Recommended package of interventions for HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for people who inject drugs

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Background

In 2022, the World Health Organization (WHO) published the Consolidated guidelines on HIV, viral hepatitis and STI prevention, diagnosis, treatment and care for key populations. These guidelines outline a public health response to HIV, viral hepatitis and sexually transmitted infections (STIs) for five key populations (men who have sex with men, sex workers, people in prisons and other closed settings, people who inject drugs and trans and gender diverse people).

In this policy brief, we give an update on those parts of the guidelines which are relevant for people who inject drugs.

**People who inject drugs** refers to people who inject psychoactive substances for non-medical purposes. These drugs include, but are not limited to, opioids, amphetamine-type stimulants, cocaine and hypno-sedatives, including new psychoactive substances. Injection may be through intravenous, intramuscular, subcutaneous or other injectable routes. People who self-inject medicines for medical purposes – referred to as “therapeutic injection” – are not included in this definition.

While these guidelines focus on people who inject drugs because of their specific risk of HIV and HCV transmission, due to the sharing of blood-contaminated injection equipment, much of this guidance is also relevant for people who use substances through other routes of administration, such as snorting, smoking and ingestion. While cannabis is consistently the most commonly used drug globally (209 million users in 2020), many people also use stimulants such as cocaine (21 million last year users globally in 2020), amphetamines (34 million last year users in 2020) and ecstasy (20 million last year users globally in 2020). Stimulant use can sometimes be associated with increased mortality, incidence of HIV and HCV and increased risk of cardiovascular events, and may have impacts on mental health; therefore access to most of the interventions included in the package recommended for people who inject drugs will also improve health outcomes for people who use stimulant drugs, whether they inject or not.

In many countries drug use or possession is criminalized, and in almost every country it is considered immoral, and significant stigma and discrimination is experienced by people who use drugs. At the time of writing, there is extremely low coverage of the evidence-based package of needle and syringe programmes (NSPs) and opioid agonist maintenance therapy (OAMT). In 2021, of 105 countries that report injecting drug use, NSPs were available in 94, and OAMT available in 90 countries. There are regional differences, with low availability of both interventions in both Africa and the Middle East. Also, in most countries that provide these services, their coverage is too low to have an impact.

As a direct result, people who inject drugs are disproportionately affected by HIV and viral hepatitis. The World Drug Report 2022 estimated in 2021 that 11.2 million people injected drugs, 5.5 million of them were living with hepatitis C, 1.4 million were living with HIV and 1.2 million were living with both hepatitis C and HIV. The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimated in 2021 that people who injected drugs had a 35 times greater risk of acquiring HIV than people who did not inject drugs, and WHO estimates that 23% of new hepatitis C infections globally are attributable to injecting drugs.

For impact on HIV and viral hepatitis, structural barriers for people who inject drugs need to be addressed, including decriminalizing drug use and possession for personal use, ending forced detention in compulsory drug treatment centres, addressing violence, stigma and discrimination and

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1 UNODC uses the term ‘new psychoactive substances (NPS)’ which are defined as “substances of abuse, either in a pure form or a preparation, that are not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances, but which may pose a public health threat” (2).
empowering communities of people who use drugs. People who use drugs face additional barriers to accessing health services where cessation of drug use is a condition for eligibility. Women who inject drugs may be more stigmatized than their male counterparts, and many work as sex workers to pay for both their and their partner’s drugs (7-9). Fear of losing custody of their children may make mothers who inject drugs less likely to access reproductive and other health services (10). They may experience more police harassment and violence than men who inject drugs. The impact of these barriers on HIV and viral hepatitis acquisition is clear (11-13), and for this reason the enabling interventions listed in the table below are considered essential for impact for people who inject drugs.

**Recommended interventions**

**Enabling interventions**

HIV, viral hepatitis and STI epidemics, particularly among people who inject drugs and other key populations, continue to be fuelled by laws and policies criminalizing sex work; drug use or possession; diverse forms of gender expression and sexuality; stigma and discrimination; gender discrimination; violence; lack of community empowerment and other violations of human rights. These sociostructural factors limit access to health services, constrain how these services are delivered and diminish their effectiveness.

Qualitative research, conducted by the global key population-led networks for the development of the consolidated key population guidelines, found people who inject drugs reported criminalization, stigma and discrimination as persistent barriers to accessing health services and remaining in treatment, as well as being driving factors in perpetuating vulnerability, human rights abuses and poor health outcomes.

Most countries have laws, regulations or policies that are barriers to effective HIV, viral hepatitis and STI and other health services for key populations, including criminalization of drug use and possession. Other barriers are related to restrictive or punitive policies and practices, such as criminalizing the possession of needles/syringes, which restricts the ability of programmes to operate needle and syringe programmes. These legal barriers have measurable, detrimental effects on the health of members of key populations, shown by modelling and other research (11, 12, 14, 15). For example, a systematic review found associations between exposure to arrest and increased HIV infection in people who inject drugs (12).

