people who inject drugs.[3]

Viral hepatitis

Although the HIV prevention and treatment response in the Middle East and North Africa has been expanded in the last several years, viral hepatitis, particularly hepatitis C, continues to be a neglected public health concern. An estimated 48.1% of people who inject drugs in the region are positive for hepatitis C antibodies, with hepatitis transmission associated with unsafe injecting practices such as sharing needles and syringes.[10] Since the *Global State of Harm Reduction 2016*, the World Health Organization Regional Office for the Eastern Mediterranean conducted a questionnaire survey to review the status of the viral hepatitis response programme in the 22 countries of the region. Findings from the survey demonstrated that although 21 countries were implementing (or at the least considering developing) prevention and care interventions for hepatitis C, actual delivery of testing and treatment was limited in scale and scope, and service provision inconsistent across the countries.[43] Even though 13 of the 22 countries reported as having a strategy for the prevention and control of viral hepatitis, baseline data on hepatitis C is lacking, and therefore effective strategies for reducing the disease burden among people who use drugs and for increasing service coverage have not been fully developed.[43] In those countries already implementing national hepatitis programmes, coverage of screening/diagnostic testing and treatment continues to be insufficient.[43]

Injecting drug use is the main route of transmission for hepatitis C in Egypt, Iran, Iraq, Libya, Morocco, Saudi Arabia, Tunisia, Yemen, Kuwait, Qatar and Syria, with prison populations and those in closed settings particularly at risk.[44] Although the risk has

been identified, coverage of treatment options in the region remains low. Across the region, direct-acting antivirals (DAAs) have been referred to in viral hepatitis treatment protocols and made available to the public, yet the costs (borne either by national health insurance mechanisms or by the individual) are generally prohibitively high. In Lebanon, for instance, although hepatitis C testing and treatment services are available, the procurement of costly DAAs is intermittent, which impacts upon effective treatment adherence and many patients must cover the costs of supplementary laboratory tests themselves.[3] Libya experiences similar challenges, with shortages of treatment and costly laboratory tests having a negative impact on patient uptake and retention.[3]

A dearth of robust data at the country and regional level, and a lack of awareness contributes to a lack of political commitment and domestic investment in viral hepatitis responses.[43]

Tuberculosis (TB)

Although there is limited data specifically on TB incidence among people who use drugs, testing and treatment of tuberculosis has been mainstreamed into public health services across the region. In many instances this has occurred as part of the HIV response, including in Bahrain,[45] Iran[46] and Algeria.[3] In Morocco, the Ministry of Health allocates an annual budget for the national tuberculosis programme to provide free health services to all TB patients, including people who use drugs.[47] The TB response programme in Jordan is implemented under a grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria. The Jordanian Ministry of Health's national TB programme is partially integrated into general health services, and operates at the central, district and peripheral levels.[3]

HIV and antiretroviral therapy (ART)

Antiretroviral therapy is officially widely available to all people living with HIV across the region, including people who use drugs, and provision is integrated into traditional HIV services.[3] In the Middle East and North Africa, as in other regions, there is little data on the numbers of people who use drugs currently on ART. Regional instability and a number of local-level security concerns negatively affect adherence among people who use drugs.[23] A 2017 systematic review covering the WHO Eastern Mediterranean region[o] estimated that 26% of people who inject drugs living with HIV had been diagnosed as such, 11% of these were on ART, and 44% of these were virally suppressed.[48] In a 2017 regional survey conducted among people who use drugs accessing ART and other harm reduction services, it was reported that three quarters of the participants believed that services in public healthcare settings were not stigma-free; and that they were subjected to discrimination, with the majority from Pakistan (88.5%), followed by Afghanistan (85%), Morocco (84.6%), Tunisia (83.3%) and Egypt (73.7%).[23]

Along the HIV cascade of care, alarming levels of treatment drop-out result from: high levels of stigma; discrimination and mistreatment from healthcare providers; the lack of privacy and anonymity, and breaches in confidentiality when accessing the medicine; and the absence of collaboration and communication among service providers, especially with regard to people living with HIV co-infected with viral hepatitis or other infectious conditions.[23] As reported in the *Global State of Harm Reduction 2016*, Iran continues to be an example of good practice, including scaling up the number of antiretroviral centres and satellite centres, including ensuring service provision in prison contexts.[49] Despite this, overall coverage of ART in Iran is estimated be low at 19%, mainly due to a lack of access to treatment for people who inject drugs.[6,50] The country is currently developing pilot projects integrating antiretroviral therapy into OST services.[50]

Harm reduction in prisons

In 2016, there were an estimated 625,413 people imprisoned across the Middle East and North Africa (excluding Palestine), a 5% increase on the figure for 2010.[51] Of these, 225,624 (36%) were in Iran, 76,000 (12%) were in Morocco and 62,000 (10%) were in Egypt.[51] One third of all incarcerated people are reported to be imprisoned for drug-related charges.[3] Punitive drug control continues to be the primary approach for addressing drug use in the region, with countries like Bahrain arresting individuals purely for possessing needles or syringes.[3]

Drug use is reportedly highly prevalent in prison contexts in the Middle East and North Africa (including in Lebanon, Morocco, Oman, Palestine and Syria) and, due to the lack of needle and syringe programmes, so too is unsafe injecting drug use.[3] While high levels of unsafe injecting drugs should precipitate an scale-up of harm reduction programmes in prisons, the regional response continues to be weak.[3] OST is available in prisons

o This region includes Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, the UAE and Yemen. It also includes Afghanistan, Djibouti, Pakistan, Somalia and Sudan, which are covered by other chapters in this report.

in five of the 19 countries in the region: Iran, Israel, Lebanon, Morocco and Palestine.[3,6,13] In 2016, 49,785 people received OST in prison in Iran and 6,000 prisoners were enrolled in the therapy in Israel.[6,13] In Palestine, daily journeys are reportedly made by prison authorities to take prisoners to receive methadone, though the number of people enrolled in prison OST appears to be small.[3] In both Lebanon and Morocco, OST services exist in prison, but are reported to be largely inaccessible.[3] In Morocco, only seven people received OST while in prison in 2016; in Lebanon, OST is only available to people who were enrolled before entering prison.[3]

No country in the region currently provides NSPs in prisons.[3]

A UNODC programme under the Regional Programme in the Arab States (2016-2021) was developed to prevent drug use and treat drug use disorders, while also including provisions to prevent and treat HIV among prison populations.[3,52] The UNODC-led programme now reaches over 40,000 prisoners and prison staff with HIV/AIDS prevention, treatment, care and support services.[3] This cohort includes 10,000 prisoners in three Egyptian prisons (Fayoum, Wadi AlNatroon and Borg Al-Arab); 18,000 prisoners in five Moroccan prisons (Oukacha, Tangier, Tetouan, Salé and Nador); and 15,000 prisoners and juvenile detainees in six adult and juvenile prison facilities in Tunisia (adult prisons at Mornaguia, Borj El Amri, La Manouba and Le Kef; juvenile centres at El Mourouj and El Mghira).[3] During 2017, around 1,000 prisoners were screened for HIV, hepatitis B and hepatitis C (though this represents only around one in 40 of the total population of the programme prisons).[3,51] In the same year, approximately 1,900 prisoners were tested for tuberculosis.[3] Although Iran is celebrated for its harm reduction response in prisons, there is a serious lack of gender balance in the approach, with women accounting for only 4% of methadone treatment participants in prison, according to data from 2012.[53] Condoms are reportedly accessible to prisoners in Iran and Tunisia.[3]

Women who use drugs

Recent estimates state that women account for one third of people who use drugs globally.[54] Yet women who use drugs have less access to harm reduction services and are at higher risk of HIV infection than men.[55] In the Middle East and North Africa region, given the already scarce base of harm reduction programmes and policies, gender-sensitive harm reduction services have received little attention. Research on drug use and related health issues in the region rarely produces gender-disaggregated data.[56]

In 2013, the Middle East and North Africa Harm Reduction Association (MENAHRA) conducted a study on women who use drugs, which confirmed that they face marginalisation and are disadvantaged with regards to accessing harm reduction services.[57] Many women have negative experiences in utilising harm reduction services, such as breaches of confidentiality and stigmatisation. When attempting to access health or social services, many were denied due to discrimination or having limited ability to pay for services. Acknowledging this, discussions on gender-specific services for countries in the region have been initiated by MENAHRA and practical guidelines for advocacy for women who use drugs were published in 2017.[56] A small number of emerging practices for women do exist in countries of the region:

- **IRAN:** Civil society engagement and research activities in Iran increasingly shed light on the particular needs of women who use drugs and advocate for more gender-sensitive services.[42,58] The civil society organisation Khaneh Khorshid offers a list of services that seek to provide harm reduction services, including provision of OST; HIV prevention workshops; medical and legal aid services; and referrals to medical centres, employment agencies and educational institutions. Khaneh Khorshid currently provides methadone treatment to over 100 women and provides ancillary services to more than 600 women annually.[58]
- **LEBANON:** The Inter-Ministerial Substance Use Response Strategy 2016-2021 aims to ensure gender-sensitive services and calls for targeted interventions for women to address their specific needs. It further acknowledges that gender-disaggregated data on substance use is lacking.[59]
- **TUNISIA:** The first safe injection sites were established by a civil society organisation in Tunisia,[p] of which one specifically works with women who use drugs. It is the first reception centre for women who use drugs in the region, and provides a safe place that protects women who inject drugs with health and dignity.[60]

p In 2017, it was reported that several safe injection sites were open. However, it is unclear at the time of writing if these services are still in operation.

