PROGRESS REPORT 2022

National AIDS Programme
Department of Public Health
Ministry of Health
Myanmar

Progress Report 2022

National AIDS Program, Myanmar

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National AIDS Program

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ABBREVIATIONS AND ACRONYMS

AEM	Asian Epidemic Model
AHF	Access to Health Fund
AHRN	Asian Harm Reduction Network
ART	antiretroviral therapy
ARV	antiretroviral
CBO	community-based organization
CBS	community-based screening of HIV
CCDAC	Central Committee for Drug Abuse Control
CDC	Centers for Disease Control and Prevention
CDW	Communicable Disease Working Group
CFM	community feedback mechanism
CHAI	Clinton Health Access Initiative
CNC	community network consortium
CPI	Community Partners International
CSS	community systems strengthening
DDTRU	Drug Dependency Treatment and Research Unit
DHIS2	District Health Information Software
DIC	drop-in centre
DoPH	Department of Public Health
EID	early infant diagnosis
FSW	female sex worker
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIVST	HIV self-testing
HMIS	Health Management Information System
HSS	HIV sentinel sero-surveillance
HTS	HIV testing services
IBBS	Integrated Biological and Behavioural Surveillance
ICAP	International Center for AIDS Care and Treatment Program (ICAP)
IOM	International Organization for Migration
KP	key population
M&E	monitoring and evaluation
MAM	Medical Action Myanmar
MANA	Myanmar Anti-Narcotics Association
MdM	Médecins du Monde
MMT	methadone maintenance therapy
MPG	Myanmar Positive Group
MSF-CH	MSF Switzerland

MSF-H	MSF Holland
MSI	Marie Stopes International
MSM	men who have sex with men
MSW	male sex worker
NAP	National AIDS Program
NEQAS	national external quality assurance scheme
NGO	nongovernmental organization
NSF	National Strategic Framework on Health and Drugs
NSP	National Strategic Plan
OST	opioid substitution therapy
pARV	antiretroviral prophylaxis
PGK	Pyi Gyi Khin
PLHIV	people living with HIV
PMTCT	prevention of mother-to-child transmission of HIV
PrEP	pre-exposure prophylaxis
PSE	population size estimate
PSI	Population Services International
PUI	Première Urgence Internationale
PW	pregnant women
PWID	people who inject drugs
PWUD	people who use drugs
SARA	Substance Abuse Research Association
SOGI	sexual orientation and gender identity
SRHR	sexual and reproductive health and rights
STC	Save the Children International
STI	sexually transmitted infection
SW	sex worker
TGW	transgender women
TPT	tuberculosis preventive treatment
TSG	Technical Strategy Group
TWG	Technical Working Group
UHF	USAID HIV/AIDS Flagship Project
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
UNION	International Union Against Tuberculosis and Lung Disease
UNODC	United Nations Office on Drugs and Crime
UNOPS	United Nations Office for Project Services
USAID	United States Agency for International Development
VL	viral load
WHO	World Health Organization

EXECUTIVE SUMMARY

Myanmar is one of the countries in the Asia Pacific region with a high HIV burden. The country's HIV response initiated in early 1990, and the care and treatment program was established in 2005. The HIV epidemic in Myanmar is classed as a concentrated epidemic, with the majority of new HIV infections occurring among three key populations (sex workers [SW], men who sex with men/transgender women [MSM/TGW], and people who inject drugs [PWID]), their clients and partners. Under the leadership of the Ministry of Health, the National AIDS Program (NAP) together with various HIV stakeholders including donor organizations, technical and development agencies, implementing organizations, networks and community-based organizations have exerted a collaborative effort to fight against HIV/AIDS since the start of the response program. Through this collective effort, the country has been on track towards achieving the 95–95–95 targets, guided by National Strategic Plans.

The HIV modelling results suggest that the total number of new HIV infections showed a slight increase at the country level in 2021–2022, with the main contribution from new HIV infections among the PWID population. The country's estimated HIV prevalence from modelling has been stable around 0.66% for almost a decade. During 2022, the reported HIV prevention and testing figures among key populations indicated recovery since the start of the COVID-19 pandemic. The HIV testing coverage in 2022 was 88% among FSW, 74% among MSM/TGW and 48% among PWID, based on the respective key population size estimates. The achievements represented the highest recorded testing coverage among FSW and MSM/TGW since 2011, while HIV testing coverage among PWID was still below the pre-pandemic period. With the remarkable increase in HIV testing coverage, the HIV-positive rate among the key populations continued to decrease in 2022. The volume of sterile needles and syringes distributed to PWID increased remarkably during 2021–2022 with the expansion of the secondary distribution model. Opioid substitution therapy (OST) coverage and the six-month retention on OST rate in 2022 remained at 22% and 73%, respectively.

Although the prevention and testing services among key populations at the national level showed an increase during 2022, some states and regions, such as Sagaing, Kachin, Mandalay, Magway, Nay Pyi Taw, Shan (N) and Shan (E), were still facing substantial service disruptions. Reinforced and innovative intervention efforts such as provision of prevention services through online platforms should be considered in order to uphold the current combination prevention level amid the continuing COVID-19 pandemic and other situations. The important steps on innovative approaches to strengthen HIV testing services were already established within the country during 2021–2022. The 2022 results from the HIV community-based screening model (CBS), introduced in 2019–2020, confirmed the ability to cover the high-risk and unreached population within the country. The initiatives on the HIV self-testing and pre-exposure prophylaxis (PrEP) programs among MSM/TGW populations showed encouraging results for expansion to other key populations across the country. The results from the initiatives and early program response suggested the potential to become effective alternative strategies that could lead to widening the scope of prevention, testing and the continuum of care.

Moreover, the updated national HIV program data reporting system provided an opportunity to analyse TGW and MSM populations separately, yielding strategic information on TGW for further adaptation of services. Furthermore, specific information on people who use drugs (PWUD) allowed the country to

develop detailed harm reduction and primordial prevention plans on drug use. Availability of hepatitis B and C testing and information on the test-positive rate among vulnerable populations in 2022 would help prioritize the planning and activities of hepatitis B and C testing, prevention and treatment towards key populations, particularly PWID.

As in the prevention and testing services in key populations and other populations, PMTCT service provision across the country showed signs of recovery during 2022 compared to 2021. However, countrywide PMTCT service disruption persisted for all PMTCT indicators. Overall, 51% of the estimated number of pregnant women received HIV testing, 48% received syphilis testing, and 43% of estimated HIV-positive pregnant women were provided antiretrovirals to prevent mother-to-child transmission of HIV. The abrupt reduction in services led to higher HIV transmission to exposed babies in both the 2021 and 2022 modelling estimates. The PMTCT services in Kayah, Sagaing, Shan (N), Chin, Shan (S), Magway, Kayin and Shan (E) were greatly affected during 2021–2022. Only 33% of estimated exposed infants were provided with antiretrovirals to prevent HIV transmission, and 18% of estimated syphilis-exposed infants received treatment in 2022. Similarly, early infant diagnosis volume reduced significantly during 2022, with 12% of estimated exposed babies receiving the diagnosis.

Regarding health outcomes for people living with HIV (PLHIV), AIDS-related deaths showed a slight increase in 2022 which may be due to an increase in defaulter rate in 2021. However, with increasing ART expansion and decreased defaulter rate in 2022, it is estimated that the number of AIDS-related deaths should continue decreasing in coming years. All the HIV stakeholders exerted their best effort to maintain ART dispensing across the country. With the collective efforts of the public sector, technical and implementation partners, networks and community-based organizations, the country's ART service restored its momentum in 2022 after a temporary recession in 2021, reaching more than 200,000 PLHIV receiving ART. Although the national ART cohort was recovered, ART service disruptions persist in Nay Pyi Taw, Kayah and Shan (N). The volumes of newly identified PLHIV, enrolment in care and ART initiation increased in 2022 compared to 2021, but more efforts are still required to reach the achievement levels of before the pandemic. Nevertheless, the rate of ART initiation among those enrolled was maintained at 80% in 2022, reflecting a good linkage between testing and treatment. Retention in care and adherence to ART are critical elements of HIV care interventions and health outcomes. However, retention on ART data were not consistently available due to reporting difficulties since 2020. This calls for urgent action to improve documentation processes and develop and implement tracing strategies.

By the end of 2022, 78% of estimated people living with HIV knew their HIV status, 74% and 28% had achieved viral suppression status. The reduction in viral suppression was the result of the drop in viral load testing, whereas the viral suppression rate among those tested for viral load was high at 96%. Along with remarkable gains across the HIV testing and treatment coverage, the country appears to be on track for the first two '95' targets. However, it is behind on the third '95' indicator with low viral load testing in 2021–2022. TB/HIV collaborative activities such as providing dual treatment to TB/HIV coinfected patients and providing TB preventive treatment (TPT) to TB-negative HIV patients are starting to restore essential services but have not yet fully recovered.

The work on integration of community and health systems and promoting a human right–based approach has been successfully continued during 2021–2022. Technical agencies provided capacity-building support to networks and community-based organizations to advance HIV prevention services and linkage to treatment and care services. Care and support services by peers from Myanmar Positive Group played an important role in maintaining ART distribution and adherence in recent years, especially in difficult

areas. Sensitization workshops were conducted with the aim to address the stigma and discrimination that key populations face. The second-generation community leadership program was continued to improve governance and leadership of networks. The community-led World AIDS Day program became a success in recent years, with wide dissemination of the theme 'Equalize'.

In support of community-led services, several institutional capacity-building initiatives including training, workshops and mentoring sessions were conducted for community networks and community-based organizations to increase their engagement in prevention and care and support activities. Trainings and workshops were based on the capacity needs, and the majority focused on leadership, financial management and project cycle management, and facilitation skills. In addition, there were trainings to increase community knowledge on thematic areas such as harm reduction, human rights and gender and social inclusion. The community feedback mechanism implemented by major key population networks was growing well during recent years.

In late 2022, two external reviews on the country's HIV response were conducted: HIV epidemiological review and programmatic review. Experienced international consultants led the reviews, and all the country's HIV stakeholders were involved. The reviews aimed to identify implementation progress and bottlenecks, to obtain recommendations for the necessary adaptations and changes required in implementation, to strengthen the delivery of HIV services and improve operational performance and outcomes. With the coordination and leadership of the Communicable Disease Working Group (CDW) at the national level and technical and strategy inputs from Technical Strategy Group (TSG) and respective Technical Working Groups (TWGs), the country's HIV response has been coordinated and collaborative.

All in all, the 2022 HIV program response data continued to suffer the limitation on the number of reporting sites, particularly of PMTCT services, as well as the quality of reported data due to limited availability of health workers and other healthcare resources across the country amid the pandemic and other situations. That being so, the assurance of data accuracy, completion and timeliness was insufficient. The country's HIV service provision as well as reporting capacity has shown an important step towards returning to pre-pandemic levels of service delivery and broader system functioning. It is expected that the country's HIV response will be back on track towards the 95–95–95 targets in coming years. The human resource capacity should be ensured at all levels to maintain service delivery as well as quality reporting. The resurgence will be accelerated by emphasizing the adoption of more tailored approaches at the subnational level by under-functioning states and regions to ensure the continuum of care from prevention to care and treatment.

INTRODUCTION

This report aims to summarize Myanmar's HIV response, including the achievements, opportunities and challenges, during 2022. The contents of the report are organized based on the strategic directions and national indicators described in the National Strategic Plan on HIV/AIDS 2021–2025 (NSP IV).

Under the leadership of the National AIDS Program (NAP), the country's HIV response has been collectively implemented by around 25 stakeholders including implementing partners, technical and supporting organizations, donor organizations, United Nations organizations, community and key population networks. In 2021, the national reporting format was updated to provide detailed information on the priority populations and new service modalities described in NSP IV.

HIV epidemic in Myanmar

In Myanmar, HIV has been recognized as one of the prioritized public health problems, and the country has been engaged in dedicated HIV response since early 1990, led by the National AIDS Program, Department of Public Health (DoPH), Ministry of Health. The country has committed to the 10 Fast-Track commitments to end the AIDS Epidemic by 2030 with 'Zero new infections, Zero discrimination and Zero AIDS-related deaths.'

The HIV epidemic in Myanmar is classified as a concentrated epidemic, occurring mainly among key populations, namely sex workers (SW), men who have sex with men and transgender women (MSM/TGW) and people who inject drugs (PWID), and their clients and partners. New HIV infections started around early 1990, primarily among PWID, peaked around the year 2000 involving all three key populations, clients and partners, and have been gradually declining since then. In terms of HIV prevalence, the peak was observed around 2006–2009 followed by a stable decline with the establishment and scale-up of the antiretroviral therapy (ART) program since 2005.

Epidemic modelling[1] estimated that there were about 280,000 people living with HIV (PLHIV), with around 11,000 new HIV infections and 6,500 AIDS deaths in 2022. Among all new HIV infections, one quarter came from needle sharing, one fifth were through male–male sexual transmission, and sex work related infections represented around one sixth. Husband-to-wife transmission made up more than one quarter. The country's HIV prevalence among adults (15+ years) was estimated at around 0.66% in 2022.

Based on Integrated Biological and Behavioural Surveillance (IBBS) data,[2] HIV prevalence among FSW was around 8.25% (2019), 8.79% among MSM (2019) and 34.9% among PWID (2017). HIV sentinel sero-surveillance (HSS) 2020 showed that HIV prevalence has been stable among FSW and PWID and increasing among MSM/TGW in recent years.[3]

1 AEM-Spectrum modelling estimate May 2023.

2 IBBS among FSW/MSM (2019), and IBBS among PWID (2017).

3 HSS 2020.

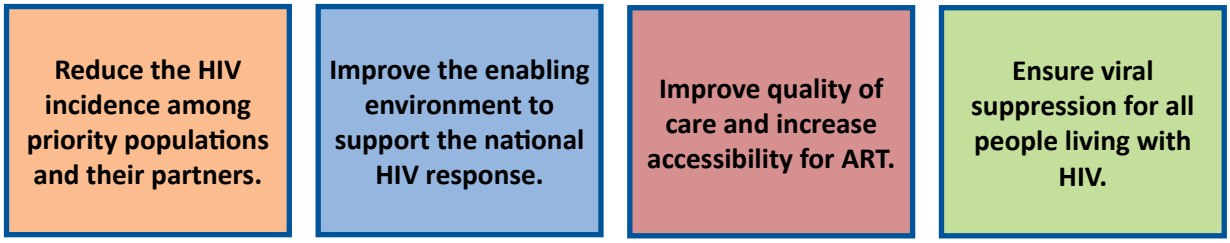
National Strategic Plan on HIV and AIDS 2021–2025 (NSP IV)

Since 2000, the country's HIV response has been going on under the guidance of sequential five-year national strategic plans on HIV and AIDS (NSP). The year 2022 was the second year of the new NSP IV (2021–2025), which was developed in 2020 by a collective effort of all HIV stakeholders in response to the country's situation and requirements.

The vision of NSP IV is "to end HIV as a public health threat in Myanmar through fast-tracking access to a continuum of integrated and high-quality services that protect and promote human rights for all without financial hardship by 2030." The guiding principle of NSP IV is the 'three Ones': one national plan, one national coordination, and one M&E plan. Under this principle, it is expected to achieve universal access to health and development, and the Sustainable Development Goals (SDGs).

The strategic framework of NSP IV includes four objectives along with five strategic milestones and five strategic directions under which are the priority intervention areas and activities for a comprehensive and coordinated response to HIV (Figure 1 and Figure 2). It identifies 10 priority populations: PLHIV, PWID and PWUD, MSM, TGW, SW and their clients, people in closed settings, sexual partners of priority populations, young priority populations and children, migrants and overlapping risks. The operational model describes 167 high priority townships. The structure of this report is aligned with the five strategic directions, and priority populations.

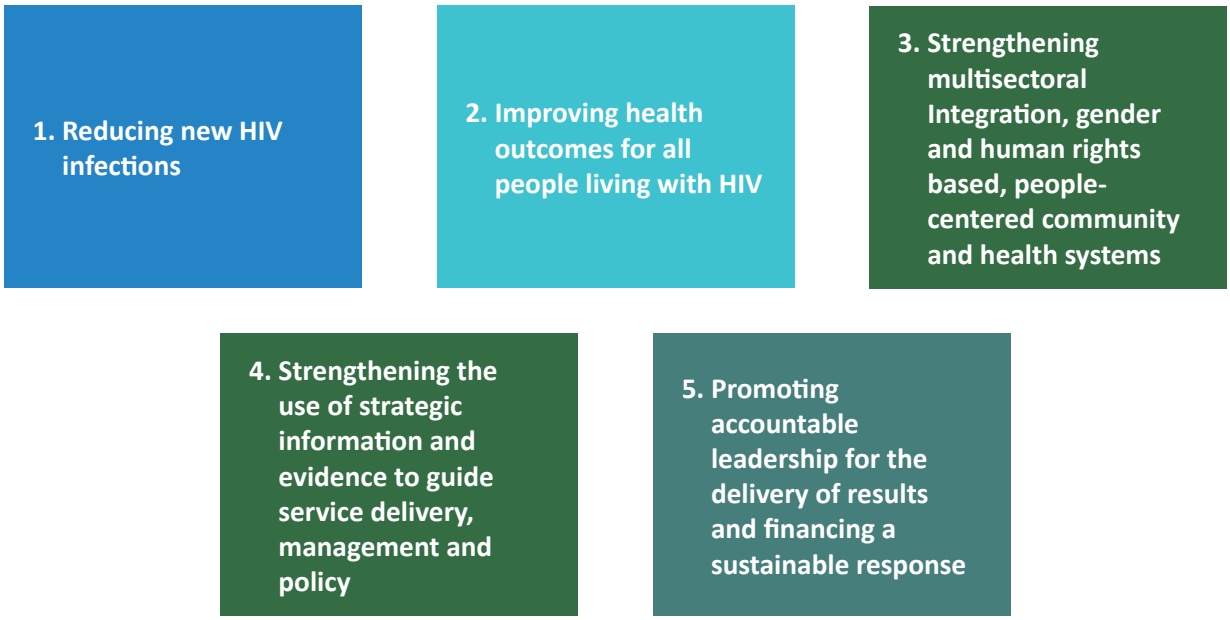
Figure 1: Objectives and strategic milestones of NSP IV



Strategic milestones

- 95% of sex workers, men who have sex with men, people who inject drugs, and prisoners have access to combination prevention services.
- 95% of people living with HIV know their status.
- 95% of people living with HIV who know their status receive treatment and get viral load tested.
- 95% of people on treatment have achieved viral suppression.
- All people living with, at risk of and affected by HIV report no discrimination in all sectors, especially in health, education and workplace settings.

Figure 2: Strategic directions of NSP IV



NATIONAL HIV INDICATOR SUMMARY

Indicator	Source	Reporting year	Result
Impact			
No. of new infections per 1,000 FSW among the uninfected population of FSW	Modelling[4]	2022	4.71
No. of new infections per 1,000 MSM/TGW among the uninfected population of MSM/TGW (reachable MSM/TGW)	Modelling	2022	11.24
No. of new infections per 1,000 PWID among the uninfected population of PWID	Modelling	2022	38.09
No. of new infections per 1,000 adults (15–49 years) among the uninfected population	Modelling	2022	0.34
No. of AIDS-related deaths per 100,000 population	Modelling	2022	11.82
% HIV-infected among HIV-exposed infants born in the past 12 months	Modelling	2022	24%
Output/coverage (FSW, MSM/TGW, PWID)			
No. of FSW reached with HIV prevention programs	Program data/ FSW PSE	2022	77,535 (high figure) 65,619 (low figure) (85%)
No. of FSW who received an HIV test and knew the result	Program data/ FSW PSE	2022	68,259 (88%)
No. of MSM and TGW reached with HIV prevention programs	Program data/ MSM/TGW PSE	2022	110,743 (high figure) 94,012 (low figure) (69%)
No. of MSM and TGW who received an HIV test and knew the result	Program data/ MSM/TGW PSE	2022	100,538 (74%)
No. of MSM and TGW who received oral pre-exposure prophylaxis (PrEP) at least once in the past 12 months	Program data	2022	2,702
% of MSM and TGW PrEP users who continued on oral PrEP for three consecutive months after having initiated PrEP	Program data	2022	48%
No. of PWID reached with HIV prevention programs	Program data/ PWID PSE	2022	79,829 (high figure) 57,646 (low figure) (50%)
No. of PWID received an HIV test and knew the result	Program data/ PWID PSE	2022	55,398 (48%)
No. of sterile injecting equipment distributed to PWID	Program data	2022	37.5 million
No. of PWID receiving opioid substitution therapy at the end of reporting period	Program data/ PWID PSE	2022	25,866 (22%)

4 AEM modelling estimate May 2023.

Indicator	Source	Reporting year	Result
% of PWID receiving opioid substitution therapy for at least 6 months	Program data	2022	73%
Output/coverage (Other vulnerable population and General population)			
No. of other vulnerable populations reached with HIV prevention programs	Program data	2022	
Clients of SW			17,528
Regular partners of SW			4,291
Female partner of MSM			99
Regular partners of PWID			7,438
PWUD			36,740
People in prison and other closed settings			2,831
Mobile and migrants/people in workplace			30,755
Youths (15–24-year non-KP but high risk)			1,045
Negative partner of PLHIV			1,714
Other populations			23,239
No. of other vulnerable populations who received an HIV test and knew the result	Program data	2022	
Clients of SW			44,982
Partners of key populations			24,372
PWUD			28,393
People in prison and other closed settings			10,113
Mobile and migrants/people in workplace			33,313
Youths (15–24-year non-KP but high risk)			32,116
Negative partner of PLHIV			10,734
Other populations			91,376
No. of people who received STI treatment in the last 12 months	Program data	2022	24,899
No. of condoms distributed for free	Program data	2022	34.2 million
No. of condoms sold through social marketing	Program data	2022	6.6 million
% of PLHIV who have been tested and knew their HIV-positive status (1st 95)	Program data/ PLHIV estimate	2022	78%
Output/coverage (PMTCT)			
% and number of pregnant women attending antenatal care services who received HIV testing	Program data	2022	569,709 (51%)
% and number of pregnant women attending antenatal care services who received syphilis testing	Program data	2022	537,255 (48%)

Indicator	Source	Reporting year	Result
% and number of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission	Program data/ HIV+ PW estimate	2022	1,954 (44%)
% and number of syphilis-positive pregnant women who received treatment to reduce the risk of mother-to-child transmission	Program data	2022	2,232 (46%)
% of HIV exposed infants who initiated ARV prophylaxis	Program data/ HIV+ PW estimate	2022	1,393 (33%)
% of syphilis exposed infants who received treatment	Program data	2022	824 (18%)
% of HIV exposed infants receiving a virological test for HIV within 2 months of birth	Program data/ HIV+ PW estimate	2022	521 (12%)
Outcome (ART)			
% of PLHIV on ART who are virally suppressed (≤1,000 copies/mL) (3rd 95) among those on ART	Program data	2022	27%
% of PLHIV on ART who are virally suppressed among those tested for viral load	Program data	2022	96%
Output/coverage (ART)			
% of newly identified (reported) HIV-positive people newly received treatment during the reporting period	Program data	2022	80%
% of PLHIV who are receiving ART (2nd 95) (among the estimated PLHIV)	Program data/ PLHIV estimate by modelling	2022	75%
No. of adults living with HIV who are receiving ART	Program data	2022	203,863 (75%)
No. of children living with HIV who are receiving ART	Program data	2022	6,137 (68%)
No. of PLHIV on ART received viral load test (among those on ART)	Program data	2022	60,260 (29%)
No. of HIV-positive new and relapse TB patients on ART during TB treatment	Program data	2022	3,766
% of PLHIV on ART who initiated TB preventive therapy among those eligible during the reporting period	Program data	2022	38%
Output/coverage (Laboratory)			
No. of HIV testing laboratories participating in national quality assurance scheme	National Health Laboratory NEQAS records	2022	406

STRATEGIC DIRECTION I: REDUCING NEW HIV INFECTIONS

PRIORITY INTERVENTION AREA

1.1 Increase scale of effective combination prevention interventions for priority populations.

1.2 Maximize HIV testing and strengthened linkages to ART among priority populations and their sexual partners.

Prevention among sex workers and their clients (SW and clients)

Partners working with sex workers in 2022:

AHRN, Alliance, IOM, MAM, MPG, MSI, NAP, PGK, PSI, PUI, SWiM and CBOs

Table 1: National level female sex workers (FSW) reached with HIV prevention, tested for HIV and positivity rates during 2022

Impact/outcome indicators	Data source	Size estimate	Baseline 2010	Target 2022	Results 2022
No. of new infections per 1,000 FSW among the uninfected population of FSW	Modelling[5]		16.60	4.75	4.71
Percentage of FSW reporting condom use at last sex with client	HSS				81.2%[6] (2020)
Output/coverage indicators	**Data source**	**Size estimate**	**Baseline 2020**	**Target 2022**	**Results 2022**
No. of FSW reached with HIV prevention programs	Program data	77,000[7]	44,621[8]	63,832	65,619[9]
No. of FSW who received an HIV test and knew the result in the last 12 months	Program data	77,000	48,659	60,850	68,259
No. of clients of FSW reached with HIV prevention programs	Program data	1,277,000[10]	10,442	11,150	16,397
No. of clients of FSW who received an HIV test and knew their result	Program data	1,277,000	29,857	49,454	44,359
No. of regular partners of FSW reached with HIV prevention programs	Program data	36,088[11]	2,749	2,830	2,045

5 AEM modelling estimate May 2023.

6 HSS 2020.

7 FSW PSE in 2019, in consideration of population projection in 2022 from HIV estimate model.

8 Low-end figure, adjusted for (1) duplication among different organizations in one township and (2) duplication between outreach and DIC.

9 Ibid.

10 Clients of FSW PSE from HIV estimate model.

11 2019 FSW estimate and information on regular partners from 2019 FSW IBBS.

To address service gaps and provide a better coverage of HIV services while ensuring service quality, the operational model guided the essential and comprehensive HIV service packages for different areas such as HIV prevention, HIV testing services (HTS), care and treatment, HIV integrated with other services, commodities and enabling environment. HIV prevention is the first key element included in the essential package and it includes a range of intervention activities, such as awareness raising, behaviour change communication, sexually transmitted infection management, sexual and reproductive health service, and blood safety.

The national HIV response determines priority populations, the most affected population groups, based upon annual epidemiological and sociodemographic data. This process ensures individuals in greatest need[12] are getting the most intensive community and health services. Sex workers are one of the prioritized populations, and the vast majority of sex workers identify themselves as female/women. Thus, the country's NSP IV targets were set for the FSW population.

FSW reached with HIV prevention and tested for HIV at the national level

The year 2022 was the second year under the new National Strategic Plan 2021–2025 (NSP IV), and the new Global Fund cycle (2021–2023). The HIV incidence among FSW for 2022 was expected to be 4.71 new HIV infections per 1,000 uninfected FSW. The national target for lowering the HIV incidence among FSW (4.75/1,000 uninfected FSW) was achieved in 2022.

Starting from the HIV sentinel sero-surveillance (HSS) 2020, important risk behaviour questions were added in the survey questionnaires. The results showed that condom use among FSW at last sex with client was 81.2%. This was lower than the results from Integrated Biological and Behavioural Surveillance survey (IBBS) 2019, which was 90%. The difference in site selection between IBBS and HSS might be a factor for the difference, the former including more urban sites than the latter.

It is estimated that there were around 77,000 female sex workers in Myanmar in 2022. This estimate was based on the previous FSW population estimation exercise in 2019 and consideration of population growth by year. However, the country does not have population size estimates for male sex workers (MSW) yet, as the information on MSW is still minimal.

At the program level, there is no nationwide unique identifier system to track each individual accessing prevention services from outreach and drop-in centre (DIC) services within the same organization or different organizations providing similar services in the same township. Although some organizations started utilizing organization-specific identifiers, the total reported number of FSW reached with prevention services is still likely to have double counting between outreach and DIC services across the organizations. The mobile nature of the FSW population can also be an issue. Evidence from the IBBS shows that FSW tend to move among townships for sex work within a year, leading to another type of duplication in prevention reach data.

In the absence of a unique identifier system across the country, the issue of possible double counting (the possibility of counting the same individual two or more times for the same service provision) has been considered and addressed in two steps: (1) across organizations and (2) within an organization. If more than one organization is providing the same services in the same township, we used the figure reported by the organization that reached the highest number of individual FSW in that particular township. Considering duplications within an organization, if an organization is providing services

12 NSP IV.

through outreach activities as well as by DIC in the same township, it is assumed that 25% of reach might be overlapping, based on consensus among implementing partners. Hence, 75% of combined outreach and DIC reach is counted if that figure is larger than the individual outreach or DIC reach. After consideration of possible double counting of FSW within and between organizations, the resulting figure is described as the low-end figure (65,619 in 2022). The high-end figure (77,535 in 2022) refers to the sum of all FSW reached by both prevention service models by all organizations. These low- and high-end figures yield a range of prevention reach data from the lowest to the highest possible among FSW. It can be interpreted that the possible number of FSW reached by prevention services in 2022 is between 65,619 and 77,535.

For the same reasons as in the FSW population (duplication, and difficulty of providing unique identifier in outreach activities), the same method of calculation is applied consistently for the national data over the years and for other key populations, such as the number of MSM/TGW and PWID reached with prevention services. The general consensus was that the low-end figures would be utilized for analysis of each key population and target setting purposes.

During 2022, a total of 77,535 FSW were provided with the minimum package of HIV prevention services by 11 organizations including NAP. Table 2 shows the high-end figures of prevention reach for FSW between 2018 and 2022. In general, there was a drop in the FSW prevention reach in 2020 and 2021 due to COVID-19 restrictions and other situations. However, the total number of FSW reached recovered in 2022, reaching the highest number over the five-year period.

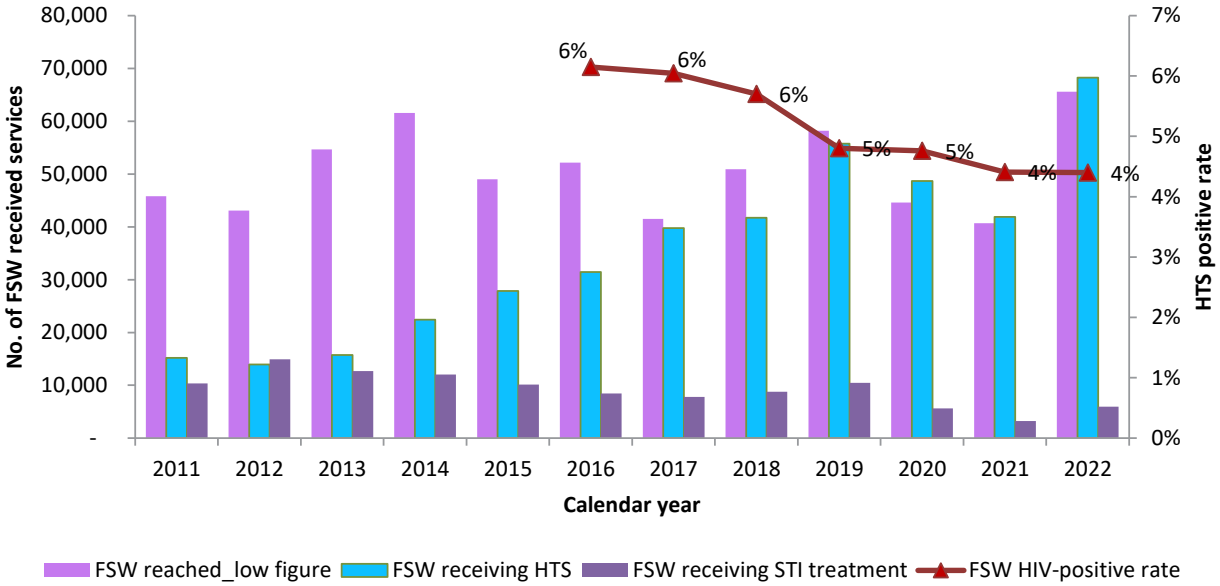
Since 2018, Pyi Gyi Khin (PGK) has been providing services through key population service centres (KPSC) under the supervision of NAP. A new implementing partner, Myanmar Positive Group (MPG), started providing services since 2021 as one of the sub-recipients under the Global Fund grant. Despite the country situation, all the service providers maintained their prevention services to FSW population. Significant achievements were noted in MPG and Alliance during 2021 and 2022 (Table 2). Since prevention services from the public sector were disrupted in early and mid-2021, prevention service reach substantially dropped in 2021; the public sector accounted for 27% of the country's total FSW prevention reach in 2021 compared to 47% in 2020. The total of number of FSW reached by the public sector showed signs of recovery in 2022 but has not yet reached the level of 2020.

After undergoing the de-duplication process mentioned above, the number of FSW reached by prevention services in 2022 became 65,619 (low-end figure). As mentioned above, the low-end figure was used as the national reporting figure throughout NSP II, NSP III and NSP IV. It is estimated that around 85% of FSW were covered by prevention services in 2022.

Table 2: Female sex workers reached with prevention services by organization (high-end figures[13]) (2018–2022)

Organization	2018	2019	2020	2021	2022
AHRN	501	289	516	1,422	2,025
Alliance	8,734	9,096	7,976	10,028	11,757
IOM	1,193	1,790	1,446	1,956	2,568
Malteser	1,405	1,305	757	-	-
MAM	5,019	4,791	2,767	2,463	2,163
MdM	2,885	1,726	1,729	1,659	-
MPG	-	-	-	2,240	6,081
MSI	2,092	2,452	2,279	2,678	3,814
NAP	20,659	30,947	29,735	13,949	24,770
PSI	22,167	24,096	15,065	14,047	23,177
PUI	542	678	821	1,068	1,180
Total	**65,197**	**77,170**	**63,091**	**51,510**	**77,535**

Figure 3: Female sex workers reached with prevention, HTS and STI treatment (2011–2022)



13 Sum of total reported figures of FSW prevention reach from all organizations (outreach + DIC).

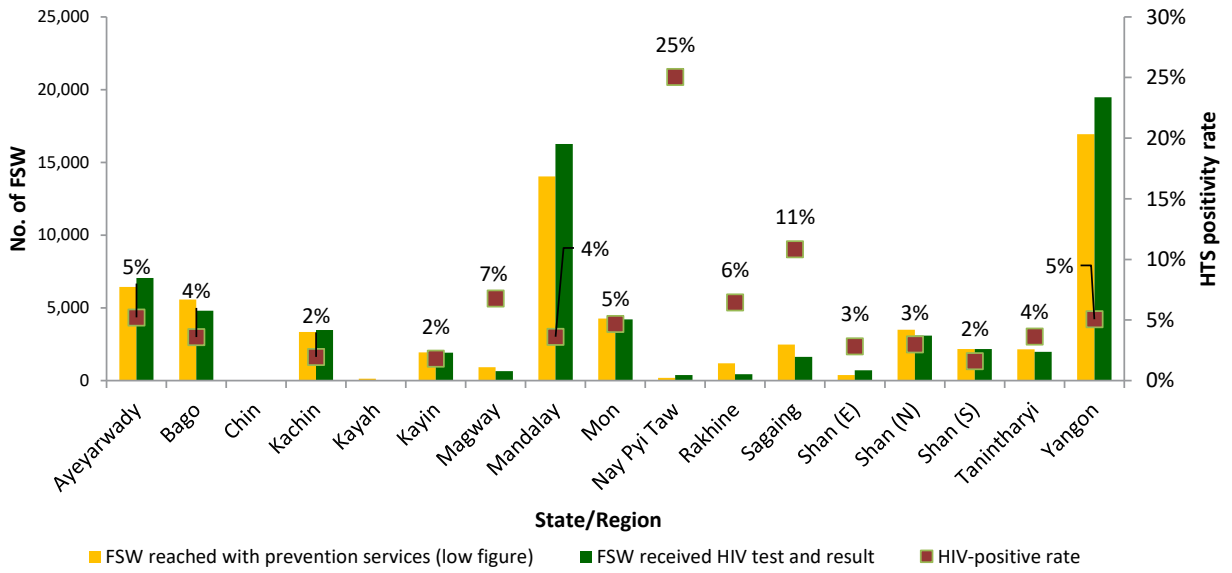
Figure 3 shows the number FSW reached with HIV prevention services, tested for HIV and received the test result, and who received treatment for sexually transmitted infections (STI) between 2011 and 2022. The prevention and testing related national targets set for FSW were achieved in 2022. The year 2022 had the highest number of FSW reached with HIV prevention and testing services recorded in the Myanmar national HIV/AIDS program response. It is estimated that in 2022 at least 85% of FSW were covered by HIV prevention services and around 89% received HIV testing. The reason why the HIV testing number was higher than the prevention reach number might be that some FSW received or requested the testing service only without receiving the prevention service package, and the lack of unique identifier system for the beneficiaries. Although there were slight fluctuations among FSW reached with prevention services over the decade, the number of FSW who received HIV testing and counselling services increased steadily over the years, except for a dip in 2020–2021. The HIV-positive rate among those tested has been constantly decreasing, from 6% to 4% in the last five years. The number of FSW receiving treatment for STI reached the lowest recorded level in 2021, when only 3,254 FSW received STI treatment. However, this service started to recover in 2022, reaching almost 6,000 FSW receiving STI treatment.

FSW reached with HIV prevention and tested for HIV at the state and regional level

There are five priority regions for HIV programs identified in both NSP III and NSP IV, namely Yangon, Mandalay, Kachin, Shan (N) and Sagaing, based on numbers of key populations, new HIV infections and HIV prevalence. HIV prevention services for FSW are provided in all states and regions except Chin State where the FSW population is very low, and with difficult transportation in the area. Yangon is the largest city in Myanmar with the highest estimated number of FSW. Consequently, the highest number of FSW reach was reported in Yangon for every year, followed by Mandalay, the region with the second largest FSW population, at 25% and 21%, respectively, of the country's total reach low-end figure (Figure 4).

During 2020–2021, there was a significant decrease in the FSW prevention reach in almost all states and regions, particularly in Kachin, Magway, Nay Pyi Taw and Shan (E) (Figure 5, Table 3). In 2022, the service coverage started showing the first major signs of recovery; the coverage in most states and regions, including Yangon, Mandalay, Bago, Ayeyarwady, Shan(N), Kayin and Rakhine, surpassed the levels recorded in the last five years. Other states and regions, such as Magway, Kachin, Shan (E) and Nay Pyi Taw, showed an encouraging trend but did not reach the level of before the pandemic. During the period 2018–2022, there were no implementing partners in Chin and Kayah, and only very few FSW were reported receiving prevention services through the national program. However, in Rakhine, the new community-led prevention service activities under a community network consortium (CNC) in collaboration with NAP enabled prevention services for key populations in that state. Thus, there has been an encouraging coverage trend since 2020, reaching 71% of FSW received prevention services in 2022. Regions showing more than 100% coverage in previous years may be due to a larger change in FSW population size estimate (PSE) than expected, mobility of FSW from region to region, or inadequate adjustment of duplication in the reporting of FSW reached in those states and regions.

Figure 4: Female sex workers reached with different prevention services by state/region in 2022



As in the prevention service coverage, HIV testing figures decreased during 2020 and 2021 before showing an upward trend in 2022 (Table 4). Similarly, the regions that suffered most were Kachin, Magway, Sagaing, Tanintharyi and Shan (E). In 2022, more than 70% of FSW in Yangon, Mandalay, Ayeyarwady, Mon, Bago and Shan (S) had received HIV testing and counselling services whereas other states and regions had less than 70% HIV testing coverage, with the lowest shown in Magway (21%), Sagaing (23%) and Shan (E) (26%). Chin and Kayah did not report any HIV testing service among FSW in 2022.

In general, the reported HIV-positive rate among those who received HIV testing and counselling services has been decreasing marginally in most states and regions across the country. However, there has been a significant increase in HTS positive rate in Sagaing, Magway and Nay Pyi Taw during 2021–2022, which might be due to a more targeted HIV testing amid the restrictions.

Map 1 illustrates township-level distribution of prevention services for FSW in 2022. HIV prevention services for FSW were available in 152 out of 329 townships (46%) in 2022. This showed a modest increase from 38% in 2021. As in previous years, there were no prevention services delivered to FSW residing in Chin in 2022.

Prevention among male sex workers (MSW)

Since 2021, the national reporting system extended to include prevention service reach to male sex workers (MSW). A total of 512 MSW (<1% of total sex workers reached) were reported to have received HIV prevention services in 2022. This represents a four-fold increase in the number of MSW reached with HIV prevention services compared to 2021. Among MSW who received prevention services in 2022, more than 70% of them were from Yangon and Mandalay, and the vast majority (>75%) received prevention services from NAP and PSI. Similarly, the number of MSW who received HIV testing services increased significantly from 130 in 2021 to 552 in 2022. With regard to HIV-positive rate, 52 out of 552 MSW who received HIV testing in 2022 tested positive (9%), which is slightly higher than in 2021 (8%).

The HIV-positive rate among MSW is roughly two-times higher than among FSW in both 2021 and 2022. This can be an important signal of the need to collect program data as well as bio-behavioural data consistently among MSW.

Figure 5: Number of FSW reached by HIV prevention program by state/region (2018–2022)

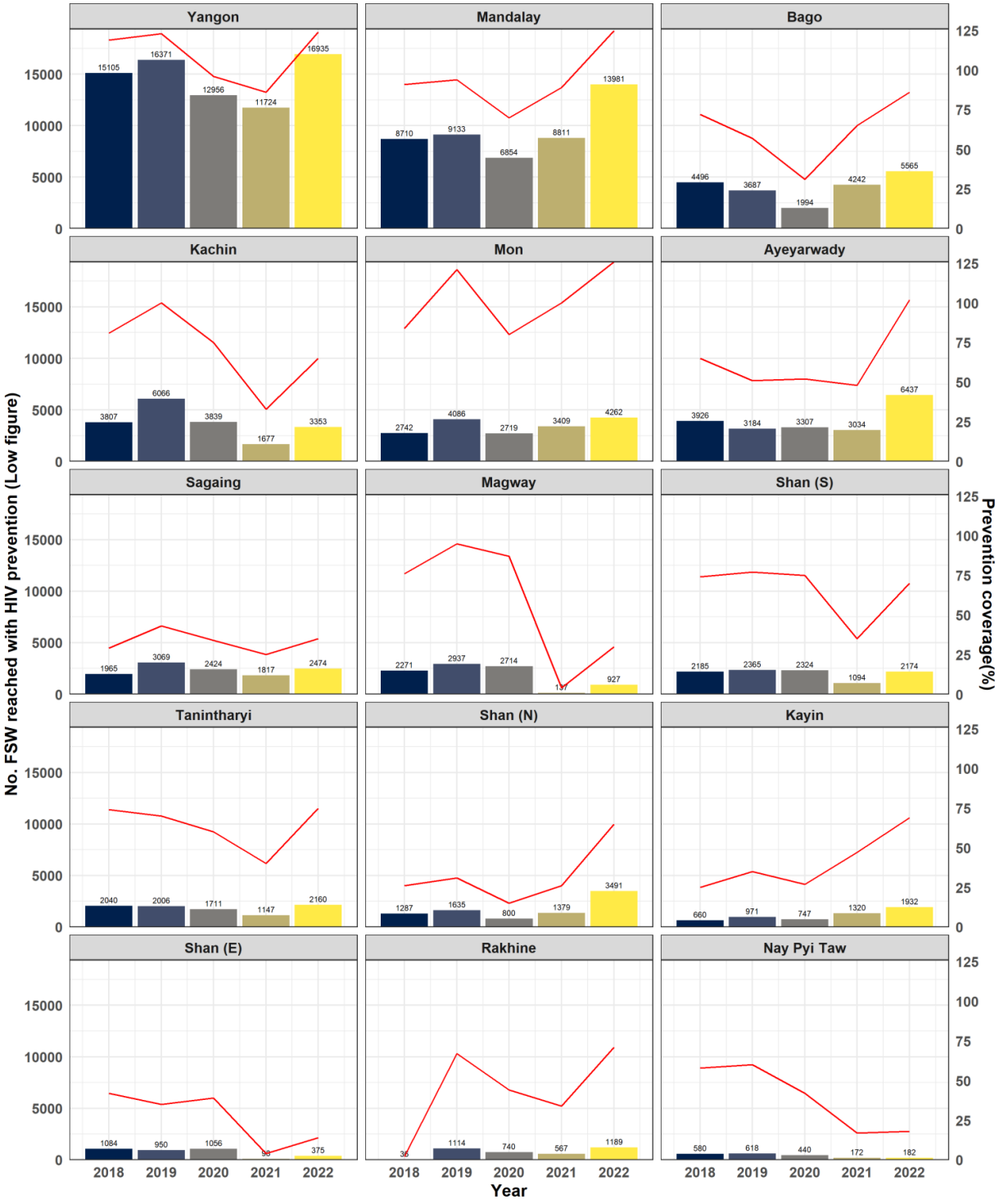


Table 3: Number of FSW reached by HIV prevention program by state/region (2018–2022)

State/Region	2018			2019			2020			2021			2022		
	High figure	Low figure	Coverage	High figure	Low figure	Coverage	High figure	Low figure	Coverage	High figure	Low figure	Coverage	High figure	Low figure	Coverage[14]
Ayeyarwady	5,375	3,926	***65%***	5,153	3,184	***51%***	5,202	3,307	***52%***	5,586	3,034	***48%***	7,615	6,437	***102%***
Bago	5,504	4,496	***72%***	4,661	3,687	***57%***	2,977	1,994	***31%***	4,933	4,242	***65%***	6,782	5,565	***86%***
Chin	-	-	-	4	4	***1%***	-	-	-	-	-	-	-	-	-
Kachin	4,732	3,807	***81%***	6,638	6,066	***120%***	6,049	3,839	***75%***	1,935	1,677	***33%***	3,802	3,353	***65%***
Kayah	12	12	***2%***	-	-	-	1	1	***0%***	62	62	***12%***	131	131	***25%***
Kayin	965	660	***25%***	2,007	971	***35%***	1,384	747	***27%***	1,320	1,320	***47%***	1,932	1,932	***69%***
Magway	2,429	2,271	***76%***	3,538	2,937	***95%***	3,252	2,714	***87%***	253	137	***4%***	1,233	927	***30%***
Mandalay	11,802	8,710	***91%***	12,999	9,133	***94%***	10,879	6,854	***70%***	11,705	8,811	***89%***	16,920	14,032	***125%***
Mon	5,037	2,742	***84%***	6,111	4,086	***121%***	4,174	2,719	***80%***	4,153	3,409	***100%***	5,548	4,262	***126%***
Nay Pyi Taw	580	580	***58%***	618	618	***60%***	440	440	***42%***	172	172	***17%***	182	182	***18%***
Rakhine	36	36	***2%***	1,114	1,114	***67%***	740	740	***44%***	767	567	***34%***	1,327	1,189	***71%***
Sagaing	2,644	1,965	***29%***	3,893	3,069	***43%***	3,268	2,424	***34%***	2,136	1,817	***25%***	3,066	2,474	***35%***
Shan (E)	1,403	1,084	***42%***	1,480	950	***35%***	1,518	1,056	***39%***	98	98	***4%***	375	375	***14%***
Shan (N)	1,412	1,287	***26%***	2,156	1,635	***31%***	1,356	800	***15%***	1,501	1,379	***26%***	3,758	3,491	***65%***
Shan (S)	2,185	2,185	***74%***	2,365	2,365	***77%***	2,324	2,324	***75%***	1,094	1,094	***35%***	2,174	2,174	***70%***
Tanintharyi	2,911	2,040	***74%***	3,192	2,006	***70%***	2,690	1,711	***60%***	1,418	1,147	***40%***	2,493	2,160	***75%***
Yangon	18,170	15,105	***119%***	21,241	16,371	***123%***	16,837	12,956	***96%***	14,377	11,724	***86%***	20,197	16,935	***124%***
Total	65,197	**50,906**	***71%***	**77,170**	**58,196**	***78%***	**63,091**	**44,626**	***59%***	**51,510**	**40,690**	**53%**	**77,535**	**65,619**	**85%**

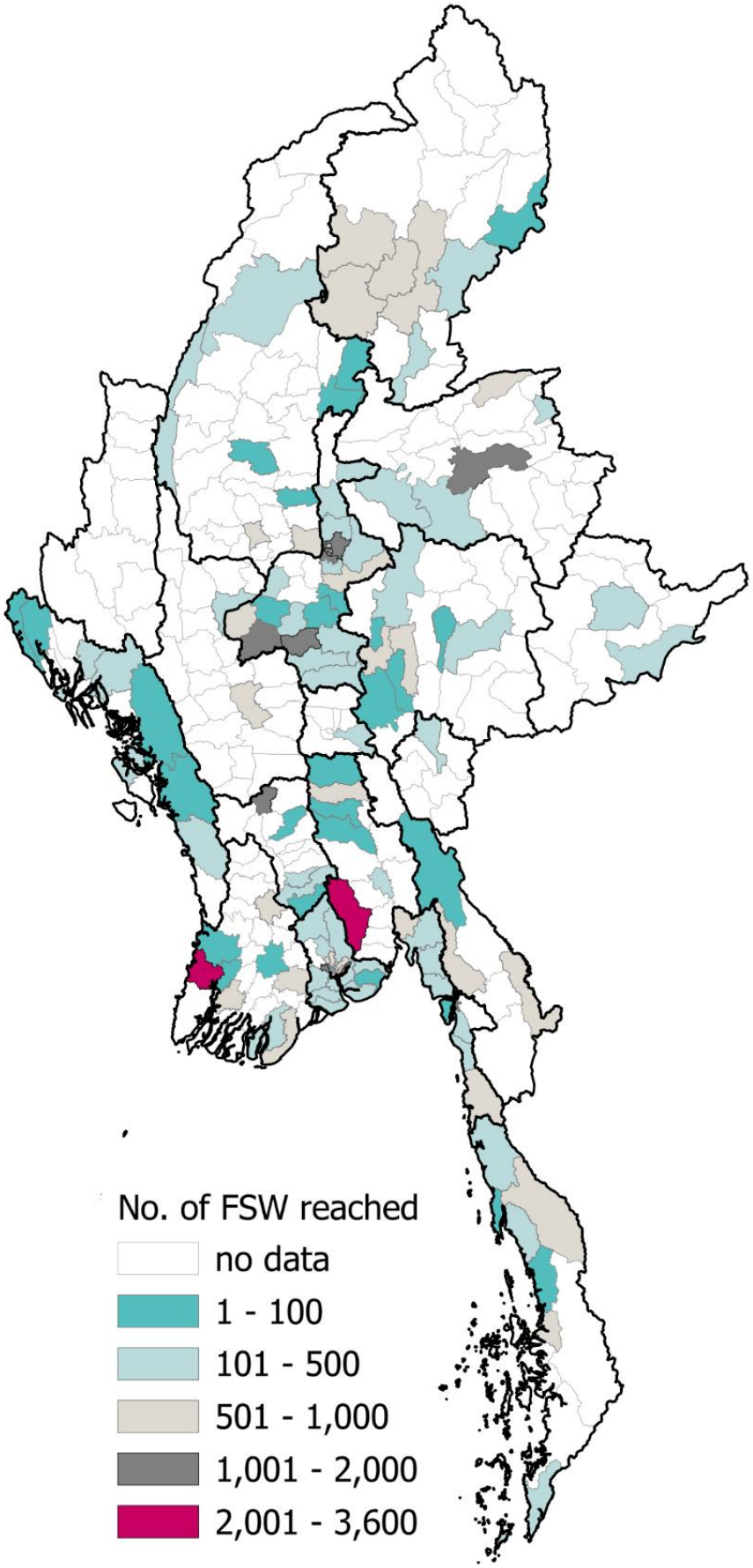
14 Prevention coverage is calculated based on low-end prevention reach figure and FSW PSE for respective year from modelling (using 2019 PSE with consideration of population growth).

