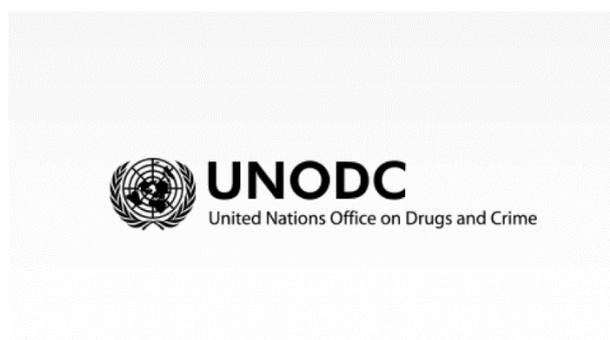


Tailoring Vaccination Campaigns and COVID-19 Services for People Who Use Drugs Technical Guidance

Final pre-design stage draft
June 2022



Contents

Acknowledgments.....	3
Abbreviations.....	3
Definitions of key terms.....	4
1. Introduction	5
1.1. Background	5
2. Planning for the implementation of COVID-19 safety measures.....	7
2.1. Situational analysis for COVID-19 safety measures	7
2.2. Service adaptations.....	9
2.3. Sharing information materials	11
2.4. Training HIV harm reduction service providers	11
3. COVID-19 vaccination programme planning.....	14
3.1. Full situational assessment	14
3.2. Identifying and estimating the number of clients that will require vaccination	16
3.3. Establishing links with public health authorities and other partners involved in COVID-19 vaccination	17
3.4. Identifying suitable pathways to integrate COVID-19 vaccines into HIV harm reduction programmes.....	17
3.5. Identifying a vaccination provider and developing a vaccination plan.....	29
3.6. Advocacy for vaccines for people who use drugs	29
3.7. Developing a COVID-19 vaccine outreach plan and information materials	30
3.8. Training HIV harm reduction workers.....	30
4. Resources	32
5. References	33

Acknowledgments

This technical guidance benefited from the contributions of many experts: Annie Madden, International Network of People who Use Drugs (INPUD); John Kimani, Desmonio Omboto, Kenya Network of People who Use Drugs (KeNPUD); Rosma Karlina, AKSI (Action for Justice Indonesia); Baby Virgarose Nurmaya, Womxn’s Voice; Mary Harrod, Charles Henderson, NSW Users and AIDS Association (NUAA); Michael Wilson, Bellhaven Harm Reduction Centre; Murdo E. Bijl, Asia Harm Reduction Network (AHRN) Myanmar; Olga Belyaeva, Eurasian Network of People who Use Drugs (ENPUD); Jason George, New Zealand Needle Exchange Programme (NZNEP); Jane Batte, Joint United Nations Programme on HIV/AIDS (UNAIDS); Dasha Matyushina-Ocheret, UNAIDS; Annette Digna Verster, World Health Organization (WHO); Ernst Wisse, Médecins du Monde; Sam Shirley-Beavan, Cinzia Brentari, Harm Reduction International (HRI); and Iryna Mikhnovets, UNODC.

This technical guidance was developed by Dr Robert Csák, HRI, in collaboration with Dr Monica Ciupagea, United Nations Office on Drugs and Crime (UNODC) and Naomi Burke-Shyne, HRI.

Abbreviations

AHRN	Asia Harm Reduction Network
CDC	Centres for Disease Control and Prevention
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
EuroNPUD	European Network of People Who Use Drugs
HCV	viral hepatitis C
HPV	human papillomavirus
HRI	Harm Reduction International
INPUD	International Network of People Who Use Drugs
KeNPUD	Kenyan Network of People Who Use Drugs
NSP	needle and syringe programme
NUAA	New South Wales Users and AIDS Association
OAT	opioid agonist therapy
PPE	personal protective equipment
TB	tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNODC	United Nations Office on Drugs and Crime
WHO	World Health Organization

Definitions of key terms

Advocacy is the process of communication for change, with specific goals directed at individuals and groups that can bring about reforms in policy, law, structures, services and social or cultural environments.

Community-led interventions are interventions that are designed, delivered and monitored by organizations or networks of people who use drugs.

HIV harm reduction - For the purposes of this operational tool HIV harm reduction services are defined by the interventions included in the comprehensive package detailed in the *WHO, UNODC, UNAIDS Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users* (2012).

Low-threshold services aim to minimize the barriers a patient may face in relation to starting, continuing and re-engaging in opioid agonist therapy.

Opioid use disorders are characterized in the International Classification of Diseases 11th Revision (ICD-11) by the pattern and consequences of opioid use. This group of disorders includes harmful use of opioids and opioid dependence.

Opioid dependence is defined in the ICD-11 as a “disorder of regulation of opioid use arising from repeated or continuous use of opioids. The characteristic feature is a strong internal drive to use opioids, which is manifested by impaired ability to control use, increasing priority given to use over other activities and persistence of use despite harm or negative consequences. These experiences are often accompanied by a subjective sensation of urge or craving to use opioids. Physiological features of dependence may also be present, including tolerance to the effects of opioids, withdrawal symptoms following cessation or reduction in use of opioids, or repeated use of opioids or pharmacologically similar substances to prevent or alleviate withdrawal symptoms. The features of dependence are usually evident over a period of at least 12 months but the diagnosis may be made if opioid use is continuous (daily or almost daily) for at least 3 months”.

Opioid agonist therapy (OAT) refers to the prescription of opioid agonist medications with long-lasting effects at an appropriate dose to people with opioid dependence. It is provided under medical supervision and supported by access to evidence-based psychosocial interventions. OAT is most effective as a maintenance therapy (sometimes referred to as opioid agonist maintenance therapy or OAMT) and should be provided for as long as a person requires it. OAT is the term used for this intervention in this document.

Opioid agonist medications are medications that bind to and activate opioid receptors. The World Health Organization (WHO) has listed methadone (full agonist) and buprenorphine (partial agonist) as essential medicines since 2005. Other medications used for OAT include (slow-release) morphine, opium tincture and diamorphine (heroin) [5]. Methadone and buprenorphine are the most-studied agonist medications and are the focus of this tool.

People with opioid dependence in this tool refers to people who meet the ICD-11 criteria for opioid dependence.

People who use drugs refers to people who use psychotropic (or psychoactive) substances for non-medical purposes.

1. Introduction

The COVID-19 pandemic has put national health systems and international public health bodies under immense pressure. The pandemic has highlighted just how pivotal communities, civil society organizations and community-led networks¹ are in providing access to information and services in a public health emergency (1,2). While lockdown measures and physical distancing rules introduced in early 2020 seriously disrupted HIV service delivery, HIV harm reduction² services rapidly adopted innovative, adaptive approaches in the months that followed, enabling them to maintain coverage under the novel circumstances and link marginalized populations to social and health-care services (1,3).

This technical guidance aims to support HIV harm reduction services in further realizing their role as an essential public health service and, by drawing on their unique expertise and position, to strengthen national vaccination efforts and increase access to vaccines in one of the most marginalized populations.

This guidance has been developed in response to the COVID-19 pandemic, and its focus is COVID-19 vaccines. However, the steps and recommendations in this document may also be used to integrate other vaccination campaigns into HIV harm reduction programmes and increase adherence to vaccines like seasonal influenza, hepatitis B or human papillomavirus (HPV).

1.1. Background

The COVID-19 pandemic exacerbated existing health inequalities, and its direct and indirect consequences disproportionately impacted the most marginalized and criminalized communities (4). People who inject drugs, an estimated 11.2 million globally (9), are among these communities. Due to pre-existing socio-structural inequalities, people who use drugs are more likely to experience social and economic disadvantage, stigma and discrimination (5,6).

At the time of writing, there are no published data on the incidence or prevalence of COVID-19 among people who use drugs. However, evidence indicates that compared with the general population, people who use drugs, especially people who smoke or inject drugs, face elevated risks and vulnerabilities of COVID-19 infection (5,7). Specifically, smoking or inhaling increases COVID-19-related risks, as it is associated with pulmonary and respiratory complications (8). In addition, people with a long history of opiate or stimulant use are more likely to have compromised immune systems, another factor that increases vulnerability (7). People who inject drugs can have underlying medical conditions that enhance vulnerability to COVID-19, such as HIV, viral hepatitis and tuberculosis (TB). The prevalence of HIV and viral hepatitis C (HCV) is higher among people who inject drugs than in the general population; HIV prevalence is estimated to be 12.6% and HCV prevalence 50.1% (9,10). HIV coinfection with TB also increases COVID-19 related risks for people who inject drugs (5). Finally, upwards of 58% of people who inject drugs have a history of incarceration (11); communicable diseases, especially HCV and TB, are particularly prevalent in prisons and closed settings around the world (12,13).

¹ This guidance uses “community-led” as defined by UNAIDS and communities: “Community-led organizations, groups and networks, whether formally or informally organized, are entities for which the majority of governance, leadership, staff, spokespeople, membership and volunteers, reflect and represent the experiences, perspectives, and voices of their constituencies and who have transparent mechanisms of accountability to their constituencies. Community-led organizations, groups, and networks are self-determining and autonomous, and not influenced by government, commercial, or donor agendas.” See UNAIDS (2020), *Progress report of the multi-stakeholder task team on community-led AIDS responses*.

² For the purposes of this technical guidance, HIV harm reduction services are defined by the interventions included in the Comprehensive Package detailed in the WHO, UNODC, UNAIDS *Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users* (2012).