Despite the positive developments in some countries in the region, an emphasis on gender-specific service provision is still lacking and in many countries the needs of women who use drugs are not addressed adequately. A scale-up of gender-sensitive harm reduction in the region is much needed.[56] In order to ensure that women who use or inject drugs are reached by harm reduction interventions, service providers, programme developers and policy makers should acknowledge women's particular vulnerabilities and tailor interventions to their needs. Depending on the context, gender-sensitive harm reduction may include, but must not be limited to: targeted education and awareness for women about drug use and its related harms; tailored harm reduction services for women, including women-only drop in centres; female counsellors; and female condom distribution, as well as psychological services and safe places for women drug users who are victims of violence in the region.[56]

Policy developments for harm reduction

Despite the evidence that drug use is a major issue in the Middle East and North Africa region, with preventable adverse health and social effects, many countries in the region lack an adequate evidence base of epidemiological, qualitative and sociological data on drug use, key populations and related health consequences.[22,61] Barriers to research on harm reduction are not only created by the lack of funding, but also by the particular socio-cultural, economic, policy-related and political situations in each country.[61,62] While some countries allow for harm reduction interventions to protect a person's physical and mental wellbeing (for example Israel, Iran, Lebanon and Morocco), others continue to apply a punitive approach against people who use drugs and deny harm reduction service provision.[61,62] Criminalisation and entrenched stigma associated with drug use in Middle Eastern and North African countries negatively impacts upon research into harm reduction, drug use and its adverse effects, and contributes to the exclusion of people who use drugs from national surveillance programmes. For example, Bahrain, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, Syria and the United Arab Emirates have limited, or lack completely data on key populations at risk of HIV, including people who use drugs.[62]

Since the *Global State of Harm Reduction 2016*, there have been a number of policies addressing the health and harm reduction needs of people who use drugs in the region. Harm reduction has been referenced in: the Iranian National AIDS Strategy for 2015-2019, which works towards the maintenance of HIV prevalence at less than 15% among people who inject drugs; the 2016-2020 National AIDS Strategy in Lebanon, which includes a commitment to NSP and OST, along with naloxone by 2019;[3] Morocco has included efforts for increasing HIV education, and distribution of syringes and condoms in policy documents since 2016; Palestine has been piloting methadone maintenance programmes;[3] Saudi Arabia's National AIDS Strategic Plan prioritises HIV screening, counselling and treatment;[3] and Tunisia made reference to OST and NSP for the first time in their 2015-2018 National AIDS Strategy.[49]

After years of designing drug policies that have mainly focused on eliminating drug use, drug policy reform is becoming a mainstream discussion in Morocco.[63] The Authenticity and Modernity, and Al Istiqlal political parties have introduced parliamentary bills to legalise the medical and industrial use of cannabis.[63] In Yemen, civil society reports that there have been no new policy developments, due to the ongoing conflict.[3]

While Iran has served as a model for other countries in the region in its implementation of harm reduction policies and deployment of peer-education programmes and NSPs, [64] continued criminalisation of people who inject drugs, manifested by punitive laws, incarceration and prohibitions on harm reduction, have a detrimental impact upon access to harm reduction services in the country. These negative effects include decreased access to NSPs, increased risky behaviours of sharing used injecting materials, and an increased HIV and hepatitis C prevalence among people who use drugs.[29]

Civil society and advocacy developments for harm reduction

Since 2007, the Middle East and North Africa Harm Reduction Association (MENAHRA), a network of knowledge hubs and civil society organisations focusing on harm reduction strategies, has led civil society advocacy efforts in the region. MENAHRA's mission is to improve the quality of life of people who use drugs through advocacy, capacity building and technical assistance, and by serving as a resource centre in the region.[65] The Middle East

and North Africa Network of People who use Drugs (MENANPUD) is also active, and acts as a support group of activists concerned with harm reduction and the rights of people who use drugs.[66]

Civil society continues to lead advocacy efforts for the promotion and sustainability of harm reduction services for people who use drugs in the region. In addition to MENAHRA, in 2016/2017, the MENA H Coalition was launched, which aims at limiting the spread of HIV, promoting harm reduction interventions, and mitigating stigma and discrimination in the Middle East and North Africa.[66] In early 2018, the MENA H Coalition formally announced its interest in applying for the Multi-Country Request for Proposals launched by the Global Fund to address the "Sustainability of services for Key Populations in the MENA region".[67]

The global Support. Don't Punish campaign is a popular platform for harm reduction advocates in the Middle East and North Africa. In 2017 and 2018, the campaign was rolled out in a number of countries, including Lebanon and Yemen, and by the Forearms of Change Centre in Jordan.[3,68] The Forearms of Change Centre also runs a peer-based network of people who use drugs in the country.[3]

Civil society organisations contribute greatly to reducing stigma towards people who use drugs and advocating for the continuation and scaling up of harm reduction services, even in increasingly hostile environments. Progress can be seen in Morocco, Tunisia, Algeria and Lebanon, where civil society voices are gaining momentum.[69] In the past few years, multiple regional platforms and networks have been established or grown, such as the Regional/ Arab Network Against AIDS and a regional chapter of the International Treatment Preparedness Coalition advocating for access to HIV treatment.[69]

Funding developments for harm reduction

Despite increasing efforts to advocate for the establishment of harm reduction policies and programmes, people who use drugs in the Middle East and North Africa region remain highly vulnerable and lack access to health and social services.[2] A fundamental barrier to the effective and sustainable implementation of harm reduction in the region is the scarcity of funding for harm reduction.[3] In most countries, interest in allocating resources to harm reduction is non-existent at national government level. [3] This is exacerbated by a tremendous decline in international donor funding in recent years. The Global Fund, for instance, spends only around 8% of all its investments in the Middle East and North Africa region.[3,70] The lack of funds and support for harm reduction has forced the closure of some established programmes, such as needle and syringe programmes in Egypt and Jordan.[3]

The International Organization for Migration is implementing a regional grant to provide TB, HIV and malaria services in Jordan, Lebanon, Syria and Yemen; however, the majority of these funds are directed at support for displaced people.[70] In Palestine, there is a lack of donor interest, leading to severe shortages in funds allocated for prevention of harm and treatment of drug use; the Ministry of the Interior in Gaza stated, "there is no support from donor agencies and no-one considers this area a priority".[71]

A number of extenuating factors impact upon the availability and distribution of funds for harm reduction work in the Middle East and North Africa. Services are understaffed in Oman, Saudi Arabia and Syria, and as a result these countries have been forced to downsize their harm reduction plans.[49] Civil society organisations report there is insufficient collaboration between research groups, non-governmental organisations, the government and private clinics, which results in a lack of data and limited distribution of harm reduction resources.[49] This is especially present where there are many groups working without cohesion, like in Lebanon. MENAHRA report that there is poor resource allocation, availability or mobilisation in Algeria, Bahrain, Kuwait, Lebanon, Palestine, Morocco and Yemen.[49] Political challenges and punitive drug policies work against the provision of funding for services for people who use drugs in Qatar, Bahrain, the United Arab Emirates, Saudi Arabia and Kuwait. Budget advocacy tends to be largely driven by civil society in other regions, meaning that in countries with little or no meaningful freedom for civil society organisations working for harm reduction (such as Kuwait, Bahrain, Oman, Qatar, Yemen, Iraq and the United Arab Emirates), there is a lack of a strong voice to encourage investment in harm reduction.[49]

The discontinuation of harm reduction efforts is particularly alarming in light of rising AIDS-related deaths in the Middle East and North Africa and regional estimates that indicate more than 50% of all new HIV infections among adults occur among people who inject drugs.[25] In the absence of any change to the lack of funding and evidence, the current situation paints a bleak future for the health of people who use drugs in the region. Political commitment, regional collaboration and investment are fundamental to increase and sustain harm reduction service availability and accessibility.[26]