Table 4: Number of FSW tested for HIV and knew their result by state/region (2018–2022)

State/Region	2018			2019			2020			2021			2022		
	FSW received HTS	HTS coverage[15]	HTS positivity	FSW received HTS	HTS coverage	HTS positivity	FSW received HTS	HTS coverage	HTS positivity	FSW received HTS	HTS coverage	HTS positivity	FSW received HTS	HTS coverage	HTS positivity
Ayeyarwady	4,283	*71%*	*7%*	4,477	*71%*	*8%*	4,714	*74%*	*7%*	3,989	*63%*	*4%*	7,052	*111%*	*5%*
Bago	4,190	*67%*	*5%*	3,990	*62%*	*4%*	2,595	*40%*	*7%*	3,580	*55%*	*4%*	4,814	*74%*	*4%*
Chin	3	*0%*	*0%*	-											
Kachin	2,006	*43%*	*7%*	4,832	*96%*	*3%*	4,646	*91%*	*2%*	1,628	*32%*	*3%*	3,477	*68%*	2%
Kayah	28	*6%*	*18%*	4	*1%*	*25%*	31	*6%*	*0%*						
Kayin	872	*33%*	*4%*	1,364	*49%*	*4%*	1,263	*45%*	*3%*	1,208	*43%*	*3%*	1,916	*69%*	*2%*
Magway	1,576	*53%*	*5%*	2,359	*76%*	*3%*	2,247	*72%*	*3%*	247	*8%*	*6%*	649	*21%*	*7%*
Mandalay	6,278	*66%*	*6%*	9,047	*93%*	*4%*	8,340	*85%*	*4%*	10,861	*110%*	*3%*	16,275	*146%*	*4%*
Mon	3,570	*110%*	*4%*	3,776	*112%*	*5%*	2,759	*81%*	*6%*	3,351	*98%*	*4%*	4,205	*124%*	*5%*
Nay Pyi Taw	429	*43%*	*7%*	664	*64%*	*8%*	614	*59%*	*8%*	216	*21%*	*5%*	387	*37%*	*25%*
Rakhine	82	*5%*	*5%*	364	*22%*	*5%*	186	*11%*	*8%*	171	*10%*	*8%*	433	*26%*	*6%*
Sagaing	1,559	*23%*	*6%*	2,633	*37%*	*5%*	2,426	*34%*	*4%*	1,006	*14%*	*12%*	1,633	*23%*	*11%*
Shan (E)	830	*32%*	*3%*	1,134	*42%*	*5%*	1,476	*55%*	*3%*	138	*5%*	*9%*	705	*26%*	*3%*
Shan (N)	821	*17%*	*9%*	1,670	*32%*	*4%*	1,503	*28%*	*6%*	1,266	*24%*	*3%*	3,101	*58%*	*3%*
Shan (S)	1,496	*50%*	*4%*	1,763	*57%*	*3%*	1,459	*47%*	*3%*	1,175	*38%*	*3%*	2,170	*70%*	*2%*
Tanintharyi	2,666	*97%*	*7%*	2,649	*93%*	*5%*	2,142	*75%*	*6%*	768	*27%*	*4%*	1,973	*69%*	*4%*
Yangon	11,031	*87%*	*6%*	15,033	*113%*	*5%*	12,191	*90%*	*6%*	12,282	*90%*	*5%*	19,469	*142%*	*5%*
Total	**41,720**	*58%*	*6%*	**55,759**	*74%*	*5%*	**48,592**	64%	*4.8%*	**41,886**	55%	*4.4%*	**68,259**	88%	*4.4%*

15 HTS coverage is calculated based on FSW PSE 2015 and FSW PSE 2019 with consideration of female population projection for respective years (from AEM modelling).

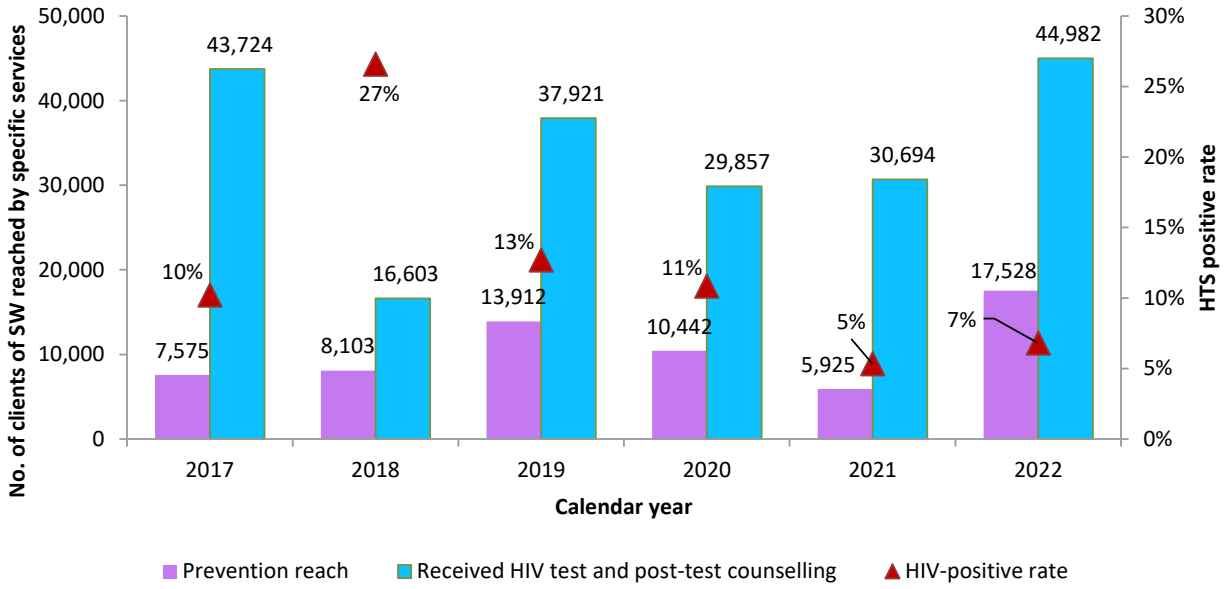
Map 1: Distribution of prevention services for FSW by township in 2022



Prevention among clients and regular partners of SW

As in the FSW prevention reach, the prevention coverage among clients of SW hit its lowest point in 2021 before showing a dramatic increase in 2022. This represents a three-fold increase in 2022 compared to 2021, representing the highest recorded reach between 2017 and 2022. NAP was the major service provider for this specific group over the period, covering 80% of total reach in 2022. HIV prevention services for clients of SW were available in 15 of 17 states and regions, with the highest reach in Yangon. Compared to previous years, a significant increase in prevention reach was observed in every state and region. However, some states and regions, such as Kachin, Magway, Nay Pyi Taw, Sagaing and Shan (E), have not reached the level recorded in 2018 or 2019, although there was an increase in service provision in these areas. Nevertheless, the increase in prevention reaches among clients of sex workers meant that NSP IV targets set for 2022 were achieved at the national level.

Figure 6: HIV prevention and testing among clients of sex workers (2017–2022)



HIV testing among clients of SW has been consistently much higher than prevention reach. As in the prevention reach, there was a dip in HIV testing service provision during 2020 and 2021. However, the number of clients reached with HIV testing and post-test counselling services recovered in 2022, reaching the highest recorded reach during the period (~45,000 clients). The HIV-positive rate among clients has been decreasing in the past four years but showed an increase in 2022. In general, the HIV-positive rate among clients is consistently higher than that of FSW.

Prevention reach among regular partners of SW was around 4,300 in 2022. Unlike other populations, HIV prevention services to regular partners was minimally affected in 2021 (Table 5). Apart from that, the number of regular partners reached by prevention services consistently increased at the national level over the years. As in previous years, NAP was the main service provider for this population in 2022, followed by MSI, PUI and MPG. HIV prevention services to this population were available in 13 of 17 states and regions. Similar to FSW and clients, service disruptions persist in Kachin, Sagaing, Nay Pyi Taw, Shan(E) and Tanintharyi.

Table 5: Clients and regular partners of sex workers reached with prevention services by state/region (2018–2022)

State/Region	Clients of SW					Regular partners of SW				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Ayeyarwady	860	1,684	1,595	446	3,507	596	232	344	151	15
Bago	358	377	203	206	355	62	126	87	286	678
Chin	-	-	-	-	-	-	-	-	-	-
Kachin	503	608	413	683	259	111	28	44	-	26
Kayah	-	58	472	-	-	-	-	-	-	-
Kayin	185	309	270	153	262	-	7	7	-	2
Magway	362	1,077	283	24	453	109	-	29	76	421
Mandalay	685	1,471	2,106	706	1,590	204	291	602	296	620
Mon	501	876	259	795	1,278	15	25	172	86	535
Nay Pyi Taw	273	236	416	98	50	-	-	7	12	-
Rakhine	110	414	418	367	532	18	56	38	112	122
Sagaing	149	1,138	292	4	287	-	159	151	27	62
Shan (E)	919	1,198	555	23	255	8	6	6	18	2
Shan (N)	298	306	193	151	276	10	92	32	-	-
Shan (S)	194	283	221	785	1,965	-	42	-	18	75
Tanintharyi	438	764	374	220	1,288	52	2	98	1	5
Yangon	2,268	3,113	2,372	1,264	5,171	708	934	1,132	1,342	1,728
Total	**8,103**	**13,912**	**10,442**	**5,925**	**17,528**	**1,893**	**2,000**	**2,749**	**2,425**	**4,291**

At the implementation level, it is difficult to identify clients or regular partners of SW and differentiate them from the general population. Under the Global Fund grant, clients and regular partners of SW are only considered as other vulnerable population, and funding allocation for these populations has been much less than for key populations. As such, the national targets set for these populations are particularly lower than for key populations. As the HTS positive rate among clients was consistently higher than among FSW, targeted prevention activities to clients and regular partners may play an important role to reduce new HIV infections among sex workers. Nonetheless, with the high reported condom use among sex workers with their last clients (80–90%), it can be considered that these populations are covered by HIV prevention services indirectly.

All in all, the national HIV response program for FSW and their clients showed major recovery across the country in 2022 after facing significant service disruption during the pandemic and other situations in previous years. Some states and regions, such as Kachin, Sagaing, Magway, Shan (E), Nay Pyi Taw and Tanintharyi, are still facing substantial challenges in providing HIV prevention services. Reinforced and innovative intervention concepts and efforts such as provision of prevention services through online platforms and HIV self-testing should be considered in order to uphold the current level of combination prevention amid the continuing COVID-19 pandemic and other situations. At the same time, several efforts need to be made towards standardized data reporting and data quality control, including adoption of a unique identifier system, case-based reporting, and surveillance, and improvement of data linkage between different services such as prevention, testing, treatment and care, and further follow-up.

Prevention among men who have sex with men and transgender women (MSM/TGW)

Men who have sex with men (MSM) and transgender women (TGW) are among the top priority populations in NSP IV. Because the country used to collect program and surveillance data on the two populations combined, the modelling results and national targets in NSP IV were estimated as combined figures for both MSM and TGW populations. Separate program data collection for MSM and TWG populations started in 2021, and separate surveillance is planned for each population in the span of NSP IV.

Based on modelling results, the estimated new HIV infections among reachable MSM/TGW per 1,000 uninfected population was 11.24 in 2022. The MSM/TGW combined population who are reachable through HIV prevention services self-identify (as MSM/TGW in some way or other) for 2022 was estimated at around 136,000. Reported condom use among MSM/TGW at last anal sex was 64.3% in the 2020 HSS. This result was comparable to the 2019 IBBS result of 57%. It should be noted that reported condom use among MSM/TGW in both IBBS and HSS surveys was lower than for the FSW population.

Table 6: MSM/TGW-related indicators, targets and results in 2022

Impact/outcome indicators	Data source	Size estimate	Baseline 2010	Target 2022	Results 2022
No. of new infections per 1,000 MSM/TGW among the uninfected population of MSM/ TGW	Modelling[16]	-	12.93	4.92	11.24
Percentage of MSM/TGW reporting condom use at last anal sex	HSS	-	-	-	64.3%[17] (2020)
Output/coverage indicators	**Data source**	**Size estimate**	**Baseline 2020**	**Target 2022**	**Results 2022**
No. of MSM/TGW reached with HIV prevention programs	Program data	136,500[18]	57,166[19]	111,202	94,012[20]
No. of MSM/TGW who received an HIV test and knew the result	Program data	136,500	62,810	105,895	100,538
No. of MSM/TGW who received oral pre-exposure prophylaxis (PrEP) at least once in 2022	Program data	-	407	4,966	2,702
% of MSM/TGW PrEP users who continued on oral PrEP for three consecutive months after having initiated PrEP	Program data	-	84%	48%	48%

16 AEM modelling estimate May 2022.

17 HSS 2020.

18 MSM/TGW PSE in 2019, with consideration of population projection in 2021 from HIV estimate model.

19 Adjusted for (1) duplication among different organizations in one township and (2) duplication between outreach and DIC.

20 Ibid.

Partners working with men who have sex with men/transgender women in 2022:

Alliance, IOM, MAM, MPG, MSI, NAP, PGK, PSI, PUI, MMTN, MYS and CBOs

MSM/TGW reached with HIV prevention and tested for HIV at the national level

In 2022, a total of 110,743 MSM and TGW were reached with HIV prevention services through 9 different organizations and key population networks. These high-end figures were not adjusted for any possible duplication within or between organization, and it represented a 46% increase compared to 2021 figures (Table 7). In general, the number of MSM/TGW reached during the period between 2018 and 2022 increased significantly except for a slight dip in 2021. Compared to FSW reach figures, it seems that service disruptions due to COVID-19 and other situations were minimal among MSM/TGW. All organizations maintained or increased their prevention reach services during the period. NAP and PSI continued to be the major service providers for MSM and TGW population, representing more than 50% of total service. MPG started providing HIV prevention services for MSM/TGW in 2021 and showed significant achievements (4,593 in 2021 and 11,597 in 2022) over its two-year activity.

However, considering the double counting, after applying the same calculation method mentioned for FSW, the adjusted number for MSM/TGW prevention reach in 2022 became 94,012 (low-end figure), which represents the highest recorded number since 2011 (Figure 7). It appears that the gap between the high- and low-end figures became smaller in years 2021 and 2022. The main reason for less duplication in one township might be due to clearer geographical area assignment among implementers over the years. For consistency, the low-end figure was used in coverage and trend analysis.

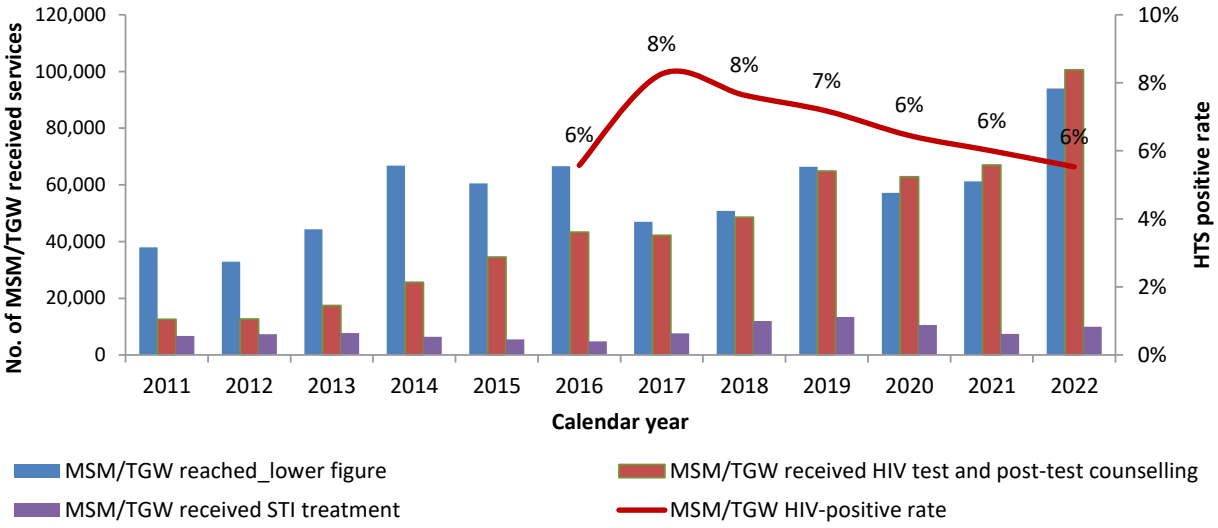
Table 7: MSM/TGW reached with prevention services by organization (high-end figures)[21] (2018–2022)

Organization	2018	2019	2020	2021	2022
Alliance	13,491	14,681	14,394	16,101	19,725
IOM	685	759	635	1,026	1,239
Malteser	203	181	143	-	-
MAM	1,280	1,909	2,574	3,380	4,265
MdM	2,848	2,453	2,760	961	-
MPG	-	-	-	4,593	11,597
MSI	6,819	8,210	7,357	8,562	11,827
NAP	14,870	24,618	28,137	14,376	23,400
PSI	22,940	33,073	22,076	24,128	35,443
PUI	1,045	1,339	1,908	2,573	3,247
Total	**64,181**	**87,224**	**82,004**	**75,700**	**110,743**

21 Sum of total reported figures of MSM/TGW prevention reach from all organizations (outreach + DIC).

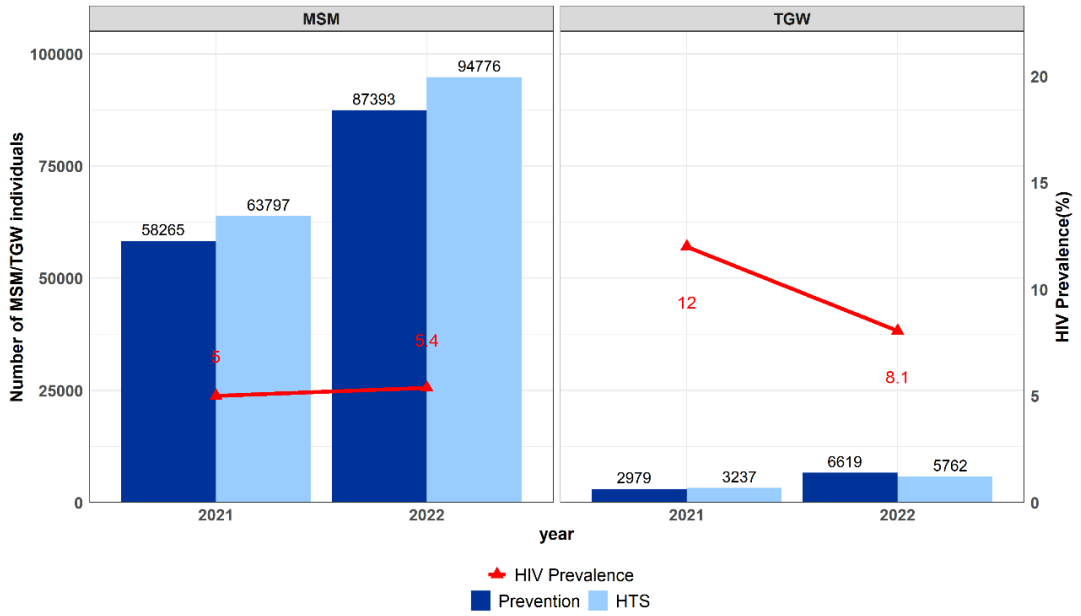
At the national level, at least 69% of the estimated reachable MSM/TGW population was covered by HIV prevention program and 74% received HTS during 2022. These coverage figures, HIV testing in particular, grew significantly over the last 12 years. The HIV-positive rate showed a gradual decreasing trend since 2017 alongside an increase in testing coverage among MSM/TGW populations. The HIV-positive rate in 2022 was around 6% among MSM/TGW. The overall STI treatment among MSM/TGW showed slight fluctuations over the years. Since prevention reach and testing data were from different data sources (no individually tracked record between testing and prevention) at the program reporting level, it is difficult to understand the relationship and develop a prevention-to-testing cascade.

Figure 7: Men who have sex with men/transgender women reached with prevention, HTS and STI treatment (2011–2022)



The national reporting system was recently integrated to collect program data disaggregated by MSM and TGW. Figure 8 illustrates the number of MSM and TGW reached with HIV prevention and testing services in 2021 and 2022. As expected, the MSM population is larger than the TGW population, and the total number of MSM reached with HIV prevention and testing services was much higher than for TGW who received similar services in both years. The total number of MSM or TGW reached with prevention and testing services increased significantly from 2021 and 2022. There was a difference in HIV-positive rate between the two populations, the rate being much lower among MSM than TGW. Whereas the HIV-positive rate among MSM was stable at around 5%, the HIV-positive rate among TGW dropped from 12% in 2021 to 8.1% in 2022. TGW-oriented clinics started operating in 2020, and it is expected that better HIV services will be provided to TGW population in the coming years. A separate behaviour survey along with PSE for TGW is planned to be conducted in 2024 to explore in-depth behavioural and other risk factors in the population.

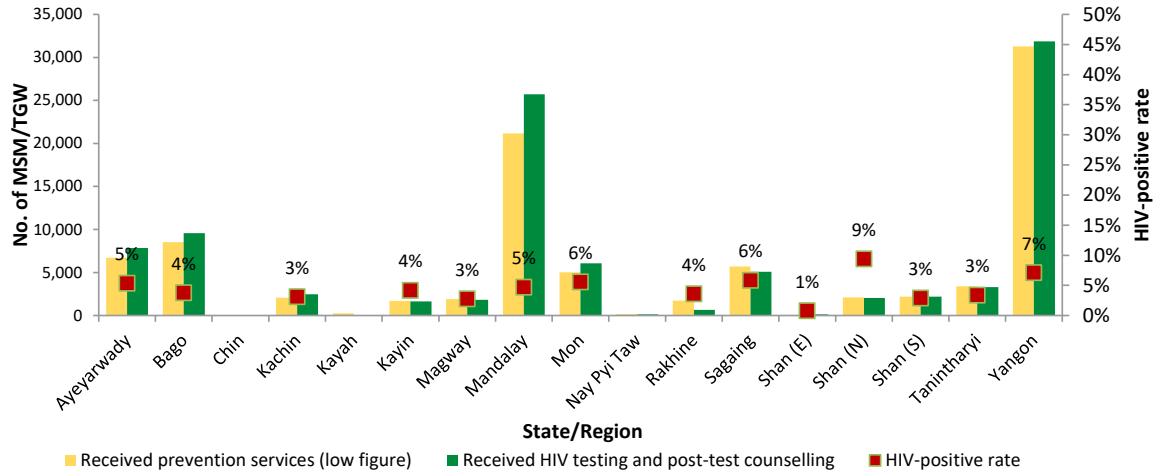
Figure 8: Number of MSM and TGW reached with HIV prevention services and HTS in 2021 and 2022



MSM/TGW reached with HIV prevention and tested for HIV at the state and regional level

Prevention services were provided to MSM and TGW in 15 of 17 states and regions during 2022 (Table 8). Yangon and Mandalay continued to be the regions with largest number of MSM/TGW populations and highest number of prevention and HTS service reach, followed by Ayeyarwady and Bago. Based on key population estimates, Yangon presented with the highest proportion of FSW (18%) and MSM/TGW (21%) population.[22] Therefore, more than 30% of HIV prevention and testing services were provided to MSM/TGW residing in Yangon in 2022. As the number and concentration of key populations are expected to be very low, there were no implementing partners in Chin and Kayah in 2022. HIV prevention services in Rakhine largely relied on the prevention outreach activities through a collaboration between key population community networks and NAP.

Figure 9: MSM/TGW reached with prevention services by state/region in 2022 (low-end figures)



22 2019 key population estimates among FSW and MSM/TGW.

Compared to FSW population, the overall service disruptions among MSM and TGW during 2020–2021 were minimal, although major reductions in prevention reach were observed in some states and regions such as Magway, Kachin, Nay Pyi Taw and Shan (E). In these regions, HIV prevention service provision was maintained but has not yet reached the level of before 2021. Kachin, Shan (E) and Nay Pyi Taw were recorded as the regions with the lowest HIV service provision (≤20%) in the two consecutive years of 2021 and 2022. Apart from these regions, HIV prevention coverage in the remaining states and regions increased substantially in 2022, reaching the highest recorded during the period 2018–2022. More than 75% of reachable MSM/TGW in Yangon, Mandalay, Mon and Tanintharyi received HIV prevention services in 2022.

Regarding HTS coverage among MSM and TGW populations, a similar trend was seen. Although all states and regions were affected by HTS service disruptions during the pandemic and other situations, most of them recovered their services in 2022. As seen in the prevention reach, there are a few states and regions – Kachin, Nay Pyi Taw, Shan (E) – that need specific strategy and support for full-service recovery in the coming years.

In terms of the HIV-positive rate among those who received an HIV test, the positive rate ranged from 1% in Shan (E) to 9% in Shan (N) in 2022 (Figure 10 and Table 9). The HIV-positive rate in high priority states and regions varies between 3% in Kachin and 9% in Shan (N). In general, the HIV-positive rate among MSM/TGW in all states and regions was quite stable or showed a slight decrease over the years.

Figure 10: Number of MSM/TGW reached by HIV prevention program by state/region (2018–2022)

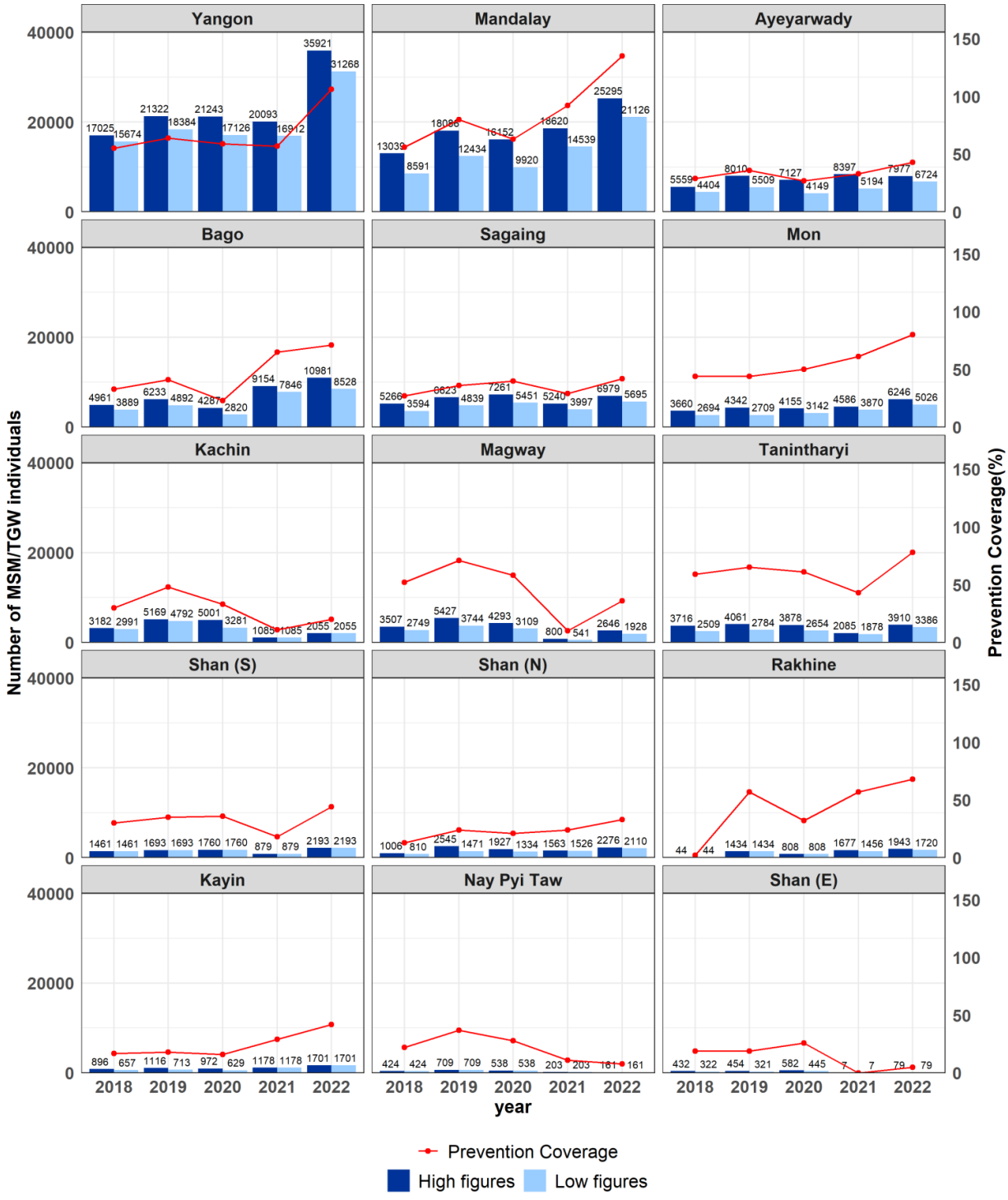


Table 8: Number of MSM/TGW reached by HIV prevention programs by state/region (2018–2022)

State/Region	2018			2019			2020			2021			2022		
	High figure[23]	Low figure[24]	Coverage[25]	High figure	Low figure	Coverage	High figure	Low figure	Coverage	High figure	Low figure	Coverage	High figure	Low figure	Coverage
Ayeyarwady	5,559	4,404	***29%***	8,010	5,509	***36%***	7,127	4,149	***27%***	8,397	5,194	***33%***	7,977	6,724	***43%***
Bago	4,961	3,889	***33%***	6,233	4,892	***41%***	4,287	2,820	***23%***	9,154	7,846	***65%***	10,990	8,537	***71%***
Chin	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0%
Kachin	3,182	2,991	***30%***	5,169	4,792	***48%***	5,001	3,281	***33%***	1,085	1,085	***11%***	2,055	2,055	***20%***
Kayah	3	3	***0%***	-	-	-	0	0	***0%***	133	133	***19%***	263	263	***37%***
Kayin	896	657	***17%***	1,116	713	***18%***	972	629	***16%***	1,178	1,178	***29%***	1,701	1,701	***42%***
Magway	3,507	2,749	***52%***	5,427	3,744	***71%***	4,293	3,109	***58%***	800	541	***10%***	2,646	1,928	***36%***
Mandalay	13,039	8,591	***56%***	18,086	12,434	***80%***	16,152	9,920	***63%***	18,620	14,539	***92%***	25,403	21,166	135%
Mon	3,660	2,694	***44%***	4,342	2,709	***44%***	4,155	3,142	***50%***	4,586	3,870	***61%***	6,246	5,026	***80%***
Nay Pyi Taw	424	424	***22%***	709	709	***37%***	538	538	***28%***	203	203	***11%***	161	161	***8%***
Rakhine	44	44	***2%***	1,434	1,434	***57%***	808	808	***32%***	1,677	1,456	***57%***	1,943	1,720	***68%***
Sagaing	5,266	3,594	***27%***	6,623	4,839	***36%***	7,261	5,451	***40%***	5,240	3,997	***29%***	6,979	5,695	***42%***
Shan (E)	432	322	***19%***	454	321	***19%***	582	445	***26%***	7	7	***0%***	79	79	5%
Shan (N)	1,006	810	***13%***	2,545	1,471	***24%***	1,927	1,334	***21%***	1,563	1,526	***24%***	2,276	2,110	***33%***
Shan (S)	1,461	1,461	***30%***	1,693	1,693	***35%***	1,760	1,760	***36%***	879	879	***18%***	2,193	2,193	***44%***
Tanintharyi	3,716	2,509	***59%***	4,061	2,784	***65%***	3,878	2,654	***61%***	2,085	1,878	***43%***	3,910	3,386	***78%***
Yangon	17,025	15,674	***55%***	21,322	18,384	***64%***	21,243	17,126	***59%***	20,093	16,912	***57%***	35,921	31,268	***106%***
Total	**64,181**	**50,816**	***38%***	**87,224**	**66,428**	***50%***	**79,984**	**57,166**	***42%***	**75,700**	**61,244**	***45%***	**110,743**	**94,012**	69%

23 Sum of total reported figures of MSM/TGW prevention reach from all organizations (outreach + DIC).

24 Number of MSM/TGW reached by prevention adjusted for (1) duplication of MSM/TGW reached among different organizations in one township and (2) adjusted for duplication between outreach and DIC.

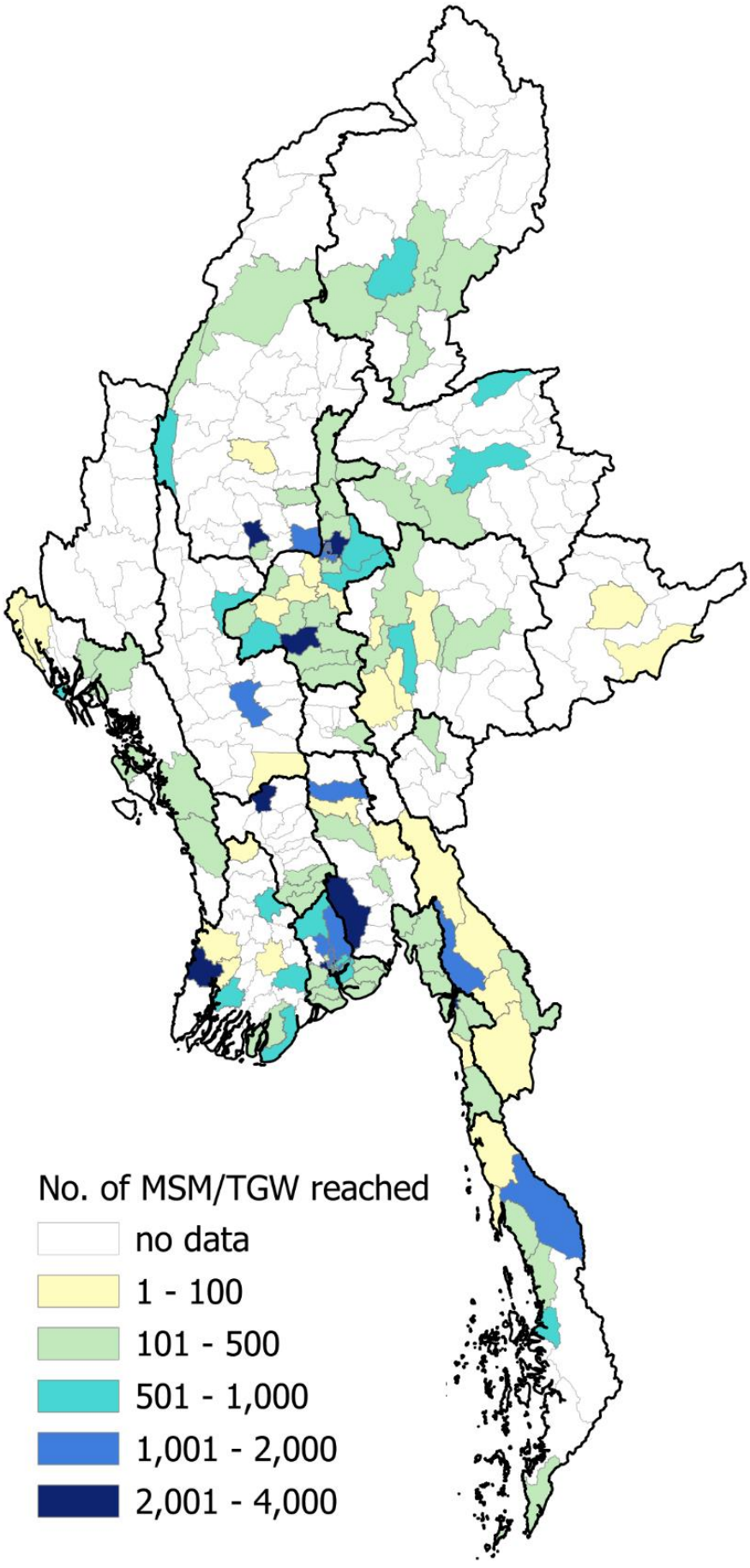
25 Prevention coverage is calculated based on MSM/TGW PSE 2015 and 2019 in consideration of population projection for respective years and lower-end figure for prevention reach to MSM/TGW.

Table 9: Number of MSM/TGW tested for HIV and received post-test counselling by state/region (2018–2022)

State/ Region	2018			2019			2020			2021			2022		
	MSM received HTS	HTS coverage[26]	HTS positivity	MSM received HTS	HTS coverage	HTS positivity	MSM received HTS	HTS coverage	HTS positivity	MSM received HTS	HTS coverage	HTS positivity	MSM received HTS	HTS coverage	HTS positivity
Ayeyarwady	4,491	*29%*	*7%*	6,712	*44%*	*6%*	6,273	*40%*	*6%*	6,590	*42%*	*4%*	7,855	*51%*	*5%*
Bago	3,692	*31%*	*7%*	4,489	*38%*	*7%*	3,523	*29%*	*10%*	8,282	*69%*	*4%*	9,562	80%	4%
Chin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kachin	933	*9%*	*10%*	2,907	*29%*	*4%*	3,959	*40%*	*2%*	1,122	*11%*	*6%*	2,473	*25%*	*3%*
Kayah	-	-	-	2	*0%*	*100%*	13	*2%*	*77%*	-	-	-	0	*0%*	-
Kayin	912	*23%*	*7%*	947	*24%*	*6%*	966	*24%*	*5%*	1,070	*26%*	*4%*	1,649	*41%*	*4%*
Magway	1,720	*33%*	*5%*	3,409	*64%*	*3%*	3,281	*61%*	*4%*	793	*15%*	*2%*	1,810	34%	3%
Mandalay	9,493	*62%*	*10%*	13,562	*87%*	*7%*	13,024	*83%*	*6%*	19,213	*122%*	*5%*	25,729	*164%*	*5%*
Mon	3,519	*57%*	*6%*	3,905	*63%*	*5%*	3,284	*53%*	*7%*	3,947	*63%*	*5%*	6,069	*97%*	*6%*
Nay Pyi Taw	581	*31%*	*5%*	735	*39%*	*9%*	773	*40%*	*6%*	222	*12%*	*9%*	146	*8%*	*49%*
Rakhine	65	*3%*	*6%*	518	*21%*	*6%*	248	*10%*	*8%*	214	*8%*	*6%*	640	*25%*	*4%*
Sagaing	5,080	*38%*	*4%*	5,323	*39%*	*4%*	5,335	*39%*	*4%*	3,264	*24%*	*5%*	5,080	37%	6%
Shan (E)	363	*22%*	*6%*	426	*25%*	*8%*	692	*40%*	*9%*	59	*3%*	*12%*	126	*7%*	*1%*
Shan (N)	596	*10%*	*6%*	927	*15%*	*5%*	987	*16%*	*6%*	1,428	*23%*	*3%*	2,029	*32%*	*9%*
Shan (S)	1,125	*23%*	*4%*	1,372	*28%*	*4%*	1,490	*30%*	*2%*	974	*20%*	*4%*	2,192	*44%*	*3%*
Tanintharyi	3,445	*81%*	*4%*	3,315	*77%*	*4%*	3,269	*75%*	*4%*	1,563	*36%*	*3%*	3,304	*76%*	*3%*
Yangon	12,530	*44%*	*11%*	16,321	*57%*	*12%*	15,682	*54%*	*9%*	18,293	*62%*	*9%*	31,874	108%	7%
Total	**48,545**	**37%**	**8%**	**64,870**	**48%**	**7%**	**62,799**	**46%**	**6%**	**67,034**	**49%**	**6%**	**100,538**	**74%**	**6%**

26 HTS coverage is calculated based on 2015 and 2019 MSM/TGW PSE in consideration of male population projection for respective years (from AEM modelling).

Map 2: Distribution of services for MSM/TGW by township in 2022



Map 2 illustrates the townships where HIV prevention services were available for MSM/TGW (low-end figures) in 2022. It can be seen that HIV prevention services for MSM/TGW population were available in every state and region except Chin State. In 2022, almost half of all townships (152 of 329 townships) were covered by prevention services for these populations. This geographical coverage of HIV prevention services represents a 24% increase from 2021. Upon checking prioritized townships, around 70% of MSM/TGW residing in high priority townships (113 of 167) were provided with HIV prevention services in 2022.

HIV self-testing among MSM/TGW

An HIV self-testing (HIVST) demonstration project was conducted among the MSM/TGW population in Yangon and Mandalay during 2020 to 2022. This was the first HIVST project in Myanmar and was carried out by the Department of Health Information Management System (HMIS) and NAP with technical and coordination support from UNAIDS, PSI and other implementing partners for referral. The main funding came from No.1 Hospital of China Medical University through the Belt and Road Initiative. The overall objective of the project was to assess the knowledge and practice of HIVST, and condom use among MSM/TGW population, before and after the implementation of crowdsourced HIVST interventions.

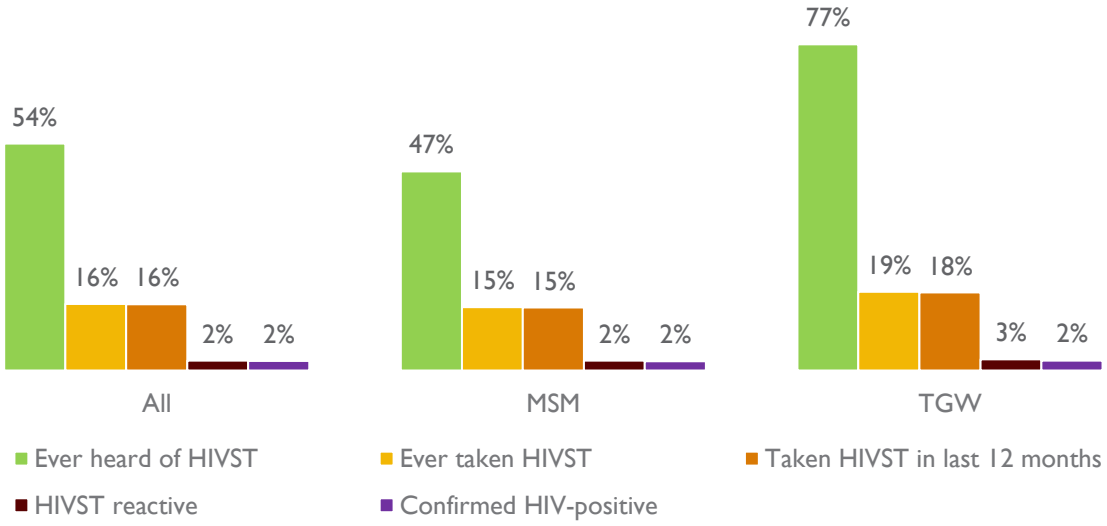
The baseline survey was conducted in September–October 2020. It was followed by the demonstration project in September–December 2021 and the endline survey in August–October 2022. The surveys utilized respondent-driven sampling (RDS), a chain referral recruitment method designed to obtain a representative sample of hidden or hard-to-reach populations, including MSM/TGW. The surveys were the first of their kind to use RDS methodology in an online survey in the country.

Overall, around half of MSM/TGW (54%) had ever heard of HIVST. There was a significant difference in awareness of HIVST between TGW and MSM (77% among TGW vs 47% among MSM). The proportion of TGW who had ever taken HIVST or taken HIVST in the last 12 months was also higher among TGW than MSM. A total of 1,929 MSM/TGW received HIVST during the demonstration project in 2021. Among those tested, around 47% of tests were conducted through facility-based and 53% through community/ outreach-based services. The HIV self-test kits distributed were blood-based tests using finger-prick blood. Among those who received HIVST, 2.8% received reactive results.

Of those with reactive results, 96% came to a facility for confirmation of the self-testing reactive result. On confirmation using the gold standard for HIV testing, 93% received confirmed HIV-positive results (positive predictive value). Among the confirmed positives, 70% initiated ART during the project period. The overall test reactive rate among all HIV self-tests was 3% and the invalid rate was 1%. In general, the linkage from reactive HIV self-test to confirmation of the result and receiving care and treatment was good. The findings from the demonstration project paved the way for further implementation of the HIVST program.

HIVST can be a complementary strategy to further enhance and strengthen the current HIV testing services to achieve the first ‘95’ target of knowing one’s status in the HIV cascade.

Figure 11: HIV self-testing cascade in 2022 (HIVST survey)



Pre-exposure prophylaxis (PrEP) program among MSM/TGW

To enhance HIV prevention among key populations, the program for provision of pre-exposure prophylaxis (PrEP) started among MSM/TGW in Yangon in July 2020, with technical and funding support from UHF/UNAIDS and the Global Fund. It is planned to extend the program to two other key populations and geographical areas in the coming years.

Since 2020, the PrEP project has been conducted in three clinics in Yangon: PSI clinic, MAM clinic and Latha NAP clinic. The number of MSM/TGW eligible, accepted and initiated on PrEP increased annually since inception. In 2022, a total of 3,088 individuals were eligible for PrEP, of which 2,351 (76%) accepted to take PrEP and 2,136 (69%) actually initiated daily PrEP in 2022. The initiation rate decreased in 2022 compared to 2021 figures. More in-depth information is required to identify gaps in demand and preferences for PrEP among MSM and TGW separately. The acceptance rate and initiation rate for PrEP was higher in TGW than MSM.

Figure 12: Number of MSM/TGW eligible for, accepted and initiated on oral PrEP (2020–2022)

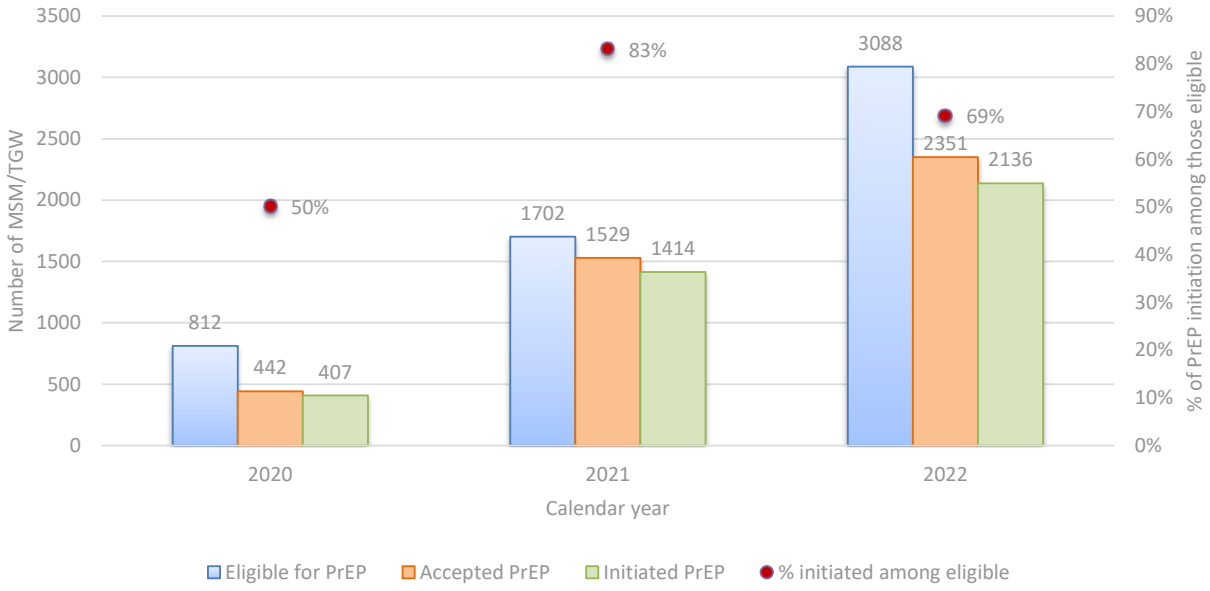
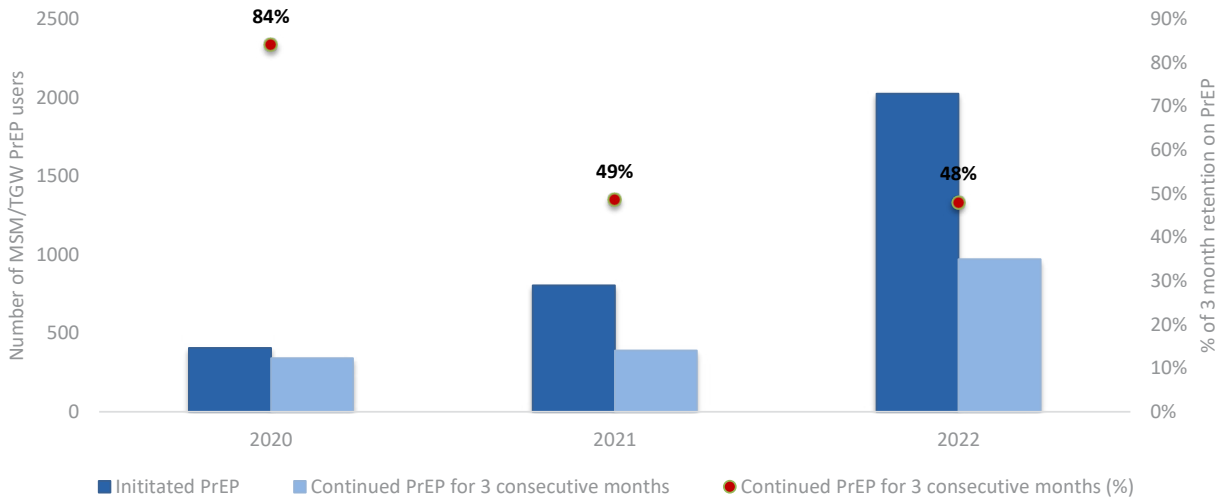


Figure 13: MSM/TGW who continued oral PrEP for three consecutive months (2020–2022)



Looking at the program outcome, the proportion of MSM/TGW PrEP users who continued oral PrEP for three consecutive months was stable at around 50% in both 2021 and 2022. Although this proportion was much lower than the level recorded in 2020 of 84%, it achieved the target set for 2022. This was mainly because some users had difficulty to come to the clinic monthly and expressed their preference for event-driven PrEP to daily PrEP. More efforts would be necessary to retain the PrEP cohort in coming years.