COVID-19 measures introduced at the beginning of 2020 to reduce virus transmission, such as physical distancing rules, isolation and stay-at-home mandates, and travel restrictions also negatively affected people who use drugs. These measures not only disrupted access to health and social care but caused an increase in adverse mental health impacts, including isolation, and anxiety related to the consequences of COVID-19 infection. These stresses compounded the existing risks of mental health issues experienced by people who use drugs due to criminalization, stigma and discrimination (2,11,14,15). Moreover, recent analysis of the COVID-19 measures concluded that certain unintended consequences of these public health interventions can lead to an increased risk of overdose deaths (16). Such unintended consequences include increased drug use in riskier settings (using alone or stockpiling of drugs); insufficient access to HIV harm reduction services or opioid agonist therapy (OAT) due to closure or limitations imposed on services; and an increased risk of return to drug use (with reduced tolerance) due to worsening mental health issues. Furthermore, people who use drugs experiencing unstable housing conditions or economic hardship may be less able to maintain self-isolation or adhere to physical distancing rules, as such individuals need to access OAT (as often as once per day) or antiretroviral therapy medication, or have to buy drugs to avoid withdrawal symptoms (16). All these circumstances can increase the risks of drug use and overdose (16).

HIV harm reduction services were seriously challenged when COVID-19 emerged and the related public health measures were put in place. In 2020, these services were completely disrupted in 30% of countries reporting to the World Health Organization (WHO) and partially disrupted in 35% (17). Half of the reporting countries still noted some level of disruption at the end of 2021 (18). The effects varied widely across regions. While services in Western Europe, North America, and parts of Oceania and the Eurasia regions have been able to maintain a relatively good level of coverage, access was more seriously disrupted in Asia and Latin America. Service providers had to reduce opening hours or close entirely in all countries in the Middle East and North Africa, and OAT services were suspended in many countries throughout sub-Saharan Africa (1,19–21).

In this context, HIV harm reduction services proved resilient. They adapted quickly to maintain service coverage and adopted COVID-19 prevention measures, adjusted service delivery and integrated innovative methods (1,22,23). New modes of service provision – for example, mail delivery of needles and syringes and other commodities; offering online, phone or video consultations; and increased outreach activities – became common, along with the provision of more services in low-threshold and community settings (1,20,23). Furthermore, OAT regulations were eased in high-, middle- and low-income countries around the world, with expanded take-home periods, home delivery of OAT medications or distribution in outreach settings (1,23,24). Specifically, 47 of the 84 countries with established OAT programmes provided for longer take-home periods in 2020 (1). In at least nine countries, waiting periods and barriers to initiation were reduced (1,23,24).

Community-led networks were among the first to react to the pandemic and played an essential role in maintaining coverage of services. The International Network of People Who Use Drugs (INPUD), in collaboration with 3D Research and the European Network of People Who Use Drugs (EuroNPUD), was the first to develop guidelines and a set of HIV harm reduction tips (available in nine languages) to support people who use drugs to avoid COVID-19 (25,26). A leaflet customizable to local and national contexts was also developed by communities and made available in 20 languages.

To support their efforts, in March 2020, the United Nations Office on Drugs and Crime (UNODC) issued guidance on the continuation and sustainability of harm reduction services during the

pandemic,³ and WHO issued guidance identifying HIV harm reduction services as an essential health service that should be maintained (32).

Peers were crucial in disseminating information on COVID-19 to other people who use drugs and contributed substantially to service delivery, with peer-to-peer needle and syringe distribution in some cases being the only service available when larger services closed their doors and moved operations online (2,14).

People who inject drugs often face stigma and discrimination in the health-care system, which frequently results in their being forced away from critical services, information and support (15). HIV harm reduction services – which work without judgement, stigma or discrimination – have been instrumental in connecting their clients not only to COVID-19 information and preventive approaches, but also to vaccination programmes (27–29).

2. Planning for the implementation of COVID-19 safety measures

This section summarizes some of the low-threshold, high-impact interventions that are relevant to HIV harm reduction services on an ongoing basis to ensure best possible coverage and continuity of services in the case of a public health emergency like the COVID-19 pandemic (1,20,21,30,31).

Recommended steps for HIV harm reduction service implementers:

- Carry out situational analysis for COVID-19 safety measures
- Implement service adaptations
- Share information materials
- Train HIV harm reduction workers

Community participation is key throughout all steps.

2.1. Situational analysis for COVID-19 safety measures

HIV harm reduction services have already established their central role in key interventions to reach public health goals such as reducing mortality and morbidity, including the elimination of HIV and viral hepatitis, because they can reach people who use drugs where they are and deliver tailored services. As outlined above, it is important to recognize that people who use drugs and people who inject drugs are more vulnerable to health risks than the general population, especially in relation to COVID-19, due to their marginalization. In this context, it is pivotal to ensure that they have uninterrupted access to essential health and HIV services.

It is useful to conduct a situational analysis periodically throughout pandemic response periods to note major changes and understand new limitations and opportunities. The situational analysis should involve:

- an assessment of the local legal and policy environment and prevention measures (for example, lockdown/curfew rules, organizations and occupations exempt from lockdown rules, policies regulating social welfare, health care and/or HIV harm reduction services)
- a review of data on COVID-19 incidence, prevalence and vaccines, drug use and services
- a stakeholder analysis
- a survey of the available resources at the service, including financial resources, infrastructure and HIV harm reduction workers, to be able to decide on feasible changes in service delivery.

³ <https://www.unodc.org/unodc/en/hiv-aids/new/covid-19-and-hiv.html>

Involving community-led networks and the community at the situational analysis phase is essential. HIV harm reduction services can adapt in different ways, and the community must be included in decision-making processes when choosing the most appropriate modality of service delivery in the specific context.

Over the COVID-19 pandemic, frontline HIV harm reduction service providers⁴ demonstrated their ability to quickly adapt, and they often did this by learning through practice and responding to challenges as they emerged. There may be situations where a situational analysis is not feasible before a decision due to the rapidly changing environment. This should not be an excuse for inaction.

Legal and policy environment and prevention measures: In 2020, WHO defined HIV harm reduction services as essential services (32). HIV harm reduction services should be included among essential services defined by governments at national level, and service providers should be included in the defined group of frontline workers. Being included in these defined groups enables access to appropriate protective equipment and the authority to move about an area in the course of their duties. It is important to advocate continually with local decision-makers for the inclusion of HIV harm reduction services among essential services and to ensure the continuity of service provision and appropriate coverage.

Data: It is important to identify both national and local public health data sources that can be used to assess the pandemic risks and overall COVID-19 situation. This may become a regular exercise, as the degree of health risk will change with the different waves of the pandemic, entailing adjustments to prevention measures in place at the service.

Stakeholder analysis: Relevant national and local public health actors should be identified. In a public health emergency, more focused or more frequent coordination may be appropriate between these actors, and HIV harm reduction services should be included. A stakeholder analysis helps service providers to identify reliable sources of information and key partners in health and social services.

Programme resources: To be able to identify the appropriate and feasible changes needed to implement COVID-19 prevention measures, an assessment of programme resources is necessary:

- financial resources and prospects
- stocks of supplies
- available human resources
- a clear estimate of the number of clients who can enter the programme under physical distancing rules
- the capacity of a mobile outreach van (where available) to provide COVID-19-safe service in outdoor settings.

The experience and the skills of HIV harm reduction service providers are also valuable assets. It is likely that they already have basic epidemiological knowledge, as disseminating HIV- and viral hepatitis-related information is typically part of their everyday tasks. Websites, reliable social-media

⁴ This guidance uses the term “HIV harm reduction service providers” to refer to the people delivering HIV harm reduction services – likely to be a combination of peers or people with lived experience of drug use, as well as clinicians, volunteers and service providers without personal experience of drug use. This guidance also specifically and separately acknowledges community-led networks to give due emphasis to peer involvement.

commentators and other HIV harm reduction online spaces can also be valuable resources in establishing COVID-19-safe options to connect with clients.

Example of early adaptation and implementation of COVID-19 safety measures – AHRN, Myanmar

In February 2020, as a response to early signs of the COVID-19 outbreak in China, the Asia Harm Reduction Network (AHRN) in Myanmar developed a COVID-19 Contingency Plan and Response Guidance. Although there was very little available information, the network planned ahead to ensure service coverage, since its programme serves 60,000 clients. AHRN found early information – for example, on the website of the Centres for Disease Control and Prevention (CDC) – and took a pragmatic approach to drafting the guidance, looking at the network’s resources and assessing what was needed to run all clinics from the perspective of logistics, supply chain and infection control. AHRN introduced a range of measures to adapt service provision, and transferred stocks, commodities and essential medicines from its central and regional warehouses to all 21 of its clinics and drop-in centres. The network was prepared to maintain service delivery for at least nine months, anticipating lockdowns and travel restrictions. Similarly, to TB infection control, AHRN implemented a COVID-19 surveillance mechanism to identify and register COVID-19 symptoms in HIV harm reduction workers and clients entering AHRN facilities and project sites (for example, prisons and other closed settings).

AHRN made personal protective equipment (PPE) available, and trained HIV harm reduction workers on PPE use, while an appointment system was also set up to ensure physical distancing in AHRN premises. Transparent plastic walls were installed to form makeshift cabins so that HIV harm reduction workers could continue face-to-face consultations and maintain access to services while mitigating the risk of COVID-19 exposure.⁵ AHRN adjusted its needle and syringe programmes (NSPs) and OAT clinics to comply with physical distancing requirements by painting signs on the floor and providing plastic face shields for HIV harm reduction workers. The network also scaled up take-home OAT, antiretroviral therapy and treatment of latent TB infection, increased NSPs through outreach and local shops, and involved more peers and volunteers in remote villages.