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Regional Overview

2.9 Sub-Saharan Africa

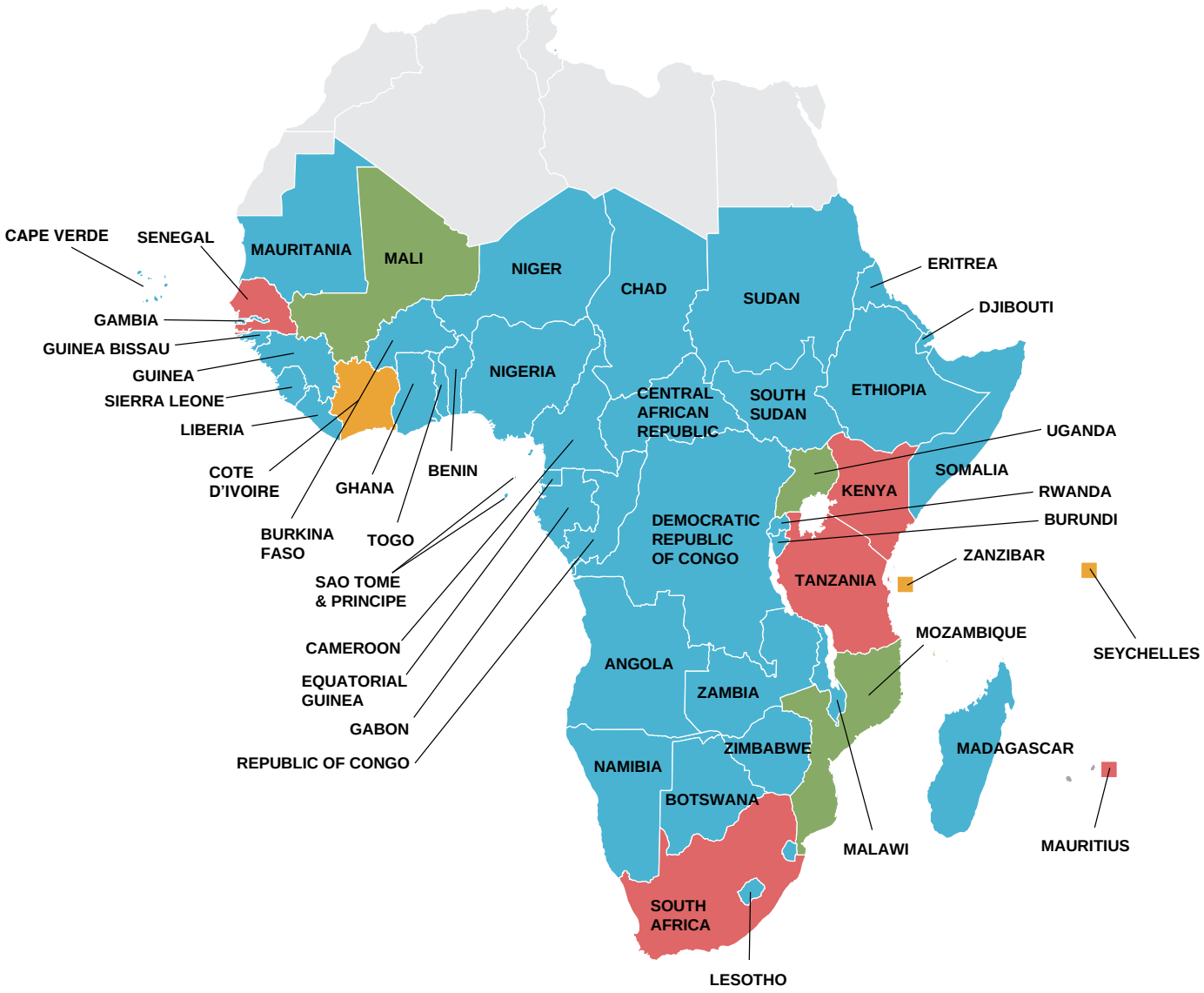
Table 2.9.1: Epidemiology of HIV and viral hepatitis, and harm reduction responses in Sub-Saharan Africa

Country/territory with reported injecting drug use[a]	People who inject drugs	HIV prevalence among people who inject drugs(%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs(%)	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs(%)	Harm reduction response		
					NSP[b]	OST[c]	Peer-distribution of naloxone
Benin	nk	5.1[1]	nk	nk	x	x	x
Burkina Faso	nk	nk	nk	nk	x	x	x
Burundi	nk	nk	nk	nk	x	x	x
Côte d'Ivoire	500[1]d	5.3[1]	1.8[1]	10.5[1]	x	✓[12]	x
Democratic Republic of the Congo	3,500[1]	13.3[1]e	nk	nk	x	x	x
Ghana	6,314[3]	nk	40.1%[1]	nk	x	x	x
Kenya	30,500[1]	42[1]	16.4[1]	5.4[1]	✓19[12]	✓7[4,5]	x[f]
Lesotho	2,600[6]	nk	nk	nk	x	x	x
Liberia	457[7]g	3.9[8]h	nk	nk	x	x	x
Madagascar	15,500[1]	4.8[1]	5.5[1]	5%[1]	x	x	x
Malawi	nk	nk	nk	nk	x	x	x
Mali	nk	5.1[9]i	nk	nk	✓[1]	x	x
Mauritius	11,667[10]	45.5[1]	97.1[1]	6.1[1]	✓46[11] j	✓42[11](B, M)	x
Mozambique	29,000[1]	46.3[1]	67.1[1]	nk	✓1[12]	x	x
Nigeria	44,515[9]	3.4[13]	5.8[1]k	6.7[1]	x	x	x
Rwanda	2,000[1]	nk	nk	nk	x	x	x
Senegal	1,324[14]l	9.4[1]	38.9[1]	nk	✓5[15,16]	✓1[15]	x
Seychelles	2,560[17]m	12.7[17]	76[17]	1[17]	x	✓n	x
Sierra Leone	1,500[1]	8.5[1]	nk	nk	x	x	x
South Africa	76,000[1]	14.2[1]	54.7[18]o	5[19]nk	✓4[20]	✓<11[20]p (M, B, B-N)	x[q]
Tanzania	30,000[21]r	35[22]	57[23]	1.1[1]	✓	✓6[24]	x
Tanzania (Zanzibar)	3,000[25]	11.3[26]	25.4[26]	5.9[26]	x[1]	✓[27]	x[s]
Togo	2,500[28]	nk	nk	nk	x	x	x
Uganda	nk	17-20[29]t	nk	nk	✓2[30]	x	x
Zambia	nk	nk	nk	nk	x	x	x
Zimbabwe	nk	nk	nk	nk	x	x	x

nk – not known

a The countries included in this table are those with reported injecting drug use according to the 2008 United Nations Reference Group systematic review and/or with operational NSPs or OST at the time of data collection. HRI also found data on injecting drug use in Angola, Benin, Burkina Faso, Cameroon, Cape Verde, Djibouti, Ethiopia, Gabon, Gambia, Guinea, Malawi, Mali, Niger, Rwanda, Sierra Leone, Somalia, Togo, Zambia and Zimbabwe, but did not find verified data to include on these countries.
b All operational needle and syringe exchange programme (NSP) sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers.
c Opioid substitution therapy (OST), including methadone (M), buprenorphine (B) and any other form (O) such as morphine and codeine.
d For people who use drugs this number is believed to be between 6,000 to 10,000 people, with smoking rather than injecting more widely practised.
e For Kinshasa.
f Naloxone is available at harm reduction sites in Kenya but can be administered only by trained healthcare personnel.
g Based on sub-national data from six cities in three counties of Liberia.
h Based on sub-national data from Grand Cape Mount, Grand Bassa, Grand Gedeh, Gbarpolu, Lofa, Montserrado, Margibi, Nimba and River Gee.
i Based on sub-national data for Bamako only, with a sample size of 39.
j 35 sites managed by the Ministry of Health and Quality of Life (Government of Mauritius), 11 sites managed by the NGO Collectif Urgence Toxida.
k Based on sub-population data from 2010.
l Based on sub-population data from Dakar only.
m Total number of people using heroin estimated to be 4,318, with 2,560 using injection as the chosen route of administration.
n OST offered by the Agency for the Prevention of Drug Abuse and Rehabilitation, believed to be an abstinence-oriented programme.
o N=940 people who inject drugs in Cape Town, Durban and Pretoria. Data from 2017.
p OST is available in four cities: Cape Town, Durban, Johannesburg and Pretoria (eight sites in Pretoria).
q Naloxone available for administration by first responders/emergency healthcare workers.
r Figure is believed to be an underestimate nationally, but locally adequate in selected sites.
s Naloxone available for administration by first responders/emergency healthcare workers.
t Figure relates to people who use drugs, but women who inject drugs appear disproportionally affected by HIV with more than double the prevalence at 45%.

Map 2.9.1: Availability of harm reduction services



Both NSP and OST available

OST only

NSP only

Neither available

Not Known

DCR available

Peer-distribution of naloxone

Harm reduction in Sub-Saharan Africa

Overview

Since the previous iteration of this report in 2016, sub-Saharan Africa has seen some progress in harm reduction policy and services in selected countries. Explicit support for harm reduction is now contained in national policy documents in 10 countries as opposed to seven in 2016, and needle and syringe exchange programme (NSP) services have been established in Uganda, Mali and Mozambique, which brings the total number of countries operating an NSP in the region to eight. The number of countries with some opioid substitution therapy (OST) provision has increased since 2016, with the addition of Zanzibar (see Table 2.9.1) having a service operating since 2015, and a new OST service having been established in August 2018 in Abidjan, Côte d'Ivoire. *The Global State of Harm Reduction* now also reports on more countries than ever in the region that have demonstrable advocacy efforts for harm reduction or with established programmes in place.

In a systematic review published in 2017, evidence was found of injecting drug use in 36 countries in the region,[u] with a broad-ranging estimate of people who inject drugs numbering between 645,000 and 3 million.[1] Reliable information on drug use in sub-Saharan Africa is, however, limited. Due to differing methods for calculating prevalence of blood-borne diseases among people who use drugs, with figures often stemming from sub-national data, the numbers cited in Table 2.9.1 should be viewed with caution. Although harm reduction services are generally found to be lacking, after an extended period of political rejection of harm reduction, some change has been observed in the region during the last five to 10 years, with epidemiological research being undertaken, pilot programmes and endorsements of harm reduction found in government policies. There has also been programmatic scale up of harm reduction services in a select few sub-Saharan African countries.