Legal reforms, such as decriminalizing drug use or possession, sex work and same sex relationships; legal recognition of transgender or gender diverse status; lowering the age of consent for accessing health services; and considering exceptions to a standard age of consent policy (such as mature minors) are critical enablers that can change a hostile environment for key populations to a supportive environment.

People from key populations are also often particularly subjected to stigma, discrimination and negative attitudes related to their behaviour, sexual orientation, gender identity or engagement in sex work – and doubly so if also living with HIV, viral hepatitis or STIs. Many key populations also face intersecting forms of discrimination on the basis of their age, sex, race or ethnicity, physical or mental health status, disability, nationality, asylum or migration status, or criminal record.

The effects of stigma and discrimination against key populations can manifest in delayed testing and missed diagnoses, poor retention in treatment programmes and poor treatment outcomes, concealment of health status and, in general, poor uptake of health services (16-25). There are many interventions designed to reduce stigma and discrimination in health care settings, with some randomized controlled trials and observational studies showing positive effects (21, 26-37). It is also important to consider addressing stigma and discrimination among the broader community. However, given the heterogenous nature of the interventions and outcomes measured, meta-analyses are often not possible, and systematic reviews do not clearly indicate which are the most effective
interventions when it comes to reducing stigma and discrimination in health care settings (38-41). Instead, it is useful to consider a range of interventions that can address different aspects of stigma and discrimination (20, 38).

Empowerment is the process by which people with little power work together to increase control over events that determine their lives and health. Community empowerment means increasing key population communities’ control over their health by addressing the structural constraints to health, human rights and well-being; making social, economic and behavioural changes; and improving access to health services. Community empowerment can take many forms, such as fostering key population-led groups and key population-led programmes and service delivery; meaningful participation of people from key populations in designing and operating services; peer education or navigation; task shifting to key population peers; self-care; implementation of legal literacy and service programmes; and ensuring civil space in which key populations can function without fear of reprisals.

Evidence, mainly among sex workers, shows that community empowerment has a measurable impact on key populations’ health (42-50), including reductions in STI incidence (46), HIV incidence (50, 51), high-risk sex (48) and increased uptake of family planning (52).

Violence against people from key populations is a common occurrence and can take various forms – physical, sexual or psychological, and can be perpetrated by different people, including intimate partners, clients, family members, strangers, service providers, law enforcement officers and others in positions of power (53-60). Violence can be fuelled by the imbalance in the power dynamics of gender – by prejudice and discrimination against persons perceived to depart from conventional gender and sexuality norms and identities. Other characteristics such as age, disability or race can increase vulnerability to violence. Also, multiple structural factors influence vulnerability to violence, including discriminatory or harsh laws, and policing practices and cultural and social norms that legitimize stigma and discrimination.

Experience of violence has been shown to negatively impact on key populations’ health, including increasing drug-related harms (54, 61-65), reduced uptake of sexual and reproductive health services (53), inconsistent condom use (53, 59, 62, 66), depression and other mental health issues (55, 67), and increased HCV risk (68, 69), as well as having a direct impact on HIV and STI acquisition (70). Women, especially young women from key populations, including women who use drugs, female sex workers, people in prisons and transgender women, experience particularly high rates of physical, sexual and psychological abuse (71).

The health sector has an important role to play in addressing violence by providing comprehensive health services, including: for sexual and reproductive health; providing referrals to other support services; gathering evidence through data and research; fostering prevention policies in other sectors; advocating for violence to be recognized as a public health problem; and for resource allocation (72).

**Health interventions**

Harm reduction is one of the key elements of a public health promotion framework (or response) that has been proven highly effective in reducing and mitigating the harms of injecting drug use for individuals and communities. WHO defines harm reduction as a comprehensive package of evidence-based interventions, based on public health and human rights, including NSPs, OAMT and naloxone for overdose management. OAMT medicines methadone and buprenorphine and also naloxone are listed on the WHO essential medicines list. Harm reduction also refers to policies and strategies that aim to prevent major public and individual health harms, including HIV, viral hepatitis and overdose, without necessarily stopping drug use.

The impact of NSP and OAMT on both HIV and HCV is well established (73-77). Importantly, modelling shows that impact on both HIV and HCV and related public health benefits are more likely when a combination of harm reduction approaches is used, that is, both NSP and OAMT, and at a sufficient scale (78, 79). Further, modelling also shows that while scaling up NSP and OAMT will reduce HIV and HCV
incidence considerably (in one United Republic of Tanzania model by 62.6% and 81.4% respectively, from 2019 to 2030), scaled-up antiretroviral therapy (ART), alongside full NSP and OAMT, will further decrease HIV incidence, particularly when sexual transmission is also reduced, and HCV treatment alongside harm reduction will significantly decrease HCV incidence (by 92.4% over 10 years in the United Republic of Tanzania model) \( \text{(79, 80)} \).