Prevention among female partners of MSM

Female partners of MSM are a special target group that is hard to reach due to the difficulty in identifying them in practice. During 2022, it was reported that only 99 female partners were reached through the HIV prevention program. Nevertheless, this represents a big jump from 2021 when only 6 female partners were reported reached. Organizations working on MSM population should place extra effort on covering this partner population.

All things considered, although prevention and testing figures for MSM/TGW have been on the rise at the national level, the annual targets were not yet met, except for HIV testing and PrEP retention. Particular attention should be paid to the regional variation in prevention and testing reach during 2022 in order to reduce new HIV infections among MSM/TGW in coming years, particularly in the areas with persistent service disruptions, such as Magway, Kachin, Nay Pyi Taw and Shan (E). Virtual HIV prevention program through internet and mobile devices and anonymous HIVST would be useful tools for reaching the hidden MSM population. Introduction of HIVST and expansion of community-based HIV screening would help reinforce the HIV testing program. The PrEP program should be tailored to the situation in order to retain the MSM/TGW PrEP cohort. Female partners of MSM should also be included in a comprehensive prevention package to break the HIV infection chain to the general population.

Prevention among people who inject drugs (PWID)

People who inject drugs (PWID) are identified as one of key populations who are disproportionately affected by HIV infection in Myanmar. Based on updated HIV modelling, the HIV incidence among PWID was estimated to be around 38 per 1,000 PWID in 2022, representing a significant reduction from 45.2 per 1,000 PWID in 2010. However, the national target of HIV incidence among PWID (24.6 per 1,000 PWID) was not met in 2022. Since 1992, this population has been included in the national HIV sentinel sero-surveillance (HSS), and HIV prevalence among PWID dropped substantially from 61.0% in 1992 to 18.9% in 2020. The Integrated Biological and Behavioural Surveillance (IBBS) surveys among PWID conducted in 2014 and 2017 reported overall HIV prevalence of 28.5% and 35%, respectively, with a wide regional variation. Along with intensive scale-up in harm reduction programs over the years, the proportion of PWID who reported using sterile equipment at their last injection has been consistently high in recent surveys, showing 86% in the 2017 IBBS and 93% in the 2020 HSS.

Table 10: PWID related indicators, targets and results in 2022

Impact/outcome indicators	Data source	Size estimate	Baseline 2010	Target 2022	Results 2022
No. of new infections per 1,000 PWID among the uninfected population of PWID	Modelling[27]	-	45.22	24.61	38.09
Percentage of PWID reporting the use of sterile injecting equipment the last time they injected	HSS	-	-	93.2%	93.3%[28]
Output/coverage indicators	**Data source**	**Size estimate**	**Baseline 2020**	**Target 2022**	**Results 2022**
No. of PWID reached with HIV prevention programs	Program data	115,686[29]	54,242[30]	79,402	57,646[31]
No. of PWID who received an HIV test and knew the result in the last 12 months	Program data	115,686	53,026	68,366	55,398
No. of sterile injecting equipment distributed to people who inject drugs	Program data	115,686	34m	36.6m	37.5m
No. of PWID receiving opioid substitution therapy at the end of the reporting period	Program data	115,686	26,016	41,111	25,866
% of PWID receiving opioid substitution therapy for at least 6 months	Program data	-	70%	80%	73%
No. of regular partners of PWID reached with HIV prevention programs	Program data	38,611[32]	6,637	7,900	7,438

27 AEM modelling estimate May 2023.

28 HSS 2020.

29 PWID PSE in 2017, with consideration of population projection in 2021 from HIV estimate model.

30 Adjusted for (1) duplication among different organizations in one township and (2) duplication between outreach and DIC.

31 Ibid.

32 2019 estimate based on PWID PSE and information from 2017 PWID IBBS.

Partners working with people who inject drugs and people who use drugs in 2022:

AHRN, DDTRU, MAM, MANA, MdM, MPG, NAP, SARA, NDNM

PWID reached with HIV prevention and tested for HIV at the national level

At the national level, a total of 79, 829 PWID were provided with HIV prevention services through drop-in centre (DIC) and outreach services (Table 11). This represents the high-end figure of PWID reached in 2022. As for the FSW and MSM/TGW populations, the adjusted prevention reach figure among PWID became 57,646 (low-end) after consideration of possible double counting within and among organizations. Since 2018, fewer organizations were working on harm reduction service delivery due to a funding cut from the Global Fund. In 2022, only nine organizations worked in the area, including NAP and the Drug Dependency Treatment and Research Unit (DDTRU), which provides opioid substitution therapy (OST). In addition to the Global Fund, the Access to Health Fund supported harm reduction services in separate implementing sites. Further, the USAID HIV/AIDS Flagship Project (UHF) provided additional funding for harm reduction service strengthening. As a result of collaborative efforts, the decline in harm reduction services started showing noticeable signs of recovery in 2022. AHRN and MANA were the main service providers for PWID population and achieved the greatest share of more than 70% of all PWID prevention reach. MdM, SARA and MAM were providing services on a relatively smaller scale compared to AHRN and MANA. In 2022, MPG started providing prevention services to PWID. Though not PWID-dedicated, some other organizations also provided HIV testing to PWID population. Except for OST, more than 99% of the country's harm reduction programs were implemented by the I/NGO sector.

Table 11: People who inject drugs reached with prevention services by organization (high-end figures)[33] (2018–2022)

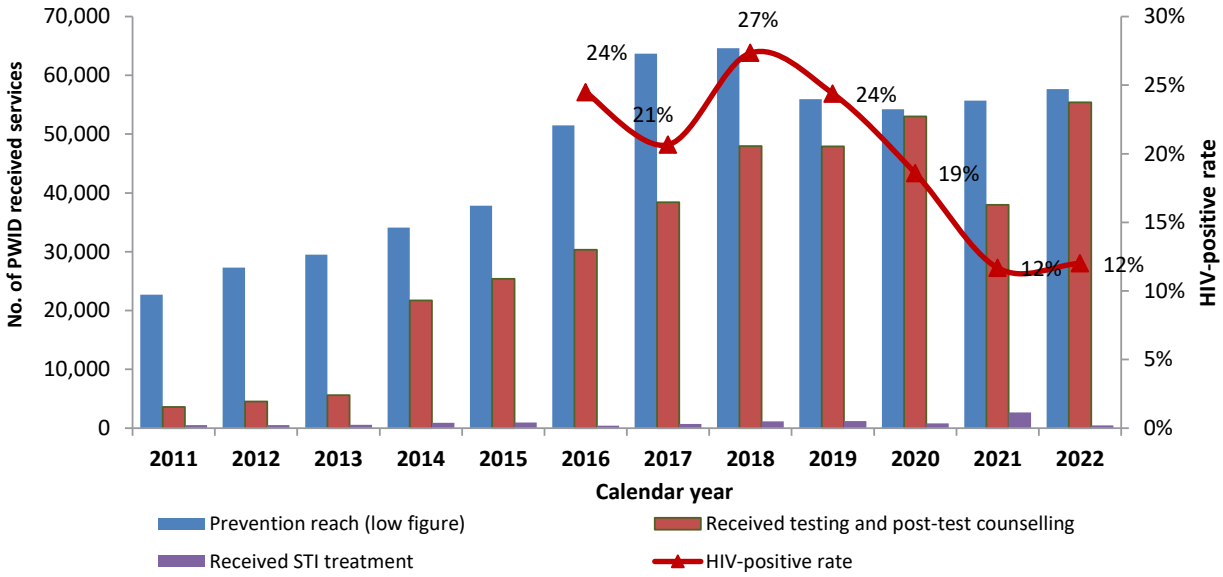
Organization	2018	2019	2020	2021	2022
AHRN	26,514	28,866	23,719	26,120	29,026
MAM	1,057	1,602	2,317	3,064	3,055
MANA	42,374	31,981	35,235	29,329	28,358
MdM	8,064	4,798	3,108	7,560	9,463
Metta	3,792	796	738	-	-
MPG	-	-	-	-	26
NAP	1,282	1,040	936	140	449
PUI	-	-	-	1	-
SARA	8,183	9,103	7,318	5,893	9,452
Total	**91,266**	**78,186**	**73,371**	**72,107**	**79,829**

Overall, around 50% and 48% of estimated PWID population in the country were covered by prevention and HTS, respectively, in 2022. A total of 55,398 PWID were provided with HIV testing and post-test counselling services in 2022. This represents a 46% increase from the 2021 figure. During 2021 there was a notable decrease in the magnitude of service disruptions among PWID, and in HTS in particular. However, in 2022, both HIV prevention and HIV testing among PWID restored service levels substantially, reaching the highest recorded HTS service volume since 2012 (Figure 14). Along with the sizeable increase

33 Sum of total reported figures of PWID prevention reach from all organizations (outreach + DIC).

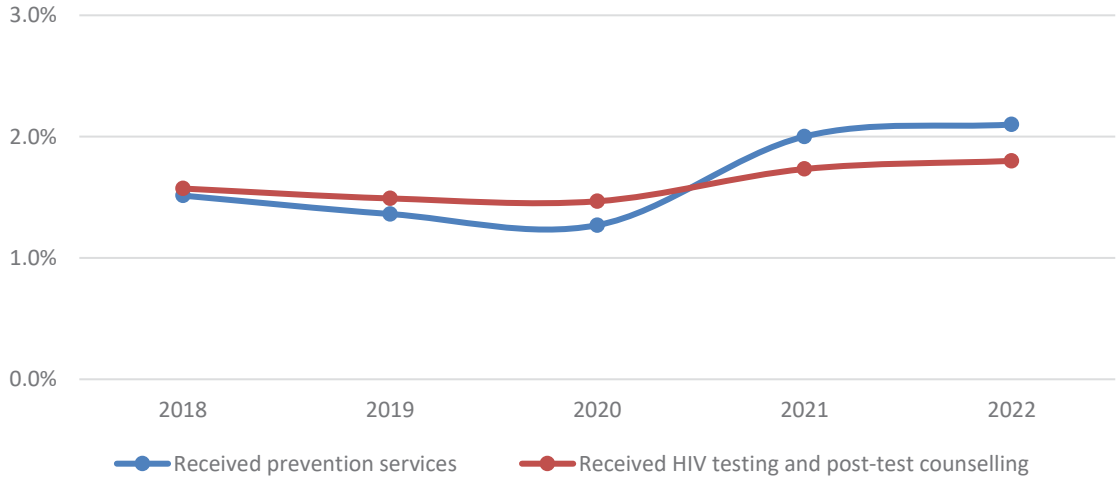
in HIV testing among PWID, the HTS positive rate among PWID showed an encouraging decreasing trend over the years; it showed a significant decline since 2017 and became stable at 12% in the last two years. On the other hand, STI treatment provided to PWID dropped in 2022, reaching only 452 PWID.

Figure 14: People who inject drugs reached with prevention, HTS and STI services (2011–2022)



Harm reduction programs also provided services to female PWID in recent years. However, service provision to female PWID remained low at between 1% and 2% of total prevention reach and HIV testing. More efforts are necessary to cover this hidden female PWID population.

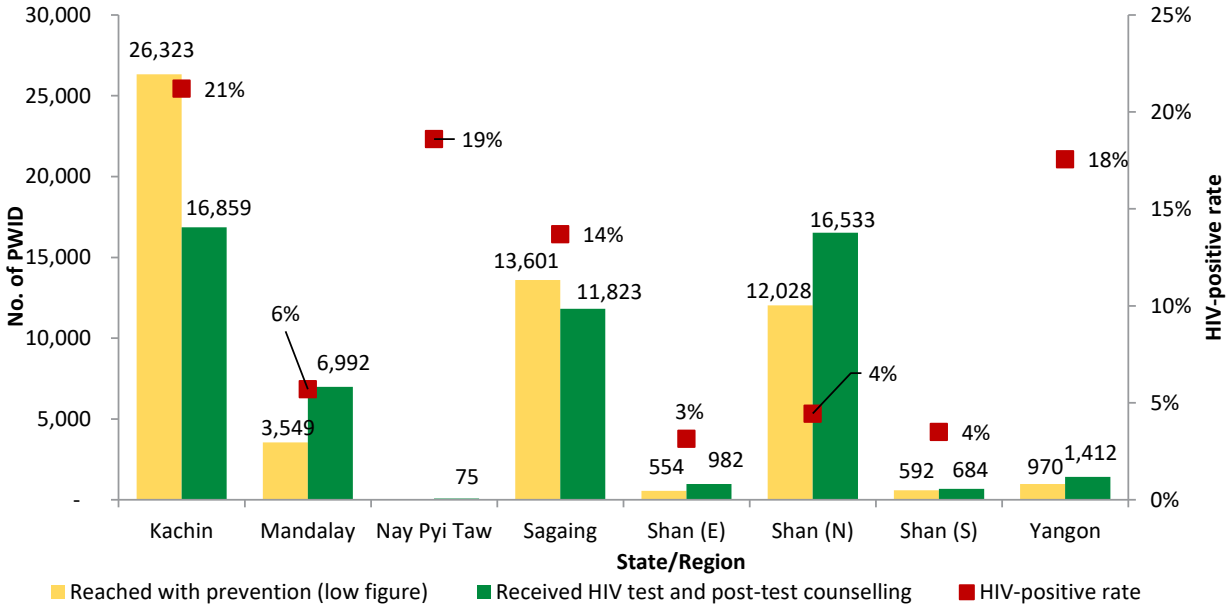
Figure 15: Percentage of female PWID among those reached by prevention and HTS (2018–2022)



PWID reached with HIV prevention and tested for HIV at the state and regional level

At the state and regional level, large-scale, comprehensive harm reduction programs are established in the four states and regions with high prevalence of injecting drug use: Kachin, Sagaing, Shan (N) and Mandalay. Shan (E) and Shan (S) also have programs on a moderate scale, and Yangon resumed the harm reduction program on a comprehensive level in 2022. HTS for PWID also extended to Nay Pyi Taw region in 2022. Apart from the methadone program, all the other harm reduction activities are mainly provided by nongovernmental implementing partners. The HTS positive rate among states and regions with the highest estimated number of PWID ranged from 21% in Kachin to 3% in Shan (E) in 2022.

Figure 16: People who inject drugs reached with prevention services by state/region in 2022



As in previous years, Kachin State, the state with the largest PWID population (23% of national PWID PSE), was reported as the region with the highest PWID prevention reach between 2018 and 2022. More than 100% achievement was observed in Kachin, which may be due to a few reasons: 1) inadequate adjustment for double counting, and/or 2) a larger change in the estimated PWID population size than expected, and/or 3) the mobile nature of PWID in Kachin (Hpakant), which has not been adjusted for. After Kachin, Shan (N) and Sagaing were the regions with the highest service volume, as these regions were estimated to have the second and third largest PWID population in the country.

Unlike the FSW population, the decline in PWID prevention reach among states and regions during the pandemic was minimal at the national level with a wide variation at granular level. The prevention reach reduced significantly during 2021 and 2022 in Shan (N), whereas in Mandalay there was a 20% drop in 2022 compared to 2021. However, Shan (E) and Yangon showed a slight increase in PWID prevention reach in 2022. Apart from Kachin, prevention coverage among estimated PWID population in other priority regions was low, at 13% in Shan (S), 21% in Mandalay, 22% in Yangon, and 24% in Shan (E).

Between 2018 and 2022, the proportion of PWID reached with HIV testing and post-test counselling services was highest in Kachin and Shan (N), followed by Sagaing and Mandalay (Table 12). There was

a substantial drop in HIV testing reach among PWID in almost all states and regions during 2021 except Mandalay, Shan (E), Shan (S) and Yangon (Table 13). In particular, Yangon and Shan (E) showed an increasing HTS coverage over the period. During the period 2018–2022, some fluctuations in HIV-positive rate were seen in Magway, Nay Pyi Taw and Rakhine. This should be interpreted with caution, as the number of PWID tested for HIV in these regions was small. In general, the HIV-positive rate in most regions continued declining in 2022, a promising sign for the success of harm reduction programs in the country. Yangon experienced insufficient provision of harm reduction services apart from OST between 2018 and 2020. However, since 2021, harm reduction services have been restored in Yangon, and HIV prevention and testing figures have shown significant improvements. The HIV-positive rate among PWID in Yangon showed a gradual decrease, from 23% in 2019 to 18% in 2022.

Map 3 illustrates the townships where prevention services for PWID were available and the number of PWID provided with prevention services in 2022. The north and north-east of the country are the areas most affected by the injecting drug use problem. Map 3 shows that services are widely accessible in most of the townships in Kachin, Shan (N) and northern Sagaing. Only the townships with very low population density and difficulty in transportation in Kachin and Shan (N) are not covered by harm reduction services.

Figure 17: Number of PWID reached by HIV prevention program by state/region (2018–2022)

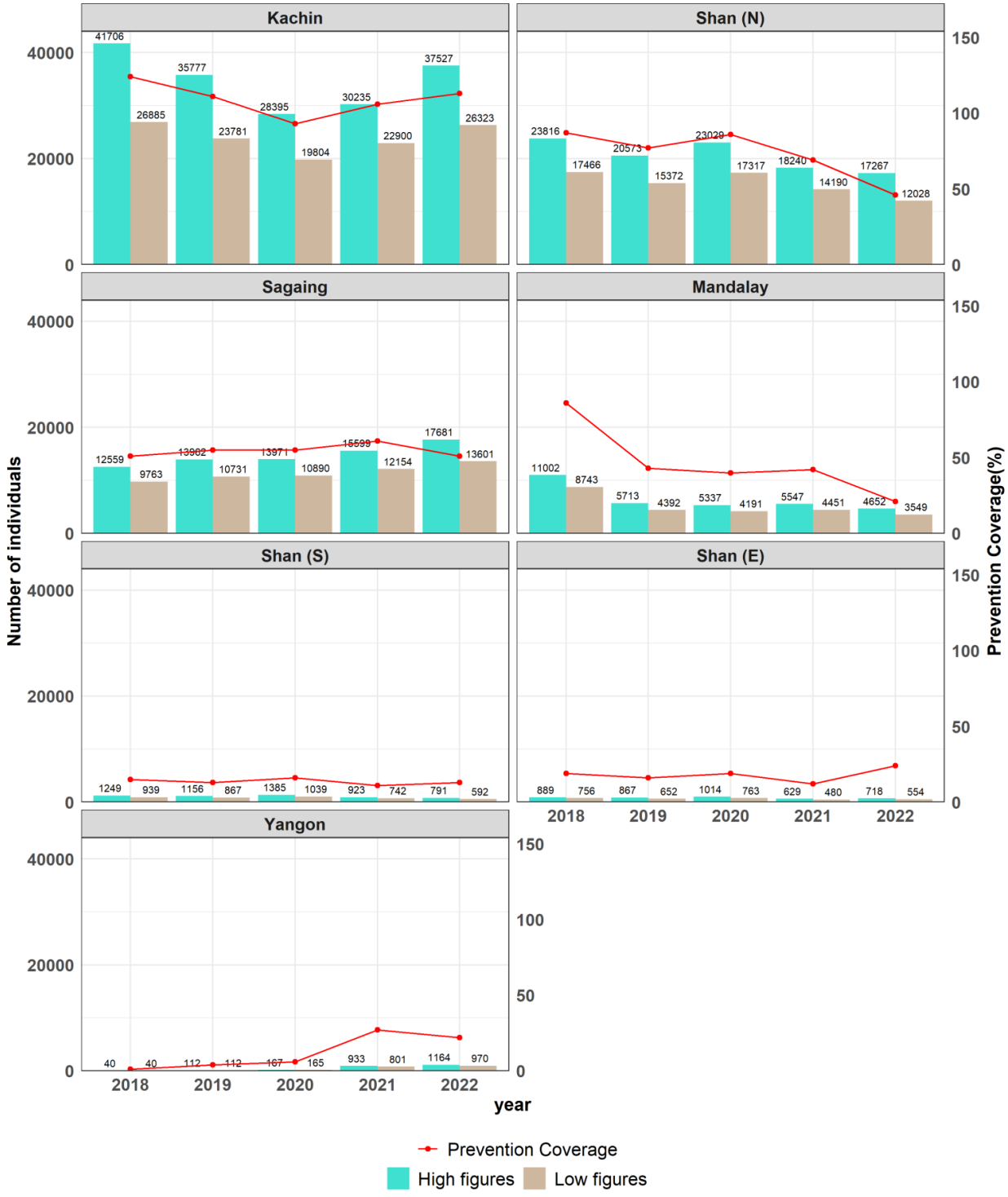


Table 12: Number of people who inject drugs reached by prevention program by state/region (2018–2022)

State/Region	2018			2019			2020			2021			2022		
	High figure[34]	Low figure[35]	Coverage[36]	High figure	Low figure	Coverage	High figure	Low figure	Coverage	High figure	Low figure	Coverage	High figure	Low figure	Coverage
Kachin	41,706	26,885	***124%***	35,777	23,781	**111%**	28,395	19,804	***93%***	30,235	22,900	***106%***	37,527	26,323	***113%***
Kayah	1	1	***1%***	-	-	-	-	-	-	-	-	-	-	-	-
Kayin	1	1	***0%***	21	21	**5%**	66	66	***15%***	-	-	-	-	-	-
Magway	-	-	-	1	1	0%	2	2	***0%***	1	1	***0%***	1	1	***0%***
Mandalay	11,002	8,743	***86%***	5,713	4,392	**43%**	5,337	4,191	***40%***	5,547	4,451	***42%***	4,652	3,549	***21%***
Mon	1	1	***0%***	-	-	-	1	1	***0%***	-	-	-	-	-	-
Nay Pyi Taw	-	-	-	2	2	**1%**	-	-	-	-	-	-	-	-	-
Rakhine	2	2	***0%***	2	2	**0%**	4	4	***0%***	-	-	-	26	26	***2%***
Sagaing	12,559	9,763	***51%***	13,962	10,731	**55%**	13,971	10,890	***55%***	15,599	12,154	***61%***	17,681	13,601	***51%***
Shan (E)	889	756	***19%***	867	652	**16%**	1,014	763	***19%***	629	480	***12%***	718	554	***24%***
Shan (N)	23,816	17,466	***87%***	20,573	15,372	**77%**	23,029	17,317	***86%***	18,240	14,190	***69%***	17,267	12,028	***46%***
Shan (S)	1,249	939	***15%***	1,156	867	**13%**	1,385	1,039	***16%***	923	742	***11%***	791	592	***13%***
Tanintharyi	-	-	-	-	-	-	-	-	-	-	-	-	2	2	***0%***
Yangon	40	40	***1%***	112	112	**4%**	167	165	***6%***	933	801	***27%***	1,164	970	***22%***
Total	**91,266**	**64,597**	***69%***	**78,186**	**55,934**	**59%**	**73,371**	**54,242**	***57%***	**72,107**	**55,719**	***58%***	**79,829**	**57,646**	***50%***

34 Sum of total reported figures of PWID prevention reach from all organizations (outreach + DIC).

35 Number of PWID reached by prevention adjusted for (1) duplication of PWID reached among different organizations in one township and (2) adjusted for overlap between outreach and DIC.

36 Calculation based on lower end figure of PWID reach and PWID PSE 2017 with consideration of population growth for respective year (from AEM modelling).

Table 13: Number of people who inject drugs tested for HIV and received post-test counselling by state/region (2018–2022)

State/Region	2018			2019			2020			2021			2022		
	PWID received HTS	HTS coverage[37]	HTS positivity	PWID received HTS	HTS coverage	HTS positivity	PWID received HTS	HTS coverage	HTS positivity	PWID received HTS	HTS coverage	HTS positivity	PWID received HTS	HTS coverage	HTS positivity
Ayeyarwady	-	-	-	32	2%	0%	61	3%	2%	51	3%	6%	30	1%	20%
Bago	-	-	-	1	0%	0%	2	0%	0%	1	0%	0%	1	0%	0%
Chin	14	3%	7%	-	-	-	-	-	-	-	-	-	-	-	-
Kachin	18,386	85%	49%	20,137	94%	37%	18,178	85%	28%	10,531	49%	23%	16,859	72%	21%
Kayah	1	1%	100%	1	1%	0%	-	-	-	-	-	-	-	-	-
Kayin	4	1%	0%	-	-	-	-	-	-	-	-	-	-	-	-
Magway	11	1%	27%	5	0%	80%	1	0%	100%	1	0%	100%	2	0%	50%
Mandalay	3,815	37%	6%	4,684	45%	8%	4,704	45%	10%	4,856	46%	5%	6,992	41%	6%
Mon	3	1%	67%	1	0%	0%	1	0%	100%	-	-	-	1	0%	0%
Nay Pyi Taw	-	-	-	13	3%	23%	47	12%	6%	12	3%	50%	75	13%	19%
Rakhine	1	0%	0%	24	2%	21%	12	1%	50%	1	0%	100%	2	0%	100%
Sagaing	8,756	45%	28%	9,071	47%	28%	13,339	68%	23%	8,533	43%	13%	11,823	44%	14%
Shan (E)	473	12%	9%	384	9%	4%	389	10%	5%	541	13%	1%	982	43%	3%
Shan (N)	15,501	78%	8%	12,673	63%	9%	15,231	75%	7%	11,872	58%	4%	16,533	63%	4%
Shan (S)	487	8%	2%	442	7%	3%	513	8%	2%	731	11%	0%	684	15%	4%
Tanintharyi	19	5%	32%	5	1%	40%	9	2%	22%	-	-	-	2	0%	0%
Yangon	484	17%	20%	427	15%	23%	539	19%	21%	852	29%	20%	1,412	32%	18%
Total	**47,955**	**51%**	**27%**	**47,900**	**51%**	**24%**	**53,026**	**56%**	**19%**	**37,982**	**40%**	**12%**	**55,498**	**48%**	**12%**

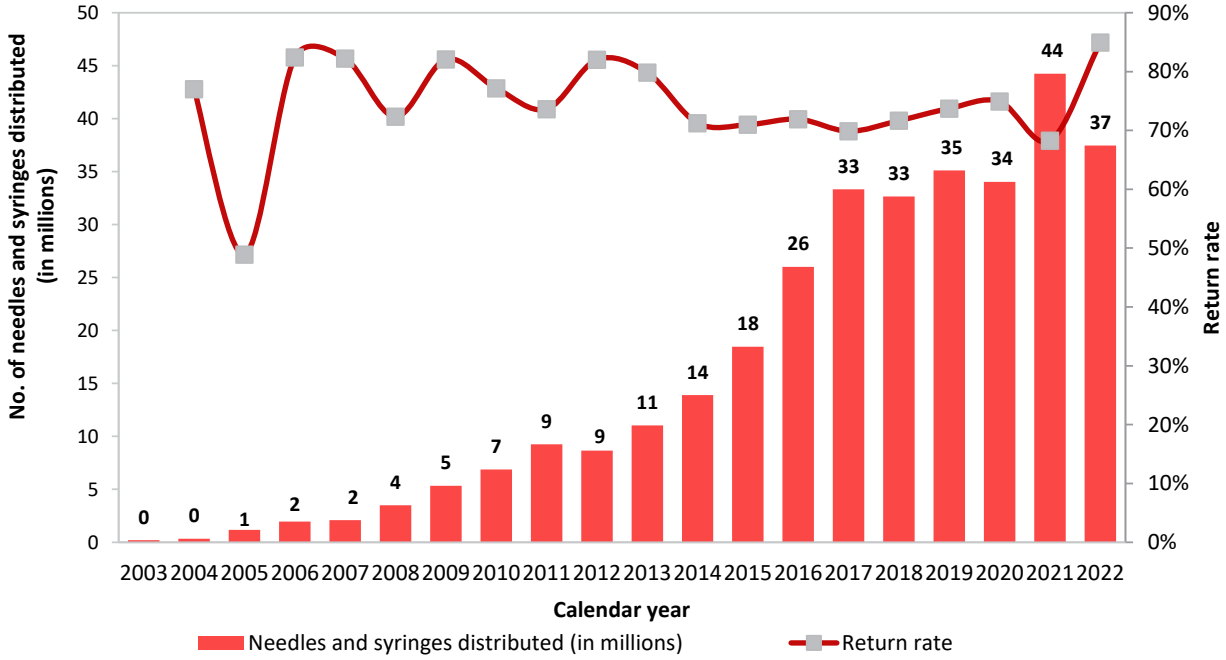
37 Calculated based on PWID received HTS and PWID PSE 2017 with consideration of population growth for respective year (from AEM modelling).

Needle and syringe exchange program

The needle and syringe program has been expanding well in the last five years, even in the difficult times in 2020 and 2021, along with a wider adoption of secondary distribution in the last two years (Figure 18). A total of 37.4 million sterile needles were distributed to PWID across seven states and regions during 2022. Although it showed a 15% decrease compared to 2021 figures, there has been a general significant upward trend since inception. The total number of needle and syringes distributed in 2022 achieved the NSP IV target set for 2022 of 36.6 million. This was equivalent to an average of 323 needle and syringes per PWID, which well exceeds the global recommendation of 200 per year.[38] This is the only indicator that exceeds the target set in NSP IV for harm reduction activities. The needle return rate also increased from 68% in 2021 to 85% in 2022, reaching the highest recorded return since 2003. There was a dip in the return rate during 2021 when organizations introduced secondary distribution of needle and syringes during the pandemic. However, the drop was recovered in 2022.

Since the start of the needle and syringe exchange program, it has been entirely implemented by I/NGO partners. As in the prevention reach and testing, AHRN and MANA are the largest implementers, followed by MdM and SARA. Between 2016 and 2022, there have been substantial improvements in needle and syringe distribution in certain regions, such as Kachin and Sagaing, whereas in Yangon needle and syringe distribution in 2022 returned to the level of 2016 and 2017 (Table 14). Despite the ongoing pandemic, the needle and syringe program covered a wider geographic area during 2022, delivering services in 12 townships in Kachin and 11 townships in Mandalay, 16 townships each in Sagaing and Shan (N), 1 in Shan (E), 2 in Shan (S), and 6 townships in Yangon (Table 15).

Figure 18: Number of sterile needles and syringes distributed and return rate (2003–2022)



38 WHO, UNODC, UNAIDS technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users – 2012 https://www.who.int/publications/i/item/978924150437, and Global AIDS monitoring indicator guidelines 2020 – page 80.

Table 14: Number of sterile needles and syringes distributed by state/region (2016–2022)

State/Region	2016	2017	2018	2019	2020	2021	2022
Kachin	13.2m	16.7m	17.8m	20.2m	17.4m	23.6m	21.2m
Mandalay	3.5m	4.4m	2.6m	1.5m	1.7m	3m	2.0m
Sagaing	2.7m	4.4m	3.8m	5m	5.2m	7.9m	6.6m
Shan (E)	0.2m	0.2m	0.3m	0.3m	0.3m	0.3m	0.3m
Shan (N)	6.1m	7.2m	7.9m	7.8m	8.9m	9.1m	6.8m
Shan (S)	0.05m	0.2m	0.3m	0.3m	0.5m	0.4m	0.3m
Yangon	0.2m	0.2m	-	-	0.05m	0.04m	0.2m
Total	26m	33.3m	32.7m	35.1m	34.0m	44.2m	37.5m

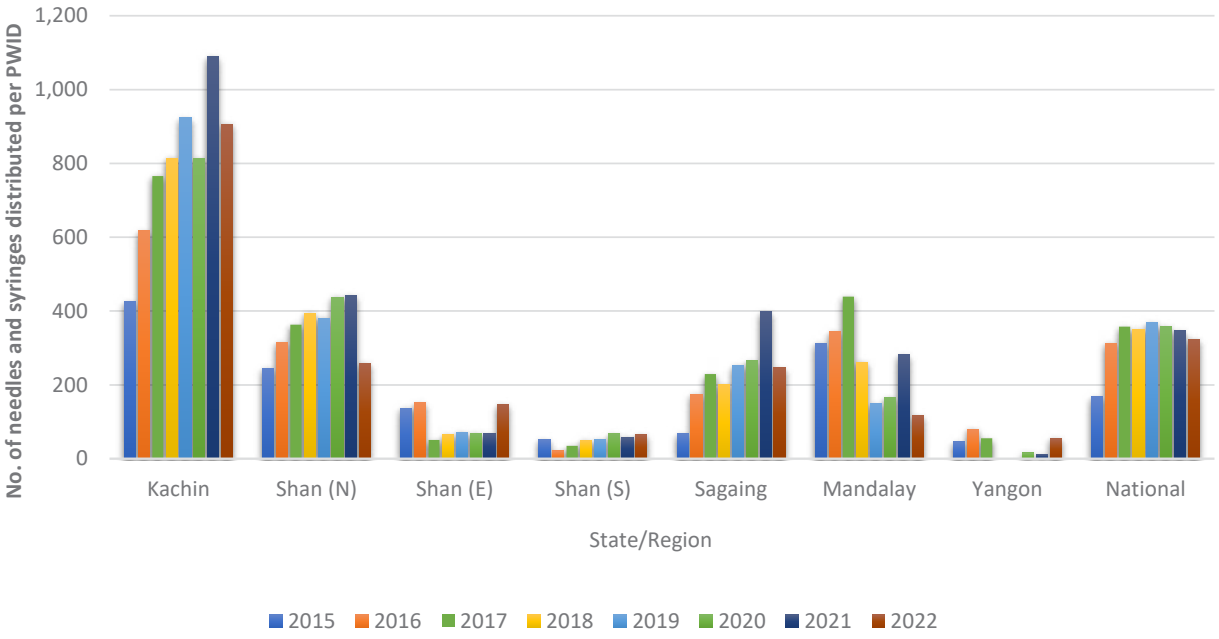
Needle and syringe distribution varies greatly at the state and regional level. PWID in Kachin received between 425 and 1,089 needles and syringes per PWID over the years (2015–2022) (Figure 19), higher than any other state/region. High mobility of the PWID population in Hpakant (migrant workers in jade mines) might account for this high distribution in Kachin. During the same period, the distribution of needles and syringes per PWID in other states and regions such as Sagaing and Shan was well above the recommended level of 200 per year. On the other hand, PWID in Shan (S) and Yangon received less than 100 needles and syringes per PWID.

As needle and syringe distribution is still disproportionate at the state and regional level, more efforts should be made to strengthen the needle and syringe program in the regions with high numbers of PWID. Although sexual transmission tends to be the major mode of HIV infection in Yangon, the HIV-positive rate among PWID in Yangon in 2022 was found to be higher than in other prioritized regions such as Sagaing and Mandalay. Therefore, particular attention should be paid to harm reduction programs in Yangon, and these should be considered for reinforcement. Nevertheless, safe injecting behaviour and HIV incidence should be continuously monitored to assess the effectiveness of the needle and syringe program.

Table 15: Sterile needles and syringes distributed by organization and state/region/ township in 2022

Organi-zation	Kachin	Mandalay	Sagaing	Shan (E)	Shan (N)	Shan (S)	Yangon	Total
AHRN	Bhamo, Chipwi, Hpakant, Shwegu, Waingmaw		Homalin, Indaw, Kale, Katha, Mawlaik, Tamu, Tigyaing		Lashio, Lukkaing Mabein			17,529,200
	11,108,139		4,405,805		2,015,256			
MAM	Putao						Hlaingtharyar Shwepyithar Thanlyin	**1,161,579**
	932,670						228,909	
MdM	Moegaung, Mohnyin, Myitkyina							**6,171,955**
	6,171,955							
MANA		Amarapura, Aungmyaytharzan, Chanmyathazi, Chanayethazan, Kyaukse, Mahaaungmyay, Mogoke, Patheingyi, Pyigyitagon Pyinoolwin, Singu	Hkamti, Kawlin, Kyunhla, Monywa, Paungbyin, Pinlebu, Sagaing, Wuntho	Tachileik	Hseni, Hsipaw, Kunlong, Kutkai, Kyaukme, Lashio, Mongmit, Maingmaw, Muse, Namhkan, Namhsan, Namtu, Nawnghkio Pangsang, Tangyan	Nansang, Taunggyi	Bahan, South Okkalapa, Tamwe	**9,137,997**
		1,997,101	1,696,747	332,675	4,803,274	292,997	15,203	
SARA	Mansi, Moemauk, Mogaung, Mohnyin, Myitkyina, Tanai		Banmauk					**3,460,941**
	2,975,441		485,500					
Total	**21,188,205**	**1,997,101**	**6,588,052**	**332,675**	**6,818,530**	**292,997**	**244,112**	**37,461,672**

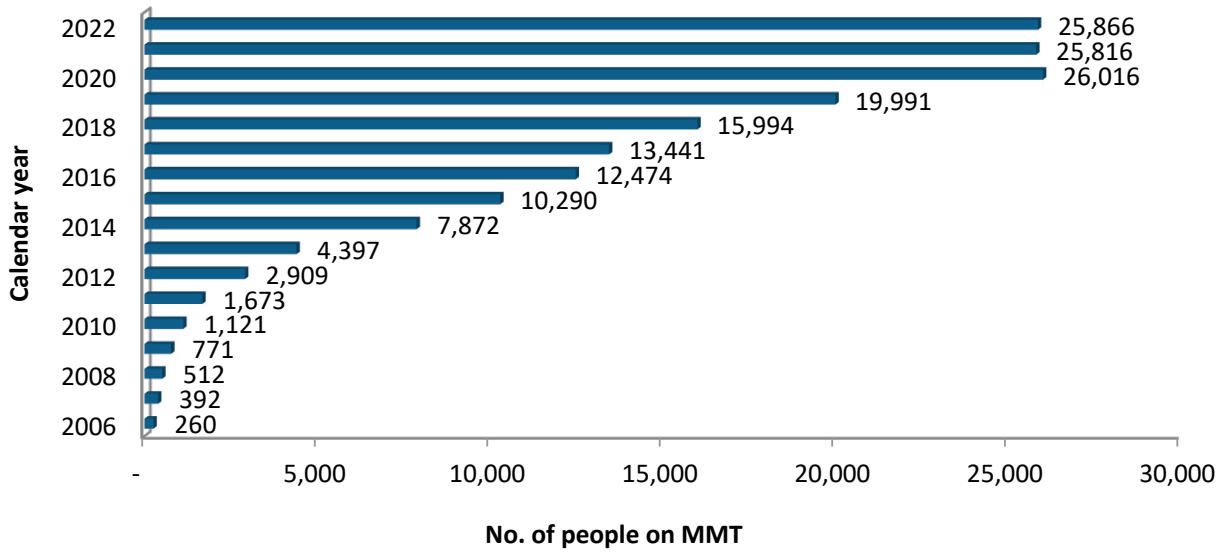
Figure 19: Number of sterile needles and syringes distributed per PWID by state/region (2015–2022)



Methadone maintenance therapy (MMT)

The number of people on methadone maintenance therapy (MMT) has been increasing over its 14 years of activity and became stable in recent years (Figure 20). With support from harm reduction partner organizations, the Drug Dependency Treatment and Research Unit (DDTRU) was able to provide MMT to nearly 26,000 PWID by the end of 2022, covering 22% of the estimated PWID population in the country. Of those who accessed the MMT program, 1.5% were females and 5% were PWID younger than 25 years old.

Figure 20: People on MMT (2006–2022)



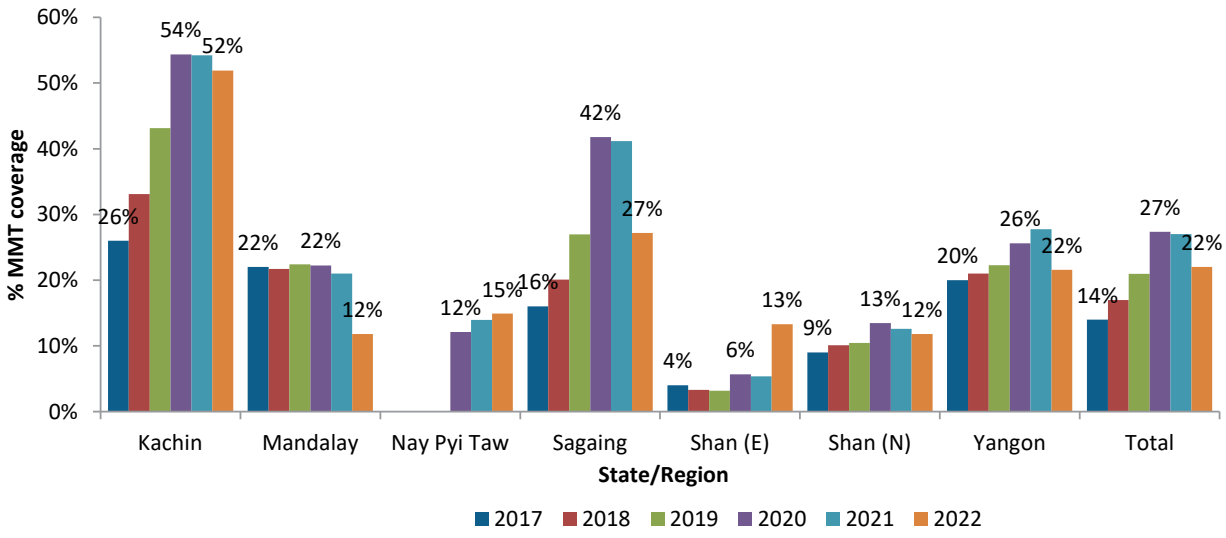
The MMT program has been expanding its geographical coverage every year since its initiation in 2006, but no new MMT site was added in the last two years. There was a decrease of around 40% in MMT initiation in 2021 and 2022 compared to previous years, leading to a stable MMT cohort during the last three years.

During 2022, MMT was dispensed through 73 MMT sites in 51 townships in seven states and regions. This is a reduction of 12 working MMT sites compared to 2020. There were 23 sites in Sagaing and Kachin, 18 in Shan (N), 4 in Mandalay, 2 sites each in Yangon and Shan (E), and 1 site in Nay Pyi Taw. Kachin had the largest MMT cohort followed by Sagaing. Kachin and Sagaing combined have almost 80% of the country's MMT cohort. By end of 2022, Kachin had 52% of its estimated PWID population covered by MMT, compared to 27% in Sagaing (Figure 21). Despite being a PWID-predominant high priority region, Shan (N) could provide MMT to only 12% of its estimated PWID.

Table 16: Number of PWID on MMT by state/region (2016–2022)

State/Region	2016	2017	2018	2019	2020	2021	2022
Kachin	5,211	5,726	7,235	9,424	11,634	11,765	12,136
Mandalay	2,085	2,203	2,194	2,331	2,335	2,204	2,021
Nay Pyi Taw					46	53	84
Sagaing	2,636	3,024	3,823	5,315	8,271	8,172	7,241
Shan (E)	148	147	132	129	233	220	302
Shan (N)	1, 785	1,766	2,012	2,140	2,732	2,580	3,118
Shan (S)					10		
Yangon	609	575	598	652	755	822	964
Total	**12,474**	**13,441**	**15,994**	**19,991**	**26,016**	**25,816**	**25,866**

Figure 21: Percentage of PWID covered by MMT services by state/region (2017–2022)

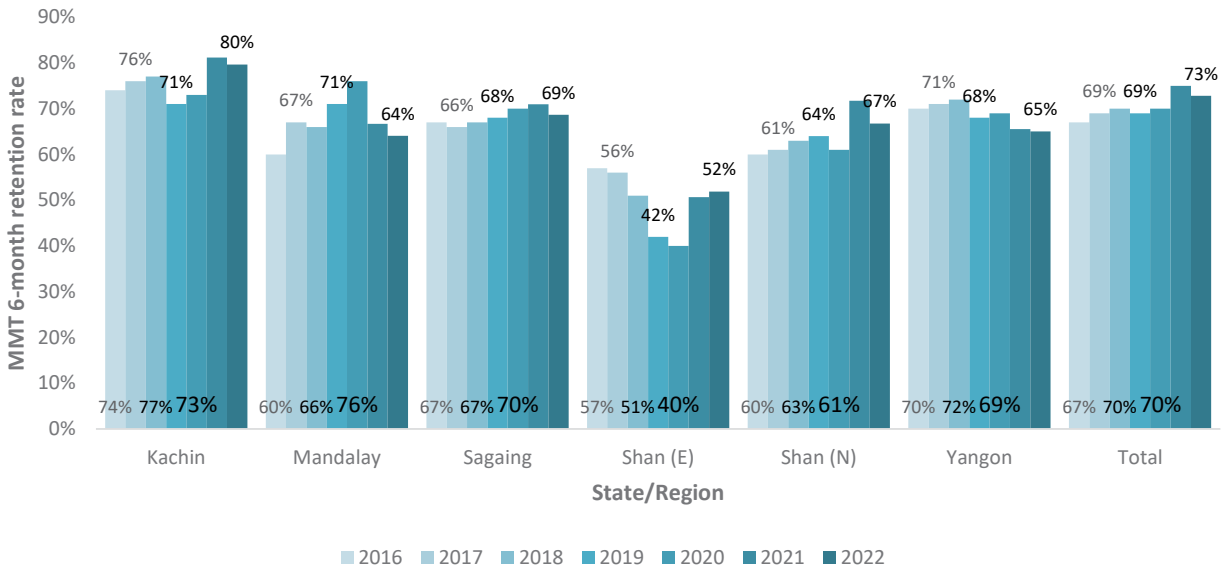


Concerning MMT program outcomes, the overall six-month retention rate for all MMT sites increased from 67% in 2016 to 73% in 2022. Among all states and regions, Nay Pyi Taw had the highest retention

rate at 88%, followed by Kachin at 80%, Sagaing at 69% and Shan (N) at 67% in 2022. There is still room for improvement, as the national target for MMT six-month retention is 80%. Among regions providing MMT services, the lowest retention rate was consistently seen in Shan (E) over the years (Figure 22). This state should be assessed for obstacles to access and service quality. Additional communication strategies may be necessary to enhance individuals' retention in this area.

All in all, it can be expected that the country's MMT cohort will increase once MMT initiation returns to the level of previous years, with an increasing retention rate. Given that the results of the behavioural survey among PWID show that MMT is an effective program for reducing injection and subsequent sharing of injecting equipment, the MMT program should be further scaled up proportionately to the severity of the HIV epidemic among PWID.

