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2.4 | Regional Update **Caribbean**



Table 2.4.1: Epidemiology of HIV and Viral Hepatitis, and Harm Reduction Responses in Caribbean

Country/territory with reported injecting drug use ^a	People who inject drugs ^b	HIV prevalence among people who inject drugs (%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs (%) ^c	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs (%) ^c	Harm reduction response ^d	
					NSP ^e	OST ^f
Bahamas	nk	nk	nk	nk	✗	✗
Bermuda	nk	nk	nk	nk	✗	✗
Dominican Republic	nk	nk	nk	nk	✗	✗
Haiti	nk	nk	nk	nk	✗	✗
Jamaica	nk	nk	nk	nk	✗	✗
Puerto Rico	29,130	12.9 ^g	89% ^h	nk	✓ (13)	✓ (6)(M)
Suriname	nk	nk	nk	nk	✗	✗

nk= not known

a In 2008 the UN Reference Group found no reports of injecting drug use for Antigua and Barbuda, Barbados, Belize, Dominica, Grenada, St Kitts and Nevis, St Lucia or St Vincent and the Grenadines.

b Unless otherwise stated, data are sourced from Mathers B et al. for the Reference Group to the UN on HIV and Injecting Drug Use (2008) Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review, *Lancet*, 372(9651):1733–1745.

c Nelson PK et al. (2011) Global epidemiology of hepatitis B and hepatitis C in people who inject drugs: results of systematic reviews, *Lancet*, 378(9791): 571–583.

d Unless otherwise stated, data on NSP and OST coverage are sourced from Mathers B et al. for the Reference Group to the United Nations on HIV and Injecting Drug Use (2010) HIV prevention, treatment and care for people who inject drugs: A systematic review of global, regional and country level coverage, *Lancet* 375(9719):1014–28.

e 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.

(P) = needles and syringes reported to be available for purchase from pharmacies or other outlets, and (NP) = needles and syringes not available for purchase.

f The number in brackets represents the number of operational OST programmes, including publicly and privately funded clinics and pharmacy dispensing programmes. (M) = methadone, (B) = buprenorphine, (O) = any other form (including morphine and codeine).

g Estimate from 1998–2001.

h This figure is sub-national and relates to San Juan only.

Map 2.4.1: Availability of needle and syringe exchange programmes (NSP) and opioid substitution therapy (OST)



Harm Reduction in the Caribbean

After sub-Saharan Africa, the Caribbean has the highest regional HIV prevalence worldwide.¹ Seven of the larger Caribbean islands have adult HIV prevalence of more than 1%, the highest being the Bahamas at 3.1%.² UNAIDS reports, that the generalised epidemic slowed significantly between 2001 and 2011, with HIV incidence declining by 25% in the Dominican Republic and Jamaica, and by 12% in Haiti.¹

Injecting drug use (IDU) is rare across most of the Caribbean with the exception of Puerto Rico and Bermuda.² Currently only seven countries and/or territories have reported IDU.³ Reliable data on the number of people who inject drugs (PWID) and the prevalence of HIV among injecting populations are only available for Puerto Rico, where unsafe injecting is a major contributor to the HIV epidemic. In 2006 it was reported that this mode of transmission accounted for 40% of new infections among men and 27% among women.⁴ The most recent estimate indicates that there are 29,130 PWID in Puerto Rico, with HIV prevalence among them reported to be 12.9%.⁵ Researchers have found that Puerto Ricans who inject drugs tend to inject frequently (on average six times a day) and use the same syringe multiple times (on average eight times). They are more likely to share drugs and injecting equipment and inject in shooting galleries than Puerto Ricans who inject drugs living in mainland USA.⁶ A 2007 study found HIV prevalence to be higher among female non-injecting heroin users (4.3%) than among their male counterparts (0.6%). The researchers called for supportive systems for women who use drugs to be made a high-priority public health issue in the country.⁷

Several Caribbean countries have reported a link between sexual HIV transmission and the use of crack cocaine, which is widely available and extensively used on some islands.⁸ Reported HIV prevalence among people who use crack cocaine reach 5% in Jamaica and 7.5% in St Lucia (11.1% among women and 6.8% among men).⁹ Researchers have reported that crack cocaine users, particularly women, are more likely to sell sex to support their drug use and engage in high-risk sexual practices.^{k 2, 10-11} Impaired judgement associated with drug use is also reported to contribute to sexual risk behaviours in Barbados.¹² Research plans in Belize for 2012 included further investigation into the link between drug use and HIV transmission.¹³ In 2006, UNAIDS recommended that countries devise indicators on targeted HIV prevention programmes among people who use crack cocaine, to ensure these activities are captured in UNAIDS progress reporting.⁹

i Trinidad and Tobago's progress report to UNAIDS in 2012 stated that it is 'by and large not an injecting society' and that the few reported cases have been linked to 'deportees returned from abroad'.

j Estimate from 1998–2001.

k In a study conducted in St Croix in 2005 involving 254 drug and alcohol users, women not only reported higher levels of crack use (85% compared to 49% of male participants) but also significantly more sexual partners in the month previous to the study (5.6 compared to 2.3) with more unprotected sexual acts (11.2 compared to 6.5). Female participants also reported a notably higher HIV prevalence of 8.8%, compared to 1.4% in men.

However, few countries have included information on this in their latest progress reports.¹⁴

The harm reduction response remains very limited throughout the region. Needle and syringe exchange programmes (NSPs) and opioid substitution therapy (OST) are only available in Puerto Rico.³ Services for people who use drugs (PWUD) throughout the rest of the region are predominantly abstinence-based, high-threshold interventions, with the exception of a small number of drop-in centres in St Lucia, the Dominican Republic, Trinidad and Tobago and Jamaica.⁸ With the initiation of a Round 9 Global Fund programme in the region, there are planned activities related to harm reduction in Jamaica, the Dominican Republic and Trinidad and Tobago, including the development of a harm reduction training programme.¹⁵ There are also efforts underway to include drug use and harm reduction within peer education curriculum for sex workers and men who have sex with men (MSM), as part of the Global Fund programme.¹⁵

There have been no significant policy developments related to harm reduction in the Caribbean in the past two years.

Developments in harm reduction implementation

Needle and syringe exchange programmes (NSPs)

Regional NSP coverage is very low, with a reported distribution of 0.3 syringes per PWID per year.³ Puerto Rico is the only territory with NSPs, with currently 13 active NSP sites based in communities around the capital city of San Juan, equal to 0.4 NSP sites per 1000 PWID.³ Although Law 110 that classified syringes as illegal injecting paraphernalia was amended in 1997, there are anecdotal reports of law enforcement authorities entering *el punto* (shooting galleries) and destroying the available sterile injecting equipment.¹⁶

Despite reports of IDU in six other Caribbean countries and/or territories, no NSP services have been established outside Puerto Rico. In the Dominican Republic, it is reported that sterile syringes can be purchased in pharmacies.¹⁵

Opioid substitution therapy (OST)

Puerto Rico remains the only territory in the region that has any OST provision. There are reported to be six operational OST sites (five in the community and one in a prison), which is equal to 0.2 OST sites per 1000 PWID.³ In 2007, there were an estimated 5570 people receiving methadone in Puerto Rico, representing 19% of the injecting population.³ Despite opiate use reported in the Dominican Republic, there are no OST sites operating in the country.¹⁵

In Puerto Rico a majority of PWID report starting to inject at a very young age. In contrast to many other countries outside the Caribbean, there are currently no legal restrictions inhibiting anyone under eighteen from accessing available NSP and OST services.¹⁷

Anecdotal reports indicate that harm reduction coverage in Puerto Rico is negatively impacted by funding restrictions. Since 2010 the Punto Fijo programme of Iniciativa Comunitaria that previously worked across twenty five communities in the northeastern part of the island, now covers only fifteen communities in the San Juan municipality, with no renewed services in the other ten areas.¹⁶ The situation in Puerto Rico is not captured by UNAIDS reporting processes as it is a territory of the USA but unfortunately not included within the 2012 USA report.¹⁸

Harm reduction for people who use crack cocaine

A small number of drop-in centres primarily for people who use drugs (PWUD) have been established across the region. Programmes advocating a harm reduction approach have been set up in Santo Domingo (Dominican Republic), Port of Spain (Trinidad), Kingston (Jamaica) and Vieux Fort and Castries (St Lucia).¹⁹ The Castries facility offers shelter and other services for homeless crack cocaine users living with HIV, providing adherence support for residents receiving antiretroviral therapy (ART). Although it does not distribute cannabis, the centre advocates the use of the drug for residents as a method of combating crack cocaine addiction and the nausea that is often a side effect of ART.¹⁹ In Jamaica, the National Council on Drug Abuse (NCDA) provides homeless PWUD with HIV treatment, prevention and care services as well as rehabilitation and detox services and links to services providing food, shelter and primary health care.²⁰

While countries have not developed indicators specifically related to targeted prevention for people who use crack cocaine,¹⁹ several UNAIDS progress reports in 2012 include mention of this group as a vulnerable population. Jamaica, for example, now includes responding to HIV among crack cocaine users within its National Strategic Plan.²⁰

Hepatitis C

There is very limited information available on hepatitis C (HCV) among PWUD in the Caribbean. The national HCV prevalence among PWID in Puerto Rico is not available. However, sub-national data relating to San Juan indicate that HCV prevalence among PWID is very high (89%).²¹ Positive HCV status has been found to be strongly associated with the number of years of IDU, use of shooting galleries, receiving a tattoo while incarcerated and having a history of sexually transmitted infections (STIs).²¹ HCV treatment is currently not being distributed by the Puerto Rican Health Department due to prohibitive cost.¹⁷ Obtaining treatment from private health providers remains the sole option for people living with HCV, with associated costs prohibiting most from accessing treatment services.¹⁷

Tuberculosis

Data on the extent of tuberculosis (TB) infection among Caribbean PWUD are lacking. However, TB remains an important public health issue in the region, particularly among people living with HIV. In Puerto Rico, one study reported that TB incidence was highest among PWID living with HIV.²² A recent visit to Puerto Rico by the Centers for Disease Control and Prevention (CDC) was prompted by a reported outbreak of TB within a 'drug addiction centre' in the village of Trujillo Alto.²³ The extent to which TB prevention and treatment is available to PWID in Puerto Rico is not known.

Antiretroviral therapy (ART)

Alongside Latin America, the Caribbean leads globally in ART coverage among low- and middle-income countries; Belize, Haiti and Jamaica are reported to have ART coverage of 40–59%, with Cuba reporting to reach 80% of people who require ART.¹ Increased access to ART has led to a considerable drop in the number of people dying of AIDS-defining illnesses, with an estimated 26,000 averted deaths.² While there are programmes in place on some islands to provide ART adherence support to PWUD,¹⁵ there are no estimates of the numbers of PWUD receiving ART in the Caribbean.³ A regional synthesis of UNAIDS progress reports from 2008 emphasised the need for the region to quickly increase the meaningful involvement of its most vulnerable populations within the HIV response. It also called for more targeted prevention, as currently HIV prevention efforts primarily target the general population and reach a very low percentage of MSM, male and female sex workers and PWUD.⁹ Similarly, there is a need for increased access to HIV treatment, care and support programmes among populations with elevated HIV prevalence including PWUD and prisoners.

Harm reduction in prisons

Drug use is highly criminalised and incurs severe sentences across the Caribbean region, resulting in the incarceration of large numbers of PWUD and subsequent overcrowding within prisons. The criminalisation of sex between men and drug use, and high-risk sex within prisons, contribute to high HIV prevalence among Caribbean prisoners. While estimates of HIV prevalence within prisons are limited to results from routine HIV screening and seroprevalence studies (i.e. no systematic research has yet been undertaken), there is evidence of elevated HIV prevalence in prisons from several countries and/or territories, ranging from 2% in St Lucia to 4.9% in Belize and 5.24% in Guyana.²⁴

There are no NSPs operating within prisons in the Caribbean, and only one OST programme operating in one prison in Puerto Rico. There are no systematic data on access to HIV prevention, treatment, care and support within prisons, but indications are that service provision remains limited.

Overdose

Data on overdose prevalence among PWUD in the Caribbean are lacking. One cross-sectional survey in Puerto Rican prisons found that almost half of 1179 prisoners had witnessed an overdose in prison, and one-third had known someone to have died of an overdose while incarcerated.²⁵ The likelihood of witnessing an overdose incident was associated with age, being male and using drugs in prison (particularly poly-drug use).²⁵ Of those reporting IDU before incarceration, 60.6% had witnessed an overdose incident and 44.9% had known of an overdose death.²⁵ The majority of participants who injected drugs in prison reported high-risk injecting practices.²⁵

The researchers note the need to develop and improve appropriate responses within prison settings.²⁵ They also highlight the need for further investigation into the structural factors and staff attitudes that facilitate or hinder the implementation of overdose prevention programmes in prisons.²⁵

Policy developments for harm reduction

There have been few developments in harm reduction policy at either national or regional levels in the Caribbean during the past two years. Harm reduction is included within Trinidad and Tobago's National Anti-Drug Plan for 2008–2012 as a key component of the national response to drugs,²⁶ but this remains the sole national policy related to HIV or drugs in the region which includes harm reduction.

Local respondents have reported an increase in discussions surrounding the decriminalisation of cannabis in the Caribbean, but as yet there has been no actual legislative action.¹⁵

The awarding of a regional bid from Round 9 of the Global Fund to fight AIDS, Tuberculosis and Malaria, entitled 'Fighting HIV in the Caribbean: a Strategic Regional Approach', signified an important advance for harm reduction in the Caribbean.²⁷ A total of US\$29,812,507 will be disbursed to the Pan Caribbean Partnership Against HIV/AIDS (PANCAP) over a period of five years, from January 2011 to December 2015.²⁷ The programme includes harm reduction initiatives for people who use crack cocaine both in the community and in prisons. Priority area 3 of the Caribbean Regional Strategic Framework (CRSF) 2008–2012 is 'to achieve universal access to targeted prevention interventions among the most-at-risk populations (such as, MSM, SW [sex workers], drug users, prisoners, and migrant populations).'²⁸ An expected result articulated in the Grant Application is that six countries will report adoption of HIV prevention programmes among cocaine users with harm reduction measures by 2014 (up from two in 2008 – St Lucia and Jamaica).²⁷

As reported in the *Global State of Harm Reduction 2010*, the involvement of government representatives within Country Coordinating Mechanisms (CCMs) for Global Fund grants provides some indication of national support for a harm reduction approach from Caribbean governments.

Civil society and advocacy developments for harm reduction

The few drop-in centres with a harm reduction approach operating in the region are primarily implemented by civil society organisations (CSOs). The civil society initiative within the PANCAP Round 9 Global Fund programme continues to play a significant role in the regional HIV response. It is jointly led by the Caribbean Vulnerable Communities Coalition (Jamaican coalition of civil society actors known as CVC) and El Centro de Orientación e Investigación Integral (Dominican Republic-based CSO COIN). They work to challenge the structural drivers of the epidemic, focusing on socially marginalised populations affected by HIV.²⁹ CVC/COIN provides technical support to community partners to help scale up and develop innovative programme models targeting key population groups that include PWUD.³⁰

The Caribbean Drug Abuse Research Unit (CDARI) continues to support research into the public health risk of hidden populations by assessing prevention, treatment and legislative methods as well as promoting a public health approach to substance use and dependency issues.³¹

The 2011 Caribbean HIV conference was held in the Bahamas to discuss the forging of a sustainable response to the regional HIV epidemic, highlighting critical issues of sustainability and evidence-based interventions.³² The conference attracted more than 2000 participants from across the region, with individuals from vulnerable population groups, members of community organisations and representatives of regional and international governments.³²

Caribbean civil society will have some involvement in the upcoming 6th Latin American & Caribbean Forum on HIV/AIDS and STIs to be held in Sao Paulo, Brazil, in August 2012. The theme of the conference will be 'health systems, community networks and the challenge of prevention', and it will offer an opportunity to strengthen regional dialogue on key objectives in the prevention of STIs, AIDS and viral hepatitis throughout the two regions.³³

At the international level, civil society engagement in the Commission on Narcotic Drugs (CND) remains limited, with only a small number of Caribbean countries sending CSO representatives to participate and/or observe the CND.³⁴

Multilaterals and donors: developments for harm reduction

The most significant advance in harm reduction funding within the region has been the regional Global Fund grant. The five-year programme includes US\$1.2 million allocated for HIV prevention, treatment and care among drug users and prisoners.¹⁹ Harm reduction activities within the programme focus on HIV transmission among people who use crack cocaine and as such do not include implementation of the comprehensive package of interventions for PWID.¹⁹

The US President's Emergency Program for AIDS Relief (PEPFAR) has continued to fund HIV programmes within the region. A five-year collaborative framework between the USA and the Caribbean to support the implementation of strategic, regional efforts to combat HIV/AIDS was confirmed in 2010.¹⁹ Although it is potentially a mechanism to provide financial and technical support for harm reduction initiatives across the region, recent changes to PEPFAR funding restrictions prohibit the funding of NSPs. The current USAID grant is administered by the Caribbean HIV/AIDS Alliance (CHAA) and currently covers sex workers, MSM and people living with HIV in some of the smaller Caribbean territories.¹⁵ As yet, no international programmes target PWID in the region.

A new Strategy on Substance Use and Public Health was approved at the WHO/PAHO 50th Directing Council meeting in September 2010.³⁵ While advocating a primary health care approach with integrated service delivery networks, the strategy directly articulates the benefits of evidence-based health initiatives that include harm reduction and preventive interventions targeting vulnerable population groups.³⁵

A recent initiative of the Organization of American States (OAS) involved the training of 40 Caribbean delegates on the Drug Treatment Courts (DTCs) model that has proved an effective alternative measure to incarceration for drug use.³⁶ The delegates included judges, prosecutors, defence attorneys, treatment providers and health care and justice professionals from Trinidad and Tobago, Jamaica, Barbados, the Bahamas and Grenada.

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2.5 | Regional Update **Latin America**



Table 2.5.1: Epidemiology of HIV and Viral Hepatitis, and Harm Reduction Responses in Latin America^a

Country/territory with reported injecting drug use	People who inject drugs ^b	HIV prevalence among people who inject drugs (%) ^b	Hepatitis C (anti-HCV) prevalence among people who inject drugs (%) ^f	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs (%) ^f	Harm reduction response ^c	
					NSP ^d	OST ^e
Argentina	65,829 (64,500–67,158)	49.7 (35.4–64)	54.6	8.6	✓ (25)	✗
Bolivia	nk	nk	nk	nk	✗	✗
Brazil	540,500	48 (18–78)	63.9	2.3	✓ (150–450)	✗
Chile	42,176	nk	nk	nk	✗	✗
Colombia	nk	1 ^f	nk	nk	✗	✓ (4)
Costa Rica	nk	nk	nk	nk	✗	✗
Ecuador	nk	nk	nk	nk	✗	✗
El Salvador	nk	nk	nk	nk	✗	✗
Guatemala	nk	nk	nk	nk	✗	✗
Honduras	nk	nk	nk	nk	✗	✗
Mexico	nk	3 (1.9–4.1)	97.4 (96–98.7)	nk	✓ (19)	✓ (21–25)(M)
Nicaragua	nk	6	nk	nk	✗	✗
Panama	nk	nk	nk	nk	✗	✗
Paraguay	nk	9.35 (3.7–15)	9.8	nk	✓ (3)	✗
Peru	nk	13 ^g	nk	nk	✗	✗
Uruguay	nk	nk	21.9	4.5	✓	✗
Venezuela	nk	nk	nk	nk	✗	✗

nk= not known

a Latin American civil society respondents reviewing the data above expressed concern that many of the estimates were outdated and did not accurately represent the current national situation in relation to the number of PWID and HIV among PWID. Where more recent alternative estimates were available, these are included in the text of this chapter. Similar concern was expressed regarding the number of NSP and OST within countries, but in most cases up-to-date figures were not available.

b Unless otherwise stated, data are sourced from Mathers B et al. for the Reference Group to the UN on HIV and Injecting Drug Use (2008) Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review, *Lancet*, 372(9651):1733–1745.

c Unless otherwise stated, data on NSP and OST coverage are sourced from Mathers B et al. for the Reference Group to the United Nations on HIV and Injecting Drug Use (2010) HIV prevention, treatment and care for people who inject drugs: A systematic review of global, regional and country level coverage, *Lancet*, 375(9719):1014–28.

d 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.

(P) = needles and syringes reported to be available for purchase from pharmacies or other outlets, and (NP) = needles and syringes not available for purchase.

e The number in brackets represents the number of operational OST programmes, including publicly and privately funded clinics and pharmacy dispensing programmes. (M) = methadone, (B) = buprenorphine, (O) = any other form (including morphine and codeine).

f Estimate from 1999: UN Reference Group.

g Estimate from 1994–1995: UN Reference Group.

Map 2.5.1: Availability of needle and syringe exchange programmes (NSP) and opioid substitution therapy (OST)



Harm Reduction in Latin America

HIV continues to affect marginalised populations across the Latin American region, including people who use drugs (PWUD). Though widely under reported, injecting drug use (IDU) is a significant route of HIV transmission in the region, especially in the southern cone of South America and in Mexico.² The Reference Group to the United Nations on HIV and Injecting Drug Use estimates that there were over two million people who inject drugs (PWID) in Latin America in 2008, with the largest number residing in Brazil (540,000). Where data on HIV prevalence among PWID are available, there are wide variations among and within countries. Latest UN Reference Group estimates are that over one quarter (580,500) of the 2 million PWID in Latin America were living with HIV.³ The highest HIV prevalence among injecting populations was reported in Brazil and Argentina at 48% and 49.7%, respectively (see Table 2.5.1).