Since the last iteration of the *Global State*, the first East African harm reduction conference was held in Nairobi, Kenya in early 2018 and attracted approximately 600 participants from 20 countries. The event, co-hosted by the Kenya AIDS NGO Consortium (KANCO) and the Kenyan Ministry of Health, also saw the Cabinet Secretary for Health (Kenya) formally launch the Eastern Africa Harm Reduction Network.[5] A decade ago this conference would have been hard to imagine, and donor support for harm reduction activities in selected countries has assisted greatly with these changes. For example, Kenya now appears as one of the champions of harm reduction in the continent, steadily upscaling its harm reduction services over the last three to five years. Some politicians and policy makers voiced opposition to the criminalisation of drug use and urged a move towards drug use being treated as a public health issue.[31] Civil society mobilisation in the region has led to increased levels of support for harm reduction interventions, public awareness of what harm reduction is and in some instances to the initiation of services, such as pilot NSPs in Uganda.[30]

In November 2016, a civil society organisation in Senegal – Alliance Nationale des Communautés pour la Santé (ANCS) – became the principal recipient of a Global Fund regional grant programme which aims to: produce strategic information about people who use drugs; support countries to create harm reduction programmes and policies; advocate for harm reduction-friendly laws; create advocacy tools for harm reduction; and, build capacity for actors in the sector, including people who use drugs.[32] Importantly, the project calls for the establishment and necessity of a favourable environment for harm reduction interventions.[33] The programmes are due to operate in five countries (Côte d'Ivoire, Cape Verde, Burkina Faso, Guinea-Bissau and Senegal) in the coming years, all of which at the time of reporting had either no or very limited harm reduction services.[15,32]

Although increases in harm reduction services and support have been achieved, there are also examples of regression in the region. In 2014, the *Global State of Harm Reduction* reported a scale-up in both NSP and OST services in Tanzania.[34] In 2018, although there has been an increase in OST interventions outside Dar es Salaam, NSPs remain limited and accessibility is low.[24] The understanding of harm reduction interventions appears entwined within an abstinence-based approach in Tanzania under the current government, and demonstrates little focus on the health and wellbeing of people who use drugs.[24] As endorsed by the World Health Organization (WHO), the United Nations Office on Drugs and Crime (UNODC), the Joint United Nations Programme on HIV and AIDS (UNAIDS), the UN General Assembly, the Economic and Social Council, the UN Commission on Narcotic Drugs, the UNAIDS Programme Coordinating Board, the Global Fund and the President's Emergency Plan For AIDS Relief (PEPFAR), a comprehensive package of harm reduction interventions has been scientifically

u Angola, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritius, Mozambique, Niger, Nigeria, Rwanda, Senegal, the Seychelles, Sierra Leone, Somalia, South Africa, Swaziland, Togo, Uganda, Tanzania, Zambia and Zimbabwe.

demonstrated to support the prevention and spread of HIV and the reduction of other harms.[35] NSPs in particular are based on strong evidence for their effectiveness in the prevention of HIV[36,36,37] and hepatitis C,[36-39] and are known to lead to a reduction in injecting risk behaviours, such as the sharing of equipment.[39] NSPs are also cost-saving when compared with the total lifetime cost of treating a person with HIV.[40]

An inclusive approach: the necessity for gender-sensitive harm reduction services

Since 2012, the Muslim Education and Welfare Association (MEWA) in the coastal region of Kenya has partnered with Mainline, an organisation which implements harm reduction programmes in different parts of the world. The partnership's focus was on improving access to quality HIV prevention, treatment, care, support services, socio-economic rehabilitation, reintegration and human rights for people who use drugs. Starting in 2017, the project added a specific focus to deliver inclusive, rights-based and gender-sensitive services which were more accessible for women.[41]

Women who inject drugs often experience disproportionately high levels of negative health outcomes,[42,43] with studies often illustrating a much higher HIV prevalence rate among women who inject drugs than their male counterparts. [44,45] Women are often less inclined to seek harm reduction services due to multiple stigmas (such as external gender-related stigma, internal self-stigma, stigma from others living with HIV),[46] which has clear implications for their health.[47-49] Examples of this disparity have been reported in the Democratic Republic of the Congo, where drug use appears much more taboo among women than men,[50] and in Mauritius, where women remain a hidden population.[51,52] These attitudes are similarly echoed all over the region.[5,20,24,30,50]

To ensure women and girls are not left behind, the joint project in Kenya aims to strengthen and build capacity of established drop-in centres and NSPs; distribute condoms; improve screening, diagnostics and treatment of diseases and infections; improve HIV testing and counselling; and improve outreach. It also aims to provide expert harm reduction training to female drug users to form a "train the trainer" model of peer-to peer support, and information and assistance on accessible services.[41] The hope is that this approach, although currently implemented only in the coastal region, will eventually be taken up nationally and investment in it increased.[41,53]

Nigeria continues to be politically resistant to harm reduction interventions, even given the high lifetime prevalence of use of drugs such as heroin (63%) and cocaine (70%) among people who inject drugs, and unsafe practices such as the sharing and reuse of needles.[16,54] In the Seychelles, the harm reduction response has also fallen short, leading to the potential for a public health crisis. Between 2011 and 2017, HIV prevalence among people who injected drugs in the country increased from 5.8% to 12.7% and HCV prevalence from 53.5% to 76%.[17] Zanzibar, where one harm reduction service is in operation, has an HIV prevalence among people who inject drugs of 11.3%.[26] Although the hepatitis C prevalence rate is lower than other countries in the region (25.4%), both are likely to rise without a range of harm reduction interventions in place for this population.[26] The Democratic Republic of the Congo lacks many of the WHO-recommended harm reduction interventions.[35] Meetings between harm reduction advocates in the country and the ministers of health and security have not yet resulted in improvements to the implementation of essential services.[50]

Prevalence and patterns of drug use also vary across the region and, as Table 2.9.1 highlights, there remains a serious need to close the gap in harm reduction services and healthcare provision in sub-Saharan Africa for those at risk of blood-borne viruses, such as people who inject drugs, particularly in reference to hepatitis C. Research is assisting with this in some countries. For example in South Africa, between August 2016 and December 2017, 1,165 people who use drugs (including 941 people who inject drugs) were recruited across three cities (Cape Town, Durban and Pretoria) to assess prevalence of HBV, HCV and HCV-HIV co-infection. The study found that hepatitis C prevalence (virological confirmation) ranged from 29-73%, with up to 29% of people who inject drugs in Pretoria found to be co-infected with HIV and HCV.[18]

Even in the countries in the region which have established harm reduction services, significant structural barriers to uptake by people who use drugs persist. As one study participant in Durban notes, "Drug prohibition laws, stigmatisation and heavy-handed policing have all led to low levels of help or health seeking behaviour, distrust of the health system and little faith in the interventions that are available among [a] low-income community

of people who use drugs",[55] and there remains limited access to legal services for this population.[20] Mauritius and Tanzania have taken regressive steps in harm reduction-related policy, reducing and/or limiting access to comprehensive harm reduction services in recent years.[52]

Although harm reduction services are improving in some countries in sub-Saharan Africa, it is clear that there continues to be discordance between levels of HIV and hepatitis C among people who inject drugs and the availability of harm reduction services. Laws, policies and practices are inextricably linked to the effectiveness of a country's response to epidemics and the ability of people who use or inject drugs to gain access to HIV prevention, treatment and care services.[56] People who use drugs often feel stigmatised and discriminated against when seeking HIV testing and treatment, with a lack of integrated service provision for this population.[20,24] In addition, as in other regions, hepatitis C treatment remains beyond the grasp of the vast majority of people (both those who use drugs and those who do not) due to its cost. People also identified a low sense of self-worth, previous negative health care service experiences, a sense of hopelessness and long waiting times as contributing barriers to accessing hepatitis care.[19]

There is a great need in this region, as in others, for stability of harm reduction in policy, programming and security of its funding, such that these will not be undone by a change in government. Harm reduction is not a moral question, but an evidence-based, established public health approach which works.[57-61] The effectiveness of abstinence-based rehabilitation treatments has been refuted anecdotally in the region, with one harm reduction focus group in South Africa finding that every participant had at one time or another been enrolled in some form of rehabilitation centre, only to return to illicit opioid use on departure.[55] Human Rights Watch has also reported that abusive and unregulated rehabilitation centres which violate international human rights laws are operating across the region.[58,62]

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

NSPs in sub-Saharan Africa have been newly implemented in three countries since the *Global State of Harm Reduction* last reported in 2016 – Mali, Uganda and Mozambique – bringing the total number of countries now implementing this service in the region to eight. In September 2017, the Ugandan Ministry of Health approved pilot NSPs run by the Uganda Harm Reduction Network (UHRN), in partnership with Community Health Alliance Uganda, in two designated health facilities in one district of Uganda (Kampala).[29,30]

At the time of writing, there are four NSP sites in four cities in South Africa (Cape Town, Pretoria, Johannesburg and Port Elizabeth), an increase of one since the *Global State* reported in 2016, with the City of Tshwane (Pretoria) planning to expand its services to eight locations in the future.[20] In Kenya, thanks to an increase of funding from the Global Fund, NSPs have also increased, going from 13 to 19 since 2016.[63] In Senegal, the Alliance Nationale des Communautés pour la Santé (ANCS) implement a syringe programme based in Dakar,[32] and provide psychosocial and health specialists who can accompany and support people who use drugs when using the service.[32] Four further NSP sites are also operational, two in Dakar, one in Mbour and one in Kaolack.[16]

