South African Policy Brief:
Viral hepatitis in people who use drugs

INHSU
International Network on Health and Hepatitis in Substance Users

1 Political commitment

Why should governments care about the health of people who use drugs?	
Leave no one behind and end inequalities	Human rights and public health-based approaches are essential to development and health. People who use drugs have been marginalised and have inequitable access to services.
The Sustainable Development Goals (SDGs) and Global Health Commitments	All United Nations Member states have agreed to **eliminate viral hepatitis and HIV as public health threats by 2030** and to move towards Universal Health Coverage. Globally, there is still a long way to go before targets are achieved (see Table 1).
Realise the public health benefits of scientific breakthroughs	Safe, effective therapies exist for lifelong management of HIV and hepatitis B virus (HBV). Hepatitis C virus (HCV) infection can be cured. Effective prevention interventions exist, including vaccination for HBV, pre-exposure prophylaxis for HIV and other harm reduction interventions for the prevention of blood borne infections.

2 Global picture

11.3m
An estimated 11.3 million people have **recently injected drugs**[*1]

→ **11%**
This is expected to **increase** by 11% by 2030[2]

38m
There are an estimated 38 million people **living with HIV worldwide**[3]

→ **5.5 million** of those have recently injected drugs[*]

→ **10%** of all new HIV infections in 2019 occurred among people who inject drugs

325m
There are an estimated 325 million people **living with HBV and/or HCV**[4]

→ **6.1m**
6.1 million of those living with HCV have **recently injected drugs**[5]

1.1m
There were 1.1m HBV and HCV related deaths in 2019 - almost double the deaths related to HIV (690k)[6]

*in the last 12 months

HIV Indicators (by 2030)	Target	Status (2019)
% of people living with HIV know their status	95	81
% of people who know their HIV-positive status receive antiretroviral therapy (ART)	95	82
% of people living with HIV on treatment with suppressed viral loads	95	88
Viral hepatitis Indicators (by 2030)	**Target**	**Status (2019)**
% coverage of HBV vaccine (third dose)	90	85
% vaccine coverage of prevention of HBV mother-to-child transmission	90	43^
% chronic HBV infections diagnosed	90	13
% chronic HCV infections diagnosed	90	32
% receiving HBV treatment	80	2
% receiving HCV treatment	80	16
Number of sterile needles and syringes provided per year per person who injects drugs	300	33*
% of people who inject drugs accessing opioid substitution therapy (OST)[7]	40	16*

Table 1: Selected Global HIV and viral hepatitis service coverage targets[6,8]

^birth dose vaccination *in 2017

3 South African picture

Epidemiology:

There are an estimated 82 500 people who inject drugs (2020) and 164 129 people in prison (2018) in South Africa[9,10]. National viral hepatitis data is limited and points to epidemics in need of urgent attention (see Table 2).

Prevalence	General population	People who inject drugs	People in prison
HIV	**13%**	21%	15%
HBsAg	**7%**	5%	3%
Anti- HCV	**1%**	55%	3 - 6%

Table 2: HIV and viral hepatitis in South Africa[11,12,13,14,15,16]

Policy:

The National Viral Hepatitis Action Plan (2019-2024) and National Viral Hepatitis Management Guidelines, the National Drug Master Plan (2019-2024) and the National Strategic Plan on HIV, TB and STIs (2016 – 2022) support viral hepatitis and HIV services and other harm reduction for people who use drugs. The latest Essential Medicines List (EML) and Standard treatment guidelines restrict HBV treatment initiation to hospital (secondary) level and HCV treatment to tertiary and quaternary levels. Direct acting antivirals (DAAs) were registered in 2020 by the South African Health Products Regulatory Authority (SAHPRA); however, they are not yet included in the EML.

Prevention, testing and treatment services:

- The National Viral Hepatitis Programme is yet to be funded and implemented. Only one metropolitan municipality funds harm reduction services, the remaining are funded by donors.
- HBV vaccination for adults is limited to selected harm reduction sites and hospital clinics (health care worker vaccination is disproportionately implemented focusing on those deemed to be at highest risk e.g. laboratory staff).
- Needle and syringe services and OST services are operational in 9 and 4 health districts, respectively*. The high cost of methadone is the major barrier to OST scale-up.
- A range of diagnostic tests are registered for local use (Table 3). The National Health Laboratory Service and private pathology networks have testing infrastructure. Routine screening for people who use drugs is not conducted, and there is limited viral hepatitis testing and integration in the existing HIV programme (HBsAg screening is one of the baseline tests prior to ART initiation or regimen change in those whose HBV status is unknown).
- In the public sector, initiation of HBV treatment is limited to district hospital level.
- HCV treatment is limited to tertiary/ quaternary level. DAA therapy is limited to special certification at specialist clinics and in the private sector.