AHRN COVID-19 prevention measures in April 2020

2.2. Service adaptations

⁵ <https://ahrnmyanmar.org/service-providing-during-covid-19-pandemic-at-waing-maw>

International public health bodies like WHO, the European Centre for Disease Prevention and Control and the Africa Centres for Disease Control and Prevention agree on effective COVID-19 prevention measures.⁶ While the use of PPE is essential, it must be accompanied by other infection prevention and control measures. In line with current national guidelines and the local transmission situation, it is recommended that HIV harm reduction programmes adapt their service provision policies to integrate the following measures:

- face masks (and other PPE appropriate to the service)
- physical distancing
- strict hand hygiene, i.e. use of alcohol-based rubs or soap and water
- regular cleaning and disinfecting of surfaces (especially frequently touched surfaces)
- limits on the number of people in closed spaces to avoid crowded indoor settings
- appropriate ventilation of indoor spaces.⁷

Services should assess the situation and adapt accordingly, prioritising staff and client safety. This can be done by:

- **providing well-ventilated rooms** with enough space to allow for physical distancing
- **providing adequate space and or equipment** for staff to carry out online consultations
- **providing access to outdoor waiting areas** for clients seeking face-to-face consultations
- **encouraging staff to wear masks** even when it is no longer mandatory at the national level
- **making PPE and hygiene supplies available for staff** to ensure the safest possible work environment
- **making PPE available for clients** to ensure that COVID-19 prevention requirements do not stop people who use drugs from accessing the programme.

Some of the innovative, low-cost examples used by HIV harm reduction services to access PPE include cooperation with hospitals in acquiring PPE; leveraging donations or repurposing grant funds; and relying on health-service regulations that mandate that HIV harm reduction services are provided with PPE. Services can also consider reaching out to local (city or national) public health coordinating bodies to check for initiatives providing PPE to institutions in the health-care and social welfare system during COVID-19 and other public health emergencies.

Providing hygiene supplies such as hand sanitiser and surface disinfectants to clients (especially people who inject drugs) allows people to take steps to protect their own health. For example, VOCAL Kenya and Harm Reduction International (HRI) applied for, and were awarded, COVID-19 emergency response funds, which were used to establish 26 hand-washing stations with clean water and soap in strategic locations around Kibera and Kawangware for the community of people who use drugs, and to support service delivery adaptations.

Potential negative effects

Service adaptations like physical distancing, masks and other PPE can have a negative effect on interactions with clients, because they can restrict non-verbal behaviours (such as handshakes/fist bumps, leaning in etc.) and make it harder to read facial cues. Furthermore, wearing masks makes it harder to understand each other due to muffled speech and the inability to lip-read. Such COVID-19 protection measures can therefore negatively impact service quality. The safety of HIV harm reduction service providers is paramount and cannot be realized without these measures. However, it is important to acknowledge that these can make it harder to work on the ground and connect to

⁶ See for example: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
<https://www.who.int/publications/i/item/WHO-2019-nCoV-IPC-Masks-Comm-health-care-2021.1>
<https://www.ecdc.europa.eu/en/covid-19/prevention-and-control/non-pharmaceutical-interventions>
<https://africacdc.org/tag/covid-19-guidance/>

⁷ This list is not definitive: always consult the most recent guidelines available.

people, and programmes should consider the potential negative effects when implementing service adaptations.

These challenges emphasize the importance of engaging with clients, sharing information and explaining the need for protective measures. Strong communication allows HIV harm reduction workers to manage clients' fear, anxiety or questions, and to gain support for necessary adaptations.

2.3. Sharing information materials

HIV harm reduction services, together with community-led networks, have played a pivotal role in informing people who use drugs about COVID-19. Highly marginalized groups may have more limited access to reliable information about the pandemic and how it is unfolding. It is strategic for HIV harm reduction programmes providing services to marginalized communities like people experiencing homelessness, indigenous people and undocumented migrants to disseminate clear, accessible, evidence-based information about COVID-19.

According to the local context and community needs, information materials could include topics like general COVID-19 prevention; proper use of PPE; the extent of travel bans, levels of lockdown, curfew times or rules regarding meeting with others; information on vaccines and access to vaccination; and information on mitigation measures (for example, hand-washing, use of disinfectants, face masks, fresh-air ventilation etc).⁸ Materials can also cover the interactions between COVID-19 and other comorbidities for people who use drugs, HIV harm reduction advice, and information about changes in the provision of OAT.

HIV harm reduction services may not need to develop new information materials. Other health and social services identified during the situational analysis may have materials appropriate for distribution more widely. For example, the comprehensive HIV harm reduction tips for people who use drugs developed by INPUD are tailored specifically to the needs of the community, and are available in several languages.⁹ Furthermore, UN agencies and international organizations such as the Joint United Nations Programme on HIV/AIDS (UNAIDS), WHO, UNODC, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Médecins du Monde, INPUD, EuroNPUD and HRI have developed guidance and conducted webinars to share experiences and innovations; these can also be used in developing information materials.¹⁰

2.4. Training HIV harm reduction service providers

HIV harm reduction services are an important source of health-related information for their clients. Therefore, it is key to ensure that service providers have robust knowledge of COVID-19-related prevention strategies and are up to date on the COVID-19 situation, including:

- COVID-19 prevention measures
- the current transmission situation
- national or local COVID-19 mitigation rules
- vaccine availability and access to vaccination (including boosters).

⁸ Latest technical guidance on COVID-19 related measures can be found at the WHO website here: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance-publications>

⁹ <https://inpud.net/covid-19-crisis-harm-reduction-resources-for-people-who-use-drugs/>

¹⁰ See for example: <https://www.youtube.com/watch?v=VT5C16qMt04>; <https://www.unaids.org/en/covid19>, <https://www.who.int/teams/social-determinants-of-health/equity-and-health/webinar-series>, <https://www.medecinsdumonde.org/en/harm-reduction>, <https://www.euronpud.net/webinar-series>, https://www.emcdda.europa.eu/topics/covid-19_en, <https://www.unodc.org/unodc/en/hiv-aids/new/covid-19-and-hiv.html>

HIV harm reduction service providers should be trained to use PPE properly, practise all other prevention interventions (like physical distancing and hand hygiene) appropriately, and explain these measures to their clients. HIV harm reduction services typically offer people who inject drugs health interventions such as HIV and HCV diagnosis, treatment and counselling. The existing skills and knowledge base derived from providing these interventions are critical assets in a pandemic response. Training to further develop additional needed skills and acquire new information should be organized.

During COVID-19, many HIV harm reduction services integrated innovative methods to meet the needs of the community and compensate for decreased service coverage, for example through the use of online assistance, messaging and video conferencing. Capacity-building for HIV harm reduction service providers should be provided if necessary, to enable them to develop the skills to use new tools like messaging services or social networks.

Digital divide

COVID-19-related adaptations of HIV harm reduction services often involve increased online presence and more Internet-based services. However, some groups of people who use drugs do not have regular access to the Internet or mobile phones, or are not comfortable with digital technologies. Services should adapt to ensure these clients are still served.

When implementing online services, HIV harm reduction services should consider the challenges posed by limited access to mobile phones, mobile data plans or the Internet in general. Digital security is also an important issue, since drug use is broadly criminalized. Protecting clients' online privacy should be central to every HIV harm reduction service provided over the Internet.

Summary of questions – checking your readiness...	
	Are HIV harm reduction services included among the defined essential services and exempt from pandemic measures like service closure?
	Are HIV harm reduction service providers included in the definition of “frontline workers” and exempt from travel regulations or curfew?
	Are community-led networks meaningfully involved in the situational analysis?
	What are the national and local public health data sources that can be used to assess the situation?
	Who are the critical stakeholders in national and local public health departments? Do you have their contact information?
	What are the available resources at the HIV harm reduction service (including financial resources, HIV harm reduction workers and infrastructure – premises, mobile vans etc.)?
	Are personal protective equipment and hygiene supplies available to ensure the implementation of appropriate mitigation measures?
	Are information materials developed to address the pandemic appropriate to the local context and community needs?
	Are community-led networks and the community involved in developing and sharing information materials?
	Are HIV harm reduction service providers trained on appropriate use of prevention interventions and other skills necessary to maintain services during a pandemic?

3. COVID-19 vaccination programme planning

COVID-19 prevention and mitigation measures may be more readily accepted among people who use drugs when delivered and supported by HIV harm reduction services. COVID-19 (and other) vaccines can be made more accessible among this group when trusted HIV harm reduction service providers, including peers, are supporting people who use drugs to acquire accurate information and navigate health-care systems.

Vaccine hesitancy can be a public health concern. COVID-19 vaccine hesitancy has emerged as a considerable problem due to lack of information or the spread of misinformation, and has to a certain degree undermined public confidence in COVID-19 vaccine safety. Recent studies show that people who use drugs can have considerable rates of vaccine hesitancy, sometimes higher than the general population (33,34).

Barriers in accessing health services can also hinder the uptake of COVID-19 vaccines among people who use drugs. Structural factors such as stigma and discrimination can limit health-care engagement of people who use drugs, especially people who inject drugs, and can lead them to disengage or actively avoid institutional health-care settings (1,15,35). In contrast, HIV harm reduction services are based on the principle of providing non-stigmatizing and non-judgmental environments, where people who use drugs are treated with dignity and respect. This builds trust in service providers, making them a valued source of health-related information. The following section supports HIV harm reduction services to strengthen their clients' access to COVID-19 vaccines.

Globally, inequitable distribution of vaccines represents an overwhelming barrier to access. As of the beginning of March 2022, 69% of the population in high-income countries have been vaccinated with at least one dose of the COVID-19 vaccine, while just 14% of people in low-income countries have received one dose (36). This guidance aims to support planning in diverse settings, but recognizes this overwhelming limitation.