NSP sites in Mauritius, although still operational and financially supported by both the government and the Global Fund, remain restricted to a fixed quota of 30,000 needles per month.[51,64] The restriction, implemented by the government that came to power in 2014, inhibits service providers (who cannot respond to need) and is harmful, given the increasing number of people who inject drugs in the country.[51,52,64] People under the age of 18 do not have access to harm reduction programmes and, with paraphernalia illegal under the Mauritius Dangerous Drugs Act, young and old may be arrested for the simple possession of a syringe.[52] In Kenya, although NSP services fail to reach everyone who needs them, approximately 135 needles per person who injects drugs per year are distributed, a substantial increase since 2015.[65] A guideline for young people and harm reduction is currently in development in Kenya to enable better access to this group in the future.[5] Some NSPs in South Africa and Mauritius also solicit feedback on people's experience of the services to inform future improvements.[20,51,52]

Despite some increases in the region, coverage of existing NSP services remains disproportionately low compared to international targets.[35] In Tanzania, NSP provision remains poor, and high-risk behaviours such as needle sharing and the

practice of flashblood[v] have been reported, with an estimated 15.6% of people who inject drugs practising flashblood and 14.2% sharing a needle with another at last injection.[66] As previously noted, the approach taken in the country is predominantly abstinence-based in nature and therefore much-needed NSP services are not yet being scaled-up to the same extent as OST.[24] Tanzania is one of the main routes of entry for heroin in sub-Saharan Africa[67,68] and there is relatively high opioid use in the region.[21] There is poor access to screening services for blood-borne viruses such as HIV and viral hepatitis for people who inject/use drugs.[67] There is therefore an urgent need for significant increase in coverage of NSP, along with better integrated healthcare services for people who use/inject drugs and a strengthening of counselling on safe injecting and safe sex practices.[66]

NSP provision is currently unavailable in Zimbabwe.[69] However, the Zimbabwe Civil Liberties and Drug Network (ZCLDN) is currently working with the Parliamentary Committee on Health and HIV to table a motion to introduce harm reduction services, including NSP, in the country.[69] One of the major challenges to initiating NSP has been the lack of reliable data on injecting drug use. Civil society groups, such as the ZCLDN, point to evidence of injecting drug use and a clear need for these harm reduction services.[69] The Seychelles also has no NSP provision in free harm reduction services, but needles and syringes are available for purchase from pharmacies. From recent data, however, pricing appears as a barrier to the safe use of needles, with 41% of respondents (n=142) reporting unsafe injecting practices.[17] Given the rising rates of HIV and hepatitis C among people who use drugs in the Seychelles, harm reduction measures such as NSP are urgently called for.[17,70]

Nigeria remains politically resistant to the implementation of NSPs, even though unsafe practices such as the sharing and the reuse of needles is high.[13,71] Needles and syringes are sold at pharmacies, but people who inject drugs are often asked undesirable questions and worry about criminal repercussions. Coupled with this are the behavioural norms of needle sharing as a sign of trust or brotherhood, and new practices, such as the shared purchase of pre-loaded syringes by several people, leading to the sharing of a single syringe.[71] Civil society organisations in the country, such as YouthRISE, continue to advocate for the initiation of NSPs as an essential harm reduction service.[16]

In all countries where NSP sites exist (Kenya, Mali, Mauritius, Senegal, South Africa, Tanzania and Uganda and Mozambique), barriers to access remain, including social stigma, geographic coverage (often sites are restricted to urban areas with no mobile sites operational) and harassment/rights infringements by law enforcement, such as the confiscation of syringes/needles.[20]

Opioid substitution therapy (OST)

A total of seven countries in sub-Saharan Africa have OST services freely available for people who use/inject opioids (see Table 2.9.1). Zanzibar has offered this service since 2015 and Côte d'Ivoire since August 2017.[2,27] Similarly to NSPs, the majority of countries in the region have yet to introduce OST programmes. Where it exists, OST is provided in the form of methadone or buprenorphine, depending on the country, predominantly in directly observed treatment settings. Take-home dosing has been successfully implemented in South Africa, and is beginning on a small scale in Tanzania in the municipality of Temeke.[20,24]

Tanzania established its first methadone clinic at the Muhimbili National Hospital in Dar es Salaam in 2011, followed by a second clinic in Mwananyamala and an additional site in Dar es Salaam.[72] Since then, there has since been significant scale-up of OST outside Dar es Salaam, including the Mbeya and Mwanza regions, with political endorsement to scale up OST in other regions of Tanzania, beginning with Dodoma in late 2018.[24] Although the scale-up of services is welcome, the primary focus remains on injecting drug use; people who smoke rather than inject, particularly women, find access to OST more challenging.[68] There are also regular drug checks for people attending the clinics. The continuation of OST is dependent on negative results for illicit drug use, and an abstinence-oriented culture is dominant.[24] Zanzibar began implementing OST in 2015, offering methadone (doses ranging from 8mg-295mg), and had enrolled approximately 415 people into the programme at the time of reporting.[27] In early 2017, the Ministry of Health in Côte d'Ivoire approved the first OST programme in the country; the first unit was established in August 2018 in Abidjan.[2]

In the last iteration of the *Global State* in 2016, the city of Tshwane (Pretoria) in Gauteng, South Africa had entered into an agreement for OST to be made available at selected primary healthcare centres, with an OST demonstration project at the planning stages in Durban. In 2018, these programmes are

v Flashblood is a high-risk blood-sharing practice that carries a very high probability of viral transmission. A person who has recently injected draws blood back into the syringe post-injection and passes the syringe to a peer, who injects the 3ml to 4ml of blood in turn.

operational; 606 people were enrolled in OST as part of the city-funded low-threshold programme in Pretoria, and approximately 50 new people entered the service each month.[20] At the time of reporting, there were over 11 OST projects being implemented in four cities (Pretoria, Cape Town, Durban and Johannesburg) in South Africa for people who use opioids.[20] However, one of the main barriers to accessing substitution treatment remains the cost of medication (with no generic products available), since the services are not subsidised.[20] There have also been limited discussions with the National Department of Health in respect of determining appropriate budgets for OST; however, at the time of publication there was no clear call for a harm reduction-specific budget to offer free or subsidised care.[20]

In Kenya, OST was introduced by non-private providers in December 2014; since then there has been a steady increase in provision and support for further roll-out of OST services by USAID and the US Centers for Disease Control and Prevention, with seven OST clinics now open.[5] Further scaling up of this service is needed. Although many people who use drugs are keen to access OST programmes, at the time of reporting they were reaching less than 10% of people who inject drugs in the country.[63] Barriers to accessing substitution therapy include lengthy distances for people to travel to receive daily dosages and limited uptake by people living with disabilities.[5]

In 2016, under the newly elected Mauritian government, OST distribution was moved from health facilities to police stations, with daily fixed times and reduced hours (from 6.00 to 8.00 am) for people who use drugs to attend, with considerable negative impact on access to services. Methadone was also replaced with buprenorphine and naltrexone.[73] Successful advocacy by a Mauritian network of civil society organisations, Collectif Urgence Toxida, resulted in the reintroduction of methadone in 2017.[52] In the first half of 2018, distribution continued to be carried out at police stations and at the aforementioned fixed hours. However, in July 2018 the health minister of Mauritius announced that OST distribution would revert to primary healthcare settings with times of distribution to be reviewed.[52] The restrictions placed around OST in Mauritius highlight the retreat from previously well-established services in this country.

OST is available in Senegal, funded by several partners including the Global Fund and Expertise France, yet coverage is limited.[33] In 2016, the Centre de Prise en Charge Intégrée des Addictions de Dakar (CEPIAD) had enrolled 425 people in OST, carried out more than 3,000 consultations and offered a full range of services, including medical, psychological and social services plus daily methadone therapy, as well as activities such as gardening, literacy, theatre and art therapy.[33] There is hope for the service to be scaled-up, with take-home methadone available and a decentralised community service reaching beyond Dakar, yet these plans are funding-dependent. At present, women who use drugs make up only 10% of people coming to CEPIAD, and methods are still being explored to adapt services to meet their needs.[33]

OST remains unavailable in Zimbabwe. Opioids for detoxification are only available in rehabilitation clinics or by referral to mental health services.[69] Making harm reduction services available in the country would be an important step toward respecting the health-related and human rights of people who use drugs, and enabling access to opioids as a harm reduction measure. The Zimbabwe Civil Liberties and Drug Network is currently working with the Parliamentary Committee on Health and HIV to table a draft motion to introduce essential harm reduction services, including OST, to Zimbabwe.[69]

After long-term advocacy activities in Uganda, PEPFAR (through the US Centers for Disease Control) is due to incorporate elements of OST in Uganda's Country Operational Plan 2018 budget.[30] In Côte d'Ivoire and Mozambique, the respective Ministries of Health have announced plans to launch OST.[12,33] Although OST services are not available in the Democratic Republic of the Congo, it is believed that opioids may be available for substitution therapy via clandestine methods. However, further research is needed to understand need and subsequent harm reduction provision.[50]

In the Seychelles, OST is offered by the Agency for the Prevention of Drug Abuse and Rehabilitation, yet this appears linked to an abstinence-oriented approach rather than a harm reduction approach. In a recent report it was noted that there is an urgent need to pursue and scale-up harm reduction programmes in the country, particularly given the rising rates of HIV and hepatitis C among people who inject/use drugs. [17]