Opioid use, including injection, is associated with considerable morbidity and mortality, including high rates of fatal overdose. The World Drug Report 2022 found that out of 48 countries, 77% indicated that opioids (most frequently heroin/morphine) were causing the greatest number of direct drug-related deaths \( \text{(6)} \). Opioids were present in 75% of fatal overdoses in the United States in 2020 and in 76% in the European Union in 2019 \( \text{(1)} \). Opioid overdose is treatable with naloxone, an opioid antagonist which rapidly reverses the effects of opioids. Death does not usually occur immediately, and in the majority of cases, overdoses are witnessed by a family member, peer or someone whose work brings them into contact with people who use opioids. Increased access to naloxone for those people likely to witness an overdose, known as community-based naloxone, can significantly reduce the high numbers of opioid overdose deaths \( \text{(81)} \).

Pre-exposure prophylaxis (PrEP) is an evidence-based HIV prevention intervention. Although there is strong evidence that PrEP is highly protective to prevent sexual HIV transmission, evidence is more limited for the prevention of parenteral HIV transmission. PrEP services for people who inject drugs and for their sexual partners can provide benefits both in the prevention of sexual transmission, and likely in the prevention of HIV acquired through unsafe injection practices. PrEP services should not replace NSPs. NSPs have the greatest impact in preventing the transmission of HIV and other bloodborne infections, including HCV associated with injecting drug use.

More research is needed on the values and preferences of people who inject drugs on PrEP as part of comprehensive HIV prevention approaches, and on how to best deliver PrEP services for this population to improve uptake and effective use (including through comprehensive and integrated community-based delivery models).

While global estimates of STIs among people who inject drugs are not known, people who inject and use drugs may be at increased risk of STIs, particularly those engaging in chemsex or those using stimulants. Values and preferences research showed a strong preference for STI services among women who inject drugs. For this reason, people who inject drugs should have access to STI testing, diagnosis and treatment.

People who inject drugs are at increased risk of TB, irrespective of their HIV status, and TB is a leading cause of HIV-related mortality among people who inject drugs \( \text{(82, 83)} \). For this reason, TB prevention, screening, diagnosis and treatment are included in the package of interventions essential for broader health of people who inject drugs. Other common health issues related to unsafely injecting drugs include nerve and vein damage, abscesses and skin infections.

**Recommended package for people who inject drugs**

NB These interventions are not in order of priority.

The interventions listed here have been categorized as follows:

1. **Essential for impact: enabling interventions**
   This includes all interventions recommended to reduce structural barriers to health services’ access for key populations.

2. **Essential for impact: health interventions**
   This includes health sector interventions that have a demonstrated direct impact on HIV, viral hepatitis and STIs in key populations.

3. **Essential for broader health**
   This includes health sector interventions to which access for key populations should be
ensured, but do not have direct impact on HIV, viral hepatitis or STIs.

4. **Supportive**
   This includes health sector interventions which support the delivery of other interventions, such as creating demand, and providing information and education.

The guidelines also include a chapter on service delivery which describes different approaches that can be used to improve access, acceptability and availability of services for key populations. The concepts of community-led services, task sharing, integration, decentralization, self-care and virtual interventions can be applied to a range of interventions, from prevention and diagnosis to treatment and care. Please see the guidelines for detailed descriptions.

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<thead>
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<th>Essential for impact: enabling interventions</th>
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<tbody>
<tr>
<td>Removing punitive laws, policies and practices</td>
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<td>Reducing stigma and discrimination</td>
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<td>Community empowerment</td>
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<tr>
<td>Addressing violence</td>
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<tr>
<td><strong>Prevention of HIV, viral hepatitis and STIs</strong></td>
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<td>Harm reduction (NSPs, OAMT and naloxone for overdose management)</td>
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<tr>
<td>Condoms and lubricant</td>
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<td>Pre-exposure prophylaxis for HIV</td>
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<td>Post-exposure prophylaxis for HIV and STIs</td>
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<td>Prevention of vertical transmission of HIV, syphilis and HBV</td>
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<td>Hepatitis B vaccination</td>
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<td>Addressing chemsex</td>
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<td>HIV treatment</td>
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<td>Screening, diagnosis, treatment and prevention of HIV-associated TB</td>
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<td>STI treatment</td>
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<td>HBV and HCV treatment</td>
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<td>Conception and pregnancy care</td>
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<td>Contraception</td>
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<td>Mental health</td>
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<tr>
<td>Prevention, assessment and treatment of cervical cancer</td>
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<tr>
<td>Safe abortion</td>
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<tr>
<td>Screening and treatment for hazardous and harmful alcohol and other substance use</td>
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<td>Tuberculosis prevention, screening, diagnosis and treatment</td>
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References