3.1. Full situational assessment

The situational analysis (see Section 2.1) related to COVID-19 safety measure implementation establishes the basis for a full situational assessment for COVID-19 vaccination programme planning. The aim is to identify an appropriate and feasible way to integrate COVID-19 vaccinations into HIV harm reduction services. In addition to analysing vaccine-related regulations and policies, it is important to explore the needs of the community of people who use drugs to ensure that interventions will address the most urgent issues in the target population. It is essential to **meaningfully involve the community** in the assessment, design and implementation of plans for improving access to vaccines. Peer-informed programme design and implementation will ensure that connections to vaccination programmes are accessible and appropriate to the needs of the community, while at the same time strengthening the credibility of, and trust in, the service.

Policies, laws and regulations: The national legal and regulatory framework on COVID-19 vaccination will determine the possibility of integrating COVID-19 vaccines campaigns into HIV harm reduction programmes. Policies and rules governing vaccination may be frequently updated or adjusted to respond to the epidemiology of the pandemic. The legal framework assessment should identify and clarify:

- the regulations relevant to the **institution**: What are the rules relating to vaccine administration and storage?

- the regulations relevant to HIV harm reduction **service providers**: What are the rules in place determining who can administer vaccines? Do health-care professionals need particular qualifications or training?
- the regulations relevant to the **individuals seeking the vaccine**: Are there barriers related to eligibility – for example, is an identity document or social security number requested? Is health insurance required? Do individuals need local registration (i.e., a permanent address)? Are individuals required to register online? Are there any requirements related to age or health status?

As HIV harm reduction programmes serve marginalized communities — including people who use drugs, people experiencing homelessness and undocumented migrants — regulations regarding eligibility for vaccines are important. In particular, presenting an identity card, having valid social security or online registration requirements could be significant barriers.

There have been examples of more relaxed regulations providing for the erection of temporary vaccination sites in non-health-care institutions and/or the training of volunteers to administer COVID-19 vaccines. Such circumstances are good opportunities for HIV harm reduction services to become part of vaccination efforts.

It is important to consider the requirements imposed on vaccination programmes, including capacity related to data and reporting. Public health authorities and organizations responsible for national or local vaccination efforts should be consulted on these aspects, and links to them should be established to ensure that the HIV harm reduction programme can meet all requirements. For example, vaccination data is usually recorded and aggregated at national or local level; vaccination programmes must be able to feed their data into that system. Furthermore, vaccine certificates are typically part of COVID-19 vaccine programmes; clients getting vaccinated at an HIV harm reduction service must be able to receive a vaccine certificate.

Vaccines: Available vaccines and requirements regarding specific vaccines will also determine the extent to which vaccination programmes can be integrated into HIV harm reduction services. The situational assessment therefore should include a scoping of all the available vaccines in the local context. The assessment of each vaccine should check for national authorisation or approval status, international recognition of the vaccine, ages recommended, number of doses required, recommended time interval between doses, time after the final dose to reach full effect, possible side-effects, and storage requirements. Information regarding the type of vaccines used as boosters and the effectiveness of different combinations of vaccines should be included in the assessment, when available.

These resources can be useful in training HIV harm reduction service providers and drafting information materials with programme clients.

Stakeholder analysis: Similar to the stakeholder analysis for the implementation of COVID-19 safety measures, a thorough analysis of relevant national and local public health actors is useful at this stage. The stakeholder analysis should aim to list the local social welfare and health services responsible for coordinating vaccination efforts. This list should include state services, such as the dedicated COVID-19 response team or the Ministry of Health, as well as civil society and non-state actors. Furthermore, actors who might be valuable partners in advocacy or implementation should also be identified during stakeholder analysis. It is important to identify and connect with professional associations (for example, medical or social-work associations, HIV, viral hepatitis or TB associations) able to support HIV harm reduction organizations in their efforts to associate with or integrate vaccination programmes.

Additionally, the role of law enforcement and police in national or local vaccination programmes should be considered. There are contexts where police are involved in COVID-19 responses (see for example,

Case study – KeNPUD, Kenya) and this can create a serious barrier to access for people who use drugs in countries where drug use is illegal.

Programme resources: To evaluate the possibilities for integrating vaccine delivery into the HIV harm reduction service, an assessment of programme resources is necessary:

- financial resources
- available human resources and the knowledge and skill set of HIV harm reduction service providers
- physical environment of the programme, characteristics of the building, existing equipment and opening hours.

The physical environment of the programme and the premises where it is located may not be adequate to implement fully integrated vaccination if it is not possible to dedicate properly ventilated rooms, private space for vaccination, and a room where clients can wait for 15 minutes after getting vaccinated (subject to the type of vaccine administered), and if the needed equipment for vaccine storage and transport is not available. The programme's opening hours and the number of HIV harm reduction workers available can determine a realistic timeframe for vaccination or the extent of an accompanying service. Assessing the knowledge and skill set of HIV harm reduction workers can establish who can deliver the vaccination or what capacity is missing. It is useful to consider the availability and skills of volunteers who can help in establishing a vaccination programme. Physicians or nurses can not only help in vaccination but can be valuable allies in informing HIV harm reduction workers or developing information materials, organizing webinars or real-life sessions on vaccines.

3.2. Identifying and estimating the number of clients that will require vaccination

Estimating the number of clients requiring vaccination is an essential part of the needs assessment. Though the public health approach in most countries aims to get the majority of people vaccinated, priority groups may be defined among the general population (for example, by age, health condition or other vulnerability). Prioritizations such as these may apply to clients of the HIV harm reduction service. National or local datasets and surveys of people who use drugs and people who inject drugs can be a good basis for a population size estimate. Extrapolating from this data allows for an estimation of the number of people who use drugs who may seek the vaccine. Available seroprevalence surveys on the prevalence of HIV, viral hepatitis and TB among people who inject drugs can be especially valuable sources, as they can identify the most vulnerable subgroups of the population.

Besides national surveys and estimates, service providers can use their own data sources. In addition, ad hoc surveys or qualitative research exploring clients' needs can provide invaluable guidance. HIV harm reduction services typically have several data sources that can be useful in estimating the vaccination needs among clients. For example, daily records of clients entering the programme, the client registration database, data recorded for programme evaluation or any data source on activities at the programme can be used to refine estimates based on national data. It is essential to involve peers in identifying and estimating the number of clients that will require vaccination. Members of the community have insights on the needs of the community that no other source of information can provide. Furthermore, there may be no other source of information on a specific subgroup of people who use drugs. An estimate of the number of clients requiring

vaccination must be made while the epidemic is ongoing; it is likely that surveys or other scientific studies will not be available in the necessary timeframe.

Safety of HIV harm reduction service providers

The safety of HIV harm reduction service providers must be a priority. They are key in ensuring the availability of essential services like OAT or NSPs, and they are therefore working continuously on the frontline with people who have multiple vulnerabilities. Appropriate access to PPE is essential. Furthermore, HIV harm reduction service providers must be included in the priority groups for vaccines and have access to vaccines and boosters as soon as possible.

3.3. Establishing links with public health authorities and other partners involved in COVID-19 vaccination

Relevant actors identified through the stakeholder analysis should include public health authorities and possible partners in implementing a vaccine programme. Since services such as OAT and NSPs are important public health initiatives (for example, for HCV elimination or HIV prevention and treatment), it is likely that connections with public health authorities are already established. These connections can be used to reach out and help with establishing connections to actors responsible for COVID-19 vaccination. Furthermore, these connections can also be used to implement other vaccinations campaigns, such as seasonal influenza, hepatitis B or HPV.

Relevant public health authorities and partners can be involved early during the planning phase to help conceptualize and develop a suitable pathway to integrate COVID-19 vaccines into HIV harm reduction services. It is important to involve decision-makers and people working in vaccination programmes during planning, as they will have relevant inputs and practical knowledge. Establishing open communication channels with decision-makers and partners in the public health system will help HIV harm reduction service providers take into account all relevant aspects when deciding on the appropriate integration pathway.

3.4. Identifying suitable pathways to integrate COVID-19 vaccines into HIV harm reduction programmes

Based on the full situational assessment, considering the needs of the community of people who use drugs, the policy environment and the programme resources, as well as population size estimates and links with public health authorities, HIV harm reduction services can plan for the integration of COVID-19 vaccines, including both the original dose(s) and boosters. A fully integrated COVID-19 vaccine programme is ideal – i.e., one where people who use or inject drugs can access the COVID-19 vaccine without barriers while collecting sterile syringes or opioid agonist medication. However, this may not be feasible in some contexts.

Where full integration is not possible, HIV harm reduction services can support their clients and broader public health efforts by using their established role in the community as a trusted source of health-related information and provider of counselling without stigma and discrimination. Critical components of vaccination programmes in addition to national or local public health interventions include referrals, connecting people who use drugs to the health-care system, disseminating accurate information and motivating people in the community to get vaccinated.

The following pathways of COVID-19 vaccine integration are not comprehensive but illustrative of three general approaches to integration. Service providers can start in one pathway and build up to another level of integration. Timely implementation is key; therefore, service providers are

encouraged to plan ahead and prepare for greater integration while immediately commencing implementation of the lowest-threshold programme elements.

Path 1 – Information and motivation

Where vaccine-related laws and regulations do not permit HIV harm reduction services to administer COVID-19 vaccines at their premises, or where HIV harm reduction services do not have adequate resources to implement a vaccination programme, path 1 is the appropriate way forward.