As indicated in Table 2.9.1 and Map 2.9.1, Nigeria still lacks OST services. However, [16,74] in 2018 the Ministry of Health began a consultation on the development of guidelines on the use of methadone for drug rehabilitation treatment. The health minister has also set up a task force to advise on the implementation of harm reduction in the country.[16]

Human rights violations and Stepping Up in South Africa

Human rights violations of people who use drugs are often unreported, underreported, or ignored. The Step Up Project, which has provided needle and syringe programmes and other core HIV services to people who inject drugs in South Africa, has consulted intensively with people who use drugs in order to better understand their lived realities and needs.[75] In 2016, 683 violations were recorded in Cape Town, Durban and Pretoria, 81% of which involved the illegal removal of unused injecting equipment.[75]

The Step Up Project emphasises the value of reporting violations and the way in which recording violations can contribute to positive changes in the environment.[75] An example of this was evidenced in Pretoria, where people who use drugs reported increased harassment, arrests and assaults by South African Police Services (SAPS) and members of the local Community Police Forum (CPF). When approached by members of the Step Up team, SAPS and CPF members reported that increased policing actions against people who inject drugs were motivated by concerns around the incorrect disposal of injecting equipment. Service users acknowledged this problem and Step Up implemented an adapted needle and syringe service based on needle exchange at the location in lieu of the regular distribution of full harm reduction packs (although these were still supplied where necessary), reducing the number of inappropriately discarded needles in the community. This measure, combined with informing SAPS and CPF that Step Up team members would be recording human rights violations, is believed to have led to a reduction in human rights violations in the area.[75] This is a small but significant example of the ways in which communication, understanding, respect and persistence can effect necessary changes for both people who inject drugs and the broader community.

Amphetamine-type stimulants (ATS) and new psychoactive substances (NPS)

Although injecting drug use is believed to be relatively low in some of the countries in the region, inhalation of substances like crack or heroin has been documented as quite commonplace in parts of West Africa.[33] With respect to broader amphetamine-type stimulant (ATS) and new psychoactive substances (NPS) use, evidence points to increases seen elsewhere around the globe[76] (please see ATS and NPS sections in other regional chapters).

A study of healthcare workers in Kenya found 8.8% had used cocaine, 6.4% ATS and 5.4% hallucinogens.[77] Methamphetamine laboratories have been discovered in Nigeria, and civil society organisations report a growth in the use of ATS.[74] Anecdotal evidence suggests there has been an increase in the use of NPS in Mauritius, with more seizures being carried out by the anti-drug and smuggling unit in the country.[52] Cocaine and its derivatives are available in Zimbabwe, but the drug is expensive and therefore access is limited.[69] Although there is no available data on NPS, sources note a rise in use in the Zimbabwean market where these substances are popular with younger people. In the capital's two major psychiatric referral hospitals, a high prevalence of substance-related psychiatric conditions has been noted by local doctors with the emergence of NPS.[69,78] Although ATS use is prevalent in South Africa, there is very little data outside detoxification treatment numbers. A study in Cape Town found over 90% of people who inject drugs screened for OST (n=<70) reported concurrent heroin and methamphetamine injecting.[20,79] Yet the response to ATS in all countries is almost exclusively abstinence-based, and resistance to harm reduction stands as a major barrier for people who use stimulants.[24,30,52,80]

Perhaps in light of the reported increase, Expertise France is financing six long-terms projects in West Africa (and South East Asia) to respond to new modes of drug consumption.[33] Given the reported increase in the whole region, there is a great need for research and development of harm reduction services specific to ATS and NPS.

Viral hepatitis

As seen in Table 2.9.1, data on the extent to which people who inject drugs are affected by hepatitis C (HCV) in the region remain extremely limited. From the estimates it is clear that the prevalence of hepatitis C in this population is high among people who use drugs when compared with national estimates.[9] It appears that Kenya is the only country in the region where treatment for hepatitis C is available free of charge, through funding from both the Global Fund and UNITAID, for small pockets of people who inject drugs.[5] At the time of publication, the treatment programme was available to 200 individuals as part of a research project; however, the Global Fund plans to assist 1,000 people into treatment by the end of 2019.[5] For the majority of people with limited access to these programmes, hepatitis C treatment remains expensive, often forming an insurmountable barrier, particularly for people who inject drugs and who are most vulnerable to the virus.[5]

In South Africa, National Hepatitis Guidelines and a National Hepatitis Action Plan are under development and will include a focus on people who inject drugs.[20] At time of publication, hepatitis C testing was not included in existing harm reduction programmes in South Africa, and direct acting antivirals (DAAs) were not formally registered with the South African Health Products Regulatory Authority. Treatment is therefore limited to two tertiary hospitals in the public sector, and there is limited awareness surrounding hepatitis C and poor linkages to care.[81] A study undertaken in three locations in South Africa (Cape Town, Durban and Pretoria) among 940 people who inject drugs found hepatitis C prevalence (virologically confirmed) at 44%; 224 people in the study who used drugs but did not inject had hepatitis C prevalence of 8%.[81] The high hepatitis C prevalence among people who inject/use drugs highlights an urgent necessity for expanded community-based services that are accessible and appropriate for key populations.[81,82] The findings also support a comprehensive care package of needle and syringe exchange programmes, opioid substitution and DAA therapy.[82]

In Tanzania, hepatitis B and C testing have recently been integrated into OST services, with more comprehensive care packages available for people who inject drugs.[24] However, hepatitis C treatment is inaccessible to much of the population due to the price of treatment, and diagnostic tests often have recurrent stock-outs.[24] With hepatitis C rates significant among people who inject drugs in the country (22% reported in 2010 in Zanzibar,[83] 27.7% reported in 2013 in Dar es Salaam[84] and 57% reported in Tanzania as a whole[23]), integrating hepatitis treatment into OST clinics should be considered with urgency.

In Uganda, Senegal, Zimbabwe, Zambia, Mauritius, South Africa and Nigeria, a lack of availability and accessibility of hepatitis C testing and treatment was reported for people who use drugs.[16,20,30,32,52,69,74] The cost of treatment remains the principal barrier; however, punitive laws and fear of reprisals often deter people who use drugs from accessing hepatitis C testing and treatment services.[69]

Tuberculosis (TB)

In 2016, an estimated 10.4 million people fell ill with TB around the world, 25% in Africa.[85] With TB deaths among those infected at approximately 82% in this region, a long way away from the WHO sustainable development goal of 10%, it is clear that TB prevention and treatment remain to be comprehensively addressed.[85] Sub-Saharan Africa, although witnessing a marginal decline in overall incidence (in 2016, 254 cases per 100,000 population per year as opposed to 263 in 2014), is estimated to have nearly double the TB global incidence of 140 per 100,000.[86]

Although TB testing and treatment are available to everyone in principle, they remain out of reach for much of the population in practice, and there continues to be a paucity of data regarding TB prevalence and treatment access among people who inject drugs. Whilst the majority of those who have been diagnosed may not develop active TB, people who use/inject drugs, together with prisoners, are more vulnerable to progressing to active TB due to increased HIV co-infection and poor prison conditions in many countries.[87]

In 2016, South Africa accounted for the largest share of people newly enrolled in HIV care who began TB preventive treatment, and it has been noted by WHO for its strong efforts in this area.[85] TB diagnosis and treatment is available in South Africa and Nigeria, but often services also place emphasis on abstinence as a condition for treatment, which restricts access.[16,20] With this in mind, in 2016 one sub-acute TB hospital in Cape Town shifted from running an abstinence-based intervention to implementing a harm reduction approach. This included the development of a new screening tool, a "contemplation group" for patients and harm reduction practice guidelines for staff. The aim of the programme is to assist patients to adhere to TB treatment, regardless of substance use. Over the first six months of the project, attendance in the contemplation group improved from 13% to 42%, highlighting how a harm reduction approach can be made practical and acceptable in a short space of time. However, acceptance of the programme has been varied among hospital staff, and long-term mentoring and support for hospital staff in harm reduction was recommended to improve their understanding of a harm reduction approach.[88]

The lack of available access to TB services for people who use drugs can also be seen in Uganda.[30] TB programmes are often more accessible when integrated into other services, such as harm reduction sites or HIV testing and treatment facilities. TB diagnostics and treatment are available in integrated services in Zimbabwe,[69] Senegal,[32] South Africa[20] and Kenya.[5]

In Tanzania, TB testing and treatment are integrated into OST services, but there remain challenges and a lack of resources in providing care to the population of people who use drugs in a friendly and non-judgmental way.[24] The criminalisation of

drug use, often linked with intense social stigma and discrimination faced by people who use drugs in the region, can lead to poor health-seeking behaviours.[49] Given the high rates of TB in sub-Saharan Africa, urgent action is needed to address the gaps in service provision.