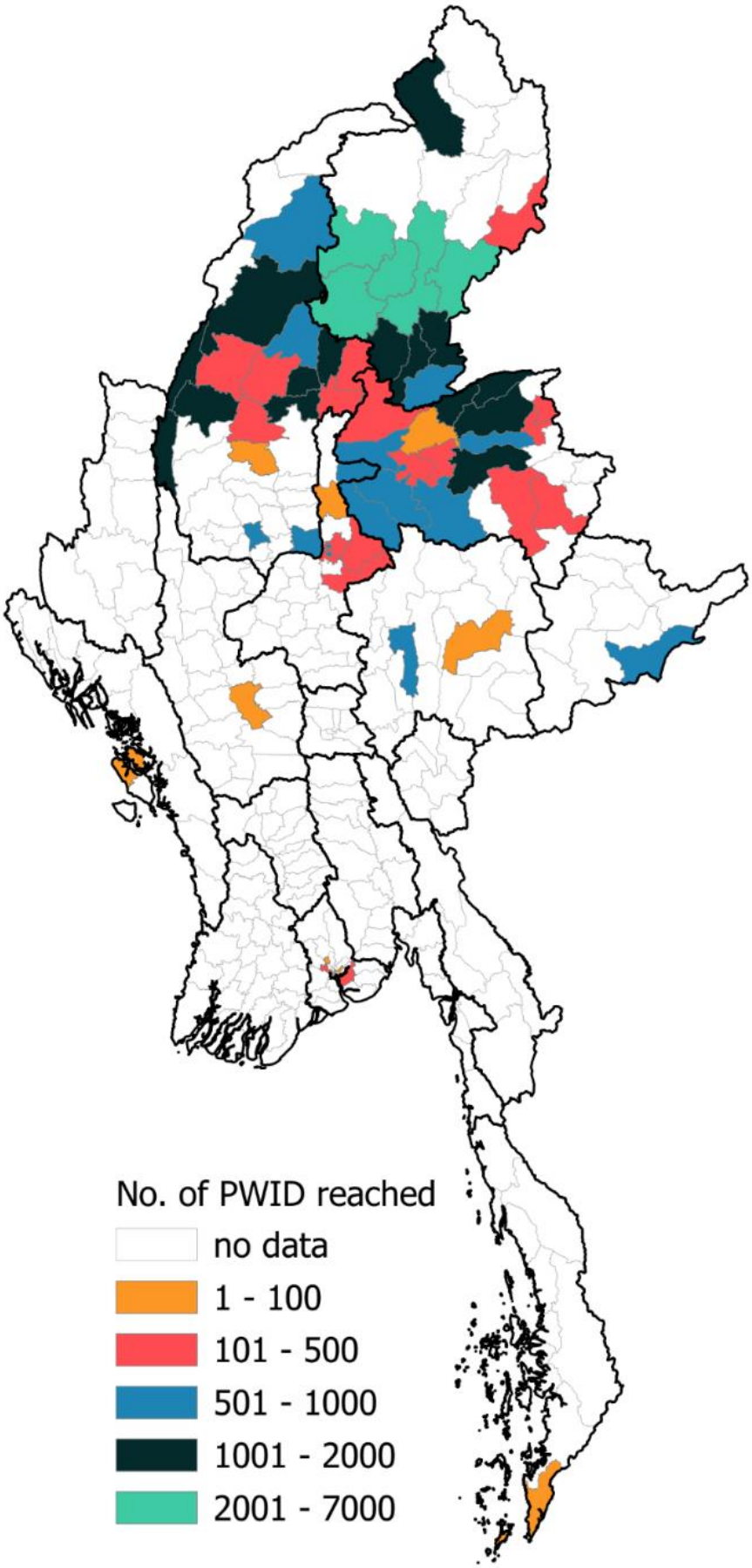
Figure 22: MMT six-month retention rate by state/region (2016–2022)



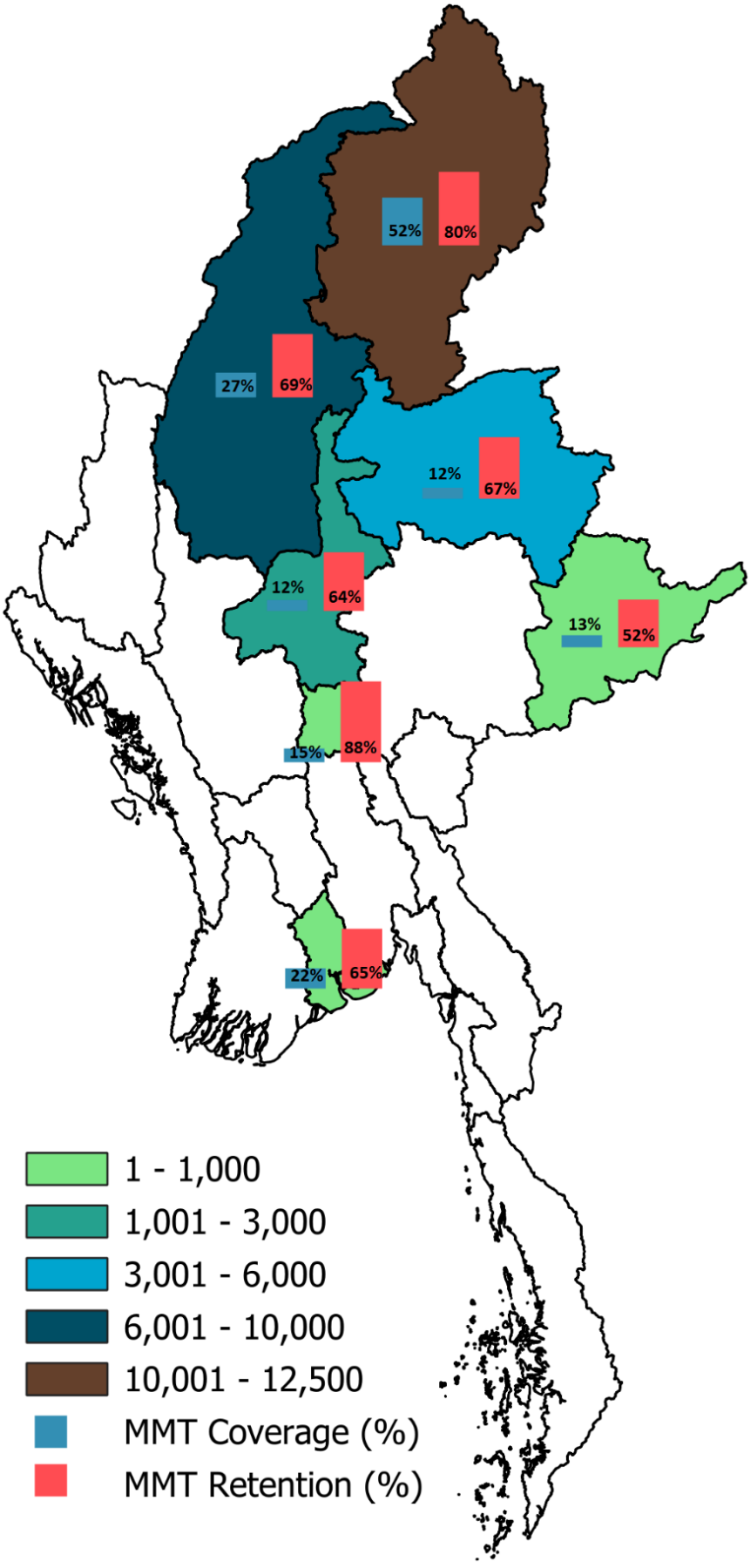
Map 4 illustrates the distribution of the MMT program by state and region. In general, the MMT program is relatively successful in Kachin and Sagaing in terms of coverage of MMT among PWID and retention on MMT. Being an area with high injecting drug use, Shan (N) still has a low coverage for MMT, and Shan State as a whole has much room to improve the MMT program.

With increasing coverage of harm reduction services, new HIV infections among PWID are expected to decrease. HIV test positive rate from the HTS program and HIV prevalence from HSS both show a decreasing trend for the PWID population. Modelling results also showed a gradual decline of new infections among PWID. It is essential to explore the HIV incidence among PWID, particularly in areas recognized as having an HIV epidemic driven by injecting drug use, for data triangulation of the modelling results. Evaluation of the effectiveness of harm reduction activities is crucial to provide tailored services at the subnational level in order to mitigate HIV transmission through injecting drug use.

Map 3: Distribution of prevention services for PWID by township in 2022



Map 4: Distribution of PWID on MMT, MMT coverage and retention by state/region in 2022



Prevention among sexual partners of PWID

Sexual partners of PWID are a group at high risk for HIV. Behaviour surveillance reveals high HIV prevalence among PWID and low condom use with their sexual partners. This group has received more attention in recent years, and the number of partners of PWID who received HIV prevention services increased every year (Figure 23). Six organizations working on harm reduction, including NAP, reported providing services to this group in 2022. The two main organizations (AHRN and MANA) providing prevention services to PWID are also providing services to their partners on a large scale.

Figure 23: Number of regular partners of PWID reached by prevention program by year (2011–2022)

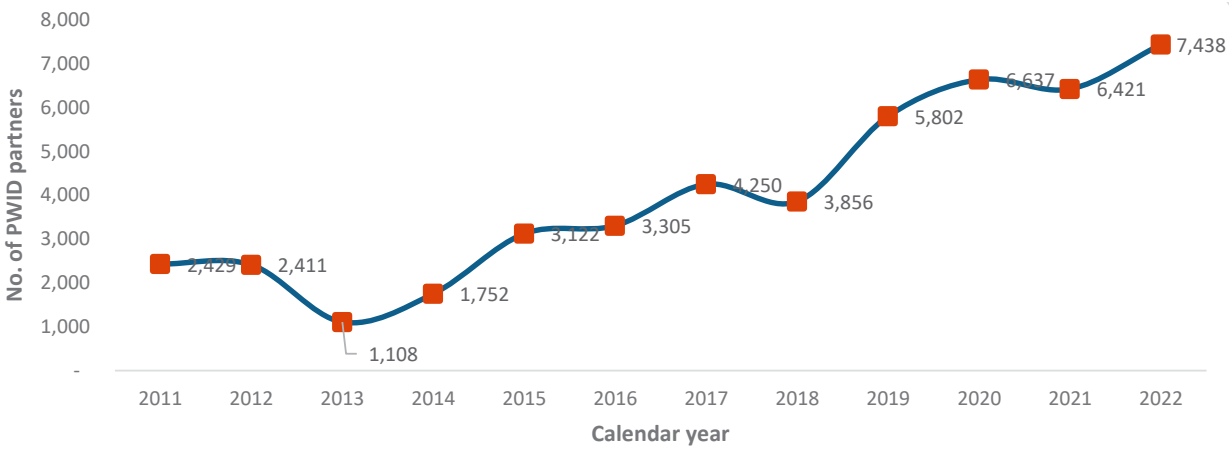


Table 17: Sexual partners of people who inject drugs reached by state/region (2018–2022)

State/ Region	2018			2019			2020			2021			2022		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Bago	-	-	**-**	-	-	**-**	7	6	**13**	-	-	**-**	-	-	**-**
Kachin	40	1,022	**1,062**	72	1,097	**1,169**	45	1,423	**1,468**	38	1,777	**1,815**	46	2,687	**2,733**
Magway													1		**1**
Mandalay	20	16	**36**	19	190	**209**	1	206	**207**	2	94	**96**	3	152	**155**
Mon	-	1	**1**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	
Rakhine	20	16	**36**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	
Sagaing	192	752	**944**	68	1,410	**1,478**	19	1,680	**1,699**	41	1,881	**1,922**	11	1,854	**1,865**
Shan (E)	-	3	**3**	29	134	**163**	42	125	**167**	3	46	**49**	0	137	**137**
Shan (N)	10	1,764	**1,774**	35	2,493	**2,528**	10	2,765	**2,775**	26	2,236	**2,262**	6	2,102	**2,108**
Shan (S)	-	-	**-**	-	233	**233**	11	273	**284**	23	237	**182**	29	174	**203**
Tanintharyi	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	1	**1**
Yangon	-	-	**-**	7	15	**22**	**8**	**16**	**24**	-	17	**17**	138	97	**235**
Total	**282**	**3,574**	**3,856**	**230**	**5,572**	**5,802**	**143**	**6,494**	**6,637**	**133**	**6,288**	**6,421**	**234**	**7,204**	**7,438**

At the state and regional level, Kachin reported reaching the largest number of sexual partners of PWID for HIV prevention services in the last year, followed by Shan (N) and Sagaing. As Kachin has the highest number of PWID population and is providing prevention services, it is important to reach the sexual partners of PWID to break the chain of HIV transmission to the more general population in Kachin. The sexual partners of PWID reached with HIV prevention in Kachin increased significantly in 2022, reaching the highest number recorded since 2018. Although there has been a stable increase in the number of sexual partners reached with HIV prevention program over the years, the prevention coverage of sexual partners of PWID is estimated to be low.

All organizations working in harm reduction should consider providing services to this group on a wider scale. Greater combined efforts are needed in order to reduce HIV transmission from PWID to their sexual partners, particularly in areas where the HIV epidemic is driven by injecting drug use: Kachin, Shan (N) and northern Sagaing.

In summary, based on reported figures, HIV prevention and HTS for PWID were maintained in 2022, including needle and syringe distribution. However, apart from needle and syringe distribution, none of the other targets set for PWID were met in 2022. OST services struggled to retain the current cohort even though OST initiation was limited and decreased during the year. Kachin, Mandalay and Sagaing showed a clear increase in HIV testing for PWID, but services in these areas have not fully recovered. The HIV-positive rate from testing showed a steady decline in all states and regions. Access for female PWID and partners of PWID to programs is still undetermined and should be elaborated. With the program expansion and changes of approaches during the difficult situation – for example, secondary distribution of needles and syringes, and fewer PWID accessing HIV testing – a program evaluation assessment would be recommended. As such, the program can be adapted further to the current situation, and all PWID should be able to access quality services across the country.

Prevention among people who use drugs (PWUD)

Table 18: PWUD related indicators, targets and results in 2022

Output/coverage indicators	Data source	Size estimate	Baseline 2020	Target 2022	Results 2022
No. of PWUD reached with HIV prevention programs	Program data	-	34,347	50,000	26,974
No. of PWUD who received an HIV test and knew their result	Program data	-	-	30,000	28,393

People who use drugs (PWUD) are regarded as one of the priority populations in NSP IV, along with PWID. The National Strategic Framework (NSF) on Health and Drugs was launched and endorsed in January 2021 by the Ministry of Health to respond to the interconnected health, social and legal consequences of drug use in Myanmar. The operational plan is currently under development. The NSF addressed the current service gaps and intertwined challenges associated with the use of illicit substances through a multisectoral approach. To date, there are no specific services or program that focus solely on PWUD, and the organizations focusing on PWID services are also providing services to PWUD.

In 2022 there were seven organizations providing services to PWUD, reaching around 37,000 PWUD across the states and regions. The number of PWUD that received HIV prevention services increased by 17% in 2022 compared to 2021 figures. However, the highest recorded levels among this population were seen during NSP III. AHRN has been the largest service provider for PWUD followed by MANA. Other organizations working on PWID extended their services to PWUD on a smaller scale.

Table 19: People who use drugs (PWUD) reached by HIV prevention services by organization (2018–2022)

Organization	2018	2019	2020	2021	2022
AHRN	18,665	21,110	17,094	20,344	23,465
MAM	-	-	211	405	383
MANA	19,817	14,100	15,336	9,060	9,935
MdM	1,191	1,049	482	886	1,053
Metta	1,043	281	345	-	-
MPG	-	-	-	-	7
NAP	-	-	-	11	212
SARA	1,941	1,584	878	807	1,685
Total	**42,657**	**38,124**	**34,347**	**31,513**	**36,740**

Among all PWUD who received HIV prevention and testing services in 2022, 8% were female. In general, the proportion of female PWUD reached with HIV prevention and testing services was much higher than that of female PWID over the years. This may be due to larger female PWUD population and/or it is easier to identify female PWUD than female PWID.

Figure 24: Number of PWUD reached by prevention program by year (2011–2022)

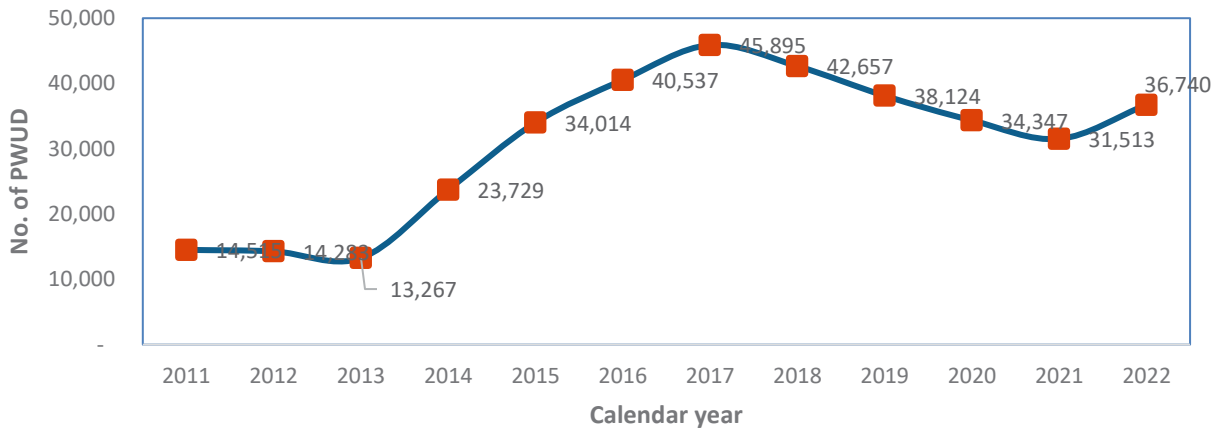
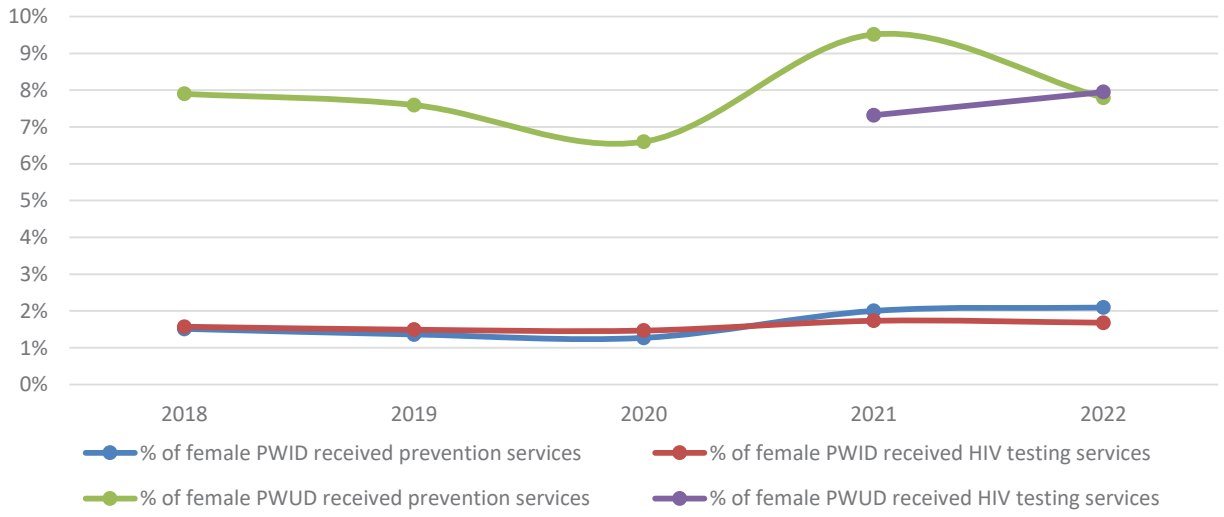


Figure 25: Percentage of female PWID and PWUD received prevention and HIV testing services (2018–2022)



The states and regions with harm reduction services available for PWID also provide HIV services for PWUD. As in the PWID population, the highest number of PWUD were covered in Kachin, followed by Sagaing and Shan (N). In 2022, service providers in almost all states and regions attempted to restore service disruptions from 2020 and 2021 to the level before the pandemic. Since 2021, two service providers in Yangon have resumed harm reduction services but on limited scale.

Table 20: People who use drugs (PWUD) reached by HIV prevention services by state/ region (2018–2022)

State/Region	2018	2019	2020	2021	2022
Ayeyarwady					2
Kachin	16,734	16,445	11,478	12,862	15,644
Mandalay	2,662	471	613	443	460
Rakhine					4
Sagaing	8,701	8,139	8,666	9,221	10,059
Shan (E)	1,056	1,042	1,046	738	1,293
Shan (N)	11,467	10,391	10,824	6,914	8,180
Shan (S)	2,037	1,636	1,720	1,253	1,004
Yangon	-	-	-	82	94
Total	42,657	38,124	34,347	31,513	36,740

The national PWID network leaders highlighted their concerns of an increase in drug use during the pandemic in both cities and border areas because of ongoing cheaper supply and easy availability of drugs. An assessment or bio-behavioural survey should be considered among PWUD in order to organize timely intervention programs in areas with high drug use. These areas could be same as PWID-predominant areas or different.

As primordial prevention is best, it is very important to prevent drug use from the start, especially among young people, to reduce the overall burden of drug use. This can be achieved only through a multisectoral approach, and the NSF on Health and Drugs will be the main source of guidance to address the issue. Moreover, studies on the impact of drug use on HIV in Myanmar are needed in order to provide concrete evidence for relevant policy, guidelines and services to prevent and address drug use in relation to HIV.

Prevention among people in prison and other closed settings, sexual partners of priority populations, young priority populations and migrants

Table 21: Indicators, targets and results related to people in prison and other closed settings, sexual partners of priority populations, young priority populations and migrants in 2022

Output/coverage indicator	Data source	Size estimate	Baseline 2020	Target 2022	Results 2022
No. of people in prison and other closed settings reached with HIV prevention programs	Program data	100,000–110,000[39]	11,351	50,000	2,831
No. of people in prison and other closed settings received an HIV test and knew their results	Program data	100,000–110,000	22,792	44,000	10,113
No. of youth (15–24 yrs non-KP but high risk) reached with HIV prevention programs	Program data	-	-	22,000	1,045
No. of youth (15–24 yrs non-KP but high risk) received an HIV test and knew their results	Program Data	-	-	2,200	22,064*
No. of mobile and migrant population/people at workplace reached with HIV prevention programs	Program data	-	26,042	64,500	30,755
No. of mobile and migrant population/people at workplace received an HIV test and knew their results	Program data	-	28,896	22,575	33,313
No. of partner of PLHIV (negative partner) reached with HIV prevention programs	Program data	46,156[40]	-	16,376	1,714
No. of partner of PLHIV (negative partner) received an HIV test and knew their results	Program data	46,156	-	16,376	10,734

**This group is the combination clients, PWUD, partners of KP/PLHIV, people in closed settings, and mobile and migrants aged 15-24 years. This is overlapped with the total of above mentioned groups.*

39 Presentation from Prisons Department in HIV prevention workshop, February 2019, Nay Pyi Taw.

40 From NSP IV, estimate from care and treatment working group.

Prevention among people in prison and other closed settings

Partners working with people in prison and other closed settings in 2022:

NAP

In 2022, a total of 2,831 and 10,113 prisoners were provided with HIV prevention and testing services, respectively. As the pandemic progressed, the service provision has improved compared to the year 2021. However, the vast majority of services to this population were still disrupted compared to pre-pandemic levels. A significant decrease in the number of people in prison reached with HIV prevention and testing services was observed since 2020, and the lowest level was recorded in 2021 due to difficulty in having access to the prison population amid the COVID-19 pandemic and other difficult situations. The prevention services available for this population are very limited, including health education on HIV and testing of HIV and STI, as no commodity distribution is allowed in prison settings. NAP has been the primary institution providing services in prisons in collaboration with the Prison Health Department of the Ministry of Home Affairs, with the support of implementing partners.

Based on the prison health standard operating procedure (SOP), prison health staff performed entry screening for HIV to all new detainees. However, it is difficult to obtain HIV testing reports from prisons. During 2022, HIV prevention services were provided to people in prisons in 9 out of 17 states and regions, with a significant increase in Magway region. As in 2021, HIV prevention and testing service continued to be disrupted in Kachin, Kayah, Sagaing, Shan (E), Shan (N) and Tanintharyi during 2022. Only 22 people in prison and other closed settings in Yangon were reached with HIV prevention services. HIV prevention services for people in prison and other closed settings should be reinforced to ensure the health of incarcerated population in the coming years.

Figure 26: Number of people in prison and closed settings received HIV prevention and testing programs (2011–2022)

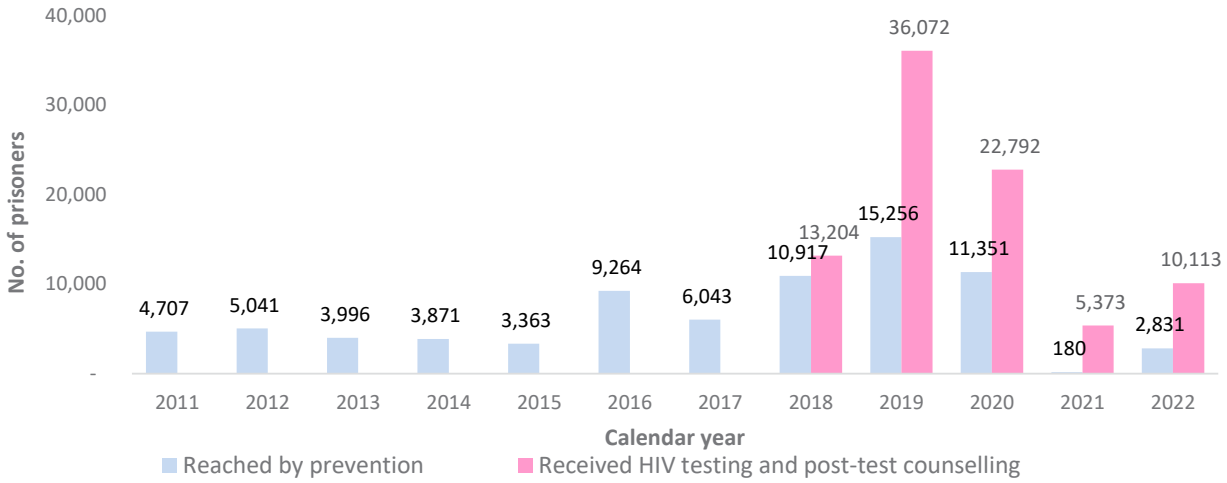


Table 22: Number of people in prison and closed settings reached by state/region (2018–2022)

State/ Region	2018			2019			2020			2021			2022		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Ayeyarwady	273	77	350	1,667	326	1,993	798	43	841	19	11	30	179	35	214
Bago	788	100	888	57	35	92	224	57	281	4	-	4	2	8	10
Chin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kachin	862	390	1,252	1,798	397	2,195	1,420	489	1,909	-	-	-	-	-	-
Kayah	762	89	851	474	130	604	103	0	103	-	-	-	-	-	-
Kayin	219	199	418	284	206	490	262	29	291	2	-	2	3	2	5
Magway	280	-	280	201	71	272	247	62	309	-	-	-	1,943	56	1,999
Mandalay	565	203	768	2,566	513	3,079	1,466	274	1,740	14	-	14	30	15	45
Mon	720	172	892	569	-	569	-	-	-	-	-	-	217	40	257
Nay Pyi Taw	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rakhine	35	12	47	41	-	41	1	-	1	2	-	2	90	79	169
Sagaing	2,754	114	2,868	2,300	201	2,501	893	193	1,086	-	-	-	-	-	-
Shan (E)	589	237	826	717	169	886	264	42	306	-	-	-	-	-	-
Shan (N)	4	-	4	581	110	691	1382	221	1,603	-	-	-	-	-	-
Shan (S)	238	14	252	365	176	541	291	208	499	38	90	128	110	0	110
Tanintharyi	1,103	106	1,209	1,062	72	1,134	1,610	167	1,777	-	-	-	-	-	-
Yangon	7	5	12	10	158	168	536	69	605	-	-	-	16	6	22
Total	**9,199**	**1,718**	**10,917**	**12,692**	**2,564**	**15,256**	**9,497**	**1,854**	**11,351**	**79**	**101**	**180**	**2,590**	**241**	**2,831**

Prevention among mobile and migrant population

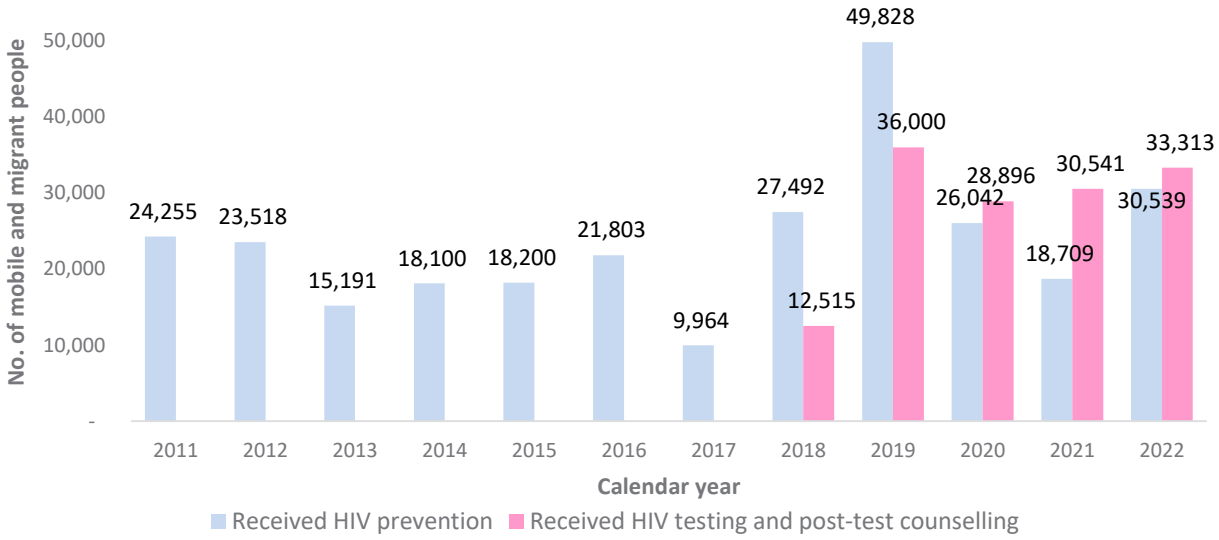
Partners working with migrant population in 2022:

IOM, MPG, MSI, NAP

Migrant population is identified as one of the vulnerable populations in NSP IV. While migration itself is not a risk factor for HIV, conditions of travel, accommodation and work associated with migration can increase the risk of exposure to HIV infection.[41] As in HIV service provision to key populations and other populations, HIV prevention reach to this population has improved in 2022, with 30,539 migrants reached with prevention services and 33,313 migrants reached with HIV testing services, but has not yet fully recovered to pre-pandemic levels. More than 58% of migrants who received prevention services in 2022 were female. Besides the conventional organizations providing services to migrant workers – IOM and NAP – other organizations such as MPG and MSI were providing HIV testing services to migrants in 2022.

41 Labour Migration and HIV, ILO.

Figure 27: Number of migrant people received HIV prevention and testing programs (2011–2022)



As in the past, the highest prevention reach among migrants (~95%) was recorded in Mon and Kayin due to the presence of the largest migrant population on the Myanmar–Thailand border. During the pandemic along with other situation, service provision was particularly disrupted in Kachin, Kayah, Kayin, Magway, Mandalay, Shan (E), Shan (N), Tanintharyi and Yangon. Although some states and regions restored their services in 2022, HIV prevention and testing services to this population were still disrupted in Kachin, Kayah, Shan (E) and Shan (N).

Although the numbers of migrants reached with HIV prevention and testing services were available, information on HIV-related risk behaviour and a population size estimate are currently unknown. Availability of more comprehensive information on this population would be advantageous to the program.

NSP IV sets targets for mobile and migrant population together with people in the workplace. In 2022, more than 200 people in the workplace were reached with HIV prevention services through NAP.

Table 23: Mobile and migrant population reached with HIV prevention by state/region (2018–2022)

State/ Region	2018			2019			2020			2021			2022		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Ayeyarwady	126	69	195	179	248	427	43	17	60	-	-	-	13	9	22
Bago	-	-	-	4	6	10	42	12	54	3	2	5	46	16	62
Chin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kachin	770	809	1,579	326	689	1,015	349	930	1,279	-	-	-	-	-	-
Kayah	488	1,164	1,652	108	122	230	35	62	97	-	-	-	-	-	-
Kayin	6,653	8,335	14,988	8,233	8,868	17,101	4,608	2,982	7,590	1,301	1,680	2,981	1,729	3,048	4,777
Magway	946	895	1,841	760	530	1,290	189	179	368	-	-	-	2	33	35
Mandalay	293	138	431	1,267	686	1,953	911	433	1,344	5	48	53	317	140	457
Mon	6,644	2,757	9,401	10,391	10,580	20,971	6,648	7,247	13,895	6,928	8,196	15,124	10,272	13,711	23,983
Nay Pyi Taw	-	-	-	67	44	111	-	2	2	-	1	1	0	0	0
Rakhine	51	62	113	74	40	114	75	61	136	39	25	64	33	28	61
Sagaing	157	110	267	417	255	672	146	135	281	3	1	4	1	3	4
Shan (E)	1,476	1,627	3,101	2,505	1,962	4,467	59	81	140	-	-	-	-	-	-
Shan (N)	99	177	276	221	182	403	139	105	244	-	-	-	-	-	-
Shan (S)	-	-	-	96	49	145	15	3	18	276	201	477	71	79	150
Tanintharyi	127	72	199	386	366	752	282	212	494	-	-	-	98	41	139
Yangon	15	9	24	56	111	167	27	13	40	-	-	-	351	498	849
Total	**17,845**	**16,224**	**34,069**	**25,090**	**24,738**	**49,828**	**13,568**	**12,474**	**26,042**	**8,555**	**10,154**	**18,709**	12,933	17,606	30,539

Prevention among high-risk young people (15–24 yrs) non key population and young key populations

Prevention among HIV-negative partners of PLHIV

Organizations working with high-risk young people in 2022: NAP, PUI

Organizations working with discordant couples in 2022: MAM, MPG, MSI, NAP

Non key population but high-risk young people (15–24 years)

A recent shift in HIV prevention strategy has widened the scope from out-of-school youth to young people. NSP IV emphasizes strengthening of the youth program and integration with key population programs in order to provide comprehensive HIV services to young key populations. In 2022, a total of 1,045 youths were covered by HIV prevention services. This figure represents more than a 50% increase on the 2021 total. Around 32,000 non–key population but high-risk youths received HIV testing and counselling services, and this population included clients, PWUD, partners of key population/PLHIV, youths in prison and closed settings, and mobile and migrant people aged 15–25 years. The HIV testing services provided by implementers did not specially try to cover this population, but young people in the specified populations mentioned above benefited and were counted here.

HIV-negative partners of PLHIV

HIV-negative partners of PLHIV are at very high risk of contracting the disease. It is important to reach the partners of PLHIV to provide prevention and testing support while they are still HIV-negative. This approach can be accomplished with the involvement of both partners. This is related to positive prevention, which aims to increase the self-esteem, confidence and ability of HIV-positive people to protect their own health and avoid passing on the infection to others. A total of 1,714 HIV-negative partners of PLHIV received prevention services and 10,729 received HIV testing services in 2022, representing an increase of more than 50% on 2021 figures.

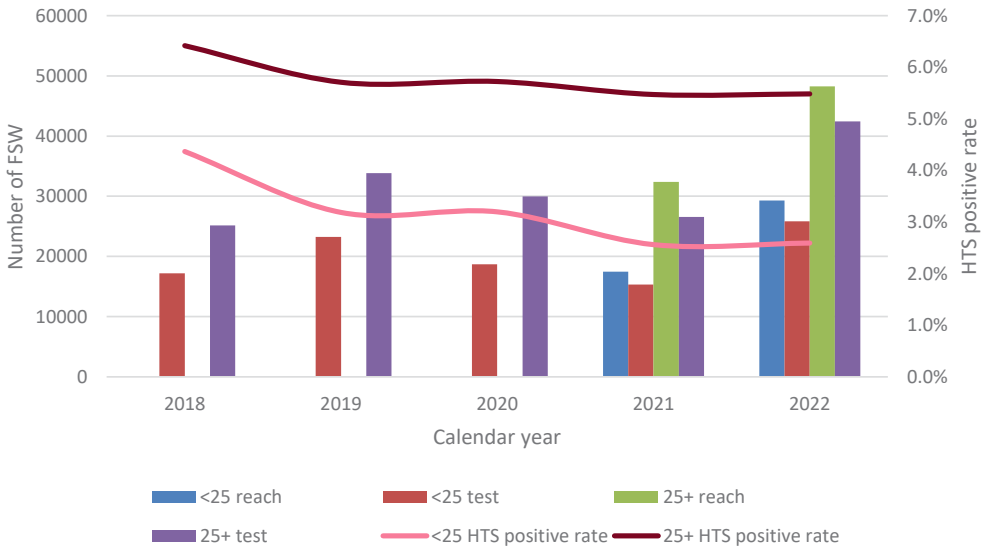
Uniformed services personnel are another population included in NSP IV. This population is no longer a priority population to be reached with HIV prevention; therefore, only 215 uniformed services personnel were reached with HIV prevention services in 2022. NAP remains the only organization providing services to uniformed services personnel.

Young key populations (15–24 years)

Young key populations (YKPs) are the most vulnerable, including young MSM and TGW, young PWID, and adolescent and young adult sex workers, and bear disproportionate burdens of HIV, particularly in the Asia–Pacific region.[42] UNAIDS 2019 data suggest that 99% of new HIV infections among young people were among young key populations and their partners.[43]

The most recent 2019 IBBS survey among FSW reported that one in four FSW were younger than 25 years. HIV prevalence among young FSW was 3.7% overall and ranged from 0.5% in Meiktila to 7.5% in Pathein, highlighting the need for HIV prevention programs targeting young FSW. Young FSW were included as one sentinel population in HSS, and HIV prevalence among young FSW has been declining significantly from 42.0% in 2005 to 3.1% in 2020.

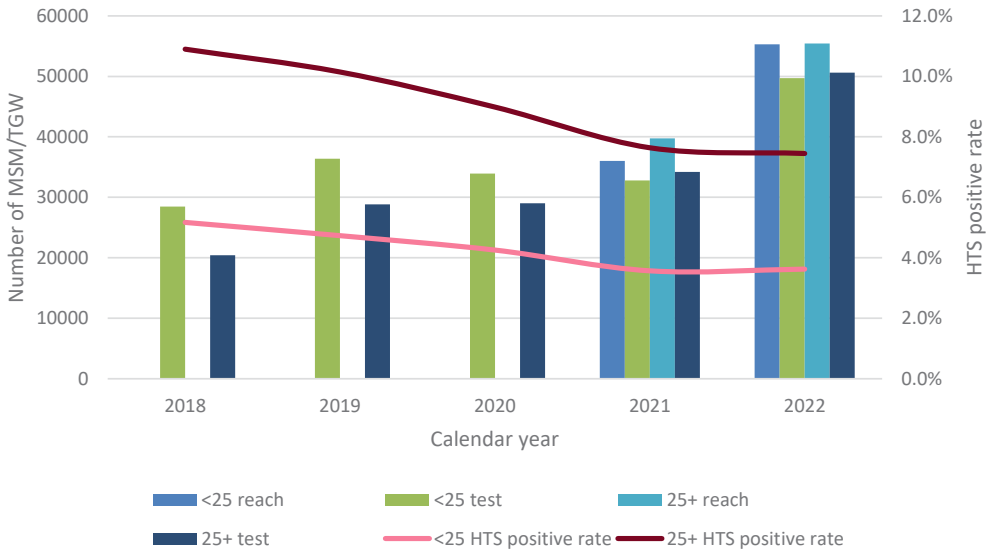
Figure 28: FSW reached with HIV prevention (high-end figures) and HTS services, stratified by age (2018–2022)



42 https://www.unaids.org/en/resources/presscentre/featurestories/2021/june/20210611_young-key-populations-asia-pacific.

43 Ibid.

Figure 29: MSM/TGW reached with HIV prevention (high-end figures) and HTS services, stratified by age (2018–2022)



Since 2018, special attention has been paid to younger members of priority populations (25 years or younger) in collecting national HIV program data to capture young key population reached with HIV prevention as well as testing services. The number of young FSW reached with both prevention and HTS services increased in 2022 compared to 2021 (Figure 28). Around 38% of HTS provided to FSW were too young FSW. HTS among both young and older FSW were disrupted during 2020 and 2021, but this service disruption was fully recovered in 2022. In general, the HTS positive rate among FSW aged 25 and older was consistently higher than that of young FSW over the period. The HIV-positive rate from testing among young FSW from program data was comparable to other sources such as IBBS and HSS. There was a gradual decline in the HIV-positive rate among young FSW over the years, from 4.4% in 2018 to 2.6% in 2022.

Figure 30: Number of TGW reached with HIV prevention (high-end figures) and HTS services, stratified by age (2021–2022)

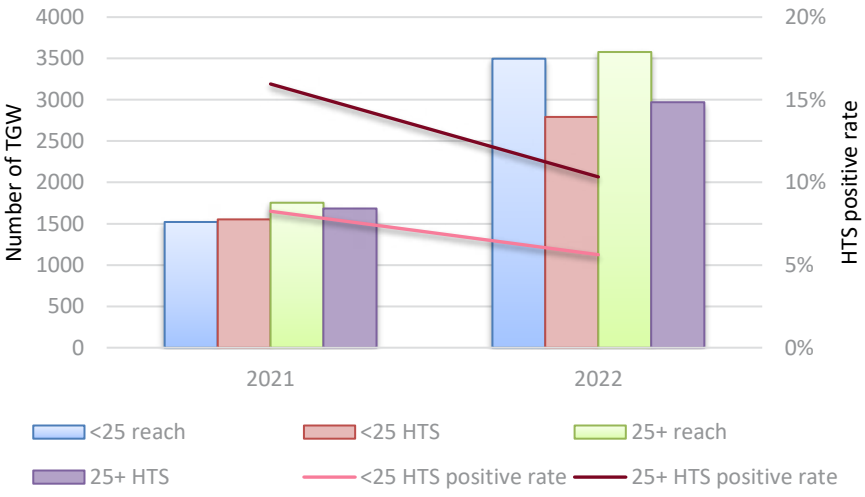
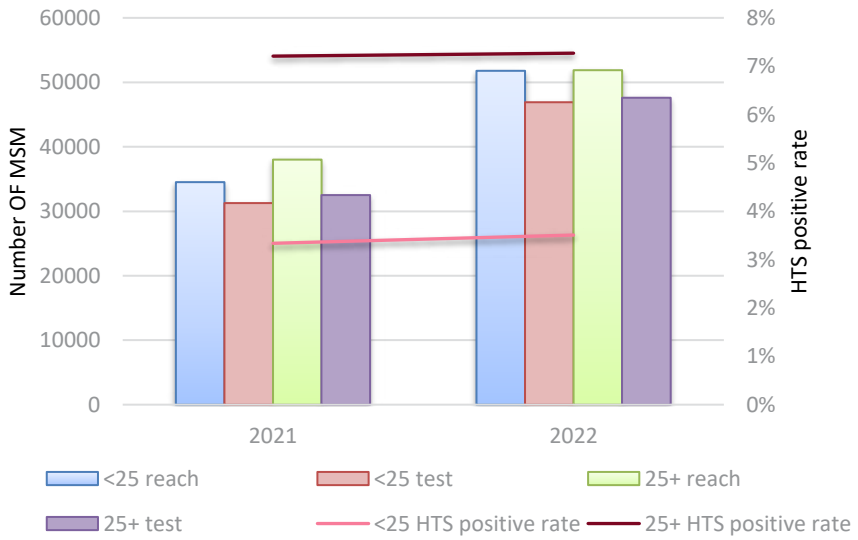


Figure 31: Number of MSM reached with HIV prevention (high-end figures) and HTS services, stratified by age (2021–2022)



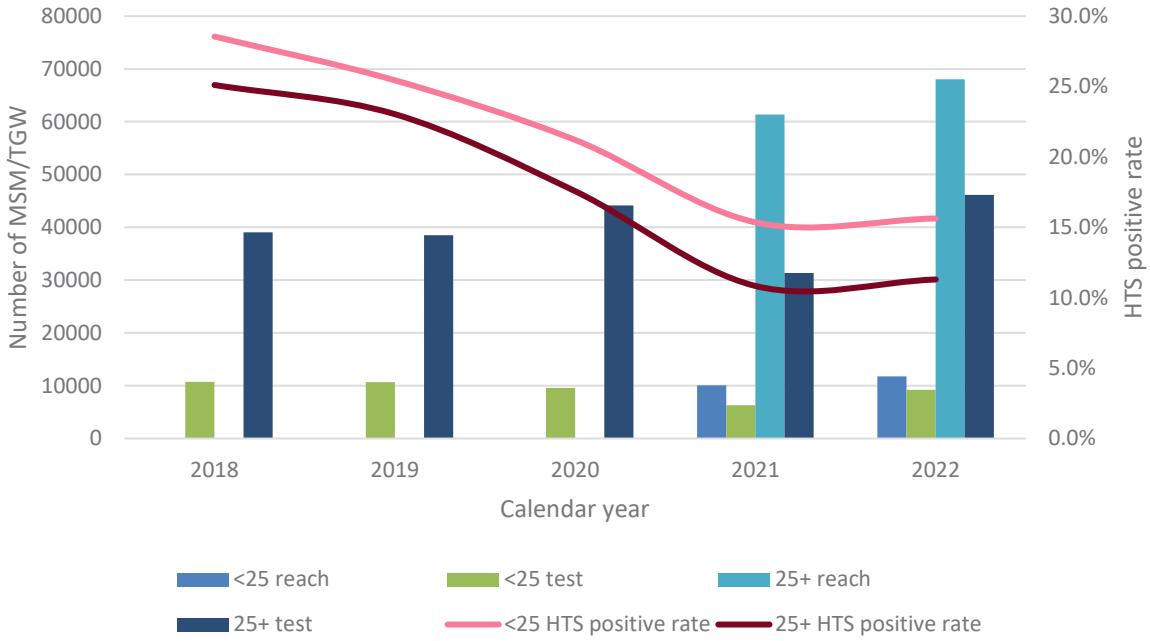
The 2019 IBBS survey conducted among MSM/TGW revealed that HIV prevalence among young MSM (<25 years) was 5.5% overall and ranged from 1.9% in Taunggyi to 19.4% in Yangon. HSS has collected HIV prevalence data among MSM/TGW since 2009, and there has been a general declining trend in HIV prevalence among young MSM/TGW, from 16.9% in 2009 to 7.3% in 2020.

As in the MSM/TGW population, the HTS positive rate was higher among older MSM/TGW compared to younger MSM/TGW. The number of young MSM/TGW reached and tested was similar to or higher than the reach and test number of older MSM/TGW. HTS service disruption among MSM\TGW populations was minimal during the years of pandemic.

Current evidence suggests that there is a difference in sexual risk behaviour between MSM and TGW populations.[44] Thus, the national HIV program also collected data on MSM and TGW populations separately since 2021. Overall, the HTS positive rate among MSM population was stable between 2021 and 2022 (Figure 31) whereas the HTS positive rate among TGW declined considerably in both young and older TGW (Figure 30).

44 HIV incidence and risk factors among transgender women and cisgender men who have sex with men in two cities of China: a prospective cohort study https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8900389/.

Figure 32: Number of PWID reached with HIV prevention (high-end figures) and HTS services, stratified by age (2018–2022)

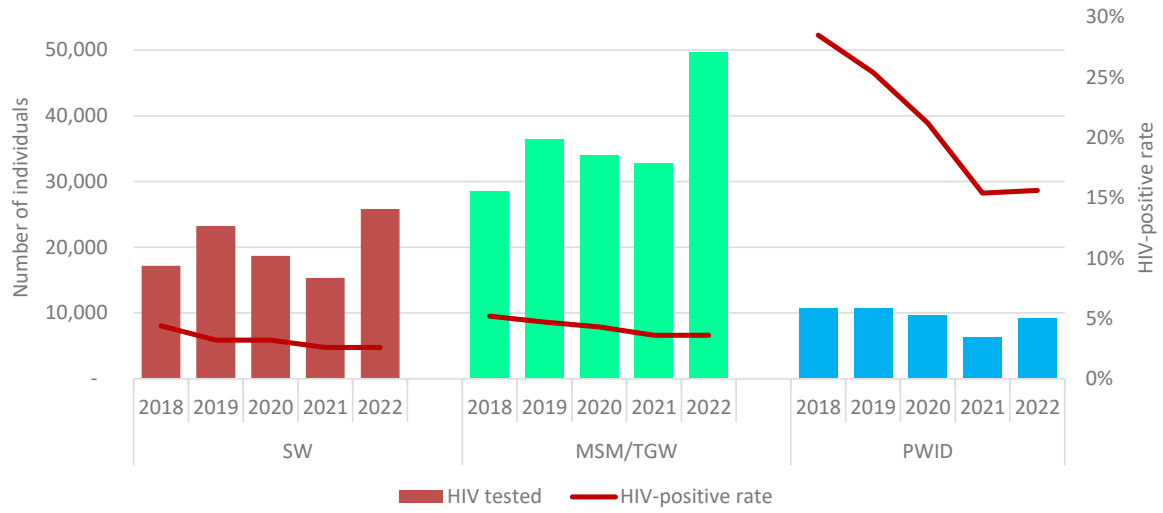


In general, young PWID are at particularly higher risk of HIV infection than young MSM/TGW and FSW. According to the 2017 IBBS among PWID, overall HIV prevalence among young PWID was 28.3%. However, the report highlights that young PWID were more likely to be HIV-positive compared to those 25 years and older in some areas, such as Indaw, Muse and Tamu. From the HSS data, the highest HIV prevalence among young PWID was observed in 2000 at 66.0%, which decreased over the years to reach 11.9% in 2020.

The national HIV program data revealed that the reach of both prevention and HTS services to young PWID was much lower than to those 25 years and older between 2018 and 2022. Unlike other key populations, young PWID constituted only 15–17% of the PWID population covered by prevention and HTS services. The gap between prevention and HIV testing was higher in older PWID than younger PWID. On the other hand, the positive rate from HIV testing among young PWID was consistently higher than for their older counterparts. Although HIV-positive rates decreased considerably over the years in both young and older PWID, data suggest that much attention should be paid to young PWID in order to provide comprehensive harm reduction services.

Although the HIV-positive rate among young PWID has been consistently higher than for other young key populations, HIV prevention and testing service provision to this population was lowest among all young key populations between 2018 and 2022. Urgent health, social, legal and political actions are required to reach a higher number of young PWID to reduce their contribution to the HIV epidemic in the country.