*Small OST services (<150 people) operate in Cape Town, Durban and Johannesburg, a large OST service (± 800 people) operates in Tshwane

	HBV	HCV
Rapid diagnostic tests	• Vikia HBsAg (BioMeriex SA) • SD BIOLINE HBsAg WB (Standard Diagnostics, Inc) • Determine HBsAg 1 & 2 (Abbott Diagnostics)	• OraQuick HCV test (OraSure Technologies) • SD Bioline HCV test (Abbott Diagnostics)
Point-of-care molecular tests[17]	• Xpert HBV Viral Load (Cepheid)	• Genedrive HCV ID (Sysmex) • Xpert HCV Viral Load (Cepheid)
Laboratory based tests*	• ARCHITECT HBV serology (Abbott) • COBAS Ampliprep/COBAS TaqMan version 2	• ARCHITECT HCV antibody (Abbott) • COBAS Ampliprep/COBAS TaqMan version 2
Treatment	• Tenofovir disoproxil fumarate^†	• Sofosbuvir/ledipasvir • Sofosbuvir/velpatasvir

Table 3: Locally registered health products

*HCV dried blood spot testing has been used in research settings.

^Originator and generic molecules registered
†First line therapy

Women who use drugs in South Africa experience alarmingly high levels of violence, sexual assault, intersecting stigma and limited gender-responsive services, which contribute to their vulnerability to viral hepatitis and HIV and their consequences.[18]

I did not experience stigma or discrimination from the health care workers. The psychosocial support and education I received while on treatment really helped me. I didn't experience side effects of the medication. My experience on treatment was good. I couldn't have asked for anything better".

KK, 29 year old male accessing HCV treatment from a pilot service at a harm reduction site in Tshwane

Stigma, mental health concerns and structural barriers prevent people who use drugs from accessing viral hepatitis services in hospital settings[19]. Recent pilot services have demonstrated the safety and effectiveness of integrated HBV and HCV treatment into OST services, achieving 92% sustained virological response. A pilot of HBV and HCV prevention, testing and treatment in a local prison is ongoing[20].

"Being cured of hepatitis C has just given me so much hope"