Further insights into the HIV epidemic among PWID in the region can be obtained from national reports to UNAIDS and WHO. For example, the following Latin American countries reported to WHO on HIV prevalence among PWID: Brazil (6%), Colombia (2%), Mexico (4%) and Paraguay (9%).² In Colombia, reported HIV prevalence among PWID ranged from 1.9% in Pereira to 9% in Cucata.⁴ There are plans for further studies on HIV and injecting drug use in Cali, Armenia and Bogota, three areas where injecting heroin use is on the rise.⁵ While unprotected sex between men remains the dominant mode of transmission in Mexico, intersections between IDU and sex work are reported to play an important role in Mexico's epidemic.⁶

There is increasing research into the prevalence and harms related to non-injecting use of cocaine and its derivatives within the Latin American region.⁷ As in the Caribbean region (see Chapter 2.4), studies in several Latin American countries indicate that HIV prevalence among people who use crack cocaine is often elevated when compared with the general population.⁷⁻¹⁰ In addition, the use of coca paste, *bazuco* or *paco* is of increasing concern in Colombia, Argentina, Bolivia, Chile, Ecuador, Peru and Uruguay.¹¹⁻¹²

Civil society organisations continue to be the primary implementers of harm reduction initiatives in Latin America. Six countries are currently implementing harm reduction programmes: Argentina, Brazil, Colombia, Mexico, Paraguay and Uruguay. No additional countries have adopted a harm reduction approach in the past two years.¹³ The vast majority of needle and syringe exchange programmes (NSPs) operate in Brazil, with projects also running in Argentina, Mexico, Paraguay and Uruguay. Opioid dependence is uncommon throughout much of Latin America, with most heroin use concentrated in Mexico and Colombia. Consequently, opioid substitution therapy (OST) coverage is low with services only available in these two countries (see Table 2.5.1).

Harm reduction programmes targeted towards people who use crack cocaine are operating in some countries but in general, these experiences are yet to be documented.

Across the region, there are very limited comprehensive care programmes available for those living with HIV, viral hepatitis or TB. Few health services target or address the specific needs of PWUD and linkages or referral systems between existing services for PWUD and other health services are often poor.¹³ However, in Colombia there are indications that they intend to '[move] forward in the integration of the agenda of HIV with the agenda of drugs, which have historically worked very separately.'⁵

Latin America is at the forefront of a growing global movement to decriminalise drug use. Civil society advocacy in several countries has been instrumental in bringing about preliminary changes in national drug policy.¹³ While these developments have clear implications for PWUD and harm reduction policy and practice, in no country have legal reforms been followed up with an increase in harm reduction services. Civil society organisations continue to be the primary service providers of harm reduction initiatives throughout the region. However, in the absence of state support they are frequently confronted with funding difficulties and are increasingly forced to rely on international resources.¹³

Multilateral agencies and international donors such as the Global Fund to Fight AIDS, Tuberculosis and Malaria and the World Health Organization's Pan American Health Organization (PAHO) continue to provide limited support to harm reduction initiatives throughout the region.¹³ However, the absence of adequate government support and poor financing for harm reduction continues to inhibit the introduction and/or scale-up of services in many Latin American countries.¹³

Developments in harm reduction implementation

Needle and syringe exchange programmes (NSPs)

Estimates of NSP coverage are very limited for Latin America. Where available, data indicates extremely low coverage with only 2% of PWID accessing NSP services across the region and 0.3 syringes received per PWID per year.¹⁴ Only five countries currently operate NSP programmes, leaving twelve that have reported injecting drug use with no available NSP facilities. No new countries have introduced NSP sites in the past two years, and there has been very little scale-up of established NSP services.¹³ Brazil still reports the highest number of active NSP sites, with between 150 and 450 currently in operation¹⁴ (see Table 2.5.1). Recent national reporting to UNAIDS indicates that 54.3% of PWID reported to have used sterile injecting equipment the last time they injected.⁴

In Paraguay this figure is reported at 92.11% despite there being only three NSP sites in operation.⁴

In Mexico, there are reported to be 0.4 NSP sites per 1000 PWID, providing equivalent to 2.7 syringes per PWID per year;² significantly higher than the regional average. State funds subsidise the distribution of sterile injecting equipment to Centres for Youth Integration (CIJ) and some CAPASITS (State Coordinating of HIV/AIDS/STIs).¹³ In Ciudad Juarez, the NGO intervention *Companeros Program* distributes equipment packs containing sterile needles and HIV and hepatitis C prevention information.¹³

There are still no NSP programmes in Colombia, despite widespread heroin use and high-risk injecting practices. A recent study found that 40% and 60% of PWID in Medellin and Pereira respectively reported sharing injecting equipment.⁴ The majority of participants reported using tap water to clean syringes, with a small number using alcohol. The interconnection between PWID and their sexual networks in HIV transmission has also been highlighted.⁴ Approximately 22.9% of PWID in Medellin and 22.7% in Pereira reported giving a used syringe to a casual partner.⁴

The criminalisation of drug use and strict law enforcement across the region remains a significant barrier to PWID accessing health services. There are anecdotal reports from Mexican civil society of the frequent seizing of used injecting equipment from PWID to be used as evidence against them.¹⁵ The registration requirements of Mexican NSPs are also reported to deter many PWID from accessing these services.

Prohibition policies in Colombia have given rise to high levels of stigma, social discrimination and exclusion of PWUD.¹³ Discrimination against PWUD from health service providers is reported.¹⁶ Studies in Medellin and Pereira revealed that, while the majority of PWID participants had purchased syringes in pharmacies, most reported discrimination by pharmacy employers.⁴

In those countries that offer limited harm reduction facilities, restricted access hours, waiting times, insufficient resources and inadequately trained service providers deter many PWID from accessing services.¹³ The Brazilian NGO, *Viva Rio*, in coordination with the Department of Mental Health of Rio de Janeiro, is working to improve service access in the area, training community health operators who work in the *favelas* in harm reduction intervention.^h ¹³ The *Intercambios Civil Association*, in coordination with the governments of various provinces and the support of the *Levi Strauss Foundation*, is also developing training in Argentina under the project 'Reducing stigma and discrimination of drug users'.¹⁷

Further research and programme-monitoring in countries implementing NSPs is required to determine accurate levels of coverage across the region. Although concentrated epidemics within key populations are reported throughout Latin America, services targeting the needs of vulnerable population groups are limited. More harm reduction initiatives that actively engage with networks of PWUD and include community and interdisciplinary interventions are required.

Further developments for harm reduction targeting PWID include the investment of US\$500,000 of the National Drug Council of Uruguay to open two crisis centres for PWUD, based in the *Maciel* and *San Jose Hospitals*.¹³ In Paraguay, the National Centre on Addiction Control with the National HIV/AIDS and STI Control Programme and regional NGOs, is developing harm reduction initiatives, although it is not yet clear what these will involve.¹³ An Advisory and HIV Testing Centre has recently opened in Argentina.⁴ The National Policy for the Reduction of Substance Abuse in Colombia is leading localised harm reduction developments for people who inject heroin.¹³ Street-based outreach services are being initiated in accordance with local authorities to deliver educational activities and monitored distribution of condoms and sterile syringes. Pilot schemes have been established in the *Cucata*, *Pereira*, *Santander de Quilichao*, *Cali*, *Armenia* and *Medellin* areas.¹³

Harm reduction for people who use crack cocaine

As the association between HIV transmission and non-injecting drug use in the region is being increasingly reported,^{4,7} there is a need for guidance on the development of interventions that specifically aim to prevent HIV for those drug users who do not inject. This is of particular urgency in South American countries where researchers and CSOs have called for increased access to HIV prevention and voluntary counselling and testing (VCT) for crack cocaine users.¹⁸

Some harm reduction initiatives in the region are tailored toward people who use crack cocaine, but these need to be more systematically documented. One such programme was developed in 2010 in Rio de Janeiro. The 'crack-land' project provided a safe place for young people to congregate and smoke crack cocaine in the Rio favela of *Yacarecinho*.¹³ Pipes, lip balms, condoms and syringes were provided by the scheme, which was run by health workers specifically trained in the needs of crack cocaine users. Though initially supported by a number of government and state bodies as well as UNODC, funds supporting the project have since been suspended.¹³

^h *Favelas* are poor and precarious housing settlements.

Opioid substitution therapy (OST)

Opioid use is rare throughout most of Latin America. Mexico and Colombia remain the only countries with OST programmes in operation (see Table 2.5.1).¹⁴ There have been limited developments in OST service provision in the past two years. In 2010, the estimated number of active services in Mexico was between twenty-one and twenty-five sites and in Colombia, four operational services were reported to be providing methadone maintenance treatment (MMT) across three districts.¹⁴ In 2012, local respondents reported there being eight public OST programmes in operation across Colombia, each serving an average of 100 patients, with an additional four privately run institutions offering OST services.¹³ It is also reported that expanding the range of available OST doses and forms is being considered in Colombia.¹³

Viral hepatitis

Population prevalence of HCV in Latin America varies by country but averages less than 1% across the region.¹⁹ Contaminated blood products are responsible for most HCV infections in Latin America.¹⁹ Injecting drug use is an important risk factor in parts of the region, most notably major urban areas and northern Mexico.¹⁹ Data on viral hepatitis among PWID remains limited for the Latin America region. Estimates of hepatitis C antibody (anti-HCV) prevalence among PWID range from 9.8% in Paraguay to 97.4% in Mexico. Estimates for hepatitis B surface antigen (anti-HBsAg) are only recorded for three countries, and range from 2.3% in Brazil to 8.6% in Argentina (see Table 2.5.1). HCV prevalence is also elevated among non-injecting cocaine users in Brazil and Argentina. Studies have indicated high levels of HIV/HCV co-infection among PWID in the region.¹⁹

With the exception of one programme in Brazil,¹³ there are currently no integrated HIV, tuberculosis (TB) and viral hepatitis testing and treatment programmes in Latin America. Attempts have been made to address this situation. The Ministry of Health and the Social Security (CCSS) in Costa Rica and Panama have pledged to guarantee access to testing and treatment services for HIV and viral hepatitis to all.²⁰ In 2011, the Ministry of Health of the province of Buenos Aires (Argentina) launched the Programme for Prevention and Detection of Viral Hepatitis to work in conjunction with the HIV/AIDS and Sexually Transmitted Infections (STIs) Programme.

Tuberculosis

Brazil is one of the twenty-two countries recognised as having a high TB burden, reporting forty-eight TB cases per 100,000 of the population in 2010.²¹ Infections with drug-resistant strains are beginning to occur in areas of Central America. While research on TB prevalence among PWUD in Latin America is lacking, there is evidence to suggest that both injecting and non-injecting drug use are associated with elevated TB infection rates.²¹

Most countries in the region offer an HIV test to anyone presenting with TB.¹³ Similar diagnosis services are, in theory, available for people who use drugs, though compliance to such practices is not always consistent.¹³ Integrated TB and HIV programmes are beginning to emerge in the region, including in Uruguay, Argentina and parts of Central America. However, there are currently no services that specifically target PWUD.²⁰

Overdose

Data on the prevalence of overdose in Latin America is very limited. Research in Colombia reported 25% and 33.3% of PWID in Pereira and Medellín respectively to have experienced a non-fatal heroin overdose.⁴ In both cities, six out of ten revealed that they would not access health services if they had another overdose episode for fear they would be referred to law enforcement authorities.⁴

There are currently no overdose prevention programmes established in the region.¹³ Naloxone is registered in a number of South American countries including Argentina, Brazil, Peru, Chile, Uruguay, Mexico, Paraguay and Venezuela. However, it is not yet available to PWUD or for medical emergencies in any of these areas. In Colombia, where heroin and opiate use is more widely reported, naloxone is available and its use included in regional health care plans.¹³

Prevailing laws and the criminalisation of drug use continue to inhibit the introduction of overdose prevention and treatment initiatives in the region.

Antiretroviral therapy (ART)

Latin America and the Caribbean continue to lead globally in ART coverage levels for low- and middle-income countries.²² In December 2010, it was reported that ART was being provided to 521,000 of the 820,000 (710,000–920,000) in need of treatment, which equated to 63% ART coverage.² Coverage varied between countries, from less than 70% in Ecuador and Guatemala to above 80% in Chile and Nicaragua.²² Brazil is the only country with estimates for the number of PWID living with HIV and receiving ART. While past estimates have been much higher, the UN Reference Group found only 2,974 PWID to be receiving treatment: between one and four of every hundred PWID living with HIV in Brazil.¹⁴

Latin America reports twenty-four ART facilities per 100,000 of the population.² Yet at 11%, the region reported the smallest percentage increase in the number of people receiving ART between 2009 and 2010.² While ART coverage is generally high in the region, this figure may also reflect challenges in scaling up VCT and in early HIV diagnoses.² Significant improvements in access to adequate diagnosis and care services are necessary to reach all those in need of ART in the region, particularly vulnerable populations.²³

The criminalisation of drug use continues to greatly inhibit service access and treatment adherence among key populations. Attitudes among health professionals that patients must stop the use of illegal drugs or alcohol to receive ART is also reported to be impeding the success of many ART treatment programmes.

Limited medical resources and the cost of ART are of growing concern in Latin America. In a survey conducted by PAHO/WHO in 2011, eight out of twelve countries in the region reported episodes of ART shortages, which required people to change treatment regimens or to have treatment interruptions, increasing the risk of HIV resistance and treatment failure.²⁴

Harm reduction in prisons

In most Latin American countries, the cultivation, distribution and personal use of drugs remains a criminal offence. The predominant 'war on drugs' approaches in the region have led to large proportions of the drug-using population being incarcerated. While there are a lack of data on the prevalence of HIV, viral hepatitis and TB within Latin American prisons, it is clear that prison populations are at an increased risk of infection. In Argentina, for example, TB patients with a history of incarceration were six and 18 times more likely to test positively for HBV and HCV infection, respectively.²⁵

More thorough and systematic research is required to provide an accurate analysis of the current situation of HIV, viral hepatitis and TB epidemics and drug use within prisons in Latin America. There are currently no prison-based harm reduction services operating in the region.¹³

Policy developments for harm reduction

As reported in 2010, six Latin American countries include harm reduction within their national policies on HIV and/or drugs: Argentina, Brazil, Colombia, Mexico, Paraguay and Uruguay. The extent to which this indicates government support for harm reduction varies. For example, though harm reduction is now recognised as part of national public health policy in Paraguay, it is implemented only by non-governmental organisations and often without the support of the state.¹³ While there has been little development in the specific inclusion of harm reduction within national policy across the region, there has been a notable increase in the debate about drug policy and legislation at both national and international levels. In most Latin American countries, and particularly in Central America, drug policy and legislation remains focused on supply reduction and combating drug trafficking. These policies are largely determined by security and justice ministries and incorporate extensive military and policing operations.²⁶ However, during the 'Strategic Meeting of Public Security and Drug Policy', held in Rio de

Janeiro in November 2011, law enforcement representatives from eighteen countries expressed concern at the negative consequences of the current 'war on drugs' strategy and called for more effective and constructive policy approaches.²⁷

Moreover there is a growing awareness within policy circles of the vulnerability of key affected population groups. The 47th Regular Session of the Inter-American Drug Abuse Control Commission (CICAD/OAS) in May 2010 saw the approval of the new Hemispheric Drug Strategy.²⁸ Although there are no explicit mentions of harm reduction initiatives, the strategy does call for comprehensive evidence-based prevention programmes targeting key vulnerable and socially marginalised populations as well as a stronger institutional presence to establish and implement new policy initiatives.²⁸

In September 2011, the 51st Directing Council of PAHO endorsed the Plan of Action on Psychoactive Substance Use and Public Health Strategy aimed at reducing the burden of drug use while strengthening an integrated public health response.²⁹ Shortly afterwards, delegations from the twelve UNASUR nations of the regional bloc met for the 2011 South American Council to discuss the ratification of the Drug Action Plan to reduce narcotic supply and demand. Prevention initiatives and treatment programmes for high-risk populations were addressed as well as institutional strengthening and the harmonising of anti-drug legislation to create mechanisms for regional coordination.³⁰

In January 2011, representatives of The Latin American Commission on Drugs and Democracy (comprised of 17 drug policy campaigners, including former presidents of Brazil, Colombia and Mexico) presented an initiative to create the Global Commission on Drug Policy. The first meeting and official launch of the Global Commission was held in Geneva, June 2011. Chaired by Fernando Henrique Cardoso, the Global Commission condemns the global 'war on drugs' as a failure and advocates a paradigm shift towards harm reduction, decriminalisation of drug use and the legal regulation of certain substances. It seeks to create space for a debate on evidence-based drug policies.^{13,31}

There have been several developments in drug policy in the region that have implications for harm reduction, some of which are summarised below. For more information on these and other developments globally, refer to Chapter 3.4.

Drug policy developments in Latin America

In June 2011, the **Bolivian** government announced its formal withdrawal from the UN Single Convention on Narcotic Drugs of 1961. This followed the rejection of a proposal to amend Article 49 to remove the coca leaf from the list of classified drugs as identified by the Convention. Despite its withdrawal, Bolivia indicated its intention to adhere to the main outlines of the Convention with the exception of the prohibition of the traditional use of coca leaf. It remains explicitly in favour of criminalising the use of cocaine – ‘Coca Yes, Cocaine No’.¹³

The **Chilean** government has decided to use Drug Treatment Courts for those convicted for problematic drug use. The initiative allows the accused to participate in a voluntary rehabilitation programme under the direct supervision of the judge, and on completion of the treatment, the case is dismissed and criminal records erased.¹³

In **Argentina**, the Mental Health Law now prohibits involuntary internment, previously a common practice for PWUD. It also denotes the rights of patients to be adequately informed of care options and to receive treatment that does not infringe on their personal freedoms. The regulation is still pending but the enactment of the law marks a step towards addressing addiction within mental health policy.¹³

Ecuador has some of the toughest drug laws in the region, resulting in the incarceration of many small-scale drug traffickers. The Constitution drawn up by the National Constituent Assembly in 2008 declared that drug

consumption should be decriminalised and substance dependency addressed as a public health issue. A complete review of the judicial system has since been put forward by the Ministry of Justice and Human Rights. The proposed legislation distinguishes between small and large-scale drug trafficking and street distribution, and introduces proportional sentences. Yet there is still no guarantee that either the broader reforms or drug legislation will be implemented.¹³

In November 2010 in **Mexico**, the Law for Integral Support to Psychoactive Substance Use was approved. This law proposes an alternative justice model focusing on the prevention and treatment of addictions through public services.³² However, drug policy in Mexico has continued to adhere to the ‘war on drugs’ approach.

The **Brazilian** government is to invest US\$2 billion toward creating a public health network for the treatment of PWUD, with a particular focus on crack cocaine use. Funds are to be used to establish 300 health centres and 600 temporary shelters for drug dependency.³³

In June 2012, **Colombia’s** constitutional Court approved the government proposal to decriminalise the possession of small amounts of cocaine and marijuana for personal use.³⁴ The recent court ruling stated that anyone caught with less than 22g of marijuana, or less than one gram of cocaine, may receive physical/psychological treatment depending on their level of intoxication, but may not be prosecuted or detained.³⁴

Civil society and advocacy developments for harm reduction

Civil society organisations (CSOs) have continued to play an important role in advocating for drug policy reform at both regional and national levels. A second edition of the Latin America Conference on Drug Policy was held in Rio de Janeiro in 2010, and a third in Mexico City in September 2011.¹³ Organised by Intercambios Civil Association and its respective local partners, Psicotropicus and CUPIDH, the events brought together key representatives from across the region to promote and continue discussions on drug policy and reform.¹³ Various satellite events were held at each conference to encourage further dialogue between governments and society. The 2011 Mexico convention incorporated a ‘Drug Policy in Latin America’ seminar for journalists, sponsored by PAHO, to generate a critical mass of

trained reporters engaged with advocating for inclusive, harm reduction policy development in line with human rights.¹³ Contact between regional civil society organisations and the International Network of People who Use Drugs (INPUD) led to the formation of the LANPUD (Latin American Network of People who Use Drugs)¹³ which has plans to hold a further strategic meeting in October 2012.³⁵

Such dialogues on drug policy, initiated in 2007 by the Transnational Institute (TNI) and Washington Office on Latin America (WOLA), to promote the free and confidential exchange of ideas between officials and nongovernmental experts, have continued to further the debate on current trends and how existing contradictions within international drug policy might be resolved.¹³ In recent years informal dialogues have been conducted in Rio de Janeiro (February 2009 and 2010), Buenos Aires (October 2009), Montevideo (February 2011) and most recently in Lima (February 2012).³⁶

i For more information about this topic, see TNI Publication, *Drugs and Conflict, Debate Documents*, N° 13, May 2006, ‘Coca Yes, Cocaine No’ Legal Options for the Coca Leaf, <http://www.tni.org/briefing/coca-yes-cocaine-no>.

The RAISSS network of institutions includes many community-based organisations committed to addressing the problems of drug use and harm reduction in conditions of social inequality across the continent.¹³ It currently comprises organisations throughout Latin America and the Caribbean, in Brazil, Chile, Haiti, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama, Bolivia, Mexico and Colombia. RIOD is a similar non-profit organisation network of Latin American NGOs working on prevention, treatment and social inclusion within the drug field.¹³

At the national level, CSOs continue to play a key role in advocating for drug law reform and the increase of harm reduction service provision. CSOs in Colombia are calling for a reform of the national drug statute to align drug policy with human rights and public health.¹³ Advocating a rejection of compulsory treatments and the repression, persecution and criminalisation of PWUD, they have demanded that the government readdress the failure of the punitive policies of previous years.¹³ Civil society advocacy for harm reduction and the involvement of drug users remains weakest in Central America, although some NGOs cover these issues in their work.¹³

Multilaterals and donors: developments for harm reduction

Multilateral agencies and international donors have continued to support several harm reduction initiatives in Latin America in recent years.¹³ As in other regions, the most significant donor has been the Global Fund. Over the past five years, close to US\$90 million has been allocated to programmes in Argentina, Panama, Peru, Uruguay, Colombia and Honduras.¹³ However, the 2011 selection of proposals was made in the context of a global financial crisis. With imposed restrictions on the access to resources for middle-income countries, the sustainability of many of the projects in Latin America is now at risk.