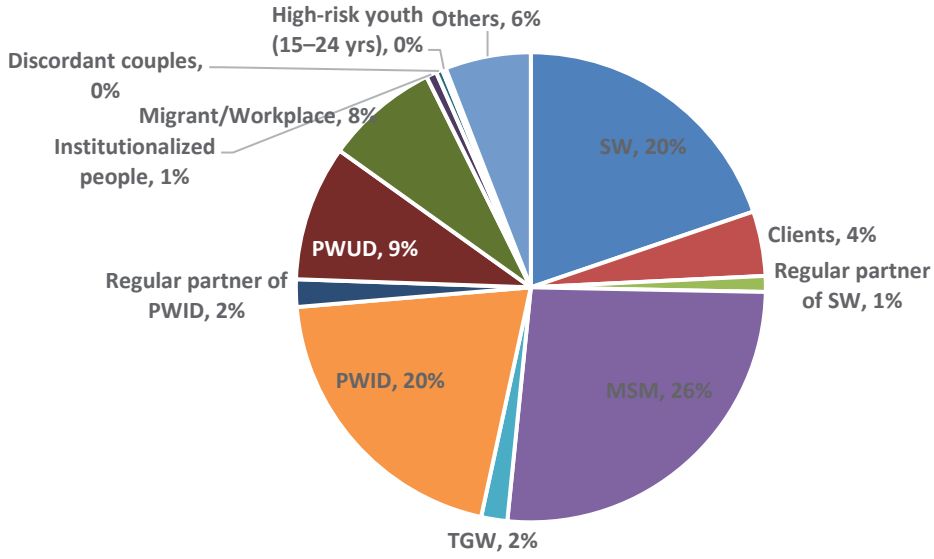
Figure 33: Young key populations reached with HIV prevention and HTS services (2018–2022)



Share of priority populations reached with prevention services in 2022

For each priority population, the number of individuals reached with prevention services was expressed as a percentage of the total number of individuals reached in 2022. Figure 34 shows the highest proportion of individuals reached in 2022 were from the MSM population (26%), followed by PWID and SW (20% each). The three key populations including TGW together accounted for 68% of total individuals reached with prevention services. The clients of SW and regular partners of key populations made up 4% and 3%, respectively, whereas a 9% share of individuals reached were from the PWUD population, and 8% the migrant population. Being a concentrated HIV epidemic, the majority of individuals reached with HIV prevention services were from the key populations, as in previous years. Compared to 2021, the proportion of PWID reduced by 6% in 2022 whereas the proportion of FSW plus clients grew by 5%.

Figure 34: Proportion of prevention services by priority population in 2022



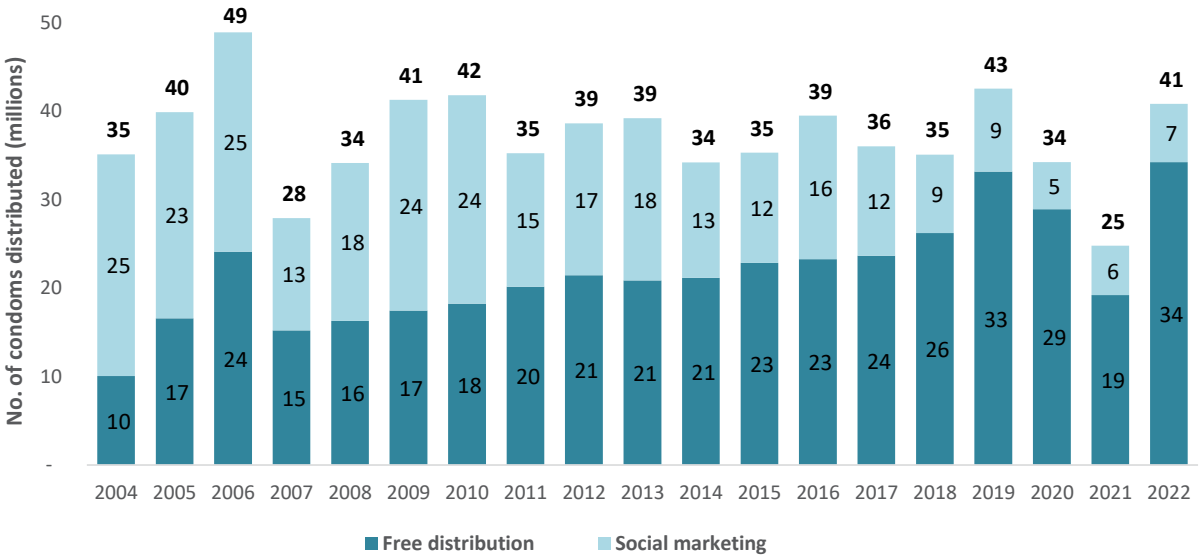
Condom distribution

Condom distribution is an essential component of HIV prevention services. Despite the availability of innovative prevention methods such as PrEP, condoms continue to play an important role in HIV and STI prevention. NAP initiated free condom distribution in 2001 through the 100% Targeted Condom Programme (TCP) in four pilot sites. Condoms are a crucial commodity in the essential package of health services described in NSP IV. Condom distribution in Myanmar has been conducted through two channels: free condom distribution and distribution through social marketing. Free condom distribution is designed to target the key and priority populations while social marketing aims to reach more general population.

In total, around 41 million condoms were distributed by HIV prevention programs in 2022 (Figure 35). This figure represents an large increase on the total condom distribution across the country last year of 25 million. Of the total number of condoms distributed in 2022, more than 34 million condoms were distributed free-of-charge, and the biggest growth was seen in free distribution, from 19 million in 2021 to 34 million in 2022. In general, there has been a gradual increase in free condom distribution over the period except for 2020–2021, reaching the highest volume of condoms distributed free-of-charge across the country in 2022. Almost all condoms distributed free-of-charge in 2022 were male condoms and only 0.2% were female condoms.

PSI has been the only organization distributing condoms through a social marketing approach. In social marketing, condom brands are developed, marketed with a promotional campaign, and sold to a target population. Some 7 million condoms were distributed through social marketing in 2022, an increase of 16% on the 2021 figure.

Figure 35: Condom distribution – free distribution and social marketing (2004–2022)



The free condom distribution program is led by NAP through its prevention townships model. Thus, NAP has been the largest condom distributor, providing condoms to all priority populations and other populations across the country. However, condom distribution by NAP was disrupted during 2020 and 2021, reaching the lowest point of 2.8 million in 2021 due to human resource constraints in all areas. Although public sector free condom programs were restored in 2022, it may take time for these to return

to full functioning. PSI became the largest condom provider in the last two years, providing its services mainly to sex workers and MSM/TGW populations. Alliance was another major organization providing services to sex workers and MSM/TG populations. It has been the third-largest provider after PSI, and the number of condoms distributed by Alliance in 2022 reached pre-pandemic levels. Other major partner organizations such as AHRN, MANA and MDM focused on condom distribution to people who use or inject drugs.

Table 24: Free condom distribution by target population and by organization in 2022

Organization	SW	Clients	MSM	TGW	PWID	PWUD	PLHIV	KP partners	Others	Total
AHRN	501,485	-	-	-	737,985	496,411	84	62,119	433,351	**2,231,435**
Alliance	2,782,094	184,655	1,243,653	126,856	-	-	35,067	31,179	4,837	4,408,341
IOM	296,175	4,176	145,808	-	-	-	19,484	288	233,070	**699,001**
MAM	390,175	93	259,081	66,960	180,232	1,008	-	699	37,369	**935,617**
MANA	-	-	-	-	764,422	230,959	-	39,973	-	**1,035,354**
MDM	7,138	-	17,054	-	577,179	22,508	-	20,022	68,610	**712,511**
MPG	229,550	29,628	291,279	23,504	36	78	1,063	9,796	7,893	**592,827**
MSI	768,447	57,838	992,759	46,601	-	-	-	39,081	1,137	**1,905,863**
NAP	2,617,105	866,989	1,723,977	84,241	70,033	33,562	450,353	544,247	1,469,707	**7,860,214**
The UNION	-	-	-	-	-	-	-	-	179,284	**179,284**
PSI	6,773,910	-	3,033,340	203,857	-	-	-	-	2,301,549	**12,312,656**
PUI	148,687	18,734	632,898	107,188	-	-	43,331	28,109	9,942	**988,889**
SARA	-	-	-	-	343,657	21,597	-	5,481	-	**370,735**
Total	**14,514,766**	**1,162,113**	**8,339,849**	**659,207**	**2,673,544**	**806,123**	**549,382**	**780,994**	**4,746,749**	**34,232,72**

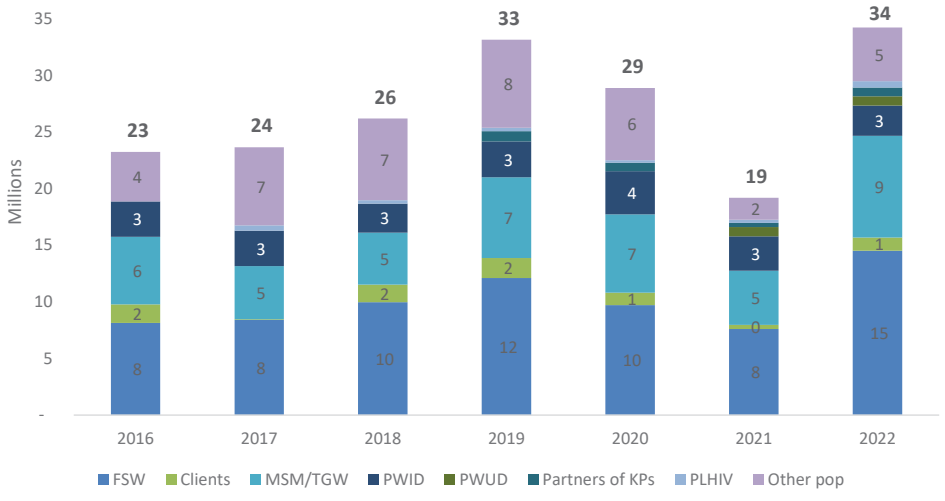
Table 25: Free condom distribution by organization (2018–2022)

Organization	2018	2019	2020	2021	2022
AHRN	1,348,913	1,714,183	1,352,460	1,878,324	2,231,435
Alliance	677,124	3,721,646	4,347,626	2,646,913	4,408,341
IOM	955,780	1,081,214	813,206	701,351	699,001
MAM	577,963	500,424	721,390	874,108	935,617
MANA	1,595,951	1,613,685	2,033,182	1,673,641	1,035,354
MdM	1,035,799	1,290,094	1,034,746	812,649	712,511
Metta	55,465	20,316	43,691	-	-
MPG	-	-	-	347,569	592,827
MSI	925,954	1,084,547	1,300,285	1,001,106	1,905,863
NAP	14,748,915	16,413,911	12,163,699	2,844,116	7,860,214
PSI	3,437,041	4,873,866	3,958,884	5,534,550	12,312,656
PUI	525,981	407,306	688,235	613,583	988,889
SARA	159,990	189,738	279,102	258,178	370,735
The Union	154,827	248,621	149,800	17,802	179,284
Total	**26,199,703**	**33,159,551**	**28,886,306**	**19,203,890**	**34,232,727**

Organization	2017	2018	2019	2020	2021
AFXB	24,947				
AHRN	1,376,839	1,348,913	1,714,183	1,352,460	1,878,324
Alliance	248,950	677,124	3,721,646	4,347,626	2,646,913
Burnet	395,096				
Consortium	2,068,104				
HPA	126,049				
IOM	1,078,578	955,780	1,081,214	813,206	701,351
MAM	120,510	577,963	500,424	721,390	874,108
MANA	1,761,450	1,595,951	1,613,685	2,033,182	1,673,641
MdM	1,196,990	1,035,799	1,290,094	1,034,746	812,649
Metta	49,087	55,465	20,316	43,691	
MPG					347,569
MSI		925,954	1,084,547	1,300,285	1,001,106
NAP	10,056,416	14,748,915	16,413,911	12,163,699	2,844,116
PGK	1,001,840				
PSI	3,507,320	3,437,041	4,873,866	3,958,884	5,534,550
PUI	163,884	525,981	407,306	688,235	613,583
SARA	286,423	159,990	189,738	279,102	258,178
SCiM	65,232				
The Union	121,023	154,827	248,621	149,800	17,802
Total	**23,648,738**	**26,199,703**	**33,159,551**	**28,886,306**	**19,203,890**

In 2022, as usual, the largest share of free condom distribution went to sex workers and their clients (46%). This was followed by MSM/TGW (26%), PWID (8%), PWUD (2%), partners of key populations and PLHIV (2%), and the rest to 'others' who were not specified but want to practise safer sex.

Figure 36: Number of condoms distributed free of charge, by target population (2016–2022)



At the subnational level, there was a substantial increase in free condom distribution in most states and regions in 2022 compared the year before, reaching the highest recorded volumes over the period. Although free condom distribution programs in Kachin, Kayin, Tanintharyi and Yangon showed improvement since the service disruption due to the pandemic in 2022, they did not reach pre-pandemic levels. On the other hand, condom distribution through social marketing was no longer the main channel in the recent years, and the number of condoms distributed through the social marketing approach was quite static in 2020–2021 and became higher again in 2022.

Table 26: Free condom distribution by state/region (2016–2022)

State/Region	Free condom distribution						
	2016	2017	2018	2019	2020	2021	2022
Ayeyarwady	1,317,165	1,687,377	1,911,563	2,159,712	1,263,087	956,767	3,091,582
Bago	1,458,139	1,793,020	1,338,027	1,701,199	1,099,206	1,559,113	2,848,000
Chin	-	96,715	25,200	29,672	14,488	-	83,256
Kachin	2,234,275	2,387,651	3,035,897	3,462,870	3,439,258	2,633,543	1,253,799
Kayah	275,512	59,216	95,930	56,160	8,640	9,110	791,069
Kayin	650,957	702,725	970,224	989,858	683,166	327,121	586,842
Magway	1,352,403	1,073,444	1,597,929	1,419,639	1,214,797	160,211	1,670,573
Mandalay	3,759,524	3,895,610	3,569,351	5,321,774	4,656,900	3,501,994	5,864,324
Mon	1,179,840	1,429,947	1,402,631	2,080,863	1,912,305	1,064,256	1,881,149
Nay Pyi Taw	306,142	-	282,983	367,002	250,033	53,734	548,234
Rakhine	343,095	435,781	433,092	646,671	326,330	372,760	612,604
Sagaing	1,389,669	1,866,372	1,945,126	2,884,720	2,591,912	1,553,564	5,546,790
Shan (E)	705,567	523,914	506,225	339,005	368,036	95,200	1,237,229
Shan (N)	2,367,916	1,845,032	1,638,522	1,474,355	1,576,544	1,651,282	1,869,185
Shan (S)	580,359	773,886	776,835	758,371	689,027	338,263	2,747,639
Tanintharyi	602,201	651,667	1,089,359	1,379,743	1,304,329	312,124	502,541
Yangon	4,733,782	4,426,381	5,580,809	8,087,937	7,488,248	4,614,848	3,097,911
Total	**23,256,546**	**23,648,738**	**26,199,703**	**33,159,551**	**28,886,306**	**19,203,890**	**34,232,727**

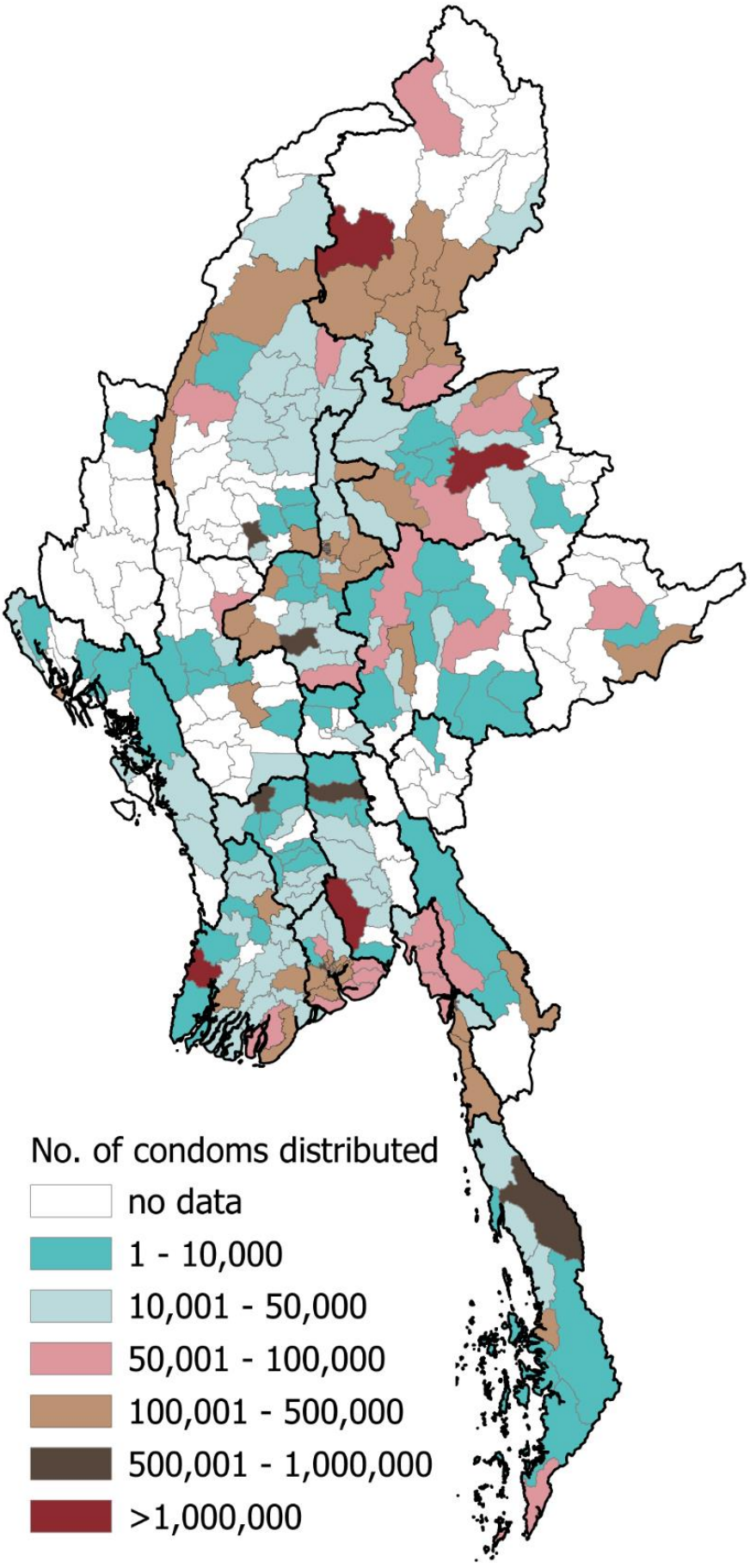
Table 27: Condom distribution through social marketing by state/region (2016–2022)

State/Region	Condom social marketing						
	2016	2017	2018	2019	2020	2021	2022
Ayeyarwady	571,912	443,148	92,640	37,696	3,780	3,120	6,036,600
Bago	984,576	538,416	85,676	32,100	4,920	3,120	600
Chin	57,048	62,460	22,920	20,300	60	-	-
Kachin	850,741	809,516	174,564	70,500	-	11,412	780
Kayah	207,516	141,540	7,164	-	-	-	-
Kayin	196,912	125,256	25,824	16,640		1,380	-
Magway	1,055,496	748,680	59,070	12,079	1,380	1,380	43,560
Mandalay	2,006,544	2,113,598	164,285	86,598	31,848	15,270	2,100
Mon	468,120	465,340	35,188	36,780	2,160	600	16,176
Nay Pyi Taw	258,996	189,032	33,888	6,000	360	-	-
Rakhine	145,428	71,340	732	-	-	-	17,580
Sagaing	910,464	745,480	137,092	151,835	3,300	13,788	240
Shan (E)	406,608	332,900	121,464	19,648	300	-	-
Shan (N)	1,334,304	1,004,566	81,476	46,320	120	10,508	1,740
Shan (S)	1,432,272	995,648	110,876	35,222	2,814	2,340	328,200
Tanintharyi	475,348	338,744	73,020	46,900	540	120	-
Yangon	4,853,508	3,241,560	7,651,307	8,742,918	5,280,897	5,512,695	125,160
Total	16,215,793	12,367,224	8,877,186	9,361,536	5,332,479	5,575,733	6,572,736

Map 5 illustrates the distribution of townships with available condom distribution services. More than 70% of townships in the country received condoms through one or both channels during 2022. The free condom distribution channel covered a much wider geographical area than the social marketing channel. Most townships in Chin, Kayah, Shan (N), Shan (S) and lower Sagaing region did not have access to condom distribution services in 2022.

Although condom distribution has been enhanced over the years, surveillance data revealed that condom use among MSM/TGW has not increased proportionately, and condom use among PWID was still considerably low (<40%). On the other hand, condom use among FSW, and their clients has increased. These findings show a need to focus behaviour change programs towards PWID and MSM/ TGW populations alongside condom distribution.

Map 5: Condom distribution in 2022



HIV testing services (HTS)

Table 28: HIV testing in general population related indicators, targets and results in 2021

Impact indicator	Data source	Size estimate	Baseline 2010	Target 2022	Results 2022
Number of new infections per 1,000 adult (15–49) person-years among the uninfected population	Modelling[45]		0.59	0.21	0.34
Output/coverage indicator	**Data source**	**Size estimate**	**Baseline 2020**	**Target 2022**	**Results 2022**
No. of people who received an HIV test and knew their result	Program data		456,091	175,107	499,594[46]
Percentage of PLHIV who have been tested and knew their HIV-positive status (1st 95)	Program data	280,000[47]	78%	95%	78%[48]

Organizations providing HIV testing services in 2022:

AHRN, Alliance, DDTRU, IOM, MAM, MANA, MdM, MMT, MPG, MSF-CH, MSF-H, MSI, NAP, PGK, PSI, PUI, SARA, UNION, networks and CBOs

Based on the modelling estimates, the estimated new HIV infections per 1,000 adult (15–49) person-years was 0.34 in 2022, which is a reduction of around 40% from the 2010 baseline. The modelling results suggest that the decline was mainly driven by a reduction in new infections among the clients and partners of people who engage in sex work and needle-sharing. More work needs to be done to reach the target of 75% reduction by 2030.

HIV testing services (HTS) are the critical entry point to a range of services such as regular HIV testing (including HIV self-testing), commodity provision, PrEP for HIV-negative people and the series of HIV care and treatment services and PMTCT services for HIV-positive people and pregnant women. HIV testing in the country has been conducted through HTS and PMTCT programs. HTS programs mainly focus on priority populations and their partners, while the PMTCT program covers pregnant women and their spouses. The HIV tests described in this section do not include HIV testing within the PMTCT program, the details of which are provided in the PMTCT section of the report.

45 AEM-Spectrum modelling estimate March 2023.

46 HTS program data not including PMTCT program data (HIV testing among pregnant women and their spouses).

47 Ibid.

48 Numerator: No. of PLHIV on ART and PLHIV waiting for ART at the end of 2020 + No. of newly diagnosed PLHIV from HTS program during 2021 – (No. of PLHIV deaths on ART + [one third of] LTF during 2021 from ART program); Denominator: estimated number of PLHIV from modelling.

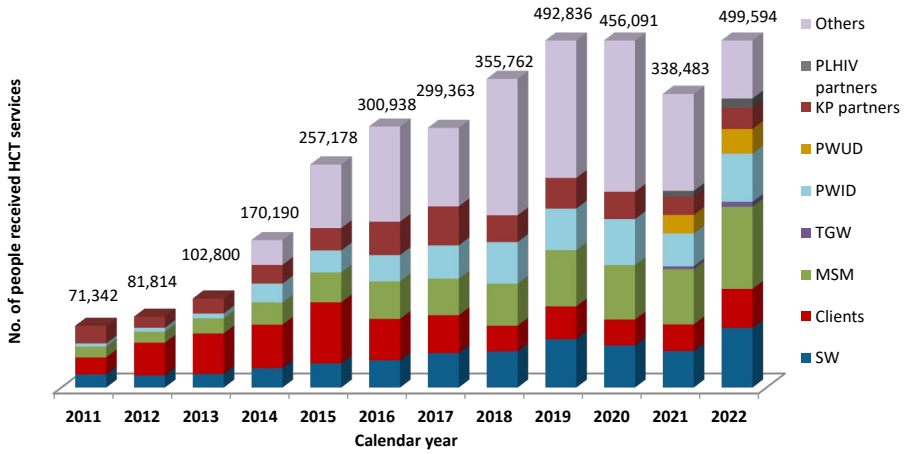
Table 29: Number of people received HIV test and post-test counselling by program (2017–2022)

Program	2017	2018	2019	2020	2021	2022
HTS	299,363	355,762	492,836	456,091	338,483	499,594
PMTCT – pregnant women	848,642	900,846	895,411	899,607	354,176	559,102
PMTCT – spouses	104,849	155,280	229,558	252,720	77,305	140,705
Total	**1,252,854**	**1,411,888**	**1,617,805**	**1,608,418**	**769,964**	**1,199,401**

In the absence of a unique identifier system, case-based recording and reporting in HTS, and incomplete HIV case and death reports, the calculation of the first '95' is based on many assumptions, using aggregate data from different sources, resulting in questionable data validity and accuracy. However, to have a sense of how far the HIV response has advanced, the percentage of PLHIV who knew their HIV-positive status was estimated based on available aggregate data reported and modelling. It is estimated that around 78% of PLHIV were aware of their HIV status by 2022.

With the expansion of HTS sites across the country, the number of people who received HIV testing and post-test counselling had been increasing over the years until 2019 and since has become stable, except for 2021. Because the national program data reporting system has improved over time, HTS testing data for TGW, MSM, PWUD and HIV-negative partners of PLHIV have been presented separately from the other category as of 2021. This way of presenting the data meant an apparent decrease in HIV testing volume among other populations. During 2022, 19% of the total people tested for HIV were identified as MSM, 14% as SW, 9% as clients, 11% as PWID, 6% as PWUD, 5% as regular partners of key populations, 2% as partners of PLHIV, 1% as TGW, and the rest as 'other' populations. 'Other' population includes people in prison and closed settings, uniformed services personnel, migrant population, TB patients, blood donors, children under 15 years and other unidentified people. The reason for the larger share in the 'other' category is that whenever the exposure risk of the person being tested was not identified, the person was classified as 'other'.

Figure 37: Number of people received HIV testing, and post-test counselling by target population (2011–2022)[49, 50]



49 Others include institutionalized population, uniformed services personnel, migrant workers, new TB patients, blood donors, children under 15 years, and others (whose risk cannot be differentiated for various reasons).

50 From 2011 to 2020, MSM includes MSM and TGW combined, which are separated starting from 2021.

NAP has been the largest service provider of HIV testing, delivering its nationwide services through HIV/STD teams as well as public hospitals, and key population service centre (KPSC) sites from PGK. In 2022, NAP was the main HTS provider to SW, clients, partners of key population and PLHIV, and other populations. PSI was the second largest HTS provider, mainly focusing on MSM and FSW. Alliance was the third largest provider, and its focus was on SW, MSM, TGW, clients and other populations. Apart from NAP, PSI and Alliance were the major HTS providers to SW and their clients, MSM and TGW, while MANA and AHRN mainly served PWID. Since 2021, MPG started providing HTS to key populations and their partners except PWID, and significant achievements were observed, particularly in 2022.

Table 30: Number of people received HIV testing and post-test counselling, by target population and organization in 2022

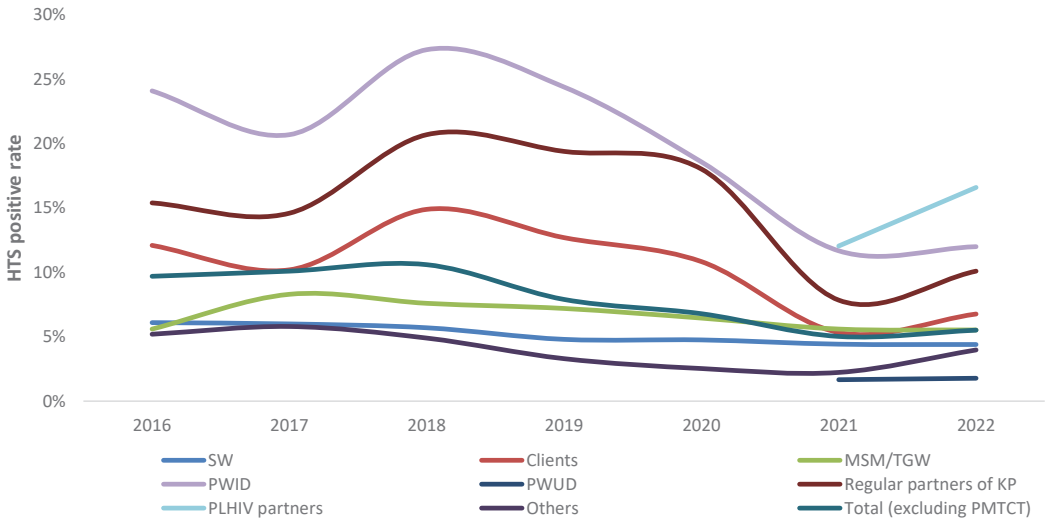
Organization	SW	Clients	MSM	TGW	PWID	PWUD	KP partners	PLHIV partners	Others	Total
AHRN	1,371	0	0	0	13,458	15,460	1,670	179	1,671	**33,809**
Alliance	8,943	16,867	16,140	1,274	0	1	2,818	0	13	**46,056**
IOM	2,455	327	1,130	0	0	0	11	11	11,357	**15,291**
MAM	2,091	861	3,578	607	2,218	337	461	565	5,549	**16,267**
MANA	5	0	5	0	27,081	8,166	2,780	25	700	**38,762**
MdM	205	4	375	0	3,238	840	825	0	251	**5,738**
MMT	0	0	0	0	2,439	330	13	0	12	**2,794**
MPG	2,383	1,462	4,503	392	0	6	725	181	707	**10,359**
MSF-CH	3	41	5	0	0	0	9	55	57	**170**
MSF-H	20	80	22	0	247	43	42	281	1,994	**2,729**
MSI	3,789	1,267	11,085	421	0	0	1,142	17	44	**17,765**
NAP	27,789	22,874	24,699	1,314	2,263	2,351	11,814	6,291	126,923	**226,318**
PSI	18,883	547	30,609	1,546	225	70	757	299	15,344	**68,280**
PUI	874	647	2,625	208	0	0	1,098	0	0	**5,452**
SARA	0	0	0	0	4,229	719	173	0	34	**5,155**
The Union	0	5	0	0	0	70	34	2,830	1,687	**4,626**
Total	**68,811**	**44,982**	**94,776**	**5,762**	**55,398**	**28,393**	**24,372**	**10,734**	**166,366**	**499,594**

Table 31: Number of people received HIV testing and post-test counselling, by organization (2018–2022)

Organization	2018	2019	2020	2021	2022
AFXB	-	-	-	-	-
AHRN	17,402	26,294	32,725	25,497	33,809
Alliance	23,589	34,222	31,056	36,251	46,056
IOM	16,713	24,849	24,943	15,460	15,291
MAM	-	-	-	12,436	16,267
MANA	31,616	27,452	28,606	28,676	38,762
MdM	7,263	7,865	5,801	4,764	5,738
Metta	1,188	195	194	-	-
MMT	5,069	3,955	6,506	956	2,794
MPG	-	-	-	2,473	10,359
MSF-CH	1,879	2,715	908	369	170
MSF-H	4,745	2,478	1,144	2,729	2,729
MSI	6,547	10,867	10,444	12,038	17,765
NAP	185,601	284,805	248,265	140,278	226,318
PSI	48,755	51,919	46,831	48,579	68,280
PUI	2,398	3,056	3,366	4,638	5,452
SARA	2,997	4,658	3,420	2,094	5,155
The Union	-	61	2,560	1,245	4,626
Total	**355,762**	**492,836**	**456,091**	**338,483**	**499,594**

Regarding HIV test results, the HIV-positive rate decreased in all populations between 2018 and 2021, and in 2022 there was a slight increase among regular partner of key population, clients, PLHIV partners and other populations (Figure 38), and the overall HIV-positive rate increased from 5% in 2021 to 6% in 2022. PWID showed the greatest decrease in HIV-positive rate during the period (2018 and 2022). The HTS positive rate among TGW decreased from 12% in 2021 to 8% in 2022, whereas the HTS positive rate among MSM was stable at 5% during the same period. Partners of PLHIV had the highest positive rate among all target populations, at 12% in 2021 and 17% in 2022, followed by PWID and regular partners of key population. Among all target populations, the HTS positive rate among SW was stable at around 5% over the period between 2016 and 2022. The new priority population PWUD had the lowest HIV-positive rate, at 2% in both 2021 and 2022.

Figure 38: HIV-positive rate among those tested for HIV and knew the result, by target population (2016–2022)



Among target populations who received HTS in 2022, more than 33% of total HIV testing was done among 'other' population, followed by MSM (19%), SW (14%) and PWID (11%). The lowest share of HIV testing was to TGW (1%).

The community-based screening (CBS) model was introduced in 2019–2020 to accelerate the achievement of HTS programs. The essential package for health service described in NSP IV includes facility-based HIV testing services, community-based HIV testing and community-referred HIV testing. The comprehensive package for health service for high priority townships includes community based HTS (peer network), self-testing and index testing. In 2022, CBS was widely implemented among priority populations. More than 20% of TGW, 15.7% of PWUD, 14.7% of MSM, 13.5% of SW, 10.1% of PWID, and 8% of client HIV testing was achieved through the CBS model (Figure 40). Despite this achievement, the CBS model requires improvements to serve a wider population. The HIV-positive rate among other population through CBS was very high at 28% in 2022; therefore, attention should be given to exploring the types of HIV risk exposure among individuals reached through CBS.

Figure 39: Number of target population receiving HTS and tested positive in 2022 (all HTS models combined)

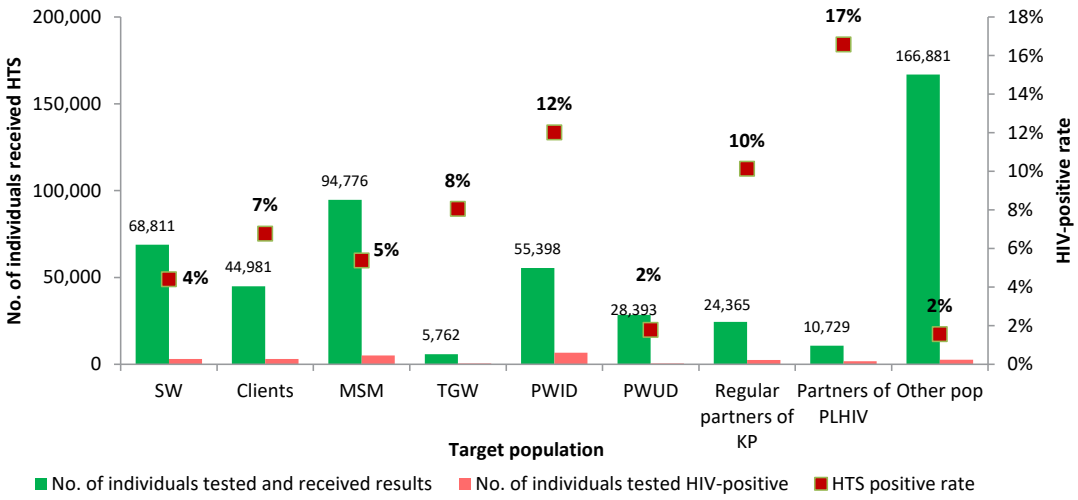


Figure 40: Number of target population received HTS and tested positive (confirmed positive) through CBS in 2022

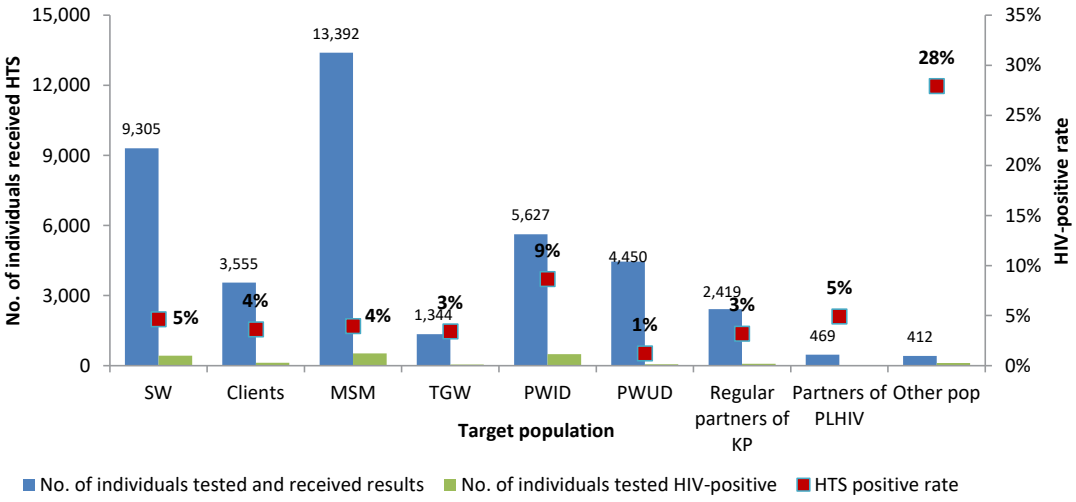
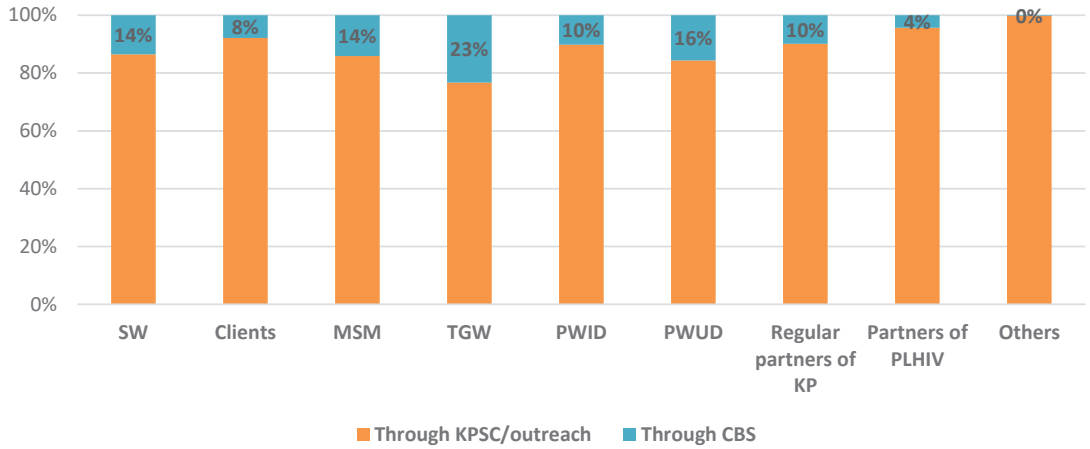


Figure 41: Percentage of HIV testing through community-based screening (CBS) in 2022



At the state and regional level, Yangon, Mandalay, Kachin and Sagaing were the regions with the highest number of people who received HTS during 2022. As in the past, Kachin was the region with the highest HTS positive rate at 13%. Among other states and regions, the positive rate ranged from 10% in Nay Pyi Taw to 1% in Chin.

Although almost all states and regions showed an increase in individuals reached with HTS in 2022 compared to previous years, the most remarkable increase was seen in Yangon, from 68,549 in 2021 to 132,313 individuals in 2022. However, some regions, namely Chin, Kachin, Kayah, Kayin, Mon, Sagaing, Shan (E), Shan (S) and Tanintharyi, did not yet restore the testing volumes to pre-pandemic levels.

Despite the decreasing trend in the overall HIV-positive rate at the national level, variation among states and regions is apparent. During the period, the HIV-positive rate showed a large increase in Nay Pyi Taw and Chin. Other states and regions showed a decline in the overall HIV-positive rate, especially Mandalay and Yangon.

Figure 42: Number of individuals receiving HTS, tested positive and HIV-positive rate by state/region in 2022

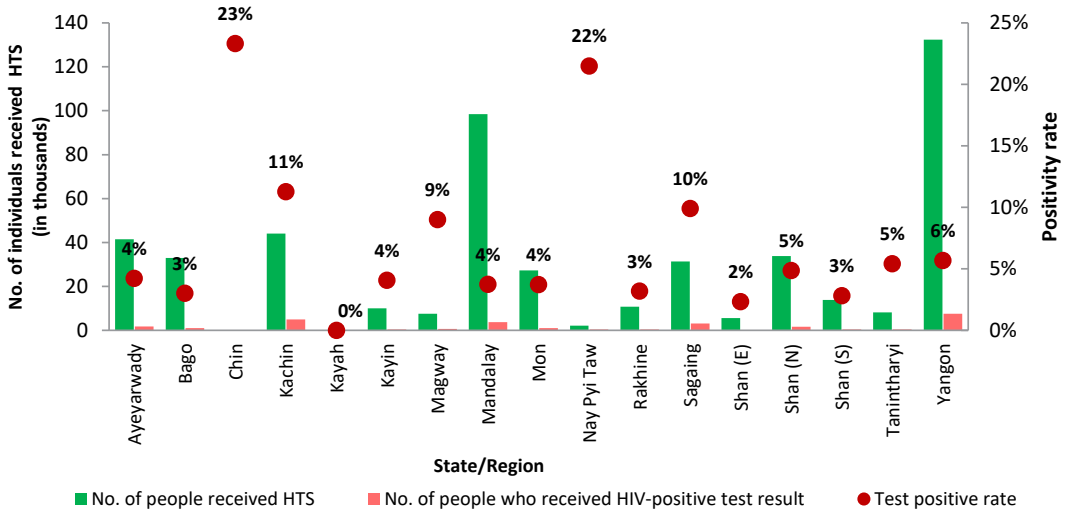


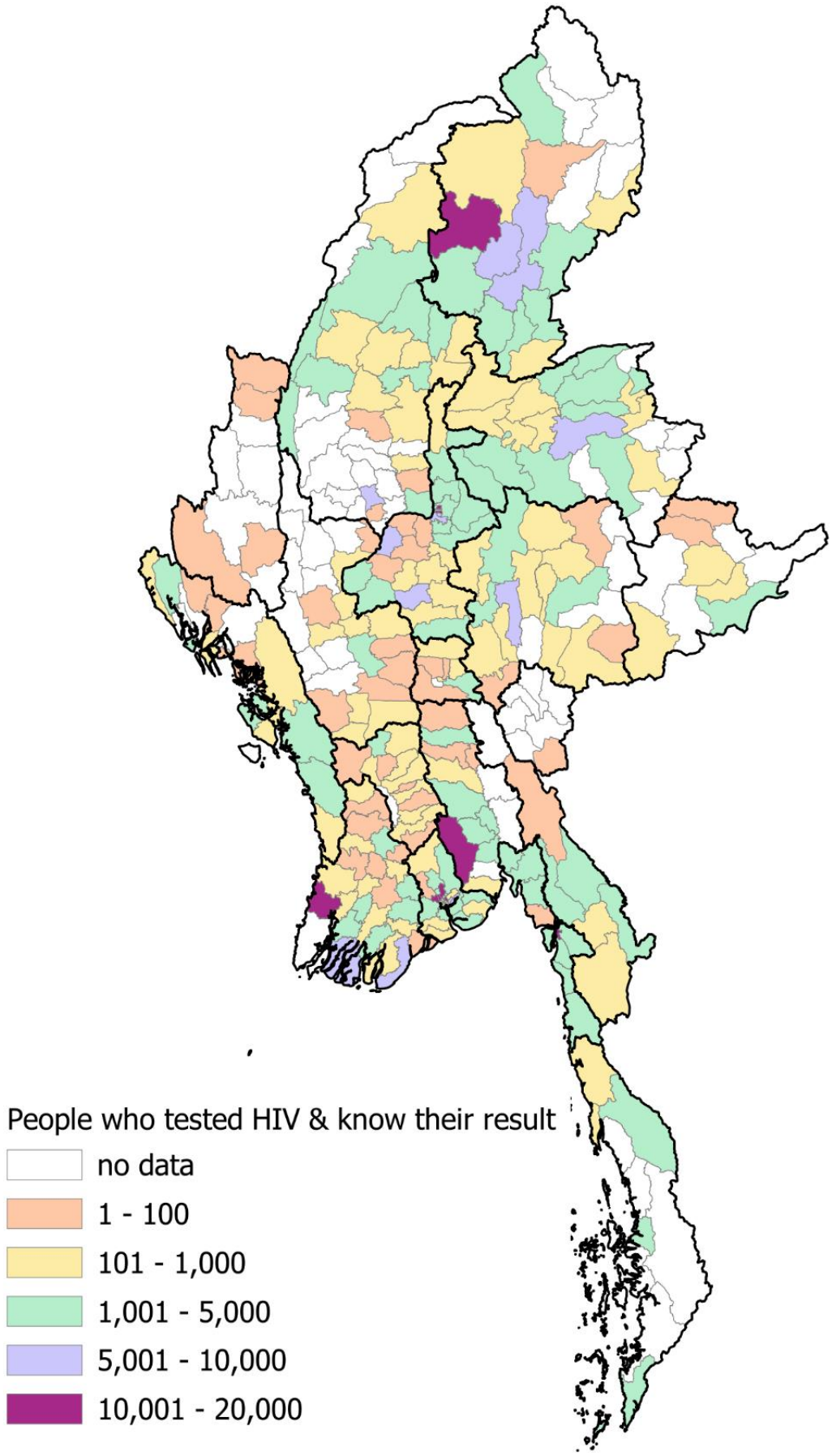
Table 32: Number of individuals received HIV testing and post-test counselling by state/region (2017–2022)

State/Region	2017		2018		2019		2020		2021		2022	
	HIV tested and post-test counselling	HIV positive rate	HIV tested and post-test counselling	HIV positive rate	HIV tested and post-test counselling	HIV positive rate	HIV tested and post-test counselling	HIV positive rate	HIV tested and post-test counselling	HIV positive rate	HIV tested and post-test counselling	HIV positive rate
Ayeyarwady	22,865	**8.7%**	20,765	**12.4%**	42,947	**6.0%**	33,567	**5.8%**	22,533	**4.5%**	41,414	**4.2%**
Bago	16,437	**8.5%**	28,987	**5.6%**	31,499	**5.3%**	33,087	**4.5%**	20,591	**3.4%**	32,928	**3%**
Chin	292	**4.5%**	1,328	4.7%	2,621	**2.6%**	2,080	**1.3%**	6		90	**23.3%**
Kachin	24,878	**26.3%**	38,990	**30.3%**	57,393	**18.2%**	54,811	**12.9%**	26,795	**13.1%**	44,031	**11.3%**
Kayah	3,794	2.6%	2,346	**4.3%**	3,121	**3.2%**	1,043	**7.6%**	-	-	3	**0%**
Kayin	7,965	**4.8%**	23,624	**2.8%**	32,772	**2.3%**	33,182	**1.9%**	3,209	**5.7%**	9,966	**4.1%**
Magway	7,043	**7.3%**	11,056	**10.3%**	15,418	**8.1%**	12,325	**6.4%**	2,520	**13.3%**	7,582	**9%**
Mandalay	36,011	**12.2%**	34,910	**10.9%**	58,543	**7.0%**	53,203	**5.7%**	111,222	**2.5%**	98,493	**3.7%**
Mon	21,618	**5.8%**	23,110	**6.6%**	31,851	**4.0%**	25,937	**4.6%**	10,234	**7.1%**	27,339	**3.7%**
Nay Pyi Taw	481	**9.1%**	1,911	**11.4%**	3,788	**9.2%**	3,647	**9.7%**	2,757	**5.4%**	2,102	**21.5%**
Rakhine	1,041	**9.9%**	1,496	**15.0%**	5,993	**4.8%**	6,376	**3.5%**	6,484	**4.3%**	10,726	**3.2%**
Sagaing	32,102	**10.5%**	46,846	**9.4%**	57,650	**8.1%**	53,209	**8.9%**	26,196	**7.0%**	31,304	**9.9%**
Shan (E)	2,159	**9.4%**	6,063	**6.5%**	8,373	**3.9%**	6,159	**5.9%**	1,786	**4.2%**	5,599	**2.3%**
Shan (N)	21,780	**10.4%**	30,552	**8.8%**	33,291	**7.7%**	34,451	**6.2%**	21,608	**3.8%**	33,771	**4.9%**
Shan (S)	6,937	**5.2%**	13,717	**3.8%**	18,988	**2.6%**	22,110	**1.9%**	9,668	**2.7%**	13,799	2.8%
Tanintharyi	10,061	**7.4%**	11,541	**8.5%**	16,346	**6.1%**	16,793	**4.1%**	4,325	**3.9%**	8,134	**5.4%**
Yangon	83,899	**7.7%**	58,520	**8.7%**	74,242	**9.5%**	64,111	**9.0%**	68,549	**6.1%**	132,313	**5.7%**
Total	299,363	10.1%	355,762	10.6%	492,836	7.9%	456,091	6.8%	338,483	5.0%	499,594	5.5%

Map 6 shows the nationwide coverage of the HTS program in 2022. More than 78% of townships (256 of 329 townships) had at least one HTS service point exclusive of PMTCT testing in 2022. No service provision was reported from some townships in southern Sagaing, northern Kachin, Chin and Kayah.

Overall, similar to other prevention services, most states and regions restored their HTS. However, service disruptions were observed in some parts of Chin, Kachin, Kayah, Kayin, Mon, Sagaing, Shan (E), Shan (S) and Tanintharyi. Alternative and tailored HIV prevention and testing approaches other than in-person modality, such as prevention using an internet platform and mobile devices and HIV self-testing should be explored. Strengthening the capacity of the data reporting persons at the state and regional level will help ensure data collection is more complete and timelier, especially in difficult areas.