Antiretroviral therapy (ART)

Data on the number of people who inject drugs receiving ART within the sub-Saharan Africa region are sparse. It is believed that HIV testing and treatment for people who inject drugs in Kenya reached approximately 68% of people who inject drugs registered in harm reduction services.[5,89] Yet adherence can be problematic, with missed appointments and a lack of follow-up care.[5]

In South Africa, Tanzania and Senegal, ART is widely available in mainstream public health services. However, there are few key population-specific ART services in existence, and criminalisation continues to contribute to non-disclosure of drug use to service providers.[20,24,32] Mandatory drug testing for people who inject/use drugs currently inhibits people from accessing ART in the current HIV prevention policy in Uganda.[30] HIV testing and treatment services in Nigeria are often located some distance from where people who are using drugs reside, so although ART is provided free of charge at government facilities, there are some associated costs for registration and laboratory tests which form another barrier to service uptake.[16]

To protect confidentiality and privacy, HIV data systems in South Africa do not routinely collect data on key population type.[20] Enrolling people who inject/use drugs into ART programmes is imperative, and integrated services which enable access should be increased in all countries in the region.

Overdose, overdose responses and drug consumption rooms

There are no drug consumption rooms or safer injecting facilities in sub-Saharan Africa and no peer-distribution naloxone programmes in operation at time of publication. Naloxone, a highly effective opioid antagonist used to reverse the effects of an overdose, is available outside hospitals in Kenya at harm reduction sites.[5] However, although harm reduction sites have access to naloxone, it can only be administered by medical personnel, which causes challenges for community groups and outreach.[5]

Naloxone can also be administered only by first responders and healthcare workers in South Africa[20] and Tanzania.[24] The existing harm reduction services in South Africa have trained peers and staff in overdose and prevention management, but there are occasional national stock-outs.[20] Formulations of naloxone other than injection (e.g. intranasal) have not yet been registered in South Africa, which further limits the life-saving support that first responders can provide.[20] In 2016, naloxone was added to the List of Essential Medicines in Tanzania, but can be stored and administered only in hospitals and specific medical facilities that have an emergency or specialised unit, meaning access is extremely limited.[24]

Naloxone is reportedly unavailable in the majority of countries listed in Table 2.9.1, including Mauritius,[52] Zimbabwe,[69] Senegal,[32] Nigeria,[16] the Seychelles,[17] Democratic Republic of the Congo[50] and Uganda.[30] The barriers preventing overdose programmes from operating were primarily noted to be prohibitive drug laws and restrictions on who is eligible to administer the drug.[24,30,52] In the Democratic Republic of the Congo, alongside many other countries in the region, advocacy efforts are in place to lobby for access to naloxone, and the necessity for drug and overdose training.[50]

A systematic review in 2014 found between 83-100% survival rates post-naloxone treatment, demonstrating that non-medical bystanders trained in community opioid prevention techniques are effectively able to administer the life-saving treatment.[57] It is widely acknowledged that people using drugs, their families, friends and people nearby who have access to naloxone form the most effective line of defence against opioid overdose; ensuring ease of access to this medicine is paramount.[90]

Harm reduction in prisons

Despite some momentum around decriminalisation in recent years, the response to drugs remains predominantly punitive in sub-Saharan Africa. In 2014, the West Africa Commission on Drugs called for the decriminalisation of both drug use and possession for personal use, presenting evidence of the ways in which criminalisation negatively impacts on health and social problems, and places undue pressure on the criminal justice system.[91] Since then, Ghana is poised to become the first country in the region to decriminalise the personal possession and use of all illicit drugs, replacing dated punitive legislation with an approach which addresses drug use as a public health issue. However, how this would work in practice is unknown.[92]

Research indicates that prisoners are more likely to be exposed to blood-borne viruses in the prison setting,[93,94] and reports of injecting drug use in

prisons are found worldwide.[95] The effectiveness of prison NSPs in challenging this has been demonstrated,[96] yet no countries in sub-Saharan Africa implement NSP harm reduction services in prisons and places of detention. Only three countries in the region provide OST in the prison setting: Mauritius, Kenya and the Seychelles.[w] In 2016, the *Global State* reported that, since the change of government in Mauritius in 2014, OST had been limited to those who already received it prior to incarceration. Thanks to lobbying by groups such as Collectif Urgence Toxida, OST in the form of methadone can now be initiated in three of the six prisons on the island.[52] Given that illicit drugs have been reported in all six prisons,[97] a scaling up of OST services and implementation of further harm reduction measures (such as NSP provision) is recommended, particularly given that 85% of people who inject drugs have reported being arrested by police in Mauritius.[11] In Kenya, only people who had received methadone maintenance prior to being incarcerated are given access to off-site OST centres by prison wardens.[5] However, the extent of ease of access to OST services in prisons for people who use opioids in all three countries is unclear.

Prison population rates vary considerably across sub-Saharan Africa. The median prevalence of incarceration for West African countries is 52 people per 100,000, whereas in Southern Africa it is nearly quadruple the figure at 188.[98] With the highest per-capita incarceration rate in the world, greater even that that of the United States, the Seychelles has 799 people imprisoned per 100,000.[98] Perhaps because of these figures, the Seychelles replaced its 1990 drug law with a new Misuse of Drugs Act in 2016 and convened a special tribunal to review sentences for drug offences.[99] The updated act is aimed at providing more effective measures in relation to drug use, and promoting treatment, education and rehabilitation.[99] This may result in a reduced number of people incarcerated for drug offences over time; however, the Seychelles remains extremely limited in its harm reduction approach, both in the community and in prisons (see Table 2.9.1). Without an appropriate public health-centred harm reduction response in the Seychelles, HIV and hepatitis C prevalence will continue to rise.[17]

UNAIDS estimated that 56-90% of people who inject drugs will be incarcerated at some stage in their lives[100] and drug use in the prison setting is widely documented.[95] A study involving people who use drugs in Dakar, Senegal found that 29.2% had consumed drugs whilst in prison.[14] People who inject drugs are also most vulnerable to overdose on release from prison,[101-104] yet naloxone is reportedly unavailable to prisoners post-release in every country in the region.[5,16,20,24,30,32,50,52,64,69,74] The provision of good-quality and accessible harm reduction, both inside and outside prisons, is a binding human rights obligation,[105] one which sadly remains unmet in sub-Saharan Africa.

HIV testing and treatment (using ART) and TB testing and treatment are available within prison settings, in theory, in all countries in the region. However, in some countries it has been noted that these services have limited reach and coverage,[30] stocks of essential medicines are often in short supply or arrive late[50] and access to ART through prison hospital/treatment centres can be difficult.[16,32,69] Although ART is available in South Africa to those who have been charged with any criminal offence, there appears to be limited access to HIV and ART services.[20] Put simply, failing to provide access to essential medicines in a timely way contravenes states' obligations to respect and protect the health and bodily integrity of people who are imprisoned, and in extreme circumstances, the very right to life of these people.[106,107]

As noted previously and evidenced in Table 2.9.1, hepatitis C prevalence among people who inject drugs is high. Similarly to naloxone availability, all countries in the region lack hepatitis C treatment in prisons.[5,16,20,24,30,32,50,52,64,69,74,108] Condom distribution is reportedly available in prisons only in Uganda (but with limited reach and coverage),[30] and in Lesotho and South Africa.[20]

In sub-Saharan Africa, the punitive response to drug use remains dominant, and people who use drugs continue to be harshly criminalised. It is clear that meeting international human rights obligations must be urgently prioritised in sub-Saharan African prisons, and that national, regional and international prison monitoring mechanisms should systematically examine issues relating to harm reduction during their prison visits.[109] One example of a progressive approach can be seen in Kenya, where a magistrate based at the Shanzu court in Mombasa offers people who use drugs a harm reduction alternative. People can be referred to the Muslim Education and Welfare Association (MEWA) rather than being imprisoned for drug-related crimes, where they are offered rehabilitation, psychosocial support, OST or support groups.[110]

w In Kenya this is an off-site OST service not operating within the prison. In the Seychelles, the extent or accessibility of OST services for people in prison is unclear.

Policy developments for harm reduction

Despite progress in the implementation of harm reduction services in some countries in the region, for the majority of sub-Saharan Africa a continued focus on supply reduction in drug policy and the criminalisation of drug use overshadows these efforts.

Harm reduction is now explicitly referenced in policy documents in 10 countries in the region,[x] and noted in regional guidance.[27] Tanzania endorsed harm reduction in its national HIV strategy, and harm reduction is present in a number of new policies, such as the National Guideline for Comprehensive Package of HIV Interventions for Key and Vulnerable Populations.[24,111] Although people who use drugs are recognised as a key population by the Tanzanian government, and included in upcoming policies on HIV and hepatitis C, coverage of services does not meet the WHO recommended levels in practice.[24]

Harm reduction is mentioned in various policy documents in South Africa, including the draft South African Hepatitis Guidelines, the draft South African Hepatitis Action Plan, and the South African National Strategic Plan on HIV, TB and STIs (2017-2021).[112] Significant advocacy efforts have also gone into including references to harm reduction in the updated South African National Drug Master Plan, which is currently in development. In Kenya, harm reduction is endorsed in national policy guidelines on HIV, and a multi-country Eastern African Harm Reduction Policy was in development at the time of publication; it is expected to include explicit reference to harm reduction.[5,30] The Kenya AIDS NGO Consortium, through support from a Global Fund regional grant, took leadership in the development of the sub-regional policy group on harm reduction at the East African Community (EAC) level.[5] The EAC is a regional intergovernmental organisation comprised of six countries (Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda) and at the time of publication the policies outlined were due to be delivered to the EAC council of ministers for further recommendation and approval.[5]