HIV harm reduction programmes were key in informing their clients about COVID-19 and the related prevention measures at the beginning of the pandemic, thus they can take on and continue this role with vaccines. In this path they can aim to address misinformation and misconceptions about vaccines in the community and inform the community about how to get vaccinated. For example, they can let people know what to expect when they receive the vaccine; support clients in registering for it if needed, including helping with technology/Internet issues or supporting undocumented clients; display the locations and opening hours of vaccination sites, and inform about the availability of boosters. Programmes can also motivate clients to get vaccinated, for example, through peer counsellors, information and examples of vaccinated members of the community and HIV harm reduction workers.

Path 1 key programme elements:

- Provide information and advice on COVID-19 vaccines.
- Provide information about vaccination sites – how to get to there, what to bring, and opening hours.
- Provide information on community-friendly vaccination sites.
- Develop peer-led information materials on COVID-19 vaccines and vaccination sites to fit the local context and the needs of the drug user community.
- Train peer navigators or peer counsellors about COVID-19 vaccines.
- Collect testimonials from vaccinated members of the community and HIV harm reduction workers.
- Support clients to register for a vaccine.
- Support clients to acquire or store vaccination certificates.
- Provide post-vaccine information (e.g. on possible side-effects).
- Organize events about COVID-19 vaccines (for example, inviting a physician to answer questions about vaccines).

[Case study – KeNPUD, Kenya](#)

The Kenyan Network of People Who Use Drugs (KeNPUD) is a network with over 2,000 members in five counties of Kenya (Kilifi, Mombasa, Nairobi, Kwale, Kiambu). KeNPUD's activities are based on a peer-to-peer model, where a peer leader, called *Maskani*, is responsible for organizing a local peer network, usually representing 40-50 persons who inject drugs. KeNPUD focuses especially on supporting groups of women who use drugs. Peer navigators link people who inject drugs to KeNPUD's head office and are responsible for raising awareness and disseminating information to people who inject drugs in the community.

At the beginning of Kenya's experience of the pandemic (July 2020), KeNPUD started COVID-19-related services by distributing PPE. With support from The Open Society Initiative for Eastern Africa (OSIEA) and INPUD, KeNPUD was able to buy more than 1,500 face masks and distribute them in the community and set up hand-washing facilities.

KeNPUD reports that vaccine hesitancy is not common, and that people who use drugs in Kenya want to get vaccinated. The issue is lack of information, and structural barriers like poverty, stigma and discrimination. Financial barriers are also a serious issue, as lack of funds prevents many members of the community from travelling to COVID-19 vaccination sites, resulting in low vaccination rates. COVID-19 vaccines are provided by non-governmental organizations, but fear of harassment from the police, who often provide security at vaccination sites, is a major barrier in accessing these services. A few OAT clinics have made COVID-19 vaccines available, but the vaccines are predominantly provided in large health institutions. KeNPUD reports that this is not adequate for the needs of the community. People who inject drugs need programmes with peer support, similar to OAT clinics where peer navigators are integrated into service delivery.

The majority of KeNPUD's COVID-19-related work has centred on educating the community about COVID-19, its risks, government instructions, and the risks of not getting vaccinated. COVID-19-related interventions are not separate services but are integrated into all of KeNPUD's programmes. For example, KeNPUD organized community conversations or trainings at which every participant received a health package with face mask and hand sanitizer, since these are still scarce. COVID-19 prevention information is also included in every event. KeNPUD adjusted its messaging to fit the practices of the community. For example, as most community members go to OAT clinics before the peer group meetings, they included COVID-19-related messages at the beginning and at the end of the meetings to reinforce the messaging and compensate for the effects of methadone. Tailoring messages to the needs of the community has also been key; for example, hand-washing instructions are posted both in Swahili and in English, and few overly technical terms are used in information materials. Messaging services like WhatsApp are central in disseminating information; KeNPUD has more than 200 members participating in chat groups where peer navigators can receive information and disseminate it to the community.



COVID-19 prevention session with women who use drugs at Ngara methadone-assisted treatment clinic, Nairobi County



COVID-19 prevention community session in Mombasa County

Path 2 – Cooperation

Path 2 proposes that, while HIV harm reduction services are not responsible for vaccinations, the vaccination programme is regularly available at HIV harm reduction premises. A practical alternative is for mobile vaccination programmes to regularly stop nearby. HIV harm reduction programmes with more resources can aim for closer cooperation with COVID-19 (or other) vaccination programmes. Building upon the trust in the community and the role of these services as a bridge between people who use drugs and national or local health-care services, HIV harm reduction programmes can aim to decrease barriers to accessing COVID-19 vaccines. In addition to programme elements in Path 1, service providers can build partnerships with the clinics responsible for COVID-19 vaccination and co-locate the vaccination programme with the HIV harm reduction service. It is important to estimate the number of clients requiring vaccination to establish how many doses would be requested from the vaccination programme.

Establishing a partnership with a vaccination provider will create a dedicated site for the community where people who use drugs, together with other marginalized and criminalized groups, are welcome and treated with respect and dignity. It is worth considering advocating for COVID-19 vaccination sites with opening hours to fit the preferences and times expressed by the community, and potentially collaborating with other civil society and community groups.

Another option is to ensure support at public vaccination sites by positioning peers or HIV harm reduction workers on site to help clients navigate the system and provide support as needed (to be planned and developed with relevant vaccination clinics). Accompanying clients from HIV harm reduction services to vaccination sites is another useful logistical support option, and an appropriate way to tackle barriers in access to health-care settings.

Path 2 key programme elements (in addition to path 1):

- Co-locate COVID-19 vaccination programme at, or position them close to, HIV harm reduction service premises, or organize regular access to a mobile COVID-19 vaccination programme.
- Provide peer or HIV harm reduction worker support at COVID-19 vaccination sites.
- Accompany clients to vaccination sites.
- Involve vaccination partners in events and trainings about COVID-19 vaccines.
- Provide post-vaccine support (information and personal support, for example, service hotline, online chat etc).

Case study – Bellhaven Harm Reduction Centre, South Africa

Bellhaven Harm Reduction Centre is a low-threshold community space providing a range of evidence-based HIV harm reduction and health-related services, including an NSP and methadone and other medications, and serving 150-175 clients per day. It has its origins in the beginning of the COVID-19 pandemic. In March 2020 the Deputy Mayor of Durban brought together a homeless task team with members of civil society organizations and the public sector to establish 12 safe-sleeping centres across the city. People working in HIV harm reduction knew that withdrawal symptoms could become a critical issue very quickly, because about 60% of people experiencing homelessness in Durban use *wonga/whoonga* (a local term for heroin). Some 2,500 people stayed in these safe sleeping centres, and many went through severe withdrawal symptoms. While the organizations involved started conversations with city leaders to get methadone delivered to these spaces, they started handing out “symptom packs” containing four different medicines to tackle withdrawal symptoms like joint pain, diarrhoea and sleeping problems. They distributed around 500 symptom packs per night for about a week, until methadone became available at the sleeping centres.

Collaboration during the initial response to COVID-19 helped to establish good connections with the Metro police, who transported nurses to the sites and protected and supported the HIV harm reduction services. COVID-19 acted as a catalyst for HIV harm reduction. Durban went from a prohibitionist and largely abstinence-based stance to a city that supports HIV harm reduction, and the Bellhaven Harm Reduction Centre was launched by the Deputy Minister of Social Development in October 2020. The programme is run by a partnership of three organizations — the South African Network of People Who Use Drugs (SANPUD), Durban University of Technology, and Advance Access & Delivery. The Municipality of eThekweni (city of Durban) is an important ally, supporting the initiative by providing a building for services. The Municipality invested in renovating the building, covers the costs of rent, water and electricity, and also provides security services for the programme. TB HIV Care and the Denis Hurley Centre (DHC) are also key supporters of the programme. For example, TB HIV Care provides a team of social workers and NSP supplies to the programme. Peers are an integral part of the team, attending all staff meetings and taking part in decision-making processes; the programme is not just peer-informed, but also peer-led.

Bellhaven now provides a full range of services. In addition to methadone and NSP, it also serves as a pick-up point for clients taking other medications. People are able to leave their medications with the nurses, who dispense them every day if clients would like. This service was set up because clients reported that medications were stolen from them, sometimes by the police during raids, and a lot of them are not able to go to the clinics to collect medications when they run out, because of their schedules. There is also a home delivery service, where peer treatment supporters take medications to people who are too sick to come to the centre. Screening for TB, HIV and HCV is available at the programme, and hepatitis B screening and vaccination. Bellhaven provides peers or social workers to accompany clients and walk them through the referral system, explaining the different steps and what the results mean.

As the centre was established during the pandemic, COVID-19 prevention is an integral part of the programme. Throughout the last two years, Bellhaven has provided masks for all clients. Masks and sanitisers were also distributed at all events held during the last year. The centre organized community events to address myths and misconceptions about COVID-19 and vaccines. COVID-19 was explained in a way that made sense to people experiencing homelessness, with advice tailored to their lifestyle. Bellhaven invited doctors and people who had been vaccinated to talk about their experience of being given the vaccine. Many of the events were held in isiZulu, the main language spoken by their clients.

Bellhaven was not a vaccination site, but the team there helped to support clients who wanted to be vaccinated at nearby shelters and NGOs that were serving as vaccination sites. The centre printed vaccination schedules of sites close to the programme and explained to people how to get vaccinated and where to go. Bellhaven's HIV harm reduction workers help clients navigate the registration process and make themselves available to accompany clients to vaccination sites.



A social worker from TB HIV Care leading a group discussion. Bellhaven has social workers from Advance Access & Delivery and TB HIV Care who lead group and individual sessions five days a week for clients.



Peer accompaniment partner visits his client on the street, part of a daily schedule of delivering chronic medications and a small meal to clients.