UNAIDS and WHO recently investigated the challenges specific to Latin America of engaging PWID in HIV prevention trials. Information collated at the regional consultation held in Buenos Aires in 2011 has been used to supplement previous guidance on ethical considerations in biomedical HIV prevention trials initially conducted in 2007.^{13, 37} WHO, UNODC and UNAIDS have also produced a region-specific draft of their Technical Guide for countries to identify and set targets for universal access to HIV prevention, treatment and care for PWID.^{13, 38} The modified document addresses HIV transmission risks and interventions for PWUD in the regional context of Latin America and the Caribbean. The HIV/STI Project of PAHO/WHO held a regional consultation in April 2010 in El Paso, Texas. Experts met to discuss research, policy and intervention strategies to address HIV transmission associated with or resulting from drug use in the region of the

Americas. A draft for discussion to review the state of harm reduction in Latin America and the Caribbean was produced.¹³ In June 2011 the Global Commission on HIV and the Law hosted a Regional Dialogue to discuss the experiences and perspectives of individuals, communities, policy makers and law enforcement officials in the Latin American region.

Open Society Foundations (OSF) continues to support advocacy activities of regional CSOs in drug policy reform and advocacy for harm reduction.¹³ Caritas (Germany) has provided support to the RAISSS network activities and the Levis Straus Foundation has continued its support for projects in Argentina.¹³

Government support is essential for sustainable harm reduction programmes within the region. In addition, and particularly given the global economic crisis, support from international donors and multilateral agencies in the region remains critical to ensuring that harm reduction forms an integral part of drug policy and public health responses throughout the region.

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2.6 | Regional Update **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 ^b	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 ^e		
					NSP ^d	OST ^e	DCR ^f
Canada	286,987 (220,690–375,173)	5.8 ²	64 (51–77)	nk	✓ (>775) ^g (S) (P) ³	✓ (B,M)	✓
United States	1,857,354 (1,294,929–2,589,858)	15.57 ^c (8.74–22.4)	73.4 (69.7–77)	11.8 (3.5–20)	✓ (186) (P)	✓ (1,433) (B, BN,M)	✗

nk= not known

a There are no identified reports of injecting drug use in Greenland.

b Unless otherwise stated, data are sourced from Mathers B et al. for the Reference Group to the UN on HIV and Injecting Drug Use (2008) Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review, *Lancet*, 372(9651):1733 – 1745.

c Unless otherwise stated, data on NSP and OST coverage are sourced from Mathers B et al for the Reference Group to the United Nations on HIV and Injecting Drug Use (2010) HIV prevention, treatment and care for people who inject drugs: A systematic review of global, regional and country level coverage, *Lancet*, 375(9719):1014–28.

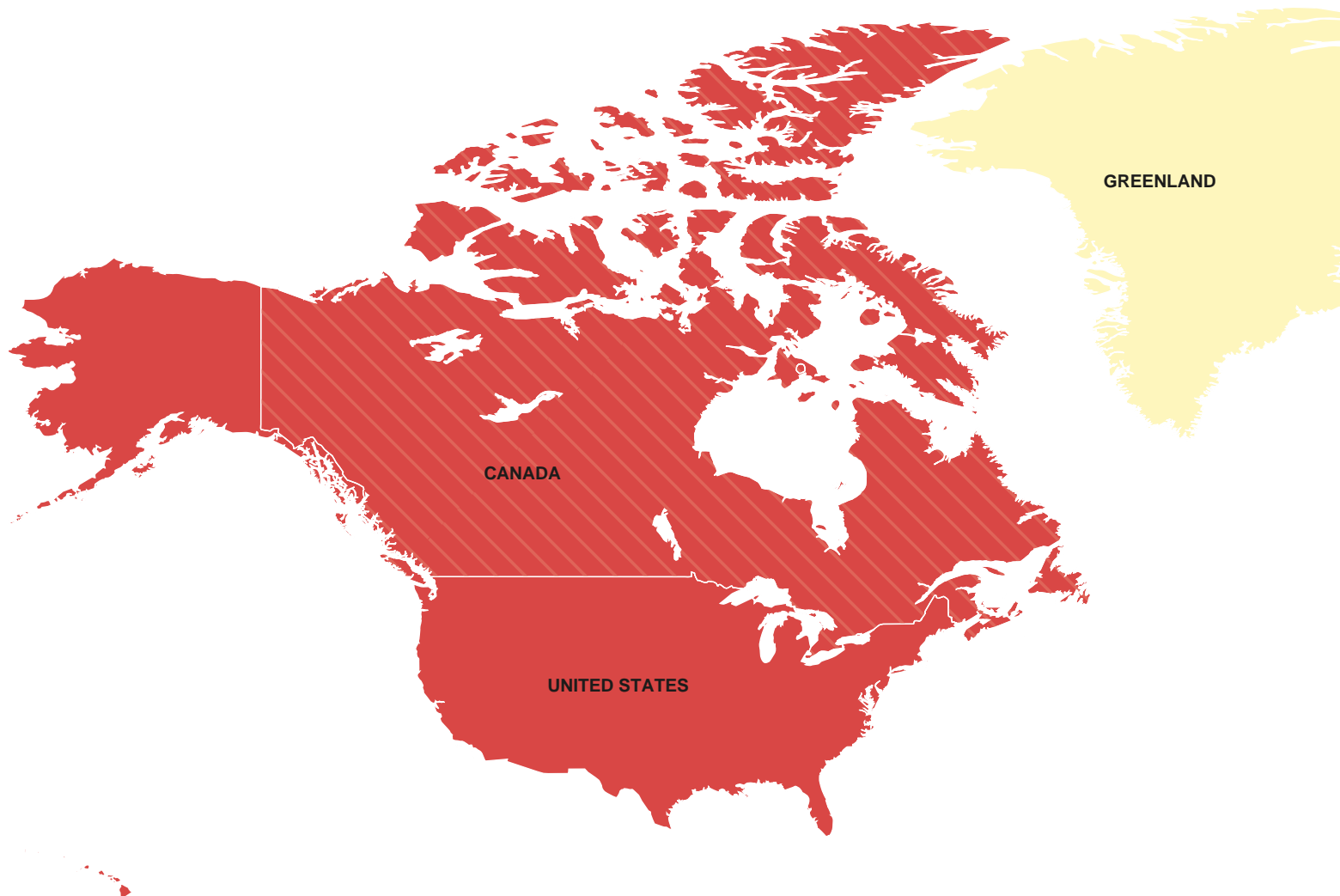
d The number in brackets represents the number of operational NSP sites, including fixed sites, vending machines and mobile NSPs operating from a vehicle or through outreach workers. (P) = needles and syringes reported to be available for purchase from pharmacies or other outlets, and (NP) = needles and syringes not available for purchase.

e The number in brackets represents the number of operational OST programmes, 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).

f DCR = Drug consumption room, also referred to as safer injection facility (SIF).

g This figure represents the number of sites in two Canadian provinces: British Columbia and Quebec. The number of sites in other provinces was not known at publication in July 2012.

Map 2.6.1: Availability of needle and syringe exchange programmes (NSP) and opioid substitution therapy (OST)



- Both NSP and OST available
- OST only
- NSP only
- Neither available
- Not known
- DCR available

Harm Reduction in North America

More than 10% of all people who inject drugs (PWID) worldwide reside in Canada and the USA.⁴ The USA, after China and Russia, has one of the highest estimated populations of PWID globally.⁴ Injecting drug use (IDU) accounted for about 17% of HIV cases in Canada at the end of 2008⁵ and 9% of new HIV cases in the USA in 2009.⁶ The HIV epidemic among PWID in both countries mirrors broader disparities in the HIV epidemic, with racial and ethnic minorities in the USA and Aboriginals in Canada disproportionately affected.^{5, 6} There are no data available on IDU in Greenland.

Although key harm reduction programmes such as needle and syringe exchange programmes (NSPs) and opioid substitution therapy (OST) are in place in both countries, provision remains uneven across smaller cities and rural areas. Coverage of NSPs and OST in North America remains below that in Australia and several countries in Western Europe⁷ (see Chapter 2.3). Since last reported in 2010, overdose prevention and response programmes, including distribution of community-based naloxone, have become increasingly widespread across the continent. Prison NSPs remain unavailable in North America, while provision of methadone for substitution therapy is offered in federal and provincial prisons in Canada and on a very limited basis in some US jails.

Significant policy developments with implications for harm reduction have occurred since last reported in 2010. The Supreme Court of Canada ruled that the Minister of Health had violated Canada's Charter of Rights and Freedoms by not allowing InSite, the country's only safe injecting facility (SIF), to remain open, and ordered its continuing operation.⁸ On 16 December 2011, US Congress reinstated the ban on US federal funding for NSPs.⁹ In a context of global financial uncertainty, this policy decision contributes to critical concerns around the expansion of HIV prevention programmes to meet global targets and commitments on coverage for PWID.¹⁰

Civil society organisations (CSOs) in the USA and Canada have actively engaged in activities around overdose prevention and community naloxone distribution in the last two years, as a result of which there has been growing awareness of the issue at various levels of policy and programme delivery. The Canadian Drug Policy Coalition (CDPC), an independent civil society network of organisations and individuals advocating to improve Canada's drug policies, is the newest addition to the strong civil society presence working for harm reduction in the region.

Developments in harm reduction implementation

Needle and syringe exchange programmes

National-level estimates of NSP coverage are not collected in Canada or the USA, making it difficult to accurately monitor service provision levels.^h The latest available data, as reported in 2010, indicate that an average of 23 syringes are distributed per PWID per year across North America, amounting to low coverage by international targets,¹¹ and placing North America behind other high-income regions such as Europe (59 syringes) and Australasia (202 syringes).¹²

Civil society reports since 2010 suggest that funding is one of the most significant barriers to service provision and scale-up in both countries. The reinstatement of the US federal funding ban for NSPs in December 2011 comes just two years after the 21-year-old ban was repealed by President Barack Obama.⁹ While the lifting of the ban in 2009 mobilised funders to consider access to sterile injecting equipment for financial support, and propelled advocacy efforts by harm reduction funders to reach out to other potential donors, the recent move undermines programme scale-up and marginalises existing programmes away from mainstream HIV policy and funding.¹³ Since individual states determine the legality of syringe exchange or distribution, some US states have only underground NSPs, or none at all, which is largely the case throughout the southern region of the USA.¹⁴ In Canada the lack of federal support for NSPs means that harm reduction services are delivered by community agencies, NGOs, municipalities, provinces and territories. Although programmes are available in most major cities, individual jurisdictions may independently prohibit the provision of harm reduction services, including NSPs and safe-injection sites, within the city limits.^j

Anecdotal evidence indicates that a small number of programmes in the USA have closed in the past two years, largely due to financial limitations and shifting political priorities. For example, when the Washington State government reallocated HIV funding away from primarily government-supported programmes, the survival of rural services was threatened.¹³ As NSP implementation is a state rather than federal responsibility, the impact of the shifting funding landscape varies across the country. In some states such as California, new bills passed as of 1 January 2012 enabling the expansion of access to needles and syringes and allowing pharmacists to sell syringes without requiring a prescription.¹⁵ Likewise, Colorado expanded its NSP provision following an authorisation bill from the state, while syringe access legislation in Nevada has stalled.¹³

^h The HRSA HIV/AIDS Bureau in the USA began tracking client-level data on utilisation of services in 2011, but data were not available at the time of writing.

ⁱ According to the 2009 WHO, UNODC, UNAIDS target-setting guide, <100 syringes distributed per person who injects drugs per year is considered low coverage; 100–200 is medium coverage, and >200 is high coverage.

^j See, for example, The Canadian Press: 'End Needle Exchange Ban', Advocates Tell B.C. city, 5 July 2012, CTV News.

The limited geographical reach and opening hours of available sites also pose barriers to access, especially for women who inject drugs, who experience added stigma and fear of exposure to authorities in light of strict child custody and welfare laws. In Canada, confidentiality and fear of stigma pose a barrier to access in rural and remote areas and on Aboriginal reserves, where those accessing harm reduction services may be easily identified.

Safer crack use kit distribution

A significant increase in crack use, particularly among PWID, has been documented in Canada over the past decade.¹⁶ People who smoke crack are particularly vulnerable to the transmission of viral hepatitis (B and C), tuberculosis (TB) and HIV through sharing crack use paraphernalia.^{17, 18} Safer crack use kit distribution programmes have resulted in health benefits to individuals who use drugs and communities in Canada, including a decreased need among users to share paraphernalia, increased health awareness and improved personal and community safety.¹⁹

Safer crack smoking supplies have been available in a number of cities across Canada for over a decade. Recently, however, negative media attention around a new pilot to distribute free crack kits in Vancouver's Downtown Eastside²⁰ has led to the slow implementation of this initiative and to the shutting down of Safeworks, a programme providing crack smoking equipment since 2008 in Calgary.²¹ Despite these challenges, new initiatives are being discussed in some settings.²² For example, a comprehensive approach to the distribution of safer crack kits, including an evaluation of the proposed programme, is being considered in Alberta for roll-out in August 2012.²³ Continuing barriers to programme initiation and scale-up include lack of resourcing, public opposition,²³ limited geographical reach, interference by the police as well as the need for further research to evaluate the impact of this intervention.¹⁹

Opioid substitution therapy (OST)

Provision of OST has increased steadily in both countries, although it is by no means universal. Over 1,433 licensed facilities provide OST in the form of methadone, buprenorphine and buprenorphine-naloxone combination across the USA. The most recent available data indicate that in the USA in 2009 there were 640,000 individuals on buprenorphine or buprenorphine-naloxone combination for maintenance therapy (up from 96,000 in 2005) and 266,818 on methadone (up from 236,836 in 2005).²⁴ All ten Canadian provinces deliver methadone maintenance therapy (MMT) services through a variety of models, including government-funded programmes, for-profit private clinics and family practice, but the number of sites is unknown due to lack of monitoring as part of national surveillance.²⁵ Only one of three Canadian territories provides MMT, and buprenorphine is not widely used due to its prohibitive cost.²⁵ In Canada, there has

also been an increase in demand, including in First Nations communities and prisons.²⁵ However, the lack of physicians who can prescribe methadone and limited provision through low-threshold services remain a significant barrier to addressing the increasing demand for MMT in Canada.

Several developments related to OST provision and access have occurred in North America since 2010. Limited funding options and budget cuts threaten the quality of service provision in Canada. For example, in December 2011, as part of broader budget cuts, the Canadian province New Brunswick's Department of Social Development placed an 18-month limit on the time period during which methadone clients can receive travel subsidies (for example, bus passes or reimbursements for petrol and taxis) to attend a dispensing pharmacy as part of a new MMT benefit programme.^{26, 27} Benefits were also capped at C\$200 per month, potentially restricting access to the 1,328 people who use drugs (PWUD) who used the travel subsidy to access OST in 2011.²⁸ Additional obstacles to OST access in Canada include geographical distance from sites, stigma and misconceptions around drug dependence at every level of the treatment system and, as with NSPs, issues of confidentiality, especially in small cities and remote areas. Furthermore, there is often powerful community resistance to the establishment of new programmes, with some cities amending their zoning by-laws to restrict or limit programmes (such as Coquitlam and Surrey, BC).^k Civil society reports highlighted a need for more low-threshold services and diversification of service models, as well as provision of integrated psychosocial and mental health support, especially in First Nation communities.

The clinical trial 'Study to Assess Longer-term Opioid Medication Effectiveness' (SALOME) is currently underway in Vancouver.²⁹ The trial will investigate the effectiveness of hydromorphone, the active ingredient in heroin, as compared to injectable medical-grade heroin (diacetylmorphine), at benefiting people with chronic opioid dependence for whom other maintenance treatments have not been successful.

In the USA, growing concerns about the diversion of buprenorphine³⁰ have the potential to decrease access to the medication. For example, newly imposed restrictions as a result of diversion concerns include mandatory counselling and urine toxicology tests, as well as requirements by insurance companies for prior approval for each patient, placing greater time demands on physicians who administer buprenorphine maintenance therapy.³¹ Additional barriers to OST access in the USA include uneven Medicaid coverage across states, leaving many uninsured PWUD unable to access the medication, as well as many physicians opting to

^k Examples include Coquitlam, BC, where a by-law regards methadone clinics as 'undesirable businesses' and limits the location of their operation to five small areas; Surrey, BC, which prohibits methadone clinics in business parks, commercial, special care housing, single family residential and multiple residential commercial zones; Abbotsford, BC, which has amended its zoning by-laws to limit harm reduction services including fixed NSPs and mobile dispensing vans as well as supervised injection sites in its municipality; and Kelowna, BC, where a municipal by-law restricts possession of harm reduction supplies in any park or public space.

discharge patients for poor attendance, active drug use or not participating in counselling. Methadone clinics in the USA are rarely low-threshold, with waiting lists of at least six months to a year, or longer outside major cities. Barriers are compounded for pregnant women who use drugs or those with children, as they are at risk of being reported to Child Protection Services and losing custody of their children for enrolling in treatment or actively using drugs. The need for frequent attendance (in some cases, seven days a week) can be further complicated by child care and increased stigma.

Restricting prescription opiates in Canada

Diversion of the prescription time-release opiate OxyContin, and adverse effects arising from its illicit use, have risen considerably in Canada in the past few years. A 2009 study linked the introduction of OxyContin to the market in 2000 with a five-fold increase in painkiller-related deaths during the following five years.³² The problem is particularly widespread in First Nations communities, where more than 50% of adults on some Canadian reserves are dependent on the medication.³³

The knee-jerk response from several Canadian provinces, including Prince Edward Island, Nova Scotia, Ontario, Manitoba, Saskatchewan and British Columbia, has been to either delist OxyContin entirely or restrict its availability under provincial health care coverage plans.³⁴ In February 2012, the federal government announced that it would no longer pay for OxyContin for patients under the Non-Insured Health Benefits Program (NIHB).³⁶ Purdue Pharma Canada, the pharmaceutical company behind OxyContin, plans to replace it with a new version, OxyNEO, but several provinces have already announced that this, too, will have restricted access. Without providing support for people who may be going into withdrawal, individuals may turn to other narcotics such as heroin, increasing the potential for switching to less regulated, potentially more harmful opioids.^k

Antiretroviral therapy (ART)

An estimated 40,334 PWID in Canada and 308,208 PWID in the USA were living with HIV as of 2008.⁵ In the USA, 9% of new HIV infections are among PWID.⁶ According to the US Centers for Disease Control, African-American PWID are ten times more likely to be diagnosed with HIV than white PWID.¹⁴ In Canada, Aboriginal (composed of First Nations, Inuit and Métis) PWID are more likely to acquire HIV than non-Aboriginal PWID, and IDU accounts for more HIV cases among Aboriginal women

than among Aboriginal men.^{37, 38} This group comprises only 3.8% of Canada's overall population but represents a disproportionately high number of new HIV cases (12.5%) and all prevalent infections (8%) at the end of 2008.³⁹

There are no national-level data on antiretroviral therapy (ART) coverage among PWID in either Canada or the USA. Differing approaches, targets and implementation structures across states, provinces and jurisdictions impact the ability to monitor service provision. It can be inferred that a sizeable proportion of those who may need treatment could be unaware of their HIV status. As of 2008, 26% of the estimated 65,000 Canadians living with HIV were unaware that they were infected.³⁹ A majority of these individuals represent key populations at higher risk of HIV, including PWID. Although recent data indicate that 85.5% of PWID took an HIV test and received their results in the past 12 months,² this proportion is substantially lower among sub-groups at higher risk, such as Aboriginal people and women who inject drugs.^{6, 37}

Civil society reports in the USA cite the lack of access to antiretroviral drugs, especially in the southern region of the country where there is a growing waiting list⁴⁰ for the AIDS Drug Assistance Program, as a major barrier to PWID starting ART.⁴¹ Additionally, some physicians are reported to initiate treatment only when the patient abstains from drug use.

Viral hepatitis

The USA and Canada have significant numbers of people co-infected with HIV and hepatitis C (HCV).³⁹ A recent systematic review reported rates of over 60% and 70% HCV prevalence among PWID in Canada and the USA, respectively (see Table 2.6.1). High lifetime prevalence of HCV (91%) was also detected among transgender people who inject drugs.⁶ Rates of hepatitis B (HBV) are unknown in Canada, and exceed 10% in the USA.¹

In 2011 the US Department of Health and Human Services released its Viral Hepatitis Action Plan.⁴² The Plan included strong language on strategies for PWUD, with a separate chapter dedicated to HCV prevention, treatment and research for PWID. In particular, the Plan commits to expanding access to syringes as a critical prevention strategy.

The extent of testing and treatment for viral hepatitis among PWID is not clear. In the USA, access to testing and treatment services for viral hepatitis is limited by several factors, including the prohibitive cost of treatment, geographic distance from centres that may offer the service, and the current lack of an effective test that can determine current infection status instead of history of exposure. In Canada, comprehensive HIV and viral hepatitis services are available in some jurisdictions but remain limited in most places where populations at higher risk may need them most, such as on Aboriginal reserves.²³ A recent study estimated that approximately

^k Public health officials in Ontario have already warned that their treatment programmes are overwhelmed. See *The Toronto Star* (2012) Ontario must boost addiction services and treatment programs to help OxyContin addicts, 2 April 2012.

137,000 PWID will experience HCV-related disease each year until 2026, and it will cost C\$3.96 billion to provide them with treatment, highlighting the urgent need to develop targeted HCV prevention strategies and ensure adequate allocation of resources for future treatment needs in Canada.⁴³

Tuberculosis

Integration of TB, viral hepatitis and HIV services vary from region to region across Canada and the USA. The lack of free TB testing and treatment targeted at PWUD and poor awareness of the relevance of TB for PWID hinder many of them from seeking these services. The US Centers for Disease Control and Prevention have recently launched a Program Collaboration and Service Integration (PCSI) mechanism to promote increased collaboration and integration of testing, treatment and surveillance for HIV, viral hepatitis, sexually transmitted infections (STIs) and TB in the USA.⁴⁴ The impacts of this initiative are yet to be determined.

