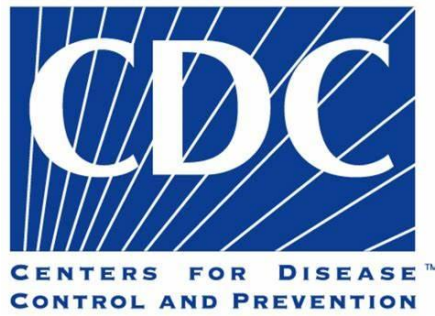




Republican AIDS Center of the
Ministry of Health and Social
protection of the Population of
Tajikistan



BIO-BEHAVIOR SURVEY AMONG PEOPLE WHO INJECT DRUGS IN TAJIKISTAN

**20
22**

BACKGROUND:

- **People who inject drugs (PWID) account for more than 27% of all registered HIV cases in the country¹ and the highest HIV prevalence (ranged from 3.1% to 17.3% as per BBS 2018).² There are an estimated 22,000 PWID in Tajikistan.²**
- **HIV prevention interventions are carried out in the country, which reached 60% of an estimated PWID population with the minimum package of services, including provision clean syringes and condoms and/or counseling on correct condom use and safe sex in 2021.³**
- **As per the program data, medication-assisted therapy (MAT) coverage is under 10% of an estimated PWID population in the country.³**
- **Over the past 10 years, the main mode of reported HIV transmission shifted from injection drug use to sexual. In 2021, HIV transmission documented to be attributable to unsafe drug injection practices reduced to 11% of all newly diagnosed people living with HIV (PLHIV) from 50% in 2011.¹**
- **In line with UNAIDS and WHO recommendations, information on the burden of HIV, behavioral risks, access to HIV related services, and knowledge about HIV among key population groups, including PWID needs to be updated every 3-5 years to assess progress towards achievement UNAIDS 95-95-95⁴ global targets for epidemic control and to inform program design and implementation.**

PURPOSE:

To assess the burden of HIV infection, risk behaviors, and access to services e. g. 95-95-95 among PWID in selected six cities of Tajikistan, including Dushanbe, Vahdat, Kulob, Panjakent, Khudjand, and Khorugh in 2022.

METHODS:

Respondent-driven sampling (RDS) was used to recruit PWID aged 18+ years in six cities in Tajikistan.

Trained survey interviewers collected information on demographics, risk behaviors, and access to HIV as well as other sexually transmitted infections (STIs) and Hepatitis C (HCV) prevention, testing and counseling, and treatment services. Blood samples were tested at survey sites using rapid tests for HIV, HCV, syphilis, and recent HIV infection (if respondent tested positive for HIV). All respondents with reactive HIV and/or HCV antibody rapid test results were escorted to the respective AIDS center for HIV viral load (VL) and HCV RNA testing on either Qiagen or GeneXpert platform.

Weighted population estimates were generated using the 'Giles SS' estimator in RDS-Analyst software.

¹ Republican AIDS center statistics as of Dec 31, 2022.

² Отчет о результатах интегрированного био-поведенческого исследования по ВИЧ и оценки численности работников секса и лиц, употребляющих инъекционные наркотики в Республике Таджикистан, Душанбе, 2018.

³ Progress update & disbursement request to GF, HIV/TB project of UNDP Tajikistan, Feb 2022. MAT abbreviation is used interchangeably with OST/opioid substitution therapy.

⁴ UNAIDS targets: 95% of PLHIV are aware of their HIV status, among those aware, 95% receiving ART, and among those on ART, 95% have HIV viral suppression.

RESULTS:

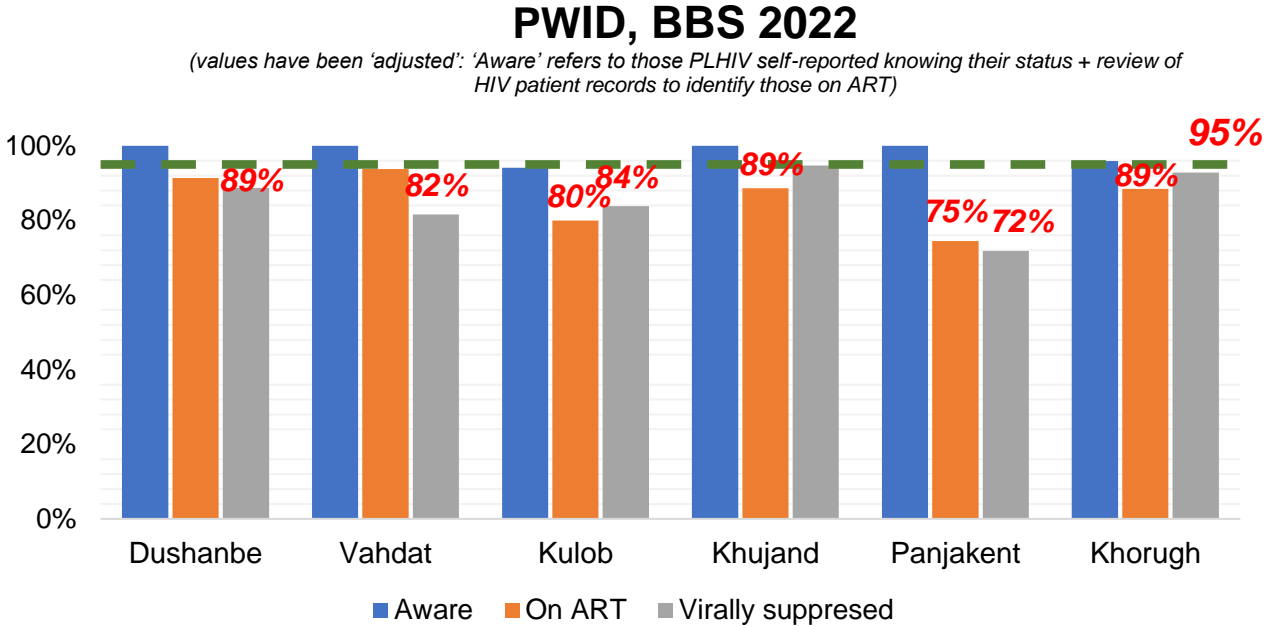
Table 1. Demographic, HIV, HCV, and syphilis serological prevalence, behavioral practices, access to HIV prevention and testing services, and attitudes data among PWID population in six cities of Tajikistan, BBS 2022

<i>Features (estimated in % [95CI])</i>	<i>Dushanbe N = 400</i>	<i>Vahdat N = 302</i>	<i>Kulob N = 272</i>	<i>Khudjand N = 220</i>	<i>Panjakent N = 223</i>	<i>Khorugh N = 297</i>
Age, years Mean (standard deviation)	40 (8.9)	40.4 (6.9)	41.2 (9.2)	41.4 (7.4)	45.4 (11.6)	46.7 (9.7)
Proportion of female among PWID population (%)*	13.0 (9.5–16.4)	6.4 (3.7–9.1)		7.5 (4.2–10.8)	4.5 (2.0–7.1)	
Total adult (15+) population**	836,000	220,401	134,462	131,228	206,320	21,869
BIOLOGICAL MARKERS						
HIV prevalence (%)	19.9 (14.7–25.1)	7.6 (4.5–10.7)	14.8 (10.5–19.0)	7.4 (3.6–11.3)	10.1 (5.1–15.1)	4.7 (2.4–7.1)
Syphilis prevalence (%)	2.3 (1.0–3.5)	11.4 (7.9–15.0)	8.6 (5.1–12.1)	11.9 (7.2–16.6)	7.1 (3.4–10.8)	3.1 (1.2–5.0)
HCV prevalence (%) (anti-HCV)	40.3 (34.2–46.4)	15.5 (11.5–19.5)	32.4 (25.8–38.9)	14.6 (8.6–20.6)	24.3 (17.2–31.3)	17.7 (13.2–22.1)
RNA HCV among anti-HCV positive	48.3 (37.9–58.7)	65.8 (54.5–77.8)	74.8 (64.3–85.4)	60.7 (43.1–77.3)	98.9 (96.8–100)	60.9 (46.8–75.7)
RNA HCV among all respondents	19.4 (15.2–23.6)	10.4 (7.4–13.3)	24.3 (18.1–30.5)	8.9 (4.4–13.4)	24.3 (18.4–30.0)	11.1 (7.9–14.3)
RISK BEHAVIORS						
Years of injecting drugs (Median, IQR)	10.1 (5.1–15.1)	5.5 (4.4–7.5)	12.0 (8.4–15.0)	11.7 (6.5–18.3)	6.4 (3.0–13.3)	13.0 (8.2–20.0)
Shared syringe/needles in the last 30 days (%)	10.7 (7.3–14.1)	41.1 (35.6–46.7)	42.6 (37.3–47.9)	18.2 (12.4–23.9)	22.4 (16.3–28.5)	1.4 (0.0–2.8)
Condom use at last sex (%)	33.8 (26.6–41.1)	39.6 (33.2–46.0)	69.7 (52.5–86.7)	54.1 (46.5–61.7)	14.3 (9.1–19.4)	43.0 (36.1–49.9)
SERVICES ACCESS/UPTAKE						
Ever received MAT (%)	14.9 (10.9–19.0)	36.8 (31.7–41.7)	16.8 (11.6–21.9)	0.3 (0.0–0.7)	0.4 (0.0–0.9)	26.3 (21.6–31.0)
Currently on MAT (%)	12.8 (9.3–16.4)	33.3 (27.4–39.3)	12.2 (8.0–16.3)	10.2 (6.7–13.6)	0.2 (0.0–0.5)	21.9 (17.2–26.6)
Received HIV prevention services (%)***	44.1 (38.9–49.4)	100.0	97.9 (96.7–99.2)	48.3 (41.2–55.3)	47.0 (39.4–54.6)	19.3 (14.5–24.1)
Received HIV test ever (%)	74.5 (69.8–79.3)	95.9 (94.0–97.8)	98.9 (97.6–100)	88.1 (83.4–92.8)	67.1 (59.3–74.9)	92.4 (88.5–96.2)
Received HIV test in the last 12 months (%)	41.8 (37.0–46.6)	75.6 (70.8–80.4)	82.0 (77.0–87.1)	60.2 (52.0–68.2)	46.9 (39.1–54.7)	74.2 (68.6–79.7)