Path 3 – Fully integrated vaccination service

Where appropriate and feasible, HIV harm reduction programmes can aim for a fully integrated vaccination service. This is where COVID-19 vaccinations are available at an HIV harm reduction service and administered by staff members known and trusted by the community. HIV harm reduction service providers should determine the availability of vaccines according to the needs of the community and the estimated number of clients who require vaccination. Vaccines can be available throughout the opening hours of the service, organized as a drop-in service, or available at specified intervals or on certain days of the week. It is worth considering opening vaccination days up to clients' friends and family, and the broader neighbourhood as well. However, the privacy and anonymity of clients must be a priority. With this strong level of integration, HIV harm reduction services may also be able to support clients by holding back-up copies of their vaccine certificates (subject to clients indicating a preference for this, explicit client consent and local data regulations).

Path 3 key programme elements (in addition to paths 1 and 2):

- Provide drop-in COVID-19 vaccination at the service during opening hours.
- Set up and provide vaccination days/hours at the service.
- Ensure that the service has the capacity and systems to collect and provide required vaccination data to national/local public health systems (including receipt of proof of vaccination, QR code, etc).

[Case study – NUAA, Australia](#)

New South Wales Users and AIDS Association (NUAA) started in 1989 when a group of people who inject drugs and their supporters came together in response to the HIV epidemic in Sydney in the state of New South Wales (NSW), Australia. NUAA works with – by working for – people who use drugs and focuses on their health, rights and well-being. The association's programmes include a peer-led NSP with a nurse-based clinic, through to peer-led festival/event HIV harm reduction services where young people with lived or living drug experience educate, inform and assist festival-goers.

At the start of the pandemic, NUAA moved to online service delivery for the NSP, putting in place protocols and training to ensure the programme would always stay open. NUAA incorporated all COVID-19 countermeasures as they emerged (physical distancing, masks, hand-washing). and throughout the lockdowns worked on issues like preventing overdose and COVID-19 prevention. For three months under state-wide lockdown conditions, NUAA provided needle and syringe supplies in specific areas of the city, public housing blocks with COVID-19 case outbreaks and homeless shelters. Advocacy was also key during this period, because in certain neighbourhoods, people with lower socioeconomic status were much more heavily targeted by police and fined for breaking restrictions; for example, people were threatened and/or provided with fines for being in public spaces while picking up their OAT dose. Part of the COVID-19 response was making sure that the NSP was an essential service. As an organization, NUAA represents the lives of people who use or inject drugs and used the "essential service" component as a way of leveraging advocacy and adaptation. Early response and service continuity were also pivotal, not only by staying open throughout the lockdowns (when many health services were not), but also by introducing new ways to deliver services, for example through mail (postal) delivery of HIV harm reduction equipment and supplies such as naloxone. The latter increased NUAA's reach and coverage across the state and also increased essential peer-developed COVID-19 safety messaging as well, as NUAA resources go out with all mail orders.

Australia adopted COVID-19 vaccination relatively late; the first thing NUAA did was make sure that all NUAA personnel were vaccinated. NUAA advocated within the local drug and alcohol services to

tailor vaccine messaging to people who use drugs and highlighted research¹¹ showing higher vaccine hesitancy among people who use drugs. This advocacy had considerable effects, as later the Chief Health Officer of the NSW Ministry of Health named people who use drugs as one of the priority groups for COVID-19 vaccination. Vaccine hesitancy and general mistrust in health services through stigma and discrimination was, and remains, a significant issue around COVID-19 vaccines; clients' trust in NUAA was leveraged to convince people of the safety of vaccines and the importance of measures for staying safe and well within the prevailing (and rapidly changing) COVID landscape. NUAA had to work around limitations to integrate COVID-19 vaccines into its service, especially the need to provide enough space for clients to wait 15 minutes after receiving the injection, and the refrigeration requirements for vaccines. NUAA set up and promoted dedicated days when the vaccine was available at its nurse-based clinic within the NSP. Clients already knew and trusted the nurses who administered vaccinations. NUAA also set up drop-in vaccine days, though these were less successful than hoped; this service will be maintained when possible, as booster vaccine doses are now recommended. NUAA also assisted with vaccine clinics across the state, bringing in peers to promote vaccination and working alongside COVID-19 experts.

Training NUAA staff was key to make sure everyone was on the same page in terms of COVID-19 and vaccines and what they could offer, both for other organizations and people who use their services as well as more generalised promotional efforts for the constituency of people who use and inject drugs.

Information campaigns were also central elements of NUAA's COVID-19 related work. NUAA created information and educational materials about vaccines, one example being a social-media campaign focusing on personal "Peer jab stories", where people talked about their experiences of vaccination and their reasons for getting vaccinated. The association used all its social-media channels, organized COVID-19 webinars with public health experts, recorded podcasts and established a free peer phone line. NUAA continues to build upon established platforms like the NUAA User News magazine,¹² the NUAA website and NUAA's Facebook page with 4,000 followers. Thanks to these efforts, NUAA staff and wider personnel got access to COVID-19 vaccines, and around 100 people received their vaccines through NUAA's channels, while many more got the information they needed to access vaccines through other means.

¹¹ Dietze PM, Hall C, Price O, Stewart AC, Crawford S, Peacock A, et al. COVID-19 vaccine acceptability among people in Australia who inject drugs: Implications for vaccine rollout. *Drug and Alcohol Review*. 2022;41(2):484–7.

¹² See for example: <http://www.usersnews.com.au/home/2021/4/30/covid-19-update-vaccinations-are-here>

Peer jab stories:

Tony



I got my vaccine because I was ready to take whatever was on offer in order to protect myself and the people around me. My immune system is damaged, and I work with people deemed high risk. It was about community and peace of mind.

I know some people have reservations, but for me, the pros outweighed the cons. I went with AZ because of my age bracket, but I am happier with that choice now that we know a little more about the technology than we did before, and it seems to be the one I would have gone with anyway.

NUAA

Peer jab stories:

Felicity



The reason that I chose to get vaccinated was so that I could have peace of mind for myself and my community. We have seen the effects that COVID has on marginalised communities and low socioeconomic communities and I wanted to make sure that I could protect those communities as much as possible.

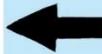
Being a member of the trans community I have seen hesitation towards getting vaccinated due to the lack of information about the interactions between Hormone replacement therapy (HRT) and COVID vaccinations, so I wanted to step forward as early as possible to get the jab so I can speak of my experience with others in my community.

NUAA

**IT WON'T BE THE MOST ENJOYABLE
SHOT YOU EVER HAVE...
BUT IT COULD BE THE MOST
IMPORTANT!**



**COVID IS SPREADING THROUGH THE
COMMUNITY OF PEOPLE WHO USE DRUGS,
PROTECT YOURSELF NOW!**



#GETYOURSHOT



Peer job stories developed by NAAA to encourage uptake of COVID-19 vaccines.

Pathways to integrate COVID-19 vaccines into HIV harm reduction programmes

HIV harm reduction services plan for the implementation of COVID-19 safety measures

- Conduct full situational assessment
- Consult community leadership
- Procure hygienic supplies and personal protective equipment
- Adapt services
- Develop information materials
- Train staff

COVID-19 vaccination planning

- Conduct full situational assessment (including regulations, legal barriers)
- Identify and estimate the number of clients who will require vaccination
- Establish links with public health authorities and other partners to be involved in the COVID-19 vaccination planning (consider factors associated with vaccine certificates and data)

Identify suitable pathways to integrate COVID-19 vaccines
Considering programme resources, estimate needs and assess the policy environment

Path 3 – Fully integrated vaccination service

Vaccines are available at the premises, administered by HIV harm reduction service staff

Key programme elements can be:

- Drop-in vaccination at the service during opening hours
- Vaccination days/hours
- Providing required vaccination data to national/local public health systems
- + Path 1 & 2 activities

- Develop community-led information materials and outreach plan
- Analyse, contact and advocate with external stakeholders and public health authorities
- Put in place agreements and conduct staff training

Path 2 – Cooperation

HIV harm reduction service, in partnership with vaccination sites, supports client access to vaccines

Key programme elements can be:

- COVID-19 vaccination programme co-located at, or positioned close to, HIV harm reduction premises, or regular access to a mobile COVID-19 vaccination programme
- Peer or HIV harm reduction worker support at COVID-19 vaccination sites
- Accompanying clients to vaccination sites
- Involving vaccination partners in events and trainings about COVID-19 vaccines
- Providing post-vaccine support (information and personal support, for example, service hotline, online chat etc.)
- + Path 1 activities

- Develop community-led information materials and outreach plan
- Analyse, contact and advocate with external stakeholders and public health authorities
- Put in place agreements and conduct staff training

Path 1 – Information and motivation

HIV harm reduction service motivates clients to get vaccinated, informs clients where they can access vaccination without stigmatization

Key programme elements can be:

- Information and advice on COVID-19 vaccines
- Information about vaccination sites – how to get to there, what to bring, and opening hours
- Information on community-friendly vaccination sites
- Developing peer-led information materials on COVID-19 vaccines and vaccination sites to fit the local context and the needs of the drug user community
- Training peer leaders about COVID-19 vaccines
- Collecting testimonials from vaccinated members of the community and HIV harm reduction workers
- Supporting clients to register for a vaccine
- Supporting clients to acquire or store vaccination certificates
- Provide post-vaccine information (e.g. on potential side-effects)
- Organizing events about COVID-19 vaccines (e.g. inviting a physician to answer questions about vaccines)

- Develop community-led information materials and outreach plan
- Analyse, contact and advocate with external stakeholders and public health authorities
- Put in place agreements and conduct staff training

3.5. Identifying a vaccination provider and developing a vaccination plan

When the most suitable pathway is identified and the fully integrated COVID-19 vaccination service (Path 3) is feasible, the HIV harm reduction service should identify the COVID-19 vaccination provider to establish a contract for their COVID-19 vaccination programme. The COVID-19 vaccination provider may have been identified at the stakeholder analysis stage. Identifying a contact person at the COVID-19 vaccination provider can also be considered to help communication between the two organizations. Later, these steps can be used to establish other vaccination campaigns at the HIV harm reduction programme (for example, seasonal influenza, hepatitis B or HPV).