Overdose

Drug overdose death rates have increased steadily in the USA since 1990. Currently, overdose is the most frequent cause of death among PWID,⁴⁵ and the number of these deaths has overtaken motor vehicle fatalities in the USA.⁴⁶ In 2008, a total of 36,450 drug overdose deaths^m were reported, with prescription opioid analgesics such as oxycodone, hydrocodone and methadone, as well as cocaine and heroin, most commonly involved.⁴⁷ Research has detected fatal overdose rates two to three times higher among First Nations Canadians compared with the general population.⁴⁸ Although national estimates for lifetime non-fatal overdose are rare, high rates have been detected at the local level (for example, 41% in Baltimore⁴⁹ and 42% in New York City).⁵⁰

Community-based programmes in the USA have increasingly offered opioid overdose prevention services to PWUD, their families and service providers, including the opioid antagonist naloxone hydrochloride. As of October 2010, 50 community-based opioid overdose prevention programmes distributing naloxone were known in the USA.⁵¹ Since the first opioid overdose prevention programme began distributing naloxone in 1996, kits with naloxone have been distributed to 53,032 persons, and programmes received reports of 10,171 overdose reversals. These 50 programmes operate in 15 US states and the District of Columbia and include nearly 200 sites where naloxone is distributed in the community to PWUD, their friends and family. New Mexico, New York and Massachusetts operate state-wide naloxone distribution programmes through their state Departments of Public Health. North Carolina has recently agreed to make naloxone available state-wide through its Medicaid health insurance programme to patients who are prescribed opioids for pain management or dependence treatment, and others at risk of an opioid overdose. The US Army also distributes naloxone

to soldiers on active duty who are at risk of overdose from prescription opioids or heroin, as part of a pilot project on one of its largest bases.⁵²

Since 2010, there has been growing activity in Canada around the implementation of overdose death prevention programmes through the delivery of naloxone. Several provinces are considering implementing initiatives for distributing naloxone in collaboration with local NGOs. One such example, the Harm Reduction Program at the BC Centre for Disease Control, is developing an initiative to increase access to naloxone across BC. Working alongside its many partners, the Harm Reduction Program hopes to increase the public's awareness of and accessibility to naloxone, as well as have naloxone made available at community service organisations.⁵³ Education and overdose prevention training are implemented through some NSPs and methadone clinics across the country, with varying availability across provinces. Streetworks in Edmonton has operated a naloxone distribution programme since 2005,⁵⁴ and a new programme was initiated by Toronto Public Health in late 2011.⁵⁵ In Canada, naloxone distribution through peers in the community is only implemented in Edmonton and Toronto.

New evidence has emerged suggesting that among other health benefits, Canada's SIF in Vancouver has had a positive impact on the number of overdose deaths in its vicinity. A 2011 study observed a 35% reduction in overdose deaths in the city's Downtown Eastside after the SIF opened in September 2003, while overdose deaths in the rest of the city declined only 9% over the same period (see chapter 3.6 for a Vancouver-based case study which includes InSite).⁵⁶

The legal battle over InSite

In the autumn of 2011 the Canadian Supreme Court ordered the federal Minister of Health to continue the Section 56 exemption to the Controlled Drugs and Substances Act that permits InSite, Canada's only supervised injection site (SIF), in Vancouver, BC, to continue to operate.⁸ Extensive research has proven that InSite reduces crime, overdose deaths and transmission of HIV and other blood-borne viruses, and has helped people access treatment when they were ready to do so.⁵⁶⁻⁵⁹ The Court found that the Minister of Health had violated Canada's Charter of Rights and Freedoms in not allowing the project to remain open, and ordered the Minister to remedy the situation. Several Canadian cities are in the process of discussing the implementation of supervised injection sites including Victoria, Montreal, Ottawa, Toronto and Quebec City.

^m Including unintentional, intentional (suicide or homicide) or undetermined intent.

Harm reduction in prisons

Despite high levels of IDU,^{60, 61} high rates of HIV and high prevalence of viral hepatitis and TB among inmates, particularly among those who are released and re-incarcerated,⁶² harm reduction initiatives within these settings remain limited in North America.

There are no NSPs operating in prisons in either Canada or the USA. MMT is available in federal correctional facilities and provincial prison systems in Canada,²⁵ and minimal access to substitution treatment is offered in some jails in the USA. Other HIV and viral hepatitis prevention strategies, such as safe tattooing programmes, were abolished by Canada's current Conservative government in one of the first actions after it attained office in 2007.

Policy developments for harm reduction

Significant developments have occurred at the national level in Canada and the USA since last reported in 2010. On 16 December 2011, US Congress reinstated the ban on US federal funding for NSPs,⁹ just two years after it was repealed and signed into law by President Barack Obama. In the precarious global economic context, the US government's policy shift on NSPs is a significant step backward in meeting international commitments to halve HIV transmission among PWID by 2015.¹⁰ Concerns around essential harm reduction programmes being discontinued or scaled back within the USA have also since increased.

Several developments have taken place on the Canadian drug policy landscape. Following public consultations on its Marihuana Medical Access Program,ⁿ Canada's federal government announced a series of proposed changes that would see an end to licences for individuals to produce medical marijuana for personal use or the use of others.⁶³ These changes would limit the cultivation and supply of medical marijuana to commercially licensed producers. The potential impacts of these changes on the quality, variety and accessibility of medical cannabis have yet to be determined.

In March 2012 the Canadian federal government passed into law changes that implement mandatory minimum sentences for drug crimes as part of the Safe Streets and Communities Act, which will come into effect in November 2012.⁶⁴ Drawn from the US approach to drug policy, these harsher penalties,^o many focused on youth and Aboriginals, are among several 'anti-crime' approaches which were recently introduced into Canadian law. The changes prioritise punishment as an objective of criminal law rather than access to treatment and health programmes.

n See, for instance, http://www.hc-sc.gc.ca/dhp-mps/consultation/marihuana/_2011/program/consult-eng.php.

o For example, these include mandatory minimum sentences of one year in a provincial jail for possession of five cannabis plants, and an increase in sentences for larger quantities of marijuana and other drugs.

Amid more conservative developments at the federal level, the debate at the provincial and local levels in Canada appears to be broadening. For example, despite opposition to the decriminalisation of currently prohibited drugs by the federal government, in the autumn of 2011, the Health Officers Council of British Columbia released a revised version of its public health model for a regulated market for all currently prohibited substances.⁶⁵ Another example is the Thunder Bay Drug Strategy, an official community plan to address substance use in Thunder Bay, Ontario. Ratified by the City Council in September 2011, the Thunder Bay Drug Strategy Implementation Panel explicitly supports harm reduction and includes in its three-year action plan the investigation of harm reduction services for youth.⁶⁶

Civil society and advocacy developments for harm reduction

CSOs working for harm reduction and drug policy advocacy in North America have been increasingly active during the past two years. For example, a joint working group, comprising government representatives and NGOs organised by the Substance Abuse and Mental Health Services Administration (SAMSHA), and an all-NGO Naloxone Overdose Prevention Education Working Group have increasingly mobilised around overdose prevention and community naloxone distribution in the USA. Notable civil society events since 2010 include the first conference of the Peer Delivered Syringe Exchange Network in New York in 2011, the annual Harm Reduction Coalition conference in Austin in November 2010 and the Drug Policy Alliance conference in November 2011. Although drug user organising remains uncommon in the USA, there is a growing awareness and legitimacy around the distinct expertise provided by PWUD, and the need to meaningfully involve this group in the planning and execution of programmes that affect them.

Organisations of PWUD operate in a number of cities and regions in Canada. They are active in Vancouver (VANDU), Victoria (SOLID) and Toronto (TODUU). Two groups – the BC/Yukon Association of Drug War Survivors and AAWARE in Alberta – operate at the regional level. Most organisations of PWUD remain small and have minimal budgets. In the past two years, smaller groups have been initiated at the local level in some cities and provinces, including around InSite, Canada's SIF.²³ A national meeting of groups of PWUD around the country is being planned for later in 2012.

In Vancouver, BC, a group of former patients in the North American Opiate Medication Initiative (NAOMI)^p have joined efforts to advocate for better integrated services in the

p The findings of the NAOMI trials conducted in Vancouver indicated that medically prescribed diacetylmorphine, the active ingredient in heroin, was more effective than methadone therapy for individuals with chronic opioid dependence who were not benefiting from other conventional treatments. The results showed that patients treated with injectable diacetylmorphine were more likely to stay in treatment and to reduce their use of illegal drugs and other illegal activities than patients treated with oral methadone.

wake of clinical trials of heroin-assisted therapy. After the research trial was completed, participants were not offered medically prescribed heroin. For some of these individuals, discontinuation of treatment precipitated a downward slide in their health and other outcomes. The NAOMI Patients Association (NPA) has now released its own study of the experience of participating in this research trial.⁶⁷ The NPA has also made recommendations for future 'experimental drug maintenance programmes' including the provision of an umbrella of support and services and the continuation of heroin-assisted treatment after the end of research trials. This group challenged future research programmes to consider the context of consent when a prohibited drug is offered as a treatment. The NPA has been supported by VANDU (see chapter 3.6 for a Vancouver-based case study which includes the NAOMI trial).

Other significant CSOs working for harm reduction in Canada include the Canadian Harm Reduction Coalition, a virtual forum for information exchange for individuals and organisations working in the areas of harm reduction and drug policy,⁹ and the HIV/AIDS Legal Network, a national organisation actively engaged in advocacy on legal and human rights issues surrounding HIV, including among PWID in communities and in prisons.

The Canadian Drug Policy Coalition

The Canadian Drug Policy Coalition (CDPC), a new independent civil society network of organisations and individuals advocating to improve Canada's drug policies, was launched in 2011. It envisions a safe, healthy and just Canada in which drug policy and legislation as well as related institutional practice are based on evidence, human rights, social inclusion and public health.

The CDPC is focused on five key policy areas: a comprehensive health, social and human rights approach to drug policy; scaling up harm reduction; challenging criminalisation as a barrier to belonging for people who use drugs; moving beyond prohibition; and promoting human rights both inside Canada and globally.

A 15-member steering committee extending across the country through partnerships and networks oversees the work of CDPC, which is based at the Centre for Applied Research in Mental Health and Addictions at Simon Fraser University in Vancouver, BC.

Though not explicitly focused on harm reduction, a civil society group – Stop the Violence BC (STVBC) – has formed a coalition of law enforcement officials, legal experts, medical and public health officials and academic experts concerned about the links between cannabis prohibition in BC and the growth of organised crime and related violence in the province. This coalition has released several reports that examine the context of marijuana production in BC and explore options for its regulation. Its campaign has received intense media scrutiny as well as support from currently serving and former mayors, former provincial attorney generals and key supporters in the USA.

Multilaterals and donors: developments for harm reduction

Harm reduction in Canada is largely funded by provinces and territories, as well as municipalities, and covers programming, community-based research and direct service delivery. Other sources of funding include MAC AIDS Fund and the Open Society Foundations.

A number of foundations consistently support harm reduction implementation and advocacy in the USA, with the largest percentage of funding being directed to direct services. In the absence of federal funding, the Syringe Access Fund (SAF) is the largest private funding source for syringe access in the country and is comprised of AIDS United, Elton John AIDS Foundation, Levis-Strauss Foundation, Open Society Foundations, Tides Foundation, Irene Diamond Fund (closed in 2011) and the North American Syringe Exchange Network. In 2010, the total reported funding for NSPs in the USA totalled \$21,674,495, over 60% of which was provided by state (43.1%), city (27.8%) and county (10.7%) governments.⁶⁸

In addition to the contributions made by the SAF, as well as separate funding provided by individual SAF partners, MAC AIDS, amfAR, Ford Foundation, Broadway Cares/Equity Fights AIDS and the Comer Foundation have provided ongoing support to both harm reduction implementation and policy advocacy projects. In response to the reinstatement of the federal funding ban, community and corporate foundations that fund harm reduction services reported an increase in grant requests from public health departments looking to offset projected loss of federal funding.¹³

⁹ For more information, see <http://canadianharmreduction.com/>.

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2.7 | Regional Update **Oceania**



Table 2.7.1: Epidemiology of HIV and Viral Hepatitis, and Harm Reduction Responses in Oceania

Country/territory with reported injecting drug use	People who inject drugs ^a	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 ^b		
					NSP ^c	OST ^d	DCR ^e
Australia	149,591 (89,253–204,564)	1.0 ²	54.6 (41.2–68)	4 (2.9–5)	✓ (1372) (P)	✓ (2132) (B,M)	✓
Fiji	nk	nk	nk	nk	✗	✗	✗
New Zealand	20,163 (13,535–26,792)	0.4 ²	51.9	2.8 (1.2–4.4)	✓ (>200) ⁴ (P)	✓ (B,M)	✗
Papua New Guinea	nk	nk	nk	nk	✗	✗	✗
Samoa	nk	0	nk	nk	✗	✗	✗
Timor Leste	nk	nk	nk	nk	✗	✗	✗

nk= not known

a Unless otherwise stated, data are sourced from Mathers B et al. for the Reference Group to the UN on HIV and Injecting Drug Use (2008) Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review, *Lancet*, 372(9651):1733 – 1745.

b Unless otherwise stated, data on NSP and OST coverage are sourced from Mathers B, Degenhardt L, Ali H, Wiessing L, Hickman M, Mattick RP, Myers B, Ambekar A & Strathdee SA for the Reference Group to the United Nations on HIV and Injecting Drug Use (2010) HIV prevention, treatment and care for people who inject drugs: A systematic review of global, regional and country level coverage, *Lancet*, 375(9719):1014–28.

c 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. (P) = needles and syringes reported to be available for purchase from pharmacies or other outlets, and (NP) = needles and syringes not available for purchase.

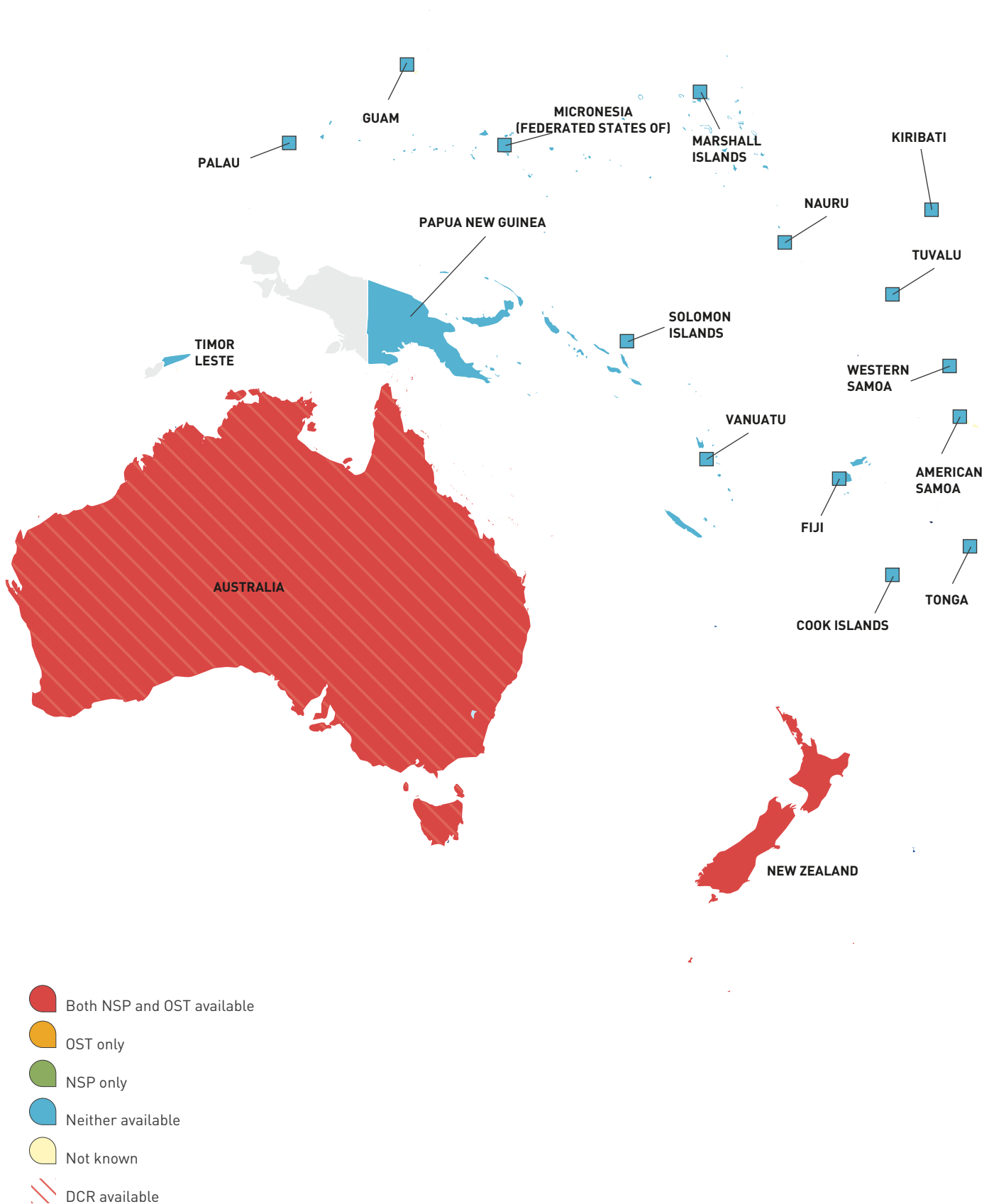
d The number in brackets represents the number of operational OST programmes, including publicly and privately funded clinics and pharmacy dispensing programmes.

(M) = methadone, (B) = buprenorphine, (BN) = buprenorphine-naloxone combination, (O) = any other form (including morphine and codeine).

e DCR = Drug consumption room, also referred to as safer injection facility (SIF).

f This figure represents the number of sites in two Canadian provinces: British Columbia and Quebec. The number of sites in other provinces was not known at publication in July 2012.

Map 2.7.1: Availability of needle and syringe exchange programmes (NSP) and opioid substitution therapy (OST)



Harm Reduction in Oceania

The Oceania region includes Australia, New Zealand and the Pacific island countries and territories (PICTs).⁹ There are approximately 170,000 people who inject drugs (PWID) in Australia and New Zealand combined, a low proportion of whom (0.4–1.0%) are living with HIV,² and over half of whom have hepatitis C (HCV).¹ The prevalence of injecting drug use (IDU) is higher and accounts for a greater proportion of HIV transmission (18%) among Aboriginal Australians than among non-Aboriginals (3%).³ Few recent, reliable and representative data exist on population size estimates of people who use and inject drugs, or on the prevalence of blood-borne viruses and other drug-related harms in the PICTs.⁴

Although the early implementation of harm reduction programmes in Australia has been widely credited with low levels of HIV among injecting populations, available evidence points to significant ethnic disparities and uneven coverage regionally and among affected groups. No significant changes have occurred in Australia or New Zealand in terms of harm reduction service coverage since 2010. Civil society reports suggest that engagement with the federal and some state governments in Australia has become increasingly challenging around issues such as the need for increased funding for needle and syringe exchange programmes (NSPs), diversification of opioid substitution therapy (OST) options including heroin-assisted treatment and improvement in the range of service provision for people who inject drugs other than heroin.⁵ Culturally sensitive, integrated services targeting Aboriginal and Torres Strait Islander Australians, particularly in remote and rural areas, and the meaningful involvement of these communities in service delivery and evaluation, remain important gaps.³

With the exception of Papua New Guinea, which has a generalised HIV epidemic, epidemics in the PICTs have remained small.⁶ IDU is a minor route of transmission in this sub-region. For instance, in French Polynesia approximately 12% of the cumulative reported HIV cases have been attributed to IDU.⁷ Poly-drug use, particularly involving alcohol – both legally and illegally produced homebrew – as well as cannabis, inhalants, kava (for example, on Samoa, Tonga and Vanuatu) and emerging markets for amphetamine-type stimulants, are more common in the PICTs than injecting drug use.⁴ Anecdotal evidence indicates that levels of licit and illicit drug use and the availability of new drugs may be increasing in the region.⁸

Responses to drug and alcohol use in the PICTs have relied largely on abstinence-based approaches and law enforcement methods focused on supply reduction. Some broader public-

health-focused approaches, including multisectoral education and awareness campaigns and integration of drug services with the mental health system, have been implemented to some degree in individual Pacific island states.⁴ However, these have not been systematically evaluated, and a clear framework for addressing drug use in this sub-region is yet to be developed.

The engagement of civil society organisations (CSOs) and organisations of people who use drugs is integral to the harm reduction response in Australia. In the PICTs, the lack of resources and of reliable, active data collection continue to pose barriers to understanding the extent of drug use and designing appropriate policies and responses.