Map 6: Distribution of HIV testing services by township in 2022



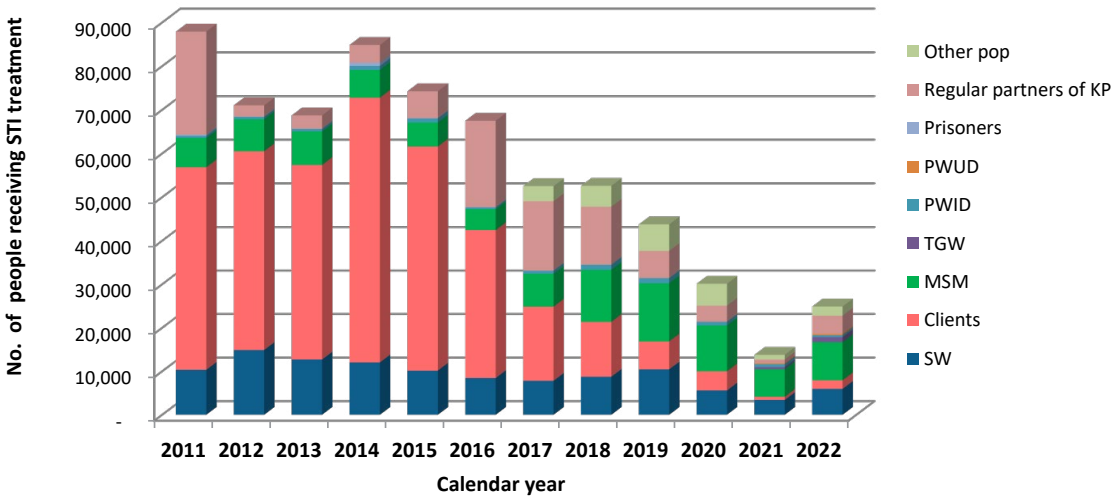
1.3 Maximize efficiency in service delivery and enhance integration opportunities with TB, maternal and newborn child health, sexual and reproductive health, and others including hepatitis

Sexually transmitted infections (STI)

Sexually transmitted infections (STI) are infections that spread from person to person through sexual activity, including vaginal, anal or oral sex. HIV is an STI. Evidence suggests that having an STI can make it easier for HIV to enter the body, such as through a sore or break in the skin caused by the STI; also, having HIV and another STI may increase the risk of HIV transmission to others.[51] STI management is included in the essential package for health service in NSP IV.

Although STI management was one of the key interventions in Myanmar's HIV response in NSP I and NSP II, STI testing, and treatment was not considered as a priority component in NSP III and the current NSP IV. Thus, the number of individuals who received STI testing, and treatment has been decreasing considerably among clients and regular partners of key populations in particular. Clients of SW and regular partners of key populations used to account for the largest share of all STI treatment in earlier years. However, MSM became the primary population receiving STI treatment since 2019. In 2022, 35% and 32% of all STI treatment went to MSM and sex workers and their clients, respectively. Lack of international funding for this component worsened the situation. Currently, most implementing organizations provide STI testing and treatment to their clients as a complement to HIV testing and treatment.

Figure 43: People receiving STI treatment by key population (2011–2022)[52]



51 AIDSinfo. HIV and Sexually Transmitted Diseases (STDs). Available from https://aidsinfo.nih.gov/understanding-hiv-aids/fact-sheets/26/98/hiv-and-sexually-transmitted-diseases--stds-.

52 During 2011–2020, the MSM population described is the combined MSM and TGW populations.

A total of 24,899 individuals were reported to have received STI treatment in 2022. NAP was the main provider of STI treatment through its HIV/STD team clinics, followed by PSI through its TOP centres and SUN clinics across the country. MAM has been the major organization providing STI services to SW, MSM, TGW and partners of key populations. These three organizations contributed more than 85% of all reported STI treatment in 2022.

Table 33: People receiving STI treatment by organization in 2022

Organization	SW	Clients	MSM	TGW	PWID	PWUD	Regular partners of KP	Other pop.	Total
AHRN	261	-	-	-	115	175	45	80	676
Alliance	150	-	210	58	-	-	-	-	418
IOM	50	-	55	0	-	-	-	9	114
MAM	1,756	234	2,759	462	51	3	79	508	5,852
MANA	-	-	-	-	202	95	35	1	333
MdM	20	-	36	-	65	7	18	3	149
MPG	66	36	69	8	-	-	8	21	208
MSF-Holland	15	-	13	-	-	-	18	299	345
MSI	434	75	544	50	-	-	116	9	1,228
NAP	1,153	1,598	1,327	34	6	3	3,807	1,162	9,090
PSI	1,958	-	3,667	534	-	-	1	21	6,181
PUI	101	20	89	7	-	-	58	-	275
SARA	-	-	-	-	13	3	14	-	30
Total	**5,964**	**1,963**	**8,769**	**1,153**	**452**	**286**	**4,199**	**2,113**	**24,899**

The number of people receiving STI treatment has been decreasing over the years, and 2021 was the year with the lowest recorded level. During 2022, STI service provision showed some improvements but did not achieve the level recorded before the pandemic. Despite improvement in 2022, STI service disruptions continued to occur in some areas such as Bago, Kayin, Magway, Mandalay, Shan (E) and Tanintharyi. Traditionally, Yangon and Mandalay were the regions with the largest number of STI service delivery points from NAP and PSI SUN clinics and provided the highest number of STI treatments. However, the SUN clinics could not provide data disaggregated by key population, as these were general practitioner clinics. While most of the areas experienced a decrease in the number of STI cases, a significant increase was observed in Ayeyarwady. It is worth mentioning that Sagaing reported a very low number of STI treatments. It is suggested that increased funding support for the STI component should be made available in order to increase screening and treatment of STI cases in at least five priority states and regions.

Table 34: People receiving STI treatment by state/region (2016–2022)

State/Region	2016	2017	2018	2019	2020	2021	2022
Ayeyarwady	4,027	4,162	2,773	2,055	1,325	716	4,489
Bago	7,784	5,842	3,813	2,792	1,654	671	799
Chin	59	39	-	-	-	-	-
Kachin	2,148	1,859	3,566	5,539	3,620	1,521	1,233
Kayah	73	232	114	26	225	-	-
Kayin	767	486	499	571	624	94	181
Magway	2,025	1,579	685	742	761	125	470
Mandalay	10,736	6,854	9,261	6,602	4,450	1,805	2,819
Mon	4,561	4,484	3,826	1,348	858	303	576
Nay Pyi Taw	1,093	481	334	741	-	54	42
Rakhine	367	405	525	910	1,063	73	136
Sagaing	3,047	2,804	1,819	1,179	1,143	441	573
Shan (E)	733	709	339	239	181	27	34
Shan (N)	2,063	1,968	2,387	1,211	1,227	573	1,128
Shan (S)	983	760	366	249	292	136	284
Tanintharyi	1,802	461	819	1,059	1,014	48	231
Yangon	29,352	19,417	21,489	18,522	11,696	7,215	11,904
Total	**71,620**	**52,542**	**52,615**	**43,785**	**30,133**	**13,802**	**24,899**

Given the lack of reliable STI-specific or STI-related survey, it is a challenge to fully understand the STI situation in the country. Unlike HIV, most of the STI testing and treatment is easily available in private clinics and hospitals across the country, and it is presumed that a large number of STI cases go to the private sector. Without STI reports from the private sector, the reported STI figures will not fully reflect the actual STI epidemic trend. The syphilis prevalence trend among key populations in HSS did not show a significant decrease. The possible reasons for the decrease in reported STI cases may be due to the reduced funding related to STI-specific activities and the unavailability of data from private general practitioners.

Although the PMTCT program is moving towards elimination of mother-to-child HIV and syphilis transmission by 2025, STI-related surveys are not yet included in the research agenda priority list. Therefore, it is recommended to conduct studies and surveillance on various STIs with available resources and at the same time to reinforce the STI programs with available funding. Although challenging, it is also advisable to try collecting HIV and STI testing and treatment data from the private sector in order to obtain a more complete picture of the STI epidemic in the country.

Hepatitis B and hepatitis C

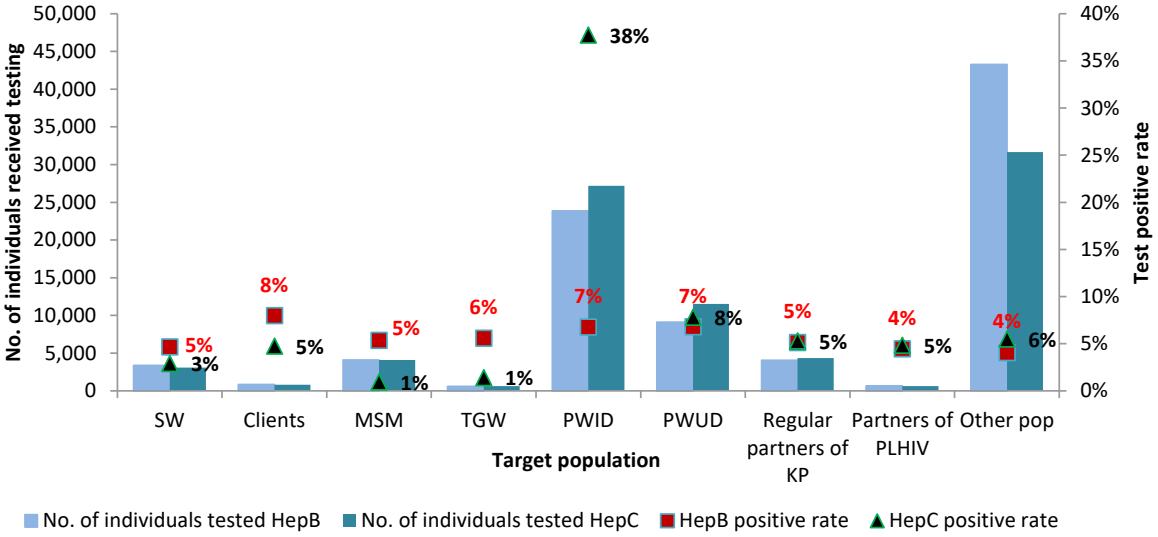
The comprehensive package for health service in NSP IV includes hepatitis B and C testing. This package is particularly aimed at key populations residing in priority townships. Hepatitis B and C testing service was provided by AHRN, Alliance, MANA, MdM, MMT, SARA, MAM, MSF-H and NAP in 2022.

A total of 89,875 and 94,462 individuals received hepatitis B and hepatitis C tests, respectively, during 2022. Among priority populations, hepatitis B and C tests were mainly provided to PWID and PWUD

populations by organizations delivering harm reduction services. On the other hand, NAP was the main hepatitis B and C testing service provider to other populations. Among those who received a hepatitis B test, the 'other' category included exposed children, pregnant women, spouses, blood donors and inpatients. The 'other' category for hepatitis C testing included similar populations as for hepatitis B testing, excepting inpatients.

Overall, the hepatitis B positive rate was 5% in 2022. It was highest among clients at 8% followed by PWID and PWUD at 7%, TGW at 6%, and SW, MSM and regular partners of key population at 5% (Figure 44). The hepatitis C positive rate was much higher at 15% overall with a wide variation between key and other populations. As expected, the hepatitis C positive rate among PWID was high at 38%. The second highest rate was seen among PWUD at 8%. The hepatitis C positive rate in the remaining populations ranged between 1% among MSM/TGW to 6% among 'other' population.

Figure 44: Number of people received hepatitis B and hepatitis C testing with test positive rate by population in 2022



During 2022, almost 19% of total hepatitis B and 16% of total hepatitis C testing services were provided in Yangon, followed by Kachin, Shan (N), Ayeyarwady and Sagaing. Despite being one of the priority regions, Mandalay provided only 3% of the total hepatitis B and C tests, disproportionate to its key population sizes. No hepatitis B and C testing services were available in Chin and Kayah, while very limited services were provided in Magway, Tanintharyi, Mon and Shan (E) in 2022.

There was a wide regional variation in hepatitis B and C test positive rate in 2022. The highest hepatitis B and C positive rates were observed in Kachin at 8% and 40%, respectively. This was followed by Mandalay (5% for hepatitis B and 27% for hepatitis C) and Sagaing (7% for B and 25% for C). High hepatitis-positive rates were expected in regions with high PWID prevalence, such as Kachin, as evidenced from previous IBBS surveys. Interestingly, the hepatitis C positive rate in Ayeyarwady was 14%, which was higher than some PWID predominant regions such as Shan (E) at 11% and Shan (N) at 9% (Table 34). Hepatitis B positive rates were highest in Bago and Kachin at 8%, followed by Kayin, Sagaing, Shan (E) and Tanintharyi. The high hepatitis B and C positive rates call for urgent health, social, legal and political actions to respond in order to reduce the hepatitis B and C epidemic among key populations in priority regions and Ayeyarwady.

Collaboration between NAP and the national hepatitis program should be strengthened to provide comprehensive hepatitis prevention and treatment.

Table 35: Number of people tested for hepatitis and test positive rate by state/region in 2022

State/Region	Hep B tested	Hep B positive	Hep B positive rate	Hep C tested	Hep C positive	Hep C positive rate
Ayeyarwady	9,779	391	4%	9,808	1,330	14%
Bago	6,008	466	8%	6,985	345	5%
Chin	-	-	-	-	-	-
Kachin	15,301	1,215	8%	14,629	5,850	40%
Kayah	-	-		-	-	-
Kayin	1,690	111	7%	1,606	37	2%
Magway	210	1	0%	270	0	0%
Mandalay	2,630	123	5%	2,956	789	27%
Mon	1,333	62	5%	1,329	12	1%
Nay Pyi Taw	3,692	87	2%	3,751	20	1%
Rakhine	4,364	138	3%	4,263	56	1%
Sagaing	8,312	587	7%	9,934	2,465	25%
Shan (E)	649	45	7%	2,114	231	11%
Shan (N)	13,152	689	5%	15,991	1,464	9%
Shan (S)	5,105	73	1%	5,758	105	2%
Tanintharyi	193	13	7%	184	1	1%
Yangon	17,457	702	4%	14,884	995	7%
Total	89,875	4,703	5%	94,462	13,700	15%

Summary of HIV prevention and testing

The 2022 program data indicated that while HIV prevention and testing services showed recovery after some recession in 2020–2021 at the national level, service disruption persisted in some states and regions including Magway, Sagaing, Kachin, Chin, Kayah, Shan (E) and Tanintharyi. These areas did not yet regain the pre-pandemic levels of service provision or data reporting. It is important to identify and address challenges in service provision in these areas to accelerate the national response towards achieving the targets. Intensified actions to mitigate the consequences of the COVID-19 pandemic and other situations with new innovative modes of service delivery are required for the country to get back on track towards the 95–95–95 targets.

1.5 Eliminate mother-to-child transmission of HIV and syphilis

Prevention of mother-to-child transmission of HIV and syphilis

Table 36: PMTCT related indicators, targets and results in 2022

Impact indicator (PMTCT)	Data source	Size estimate 2021	Baseline 2020	Target 2022	Results 2022
% HIV-infected among HIV-exposed infants born in the past 12 months	Modelling[53]	4,500	16%	9%	24%
Output/coverage indicator (PMTCT)	**Data source**	**Size estimate 2021**	**Baseline 2020**	**Target 2022**	**Results 2022**
% and number of pregnant women attending antenatal care services who received HIV testing	Program data	1,117,000[54]	901,651 (82%)	1,061,438 (96%)	569,709 (51%)
% and number of pregnant women attending antenatal care services who received syphilis testing	Program data	1,117,000	765,553 (69%)	838,554 (75%)	537,255 (48%)
% and number of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission (including known cases on ART)	Program data	4,450	3,905 (72%)	95%	1,954 (44%)
% and number of syphilis-positive pregnant women who received treatment to reduce the risk of mother-to-child transmission	Program data	4,790[55]	3,032 (64%)	48%	2,232 (46%)
% of HIV-exposed infants who initiated ARV prophylaxis	Program data	4,230[56]	3,179 (59%)	80%	1,393 (33%)
% of syphilis-exposed infants who received treatment	Program data	4,550[57]	1,883 (42%)	61%	824 (18%)
% of HIV-exposed infants receiving a virological test for HIV within 2 months of birth	Program data	4,230	1,913 (35%)	68%	521[58] (12%)

53 AEM Spectrum modelling May 2023.

54 Pregnant women estimate from NSP IV based on 2014 census projection.

55 Apply 2020 syphilis rate to all estimated pregnant women for 2022 (2020 is the year with highest syphilis testing rate among pregnant women).

56 Assume 95% of HIV-positive pregnant women delivered a live birth.

57 Assume 95% of syphilis-positive pregnant women delivered a live birth.

58 LIMS data.

Partners working on PMTCT in 2022:

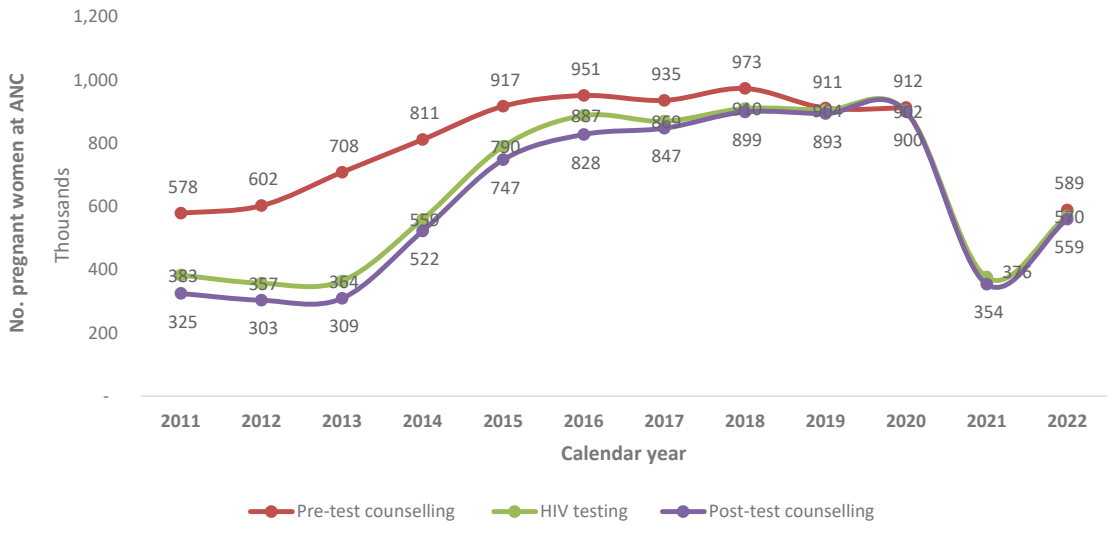
NAP, UNION, MAM

Mother-to-child transmission is the most common route of HIV transmission to young children, and the infection can pass from a mother to her baby at any time during pregnancy, delivery and breastfeeding. To break that transmission chain, the prevention of mother-to-child transmission of HIV (PMTCT) program offers a range of PMTCT services for women of reproductive age living with or at risk of HIV. In theory, PMTCT services should be offered before conception and throughout pregnancy, labour and breastfeeding. Since 2011, in collaboration with the maternal and reproductive health program, the PMTCT program has provided services to pregnant women and their babies during pregnancy, labour and until the end of the breastfeeding period to cover the risk period for exposed infants and young children acquiring HIV from their mother.

NSP IV committed to eliminating mother-to-child transmission of HIV and syphilis by 2025 and set ambitious targets. To date, the PMTCT program has been the most geographically expansive HIV prevention program in the country, and until 2020 it was well on track to achieve the elimination targets. As the public sector has been the only service provider for all PMTCT services, this program was the most severely affected by the pandemic and other situation within the country. PMTCT service provision and coverage decreased dramatically in 2021 and 2022. Although partial signs of recovery were reported by the end of 2022, none of the PMTCT indicators met their targets in 2021 or 2022.

PMTCT service delivery and reporting recovered to a degree in 2022. By the end of 2022, the number of townships reporting disruptions to the national program reduced by half compared to 2021 (from 107 townships in 2021 to 52 townships in 2022). It is not certain whether PMTCT services were unavailable in those townships, or whether the report was unavailable despite continued service provision. In other words, 84% of PMTCT townships (277 townships) reported these services in 2022, representing a 25% increase in the reporting rate from previous year.

Figure 45: Number of pregnant women receiving pre-test counselling and HIV post-test counselling (2011–2022)



Before the pandemic and other difficult situations, the PMTCT program provided HIV testing to more than 900,000 pregnant women in the country annually, covering 80–85% of the country's estimated number of pregnant women. Since 2021, the number of pregnant women who received an HIV test reduced drastically, representing around 34% of estimated pregnant women in 2021 and 51% of pregnant women in 2022. Provision of syphilis testing among pregnant women also reduced noticeably, and less than 50% of pregnant women received a syphilis test during 2022. The number of pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission dropped alarmingly: less than 45% of estimated HIV-positive pregnant women received these medications during 2022. Although this coverage improved from 19% in 2021, service disruption persists in most townships. The low level of PMTCT antiretroviral coverage leads to an abrupt increase in the estimated number of new HIV infections among exposed babies, to 29% in 2021 and 24% in 2022, the worst estimated impact in a decade. With a serious drop in the coverage area and in the number of HIV tests provided to pregnant women, a slight change in the HIV-positive rate among pregnant women was observed in 2021 but continued to decrease in 2022 (Figure 46).

Figure 46: HIV-positive rate among pregnant women (2011–2022)

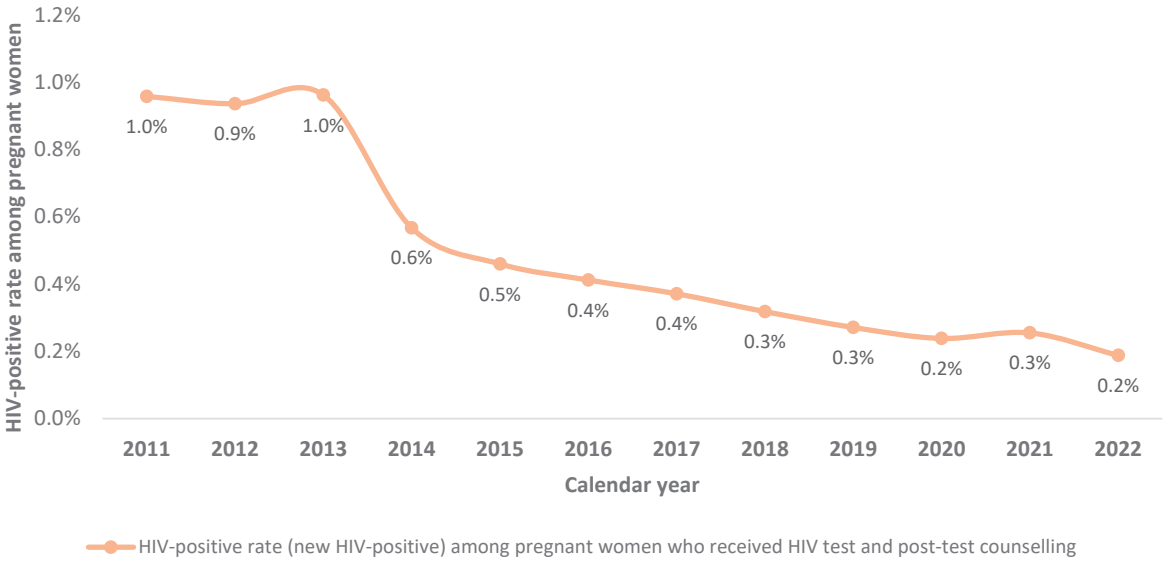
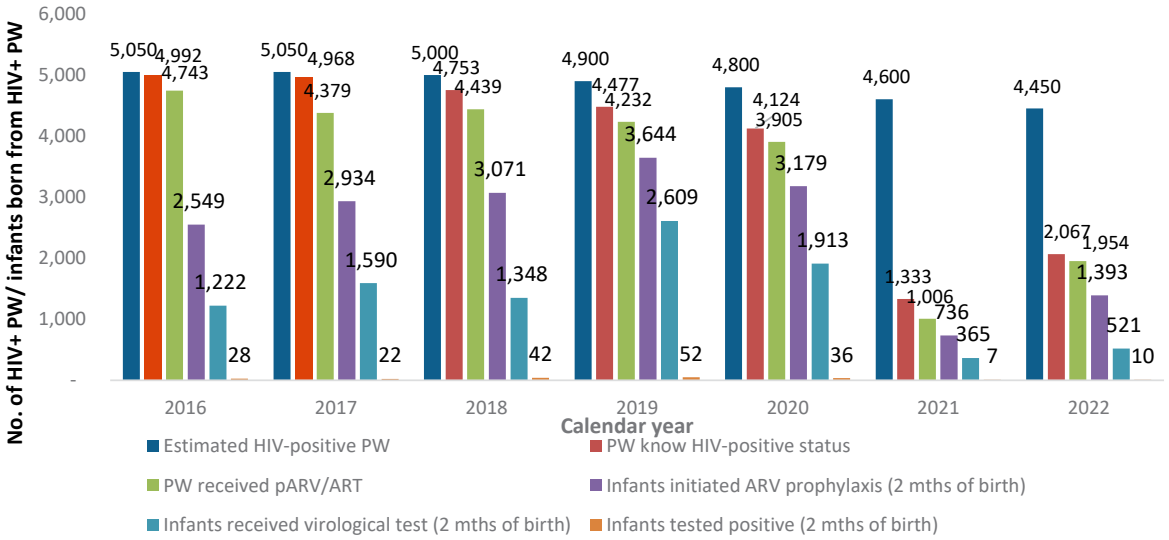


Figure 47 shows the cascade of HIV-positive pregnant women, starting from them knowing their HIV-positive status until two months of follow-up of their HIV-exposed baby. Based on HIV modelling results, it is estimated that there were around 4,450 HIV-positive pregnant women in the country in 2022. Among the estimated HIV-positive pregnant women, 46% knew their status and 44% received antiretrovirals to prevent HIV transmission to their babies. A total of 1,393 (33%) HIV-exposed babies were provided prophylactic antiretrovirals, which was markedly below the target coverage of 80% in 2022. As the national laboratory capacity also reduced notably in 2022, only 12% of the estimated HIV-exposed babies received early infant diagnosis within two months of birth, and 1.9% of those tested were HIV-positive at 2 months of age. As in the PMTCT prevention and treatment cascade, treatment coverage among syphilis-exposed infants declined steeply: only 14% and 18% of syphilis-exposed infants received their treatment in 2021 and 2022, respectively.

Figure 47: Pregnant women receiving PMTCT services, infants initiated ARV prophylaxis, infants received virological test and tested positive within two months of birth (2016–2022)



PMTCT program at the state and regional level

The reported figures suggest that all states and regions except Rakhine experienced a marked decrease in HIV testing among pregnant women in 2022. Ayeyarwady reported the highest number of PMTCT testing in pregnant women, followed by Yangon and Mandalay (Figure 48). Although there was countrywide PMTCT service disruption in 2021 and 2022, PMTCT services in Rakhine were maintained and showed no sign of disruption. The PMTCT services in Sagaing and Kayah were greatly affected, representing a drop of more than 80% in 2022 compared to the 2020 figure. Chin, Shan (N), Magway, Kayin, Shan (E) and Tanintharyi also showed a drop of more than 50% from pre-pandemic levels. Meanwhile, Yangon and Tanintharyi maintained their HIV testing services among pregnant women.

In terms of the HIV-positive rate from testing, Kachin continued to have the highest HIV-positive rate among pregnant women at 1.4%, reflecting the ongoing HIV epidemic in Kachin (Table 36). Tanintharyi region showed a prominent increase in the HIV-positive rate among pregnant women in 2022 to become the region with the second highest figure. The HIV-positive rate in Shan (N) and Sagaing also increased during 2021–2022. The enormous drop in HIV testing might have contributed to the increase in the positive rate, as HIV testing might have been offered to people at high risk for HIV. On the other hand, the HIV-positive rate in Yangon and Nay Pyi Taw has been decreasing since 2020 along with most of the routine PMTCT services have returned to pre-pandemic levels.

Figure 48: Number of pregnant women receiving pre-test counselling, HIV testing and HIV test results with post-test counselling by state/region in 2022

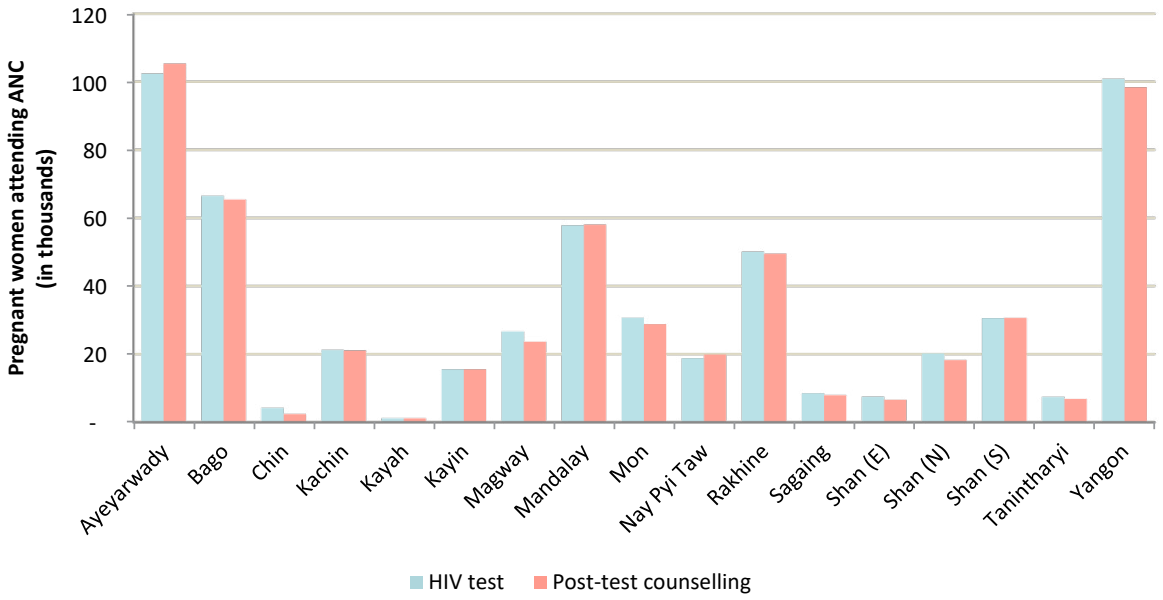


Table 37 shows HIV-positive pregnant women who knew their HIV status, received antiretrovirals and the exposed infants who initiated antiretroviral prophylaxis. Yangon, and Kachin were still the two regions with the highest number of HIV-positive pregnant women who knew their status followed by Ayeyarwady and Mandalay. However, the number of pregnant women who received antiretrovirals in these regions decreased by at least 41% compared to 2020. Unlike the HIV testing service, the number of pregnant women who received ART or prophylactic ARV decreased in all states and regions across the country, ranging from the highest drop of 94% in Kayah to the lowest drop of 24% in Rakhine, compared to 2020 figures. Kayah, Sagaing, Shan (E), Shan (N) and Shan (S) were the regions where this service was most affected, according to reporting. A similar pattern of drop was observed in the provision of infant ARV prophylaxis.

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Table 37: Number of pregnant women receiving HIV testing, post-test counselling, and HIV-positive rate among pregnant women who knew their HIV status by state/region (2018–2022)

State/ Region	2018			2019			2020			2021			2022		
	PW received HIV testing	PW received post-test counselling (including known HIV+ cases)	HIV-positive rate among PW who knew their HIV status[59]	PW received HIV testing	PW received post-test counselling (including known HIV+ cases)	HIV-positive rate among PW who knew their HIV status	PW received HIV testing	PW received post-test counselling (including known HIV+ cases)	HIV-positive rate among PW who knew their HIV status	PW received HIV testing	PW received post-test counselling (including known HIV+ cases)	HIV-positive rate among PW who knew their HIV status	PW received HIV testing	PW received post-test counselling (including known HIV+ cases)	HIV-positive rate among PW who knew their HIV status
Ayeyarwady	123,215	121,484	0.4%	117,044	115,572	0.3%	119,212	117,871	0.3%	71,923	59,159	0.3%	102,411	105,502	0.2%
Bago	88,185	85,135	0.3%	89,034	87,446	0.3%	84,975	85,051	0.3%	44,276	40,697	0.2%	66,480	65,443	0.2%
Chin	14,351	14,058	0.2%	12,922	12,688	0.2%	13,349	13,351	0.3%	2,160	1,549	0.5%	4,152	2,387	0.4%
Kachin	34,011	33,484	1.8%	37,549	37,537	1.8%	38,764	39,020	1.4%	13,743	13,693	1.4%	21,193	21,203	1.4%
Kayah	6,009	6,011	0.2%	6,743	6,743	0.4%	6,437	6,408	0.6%	-	-	-	1,117	1,117	0.2%
Kayin	32,451	32,483	0.3%	34,088	34,005	0.3%	34,204	33,754	0.2%	9,160	9,286	0.2%	15,511	15,520	0.2%
Magway	63,274	66,138	0.3%	61,125	61,125	0.2%	62,828	62,911	0.3%	16,613	15,050	0.2%	26,616	23,638	0.3%
Mandalay	109,392	111,360	0.4%	109,430	109,429	0.4%	98,936	99,121	0.4%	54,698	54,729	0.3%	57,813	58,088	0.4%
Mon	39,364	39,434	0.4%	39,608	39,608	0.4%	39,770	39,847	0.3%	19,933	19,246	0.3%	30,643	28,840	0.4%
Nay Pyi Taw	21,248	17,893	1.0%	20,903	19,015	0.8%	21,400	21,483	0.8%	8,030	6,132	0.6%	18,754	19,921	0.4%
Rakhine	45,990	45,024	0.2%	48,972	47,846	0.2%	50,754	50,753	0.2%	53,893	54,709	0.2%	50,083	49,543	0.1%
Sagaing	111,354	110,561	0.3%	104,558	104,173	0.4%	103,126	103,332	0.4%	4,246	4,228	0.9%	8,454	7,928	0.5%
Shan (E)	10,247	10,046	0.8%	11,854	11,711	0.5%	13,522	13,546	0.7%	3,640	3,075	0.2%	7,477	6,555	0.3%
Shan (N)	35,350	35,276	0.6%	38,099	37,697	0.6%	41,994	42,082	0.5%	1,854	1,740	1.1%	20,168	18,267	0.5%
Shan (S)	47,347	47,400	0.2%	45,951	45,951	0.1%	48,036	48,071	0.2%	10,997	11,000	0.1%	30,550	30,627	0.1%
Tanintharyi	29,358	28,425	0.5%	29,415	29,416	0.4%	29,174	29,240	0.4%	-	-	-	7,418	6,851	0.8%
Yangon	98,452	96,639	1.4%	97,095	95,449	1.2%	95,170	95,746	1.1%	60,772	60,313	0.7%	100,869	98,688	0.6%
Total	909,593	900,846	0.5%	904,390	895,411	0.5%	901,651	901,587	0.5%	375,938	354,606	0.4%	569,709	560,118	0.4%

59 Number of pregnant women who newly tested HIV-positive during this pregnancy combined with pregnant women with known HIV-positive status coming to ANC for a new pregnancy, divided by pregnant women received HIV test and post-test counselling combined with pregnant women with known HIV-positive status (this is used as a proxy for HIV prevalence among pregnant women, as the PMTCT program attained nationwide coverage).

Table 38: Number of HIV-positive pregnant women who knew their status, who received pARV/ART, and HIV-exposed infants received ARV prophylaxis at birth by state/region (2018–2022)

State/ Region	2018			2019			2020			2021			2022		
	PW know their positive status[60]	PW received pARV/ART	Infants initiated ARV prophylaxis	PW know their positive status	PW received pARV/ART	Infants initiated ARV prophylaxis	PW know their positive status	PW received pARV/ART	Infants initiated ARV prophylaxis	PW know their positive status	PW received pARV/ART	Infants initiated ARV prophylaxis	PW know their positive status	PW received pARV/ART	Infants initiated ARV prophylaxis
Ayeyarwady	438	421	225	373	370	294	362	360	253	154	168	143	233	231	150
Bago	297	273	174	244	222	212	218	211	166	74	71	77	130	118	88
Chin	25	24	14	29	23	16	35	26	15	7	6	7	9	7	5
Kachin	593	562	468	672	655	574	530	521	449	189	160	127	290	278	198
Kayah	13	10	8	26	24	19	38	13	19	-	-	-	2	1	0
Kayin	96	91	81	107	102	97	69	69	82	21	12	20	32	26	25
Magway	177	172	112	152	150	139	173	171	144	27	28	16	67	63	49
Mandalay	482	476	358	486	483	382	387	388	326	191	189	55	224	225	64
Mon	162	157	141	149	147	136	139	138	124	64	53	50	112	109	91
Nay Pyi Taw	186	184	72	158	151	108	180	172	100	34	33	28	79	76	35
Rakhine	79	74	39	87	83	68	78	75	61	83	69	49	62	57	51
Sagaing	343	326	236	374	357	288	369	363	296	36	32	19	42	41	34
Shan (E)	83	58	24	54	49	30	90	75	31	5	4	2	19	18	5
Shan (N)	205	202	153	229	224	207	224	219	174	20	16	14	98	91	59
Shan (S)	97	93	81	62	64	50	90	91	75	13	8	5	38	33	28
Tanintharyi	154	137	88	126	120	96	130	126	88	-	-	-	56	56	61
Yangon	1,323	1,179	797	1,149	1,008	928	1,012	887	776	415	157	124	574	524	450
Total	**4,753**	**4,439**	**3,071**	**4,477**	**4,232**	**3,644**	**4,124**	**3,905**	**3,179**	**1,333**	**1,006**	**736**	**2,067**	**1,954**	**1,393**

60 New HIV-positive pregnant women during this pregnancy + pregnant women who were already known to be HIV-positive at the start of this pregnancy.

The number of exposed infants who received early infant diagnosis (EID) within two months improved in 2022, reaching 521 infants receiving EID. However, the figure did not reach the level recorded before the pandemic. It is noted that there was no EID report from Chin and Kayah in 2022. Among exposed infants who received EID testing within two months, 1.9% of infants tested HIV-positive overall, with a wide variation between states and regions. The infant HIV-positive rate in Ayeyarwady, at 4.9%, was higher than for any other state or region. This was followed by Tanintharyi (4.5%), Rakhine (4%), Yangon (3.1%) and Kachin (1.1%), and all other regions reported no HIV-positive cases from EID testing. The EID positive rate at the subnational level varied a lot because of the small testing volume in each region.

Table 39: Number of HIV-exposed infants received virological test within two months of birth and tested positive rate by state/region (2018–2022)

State/Region	2018		2019		2020		2021		2022	
	Infants received virological test within 2 months of birth	Test positive rate	Infants received virological test within 2 months of birth	Test positive rate	Infants received virological test within 2 months of birth	Test positive rate	Infants received virological test within 2 months of birth	Test positive rate	Infants received virological test within 2 months of birth	Test positive rate
Ayeyarwady	60	5.0%	170	1.2%	74	6.8%	63	1.6%	61	4.9%
Bago	52	1.9%	115	2.6%	81	2.5%	11	0.0%	10	0%
Chin	5	0.0%	11	0.0%	14	7.1%	-	-	-	-
Kachin	186	1.6%	292	2.7%	264	2.7%	82	0.0%	91	1.1%
Kayah	5	0.0%	16	0.0%	3	0.0%	2	0.0%	-	-
Kayin	41	0.0%	87	1.1%	48	0.0%	10	0.0%	25	0.0%
Magway	60	1.7%	102	2.0%	64	0.0%	7	0.0%	17	0.0%
Mandalay	140	3.6%	332	0.3%	273	1.8%	-	-	36	0.0%
Mon	55	1.8%	129	1.6%	92	0.0%	21	9.5%	53	0.0%
Nay Pyi Taw	30	0.0%	81	2.5%	65	1.5%	22	0.0%	16	0.0%
Rakhine	27	11.1%	42	2.4%	18	0.0%	17	11.8%	25	4.0%
Sagaing	69	2.9%	232	5.2%	214	1.4%	3	0.0%	1	0.0%
Shan (E)	27	3.7%	41	0.0%	26	0.0%	1	0.0%	6	0.0%
Shan (N)	74	2.7%	122	5.7%	151	0.7%	2	0.0%	6	0.0%
Shan (S)	30	3.3%	48	2.1%	37	0.0%	13	7.7%	22	0.0%
Tanintharyi	62	4.8%	108	2.8%	68	2.9%	14	0.0%	22	4.5%
Yangon	425	3.8%	681	1.0%	421	2.1%	97	1.0%	130	3.1%
Total	**1,348**	**3.1%**	2,609	2.0%	1,913	1.9%	365	1.9%	521	1.9%

HIV testing in spouses and partners of pregnant women

Another important component in the PMTCT process is male partner involvement. Partner testing (spouse testing) can identify whether male partners are HIV-positive and enable them to take measures to reduce the risk of transmitting the infection to HIV-negative pregnant women, such as condom use and taking ART to keep the viral load suppressed. Partner involvement is a crucial enabler to retain mother and baby in PMTCT services until the post-natal follow-up.[61]

61 https://www.avert.org/professionals/hiv-programming/prevention/prevention-mother-child.

As with the services for pregnant women, spouse HIV testing decreased to the lowest recorded level in 2021 before showing partial signs of recovery in 2022. Around 140,000 spouses of pregnant women received HIV testing during 2022, which represents one in four pregnant women's spouses having had an HIV test. This coverage is higher than the previous year of 2021, but not yet at pre-pandemic levels. Interestingly, regions such as Ayeyarwady and Mon with relatively low HIV burden had the highest number of partner testing in 2022. The PMTCT services in Kayah and Tanintharyi resumed in 2022, but service disruptions persist in these regions. Although Yangon offered HIV testing services to a larger number of pregnant women, the spouse testing rate was only at 13% of pregnant women who received an HIV test in 2022.

At the national level, the spouse testing HIV-positive rate was 0.3% in 2022, maintaining the decreasing trend. As with pregnant women, the HIV-positive rate among partners of pregnant women was highest in Kachin at 1.4% because of the high HIV-positive rate among PWID population in Kachin. However, the HIV-positive rate in Kachin has been decreasing in the PWID population, pregnant women and spouses of pregnant women, reflecting the success of the HIV prevention and harm reduction programs. Similarly, the HIV-positive rate among spouses of pregnant women has been decreasing in other high priority regions such as Yangon, Mandalay, Sagaing and Shan (N) over the years; however, the positive rate in these regions was still higher than the national average of 0.3% except in Sagaing.

Table 40: Number of spouses tested for HIV and test positive rate (2018–2022)

State/ Region	2018		2019		2020		2021		2022	
	Spouses tested for HIV	HIV-positive rate	Spouses tested for HIV	HIV-positive rate	Spouses tested for HIV	HIV-positive rate	Spouses tested for HIV	HIV-positive rate	Spouses tested for HIV	HIV-positive rate
Ayeyarwady	11,692	*0.2%*	29,273	*0.4%*	29,772	*0.2%*	14,529	*0.3%*	31,047	0.2%
Bago	16,740	*0.4%*	21,209	*0.3%*	19,228	*0.2%*	7,354	*0.6%*	13,991	0.2%
Chin	4,466	*0.4%*	5,457	*0.1%*	5,151	*0.1%*	827	*0.2%*	1,333	0.2%
Kachin	4,335	*2.7%*	4,411	*2.4%*	6,323	*1.8%*	2,558	*1.6%*	4,097	1.4%
Kayah	1,629	*0.3%*	2,850	*0.1%*	3,072	*0.2%*	-	-	122	0.0%
Kayin	3,548	*0.7%*	5,526	*0.4%*	8,239	*0.2%*	2,352	*0.3%*	3,582	0.1%
Magway	26,632	*0.3%*	33,459	*0.2%*	39,715	*0.2%*	7,539	*0.1%*	10,786	0.2%
Mandalay	18,022	*0.5%*	23,718	*0.6%*	16,007	*0.4%*	16,001	*0.1%*	14,368	0.4%
Mon	8,842	*0.3%*	12,434	*0.4%*	12,734	*0.2%*	6,386	*0.1%*	15,550	0.1%
Nay Pyi Taw	6,229	*0.6%*	8,179	*0.4%*	9,665	*0.4%*	3,984	*0.2%*	9,500	0.2%
Rakhine	159	*12.6%*	678	*3.2%*	1,250	*1.5%*	2,265	*0.5%*	2600	0.4%
Sagaing	19,857	*0.5%*	37,782	*0.4%*	51,183	*0.4%*	2,074	*0.3%*	3,433	0.2%
Shan €	3,884	*0.4%*	4,361	*0.2%*	5,143	*0.1%*	1,146	*0.0%*	2,150	0.1%
Shan (N)	4,101	*0.7%*	5,712	*0.6%*	9,918	*0.3%*	1,092	*0.4%*	4,386	0.4%
Shan (S)	15,264	*0.1%*	19,407	*0.1%*	21,572	*0.1%*	3,721	*0.1%*	10,021	0.1%
Tanintharyi	1,150	*1.7%*	690	*4.5%*	1,245	*1.1%*	-	-	656	0.3%
Yangon	8,730	*2.9%*	14,412	*1.1%*	12,503	*1.3%*	5,477	*0.7%*	13,083	0.6%
Total	**155,280**	***0.7%***	**229,558**	***0.5%***	**252,720**	***0.4%***	**77,305**	***0.3%***	**140,705**	**0.3%**

Syphilis testing and treatment among pregnant women

Congenital syphilis is a significant public health problem worldwide and is the adverse outcome of syphilis infection in pregnancy. In 2007, WHO launched an initiative for the global elimination of congenital syphilis, and progress is being made in increasing access to syphilis testing and treatment for pregnant women.

Syphilis testing and treatment among pregnant women showed a similar pattern to the PMTCT indicators. There was a big decrease in syphilis testing in 2021 with signs of recovery in 2022. During 2022, nearly 540,000 pregnant women received syphilis testing, which represents coverage of 48% of the estimated number of pregnant women. Around 2,400 women tested positive for syphilis, and the overall syphilis-positive rate increased from 0.2% in 2021 to 0.5% in 2022. 92% (2,232) of those who tested positive were provided with syphilis treatment, and 824 syphilis-exposed infants (infants of syphilis-positive mothers) were also provided with syphilis treatment. Compared to mothers receiving syphilis treatment, treatment provision to exposed babies was very low (34% of the mothers identified as syphilis-positive and 18% of the mothers estimated to be syphilis-positive) in 2022.

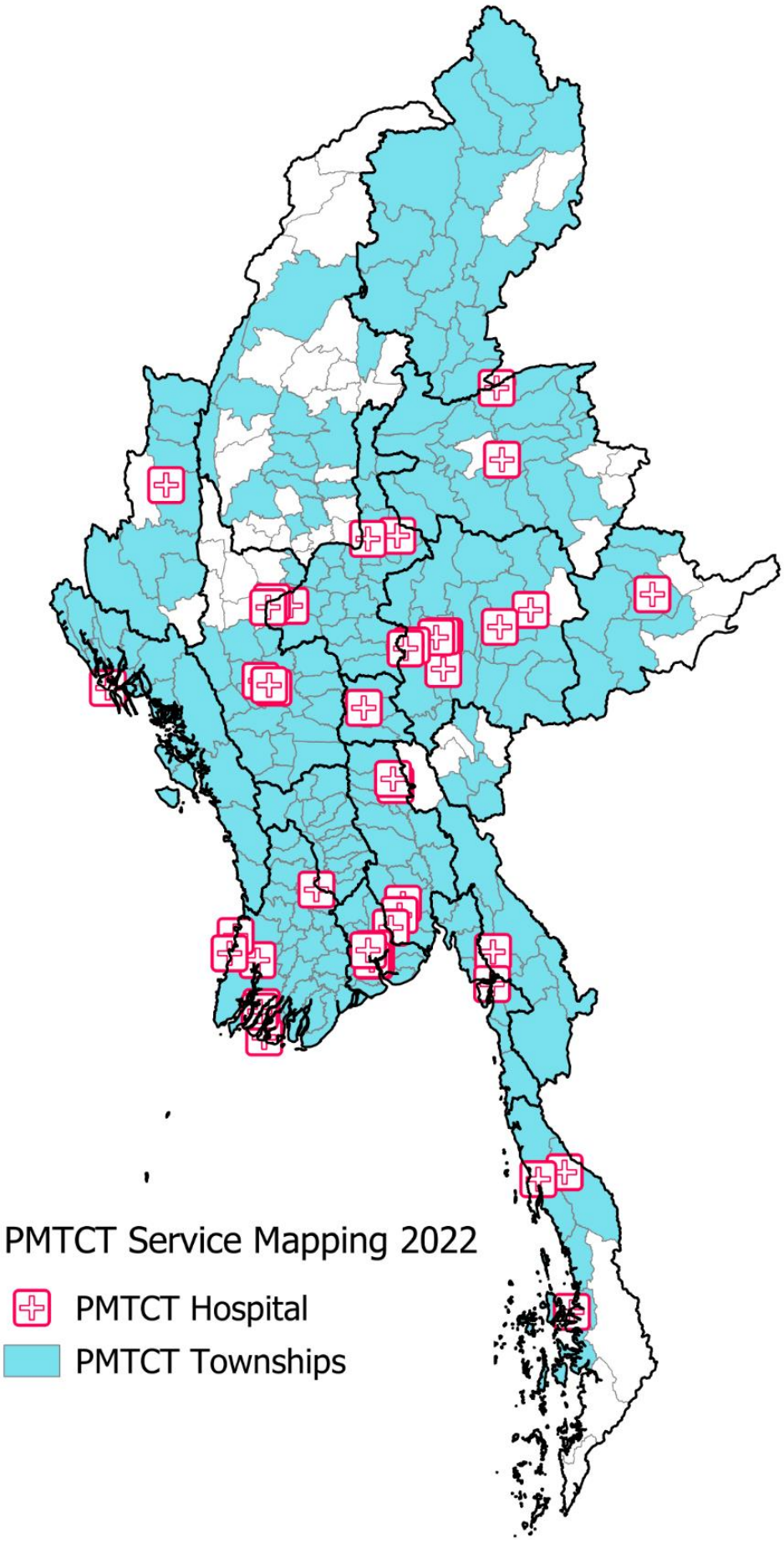
At the state and regional level, most syphilis testing was conducted in Ayeyarwady, Yangon, Bago, and Mandalay representing more than 55% of total syphilis testing in the country (Table 40). Syphilis service provision in Ayeyarwady, Bago, Rakhine, Yangon and Mon recovered in 2022 and overcome or approaching the pre-pandemic level. However, the other states and regions continued to have disruptions in almost half of services on average. Though the high number of syphilis testing, syphilis positive rate is high in Yangon (1%), the city with highest rate of sexual transmission of HIV. Syphilis-positive rate is also high in Tanintharyi (1%) probably due to low syphilis testing rate and a more targeted testing. The syphilis-positive rate in other regions such as Mandalay, and Nay Pyi Taw was also higher than the national average of 0.5%.