HIV harm reduction services should follow the COVID-19 vaccination plans developed by the national or local public health authorities, in line with international guidance, including age restrictions and priority groups determined by public health authorities. Building on the national or local vaccination plans, and the estimates of the vaccination needs in the community, HIV harm reduction service providers can tailor implementation to their clients' needs and context. The safety of HIV harm reduction workers is a priority. HIV harm reduction workers must be in the priority groups for vaccines.

Vaccination plan checklist

- Follow the vaccination plans developed by the national or local public health authorities.
- Follow age restrictions and priority groups determined by public health authorities.
- Tailor vaccination plan to clients' needs and context and the estimates on the vaccination needs in the community.

3.6. Advocacy for vaccines for people who use drugs

The stakeholder analysis is a good starting point to identify the target audience for advocacy related to access to vaccines. Vaccines should be made available in an environment that is safe, confidential, free of discrimination against people who used drugs and tailored to community needs.

Peer involvement is central in advocacy. Including people with lived experiences and networks of people who use drugs throughout advocacy planning and processes should be a priority. A strong advocacy plan specifies and elaborates on each target audience (for example, decision-makers at agencies or clinics involved in COVID-19 vaccination); the message (for example, people who use drugs together with marginalized and criminalized populations should have access to COVID-19 vaccines without discrimination); and strategic modes of communication and influence (for example, statements by professional associations, articles, personal stories). It is worth considering cooperation with other advocates, such as national or local HIV harm reduction networks, human rights organizations, sex worker organizations, organizers advancing the rights of people in prison, organizations of people living with HIV, or other civil society organizations.

Integrating COVID-19 vaccines into an HIV harm reduction programme is a good opportunity to highlight that these services are essential public health services. HIV harm reduction services are critical entry points for HIV and viral hepatitis prevention interventions, for testing for bloodborne diseases, for referrals and linking communities with multiple vulnerabilities to the health-care system, and for providing health services in settings where traditional health institutions are not fit

for purpose. Another useful advocacy point is that the cost-effectiveness of HIV harm reduction services is well documented.¹³

3.7. Developing a COVID-19 vaccine outreach plan and information materials

After deciding on the integration pathway and establishing the feasibility of relationships and contracts, community leaders and service providers should develop an outreach plan to inform the community about COVID-19 vaccines. It is essential that the community is part of developing the communication strategy and developing information materials. Peers' insights are invaluable to identify the most important issues the communication strategy should address regarding vaccines, and in choosing the most effective methods to reach the community.

It is recommended that HIV harm reduction services first review the COVID-19 information materials developed by the health and social-services authorities identified in the situational assessment. When building upon existing COVID-19 materials, it is important to tailor the messages and the means of communication to the community that the programme serves. Different methods and forms of communication should be used if possible (for example, information posters at the premises, leaflets, blog posts, text messages and social media). Messages should be communicated in a manner that is adequate to clients' needs; wording should be clear and easy to understand. Peer involvement can be especially useful when drafting information materials; people who use drugs should be involved and consulted to check for clarity and language. Communications plans should consider how much the community relies on the Internet and social media (or is limited in accessing the Internet) versus interpersonal exchange for communication of key information.

Interventions to promote COVID-19 vaccine uptake will need to address safety concerns too. In addition to written information materials, it is practical to convene events dedicated to information and awareness-raising on COVID-19 vaccines, inviting persons with adequate knowledge and experience to address the most pressing concerns in the community. Supporting leaders of the community to be COVID-19 vaccine advocates can be an effective tool in addressing vaccine hesitancy. Testimonials of vaccinated HIV harm reduction workers and peers explaining their experiences can be a useful addition to evidence-based information on vaccine safety.

3.8. Training HIV harm reduction workers

Training HIV harm reduction service providers on COVID-19 vaccines must be part of all integration pathways. As HIV harm reduction services are trusted sources of health-related information in the community they serve, it is essential that all members of staff working on the ground are able to provide accurate, evidence-based information on COVID-19 vaccines to clients. It is also key that HIV harm reduction workers are able to inform clients about the intersection of vaccines and the most common conditions in the community, as it is likely that people living with HIV, viral hepatitis C and B or TB are included in the priority groups for vaccination. Besides information on vaccines, HIV harm reduction service providers should be able to inform clients about vaccination sites, requirements for getting vaccinated, proof of vaccination and the vaccine-related services that the HIV harm reduction programme offers.

¹³ See for example: Harm Reduction International (2020), Making the investment case: Cost-effectiveness evidence for harm reduction. London. Available from <https://www.hri.global/contents/2027>

Summary of questions – checking your readiness...	
	Are community-led networks and the community involved in all stages of the COVID-19 vaccine intervention, from design to implementation?
	What are the laws and regulations that will determine the conditions for implementing COVID-19 vaccine programmes?
	What types of COVID-19 vaccines are available?
	Who are the critical stakeholders in coordinating national or local vaccination efforts? Do you have their contacts or email addresses?
	What are the available resources at the programme (including financial resources, staff and infrastructure – for example, premises, mobile vans etc.)?
	What are your national and local public health data sources that can be used to estimate the number of clients that will require vaccination?
	Are community-led networks and the community involved in the full situational assessment?
	Were public health authorities and organizations responsible for national or local vaccination efforts consulted at the planning phase to help conceptualize and develop a suitable pathway to integrate COVID-19 vaccines? Can your programme meet all requirements?
	Which pathway is the most appropriate to integrate COVID-19 vaccines into your programme?
	Do you have a COVID-19 vaccination plan? Did you identify a contact person at the COVID-19 vaccination provider to help communication between the two organizations? (For Path 3)
	Do you have an advocacy plan for vaccination that includes the target audience, the message, and the most appropriate modes of communication? Are community-led networks and the community involved in planning your advocacy activities?
	Do you have a COVID-19 vaccine outreach plan? Do you know what modes of communication will be effective in reaching the community? Are community-led networks and the community involved in preparing the outreach plan and developing information materials?
	Are HIV harm reduction service providers trained on vaccines and vaccination programmes to address vaccine hesitancy and support COVID-19 vaccination?

4. Resources

European Centre for Disease Prevention and Control (2017). Catalogue of interventions addressing vaccine hesitancy.

<https://www.ecdc.europa.eu/sites/default/files/documents/Catalogue-interventions-vaccine-hesitancy.pdf>

European Centre for Disease Prevention and Control, European Monitoring Centre for Drugs and Drug Addiction (2011). Prevention and control of infectious diseases among people who inject drugs.

https://www.emcdda.europa.eu/system/files/publications/638/ECDC-EMCDDA_IDU_guidance_-_web_version_328027.pdf

European Monitoring Centre for Drugs and Drug Addiction (2019). Monitoring the elimination of viral hepatitis as a public health threat among people who inject drugs in Europe.

https://www.emcdda.europa.eu/system/files/publications/11796/Technical%20report_The%20elimination%20barometer%20for%20viral%20hepatitis%20among%20PWID%20in%20Europe_0.pdf

European Monitoring Centre for Drugs and Drug Addiction (2020). COVID-19 resources page.

https://www.emcdda.europa.eu/publications/ad-hoc/covid-19-resources_en

Harm Reduction International (2020). Global State of Harm Reduction reports.

<https://www.hri.global/global-state-of-harm-reduction-reports>

Harm Reduction International (2021). Making the investment case: cost-effectiveness evidence for harm reduction.

<https://www.hri.global/contents/2027>

International Network of People who Use Drugs (2022). COVID-19 harm reduction resources for people who use drugs.

<https://inpu.net/covid-19-crisis-harm-reduction-resources-for-people-who-use-drugs/>

Joint United Nations Programme on HIV/AIDS (2021). COVID-19 vaccines and HIV

https://www.unaids.org/sites/default/files/media_asset/covid19-vaccines-and-hiv_en.pdf

United Nations Office on Drugs and Crime and partners (2017). Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical guidance for collaborative interventions

<https://inpu.net/iduit-implementing-comprehensive-hiv-and-hcv-programmes-with-people-who-inject-drugs/>

World Health Organization (2016). Integrating collaborative TB and HIV services within a comprehensive package of care for people who inject drugs: consolidated guidelines.

<https://apps.who.int/iris/handle/10665/204484>

World Health Organization (2019). Consolidated strategic information guidelines for viral hepatitis: planning and tracking progress towards elimination.

<https://www.who.int/publications/i/item/consolidated-strategic-information-guidelines-for-viral-hepatitis-planning-978-92-4-151519-1>

World Health Organization (2020). Maintaining essential health services: operational guidance for the COVID-19 context.

https://apps.who.int/iris/bitstream/handle/10665/332240/WHO-2019-nCoV-essential_health_services-2020.2-eng.pdf?sequence=1&isAllowed=y

World Health Organization (2022). Coronavirus disease (COVID-19): vaccines safety.

[https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-\(covid-19\)-vaccines-safety](https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-(covid-19)-vaccines-safety)

World Health Organization (2022). COVID-19 vaccine tracker and landscape.