Developments in harm reduction implementation

Needle and syringe programmes (NSPs)

There are over 1372 NSP outlets across Australia operating through a diverse range of service provision models such as needle-syringe vending machines and pharmacy-operated sites. Approximately 203 syringes per person per year were distributed to PWID in 2011.⁹ The low rate of HIV among PWID in Australia has often been attributed to the early implementation and scale-up of NSPs. Recent cost-effectiveness analyses have estimated that between 2000 and 2009 over 32,000 HIV infections were averted, and for every \$1 invested in NSPs \$4 were returned in health care cost savings.¹⁰ Along with Australia, New Zealand has one of the highest NSP coverage rates in the world, having distributed 2.7 million needle-syringes from the approximately 200 outlets across the country at an estimated rate of 270–280 needle-syringes per person per year.²

Despite relatively high coverage rates by international standards,^h recent estimates indicate that only 12.4% of PWID in Australia and 70% in New Zealand reported using sterile injecting equipment the last time they injected.² Evidence suggests that the use of non-sterile equipment and re-use of injecting paraphernalia may be relatively high among key sub-groups of PWID, such as Aboriginal Australians, who also tend to experience a multiplicity of health and socio-economic disparities compared with their non-Aboriginal counterparts.³ Access to NSP services by these groups is limited by inadequate provision in remote and rural areas, the lack of culturally sensitive service delivery or service models that recognise the Aboriginal definition of healthⁱ and

^h The 2009 WHO, UNAIDS, UNODC *Technical Guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users* categorises NSP coverage levels as follows: low (<100 needles/syringes per injector per year), medium (>100–<200 needles/syringes per injector per year) and high (≥200 needles/syringes per injector per year).

ⁱ Aboriginal community-controlled health services (ACCHS) in Australia consider three different social dimensions: the individual, the family, and the community. For more information, see Australian National Council on Drugs (2011) *Injecting drug use and associated harms among Aboriginal Australians*. Canberra: Australian National Council on Drugs.

^g The PICTs comprise 22 countries and territories subdivided into Micronesia, Polynesia and Melanesia. They are American Samoa, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna.

stigma and discrimination by the community and by medical personnel.^{3,10}

A recent survey by the Australian Injecting and Illicit Drug Users' League (AIVL) found that not only does much of the general population discriminate against people who use drugs (PWUD), but many feel that discrimination may deter people from using drugs, and as such is a positive event.¹¹ Additional barriers to access are posed by legislation limiting the distribution of injecting equipment.¹² For example, it is illegal for a person to provide injecting equipment to a peer, which often translates into services placing limits on the amount of equipment distributed per person. The limited range of equipment supplied at NSPs is also a challenge in many states in Australia, particularly for people injecting drugs other than heroin. In most states, for example, equipment such as sterile water, large-sized barrels, filters and winged-tip syringes are not supplied by state health departments, and service users must purchase them from pharmacies or other suppliers.¹⁰

NSPs do not operate in any PICTs, and it is not known whether needle-syringes can be purchased from pharmacies in these settings. Where drug and alcohol services for PWUD exist, these tend to be abstinence-based and are often located within mental health services.⁴

Legal status for Australia's only medically supervised injecting centre

Australia's only medically supervised injecting centre (MSIC) originally began operating for a trial period of 18 months in Sydney in May 2001 and continued to operate as a 'trial' project for over a decade, during which it underwent numerous evaluations.¹³ The MSIC has provided sterile injecting equipment for use alongside a range of additional services to all people who inject drugs, with the exception of pregnant women who inject drugs or young people under the age of 18.⁵

On 1 November 2010 the MSIC was ultimately awarded legal status through the enactment of the Drug Misuse and Trafficking Amendment (Medically Supervised Injecting Centre) Bill 2010 into law.¹⁴ This allows the facility to operate as other health services – without requiring an extension from the State Parliament to continue operation every four years. Although the MSIC has strong support within the local community, plans to trial or open similar facilities are not currently on the agenda anywhere else in Australia.

Opioid substitution therapy

Over 2132 outlets provide OST across Australia.⁷ A key change in the provision of OST in Australia since 2010 has been the introduction of buprenorphine-naloxone film to replace buprenorphine and buprenorphine-naloxone combination pills for substitution therapy.⁵ Presently, pills are being phased out over a two-year period, following which they will cease to be covered through the government scheme. However, some clinics, pharmacies and doctors have reportedly been forcing a shift to the film without prior consultation or patient involvement in the decision.⁵

As reported in 2010, a major barrier to accessing OST remains the cost prescribed by dispensing pharmacies and private clinics,^j with people on OST paying between A\$40 and A\$85 per week for the medication.¹⁵ Qualitative research has shown that the high costs of OST services may compel some people to choose between basic necessities such as food and their medication, while others report engaging in crime or selling takeaway doses to pay for OST.¹³ While demand for OST has increased in Australia in recent years, the availability of treatment has remained the same, resulting in frequent delays and waiting lists, particularly in remote and rural areas.¹⁶ In some regions, where one prescribing doctor or dispensing pharmacist often covers a wide geographical area, clients have reported travelling more than two hours daily or several times per week to access OST.⁵ Pregnant women and women with children who use opiates are often hesitant to access services for fear that Child Protection Services may potentially take their children into protective care.⁵ Guidelines for prescribing and administering pharmacotherapies in Australia were being reviewed at the time of writing.

In New Zealand, approximately 4600 individuals are receiving OST, mostly in the form of methadone.¹⁷ Significant waiting times and restrictions on takeaway doses have been reported among the top three perceived barriers to OST.¹¹ Resource constraints pose an additional obstacle in the transfer of OST provision from specialist OST sites and its integration into primary care settings.¹⁷

There is generally a lack of treatment options, and no OST provision, in the PICTs. Existing responses to drug and alcohol use are usually abstinence-based and largely delivered through mental health and counselling programmes.⁴ A 2008–9 situational analysis by the Burnet Institute identified a focus on prevention-focused education and training programmes around drug and alcohol use for young people; however, it is unclear whether these interventions have had an impact on behaviour change in the sub-region, and there has been little evaluation of their effectiveness.⁴

^j Methadone and buprenorphine are provided free to pharmacies and clinics in Australia by the federal government under the Pharmaceutical Benefits Scheme (PBS). These services then charge the client for dispensing, often charging more for takeaway doses.

Antiretroviral therapy

HIV prevalence among PWID remains low in Australia (1.0%) and New Zealand (0.4%) (see Table 2.7.1). However, the drug-related HIV burden is not consistent across sub-groups of injectors. In 2011, a higher proportion of HIV cases among Aboriginal and Torres Strait Islander people (19.4%) were attributed to IDU compared with new HIV diagnoses among non-Indigenous people (2.5%),⁷ and HIV rates within these sub-populations who inject drugs are high by comparison. It is estimated that in Australia the total number of people prescribed antiretroviral therapy (ART) increased from 9463 in 2006 to 11,523 during 2010.¹⁰ It is unclear how many of these people are PWID.

New data indicate that almost half (47.6%) of PWID in Australia accessed HIV testing in the last year. This proportion is lower than in New Zealand, where 80% of PWID reported having an HIV test in 2009.²

In 2010, Australasia was reported to have the second highest level of ART coverage among PWID after Western Europe.¹⁸ Papua New Guinea, Fiji, Timor Leste and states in Micronesia provide ART, but it is unknown how many PWID living with HIV are receiving treatment.

Viral hepatitis

In contrast to low HIV prevalence among PWID in the region, viral hepatitis rates are high and increasing in key areas of the region. Australia and New Zealand both have HCV rates over 50% among PWID.¹ Liver disease, most commonly as a result of viral hepatitis, has become the most common cause of mortality among ageing people who are dependent on opioids.¹⁹ For example, incidence of HCV among PWID enrolled in the Hepatitis C Incidence and Transmission Study community (HITS-c) in Sydney increased from 5.0 per 100 person years in 2009 to 9.3 in 2010.¹⁰ In some regions, such as South Australia and Western Australia, levels of HCV are substantially higher in the Aboriginal and Torres Strait Islander population than in the non-Aboriginal population.¹⁰

Hepatitis B (HBV) prevalence among PWID has remained stable over the past decade – 2.8% in New Zealand and 4% in Australia, according to a 2011 systematic review.¹ Surveillance studies show that there has been an increasing number of newly diagnosed HBV cases among Aboriginal Australians, despite vaccination programmes,³ with IDU reported as the most frequent source of exposure.¹⁰

Targeted, integrated HIV and viral hepatitis programmes operate free of charge across Australia and are particularly common in capital cities. Despite high levels of provision, the AIVL estimates that less than 10% of people living with chronic HCV access treatment every year.²⁰ Barriers to HCV testing and treatment among PWID include stigma and discrimination in the health care sector, lack of housing, treatment and post-treatment support.⁵

In Christchurch, where the largest population of PWID in New Zealand resides, a specialised pilot programme dedicated solely to addressing HCV testing, treatment and support has operated since January 2009, enrolling more than 530 clients as of November 2011.²¹ The Christchurch Hepatitis C Community Clinic operates as an integrated model attached to an NSP and liaises with various local agencies, including OST programmes, hospitals offering antiviral therapy and general practitioners (GPs). Its low-threshold services and accessible community setting have attracted PWID who may feel stigmatised by mainstream health services.

Little is known about the prevalence of viral hepatitis in the PICTs. HBV is highly endemic in Tonga, where more than 10% of the population is estimated to have active HBV infection.²² The WHO Western Pacific Regional Office (WHO-PRO) has also documented HBV in Guam, Kiribati, Solomon Islands, Fiji, Vanuatu, New Caledonia, Federated States of Micronesia and Samoa.²³ Low HCV prevalence has previously been recorded among Samoans and American Samoans, with tattooing practices potentially contributing to infection.²⁴ It is unclear what role drug and alcohol use plays in the viral hepatitis context in the PICTs.

Tuberculosis

The incidence of tuberculosis (TB) cases is low at between 5–6 cases per 100,000 people in Australia, or 1062 bacteriologically confirmed cases of TB in 2009.²⁵ Incidence rates in New Zealand are higher than those in Australia at around 10 per 100,000 people, representing approximately 350–400 cases per year.²⁶ Foreign-born individuals are disproportionately affected: for instance, all cases of multidrug-resistant TB (MDR-TB) in Australia in 2009 were among individuals from Papua New Guinea and the Torres Strait Islands cross-border region, and over two-thirds of all TB cases in New Zealand are in foreign-born individuals, particularly among people from the PICTs. It is estimated that 11,000 people across 22 PICTs acquire TB every year, 50% of whom are infectious cases.²⁷

It is not known what proportion of PWID across the region have had TB diagnosed and treated successfully, or to what extent TB/HIV co-infection occurs among PWID.

Overdose

A recent meta-analysis showed that among other world regions, Australasia had the lowest pooled crude mortality rates (CMRs) among people who use opioids, with overdose reported most commonly as the cause of death.²⁸ Non-fatal heroin overdose is highly prevalent,²⁹ while drug overdoses attributed to prescription drugs are overrepresented in remote and rural areas of Australia.³⁰ Recent evidence has shown the positive effect of the Sydney MSIC on overdose-deaths: calls to ambulance services to attend to opioid-related overdoses declined significantly in the vicinity of the Sydney safe injecting facility (SIF) after it opened, compared to the rest of New South Wales.³¹

Naloxone is a prescription-only drug administered to reverse the effects of overdose by ambulance paramedics and other medical staff through registered health services in Australia. In late 2011 the first trial piloting distribution of naloxone for peer administration was launched in Canberra.³² The two-year training programme seeks to make naloxone more widely available by training 200 PWID, their families and friends to respond to drug overdoses. This will include training on the administration of naloxone, which will be funded by the government.³¹

Harm reduction in prisons

Drug use and injecting are common in Australasian prisons. Almost half of participants (48–49%) in the 2011 Australian Needle and Syringe Program Survey reported a lifetime history of imprisonment, and 10% reported incarceration in the last year.³³ One in three (31–37%) of those who reported having been incarcerated in the past year had injected drugs while in prison.³³ Studies have shown that Aboriginal Australians, and Aboriginal women in particular, are overrepresented in prisons and tend to experience elevated rates of HIV, HCV and other blood-borne viruses.³⁴ Previous research in Australian prisons has suggested that prisoners are more likely to share injecting equipment in custody than people in the general community, and found that HCV rates among prisoners were higher than 20%.³⁵

There are currently no NSPs in prisons in the Oceania region. However, OST is available in most Australian and New Zealand prisons. In 2011 the Australian Capital Territory (ACT) government invited public submissions on a proposed NSP trial at the Alexander Maconochie Centre (AMC) in Canberra.³⁶ At the time of writing, plans to initiate the NSP had been placed on hold amid debates among key stakeholders, with an implementation date yet to be determined.⁵

Policy developments for harm reduction

Although no significant changes to harm reduction policy have occurred at the national level in Australia, the debate around drug policy reform and decriminalisation has broadened considerably. In response to the Global Commission on Drug Policy's 2010 report,³⁷ Australia 21,^k an independent, multidisciplinary NGO, brought together 24 former senior state and federal politicians, experts in drug policy and public health, young people, a business executive and former law enforcement officers to discuss Australia's present drug policy and explore moving toward a decriminalisation approach to illicit drugs. The report that followed the 21 January 2012 high-level roundtable, *The prohibition of illicit drugs is killing and criminalising our children and we are all letting it happen*,

has since called for a review of Australia's drug law toward a decriminalisation and regulation approach of illicit drugs.³⁸ Despite more open debate around drug policy reform, there has been increased interest by some state governments and funders in the 'New Recovery' movement, which in the Australian context has promoted abstinence as an externally enforced goal for people who use opiates, and limits the time period during which a person may be able to access OST.⁵

In 2010, Australia released its Third National Hepatitis C Strategy 2010–2013³⁹ and accompanying National Surveillance and Monitoring Plan.⁴⁰ The inclusion of concrete targets and dedicated resources in the new document is a significant improvement on the previous strategies between 1999 and 2008, as it will allow for monitoring and evaluation of its effectiveness.⁴¹ Targets to be measured include increasing access to sterile injecting equipment through NSPs, and reducing the burden of disease attributed to chronic HCV in Australia.

An extensive review of New Zealand's drug law began in early 2010. In June 2011 an independent, government-funded law advisory body, the Law Commission, tabled in Parliament its final report and 144 recommendations for reforming the Misuse of Drugs Act 1975. The review called the current policy 'outdated' and recommended greater investment in harm reduction, education and addiction treatment, amendment of drug paraphernalia laws and decriminalisation of small amounts of drug possession.⁴²

Many of the same concerns as in 2010 are still applicable to the context of the PICTs. Responses to drug use in the region have generally been law-enforcement-centred.⁴ However, recent reports have cited the development of a broadening perspective that takes into account public health and development approaches.⁴ Increased engagement in the region from agencies such as WHO-PRO, the Secretariat of the Pacific Community (SPC) and the Pacific Drug and Alcohol Research Network (PDARN) have increasingly brought attention to drug and alcohol issues in the PICTs. For instance, a significant concern emerging out of the 2011 meeting of PDARN remains the lack of national frameworks to address the production of homebrew alcohol, which has been linked to increased crime, particularly violence against women.⁴ ⁴⁰ The lack of data and resources to conduct comprehensive research continues to hamper the design and implementation of appropriate policy responses.⁴³

k For more information, visit <http://www.australia21.org.au>.

Civil society developments for harm reduction

Civil society organisations (CSOs) and organisations of people who use drugs have been integral to Australia's harm reduction response at the national and state levels. Although advocacy on behalf of PWUD remains underfunded, the AIVL and its member organisations across the country regularly engage in advocacy within academic, community and policy forums. AIVL recently completed its Online Discrimination Survey as part of the broader National Anti-Discrimination Project which aims to reduce stigma and discrimination, improve access to services and reduce social exclusion among PWID and those on OST.¹⁰ A report summarising the findings and exploring the history of stigma and discrimination against PWUD was published in July 2011.⁸

In August 2011 the New Zealand Drug Foundation and the New Zealand Society on Alcohol and Drug Dependence organised a Drug Policy Symposium that brought together experts from New Zealand and overseas. The aim of the symposium was to engage policymakers and funders in a conversation around integrated and effective treatment for drug dependence in light of the government's commitment to provide additional funding for treatment.⁴⁴

Although civil society in the PICTs has established a more visible presence in recent years, its engagement in regional forums around harm reduction has remained very limited. Activities have largely been hindered by inadequate resources. The Pacific Regional Rights Resource Team (RRRT) is active in the region, providing training, technical support and policy and advocacy assistance on issues of governance, democracy and human rights. PDARN is the only research and information network in the Pacific Region with a specific focus on substance use and related issues. The network first met in 2005 in response to a lack of data describing drug and alcohol issues in the PICTs, and held its most recent meeting in 2011 in Fiji. The gathering brought together government officials, NGOs, representatives from multilateral agencies, researchers and law enforcement representatives to exchange information and collaborate on joint activities.⁸ Among the priorities identified for the region are the urgent need for technical and financial support to develop effective national alcohol policies and action plans, the need for adequate funding for conducting comprehensive research to inform responses and the need for ongoing support to strengthen networks within countries and the region.⁸

Multilaterals and donors: developments for harm reduction

Bilateral funds from Australia and New Zealand remain an important source of support in the PICTs.⁴ Multilateral agencies such as WHO-PRO have increasingly worked with the SPC and PDARN to improve the level of engagement in the region. The Australian government, through the Australian Agency for International Development (AusAID), is also an important source of bilateral support for HIV and harm reduction programming across Asia and the Pacific.

Support for harm reduction services and for organisations of PWUD in Australia has long been provided by the federal government and state governments, generally via health departments. In the past two years, a competitive funding model has been introduced whereby a larger number of NGOs compete for a smaller pool of funding in one-year cycles, resulting in increasingly insecure funding year to year.⁵ The level of funding for harm reduction programmes such as NSPs and OST nationally has remained the same as reported in 2010. No significant changes in funding or support for harm reduction were reported in New Zealand.

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2.8 | Regional Update **Middle East and North Africa**



Table 2.8.1: Epidemiology of HIV and Viral Hepatitis, and Harm Reduction Responses in Middle East and North Africa

Country/territory with reported injecting drug use	People who inject drugs ^a	HIV prevalence among people who inject drugs (%)	Hepatitis C (anti-HCV) prevalence among people who inject drugs (%) ^f	Hepatitis B (anti-HBsAg) prevalence among people who inject drugs (%) ^f	Harm reduction response ^b	
					NSP ^c	OST ^d
Algeria	nk	nk	nk	nk	✗	✗
Bahrain	nk	nk	nk	nk	✗	✗
Egypt	85,000 ^{2 (e)}	6.5–6.8 ^{2 e (e)}	49.4 (35.8–63)	13.5 (10.9–16)	✓ (2) (P)	✗
Iran	170,000 – 230,000 ³	15 (9.5 - 22.9) ⁴	50.2 (34.5–65.9)	17.3 (3.7–30.9)	✓ (421) ³ (P)	✓ (3,373) ³ (B,M)
Iraq	nk	nk	nk	nk	✗ (P)	✗
Israel	nk	2.94 (2.07–3.81)	67.6	2.8 (0–5.5)	✓ (5) ³	✓ (B,M)
Jordan	nk	nk	nk	nk	✗ (P)	✗
Kuwait	nk	nk	nk	nk	✗	✗
Lebanon	nk	0 ⁵	52.8 ⁶	2.5 (0–5)	✓ (1–5) (P)	✓ (1)(B)
Libya	1685	877 ^(e)	nk	nk	✗	✗
Morocco	18,500 ²	11.4 (0.4–21.8) ³	nk	nk	✓ (6) ³ (P)	✓ (3) ³ (M)
Oman	nk	11.8 (5–18.6)	nk	nk	✓ (1)	✗
Palestine	nk	0 ^{5 (e)}	38.2 ^{6 (e)}	6.4	✓ (1)	✗
Qatar	nk	nk	nk	nk	✗	✗
Saudi Arabia	10,000 ²	0.6 ^{h, 3}	49.8 (14.1–85.4)	18.5	✗	✗
Syria	10,000 ²	nk	60.5	nk	✗ (P)	✗
Tunisia	nk	2.4 ³	nk	nk	✓ (3) ³	✗
United Arab Emirates (UAE)	nk	nk	nk	nk	✗	✓ ³ (BN)
Yemen	nk	nk	nk	nk	✗ (NP)	✗

nk= not known

^(e) = sub-national data

a Unless otherwise stated, data are sourced from Mathers B et al. for the Reference Group to the UN on HIV and Injecting Drug Use (2008) Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review, *Lancet*, 372(9651):1733–1745.

b Unless otherwise stated, data on NSP and OST coverage are sourced from Mathers B, Degenhardt L, Ali H, Wiessing L, Hickman M, Mattick RP, Myers B, Ambekar A & Strathdee SA for the Reference Group to the United Nations on HIV and Injecting Drug Use (2010) HIV prevention, treatment and care for people who inject drugs: A systematic review of global, regional and country level coverage, *Lancet*, 375(9719):1014–28.

c 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. (P) = needles and syringes reported to be available for purchase from pharmacies or other outlets, and (NP) = needles and syringes not available for purchase.

d The number in brackets represents the number of operational OST programmes, including publicly and privately funded clinics and pharmacy dispensing programmes. (M) = methadone, (B) = buprenorphine.

e Sub-national data from 2010 behavioural/biological surveillance conducted in two cities: Alexandria and Cairo.