Harm reduction is not explicitly mentioned in national policies or strategies at present in Uganda. However, harm reduction issues have been submitted to policy makers establishing the new draft HIV prevention Action Plan for Uganda.[30] PEPFAR, through its linking agency the US Centers for Disease Control and Prevention, has committed to allocate a budget for the development of policy guidelines for the delivery of harm reduction interventions in Uganda.[30]

As previously noted, much of sub-Saharan Africa continues to follow a predominantly punitive approach to drug policy. The African Union, in its common position for the United Nations Special Session (UNGASS) on drugs, committed to achieving a balanced and integrated approach among supply reduction, demand reduction and harm reduction.[113] At time of reporting, Ghana was the only country in the region poised to decriminalise the personal possession and use of illicit drugs.[92]

Civil society and advocacy developments for harm reduction

Civil society organisations continue to be active in sub-Saharan Africa, both in implementing harm reduction services and lobbying for the need for harm reduction where it does not exist and/or where services are extremely limited. This mobilisation has led to increased levels of support for harm reduction interventions, public awareness of what harm reduction is through campaigns such as Support. Don't Punish[115] and in some instances the initiation of services, such as pilot NSPs in Uganda.[30]. The East African Harm Reduction Conference was held in Nairobi, Kenya in early 2018 and attracted approximately 600 participants from 20 countries. The event, co-hosted by the Kenya AIDS NGO Consortium and the Kenyan Ministry of Health, also saw the Kenyan cabinet secretary for health formally launch the Eastern African Harm Reduction Network.[5,52] Through the African Union, members of the Southern African Development Community have also been vocally supportive of harm reduction in various forums,[69] and civil society organisations in Kenya report better engagement in government budget-making processes for harm reduction.[5]

In South Africa, the second South African Drug Policy Week (SADPW) 2017, co-hosted by the South African National AIDS Council, brought together various stakeholders and people who use NSP and OST services to participate in discussions of the National Drug Master Plan development process.[20] The Southern African Network of People Who Use Drugs (SANPUD) was also established.[20,69] In September

x As far as we are able to ascertain, harm reduction is explicitly referenced in government policy documents in Ghana, Kenya, Mauritius, Tanzania (including Zanzibar), Zambia, Nigeria, South Africa, the Seychelles and Senegal.

2017, Mauritius also held its Third International Conference on Harm Reduction.[52]

In Nigeria, a national civil society stakeholders meeting on harm reduction was held for the first time in 2017. The meeting involved the Ministry of Health and the National Drug Law Enforcement Agency, which had in the past stood against harm reduction, with a national harm reduction coalition being formed at the time of publication.[16] A drug user network was also established in Nigeria in 2017, known as the Drug Harm Reduction Advocacy Network, and linked to the International Network of People who Use Drugs (INPUD).[16,74] This drug user network joins a plethora of others in the region, some of which are attached to the broader East Africa Harm Reduction Network,[y] including SANPUD (also linked to INPUD), [20] Drug Users of Gauteng, Drug Users of Cape Town, Drug Users of Durban,[20] the Mauritian Network of People who Use Drugs,[51,52] Drug Users Network Seychelles (DUNS), the Burundi Network of People who Use drugs (BAPUD), Santé Espoire et VIE (SAVE) in Senegal,[32] the Tanzanian Network of People who Use Drugs (TANPUD),[24] the Zanzibar Network of People who Use Drugs, the Kenya Network of People who Use Drugs[5] and five drug user-led groups in Zimbabwe, including the Zimbabwe People who Use Drugs group which formed in 2016.[69] The Zimbabwe Lawyers for Human Rights group has also assisted members of the Zimbabwe Civil Liberties and Drug Network at country level to understand their rights.[69] In April 2018, a Harm Reduction Association was also established in the Democratic Republic of the Congo, although limited to harm reduction advocacy work at time of publication.[50]

In 2017, YouthRISE Nigeria led the We Are People campaign, which focused on the human rights of people who use drugs and the need for harm reduction services. In 2018, YouthRISE aims to work together with the United Nations Office on Drugs and Crime (UNODC) to organise training for civil society organisations in the country on harm reduction.[16,74] Civil society organisations, such as UHRN in Uganda, are also helping to shift the trend from arrest and detain to arrest and refer to harm reduction by engaging with police officers and stations on the principles of harm reduction.[30]

Funding developments for harm reduction

As reported in previous iterations of the *Global State*, much of the funding for harm reduction in sub-Saharan Africa stems from multilateral agencies. In 2017, civil society organisations in South Africa received funding from the Global Fund through the South African National AIDS Council's work, with the monies used to support the continuation of services in Cape Town and the scale-up of two new NSPs in Port Elizabeth and Johannesburg, and two small OST programmes.[20] Although the Global Fund is supporting harm reduction in the region and South Africa more specifically, there is currently evidence of the government prioritising harm reduction funding.

There have been limited discussions with the South African National Department of Health on the appropriate budget for OST, but at the time of publication there are no reports of plans for a harm reduction-specific budget. Funding from PEPFAR of services for people who inject drugs through the Centers for Disease Control and Prevention has been reduced, with no additional funding from USAID in the latest round of key population funding.[20] Mainline, a Dutch NGO, has been complementing PEPFAR and Global Fund harm reduction funding through a programme of work called Bridging the Gaps in South Africa, focused on OST and psychosocial services in three cities and drop-in centres.[53] The Open Society Foundations (OSF) fund advocacy initiatives in East and West Africa.[20] Harm Reduction International's 10 by 20 campaign[z] was presented at the 2017 South African Drug Policy Week.[20]

Although more than 90% of funding in South Africa comes from international donor support, the City of Tshwane has allocated 4-5 million Rand (US$300,000 to $375,000) to harm reduction funding, specifically for OST and sterile injecting equipment/harm reduction packs, as part of a three-year agreement with the University of Pretoria. The programme aims to develop and implement a response to drugs that is not prohibitionist in nature.[20]

In Kenya, the United States government contributed an estimated US$5.5 billion through PEPFAR between 2004-2017 to the national AIDS response.[115] Small pockets of government funding are being used to support OST programmes in Kenya; however, the majority of funding continues to come from international donors.[5] Through donor support, such

y Kenya, Uganda and South Africa.
z The 10 by 20 campaign calls on governments to redirect 10% of law enforcement funding to harm reduction by 2020.

as that of the Global Fund, UNITAID, International HIV/AIDS Alliance, PEPFAR, USAID and Mainline via Bridging the Gaps, harm reduction services in the country have increased, including for OST, NSPs, naloxone and hepatitis C provision; but the last only to a small extent at time of publication.[5,53] In the next two to three years, the Global Fund grant (which is the primary funding to have sustained and scaled-up harm reduction programming and advocacy in Kenya) will come to an end. There is some concern that without a strong transition process and greater commitments by governments, the positive changes in Kenya, Uganda, Tanzania, Zanzibar, the Seychelles and Mauritius may be lost.[5] At present, in Kenya, OST coverage still reaches only 9% of people who use opioids, and more resources are needed to support and scale-up all nine of the WHO recommended interventions in the country.[63]

The Global Fund have supported pilot NSPs in Uganda in 2018, with the hope to scale-up to more sites with Global Fund assistance in the future.[29] The Partnership to Inspire, Transform and Connect the HIV response (PITCH), supported by the International HIV/AIDS Alliance, is also contributing to harm reduction initiatives in Uganda.[30] In Tanzania, harm reduction funding comes from a variety of sources.[24] OST clinics and the provision of methadone are supported primarily by the Centers for Disease Control and PEPFAR, with some support from the Tanzanian government. Funding for the NSPs running in Dar es Salaam comes from the French NGO Médecins du Monde (MdM) with support from Agence Française de Développement (AFD) and harm reduction advocacy is mainly funded through the Global Fund, with monies also coming from the Open Society Initiative for East Africa (OSIEA) and UN agencies.[24] For the first time, pilot NSP activities have been integrated into the recent Global Fund grant in Tanzania.[24] Due to limited resources and a lack of understanding regarding the principles of harm reduction in the country, health services which aim to address drug users' needs often lack financing, and there is an extremely limited government budget dedicated to the care of people who use drugs.[24]

In Senegal, harm reduction continues not to be a priority for the government.[32] ANCS, which is one of the main implementers of harm reduction in the country, receives funding from the Global Fund, the International HIV/AIDS Alliance and the Open Society Initiative for West Africa (OSIWA). The Global Fund grant will end by 2020/2021, and efforts must be made to ensure alternative funding is secured before then.[32] Similarly in Nigeria, which is yet to implement harm reduction programmes, over 80% of funding for the national HIV/AIDS programme comes from international donor contributions.[16]

The only country in the region that breaks the mould is Mauritius, where the government supports approximately 70% of harm reduction services and the Global Fund provides approximately 30%.[52] In the rest of sub-Saharan Africa, government domestic investment in harm reduction is poorly documented and there remains a heavy reliance on international donors; a reliance that risks the sustainability of the harm reduction response and leaves services in a precarious situation.[115]

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Harm Reduction International is a leading NGO dedicated to reducing the negative health, social and legal impacts of drug use and drug policy. We promote the rights of people who use drugs and their communities through research and advocacy to help achieve a world where drug policies and laws contribute to healthier, safer societies.

If you would like to find out more about Harm Reduction International, please contact us at:

Harm Reduction International
61 Mansell Street,
London, E1 8AN,
United Kingdom
Phone: +44 (0) 20 7324 3535
Email: office@hri.global
Web: www.hri.global

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INTERNATIONAL