<https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines>

5. References

1. HRI. The global state of harm reduction 2020. London, Harm Reduction International, 2020 (<https://www.hri.global/global-state-of-harm-reduction-2020>, accessed 29 May 2022).
2. INPUD Online Survey on COVID-19 & People Who Use Drugs (PWUD) Data Report 2 [Internet]. London, International Network of People who Use Drugs, 2020 (<https://inpud.net/covid-19-survey-reports-health-rights-people-who-use-drugs-covid-19-environment/>, accessed 29 May 2022).
3. Csák R, Shirley-Beavan S, McHenry AE, Daniels C, Burke-Shyne N. Harm reduction must be recognised an essential public health intervention during crises. *Harm Reduction Journal*. 2021; 9;18(1):128.
4. Bambra C, Lynch J, Smith KE, Pickett K. Pale rider: pandemic inequalities. In: *The Unequal Pandemic*. 1st ed. Bristol, UK, Bristol University Press, 2021 pp. 13-34 (<http://www.jstor.org/stable/j.ctv1qp9gnf.9>, accessed 29 May 2022).
5. Vasylyeva TI, Smyrnov P, Strathdee S, Friedman SR. Challenges posed by COVID-19 to people who inject drugs and lessons from other outbreaks. *Journal of the International AIDS Society*. 2020;23(7) (<https://onlinelibrary.wiley.com/doi/abs/10.1002/jia2.25583>, accessed 29 May 2022).
6. Dunlop A, Lokuge B, Masters D, Sequeira M, Saul P, Dunlop G, et al. Challenges in maintaining treatment services for people who use drugs during the COVID-19 pandemic. *Harm Reduction Journal*. 2020;17(1):26.
7. European Drug Report 2020: trends and developments. Luxembourg, Publications Office of the European Union, 2020.
8. Harris M. An urgent impetus for action: safe inhalation interventions to reduce COVID-19 transmission and fatality risk among people who smoke crack cocaine in the United Kingdom. *International Journal of Drug Policy*. 2020;83:102829 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7306748/>, accessed 29 May 2022).
9. World Drug Report 2021: estimates of people who inject drugs, living with HIV, HCV & HBV, downloadable spreadsheet. Vienna, United Nations Office on Drugs and Crime, 2021 (https://www.unodc.org/unodc/en/data-and-analysis/wdr2021_annex.html, accessed 29 May 2022).
10. UNAIDS Global AIDS Update 2021. Confronting inequalities: lessons for pandemic responses from 40 years of AIDS. Geneva, Joint United Nations Programme on HIV/AIDS, 2021 (<https://www.unaids.org/en/resources/documents/2021/2021-global-aids-update>, accessed 29 May 2022).
11. Degenhardt L, Peacock A, Colledge S, Leung J, Grebely J, Vickerman P, et al. Global prevalence of injecting drug use and sociodemographic characteristics and prevalence of HIV, HBV, and HCV in people who inject drugs: a multistage systematic review. *The Lancet Global Health*. 2017;5(12):e1192-207.
12. HIV prevention, testing, treatment, care and support in prisons and other closed settings: a comprehensive package of interventions. Vienna, United Nations Office on Drugs and Crime, 2020 (https://www.unodc.org/documents/hiv-aids/publications/Prisons_and_other_closed_settings/20-06330_HIV_update_eBook.pdf, accessed 29 May 2022).

13. HIV and people in prisons and other closed settings. Geneva, Joint United Nations Programme on HIV/AIDS, 2021 (https://www.unaids.org/sites/default/files/media_asset/06-hiv-human-rights-factsheet-prisons_en.pdf, accessed 29 May 2022).
14. INPUD Online Survey on COVID-19 & People Who Use Drugs (PWUD) Data Report 1 [Internet]. London, International Network of People who Use Drugs, 2020 (<https://inpud.net/covid-19-survey-reports-health-rights-people-who-use-drugs-covid-19-environment/>, accessed 29 May 2022).
15. Muncan B, Walters SM, Ezell J, Ompad DC. “They look at us like junkies”: influences of drug use stigma on the healthcare engagement of people who inject drugs in New York City. *Harm Reduction Journal*. 2020;17(1):53.
16. Nguyen T, Buxton JA. Pathways between COVID-19 public health responses and increasing overdose risks: a rapid review and conceptual framework. *International Journal of Drug Policy*. 2021;93:103236.
17. The impact of COVID-19 on mental, neurological and substance use services: results of a rapid assessment. Geneva, World Health Organization, 2020 (<https://apps.who.int/iris/handle/10665/335838>, accessed 29 May 2022).
18. Third round of the global pulse survey on continuity of essential health services during the COVID-19 pandemic: November–December 2021. Geneva, World Health Organization, 2022 (https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2022.1, accessed 29 May 2022).
19. Impact on mental health and quality of life in time of covid-19 for young key populations and people living with HIV in Asia and the Pacific [Internet]. APASCO, 2020 (<https://apcaso.org/impact-on-mental-health-and-quality-of-life-in-time-of-covid-19-for-young-key-populations-and-people-living-with-hiv-in-asia-and-the-pacific/>, accessed 29 May 2022).
20. Harm reduction programmes during the COVID-19 crisis in Central and Eastern Europe and Central Asia. Vilnius, Eurasian Harm Reduction Association, 2020 (https://harmreductioneurasia.org/wp-content/uploads/2020/06/regional-review_-FINAL_ENG_1.pdf, accessed 29 May 2022).
21. EMCDDA trendspotter briefing: impact of COVID-19 on drug services and help-seeking in Europe. Lisbon, European Monitoring Centre for Drugs and Drug Addiction, 2020 (https://www.emcdda.europa.eu/publications/ad-hoc/impact-of-covid-19-on-drug-services-and-help-seeking-in-europe_en, accessed 29 May 2022).
22. Wenger LD, Kral AH, Bluthenthal RN, Morris T, Ongais L, Lambdin BH. Ingenuity and resiliency of syringe service programs on the front lines of the opioid overdose and COVID-19 crises. *Translational Research*. 2021;234:159-73.
23. Putri D, Shirley-Beavan S, Bridge J. Innovation and resilience in times of crisis (Part 2): the response from harm reduction services. London, International Drug Policy Consortium and Harm Reduction International, 2021 (<https://idpc.net/publications/2021/07/innovation-and-resilience-in-times-of-crisis-part-2-the-response-to-covid-19-from-harm-reduction-services>, accessed 29 May 2022).
24. Mapping expanded access to opioid agonist treatments during covid-19 - a global policy scan. London, Harm Reduction International, 2020.
25. COVID-19 crisis: harm reduction resources for people who use drugs [Internet]. International Network of People who Use Drugs, 2020 (<https://inpud.net/covid-19-crisis-harm-reduction-resources-for-people-who-use-drugs/>, accessed 29 May 2022).
26. Harm reduction tips for people who use drugs to avoid COVID-19. London, International Network of People who Use Drugs, 2020 (<https://inpud.net/covid-19-crisis-harm-reduction-resources-for-people-who-use-drugs/>, accessed 29 May 2022).

27. Accelerating access to hepatitis C diagnostics and treatment: overcoming barriers in low- and middle-income countries. Global progress report 2020. Geneva, World Health Organization, 2021 (<https://apps.who.int/iris/handle/10665/338901>, accessed 29 May 2022).
28. Social contexts of access to treatment and care for HIV, hepatitis C and tuberculosis among people who inject drugs in European cities [Internet]. Copenhagen: World Health Organization Regional Office for Europe, 2012 (<https://www.euro.who.int/en/health-topics/communicable-diseases/hiv-aids/publications/2013/social-contexts-of-access-to-treatment-and-care-for-hiv,-hepatitis-c-and-tuberculosis-among-people-who-inject-drugs-in-european-cities>, accessed 29 May 2022).
29. Guidance on prevention of viral hepatitis B and C among people who inject drugs. Geneva, World Health Organization, 2012 (<https://apps.who.int/iris/handle/10665/75357>, accessed 29 May 2022).
30. Van Hout MC, Haddad P, Aaraj E. The impact of COVID-19 on drug use and harm reduction programming in the Middle East and North Africa (MENA) region: a regional consultation of stakeholders and people who use drugs. *International Journal of Mental Health and Addiction*. 2021;13:1-14.
31. Krawczyk N, Fawole A, Yang J, Tofighi B. Early innovations in opioid use disorder treatment and harm reduction during the COVID-19 pandemic: a scoping review. *Addiction Science & Clinical Practice*. 2021;16(1):68.
32. Maintaining essential health services: operational guidance for the COVID-19 context, interim guidance, 1 June 2022. Geneva, World Health Organization, (https://www.who.int/publications/i/item/WHO-2019-nCoV-essential_health_services-2020.2, accessed 29 May 2022).
33. Strathdee SA, Abramovitz D, Harvey-Vera A, Vera CF, Rangel G, Artamonova I, et al. Correlates of COVID-19 vaccine hesitancy among people who inject drugs in the San Diego-Tijuana border region. *Clinical Infectious Diseases*. 2021;ciab975.
34. Dietze PM, Hall C, Price O, Stewart AC, Crawford S, Peacock A, et al. COVID-19 vaccine acceptability among people in Australia who inject drugs: implications for vaccine rollout. *Drug and Alcohol Review*. 2022;41(2):484-7.
35. Biancarelli DL, Biello KB, Childs E, Drainoni M, Salhaney P, Edeza A, et al. Strategies used by people who inject drugs to avoid stigma in healthcare settings. *Drug and Alcohol Dependence*. 2019;198:80-6.
36. Vaccine Access [Internet]. UNDP Data Futures Platform. United Nations Development Programme, 2022 (<https://data.undp.org/vaccine-equity/accessibility/>, accessed 29 May 2022).