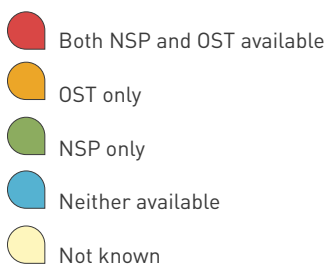
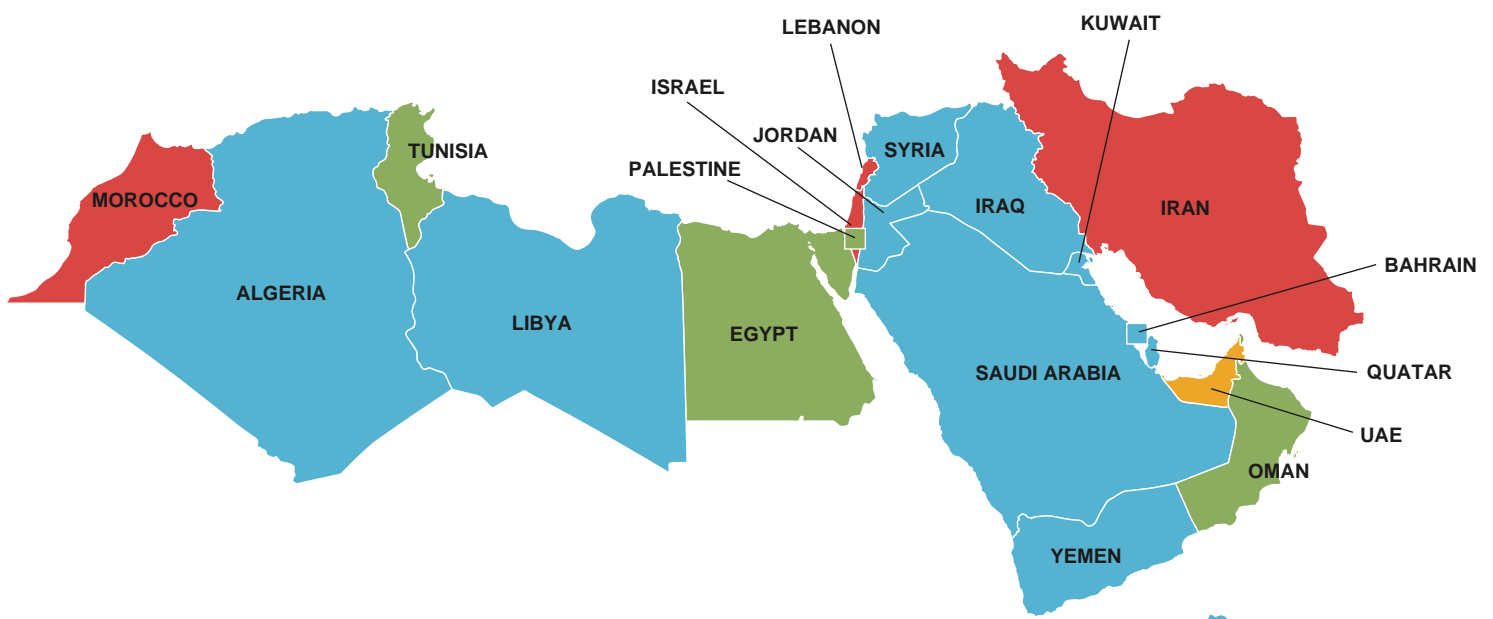
f Year of estimate: 2007.

g Includes sites in the community and in prisons.

h 2010–2011 estimate based on people who inject drugs (n=3441) enrolled in the detoxification centre at Al-Amal Hospital in Riyadh, and may not be representative of out-of-treatment and other populations of people who inject drugs.

i Population size estimate reported by NAP for 2011, but no information was available at the time of writing as to how this size estimate was arrived at.

Map 2.8.1: Availability of needle and syringe exchange programmes (NSP) and opioid substitution therapy (OST)



Harm Reduction in the Middle East and North Africa

The Middle East and North Africa (MENA) is one of two regions in the world where HIV rates continue to increase.⁹ People who inject drugs (PWID), men who have sex with men (MSM) and female sex workers (FSWs) remain the most affected groups. Estimates of the numbers of PWID across the region vary from over 300,000¹⁰ to approximately 1 million,¹¹ a wide range that is complicated by the lack of reliable size estimates for populations of PWID in most countries in this region. Although important progress has been made in improving monitoring and surveillance to inform data gathering, and to target prevention and treatment efforts among key populations at higher risk of HIV, availability of reliable data remains extremely poor.

Available data indicate that injecting drug use (IDU) contributes to HIV epidemics in most MENA countries, is increasing in some (for example, Syria, Egypt, Libya, Oman and Bahrain) and is driving the HIV epidemic in others (Iran, Libya). Since 2010 there have been significant policy developments and scale-up of harm reduction programmes as an HIV prevention strategy in several countries in the region, pointing to an increased willingness from governments to address key populations at higher risk of HIV, including drug-related epidemics among PWID.

Eight countries in the region implement needle and syringe exchange programmes (NSPs) to varying degrees, and five provide opioid substitution therapy (OST) (see Table 2.8.1). The reach of harm reduction programmes has expanded in Iran and Morocco. In 2010, Morocco started prescribing methadone for substitution therapy at three pilot sites in Tangier, Salé and Casablanca, with plans to scale up its methadone maintenance therapy (MMT) programme to seven additional sites.³ Significant scale-up of harm reduction programmes have occurred in the community and in prisons in Iran, where programmes covered an estimated 42.6% of PWID as of 2010, and expanded provision to 3,373 MMT sites in public and private treatment centres and in prisons as of August 2011, compared with 680 to 1100 sites reported in 2010.³ Despite these positive developments in service provision, the scope and coverage of existing services remain insufficient to have a marked impact on reversing HIV and viral hepatitis epidemics among PWID. Where programmes already exist, improvements in scale and quality are urgently needed to ensure that interventions achieve the greatest impact.

Poly-drug use is common across the region, particularly with pharmaceutical prescription drugs, as well as other substances such as hashish. A recent increase in use of amphetamine-type stimulants (ATS) among people who use drugs (PWUD) in the community, those enrolled in MMT and those in prisons has been documented in recent years in some

countries, with potential for these substances to be injected.³ Overlaps between IDU and the exchange of sex for money – but also for drugs, food and shelter – have been increasingly documented in the region (for example, in Syria and Egypt).³ Improved monitoring systems at the local and national levels in most countries are urgently required to gain a more nuanced understanding of local drug-related epidemics and intersections with other populations at high risk of HIV such as sex workers and MSM, and inform integrated, targeted responses across sectors.

A significant concern in the MENA region remains the high prevalence of viral hepatitis and tuberculosis (TB) among inmates, particularly those who engage in IDU in prisons and other closed settings. Harm reduction initiatives in prison settings are only available in Iran, despite evidence that injecting equipment is commonly shared in prisons across the region, including in Iran, Jordan, Kuwait and Lebanon. Improving the coverage of TB and HIV co-treatment is a persisting challenge for the region and is particularly relevant to addressing the needs of the most marginalised populations of PWID.¹²

Severe levels of marginalisation and criminalisation of PWID across the MENA region pose substantial barriers to effective service provision and outreach. Women who inject drugs comprise a small proportion of all PWID in the region but tend to experience higher levels of HIV, hepatitis C (HCV) and other blood-borne viruses and increased levels of stigma and discrimination. They are also less likely than men who inject drugs to access harm reduction programmes.^{5, 13, 14} Gender-sensitive harm reduction programming remains a considerable gap, with the notable exception of Iran, the only MENA country to have successfully developed female-operated harm reduction services targeted at women.¹⁵ Since the first female drop-in centre was opened in 2007, the gender-specific programme has expanded to 27 sites in several major cities in Iran.¹⁵ Strengthening the response among PWID in the MENA region will require a reorientation of laws and policies that continue to criminalise PWID and hinder the implementation of evidence- and human-rights-based HIV prevention and treatment services.

Several countries in the region now explicitly mention key populations at higher risk of HIV, including PWID, as part of their national HIV strategies, including Jordan, Syria and Tunisia since last reported in 2010. This suggests a slight shift in the regional policy environment toward greater acceptance of harm reduction as a core strategy for HIV prevention among PWID. The Middle East and North Africa Harm Reduction Association (MENAHRRA) has been an important catalyst for increased government and civil society attention to harm reduction since its founding in 2007. Regional momentum for harm reduction implementation and policy has increased further following MENAHRRA's multi-country Round 10 grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria,

which has been implemented beginning in January 2012. The US\$6.2 million grant awarded to MENAHRA in 2010 is the first regional Global Fund grant exclusively dedicated to support harm reduction and civil society activities. The grant came into effect in 2012, and over the next five years MENAHRA will work together with the Global Fund and other international, regional and national stakeholders to advocate for an improved policy environment for implementing harm reduction programmes, and to build the capacity of civil society organisations (CSOs) working for harm reduction in 12 countries in the region.^j

Developments in harm reduction implementation

Needle and syringe exchange programmes (NSPs)

As reported in 2010, eight countries in the MENA region have operational NSPs (see Table 2.8.1). Iran continues to have the highest level of provision in the region, with a total of 6,022,834 free needles and syringes distributed through 421 sites across the country over a one-year period ending in September 2011.³ There has been an increase in service provision in Morocco, where six NGO-run sites are now operating in Nador, Al Hoceima, Rabat, Oujda, Tangier and Tetouan. Although no formal harm reduction programmes distribute sterile injecting equipment in Oman, anecdotal evidence of small-scale, unofficial syringe distribution has been reported in the Muscat area.³ Importantly, Syria's new 2011–2015 National Strategic Plan on HIV and AIDS prioritises prevention among populations at higher risk of HIV including PWID.³ As of early 2012, plans were underway to initiate an NSP pilot with support from the Global Fund channeled through MENAHRA. Sterile needles and syringes are extremely difficult to obtain in Bahrain, where pharmacy provision is only possible on prescription. PWID are highly criminalised, with reports of arrest for possession of drug paraphernalia including new needles and syringes.¹⁶

Estimates of NSP service coverage are sparse in the region, due largely to the lack of reliable size estimates of numbers of PWID and inadequate monitoring of existing services. Global AIDS progress reports submitted by governments to UNAIDS suggest that coverage remains extremely limited. Iran has the highest NSP coverage in the region, distributing 26–35 syringes per PWID per year³ – a slight decrease from the average 41 syringes per person per year reported to be distributed in 2010.¹⁷ In Morocco 13 syringes were distributed per person per year in 2011, a minor improvement compared with 7 syringes per person per year distributed in 2010,³ but still far below levels needed to have a positive impact

on HIV and viral hepatitis epidemics in this population.^k During the same period, three NGOs with support from the Global Fund in Tunisia distributed 137,000 free needle syringes to 9000 PWID, amounting to similarly low coverage at 15.2 syringes per person per year. No national data on coverage are available for Lebanon, but reports from Soins Infirmiers et Développement Communautaire (SIDC), an NGO providing this service, indicate that coverage was exceptionally low at 1.6 syringes per person per year.³ The majority of PWID in Tunisia, and nearly half in Jordan (49.8%) and Iran (48.6%) access injecting equipment from pharmacies.³

Research indicates that there is a high prevalence of sharing syringes and other injecting equipment such as cookers, vials, containers, filters or rinse water in MENA countries.¹⁸ For instance, 63% of PWID in Jordan report engaging in the high-risk practice of 'frontloading',^l and almost three-quarters report sharing injecting paraphernalia.³ Where figures are available, high rates of syringe-sharing are also reported in Lebanon (21%),¹⁹ Bahrain (53.4%)¹⁶ and Syria (46%).²⁰

The criminalisation of PWUD and acute stigma, discrimination and human rights violations against them pose significant obstacles to accessing existing services. For example, in a 2011 study among 300 PWUD in Northern Morocco, 87% reported experiencing police violence, and 50% reported human rights violations by medical personnel; when asked to elaborate on the type of police abuse, 83% reported recurrent harassment and 65% reported illegal practices.²¹

Opioid substitution therapy (OST)

In 2012, five countries in the MENA region provide OST to varying degrees: Iran, Israel, Lebanon, Morocco and the United Arab Emirates (UAE). The most significant programme scale-up occurred in Iran, where there were 3373 sites in public and private treatment centres and in prisons providing MMT as of August 2011 – a considerable increase in provision compared with 680 to 1100 sites reported in 2010.³ Buprenorphine and opium tincture are also offered as maintenance therapies in Iran, with 3500 persons receiving the latter as of February 2012.³

Progress was also made in Morocco, where methadone was approved for substitution therapy in November 2009, and OST pilot sites in three cities – Tangier, Salé and Casablanca – began prescribing in June the following year. Responding to positive results from a 2011 evaluation, the government of Morocco approved the scale-up of the MMT programme to a further seven sites in Oujda, Rabat, Marrakech, Tetouan, Nador, Al Hoceima and Agadir.³ Information on the availability of OST in

^j Iran, Pakistan, Libya, Lebanon, Syria, Jordan, Bahrain, Morocco, Egypt, Afghanistan, Oman, and West Bank and Gaza.

^k The 2009 WHO, UNAIDS, UNODC *Technical Guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users* categorises NSP coverage levels as follows: low (<100 needles/syringes per injector per year), medium (>100- <200 needles/syringes per injector per year) and high (≥200 needles/syringes per injector per year).

^l 'Frontloading' is a drug-sharing ritual that involves injecting with a syringe after someone else has squirted drugs into it from his/her used syringe, either by removing the plunger (backloading) or needle (frontloading) from the receiving syringe.

the UAE was unknown in 2010, yet since then the government has confirmed that there are eight patients receiving buprenorphine-naloxone combination for substitution at the National Rehabilitation Centre, a drug treatment facility run by the Dubai police in Abu Dhabi.³ A decree on OST implementation was signed by Lebanon's Ministry of Health and a national OST taskforce put in place to provide technical support for developing OST clinical guidelines in September 2010. By March 2012, 120 clients were reported to be receiving buprenorphine as substitution therapy from two government hospitals in Beirut.³ Authorities in Oman have recently approved the implementation of an OST pilot, but it is as yet unclear when it will start.³ Methadone is available in Bahrain but used only for detoxification on an inpatient basis, rather than maintenance. Saudi Arabia has established the first OST committee and agreed to initiate MMT services through one pilot site in Al-Amal Psychiatric Hospital in Riyadh.²²

OST coverage estimates are almost non-existent in the MENA region, with the exception of Iran. Bio-behavioural surveillance in Iran in 2010 indicated that at the time of study 42.6% of people who had injected in the last year were receiving MMT.⁴ Women who inject drugs in Iran, as women injectors in other settings,²³ experience higher levels of HIV, HCV and other blood-borne viruses and increased levels of stigma and discrimination but are less likely than men who use/inject drugs to access harm reduction programmes.^{13, 15} A clinic for women who use drugs that provides a range of services including MMT was established in Tehran in 2007 and has now expanded to 27 sites around the country.²⁴ Subsequent research showed that women who use drugs respond well to MMT: within six months of initiating MMT, decreases were observed in heroin use, levels of dependence and engagement in high-risk injecting behaviour and criminality.¹⁵ A gender-sensitive setting designed and operated for women was key to engaging this population in harm reduction and drug treatment services.¹³

HIV testing and antiretroviral therapy (ART) for people who inject drugs

Although an increasing number of countries^m in the region now conduct bio-behavioural surveillance among populations at higher risk of HIV, including PWID,³ data on HIV prevalence, testing and antiretroviral therapy (ART) in the region are largely based on detoxification services, police registers and prison records. As such, available figures in many countries tend to be underestimated, are highly susceptible to reporting bias and are unlikely to be representative of the broader population of PWID.

Voluntary counseling and testing (VCT) is available in several MENA countries, yet where it exists, there are few, if any, facilities specifically targeted at PWID. Mandatory

testing is widely implemented across the region, with the exception of Morocco, the only country with explicit national policies prohibiting mandatory testing.¹² In early 2012, the government of Libya announced plans to establish eight VCT centres targeted at key populations at higher risk of HIV, including PWID.²⁵ The UAE has recently reviewed existing policies on mandatory HIV screening, allowing for the introduction of VCT for the first time.³ Testing for drug users is mandatory on entering treatment or on arrest/imprisonment in several countries, including the UAE, Iraq and Bahrain. Available estimates reported by countries to UNAIDS in March 2012 indicate that only a small proportion of PWID are getting tested and following up their test results: 19.5% in Tunisia, 11% in Morocco, 26.9% in Jordan, 40.9% in Egypt and 24.8% (16.9% among PWID under 25 years old) in Iran.³ In Syria, uptake of existing VCT services was generally low (1541 clients in 2011), representing only 0.23% of all tests conducted that year. However, it is unknown what proportion of VCT clients are PWID, since there are no VCT services targeting this population.³ In Bahrain, a country where HIV is primarily driven by IDU, mandatory testing of HIV, hepatitis B (HBV), HCV and TB is routinely performed, particularly among migrants and mobile populations, all of whom are deported upon a positive diagnosis. Most newly identified HIV cases in Bahrain are among males, three-quarters of whom are non-Bahraini migrants, with 58.1% of these attributed to IDU.³

Regionally, recent estimates of HIV prevalence among PWID range from 0.6% in Saudi Arabiaⁿ to over 10% in Iran, Libya, Morocco and Oman.³ However, much higher rates of HIV have been detected at the local level within some countries. A surveillance survey conducted by the Liverpool School of Tropical Medicine with the support of the European Union in the Libyan capital, Tripoli, detected 87% HIV prevalence among PWID.²⁵ In the past, IDU has accounted for as many as 90% of HIV cases in Libya.²⁶ In Iran, HIV estimates range considerably, from 2.2% to 44.4%, with the highest prevalence documented in Tehran, Fars and Lorestan provinces.⁴ Increases in prevalence have been documented in some parts of the region, particularly in Tehran, Khuzestan, Fars and Sistan-Baluchestan provinces in Iran, as well as in Egypt, where HIV prevalence among PWID rose sharply from 0.6% in 2006 to 6.7% in 2010.^{3, 27}

Despite improved access to ART in some countries at the end of 2010, including Lebanon (37%), Morocco (30%) and Oman (45%), the estimated regional coverage remains low at 13% in 2011.² It is unknown what proportion of ART recipients are PWID and how ART coverage in this population fares compared with regional coverage among all people living with HIV. In Libya, ART is currently provided for free to an estimated 2000–2500 people living with HIV from four sites including hospitals in Tripoli, and one each in Benghazi and Sabha, but information on the proportion of ART recipients

m Tunisia, Morocco, Jordan, Iran, Egypt, Algeria, Libya, Oman (planned) and Syria (planned).

n Estimate based on mandatory testing among clients enrolled in detoxification at Al-Amal Hospital in Riyadh, and cannot be generalised to the entire population of people who inject drugs in Saudi Arabia.

who are PWID is unavailable.^{o 3} According to the World Health Organization (WHO), nine of 11 countries surveyed in the MENA region in 2010 reported ART availability for PWID; however, data on the scope and reach of treatment were not known.² In Iran in 2010, 580 PWID were reported to be receiving ART.²⁸ Estimates of ART coverage among PWID are very limited across the region.

Viral hepatitis

According to a 2011 global systematic review, figures on HBV and HCV prevalence among PWID are available for only a fraction of MENA countries.¹ The large ranges for available figures suggest that the quality of estimates in the region is limited, and existing estimates are inexact at best (see Table 2.8.1). All seven countries that reported data had HCV prevalence close to or above 40% among PWID. In Israel and Syria, HCV rates among PWID exceed 60%. Prevalence of HBV ranges from 2.5% in Lebanon to 18.5% in Saudi Arabia. Additionally, a local study in Tehran, Iran, found that co-infection with HBV and HCV was significant in PWID living with HIV: up to 61.2% and 85.1%, respectively.²⁹

Information on the extent of the response to viral hepatitis among PWID in MENA is limited. In 2011, the WHO reported that among 11 countries surveyed in the region, seven provided viral hepatitis diagnosis, treatment and vaccination services for PWID.⁹ However, the scope and coverage of such interventions among PWID are unknown. The high prevalence of HBV in the region highlights the need for intensified efforts to increase provision and uptake of HBV vaccination targeting this population.

Tuberculosis

There are no systematic data on rates of TB, multi-drug-resistant TB (MDR-TB) and TB/HIV co-infection among PWID in the MENA region. Data from Libya indicate that there were 731 new TB cases in 2011, 128 of which were TB/HIV co-infected.³ However, people living with HIV are not routinely screened for TB, and there is no information on rates among PWID. In Iran, approximately 14,000 people were affected by TB in 2010, 50 of whom had MDR-TB; it is not known what proportion of these also used drugs.³⁰

According to UNAIDS 2011 Universal Access reporting, coverage of treatment for people with TB/HIV co-infection in the region ranges from less than 10% in five countries to between 22% and 55% in another four, and nearly full coverage in Oman (100%) and Algeria (99%).²⁷ However, disaggregated data by population are not available, and as such the proportion of PWID with TB/HIV co-infection among those receiving treatment is not known. Similarly, in 2011, six countries in the region reported availability of prevention,

diagnosis and treatment of TB among PWID, but the scope and reach of these interventions are unclear.²

National treatment policies and guidelines in some countries may pose barriers to accessing treatment for the most vulnerable sub-populations of PWID. For example, current policy in Libya does not allow for simultaneous treatment with ART and TB medications for patients with TB/HIV co-infection,^p despite international guidelines advising against this practice.³¹ A significant challenge in MENA countries remains the strengthening of data collection and monitoring systems to obtain a true picture of the extent of TB and HIV among marginalised groups, and the required scale of prevention and treatment.

Overdose

Data on the occurrence of fatal and non-fatal overdose remain largely elusive in the MENA region. Where data are available, rates of overdose appear to be substantial. A study examining overdose prevalence among PWUD across 29 provinces in Iran detected significantly higher non-fatal overdose rates among the sub-group of injectors (56.1%) compared to pooled rates for all drug users (injecting and non-injecting) participating in the study (42.1%). Lifetime experience of overdose was highest in those whose primary substance was Norgesic, a type of locally produced illicit opioid vial (53.9%) and heroin (50.2%).³² Previous research has suggested that opium is the dominant cause of overdose in Tehran, Iran.³³ In Oman, more than two-thirds of the current and former PWID participating in a recent qualitative research study reported overdosing at least once in their lifetime, with a range of 1–30 overdoses per respondent.³

Responses to overdose in MENA countries are very limited. Naloxone, a highly effective opioid antagonist that reverses the effects of overdose, is not available for peer distribution in the community anywhere in the MENA region. Isolated initiatives addressing overdose as part of broader interventions have been documented in some instances. For instance, the Association for Justice and Mercy (AJEM), a Lebanese NGO comprised of social workers and nurses, has recently launched a one-year campaign in partnership with MENAHRA and supported by the Global Fund with the aim of sensitising policymakers, prison managers and 300 inmates across six prisons to harm reduction approaches.³⁴ As part of the campaign, AJEM will conduct a series of information, education and communication (IEC) activities with inmates which include overdose prevention and management.