PrEP awareness (%)	2.7 (1.2–4.1)	12.8 (9.4–16.2)	17.6 (12.7–22.4)	18.4 (12.4–24.3)	6.3 (3.1–9.6)	10.7 (7.4–13.9)
Received PrEP out of those aware (%)	5.6 (0.0–28.3)	32.1 (18.5–45.5)	93.0 (88.3–97.7)	0.0	5.6 (5.3–5.3)	5.3 (5.4–5.4)
Received PrEP out of all respondents (%)	0.1 (0.0–0.4)	4.1 (2.3–5.9)	16.3 (11.7–20.9)	0.0	0.4 (0.0–0.8)	0.6 (0.0–1.6)
STIGMA						
Ever avoided seeking health care services because of being PWID (%)	3.9 (1.8–6.1)	96.5 (94.5–98.6)	13.4 (9.3–17.5)	31.4 (25.1–37.8)	2.7 (1.6–3.7)	2.3 (0.6–4.0)
Ever felt needed to hide being PWID when sought health care (%)	3.1 (1.6–4.6)	97.9 (96.4–99.5)	12.8 (9.0–16.7)	40.0 (32.8–47.0)	66.3 (59.4–73.5)	5.4 (2.7–8.1)
Ever has been treated unfairly or denied health care because of being PWID (%)	5.7 (3.0–8.3)	73.5 (69.2–77.7)	16.0 (11.7–20.3)	4.4 (2.1–6.8)	2.2 (1.0–3.3)	2.8 (1.3–4.4)

*Information is provided only for BBS locations with 95% Upper Bound above 5.0%
 ** Population size of the Republic of Tajikistan as of January 1, 2022 (stat.tj)
 ***Respondent was counted as covered by HIV prevention interventions if he/she reported receiving clean needles or syringes and at least one other intervention, including condoms and lubricants and/or counseling on condom use and safe sex in the past three months

Figure 1.
 HIV service cascade (95-95-95) in percentage among PWID in BBS locations in Tajikistan, BBS 2022⁵



⁵ These values have been 'adjusted': 'Aware' refers to those PLHIV self-reported knowing their status + review of HIV patient records to identify those on ART.

Table 2.

HIV service cascade (95-95-95) with 95%CI among PWID in BBS locations in Tajikistan, BBS 2022⁵

Location	Estimate for 1 st 95			Estimate for 2 nd 95			Estimate for 3 rd 95		
	(%)	95% CI		(%)	95% CI		(%)	95% CI	
Dushanbe	100			91.4	84.0	98.6	88.7	80.9	96.6
Vahdat	100			93.8	90.0	96.8	81.6	63.4	98.2
Kulob	94.1	92.4	95.6	80.0	71.4	89.3	83.8	75.2	92.6
Khudjand	100			88.6	80.2	96.1	94.7	94.5	97.4
Panjakent	100			74.5	52.4	95.1	71.8	46.9	96.4
Khorugh	95.9	93.9	98.5	88.5	78.4	95.5	92.8	88.6	97.1

CONCLUSION:

- The prevalence of HIV infection (4.7-19.9%) as well as hepatitis C (14.6% - 40.3%) and syphilis exposure (2,3-11.9%) across the BBS locations is high. This demonstrates the significant burden of HIV, HCV, and STIs among PWID in Tajikistan.
- The survey involved mainly PWID of the older age group, potentially indicating low accessibility to young PWID. From the other side average age of PWID could increase because nowadays younger drug addicts use first mainly non-injection drugs (due to diversification of non-injection drug options locally) and transition to injection at older ages. The median years of injecting drugs varied from 5.5 to 13.0 years across BBS locations (IQR 4.4 – 20.0).
- By survey locations, between 0.3 and 36.8% of respondents indicated that they had ever received MAT services, and at the time of the survey 0.2 to 33.3% were receiving MAT. This indicates the low accessibility and/or uptake of this service.
- Syringe/Needles sharing practices (1.4 - 42.6%), low MAT coverage, low awareness and/or uptake of PrEP (2.7 – 18.4%), low condom use at last sex (below or almost equal to 50% in five out of six sites) indicate the risk of further transmission of HIV among PWID. HIV transmission to/from PWID sexual partners may be high due to high prevalence of syphilis antibodies (from 2.3% to 11.9% across BBS locations) and low condom use at last sex (14.3 - 69.7%).
- Coverage with the minimum package of HIV prevention services in the three months preceding participation in the survey (19.3 – 48.3%) was insufficient (except Vahdat and Kulob cities), indicating sub-optimal HIV services availability and/or uptake.
- HIV testing (in the last 12 months) coverage ranged from 41.8 to 82% across the BBS locations. Awareness of HIV status among PWID/PLHIV exceeds 95% in five out of six BBS locations. At the same time, ART coverage among those who are aware of their HIV-positive status is suboptimal (less than 90%) in four out of six BBS locations.
- Viral suppression rate among HIV positive PWID receiving ART is sub-optimal (71.8%-88.7%) and may indicate poor adherence and/or patient monitoring, or HIV drug resistance in Dushanbe, Vahdat, Kulob, and Panjakent which in turn may undermine the impact of ‘treatment as prevention’ as patient-level outcomes of treatment.
- There are two problems related to PrEP, including low awareness (2.7-18.4%) and low uptake even among those who are aware (0.0-32.1% across five out of six BBS sites).

RECOMENDATIONS:

1

HIV and viral hepatitis prevention, testing, and treatment programs among PWID should remain a priority for the national response to HIV and viral hepatitis in Tajikistan.

2

Develop and provide adequate resources for a strategy and methodology to scale up universal access to HIV prevention and treatment services for PWID.

3

The introduction of prevention and treatment programs for the parenteral viral hepatitis should be provided as an element to prevent their further spread in the country, as well as to involve PWID in programs for HIV testing, treatment, and pre-exposure prophylaxis.

4

Review the HIV testing strategies for PWID by scaling up targeted approach through index testing and network-based testing approaches as well as improving access to and uptake of HIV testing through self-testing and community-based testing approaches among PWID and potentially drug users of new psycho-active substances.

5

Harm reduction programs that include demand generation for PrEP, opioid substitution therapy, and HIV testing require further engagement and support, expansion and strengthening of monitoring of their implementation. Demand creation for PrEP among groups most at risk of HIV is an important next step to rollout this evidence-based and effective prevention intervention. Tajikistan should consider development of PrEP communication strategy which would outline how to increase demand for PrEP among groups most at risk of HIV, including PWID.

6

HIV and HCV prevention and treatment programs for PWID should be strengthened, including counseling, psychological support, and social support.

**BIO-BEHAVIOR SURVEY
AMONG PEOPLE WHO
INJECT DRUGS IN
TAJIKISTAN, BBS 2022**

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Appendix: Information for UNDP (HIV Grant) annual reporting

Impact Indicators	Category	Result			Comments on results on indicators and data sources, and any other comments***
		N#*	D#*	%**	
HIV I-11 ^(M) Percentage of PWID who are living with HIV	All	199	1,632	8,9	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.
HIV O-6 ^(M) Percentage of PWID reporting the use of sterile injecting equipment the last time they injected	All	1,483	1,689	90,0	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.
HIV I-11 ^(M) Percentage of PWID who are living with HIV	<25	0	20	0,0	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.
HIV I-11 ^(M) Percentage of PWID who are living with HIV	25+	199	1,694	9,8	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.
HIV I-11 ^(M) Percentage of PWID who are living with HIV	Male	175	1,608	9,1	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.
HIV I-11 ^(M) Percentage of PWID who are living with HIV	Female	24	106	36,4	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.
HIV O-6 ^(M) Percentage of PWID reporting the use of sterile injecting equipment the last time they injected	Male	1,380	1,586	90,3	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.
HIV O-6 ^(M) Percentage of PWID reporting the use of sterile injecting equipment the last time they injected	Female	93	103	93,2	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.
HIV O-6 ^(M) Percentage of PWID reporting the use of sterile injecting equipment the last time they injected	25+	20	20	100,0	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.
HIV O-6 ^(M) Percentage of PWID reporting the use of sterile injecting equipment the last time they injected	<25	1,463	1,669	89,9	This proportion represents the median of the RDS adjusted PWID population level estimates across six survey sites.

*N# and D# represent that actual survey recruitment sizes for the respective populations.

**Confidence bounds are available upon request.

***Protocol and datasets are available upon request.