PS, 53 year old women accessing HCV treatment from an OST service in Cape Town

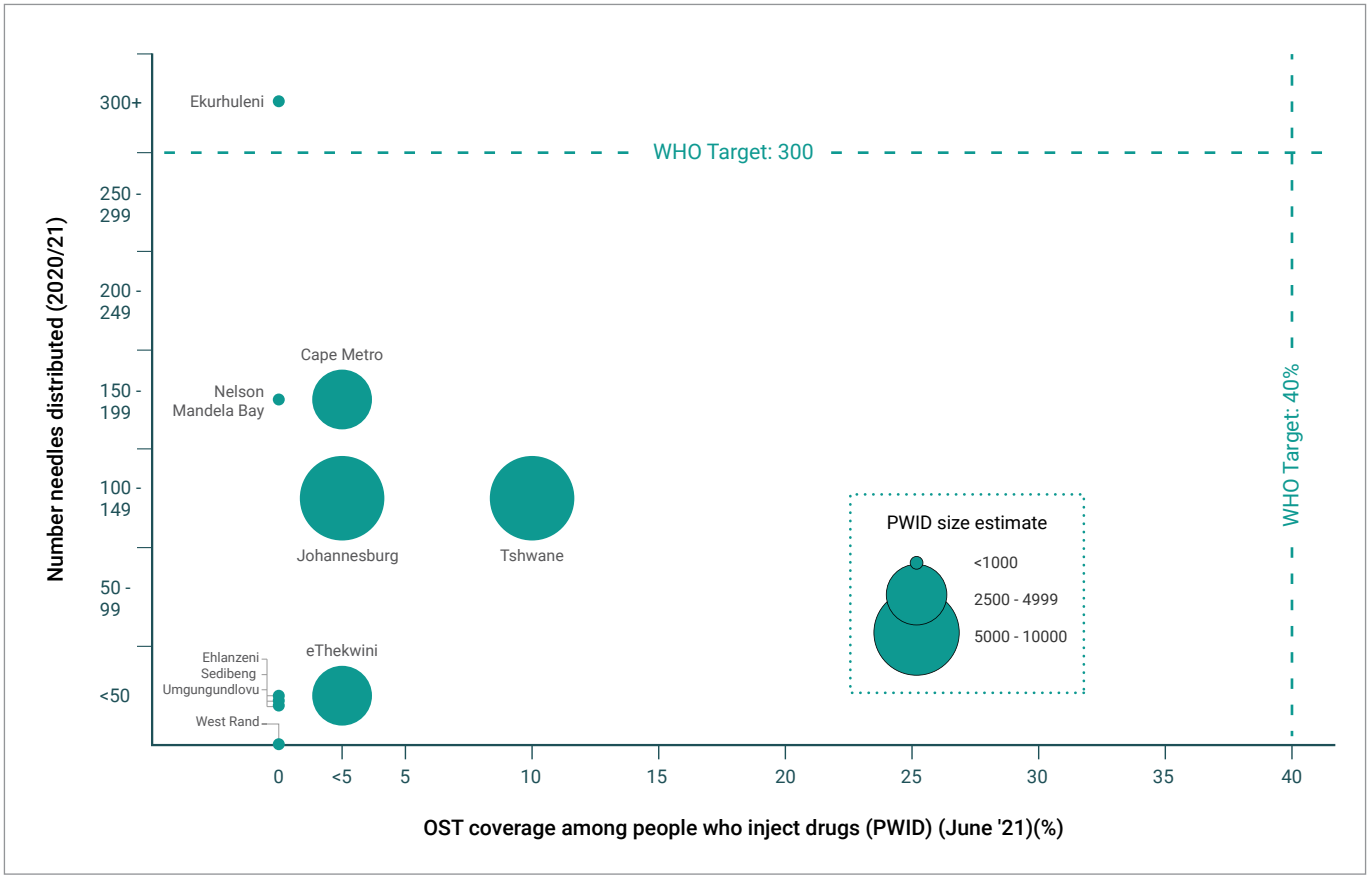

Figure 1: Needle and syringe and OST service coverage in South Africa

4 Cascade of viral hepatitis care

Elimination of viral hepatitis requires equitable access to affordable prevention, screening, assessment, treatment and care services. People who inject drugs adhere to HCV therapy and treatment is effective[22]. HCV reinfection post-treatment occurs but at a lower rate than primary infection.[23]

	Prevention	Screening	Assessment	Treatment	Ongoing Care
HBV	• HBV vaccination • Needle and syringe programmes and OST	• Hepatitis B surface antigen	• Non-invasive fibrosis assessment • HBV serological testing, HBV viral load, AFP and liver transaminase • Liver cancer screening	• Uncomplicated: treat at primary care with tenofovir • HBV-HIV co-infection: ART on a tenofovir containing regimen • HCV – HBV - HIV triple infection: treat HIV/HBV infection as a dual infection and then treat HCV	• Package of care based on harm reduction, including needle and syringe services and access to OST • Adherence support • Regular retesting (HIV, HCV) • Where possible confirm anti-HBs titres ≥ 10 IU/L. after HBV vaccination
HCV		• Hepatitis C antibody	• HCV PCR confirmatory test • Non-invasive fibrosis assessment • Liver cancer screening if advanced fibrosis/ cirrhosis	• Uncomplicated: treat at primary care with pangenotypic direct acting antiviral (DAA) • HCV-HIV co-infection: treat HCV once HIV virally suppressed at primary/ community level • HCV – HBV - HIV triple infection: complicated, consult with specialist	

Table 4: What is required across the care cascade to eliminate viral hepatitis

5 Recommendations for South Africa

01	**Political commitment**	• Dedicate funds to support the implementation of the National Viral Hepatitis Programme and scale up harm reduction services for people who use drugs
02	**Health services**	• Integrate viral hepatitis management into HIV programme • Decentralise viral hepatitis services • Scale-up harm reduction services • Scale-up rapid diagnostic tests for viral hepatitis in community settings • Provide harm reduction and viral hepatitis services in correctional service centres
03	**Medications and technology**	• Increase access to affordable methadone and buprenorphine • Place DAAs on the EML and enable community-level access • Ensure tenofovir for treatment of HBV is included on EML for primary care • Ensure access to generic DAAs • Reduce cost of HCV and HBV molecular testing
04	**Human resources**	• Sensitise health care workers to provide non-judgmental care • Provide healthcare workers with education on viral hepatitis and substance use disorders and harm reduction
05	**Health information**	• Include viral hepatitis indicators in the National Indicator Data Set
06	**Financing**	• Mobilise domestic financing for viral hepatitis services and harm reduction, including as part of National Health Insurance. • Include OST and viral hepatitis treatment in private medical aid benefits packages
07	**Quality, equity and coverage**	• Reduce community and health worker stigma towards people who use drugs • Scale-up access to harm reduction services towards WHO targets • Consider social determinants of health, such as housing, in the continuum of care

Partners

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