Harm reduction in prisons

A high proportion of PWID have spent time in detention, and IDU is a common practice in prisons across many MENA countries. In Syria, for instance, half of the 336 PWID

^o Interruptions in treatment for over six months in 2011 due to internal conflict in Libya led to an increased number of people living with HIV reporting to Tripoli Central Hospital in very advanced stages of disease, high mortality and potentially increased risk of developing resistance to existing ART regimens.

^p If a person living with HIV on ART is diagnosed with TB, treatment is discontinued and only re-started after the six-month TB treatment has been completed.

participating in a local survey in the Greater Damascus area had previously spent time in prison, and almost half reported using drugs while incarcerated.²⁰ Among 300 PWUD in three cities in Northern Morocco, 82% reported they had been incarcerated, and 6% reported inhumane treatment while in detention.²¹ At Roumieh prison in Lebanon, 34% of inmates surveyed in 2011 had newly started using drugs, with 37% of those injecting them.³⁴ Qualitative data from Oman have also indicated that many PWID spend time in prison, with most continuing to inject and share needles, syringes and other injecting paraphernalia while incarcerated.³

Inmates who inject drugs in MENA countries tend to experience high rates of viral hepatitis and TB, and comparatively low levels of HIV. Bio-behavioural surveillance across 13 correctional facilities in Jordan in 2011 found 1.5% HBV, 3.6% HCV prevalence and no cases of HIV among inmates, and an observed (but not necessarily causal) association between IDU and viral hepatitis infections.³ A recent study in Iran corroborates this observation: in addition to a history of tattooing and sharing needles and syringes, having a history of incarceration was a significant predictor of high HCV prevalence in PWID.³⁵ Surveillance among both male and female inmates in Iran also found an overall HIV prevalence of 2%; however, this figure reached 8.1% in prisoners who had a history of IDU (2.1% to 12.5%).⁴ At Roumieh prison in Lebanon a significantly higher prevalence of HBV (2.4%) and HCV (3.4%) was found among 580 prisoners, compared with only one case of HIV.³⁴ The majority (89%) of inmates with HCV injected drugs and reported a previous history of imprisonment. In Kuwait, HCV was detected in approximately 10% of the total prison population, and 75% of cases were among inmates who engaged in IDU.³

Iran remains the only country in the region to implement NSPs and OST in prison settings. By February 2012, more than 38,000 inmates were receiving MMT out of an estimated 120,000 inmates who use both injecting and non-injecting drugs and have been deemed eligible for OST.³ Other responses to harms associated with IDU in prison settings in the region include HIV prevention education and awareness programmes for prisoners and managers in Morocco and social and medical support for prisoners in Qatar. Morocco is presently exploring strategies to introduce OST in prisons in the future.²² In Egypt a multisectoral Prisons Health Steering Committee has been established to initiate activities and coordinate integrated health services in prisons, including joint responses (other than OST and NSP) to illicit drug use, HIV and TB.³ In Libya, UNODC, with funding from the Libyan government, recently re-launched the second phase of an HIV awareness project suspended in 2011 due to the security problems, focusing on PWID in prison settings. The project, funded by the Libyan government, was interrupted and is now being resumed.

Policy developments for harm reduction

Seven countries in the region – Iran, Israel, Lebanon, Morocco and, since 2010, Jordan, Tunisia and Syria – explicitly support a harm reduction approach to drug use as part of their national strategy documents on drugs and HIV. In 2010, Tunisia developed a harm reduction strategy for the first time, with support from UNAIDS. During the same year, Syria developed a national strategic plan which was the basis for the first successful Round 10 application to the Global Fund to implement harm reduction interventions. Morocco's new five-year AIDS strategy launched in April 2012 retains a focus on key populations at higher risk, including PWID, and is closely aligned with targets in the 2011 Political Declaration on HIV/AIDS.³⁶

At the 57th session of the WHO's Regional Committee for the Eastern Mediterranean in August 2010, Ministers of Health endorsed the *WHO Regional Strategy for the Health Sector Response to HIV 2011–2015*.³⁷ The strategy includes a set of priorities relevant to strengthening the response among PWID in the region, including strengthening surveillance systems and improving access to VCT and prevention and care services for key populations at increased risk of HIV.

In March 2012, at the 37th Session of the Council of Arab Ministers of Health in Jordan, member country representatives of the League of Arab States launched the Arab AIDS Initiative, aimed at accelerating responses to HIV in the region to achieve the targets set in the 2011 Political Declaration on HIV/AIDS.³⁸ A technical committee will develop a regional roadmap to reach global targets – including reducing transmission among PWID by 50% – by 2015, and work with states to monitor and implement the new strategy.

Although the policy environment in the region appears to have moved towards greater acceptance and acknowledgement of harm reduction as a core strategy for HIV prevention for PWID, a significant proportion of MENA countries still have no explicit policies on harm reduction. Many countries continue to promote abstinence-based approaches to drug use and remain politically opposed to introducing NSPs and OST. In a significant number of states, drug-related offences are subject to severe penalties, including the death penalty, which is upheld in most of the region.^{q 39}

The criminalisation of populations at higher risk of HIV such as PWID and MSM and the lack of an enabling policy environment in many parts of the MENA region severely limit the implementation of current interventions and the introduction of public health and human-rights-based approaches.

q The death penalty for drug offences is present in legislation in the following countries, although some countries have not carried out executions for drug offences in recent years: Iran, Saudi Arabia, Egypt, Syria, Yemen, Libya, Kuwait, Iraq, Oman, UAE, Bahrain and Qatar.

Bringing the 22nd International Harm Reduction Conference to Lebanon

In 2011, Harm Reduction International staged the International Harm Reduction Conference in Beirut – the first time the event was held in the Middle East. This represented a significant success for harm reduction in the region. The five-day conference brought together over 800 delegates from 79 countries to discuss, debate, share and advocate for harm reduction policies and practices.

The event included three days of practical training workshops and demonstrations, many presented in local languages, to help build harm reduction capacity in the region. Highlights included training on overdose prevention, implementing harm reduction in prisons and developing and improving hepatitis C treatment services. A 'dialogue space' was offered to provide delegates with an opportunity to engage in a less formal and more interactive programme of events.

During the closing ceremony, the Middle East and North Africa Network of People Who Use Drugs, which had coalesced during the conference, was officially launched. This newly formed network aims to promote the health and defend the rights of people who use drugs in and around the MENA region, and will work closely with the International Network of People who Use Drugs.

Civil society developments for harm reduction

CSOs in the MENA region have played an increasingly active role in advocating for and implementing harm reduction approaches in the last two years. MENAHRA, a regional network of CSOs, governments and researchers founded in 2007 and composed of three knowledge hubs in Iran, Lebanon and Morocco and a secretariat based in Lebanon, has acted as a catalyst for civil society strengthening, cooperation and mobilisation across 20 MENA countries. CSOs participating in training and advocacy workshops through the knowledge hubs report that these information-sharing activities have contributed to increasing acceptance of both harm reduction policy and practice.

In 2010, the Global Fund awarded US\$8.3 million as part of Round 10 to a multi-country project coordinated by MENAHRA – the first regional Global Fund grant exclusively dedicated to support harm reduction and civil society activities. Over the next five years, MENAHRA will work together with its partners through the Global Fund to advocate for a conducive policy environment for implementing harm reduction programmes, and build the capacity of CSOs to scale up the provision of harm reduction services in 13 countries in the region: Iran, Pakistan, Libya, Lebanon, Syria, Jordan, Bahrain, Morocco, Egypt, Afghanistan, Oman, Tunisia, and Palestine.

In March 2011, the International Drug Policy Consortium, in collaboration with the National Rehabilitation Centre in Abu Dhabi, organised the first seminar on drug policy in the MENA region. The event was attended by over 150 participants from 12¹ different countries and provided a rare forum for dialogue on existing law enforcement approaches to drug policy prevalent in MENA countries, as well as the benefits of evidence-based alternatives such as harm reduction.

MENAHRA will be organising a regional meeting for religious leaders on advocacy and harm reduction in September 2012, to sensitise them towards harm reduction strategies.

In Morocco, the CSO Association de Lutte Contre le Sida (ALCS) in collaboration with RDR, ASCMP clinic and the National Council of Human Rights, organised a conference entitled 'Towards a new approach for drug users based on health and human rights' in October 2011. Findings from a community study led by ALCS documenting widespread human rights abuses against PWUD by the police, the justice system and the health care system were presented,¹⁰ after which participating organisations adopted the Rabat Declaration, calling for policy change on the human rights of PWUD in Morocco.

Despite significant developments, in many settings across the MENA region, the work of CSOs working with populations at higher risk of HIV is impeded by high levels of stigma and discrimination, repressive laws and limited government support for harm reduction.

¹ Afghanistan, Egypt, Gaza, Iran, Jordan, Lebanon, Pakistan, Saudi Arabia, Tunisia, the United Arab Emirates, the West Bank and Yemen.

Multilaterals and donors: developments for harm reduction

The role of multilateral agencies and donors remains crucial in the MENA region. The Global Fund is the most significant source of financial support in the region, having committed approximately US\$24 million to date (see Table 2.8.2), including \$6.2 million of committed funds for the MENAHRA multi-country grant and separate grants for eight countries or territories.^{s 40} The majority of countries in the region rely on external funds to finance at least 50% of their harm reduction responses. Although recognition of harm reduction and its role in addressing drug-related epidemics among PWID has increased, national funding commitments for programmes remain limited.

Table 2.8.2: Approved Global Fund investments targeting people who inject drugs in the Middle East and North Africa Round 1 (2002) to Round 10 (2010)⁴⁰

COUNTRY / TERRITORY	TOTAL (US\$)	
Algeria	500,000	
Egypt	800,000	
Iran	8,200,000	*
Jordan	300,000	
MENAHRA	6,200,000	* †
Morocco	4,600,000	*
Syrian Arab Republic	1,200,000	*
Tunisia	1,400,000	
West Bank and Gaza	800,000	
TOTAL	24,000,000	

Notes

Figures are rounded. Data are correct as of March 2012. Data are based on detailed grant budgets submitted to the Global Fund, and may not reflect actual expenditures.

* Figure includes projections for future years of grants that have not yet been formally committed.

† MENAHRA received a multi-country grant that covers Afghanistan, Bahrain, Egypt, Iran, Jordan, Lebanon, Libya, Morocco, Oman, Pakistan, Syrian Arab Republic, Tunisia, and the West Bank and Gaza.

The WHO Eastern Mediterranean Regional Office (EMRO) is directly involved in the provision of technical support to civil society in the region through MENAHRA and directly to country missions. Moreover, WHO is directly involved with countries in building their capacities and providing the necessary technical assistance to collect, analyse and report strategic information, including epidemiological and programme monitoring information on IDU and harm reduction.

UNODC supports harm reduction in 18 Arab countries^t through a new five-year project launched in 2010 largely focused on criminal justice reform.⁴¹ UNODC has recently restarted the four-year 'Drugs and HIV' project in post-conflict Libya with financial support of US\$6 million from the government. The project will involve establishing two drug treatment centres for PWUD, providing capacity-building for local CSOs to engage in outreach to key populations at higher risk and conducting an HIV assessment in prisons, including training and awareness among prison staff and inmates.

^s Algeria, Egypt, Iran, Jordan, Morocco, Syria, Tunisia, and West Bank and Gaza.

^t Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, the Libyan Arab Jamirhiya, Morocco, Oman, Qatar, Saudi Arabia, Sudan, the Syrian Arab Republic, Tunisia, UAE, Yemen and Palestine.

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2.9 | Regional Update **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 ^b	HIV prevalence among people who inject drugs (%) ^b	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 ^c	
					NSP ^d	OST ^e
Côte D'Ivoire	nk	nk	nk	nk	✗	✗
Djibouti	nk	nk	nk	nk	✗	✗
Gabon	nk	nk	nk	nk	✗	✗
Ghana	nk	nk	40.1	nk	✗	✗
Kenya	49,167 ²	18.3 ²	51.4 (42.2–60.6)	6.4	✗	✓ (M,O) ^f
Malawi	nk	nk	nk	nk	✗ (P)	✗
Mauritius	9,253 (5,699–10,444) ³	47.4 ³	97.3 ³	9	✓ (52) (P)	✓ (16)(M,O)
Nigeria	nk	4.2 ⁴	nk	nk	✗	✓
Senegal	nk	9.2 ⁴	nk	nk	✗	✓ (B,O)
Seychelles	1,671 (673–1,706) ⁴	5.8 ⁹	53.5	0.1	✗	✗
Sierra Leone	nk	nk	nk	nk	nk	✗
South Africa	67,000 ⁵	19.4 ⁴	nk	nk	✓ (1)(P) ⁵	✓ (6)(M,B)
Uganda	nk	nk	nk	nk	✗	✗
Tanzania	25,000–50,000 ^{5b}	42 ^{5b}	22.2	3.8	✓ (1) (P)	✓ (1)
Zambia	nk	nk	nk	nk	✗	✗

nk= not known

a The countries included in the table are those which have reported injecting drug use (IDU) and/or NSP or OST according to the latest UN Reference Group systematic reviews. However, HRI data collection in 2007/08 also identified IDU reports in Angola, Benin, Burkina Faso, Cameroon, Cape Verde, Ethiopia, Gambia, Guinea, Liberia, Mali, Mozambique, Niger, Rwanda, Seychelles, Somalia, Togo, Zanzibar and Zimbabwe.

b Unless otherwise stated, data are sourced from Mathers B et al. for the Reference Group to the UN on HIV and Injecting Drug Use (2008) Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review, Lancet, 372(9651):1733–1745.

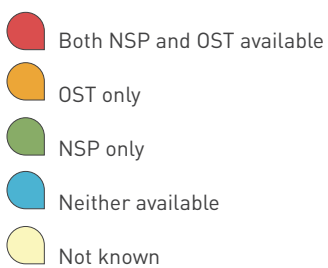
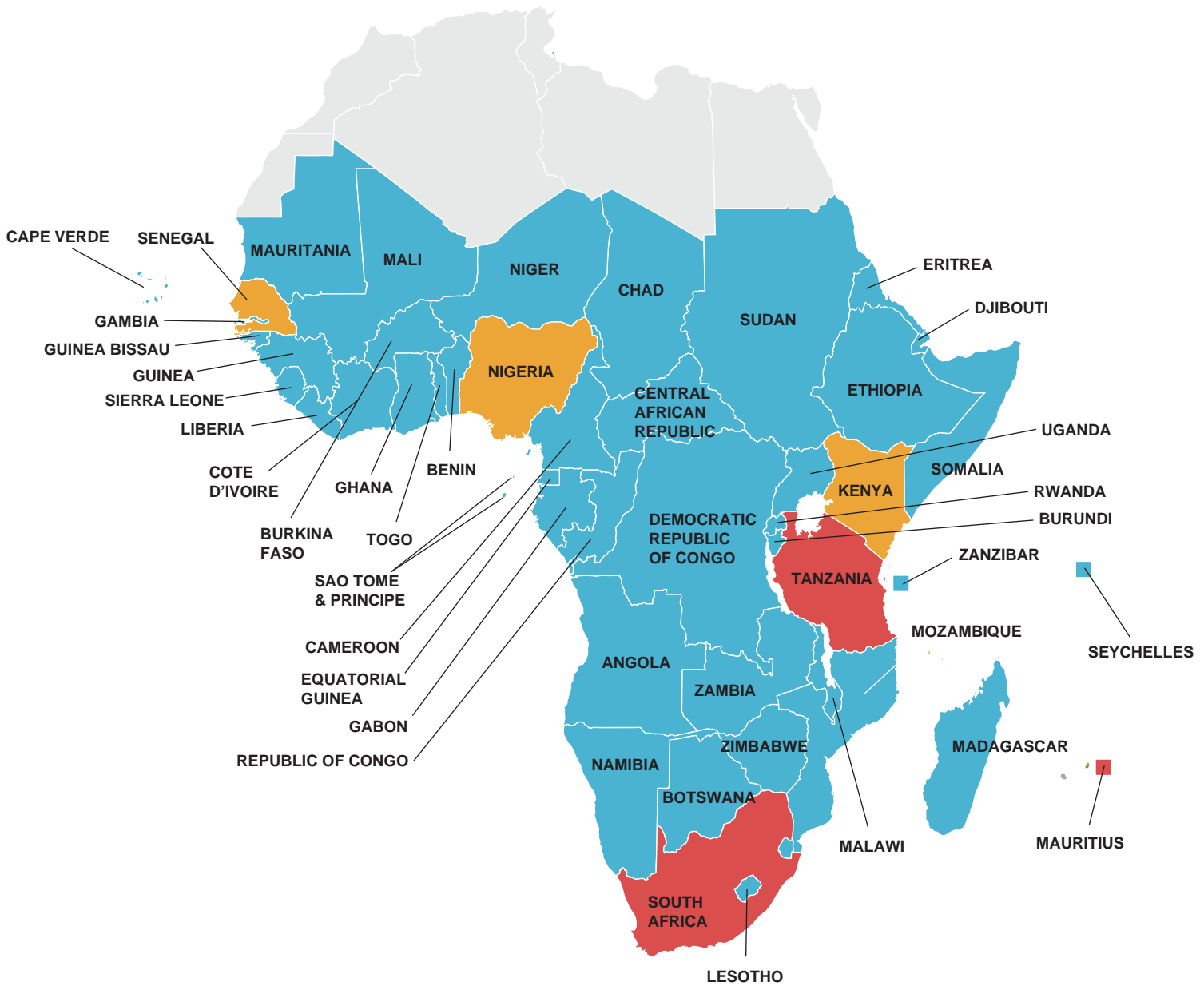
c Unless otherwise stated, data on NSP and OST coverage are sourced from Mathers B, Degenhardt L, Ali H, Wiessing L, Hickman M, Mattick RP, Myers B, Ambekar A & Strathdee SA for the Reference Group to the United Nations on HIV and Injecting Drug Use (2010) HIV prevention, treatment and care for people who inject drugs: A systematic review of global, regional and country level coverage, Lancet, 375(9719):1014–28.

d 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. (P) = needles and syringes reported to be available for purchase from pharmacies or other outlets, and (NP) = needles and syringes not available for purchase.

e The number in brackets represents the number of operational OST programmes, including publicly and privately funded clinics and pharmacy dispensing programmes. (M) = methadone, (B) = buprenorphine, (O) = any other form (including morphine and codeine).

f Methadone is available on a very limited basis from private clinics only.

Map 2.9.1: Availability of needle and syringe exchange programmes (NSP) and opioid substitution therapy (OST)



Harm Reduction in Sub-Saharan Africa

Available estimates suggest that there may be 1,778,500 people who inject drugs (PWID) in sub-Saharan Africa (range: 534,500–3,022,500).⁶ Among them, an estimated 221,000 (range: 26,000–572,000) may be living with HIV.⁶ However, since this estimate is based on only 13 out of 47 countries in sub-Saharan Africa, it is likely that current figures underestimate the true extent of injecting drug use (IDU) and HIV among injecting populations in the region. In 2009, the prevalence of IDU across the region was estimated at 0.2% in the general population.⁷

Available estimates of HIV prevalence among PWID in sub-Saharan Africa range from 4.2% in Nigeria to 51.6% in Mauritius, among a small number of countries for which data exist (see Table 2.9.1).³ Unsurprisingly, HIV prevalence among PWID is higher than in the general population; for example, in 2011 HIV rates among PWID in Zanzibar were approximately 25%, compared to less than 1% among the general population.⁸ Significant proportions of PWID in Kenya, Tanzania, Mauritius, Mozambique and South Africa engage in high-risk injecting practices, including sharing of needles, syringes and other injecting paraphernalia.^{9–11}

The growing number of PWID in sub-Saharan Africa has been closely associated with the emergence of many African countries as key transit points in the global trafficking of heroin, cocaine and other drugs.^{7, 13} For example, the Indian Ocean coastal regions of Tanzania and Zanzibar are situated on the path of multiple trafficking routes.⁷ South Africa and several countries in Western Africa likewise act as key transit points for cocaine trafficking routes from Latin American producers.⁷ Ineffective border controls, limited cross-border and regional cooperation and deficiencies in the criminal justice systems allow for relatively easy access to heroin from Afghanistan, Thailand, India and Pakistan.⁵⁸

Sub-Saharan Africa remains significantly behind global efforts to implement and scale up harm reduction interventions as part of a comprehensive HIV response for PWID. Existing needle and syringe exchange programmes (NSPs) have been scaled up in Mauritius, and new programmes have been established in South Africa and Tanzania. In South Africa, provision is small-scale, based in Cape Town only and targeted specifically at men who have sex with men (MSM), whereas in mainland Tanzania the opioid substitution therapy (OST) programme is backed by the government and has been in operation since February 2011.

Existing interventions are largely restricted to major cities and coastal regions where IDU appears to be more concentrated.⁹ Although anecdotal evidence suggests that IDU may also occur in rural areas and smaller towns,¹⁴ existing programmes in Kenya and Tanzania are focused in and around Mombasa, Nairobi and Dar es Salaam.⁹ In all cases, the scale of existing

services remains far below estimates needed to reverse the HIV epidemic among this population.¹⁵

There are substantial evidence gaps on the epidemiology of HIV and viral hepatitis among PWID, particularly for Central and Western African countries. Since 2010 there have been attempts to address the dearth of population-based studies among PWID and injecting-related HIV infection in the sub-Saharan Africa region,⁹ with bio-behavioural surveillance projects now being conducted in the major drug consumption cities of Nairobi and Mombasa in Kenya.¹⁰ However, even in East and Southern African countries that conduct surveillance, these assessments are not conducted regularly enough to track trends in IDU and HIV. As a result, in most countries there is still insufficient understanding of the size and distribution of key affected populations, rendering calculations of intervention needs and coverage very challenging.¹⁶ Further investigation is urgently needed to understand the extent to which existing interventions effectively meet the needs of PWID to determine the scale of the response required.¹⁷

Major legal and policy barriers, including criminalisation of people who use drugs (PWUD), present significant barriers to accessing existing programmes where these do exist, and exacerbate unsafe injecting practices and HIV transmission among PWID.^{7, 18} Although there has been an increasing awareness of the need to address IDU-related HIV in the region since 2010, approaches in many countries continue to focus on supply reduction and law enforcement rather than public health.