Although it is encouraging that the PMTCT program started restoring its services in 2022, several gaps remain in order to recover the whole range of services, particularly in ARV prophylaxis or treatment among HIV-positive pregnant women and exposed infants, and viral load testing. Since the country has committed to the elimination of mother-to-child transmission of HIV and syphilis by 2025, there is an urgent need to develop an intensive and longer-term post-pandemic recovery plan to address PMTCT service setbacks.

Table 41: Number of pregnant women tested for syphilis, tested positive and treated for syphilis (2018–2022)

State/ Region	2018			2019			2020			2021			2022		
	Tested syphilis	Syphilis positive	Tx syphilis	Tested syphilis	Syphilis positive	Tx syphilis	Tested syphilis	Syphilis positive	Tx syphilis	Tested syphilis	Syphilis positive	Tx syphilis	Tested syphilis	Syphilis positive	Tx syphilis
Ayeyarwady	70,892	199	179	67,850	302	265	88,748	345	309	53,784	92	83	99,684	337	334
Bago	46,281	197	182	51,319	305	288	56,144	322	315	29,086	104	74	61,310	194	175
Chin	8,337	4	2	7,661	9	8	11,620	8	7	2,127	2	2	4,255	2	2
Kachin	23,238	55	32	24,151	49	49	34,429	101	91	11,800	20	16	22,223	52	40
Kayah	6,209	3	1	8,317	9	2	8,362	9	9	0	0	0	939	0	0
Kayin	25,355	75	67	22,786	98	87	32,138	148	147	7,608	11	10	15,206	68	62
Magway	26,964	85	52	27,653	99	98	64,086	187	185	15,650	21	21	27,683	79	63
Mandalay	56,104	164	157	65,674	290	288	97,375	461	459	54,014	88	88	58,659	405	386
Mon	17,713	86	88	21,500	124	121	37,546	124	109	19,240	38	36	31,615	91	92
Nay Pyi Taw	16,133	85	38	21,286	142	95	26,503	218	201	7,940	49	47	19,955	150	146
Rakhine	39,012	48	39	20,856	86	76	33,237	108	99	37,832	98	95	45,330	114	116
Sagaing	35,194	45	14	39,182	106	82	90,242	128	124	4,040	4	4	7,242	13	2
Shan (E)	9,012	36	4	12,401	15	9	14,566	20	20	3,546	1	1	7,212	9	7
Shan (N)	22,477	31	22	21,420	48	27	35,311	96	85	5,266	3	1	19,874	46	26
Shan (S)	44,418	26	23	28,074	31	31	38,828	38	35	8,924	3	2	29,431	14	11
Tanintharyi	23,383	66	23	20,292	140	104	28,528	170	143	0	0	0	8,809	84	55
Yangon	56,432	607	313	56,373	613	450	67,890	798	694	37,508	159	129	77,828	777	715
Total	**527,154**	**1,812**	**1,236**	**516,795**	**2,466**	**2,080**	**765,553**	**3,281**	**3,032**	**298,365**	**693**	**609**	**537,255**	**2,435**	**2,232**

Map 7: Townships providing PMTCT services in 2022



STRATEGIC DIRECTION II: IMPROVING HEALTH OUTCOMES FOR ALL PEOPLE LIVING WITH HIV

Table 42: Care and treatment related indicators, targets and results in 2022

Impact indicators	Data source		Baseline 2010	Target 2022	Results 2022
Number of AIDS-related deaths per 100,000 population	Modelling[62]		24.48	9.01	11.82
Outcome indicators	**Data source**	**Size estimate 2022**	**Baseline 2020**	**Target 2022**	**Results 2022**
% of PLHIV on ART who are virally suppressed (≤1,000 copies/mL) (3rd 95) among those on ART	Program data	210,000	47%	80%	27%
% of PLHIV on ART who are virally suppressed among those tested for viral load	Program data	-	96%	95%	96%
Output/coverage indicators		Size estimate 2022	Baseline 2020	Target 2022	Results 2022
% of newly identified HIV-positive people newly receive treatment during the reporting period	Program data	-	83%	76%	81%
% of PLHIV who are receiving antiretroviral therapy (2nd 95)	Program data	280,000[63]	74%	90%	75%
Number of adults living with HIV who are receiving ART	Program data	271,000[64]	191,535	212,779	203,863 (75%)
Number of children living with HIV who are receiving ART	Program data	8,900[65]	7,697	9,054	6,137 (68%)
Number of PLHIV on ART received viral load test	Program data	210,000	96,911 (49%)	177,036 (80%)	60,259 (29%)
Number of HIV-positive new and relapse TB patients on ART during TB treatment	Program data	-	6,478	9,957 (78%)	3,766
% of PLHIV on ART who initiated TB preventive therapy among those eligible	Program data	-	-	50%	38%

62 AEM-Spectrum modelling estimate Myanmar.

63 AEM-Spectrum modelling estimate May 2023.

64 Ibid.

65 Ibid.

Partners working on care, treatment and support in 2022:

AHRN, Alliance, IOM, MAM, MdM, MPG, MSF-CH, MSF-Holland, MSI, NAP, UNION, PGK, PSI, networks and CBOs

PRIORITY INTERVENTION AREAS

2.1 Maximize linkage and improve access to care: immediate enrolment and ART initiation

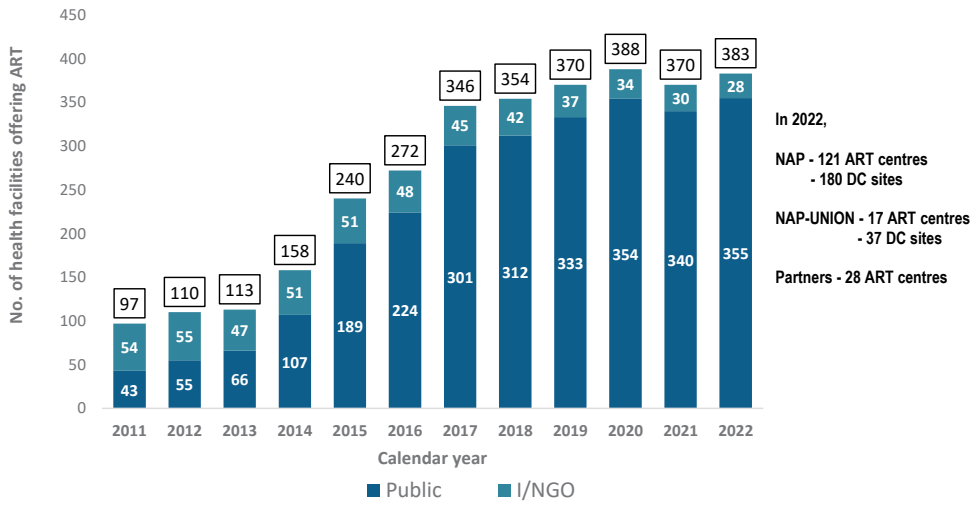
HIV diagnosis, enrolment and initiation of antiretroviral therapy (ART)

The World Health Organization (WHO) recommends antiretroviral therapy (ART) for all people living with HIV (PLHIV) as early as possible after diagnosis, regardless of WHO clinical staging and CD4 counts. Standard ART consists of a combination of antiretroviral (ARV) drugs to maximally suppress the HIV virus and stop the progression of HIV disease. Moreover, ART also prevents onward transmission of HIV, treatment as prevention (TasP). [66]

In Myanmar, the provision of ART was officially started in 2005 in Yangon, Mandalay, Kachin, Shan (N), Rakhine and Tanintharyi. MSF-Holland was the earliest and largest ART provider before the public sector took the lead for the HIV care and treatment program. During the inception period, there were only a few ART sites with a strict restriction of ART initiation based on clinical staging or CD4 level. The ART program rapidly expanded after 2013 with ART site expansion, along with the introduction of ART decentralization, and removal of CD4 criteria in later years. In 2017, the restriction criteria for initiation of ART were lifted, and any HIV-positive individual, regardless of CD4 count and clinical staging, who is willing and prepared to take ART can receive ART.

During NSP III, the country's care and treatment program intensified its HIV response through innovative and decentralized HIV testing and ART provision. As in the other areas of HIV service provision, substantial gaps were observed in the HIV care and treatment program after the start of the COVID-19 pandemic and other situations in the country.

Figure 49: Total number of health facilities that offer ART by public and private sector (2011–2022)

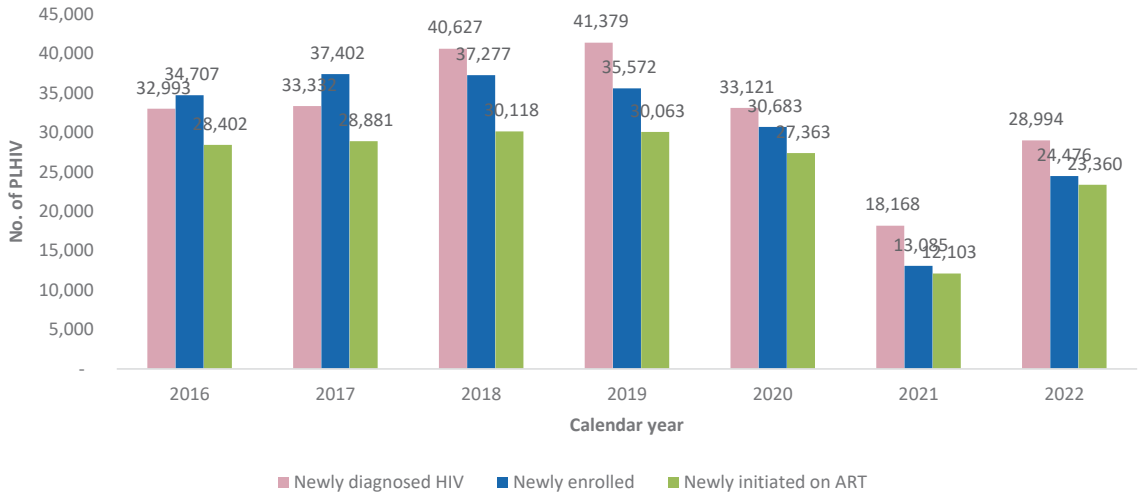


66 https://www.who.int/hiv/topics/treatment/en/.

Amid the Covid 19 pandemic and other situations, both the public and I/NGO sector together with key populations and PLHIV networks and community-based organizations (CBO) struggled to maintain ART distribution across the country. By the end of 2022, a total of 383 ART centres and decentralized sites (DC sites) reported the ART provision data (Figure 49). In 2022, 251 of 329 (76%) townships in Myanmar had access to at least one ART provision site, either decentralized site or ART centre, an increase of around 5% from the year 2021. However, the total number of reported ART sites was still lower than the pre-pandemic level of 388.

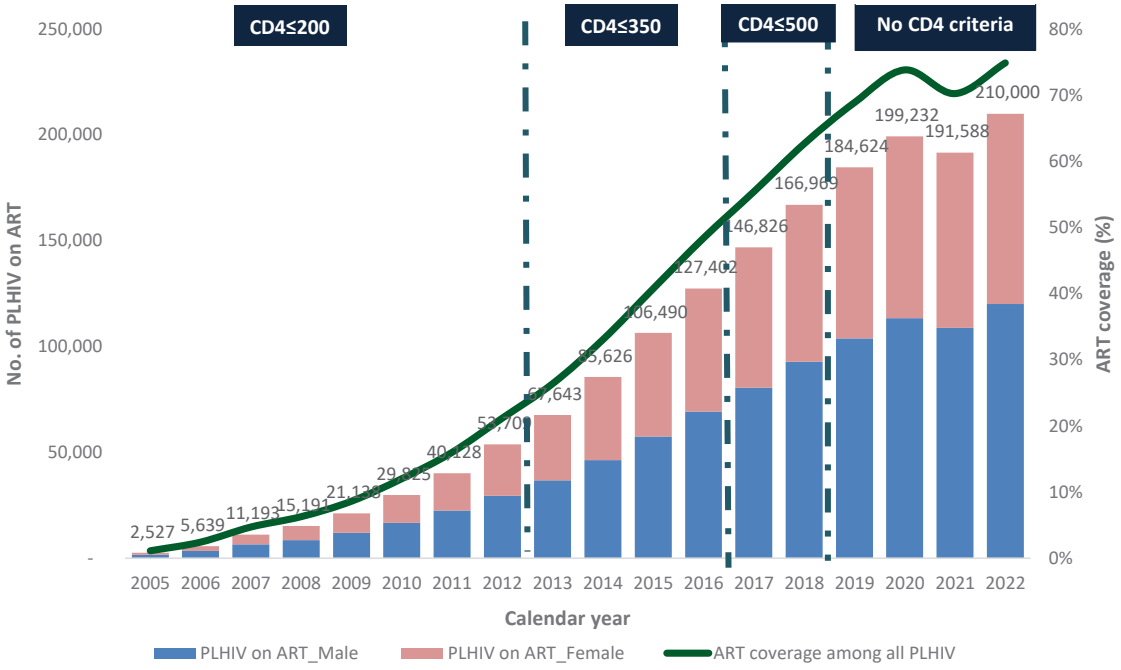
Map 8 illustrates the geographical coverage of ART services in 2022. Altogether, there were 166 ART centres (138 public ART centres and 28 NGO ART centres) providing ART initiation and maintenance, and 217 ART decentralized sites for ART maintenance as well as ART initiation for uncomplicated cases and some special populations such as pregnant women and their spouses, PLHIV coinfected with TB, and key populations, etc. For children under 15 years of age, 108 ART sites provided paediatric ART. Most of the ART centres are located in Kachin, central Myanmar and Yangon, with DC sites spreading across the country. Yangon and Kachin have large ART centres providing ART to thousands of PLHIV.

Figure 50: Number of PLHIV newly diagnosed with HIV, newly enrolled into care and initiated ART (2016–2022)



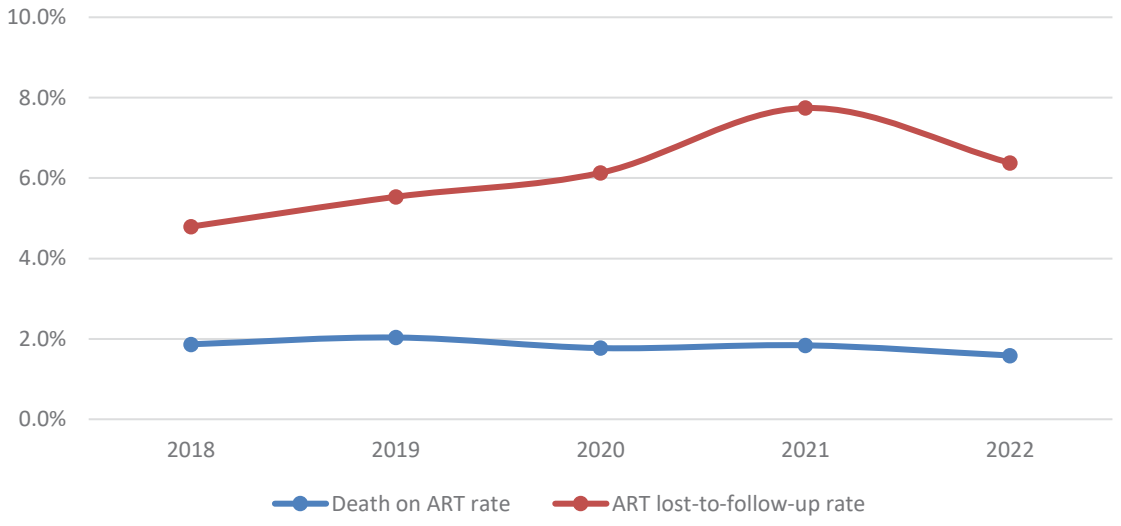
During 2021 and 2022, the capacity to find new HIV-positive cases was limited due to the general decrease in all health services, including HIV testing services. Around 18,000 PLHIV were newly identified through the HTS program and the PMTCT program in 2021, which is a reduction of around 45% compared to 2020. Although the number of newly identified PLHIV was almost 29,000 in 2022, it has not reached the pre-pandemic level. Similarly, the proportion of newly identified PLHIV enrolled in the care and treatment program also increased from 72% in 2021 to 84% in 2022 but has not reached 2019 (86%) or 2020 (93%) levels. However, ART initiation among those enrolled increased over the years, from 82% in 2016 to 95% in 2022, reflecting the better quality of care and treatment. Although data on new HIV diagnoses and enrolment in care/ART initiation come from different sources (HTS and ART programs), it seems that linkage to the care and treatment program for further management was not greatly affected during the pandemic.

Figure 51: People receiving ART (2005–2022)



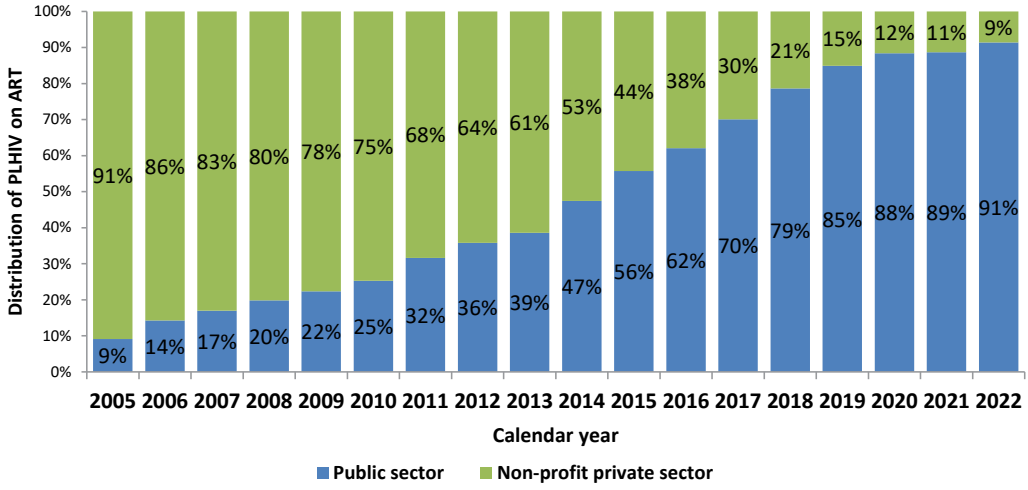
From the annual reported figures, the care and treatment service report recovered in 2022, reaching 210,000 PLHIV receiving ART treatment. As reports from a few ART sites could not be collected in 2021, this may have led to the dip in the ART cohort in 2021. Further, the increase in lost-to-follow-up during 2021 may also be due to lack of reports from a few ART sites in 2021. Since overall ART provision services were restored in 2022, the lost-to-follow-up rate returned to the 2020 level. The death rate from program data remained stable during the period between 2018 and 2022.

Figure 52: Death and lost-to-follow-up rate of ART patients by year (Program data 2018–2022)[67]



67 The lost-to-follow-up rate is calculated based on combination of all lost-to-follow-up reported monthly, not taking account of any return to care.

Figure 53: Distribution of ART patients in public and non-profit private sector (2005–2022)



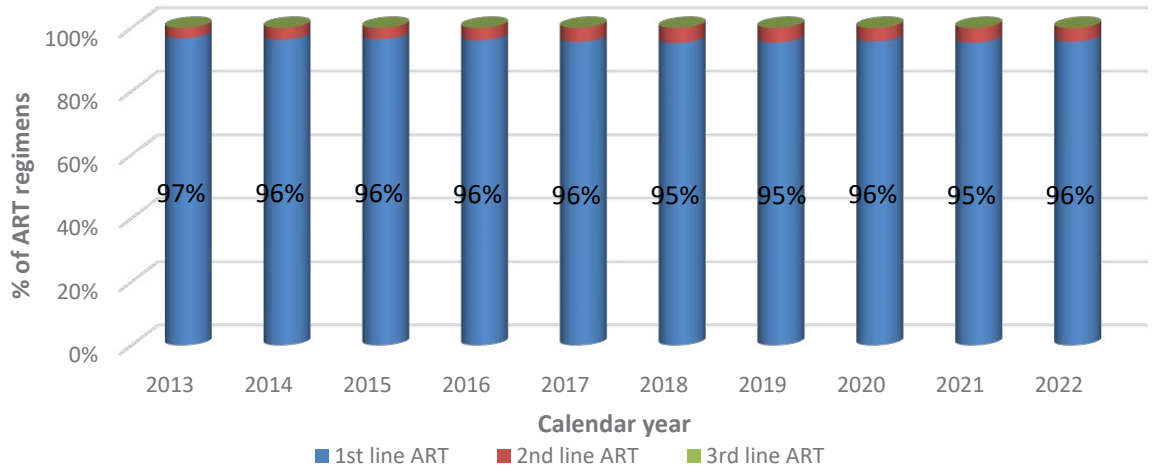
Among those who were on ART by the end of 2022, 43% were females and 3% were children. The ART coverage among estimated PLHIV was 75% in 2022. The public sector ART program is growing through the integrated health care (IHC) model in collaboration with the UNION, and the satellite site model in collaboration with various INGOs. Along with the successful transition from the I/NGO sector to the public sector, the proportion of PLHIV on ART in the public sector increased annually. By the end of 2022, 91% of PLHIV on ART were provided care and treatment services through the public sector. Despite the high ART coverage and pandemic situation, the country managed to maintain 96% of its ART cohort on first-line treatment regimen over the years. Starting from 2021, ART initiation was conducted in public sector ART centres only.

A total of 13 organizations provided care and treatment services in 2022 including NAP. MAM, Pyi Gyi Khin, and AHRN provided support to the public sector through the satellite model. Alliance, IOM, MSI and PSI had their own ART cohort as well as supported through the satellite model to public sector. MPG also supported delivery of ART at some public ART sites since 2021. Apart from NAP and UNION, which is regarded as public sector, MSF-Holland is still the largest ART service provider, working in Kachin and Shan (N).

Table 43: People receiving ART by organization in 2022

Organization	Children		Adults		Total
	Male	Female	Male	Female	
Alliance	-	-	1,264	1,001	**2,265**
IOM	33	27	696	680	**1,436**
MdM	1	-	1,959	438	**2,398**
MSF-CH	23	24	670	517	**1,234**
MSF-H	256	235	3,669	3,454	**7,614**
MSI	11	11	533	450	**1,005**
NAP	2,148	1,942	90,058	660,24	**160,172**
NAP–UNION (IHC)	746	680	16,248	14,046	**31,720**
PSI	-	-	1,765	391	**2,156**
Total	3,218	2,919	116,862	87,001	210,000

Figure 54: ART treatment regimens (2013–2022)



2.2 Improve the quality of care maximizing retention and viral suppression

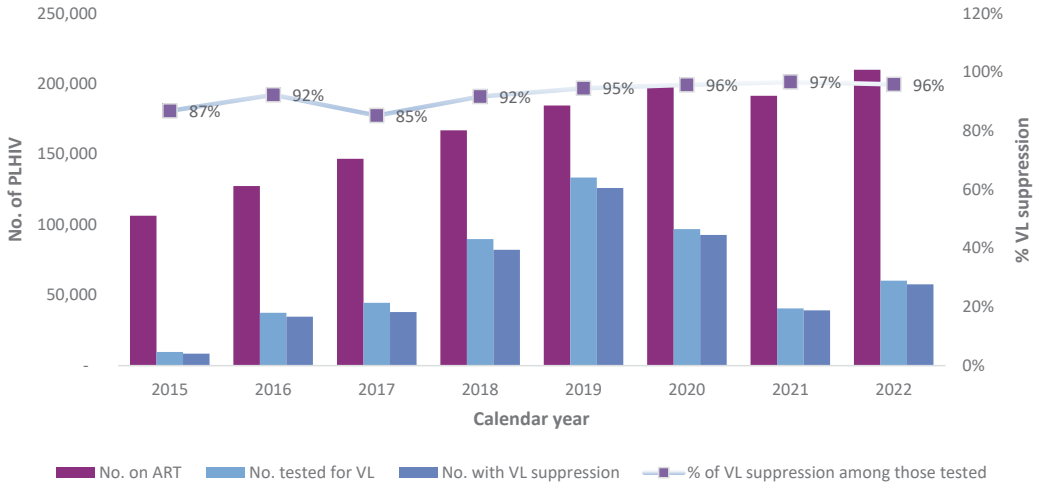
Retention on ART

The retention rate of ART patients is one of the crucial indicators for monitoring and evaluating ART program performance. Due to reporting difficulties during 2021–2022, the data on 12-month retention on ART could not be consistently collected for three consecutive years (2020 to 2022). It is expected that the data collection can be resumed in 2023.

Viral load testing and viral suppression

With the support of technical organizations and changes in the country's clinical management guideline for HIV infection, the increase in viral load testing had been very promising until 2019, when 72% of the country's ART cohort received viral load testing. The viral load testing coverage decreased since 2020 due to overburdening of laboratories and task-shifting of laboratory technicians in response to the COVID-19 pandemic and other situations. The overall laboratory capacity further decreased in 2021 before showing partial signs of recovery in 2022. During the last year, around 60,000 PLHIV on ART were tested for viral load, representing 29% coverage of PLHIV on ART. Viral suppression among those tested for viral load was maintained at 96% suppression rate in 2022. Although the trend of viral suppression was quite stable amid the difficult situation, it could not be generalizable to all PLHIV on ART across the country, because individuals with consistent access to health care in cities were more likely to receive viral load testing and have better viral suppression rates compared to those with irregular health care access. Despite signs of partial recovery, persisting service disruptions call for a prepared and resilient viral load testing system in the coming years.

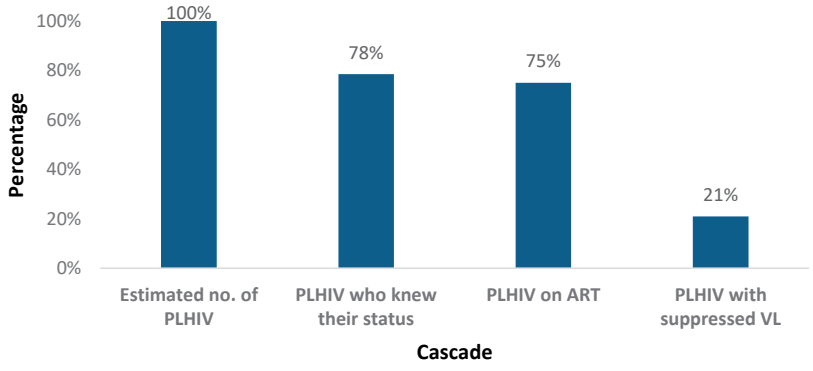
Figure 55: Number of PLHIV on ART, tested for viral load and those with suppressed viral load by year (2015–2022)



HIV treatment cascade

Looking at the HIV cascade, there were an estimated 280,000 PLHIV in the country in 2022, of which 78% knew their HIV status, 75% were on ART and 21% had achieved viral suppression. However, it is difficult to estimate the first '95', 'know their status', because of the under-functioning case-reporting system in the country. The figure described here for the first '95' was unable to be based on the recommended approach suggested by UNAIDS and WHO, as the country does not have well-functioning HIV case-based reports or a population-based seroprevalence survey. Along with remarkable gains across the HIV testing and treatment coverage, the country appears to be on track for the first two '95' targets. However, it is behind on the third '95' indicator, with viral load suppression coverage that was significantly below the target in 2022, indicating deficiencies around linkage to ART treatment and viral load testing.

Figure 56: PLHIV care and treatment cascade (95-90-86), cross-sectional 2022[68] (estimated PLHIV as fixed denominator)



68 Estimated PLHIV – from AEM-Spectrum modelling May 2023.

PLHIV who knew their status – number of PLHIV on ART and those waiting for ART at the end of 2019 + number of new HIV-positives from HTS program during 2020 – (death on ART + [one third of] LTF on ART during 2020).

PLHIV with viral suppression – calculated based on actual viral load suppression data, extrapolation to all PLHIV on ART is inappropriate as the viral load testing rate is less than 50% of PLHIV on ART (UNAIDS/WHO recommended calculation for extrapolation).

Care and treatment program at state/regional level

The decentralized ART model has demonstrated the feasibility of PLHIV access to ART in all states and regions. This model has led to a shift in the total proportion of ART provision away from the main centres of Yangon and Mandalay towards other areas, including both priority and non-priority regions.

In 2022, 70% of the country's ART provision was in the five priority regions. Yangon, Kachin, Mandalay and Sagaing were still the regions with the highest number of PLHIV on ART. Between 2012 and 2022, the growth of ART provision is most evident in Ayeyarwady, Sagaing and Bago. In 2022, Sagaing was ranked as the fourth region with highest number of PLHIV on ART. However, Shan (N), one of the five priority regions, served a lower number of PLHIV on ART than non-priority regions such as Bago and Ayeyarwady.

Although almost all regions restored ART provision by the end of 2022, service disruption persists in, Kayah and Shan (N) (19% and 9% drop from 2020 figures, respectively). Persisting low ART number may be due to lower levels of PLHIV who seek or are retained in ART care as well as limited availability of HIV care and treatment services.

Table 44: People receiving ART by state/region in 2022

State/Region	Children		Adults		Total	% of total
	Male	Female	Male	Female		
Ayeyarwady	225	208	6,963	5,699	13,095	6.2%
Bago	203	164	6,323	5,193	11,883	5.7%
Chin	24	19	200	229	472	0.2%
Kachin	439	441	20,568	10,890	32,338	15.4%
Kayah	-	-	197	168	365	0.2%
Kayin	46	42	1,634	1,506	3,228	1.5%
Magway	156	127	3,897	3,360	7,540	3.6%
Mandalay	374	348	13,664	10,582	24,968	11.9%
Mon	110	109	4,122	3,776	8,117	3.9%
Nay Pyi Taw	59	50	2,164	1,471	3,744	1.8%
Rakhine	71	62	1,858	1,348	3,339	1.6%
Sagaing	256	219	10,524	6,855	17,854	8.5%
Shan (E)	24	16	1,096	1,216	2,352	1.1%
Shan (N)	158	105	4,684	3,963	8,910	4.2%
Shan (S)	71	82	1,959	1,954	4,066	1.9%
Tanintharyi	67	64	3,271	2,862	6,264	3.0%
Yangon	935	863	33,738	25,929	61,465	29.3%
Total	**3,218**	**2,919**	**116,862**	**87,001**	**210,000**	**100.0%**

Table 45: Total people receiving ART by state/region (2012–2022)

State/ Region	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ayeyarwady	355	880	1,481	2,860	4,327	6,287	8,384	10,044	11,599	12,077	13,095
Bago	440	749	1,284	2,243	3,722	5,486	7,706	9,156	10,122	10,743	11,883
Chin	3	10	44	79	122	167	260	354	442	217	472
Kachin	7,935	10,061	12,637	15,221	18,266	21,154	24,874	28,008	30,648	30,023	32,338
Kayah	51	82	123	161	223	274	356	416	452	510	365
Kayin	194	284	428	717	1,229	1,704	2,333	2,668	2,975	2,958	3,228
Magway	1,448	2,041	2,802	3,589	4,198	4,980	5,983	6,704	7,283	6,682	7,540
Mandalay	8,369	10,200	11,875	14,525	17,277	19,547	21,410	23,079	24,584	22,683	24,968
Mon	1,382	1,819	2,350	3,115	4,129	4,903	6,070	6,703	7,172	7,762	8,117
Nay Pyi Taw	75	231	579	1,034	1,562	2,019	2,551	3,151	3,566	2,747	3,744
Rakhine	702	797	875	1,108	1,392	1,593	1,907	2,307	2,625	2,899	3,339
Sagaing	1,168	2,252	3,350	4,823	6,297	8,506	10,969	13,427	16,955	13,819	17,854
Shan (E)	636	695	941	1,266	1,489	1,718	1,951	2,087	2,189	2,270	2,352
Shan (N)	4,715	5,201	5,794	6,603	7,325	7,867	8,663	9,476	9,822	7,626	8,910
Shan (S)	1,141	1,464	1,811	2,241	2,573	2,984	3,337	3,603	3,919	3,941	4,066
Tanintharyi	2,905	3,350	3,868	4,610	4,870	5,227	5,700	6,115	6,379	5,987	6,264
Yangon	22,190	27,527	35,384	42,295	48,401	52,410	54,515	57,326	58,500	58,644	61,465
Total	**53,709**	**67,643**	**85,626**	**106,490**	**127,402**	**146,826**	**166,969**	**184,624**	**199,232**	**191,588**	**210,000**

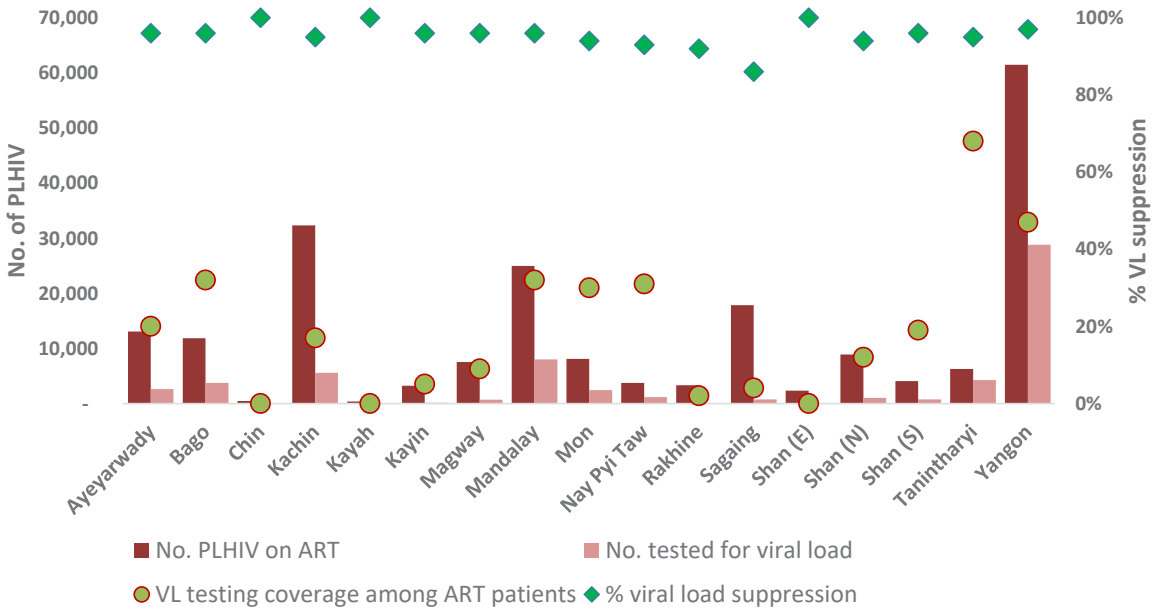
Regarding viral load testing, Tanintharyi showed the best testing coverage at over 60% in both 2021 and 2022. This might be due to the support of MSF-CH with its own viral load testing machine in Tanintharyi. All other states and regions except Nay Pyi Taw reported a decrease in viral load testing coverage since 2021. Although there has been partial viral load testing service recovery during 2022 in most regions, there was no improvement in some regions such as Chin, Kachin, Kayah, Kayin, Rakhine, Sagaing and Shan (E). Kayah was the only region with no viral load testing service report in both 2021 and 2022, whereas Chin and Shan (E) did not report the service in 2022. The drop was still most obvious in Sagaing (93%), Rakhine (82%) and Kachin (45%), compared to 2020 figures. It is also noted that Mandalay showed a considerable drop in viral load testing as well as in early infant diagnosis despite the high throughput viral testing facility situated in Mandalay.

The results of viral load suppression were still very promising among the PLHIV tested for viral load. Apart from Chin, Kayah and Shan (E), all other states and regions had a viral load suppression rate of 92% or more in 2022.

Table 46: Number of PLHIV on ART tested for viral load and viral load suppression among those tested (2018–2022)

State/Region	2018			2019			2020			2021			2022		
	No. tested for VL	VL testing coverage among ART pts	% VL suppression among those tested for VL	No. tested for VL	VL testing coverage among ART pts	% VL suppression among those tested for VL	No. tested for VL	VL testing coverage among ART pts	% VL suppression among those tested for VL	No. tested for VL	VL testing coverage among ART pts	% VL suppression among those tested for VL	No. tested for VL	VL testing coverage among ART pts	% VL suppression among those tested for VL
Ayeyarwady	2,372	28%	92%	5,820	58%	93%	4,346	37%	95%	1,137	9%	96%	2,653	20%	96%
Bago	1,734	22%	94%	3,942	43%	94%	2,681	26%	94%	1,744	16%	98%	3,763	32%	96%
Chin	31	12%	81%	117	33%	94%	168	38%	92%	15	7%	93%	-	-	-
Kachin	14,371	58%	95%	17,944	64%	95%	9,521	31%	95%	5,068	17%	96%	5,587	17%	95%
Kayah	56	16%	96%	284	68%	88%	351	78%	90%	1	0%	100%	-	-	-
Kayin	376	16%	82%	1,371	51%	90%	1,459	49%	93%	262	9%	94%	165	5%	96%
Magway	3,032	51%	88%	5,099	76%	93%	4,404	60%	96%	23	0%	100%	711	9%	96%
Mandalay	9,158	43%	86%	19,678	85%	93%	16,588	67%	96%	1,467	6%	95%	8,033	32%	96%
Mon	2,604	43%	90%	3,608	54%	95%	2,556	36%	96%	2,426	31%	98%	2,457	30%	94%
Nay Pyi Taw	309	12%	82%	1,403	45%	87%	1,035	29%	87%	930	34%	92%	1,155	31%	93%
Rakhine	47	2%	66%	811	35%	92%	293	11%	93%	56	2%	96%	73	2%	92%
Sagaing	3,104	28%	89%	8,131	61%	92%	9,440	56%	95%	878	6%	94%	774	4%	86%
Shan (E)	974	50%	95%	1,012	48%	91%	907	41%	89%	29	1%	83%	-	-	-
Shan (N)	5,027	58%	95%	6,839	72%	96%	4,968	51%	94%	267	4%	94%	1,034	12%	94%
Shan (S)	1,794	54%	89%	2,890	80%	94%	2,504	64%	97%	453	11%	97%	756	19%	96%
Tanintharyi	5,499	96%	84%	5,622	92%	95%	3,108	49%	96%	3,568	60%	97%	4,276	68%	95%
Yangon	39,272	72%	93%	48,897	85%	96%	32,582	56%	97%	22,358	38%	97%	28,822	47%	97%
Total	89,760	54%	92%	133,468	72%	95%	96,911	49%	96%	40,682	21%	97%	60,259	29%	96%

Figure 57: People on ART, tested for viral load, and viral load suppression during 2022 by state/region

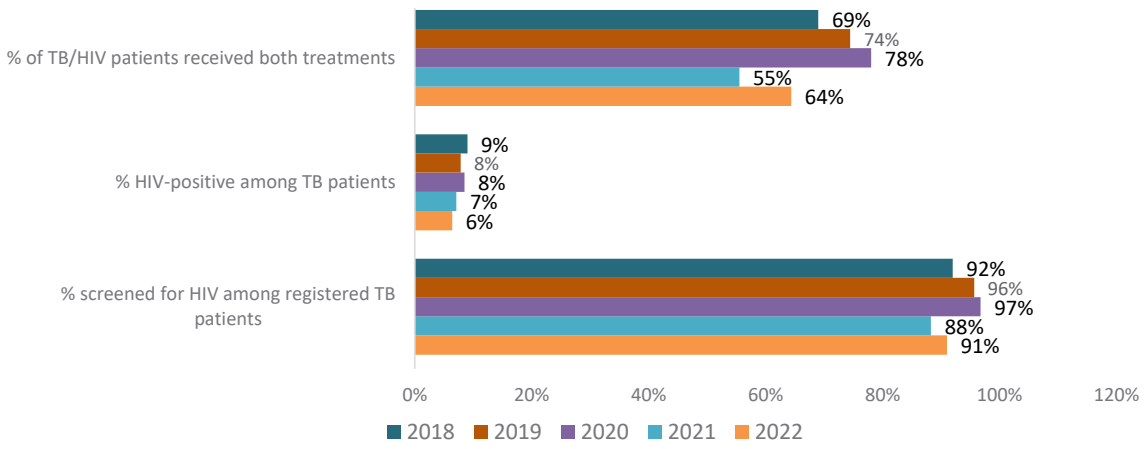


2.3 *Integration of health services for coinfection and comorbidity (TB, hepatitis, STI, NCD, mental health, SRHR and prison health)*

TB/HIV collaboration

NSP IV emphasizes integration of HIV with TB, reproductive health and family planning, and antenatal care programs. The integrated services are included in the essential package for health services.

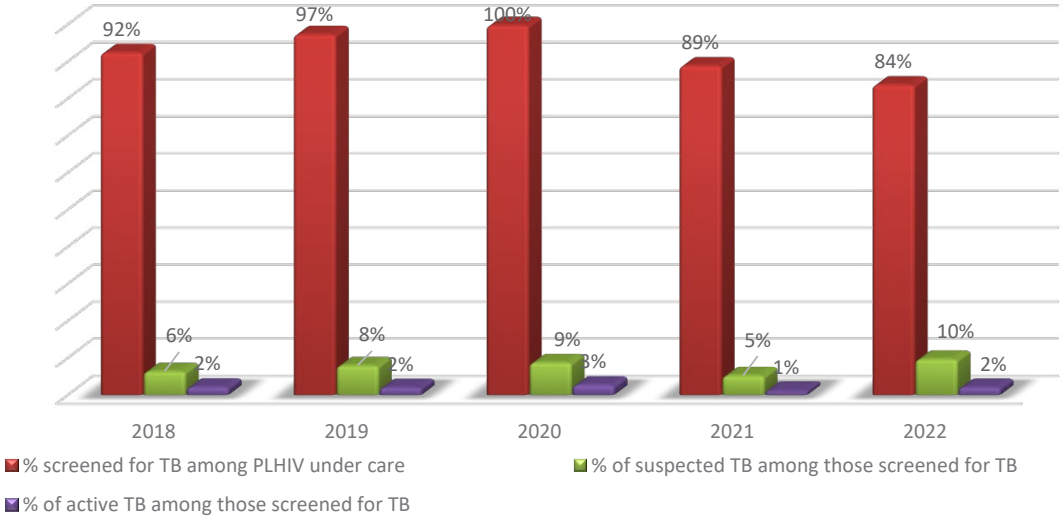
Figure 58: TB/HIV co-management (2018–2022)



Consistent with other service provision, TB/HIV co-management suffered service disruptions, in 2021 in particular. The indicators in 2022 show reduced disruptions in the delivery of TB/HIV services, but these had not yet achieved the levels of 2020. More than 100,000 TB patients were registered in 2022 and 81% had an HIV test. HIV prevalence among TB patients was 6% in 2022, representing a decreasing trend since 2018 (Figure 58). Provision of dual TB and HIV treatment to those people identified as having both TB and HIV was at 64%, below the 2020 level of 78%.

From another aspect, among all PLHIV under HIV care, 89% and 84% received TB screening in 2021 and 2022, respectively. This coverage declined from 100% in 2020. Among those screened for TB, 10% were found to be suspected TB cases in 2022 and were referred for definitive TB diagnosis. Only 2% of those screened for TB were eventually diagnosed with active TB. In other words, around 21% of those PLHIV with suspected TB turned out to have active TB disease.

Figure 59: TB status among PLHIV under care (2018–2022)



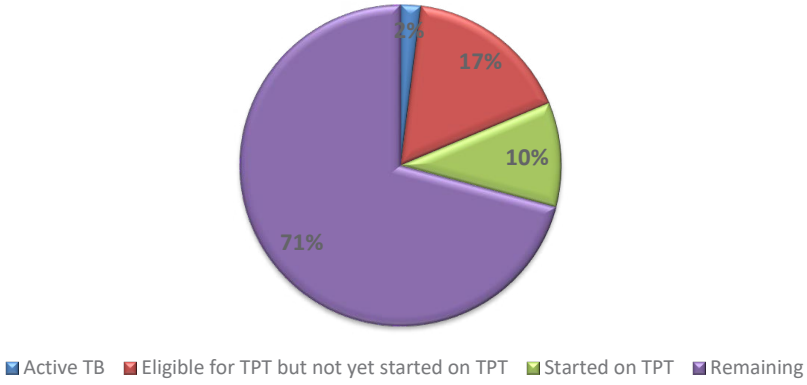
TB preventive treatment (TPT) is a critical component of preventing TB-related morbidity and mortality among PLHIV. According to the WHO guideline, PLHIV without active TB disease should receive TPT as part of a comprehensive package of HIV care.[69] Among the PLHIV screened for TB in 2022, only 2% were found to have active TB disease. Among those who did not have active TB, 27% were found to be eligible for TPT and only 10% started receiving TPT. TPT Shorter regimen was started to provide as pilot project in 2022 and a total of 1,121 PLHIV received the shorter regimen (3HP).

At the subnational level, Yangon and Ayeyarwady were the regions with the highest number of TB screening among PLHIV, followed by Kachin, Mandalay, Mon and Sagaing. Yangon was the region with the highest number of PLHIV who started TPT in 2022. Percentage of TPT initiation was very low in Shan (S) and Magway, with under 10% of PLHIV eligible for TPT who received TPT.

It is important whether consistent criteria are used in all sites for TPT eligibility screening. A detailed and systematic analysis of TPT eligibility screening and provision would likely reveal important factors that hamper the progress in TPT initiation. Surveys related to the effectiveness of the different regions on TPT in different settings should be proposed.

69 WHO consolidated guidelines on tuberculosis: module 1: prevention: tuberculosis preventive treatment https://www.who.int/publications/i/item/9789240001503.

Figure 60: TB and TPT status among PLHIV screed for TB (2022)

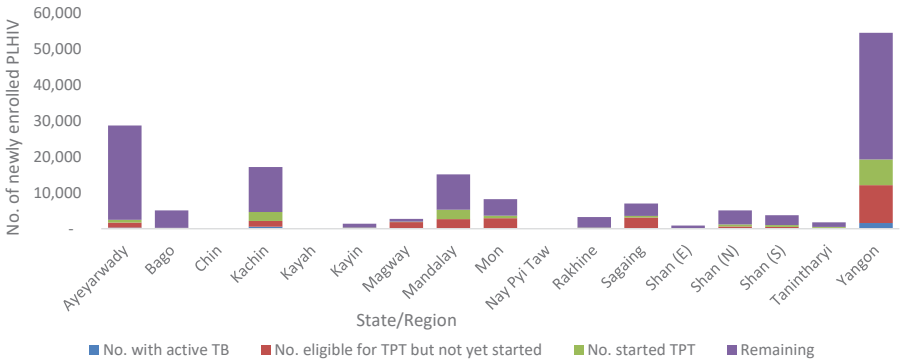


As with other programs, the COVID-19 pandemic and other situations substantially disrupted the continuum of HIV prevention and care in the country, and viral load testing in particular. During this difficult time, all stakeholders made their best efforts to maintain the ART program. As this program is lifesaving for all PLHIV, CBOs, self-help groups and networks play an important role in mitigating service interruption of in-person visits and medical follow-up services, to prevent loss of adherence to treatment.

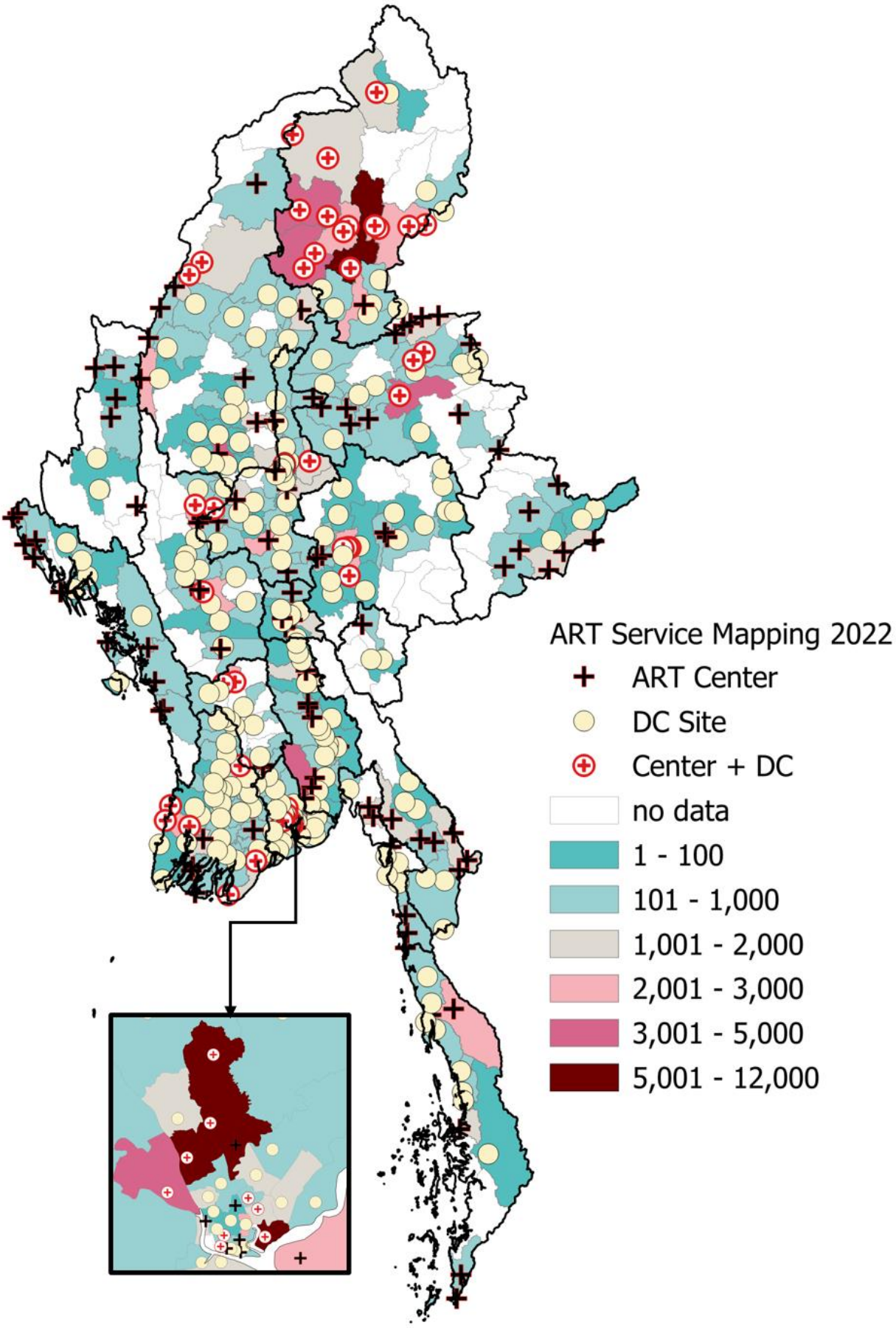
With the collaborative efforts of all stakeholders, it is expected that the ART program will be back on track towards the 95–95–95 targets in the coming years. To achieve that goal, more effort should be made on tracking those lost-to-follow-up, because retention will become more complicated as the ART cohort enlarges. Efforts to increase viral load testing coverage should be a priority to ensure the success of the program. Integration with other programs such as TB and maternal and reproductive health programs should be strengthened again.