Developments in harm reduction implementation

Needle and syringe programmes

Provision of NSPs in sub-Saharan Africa is limited to isolated efforts by non-governmental organisations (NGOs) in a small number of countries. In June 2012 the Kenyan government announced that it will begin distributing sterile needles and syringes to PWID across the country.¹⁹ At the time of writing, the proposed NSP was still in the early phases of discussion, and potential implementation sites in Kenya had yet to be identified.²⁰ A small NSP programme was launched in Cape Town, South Africa in August 2010 as part of Health4Men, a project providing free sexual health care to MSM.²¹ However, its reach remains limited to a small number of MSM. There are plans to open a second site in Gauteng in South Africa.²¹ In late 2010 Médecins du Monde-France (MdM-F) initiated the first NSP site in Tanzania, in the Temeke district of Dar es Salaam.⁸ Although still in the early stages of development with a relatively small reach, by September 2011 the MdM team had made contact with 1307 PWID, distributing a total of 32,700 needle and syringes.

The number of operational NSP sites in Mauritius, the first country in the region to implement NSPs, was scaled up from 39 sites in 2010 to 52 sites in 2012.⁵ Despite increases in the number of sites, coverage of existing NSP services in Mauritius remains low compared to international coverage targets,¹⁵ with 30 syringes distributed per PWID per year.^{22g} Some NGOs in Seychelles distribute needles, syringes and other injecting equipment sporadically; however, these efforts are not officially recognised or accounted for by government authorities.²³

In countries where data are available, sharing of injecting equipment among PWID appears to be common. In Nigeria, the percentage of PWID reported to have used sterile equipment for their last injection has decreased over the past two years, from 89.2% in 2010 to 70.8% in 2012.²⁴ More than a third of the 540 participants in a Kenyan study reported sharing injecting equipment with close friends or primary sex partners.² Reasons for sharing injection equipment included lack of personal needles when required (23%), difficulty in accessing new needles or cost (17%), pressure from peers (14%) and being in prison (2%).² HIV prevalence was six times higher (30%) among those that reported ever having shared needles and syringes than among those that never shared (5%), and 47% reported sharing a needle or syringe in the past month.² In South Africa, 86% of PWID reported sharing needles and syringes, with some reporting re-using injecting equipment up to 15 times.²⁵

Legal barriers and social stigma present major barriers to accessing sterile injecting equipment, often forcing PWID to hide injecting equipment and engage in unsafe injecting.¹⁰ ²⁶ Even in places where it is legal to purchase needles and syringe, fear of discrimination or disapproval from the community often deters individuals from accessing the services they need.⁵ In a study from Kenya, an average of 31% of respondents reported having been confronted by the police or having injecting equipment confiscated by law enforcement authorities within the past six months.² The threat of arrest for possessing residual traces of heroin in the syringe barrel when returning used injecting equipment remains a significant deterrent to those seeking to access NSP facilities.²⁷

An emerging concern is the overlap between the injecting and sexual networks of several key populations at higher risk of HIV, including PWID, MSM and sex workers. Research from South Africa highlighted a significant intersection between IDU and high-risk sexual practices.²⁸ A 2010 study of 509 MSM in Zanzibar reported that 60% used a needle after someone else had used it, with 68% passing a needle on to someone else after injecting.⁵⁸ Effective responses to overlapping high-risk behaviours require both the mainstreaming of harm reduction services within broader HIV prevention services

as well as the inclusion of population-specific needs, such as those of women or MSM, within existing harm reduction programmes. It is unclear whether and to what extent such integrated services are available in countries within this region.

As in other parts of the world,²⁹⁻³⁰ women who inject drugs in the region experience disproportionately higher levels of negative health outcomes compared with their male counterparts.^{2, 8, 31} Though fewer in number compared with their male counterparts, women who inject drugs have consistently higher HIV prevalence than male injectors.¹⁰ In a 2011 Kenyan study, HIV prevalence was 47% among women injectors compared with 17% among male injectors.¹⁰ Flashblood,^h which has previously been documented among women who inject drugs in Tanzania and Zanzibar,³² is now also evident along the Kenyan coastal towns of Mombasa and Malindi,³³ indicating cross-border influences of drug consumption trends among countries in the same geographical region.

Opioid substitution therapy

OST remains largely unavailable throughout sub-Saharan Africa (see Table 2.9.1). Tanzania is the only country in the region that has initiated an OST programme since 2010, in addition to the program already operating in Mauritius.¹⁷ Located within Muhimbili University Hospital, Tanzania's OST programme began operating in February 2011.⁸ Although the outreach capacity of the existing single facility is limited, 175 PWID received treatment through this programme as of September 2011.⁸ Plans to open an additional site were in progress at the time of writing.

Limited OST services are available in South Africa and Senegal, but there is very limited government support. In South Africa, legal restrictions for using methadone for substitution therapy have been lifted, and buprenorphine is also available for substitution, only in the private health sector.³⁴ This effectively limits access to these medicines for the vast majority of people who use opiates who are not covered by private health insurance and cannot afford the medicines.⁵ Despite evidence that access to OST could prevent 14% of new HIV infections projected to occur in Nairobi between 2010 and 2015,³⁵ methadone for detoxification is only available in one clinic on a very limited basis.

Antiretroviral therapy

In December 2010, an estimated 5,064,000 people were receiving antiretroviral therapy (ART) in the sub-Saharan Africa region. This represented almost half of the people living with HIV that were eligible for ART. Coverage differed significantly between Eastern and Southern Africa (56%) and West and Central Africa (30%).³¹

g If the 4728 clients on Methadone Maintenance Therapy are excluded from the calculation, the number of syringes distributed per PWID per year would be 60.

h Flashblood is high-risk practice that involves blood-sharing by injecting the blood of the person who got the main hit to experience some of the effect of the drug.

National reporting to WHO in 2010 on the availability of HIV prevention, treatment and care services for PWID revealed that only nine out of thirty-five reporting sub-Saharan African countries had services in place providing ART to PWID.³¹ There remain very limited data on the numbers of PWID that may be accessing ART within the region. The Reference Group to the UN on HIV and Injecting Drug Use reported that thirty-eight PWID in Kenya and 138 PWID in Mauritius were receiving ART in 2008. These estimates were equal to less than 1% of HIV-positive PWID in Kenya and 1.1% (range 0.4–9.2%) of HIV-positive PWID in Mauritius receiving ART.¹⁷ The global average, according to the UN Reference Group was 4% of HIV-positive PWID receiving ART.¹⁷ Despite the significant caveats on these calculations,ⁱ it is clear that the response to HIV among PWID is much further developed in Mauritius than in the rest of the region. While more data are necessary to accurately assess the situation, with an absence of targeted HIV interventions for PWID, along with substantial barriers to accessing health care services,³⁶ the overwhelming majority of PWID eligible for ART in sub-Saharan Africa are currently unlikely to receive it.

Where services providing ART are available to PWID, there are significant factors which may impede service access. These include, but are not limited to, institutionalised stigma and discrimination against PWID within health care systems, a perceived or real lack of confidentiality and subsequent fear of health care professionals reporting drug use to the police, as well as treatment providers refusing access to ART on the basis of drug use.³⁶

Viral hepatitis

The prevalence of hepatitis C (HCV) among the general population in sub-Saharan countries varies but is generally high.³⁷⁻³⁸ Similarly, the majority of countries in the region have considerable hepatitis B (HBV) epidemics among the general population.³⁹

There is a paucity of available data on viral hepatitis among PWID across sub-Saharan Africa. In the five countries where estimates are available, HCV prevalence may be significantly higher than HIV prevalence among PWID. Estimates were available for Tanzania (22.2%), Ghana (40.1%), Mauritius (97.3%), Kenya (51.4%, range 42.2–60.6%)¹ and Seychelles (53.5%)⁴⁰ (see Table 2.9.1). In a Tanzanian study, HCV prevalence was 28% among PWID compared with 2% in their non-injecting peers.⁸ Data on HBV among PWID are similarly limited, with estimates only available for four countries: Tanzania (3.8%), Kenya (6.4%), Seychelles (0.1%) and Mauritius (9%).¹ For many countries in the region, the failure to acknowledge the existence of PWIDs continues to thwart systematic surveillance efforts to monitor viral hepatitis and other IDU-related harms among this population.

ⁱ Not all HIV-positive people who inject drugs will be eligible for ART. The calculation of the ratio of PWID receiving ART is based on the UN Reference Group (C grade) estimate of 130,748 PWID in Kenya and an estimated HIV prevalence of 42.9% among them. More recent data suggests both the number of PWID and the HIV prevalence among PWID to be significantly lower (see Table 2.9.1).

While the cost and quality of HCV treatment regimens may change in the near future, at present the cost and complexity of treatment delivery pose substantial barriers to implementation in high-prevalence, low-resource settings.^{1,41} The significance of viral hepatitis among populations engaging in IDU needs considerably more recognition in the region. Targeted messaging for hepatitis prevention must be integrated within comprehensive HIV prevention and treatment services.⁵⁸ There are indications that such services may be developed in Zanzibar, where plans include the establishment of integrated HIV/viral hepatitis facilities that will target key affected populations.⁵⁸

Tuberculosis

Tuberculosis (TB) prevalence in the sub-Saharan region is notably high. Where available, TB rates per 100,000 in the population were reported to be highest in South Africa (981) and Zimbabwe (633), with Mozambique (544) and the Democratic Republic of Congo (327) also reporting substantial rates.⁴² South Africa currently reports the third highest TB burden in the world, with TB incidence having increased by 400% over the past fifteen years.²⁵ An estimated 80% of South Africa's population are currently infected, and TB/HIV co-morbidity is estimated to reach 60% among people living with HIV.²⁵ While the majority of people infected with TB will not develop active TB disease, PWUD and prisoners are more vulnerable to progressing to active TB disease.⁴²

Although integrated TB/HIV testing and treatment is beginning to emerge in South Africa²⁵ and other parts of the region, there are no known interventions specifically targeting PWID. The challenges posed by TB/HIV co-infection among PWID are intensified by incarceration, with TB prevalence amongst prison populations much higher than prevalence in the general population.⁴³ High rates of TB in prisons are further exacerbated by overcrowding, poor sanitation, late diagnosis, inadequate treatment of infectious cases, high transfer rates and gaps in continuity of care upon release.

Overdose

Data on the prevalence of and responses to overdose in sub-Saharan Africa are extremely scarce. Available data indicate that risk of overdose is high in some parts of the region. For instance, overdose cases in Kenya are estimated to be 83–90% higher in Nairobi than in the coastal areas, and approximately 58% of PWID in Kenya reported knowing at least one person who had experienced a fatal overdose.¹⁰

Naloxone, a highly-effective opioid antagonist used to reverse the effects of overdose, has been approved and is available for the management of overdose in hospital emergency departments in Tanzania.⁹ However, in the context of significant stigma and criminalisation of PWID, who may be reluctant to access services for fear of being reported, managing overdose remains a challenging feat in countries

in the region.⁴⁴ Community distribution of naloxone through peers is unknown to operate in any countries within the region.⁴⁴ Given the paucity of data available on this issue, further investigation is required to better understand the extent of overdose in countries in sub-Saharan Africa and to expand access to overdose prevention programmes that include peer distribution of naloxone among PWID, their families and communities.

Harm reduction in prisons

Criminalisation of drug use and possession and drug-related crime contribute to a high proportion of PWID among sub-Saharan African prison populations.¹⁰ Anecdotal evidence suggests that prison settings may be contributing considerably to accelerating HIV transmission due to the high availability of drugs and the lack of sterile injecting equipment.⁷

IDU has been documented in prisons in Côte d'Ivoire, Mauritius, Kenya and Ghana.¹⁰ Kenyan prisons are predominantly populated by adult males, with a significantly smaller number of female and juvenile inmates.⁴⁵ Drug trafficking and trading in prison is reported to be common, with drugs often brought in by inmates attending court dates or by security officers either supplying the drugs or facilitating their entry.² HIV prevalence in the Kenyan prison population is 8.2% compared with a national prevalence of 6.4%, and is significantly higher (19%) among female inmates than among male inmates (6%).⁴⁵

Access and take-up of testing services is limited, particularly for TB and viral hepatitis. Approximately 77% of Kenyan inmates reported ever being tested for HIV, 23% for TB and less than 2% for viral hepatitis.⁴⁵ In neighbouring Uganda, HIV prevalence in the prison population is nearly twice as high as the national prevalence in adults.⁴⁶ Where data are available, a high percentage of PWID report sharing injecting equipment while incarcerated. The overwhelming majority of PWID (81%) surveyed in Nairobi and coastal provinces in Kenya report having been previously incarcerated.² Approximately 7% reported injecting drugs while in prison, and of these, 61% reported sharing needles or syringes.²

NSP and OST are not implemented in any prisons in the sub-Saharan Africa region. Although Nigerian government objectives outline a commitment to increased access for PWID to a full range of harm reduction measures, planned services in prisons are limited to drug treatment, telephone hotlines and drop-in centres for providing information and referrals.⁴⁷

Policy developments for harm reduction

Progress in terms of the development of a conducive policy environment for harm reduction remains limited across the region, with a few exceptions. Harm reduction is mentioned in the Tanzanian National Strategy for Non-Communicable Diseases (NCD) 2009–2015, with key objectives on the most-at-risk populations outlined in the National Multisectoral Strategic Framework on HIV/AIDS.⁴⁸ In Kenya the recently launched national HIV strategy similarly denotes a national response to emerging evidence of changing epidemiological dynamics, affirming universal access to HIV prevention, treatment, care and support.⁴⁶ Recent steps have also been taken to increase the engagement of provinces, districts and local communities in HIV service planning across the country.⁴⁶ Ongoing strategic objectives in Mauritius include dialogue and sensitisation with the Anti-Drug Smuggling Unit to improve the running of the NSPs, advocacy for the decriminalisation of the distribution and carrying of syringes, the implementation of harm reduction programmes in prisons and the implementation of awareness-raising programmes in the community to mitigate stigma and discrimination.²²

Despite these advancements, for the majority of countries in the region, relevant policies continue to focus on supply reduction and the criminalisation of PWUD, impeding efforts to implement evidence-based harm reduction interventions.² For instance, despite progress with the implementation of the first NSP in Tanzania, the possession of needles is still illegal across some jurisdictions.^{8, 49} Although HIV-related discrimination is now prohibited in Kenya, national legislation and policy fail to offer legal protection for certain key populations.⁴⁶ Furthermore, although reference to harm reduction appears in Nigeria's National Policy on HIV and AIDS,⁵⁰ the country's National Drug Law Enforcement Agency (NDLEA) continues to focus on supply control and demand reduction via seizures and arrests. PWID are routinely harassed, raided and detained in already overcrowded prisons in the attempt by the NDLEA to control drug availability.⁴⁷

While there is an increasing awareness of the need to address IDU-related HIV in region, as can be seen above, drug policy continues to focus on supply reduction and rely on law enforcement rather than public health approaches, with very few exceptions. Progress toward the overhaul of current drug policies and regulations in favour of harm-reduction-based strategies is impeded by the lack of political will and support. Increased advocacy efforts are essential to strengthen political support for public health and human-rights-based approaches to addressing HIV related to IDU in the region.

Civil society and advocacy developments for harm reduction

Although civil society organisations (CSOs) with a focus on PWID and harm reduction are limited in number within the region, there has been a marked increase in the number of local CSOs working alongside international organisations to advocate for the introduction and/or scale-up of harm reduction services since 2010.

In the continuing absence of local government support for harm reduction, regional CSOs remain the main advocates for harm reduction. A meeting of civil society groups was held at a pre-conference event during the 16th International Conference on AIDS and Sexually Transmitted Infections (STIs) in Ethiopia in December 2011. Among the outputs of this meeting was the formation of a sub-regional harm reduction and drug policy network to be hosted by Kenya AIDS NGOs Consortium (KANCO). The objectives of the network include strengthening links between local harm reduction networks in sub-Saharan Africa, promoting awareness and facilitating the adoption of harm reduction initiatives across the continent. The network will continue to work together with national harm reduction networks and organisations in Uganda and Kenya, as well as focal points in Tanzania, Mauritius, Nigeria and Ethiopia.

There are a number of newly formed national networks in the region including those based in Kenya and Uganda. Formed in January 2011 by current and former PWUD based in Kampala, the Ugandan Harm Reduction Network (UHRN) is a national non-profit organisation that works to promote the health of individuals and communities affected by drug use. UHRN engages in advocacy, information sharing and dissemination and capacity-building, and seeks to act as a coordinating body for member associations representing marginalised groups in the country. Similarly the Kenyan Harm Reduction Network was formed in 2011 and is made up of harm reduction organisations that aim to advocate for a harm reduction approach to drug use and drug policy.

Other new initiatives include those in the Seychelles; while key groups are still not directly targeted in national prevention programmes, NGOs have attempted to become more proactive in addressing the specific needs of key populations at higher risk of HIV, including PWID.²³ Moreover, several programmes in Zanzibar are currently being developed to strengthen and extend the capacity of the public health system, community-based organisations and associated peer-education initiatives.⁵⁸

In June 2012 INPUD developed and led capacity-building workshops for drug user advocates in Kenya as part of the CAHR project, and in Tanzania in partnership with MdM. The overall aim of the workshops was to determine existing and potential platforms for PWUD to input into the development,

implementation and evaluation of programming and decision-making around national-level services and policy that impact upon PWUD. Activities included information dissemination around harm reduction, training in drug user organising and capacity-building to deliver peer education. As a result of these workshops, national drug user networks were founded in each country.⁵¹

The region held its second harm reduction conference in 2011, hosted by Collectif Urgence Toxida (CUT), a network of NGOs and individuals working in the field of drug use and HIV/AIDS mainly in Mauritius and the Indian Ocean. The conference was attended by participants from all of the Indian Ocean states as well as Kenya, Tanzania, Zanzibar, Mozambique and Morocco, among others. The theme of the conference was 'Towards a client-centred approach' and aimed to engage the participants in dialogue around the improvement of the quality of harm reduction services delivered in Mauritius. Importantly, the conference emphasised the human rights and public health principles that underscore harm reduction.

Multilaterals and donors: developments for harm reduction

Multilateral agencies and donor NGOs provide the majority of HIV/AIDS spending in sub-Saharan Africa. The German Society for International Cooperation (GIZ) provides technical assistance to exchange initiatives in parts of the region including Mauritius, Sierra Leone and Kenya.

Open Society Foundations, through the International Harm Reduction Development Program (IHRD) and the Open Society Initiative for Eastern Africa (OSEA), has supported organisations working with PWUD in Kenya and Tanzania to increase knowledge and capacity on harm reduction, health and human rights protections. Support has included: study visits for NGO representatives to harm reduction programmes in Africa (Mauritius) and North America; support for legal empowerment, including legal aid, paralegal training and NGO support for PWUD at police stations, in pre-trial detention and in prisons; training on naloxone provision, needle exchange and harm reduction basics; presentations and participation at national, regional and international conferences and advocacy to increase awareness of harm reduction principles, decrease rights abuses, secure national and international funds for harm reduction, and network with other community organisations working with PWUD.

The short-lived 2009 US Congressional decision to allow the use of federal funds for NSPs and subsequent revisions to HIV prevention guidance from the President's Emergency Plan for AIDS Relief (PEPFAR)⁵² represented an opportunity to expand and develop existing harm reduction interventions and to rally support for evidence-based approaches targeting PWID.⁹ However, the reinstatement of the ban on the use of US

federal funds for NSPs⁵³ in December 2011 greatly undermined burgeoning efforts to expand harm reduction in the region.

The Global Fund to Fight AIDS, Tuberculosis and Malaria explicitly supports harm reduction as part of its commitment to fund evidence-based, cost-effective interventions.⁵⁴ However, of the 55 countries and territories supported by the Global Fund since its inception, only three African countries with generalised HIV epidemics – Burundi, Kenya and Nigeria – were included (see Table 2.9.2).⁵⁵

Table 2.9.2: Approved Global Fund investments targeting people who inject drugs in sub-Saharan Africa, Round 1 (2002) to Round 10 (2010)⁵⁶

COUNTRY / TERRITORY	TOTAL (US\$)	
Burundi	600,000	*
Cape Verde	700,000	*
Kenya	1,900,000	*
Madagascar	1,300,000	*
Mauritius	1,500,000	*
Nigeria	1,300,000	*
Zanzibar	500,000	‡
TOTAL	7,800,000	

Notes

Figures are rounded. Data are correct as of March 2012. Data are based on detailed grant budgets submitted to the Global Fund and may not reflect actual expenditures.

* Figure includes projections for future years of grants that have not yet been formally committed.

‡ Zanzibar, a semi-autonomous part of Tanzania, receives separate grants from the Global Fund.

Despite the major concerns posed by IDU-related HIV in these epidemiological settings,^{7, 31} no funds were allocated for PWID in countries with generalised epidemics in past rounds, a situation largely influenced by limited technical support, advocacy and political commitment in most settings in the region.⁵⁷ Since 2010 the dedicated funding reserve for HIV proposals that focus on most-at-risk populations created as part of Round 10 includes funding support to implement harm reduction programmes planned in Kenya.⁵⁵ In total, the Global Fund has provided US\$7.8 million for harm reduction programmes targeting PWID in the region.

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DEVELOPING EFFECTIVE HARM REDUCTION SERVICES FOR WOMEN WHO INJECT DRUGS

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