It is important to revitalize the national reporting system while guaranteeing data quality. ART retention cohort data should be recollected so the outcome of the program can be assessed. With the growth of the public sector ART cohort, the capacity and readiness of the public sector should be constantly assessed. Together with all stakeholders and partners, innovative service disruption mitigation strategies should be developed to restore routine HIV care and treatment services for new and current ART cohort. Because the ART program demands significant resources, the Government's support on financial and human resources as well as logistics aspects is essential to sustain the current and long-term success of the care and treatment program.

Figure 61: TB and TPT status among PLHIV screened for TB by state/region (2022)



Map 8: ART program coverage by township in 2022



STRATEGIC DIRECTION III: STRENGTHENING MULTISECTORAL INTEGRATION, GENDER AND HUMAN RIGHTS BASED, PEOPLE-CENTRED COMMUNITY AND HEALTH SYSTEMS

3.3 Strengthen the community to be engaged in service delivery, including reducing stigma and discrimination and improving legal and policy frameworks

The majority of the community systems strengthening programs and activities were funded by the Global Fund, PEPFAR and the Access to Health Fund. United Nations agencies and technical agencies provided capacity-building support to networks and community-based organizations (CBO) to advance HIV prevention services and linkages to treatment and care services. NSP IV promotes and supports community-led services and states that 30% of services are aimed to be led by community. With this objective, the following activities focused on building the capacity of community networks as well as supporting community networks and CBOs to increase their engagement in service delivery.

Care and support services by peers: Myanmar Positive Group (MPG) is working in 15 states and regions to provide HIV prevention and care and support services. MPG has provided counselling, defaulter tracing and education on treatment continuation for PLHIV during the COVID-19 pandemic, and 400 counselling sessions were provided in 2021 and 2022. Tele-counselling services have been provided to 120 patients.

Sensitization workshop: Myanmar MSM and TGW Network (MMTN) in collaboration with other key population and PLHIV networks conducted sensitization workshops in six townships for family members of key population to increase their understanding of sexual orientation and gender identity (SOGI) and the barriers that MSM and transgender persons face in their life, including accessing health services. The workshops were well accepted by the community and helped to address the stigma and discrimination that MSM and transgender persons face.

Stigma and discrimination: A virtual session on stigma and discrimination reduction was conducted to raise awareness on HIV-related stigma and discrimination with the participation of 16 persons from three regions. About 32 participants from key populations and PLHIV attended in-person awareness sessions on stigma and discrimination reduction which were conducted in Mandalay.

Improving governance and leadership of networks: The second-generation community leadership program continued its second and third batch of training in 2021 and 2022. The second line leader program was reviewed and revised based on the lessons learned from the first batch of training. A total of 31 persons from key populations and PLHIV were equipped with leadership, project management and other interpersonal skills during the period. The program aims to nurture young people to take up their roles in respective networks and CBOs.

World AIDS Day: Myanmar Positive Group together with community network organized the World AIDS Day campaign on 2nd December. The World AIDS Day theme 'Equalize' was widely disseminated among key populations and PLHIV. Over 200 PLHIV engaged virtually in the campaign and participated in an interactive panel session on the social and legal barriers and challenges to accessing HIV and other health services.

Social support to mitigate social hardship due to the COVID-19 pandemic: In 2021 and 2022, hospitalization support was provided for 30 PLHIV who needed urgent medical support in 15 townships. In addition, cash support was provided to 476 sex workers who were facing financial hardship, 74 sex workers were referred for health care, and shelter support was also provided for those who needed it. MMTN provided financial and food support to 309 children living with HIV, 597 adults living with HIV, and 265 MSM/TGW in 15 townships. Sex Workers in Myanmar Network (SWiM) and Myanmar Positive Women Network (MPWN) provided nutrition support to 50 women, while MPG provided nutrition support to 500 people on ART. Funeral support was also provided to people affected by HIV.

3.4 Improve national and subnational legal and policy environment for protection and promotion of HIV-related services

POLICIES AND FRAMEWORKS

Efforts to strengthen policy and legal-related areas, particularly for key populations, increased in 2020.

Under the leadership of the Ministry of Health, UNAIDS and NAP convened the launch event of the National Strategic Framework on Health and Drugs in the first quarter of 2021. This event was attended by over 100 participants from the Ministry of Health (NAP, DDTRU), other relevant ministries, international and local nongovernmental organizations, community representatives, development partners and United Nations agencies. During the event, participants prioritized the activities for 2021 and 2022 for the operational plan; however, follow-up discussions will be needed for the drafting of the operational plan to begin.

In collaboration with the Ministry of Home Affairs, UNAIDS and UNODC jointly organized a high-level information sharing session on policy options for reducing drug-related prison overcrowding and promoting public health responses to drug use in Myanmar. The purpose of this event was to discuss implementing measures of diversion to treatment and community service, which are provided for in the Narcotic Drugs and Psychotropic Substances (NDPS) Law as well as through consensus; and to discuss a way forward for further engagement on the issue of drug use and incarceration with policy-makers in Myanmar. Many representatives from NAP and DDTRU, CCDAC, Department of Rehabilitation, I/NGOs, United Nations agencies, CBOs and key community participated in the launch event. The presentation on the alternative approaches of the policy brief 'Drugs, prisons and health: global overview' highlighted the need for alternatives to imprisonment and the assessment findings in Myanmar, including two policy options.

Knowledge of policies and the 'Policy paper on alternatives to imprisonment for minor offenses', which was officially shared in 2021, was further strengthened among the harm reduction community. In 2021, two virtual information-sharing sessions on 'Introducing legal/policy changes on alternatives to imprisonment for minor drug offenses' were organized to enhance knowledge among harm reduction partners, CBOs, community networks and self-help groups. The content of the sessions was mainly based on the policy/advocacy brief, which highlights the need to reduce prison overcrowding and promote public health responses to drug use in Myanmar.

ADVOCACY AND CAPACITY-BUILDING

In support of community-led service, under the guidance of National AIDS Programme, several institutional capacity-building initiatives including training, workshop and mentoring sessions were conducted for community networks and CBOs to increase their engagement in prevention and care and support activities. Trainings and workshops were based on the capacity needs and mainly focused on leadership, financial management and project cycle management, and facilitation skills. In addition, there were trainings to increase community knowledge on thematic areas such as harm reduction, human rights and gender and social inclusion.

- **Information sessions on the fact sheet on 'HIV prevention: harm reduction for people who use and inject drugs'**: Two information-sharing/awareness sessions on 'HIV prevention: harm reduction for people who use and inject drugs' were conducted virtually.
- **Information sessions on 'Overdose prevention and management' and 'Reducing the harms related to drug use including ATS'**: Two technical documents were developed through extensive discussion with PWUD/PWID.
- **Training on 'Human rights-based and gender-sensitive approaches to HIV'**: A three-day virtual training on 'Human rights-based and gender-sensitive approaches to HIV' was conducted in 2021 and 2022.
- **Awareness on HIV law**: Seven virtual awareness-raising sessions on 'HIV law' were conducted for self-help group members in six regions, and a total of 248 participants increased their knowledge on the development process and provisions in the law.
- **Training on inclusion of human rights and social protection in HIV programming**: A training workshop on inclusion of human rights and social protection in HIV programming was conducted in 2021 and 2022 with the aim to increase knowledge of social protection and mobilize social protection services.
- **Training of trainers (TOT) on HIV and gender-based violence**: One training curriculum was developed to support knowledge and access to health for the sex worker community. In 2021, two TOT on gender-based violence (GBV) were conducted to train peers of women living with HIV and sex workers so as to provide support on GBV and to raise awareness on GBV at the local level.
- **Legal awareness training**: 291 persons from key populations enhanced their awareness and legal literacy on issues related to key populations. Other support in relation to this included a hotline that received 239 calls and provision of counselling and referral for legal and other health and social services.

COMMUNITY FEEDBACK MECHANISM (CFM)

- The community feedback mechanism (CFM) was implemented in 20 townships across Myanmar. The CFM is implemented by Myanmar Positive Group (MPG), Myanmar Positive Women Network (MPWN), Myanmar MSM and TGW Network (MMTN), Sex Workers in Myanmar Network (SWiM), National Drug Users Network in Myanmar (NDNM), and Myanmar Interfaith Network on AIDS (MINA). In total, 2,000 and 2,496 CFM instances were reported in 2021 and 2022, respectively. About 318 women living with HIV and sex workers reported GBV-related incidents in 2021 through GBV supporters. In 2022, 58% of CFM cases were reported by women.

ACCESS TO LEGAL, FINANCIAL AND SOCIAL SERVICES

- **Legal assistance to key populations members**: A community-based legal assistance and legal aid were provided for key populations.
- **Legal assessment toolkit**: The Assessment Toolkit for Legislation was discussed and developed to evaluate the progress of the drafting, development and approval status of legislation related to key populations, supported by United Nations agencies, NGOs, CBOs and networks. The legal assessment toolkit was developed in consultation with key populations and PLHIV, who have been involved in the development of the HIV law and the law on sex work.

STRATEGIC DIRECTION IV: STRENGTHEN THE USE OF STRATEGIC INFORMATION AND EVIDENCE TO GUIDE SERVICE DELIVERY, MANAGEMENT AND POLICY

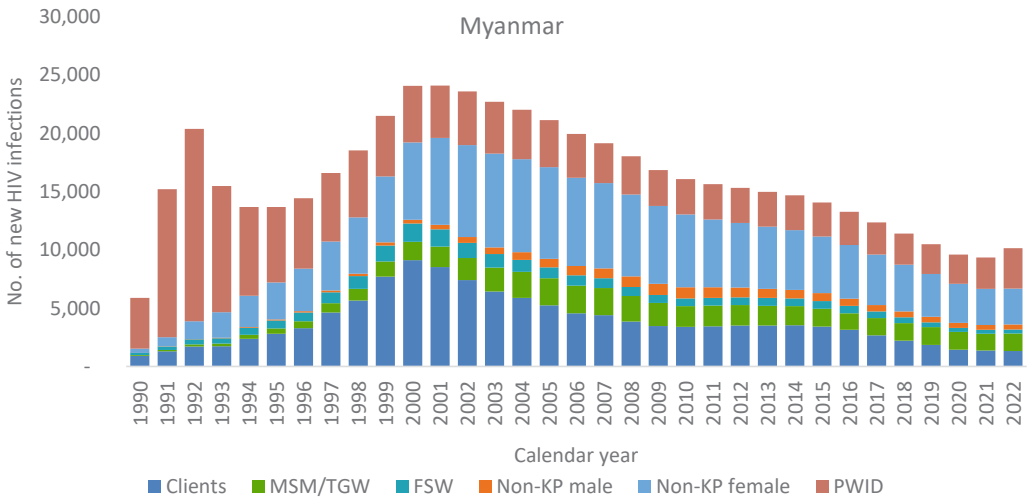
The objective of this strategic direction is to strengthen the capacity for monitoring and evaluation of the national HIV response and generate and promote the use of strategic information and evidence to guide service delivery, management, financial planning and policy development. To achieve the outcomes, the strategic information-related activities were accomplished under the leadership of NAP, in collaboration with the Department of Health Management Information System (HMIS) and involving all stakeholders of the national HIV response.

4.1 Generate and use strategic information to guide service delivery, program management, policy and financing

National HIV surveillance. The HIV sentinel sero-surveillance (HSS) due in 2022 was postponed to 2023 due to unforeseen circumstances. However, the preliminary preparations of updating the standard operating procedure and research tools were initiated in late 2022, reflecting the recommendations from the 2022 HIV epidemiological review.

HIV estimates and projections. The country's HIV estimates were updated using the behaviour and population estimate inputs from 2019 IBBS and 2022 PWID PSE exercises, and the model was finalized in March 2023. The latest program data from 2022 were used to estimate the ART and PMTCT program coverage including viral load coverage. For 2022 HIV estimates, Asian Epidemic Model (AEM) version 5.1 and Spectrum version 6.29 were used.

Figure 62: Annual estimated number of new HIV infections among adults (15+ years) from AEM modelling (1990–2022)



New HIV infections continued to decline at a steady rate from the peak around the year 2000 until 2020. These started increasing in 2021–2022 largely due to the increase in PWID population estimates and declining condom use among MSM/TGW. There were around 10,000 new infections among adults (15+ years) in 2022. As in previous years, PWID still had the largest share of the new HIV infections, with around one third of the total. MSM/TGW contributed 22%, and sex workers and their clients contributed 16%. New HIV infections among PWID increased in recent years while MSM/TGW maintained the level of contribution to new HIV infections. The estimated new HIV infections among all people is around 11,100, and the overall estimated HIV incidence is 0.21 per 1,000 population in 2022. As in adults, the estimated new infections among children increased in 2021–2022 because of decreased PMTCT coverage. The lower and higher bounds of the new HIV infection estimates are quite narrow, at 10,000 and 12,000, respectively. The estimated AIDS deaths continued declining until 2021.

Figure 63: Estimated number of new HIV infections and AIDS deaths from Spectrum modelling (2000–2022)

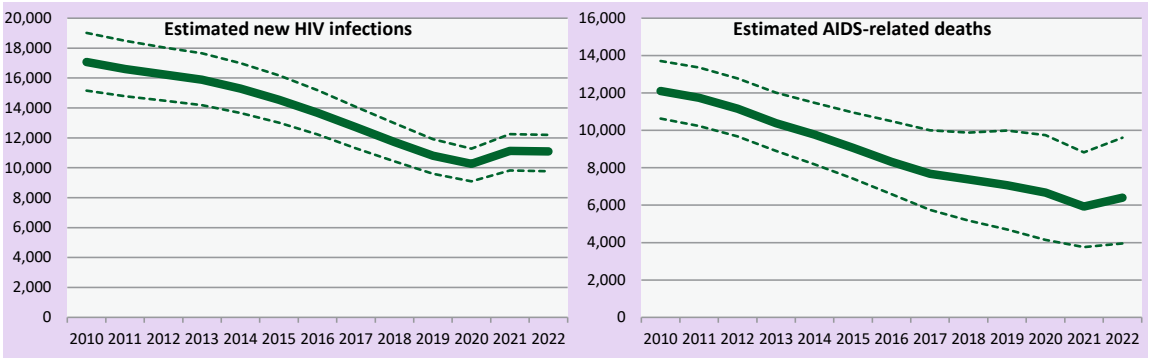
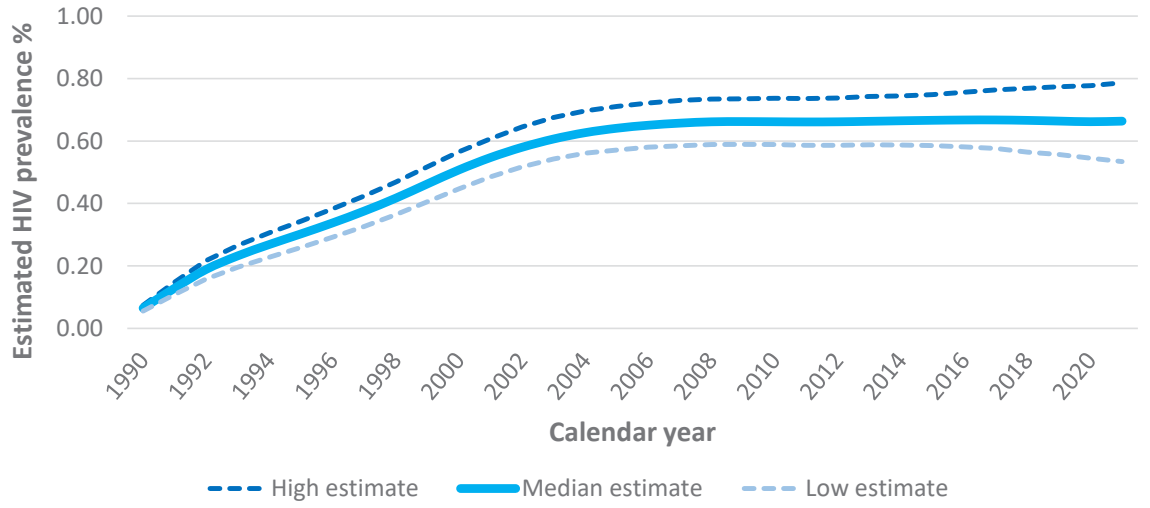


Figure 64: Estimated HIV prevalence among adults (15+ years) from Spectrum modelling (1990–2022)



The Spectrum modelling suggests that the overall estimated number of PLHIV is around 280,000 in 2022 (lower bound 220,000 and upper bound 340,000), comprised of around 270,000 adults (15+ years) and 8,900 children (0–14 years). The HIV prevalence among adults is estimated around 0.66%. The HIV prevalence among adults has been stable over the past decade.

The subnational HIV estimates were obtained from six AEM workbooks, one for each priority state/ region, namely Yangon, Mandalay, Kachin, Shan (N), Sagaing and one for all other states/regions combined. The following table summarizes the main estimate outputs for each state/region.

In terms of new HIV infections, the five priority states and regions contributed up to 80% of the new infections. Yangon was the top contributor with 27%, followed by all remaining states/regions combined. Contribution from Sagaing increased in 2022 with 18%, Kachin contributed 16%, and Shan (N) 13%.

In terms of the number of PLHIV, the remaining regions constituted 30% of all, as regions with the oldest HIV epidemics were included. Yangon contributed 26%, followed by Kachin with 16%. Sagaing contributed 10%, as the HIV epidemic in Sagaing is relatively new. HIV prevalence in Kachin was very high at 3.06%, followed by Yangon and Shan (N) at 1.03% and 1.00%, respectively.

Table 47: HIV epidemic summary 2022

	National	Yangon	Mandalay	Kachin	Shan (N)	Sagaing	Remaining
No. adult population	41,097,805	6,888,885	5,080,228	1,438,482	1,997,179	4,190,805	21,502,226
Contribution %	100%	17%	12%	4%	5%	10%	52%
No. adult PLHIV	272,000	71,000	30,000	44,000	20,000	26,000	81,000
Contribution %	100%	26%	11%	16%	7%	10%	30%
Adult HIV prevalence (%)	0.66	1.03	0.59	3.06	1.00	0.62	0.38
No. new HIV infections – adult	10,100	2,750	550	1,650	1,300	1,850	2,000
Contribution %	100%	27%	5%	16%	13%	18%	20%
No. HIV deaths – adult	7,000	1,600	800	1,300	750	550	2,000
Contribution %	100%	23%	11%	19%	11%	8%	29%

The HIV estimates were used in planning, advocacy and funding requests. The estimates are published globally on the UNAIDS and WHO websites.

Size estimates among PWID. Size estimates for key populations have been conducted regularly at 3–4-year intervals. PWID size estimates were conducted in 2010, 2014 and 2017, and updated again in 2022. Mapping of PWID population was conducted in 12 townships and 2 cities (Yangon city consisted of 34 townships, and Mandalay city consisted of 7 townships). Determinants of PWID population size estimates (PSE) at township level were finalized through discussion workshops with all key stakeholders. A township scoring workshop was conducted, and all 329 townships were scored for each determinant. The final calculation was completed to derive the national PWID PSE using township scoring and coefficients from the previous PSE round. The final validation workshop was conducted in January 2023. The national PWID PSE has been increasing since 2010 (75,000), 2014 (83,000), 2017 (93,000) and 2022 (116,000). The updated PSE became the main input for HIV estimates and projection modelling, and is used in advocacy, planning, resource mobilization and funding proposals.

Epidemiological review. The country's HIV epidemiological review was conducted in late 2022. The review process consisted of a desk review of the existing documents and program and survey reports, surveillance reports, previous review reports, and focus group discussions with various stakeholders, technical support agencies, implementation partners, fund management organizations, the national program and key populations. The main recommendations from this review included the development of a national surveillance plan; implementation of HIV case-based surveillance, HIV mortality surveillance, STI surveillance, and surveillance of HIV drug resistance; further expanding geographical coverage of HSS, especially for PWID sentinel sites; addition of recent HIV infection testing in IBBS; rapid assessment in mobile and migrant populations; and separating TGW from MSM in HSS and IBBS. The findings and recommendations from this review were addressed in the new Global Fund funding proposal (2024–2026).

Progress reports with granular analysis. The national progress report for 2020 was compiled covering the whole NSP III period of 2016–2020 with detailed disaggregated analysis by key populations, gender and geographical areas. The report highlighted the achievements, gaps and challenges encountered in service delivery and program implementation while carrying out the activities laid out in NSP III. A similar report for 2021 was also drafted in 2022. The reports provided fundamental information for the HIV epidemiological and programmatic reviews completed in late 2022.

Strategic Information Technical Working Group. SI TWG meetings were conducted to share the SI-related information and identify and address SI issues among stakeholders. Through this working group, the SI activities set out in NSP IV were reviewed and prioritized again in preparation for the Global Fund funding proposal (2024–2026).

4.2 Improve monitoring and reporting to provide quality data and effectively monitor the implementation of NSP IV and improve performance at all levels

District Health Information (DHIS2). Alongside the concept of a unified digital health information system and the OpenHIE framework in Myanmar, the national District Health Information Software 2 (DHIS2) reporting platform for AIDS, TB and malaria (ATM) was successfully integrated into the national HMIS DHIS2 during 2021. The integration was planned and prepared since 2020, led by the Department of Health Management Information System (HMIS) with the main technical support from HISP India with financing from the Global Fund and further support from in-country technical agencies such as UNAIDS, WHO and UNICEF. The integration was completed in May 2021 when the system reopened to all the HIV implementation partners.

National reporting forms. The updated national reporting forms were released alongside the reopening of the integrated HMIS/ATM DHIS2 platform. The national reporting forms were reviewed and updated to be aligned with the activities under NSP IV. The new reports include further detailed disaggregation by age and sex of the main national indicators to enable capture of a comprehensive response. The new key and priority populations such as TGW and PWUD were also added as separate populations in prevention, HIV testing, condom and STI reports. The HIV testing service report was expanded to cover syphilis and hepatitis B and C testing. A report on community-based screening (CBS) was included as a subset of the total HIV testing.

Further decentralization of the M&E system continued in early 2021. Multiplier trainings on data entry, data analysis and data use were provided at the state/regional level. The objective is to support the data

entry, analysis and use at the subnational level, leading to development of more in-time and adapted interventions at the local level.

OpenMRS. OpenMRS is a pioneering individual case recording tool that has been widely utilized in NAP since its introduction in public sector ART centres at five pilot sites in 2016. The primary objective was to enhance patient management and establish data linkages across the continuum of care. In January 2021 an OpenMRS core team meeting was conducted, and the decision was made to implement centralized data storage for OpenMRS under the guidance of NAP. During the first half of 2021, the majority of ART sites suspended OpenMRS data entry due to severe human resource shortage. Those suspended sites were revitalized during the second half of 2021 through a collaborative effort by partner organizations. OpenMRS Lite was upgraded to match the programmatic requirements of OpenMRS, including all necessary monthly reports. It became interoperable with OpenMRS, but it was designed for use in resource-limited settings because it lacks the detailed clinical information.

In 2022, two OpenMRS core team meetings were conducted to update OpenMRS implementation status and to reorganize the core team from various partner organizations. TOT for core team members was conducted as part of the capacity-building process for both new and existing team members. OpenMRS Lite training to all Global Fund sub-recipients under Save the Children Principal Recipient was also conducted as part of patient data transition under the ART transition plan. There was some additional deployment of OpenMRS to ART sites operated by partner organizations, but OpenMRS data entry was suspended in some ART sites due to operational challenges.

Table 48: Functioning status of OpenMRS

Functional status of OpenMRS	2016	2017	2018	2019	2020	2021	2022
No. of sites using OpenMRS generated reports	-	-	1 (0.3%)	10 (3%)	17 (4%)	17 (5%)	24 (6%)
No. of sites using OpenMRS in data validation phase to generate reports	5 (2%)	12 (3%)	27 (8%)	65 (18%)	81 (21%)	81 (22%)	93 (24%)
No. of sites planned to use (trained and prepared)	-	35 (10%)	67 (19%)	25 (7%)	6 (2%)	6 (2%)	8 (2%)
No. of sites where OpenMRS data entry is suspended due to operational issues	-	-	-	-	-	-	8
Total no. of public ART centres	**272**	**346**	**354**	**370**	**388**	**370**	**383**

Other individual case reporting initiatives. Consistent with the guidance from the Drug Dependency Treatment and Research Unit (DDTRU), the Drug Treatment Information System (DTIS) database has been established and supported by the DTIS core team composed of WHO, UNOPS, UNAIDS, ICAP and CHAI since 2020. DTIS aims to support the digitalization of the M&E system of DDTRU, with a focus on monitoring the progress of individual patient tracking and evaluation of the outcomes of drug treatments. The system is designed to capture and report the multiple types of drug treatment services and stock management conducted by healthcare workers in methadone dispensing sites. It also includes routine investigations such as HIV, hepatitis B and C testing; urine drug testing; as well as vaccination and associated continuity of treatments and referrals. As a preparation step for DTIS expansion and further roll-out of implementation at methadone dispensing sites, 19 training sessions have been conducted for 190 healthcare workers from 51 methadone dispensing sites as of December 2022. DTIS has been used in seven drug treatment centres and expanded to five new sites during the reporting period.

During 2021–2022, the PrEP DHIS2 tracker was upgraded to version 2.37.9. Automated data analysis was embedded to compute the disaggregation of reported data and capture custom indicators. The data verification process with implementing partners was completed. NAP disseminated the findings from the MSM/TGW PrEP demonstration project (2020–2022) in May 2022.

4.4 Conduct research and evaluation and apply funding for programmatic improvement and policy changes

Study initiatives. The second HIV self-testing study was conducted between August and October 2022. This study was part of the HIV self-testing demonstration project as the project endline survey. The studies were organized by HMIS and NAP with technical and coordination support from UNAIDS, PSI and MYS. This study used respondent-driven sampling through an online survey approach. The first study, the baseline study, was conducted in September–October 2020, and both studies were successful in terms of recruitment rate. This approach is cost-effective and allows the participation of more hidden MSM/TGW, and as such this study model is one option for future surveys and surveillance. A separate report on the HIV self-testing demonstration project will be published. The study protocol for the PrEP demonstration project among PWID in Kachin was updated and approval is being sought from the Ethics Committee.

The next round of the stigma index study among PLHIV is planned in 2023. The preparation of protocol development and research tools was initiated in late 2022. This study will be led by MPG and NAP in collaboration with UNAIDS, ICAP, CDC and Global Network of People Living with HIV (GNP+).

STRATEGIC DIRECTION V: PROMOTING ACCOUNTABLE LEADERSHIP FOR THE DELIVERY OF RESULTS AND FINANCING A SUSTAINABLE RESPONSE

The national HIV response is guided by the National Strategic Plan on HIV/AIDS in Myanmar (NSP). The focus of NSP IV is on 1) Reducing new HIV infections; 2) Improving health outcomes for all people living with HIV; 3) Strengthening multisectoral integration, gender and human rights-based, people-centred community and health systems; 4) Strengthening the use of strategic information and evidence to guide management, financing and policy; and 5) Promoting accountable leadership for the delivery of results and financing a sustainable response through advocacy, fundraising and a multisectoral approach in line with universal health coverage. The strategic milestones were set for 95–95–95.

Under the leadership of NAP and the Ministry of Health, the HIV response has been coordinated and implemented in 2023 by various stakeholders including technical partners, implementing partners, networks of key populations and PLHIV, and CBOs to achieve ending AIDS as public health threat. The implementation of NSP IV was supported by various donors including the Global Fund, PEPFAR and Access to Health Fund. At the national level, the HIV response has been coordinated by the Communicable Disease Working Group (CDW) and coordinated technically and strategically by the HIV Technical Strategy Group (TSG). As the domestic contribution, the Government of Myanmar continued its commitment to provide ART commodities and methadone.

In 2022, two external reviews (epidemiological and programmatic) were conducted with site visits to Yangon, Shan (N) and Mandalay. The epidemiological review was conducted in September and October of 2022 to identify achievements and gaps. The subsequent programmatic review was implemented in November and December 2022. The aims of the reviews are to identify implementation progress and bottlenecks and to produce recommendations for the necessary adaptations and changes in implementation that might be required to strengthen the delivery of HIV services and improve operational performance and outcomes. The reviews also looked at the effectiveness, efficiency and sustainability of current implementation and approaches of the thematic areas of prevention, treatment, care and support. The findings and recommendations of the epidemiological and programmatic reviews were validated and incorporated in the Global Fund proposal for the 2024–2026 funding cycle.

The COVID-19 pandemic had negative impacts on HIV services, especially on outreach prevention and HIV testing activities, referrals and client visits to facilities due to movement restrictions. In the context of continuing challenges of COVID-19 new variants, basic COVID-19 prevention measures were properly in place to mitigate the negative impact on HIV services. Mitigation activities such as community awareness, infection control and disinfection measures are budgeted and planned as guided by the contingency plan for HIV prevention, treatment and care in response to COVID-19.

ANNEX

STATE AND REGIONAL FACT SHEETS AND SUMMARY

Sources:

Population – Population and Housing Census of Myanmar, 2014; Thematic Report on Population Projections for the Union of Myanmar, States/Regions, Rural and Urban areas, 2014–2050

Key population estimates – Based on population size estimates among FSW and MSM/TGW and PWID and considering population projections for 2022

Program achievement data – Data from annual progress report 2022 (NAP and implementing partners)

Remark:

All the figures used for key populations reached by prevention programs at the state/regional level are **low-end figures** in an attempt to minimize the possible double counting among organizations working in the same area.

Subnational summary

Among the five priority regions, prevention reach and HIV testing service provision to key populations during 2021–2022 generally increased in Yangon, Mandalay and Shan (N), was maintained in Sagaing, and decreased in Kachin compared to 2020 achievements. Needle and syringe distribution to PWID increased in all priority regions except Shan (N). Methadone maintenance therapy provision increased in Yangon and Shan (N), was maintained in Kachin, and decreased in Mandalay and Sagaing. Yangon is the region with significant increase in prevention and HIV testing to key populations, maintaining provision of ART and STI treatment and PMTCT testing, but failing to identify and provide treatment to HIV-positive pregnant women. Shan (N) also improved in prevention and HIV testing services to FSW and MSM/TGW while struggling to maintain the harm reduction services to PWID. Sagaing generally maintained services to FSW and MSM/TGW but, similar to Shan (N), was trying to maintain the harm reduction services to PWID. Kachin suffered the reduction of all round services in 2021–2022 except ART provision. All the priority states and regions except Yangon experienced moderate to severe disruption of PMTCT services, with Sagaing showing around 90% reduction of PMTCT testing and treatment provision to HIV-positive mothers compared to 2020.

Among other regions, Ayeyarwady, Bago, Kayin, Mon, Rakhine, Shan (S) and Tanintharyi showed an increase in provision of prevention and testing services to key populations. Data from Magway, Nay Pyi Taw and Shan (E) suggested severe setbacks in prevention and testing services to FSW and MSM/TGW, although Nay Pyi Taw and Shan (E) maintained or expanded their harm reduction services to PWID. Chin and Kayah did not provide any prevention services.

Because the PMTCT program provides prevention of mother-to-child transmission of HIV and syphilis services to general population, its services were the most affected by the COVID-19 pandemic and other situations. Countrywide service disruption was observed during 2021–2022 except in Yangon and Rakhine. Despite signs of recovery in PMTCT testing services in a few regions such as Ayeyarwady, Bago and Nay Pyi Taw, severe service disruptions persisted in Chin, Kayah, Tanintharyi, Sagaing and Shan (E). Similarly, syphilis testing was disrupted during 2021–2022.

The HIV care and treatment program basically maintained its services even in times of most serious Covid crisis. Kayah, Nay Pyi Taw and Shan (N) showed a decrease in ART provision in 2021–2022. Since 2020, major service disruption was reported in viral load testing across all states and regions. The viral load testing coverage among ART patients reached to the lowest level in 2021, representing serious disruptions in all states and regions. This service disruption persisted in most states and regions during 2022. PLHIV on ART residing in Chin, Kayah and Shan (E) did not receive viral load testing in 2022. Data from Sagaing flagged an alarming sign of decrease in viral suppression, suggesting a need to review the care and treatment service quality in the region.

All in all, the most-affected states and regions appeared to be Kachin, Sagaing, Magway, Shan (E), Chin and Kayah, where most of the HIV response programs were affected during 2021–2022.

MYANMAR (2022)	
Area	676,577 km^2
Population	54,339,766
No. of townships	329
No. of AIDS/STD teams in R/S	17
No. of AIDS/STD teams in district	74, Function (45)
Key population size estimates	FSW – 77,200 (projection for 2022) MSM/TGW – 136,000 (projection for 2022) PWID – 116,000 (2022 PSE exercise)
Technical and development partners 2022	WHO, UNAIDS, UNOPS, UNICEF, UNODC, USAID, USCDC, ICAP, CPI, CHAI, STC
Implementing organizations in 2022	AHRN, Alliance, DDTRU, MAM, MANA, MdM, MPG, MSF-CH, MSF-Holland, MSI, NAP, UNION, PGK, PSI, PUI, SARA, key-population networks and community-based organizations

Coverage

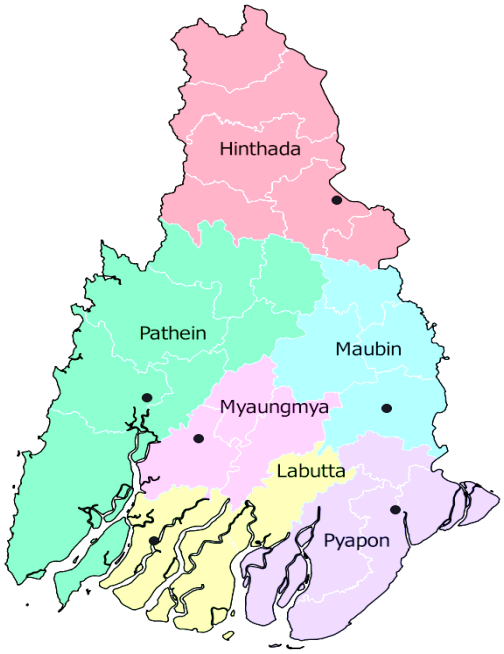
HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	Female sex workers	65,619[70]	47% ↑
		Clients of FSW reached with HIV prevention program	17,528	68% ↑
		Female sex workers tested for HIV and knew the result	68,259	40% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	94,012[71]	64% ↑
		MSM/TGW tested for HIV and knew the result	100,538	60% ↑
3	People who inject drugs	PWID reached with HIV prevention program	57,646[72]	6% ↑
		PWID tested for HIV and knew the result	55,498	5% ↑
		PWID receiving methadone maintenance therapy	25,866	1% ↓
		Number of sterile needle/syringes distributed	37.5m	10% ↑
4	Sexually transmitted infections	Total number of people treated for STI	24,899	17% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	569,709	37% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	1,954	51% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	210,000	5% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	96%	-
		New and relapse TB patients on ART during TB treatment	4,502	19% ↓
		% PLHIV on ART who initiated TPT among those eligible	38%	

70 Number of key populations reached by prevention adjusted for (1) duplications of FSW reached among different organizations in one township; (2) adjusted for duplication between outreach and drop-in centres.

71 Same as above.

72 Same as above.

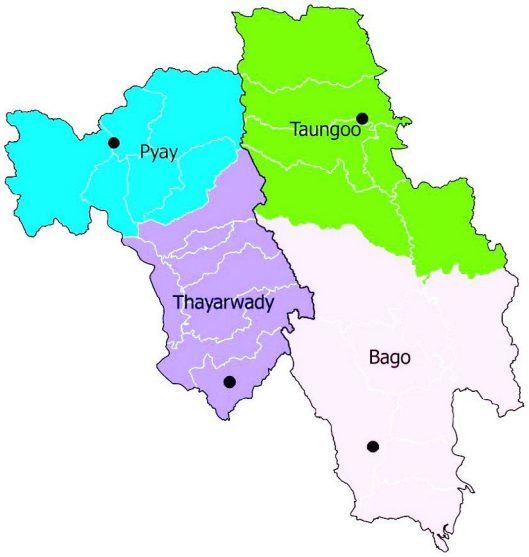
AYEYARWADY REGION (2022)	
Area	35,041 km^2
Population	6,272,891
No. of townships	26
No. of AIDS/STD teams in district	6
No. of HIV sentinel sites (2020)	ANC (4), Male STD (4), FSW (4), MSM/TGW (4), TB (4)
Key population size estimates	FSW – 6,350 (projection) MSM/TGW – 15,550 (projection) PWID – 2,800 (2022 PSE exercise)
Organizations working in state/region	MPG, MSI, NAP, PGK, PSI



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	6,437 3,507	95% ↑ 120% ↑
		FSW tested for HIV and knew the result	7,052	50% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	6,724	62% ↑
		MSM/TGW tested for HIV and knew the result	7,855	25% ↑
3	People who inject drugs	PWID reached with HIV prevention program	-	-
		PWID tested for HIV and knew the result	30	51% ↓
		PWID receiving methadone maintenance therapy	-	-
		Number of sterile needle/syringes distributed	-	-
4	Sexually transmitted infections	Total number of people treated for STI	4,489	239% ↑
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	102,411	14% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	231	36% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	13,095	13% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	96%	1% ↑
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	35%	

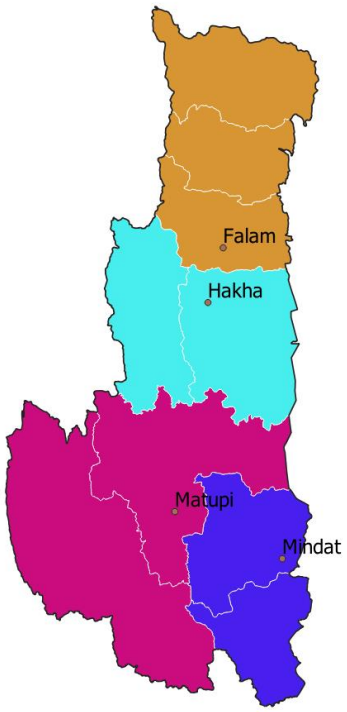
BAGO REGION (2022)	
Area	39,412 km^2
Population	4,939,461
No. of townships	28
No. of AIDS/STD teams in district	4
No. of HIV sentinel sites (2020)	ANC (3), Male STD (3), TB (3), FSW (3), MSM/TGW (3)
Key population size estimates (projection for 2022)	FSW – 6,500 (projection) MSM/TGW – 12,000 (projection) PWID – 1,600 (2022 PSE exercise)
Organizations working in state/region	MPG, MSI, NAP, PSI



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program. Clients of FSW reached with HIV prevention program	5,565 355	179% ↑ 75% ↑
		FSW tested for HIV and knew the result	4,814	86% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	8,537	203% ↑
		MSM/TGW tested for HIV and knew the result	9,562	171% ↑
3	People who inject drugs	PWID reached with HIV prevention program	-	-
		PWID tested for HIV and knew the result	1	-
		PWID receiving methadone maintenance therapy	-	-
		Number of sterile needle/syringes distributed	-	-
4	Sexually transmitted infections	Total number of people treated for STI	799	52% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	66,480	22% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	118	43% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	11,883	17% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	96%	2% ↑
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	88%	

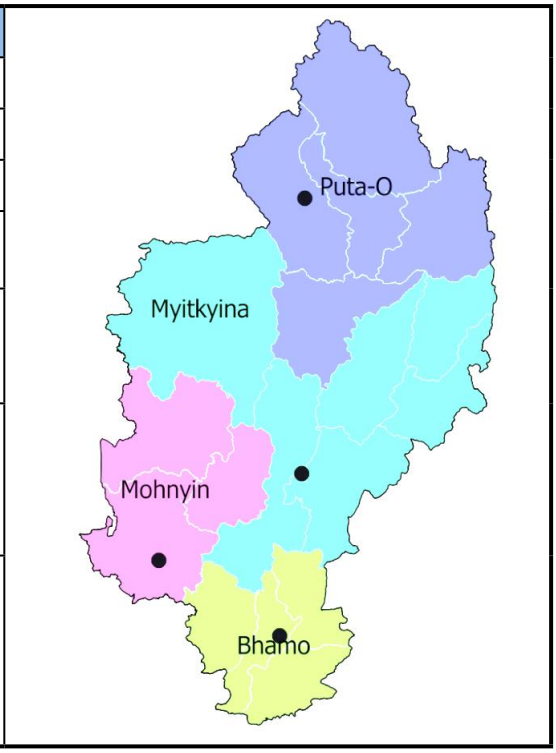
CHIN STATE (2022)	
Area	36,028 km^2
Population	519,535
No. of townships	9
No. of AIDS/STD teams in district	3
No. of HIV sentinel sites (2020)	ANC (1), Male STD (1), TB (1)
Key population size estimates (projection for 2022)	FSW – 650 (projection) MSM/TGW – 1,200 (projection) PWID – 560 (2022 PSE exercise)
Organizations working in state/region	MPG, NAP, PSI



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	-	
		FSW tested for HIV and knew the result	-	
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	-	
		MSM/TGW tested for HIV and knew the result	-	
3	People who inject drugs	PWID reached with HIV prevention program	-	
		PWID tested for HIV and knew the result	-	
		PWID receiving methadone maintenance therapy	-	
		Number of sterile needle/syringes distributed	-	
4	Sexually transmitted infections	Total number of people treated for STI	-	
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	4,152	69% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	7	73% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	472	7% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	-	-
		New and relapse TB patients on ART during TB treatment	-	-
		% PLHIV on ART who initiated TPT among those eligible	-	-

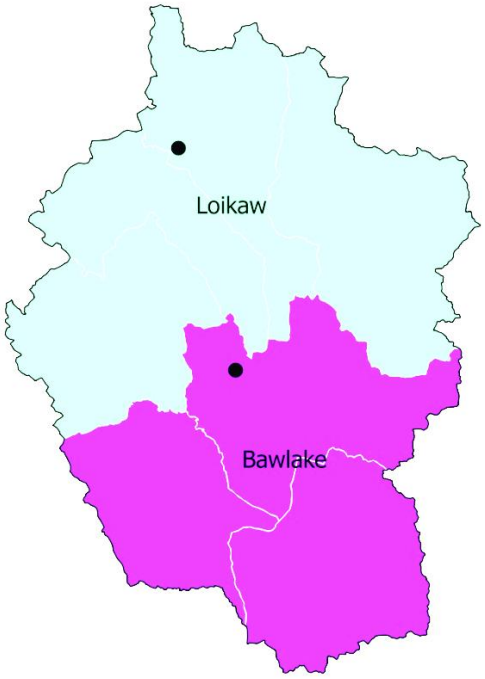
KACHIN STATE (2022)	
Area	89,071 km^2
Population	1,898,678
No. of townships	18
No. of AIDS/STD teams in district	4
No. of HIV sentinel sites (2020)	ANC (2), PWID (2), Male STD (2), TB (2), FSW (2), MSM/TGW (2)
Key population size estimates (projection for 2022)	FSW – 5,130 (projection) MSM/TGW – 10,100 (projection) PWID – 23,400 (2022 PSE exercise)
Organizations working in state/region	AHRN, DDTRU, MAM, MdM, MPG, MSF-Holland, NAP, PSI, SARA



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program	3,353	13% ↓
		Clients of FSW reached with HIV prevention program	259	37% ↓
		FSW tested for HIV and knew the result	3,477	25% ↓
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	2,055	37% ↓
		MSM/TGW tested for HIV and knew the result	2,473	38% ↓
3	People who inject drugs	PWID reached with HIV prevention program	26,323	33% ↑
		PWID tested for HIV and knew the result	16,859	7% ↓
		PWID receiving methadone maintenance therapy	12,136	4% ↑
		Number of sterile needle/syringes distributed	21.2m	22% ↑
4	Sexually transmitted infections	Total number of people treated for STI	1,233	66% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	21,193	45% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	278	47% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	32,338	6% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	95%	-
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	60%	

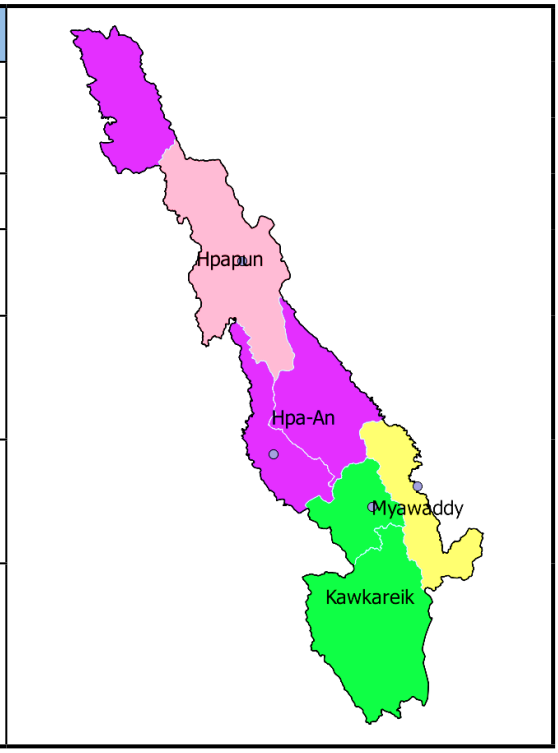
KAYAH STATE (2022)	
Area	11,734 km^2
Population	323,573
No. of townships	7
No. of AIDS/STD teams in district	2
No. of HIV sentinel sites (2020)	ANC (1), Male STD (1), TB (1)
Key population size estimates (projection for 2022)	FSW – 520 (projection) MSM/TGW – 700 (projection) PWID – 90 (2022 PSE exercise)
Organizations working in state/region	MPG, NAP



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2021
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	131 -	- -
		FSW tested for HIV and knew the result	-	-
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	263	-
		MSM/TGW tested for HIV and knew the result	-	-
3	People who inject drugs	PWID reached with HIV prevention program	-	-
		PWID tested for HIV and knew the result	-	-
		PWID receiving methadone maintenance therapy	-	-
		Number of sterile needle/syringes distributed	-	-
4	Sexually transmitted infections	Total number of people treated for STI	181	71% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	1,117	83% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	1	92% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	365	19% ↓
		% PLHIV on ART achieved viral load suppression among those tested for ART	-	-
		New and relapse TB patients on ART during TB treatment	-	-
		% PLHIV on ART who initiated TPT among those eligible	-	-

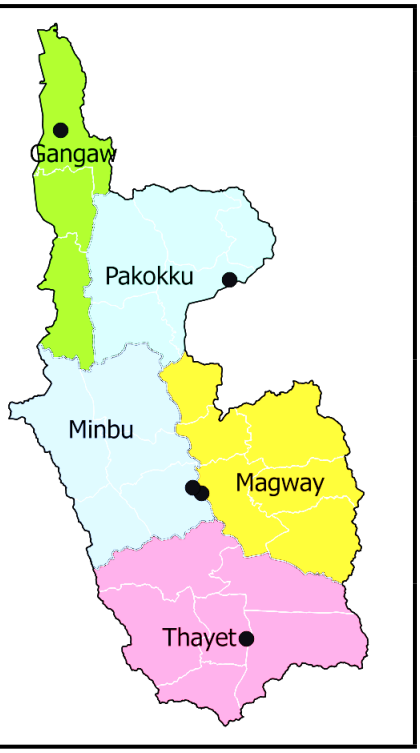
KAYIN STATE (2022)	
Area	30,390 km^2
Population	1,609,890
No. of townships	7
No. of AIDS/STD teams in district	4
No. of HIV sentinel sites (2020)	ANC (2), Male STD (2), TB (2), FSW (2), MSM/TGW (2)
Key population size estimates (projection for 2022)	FSW – 2,800 (projection) MSM/TGW – 4,050 (projection) PWID – 430 (2022 PSE exercise)
Organizations working in state/region	IOM, MAM, MPG, NAP, PGK, PSI



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2021
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	1,932 262	159% ↑ 3% ↓
		FSW tested for HIV and knew the result	1,916	52% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	1,701	170% ↑
		MSM/TGW tested for HIV and knew the result	1,649	71% ↑
3	People who inject drugs	PWID reached with HIV prevention program	-	-
		PWID tested for HIV and knew the result	-	-
		PWID receiving methadone maintenance therapy	-	-
		Number of sterile needle/syringes distributed	-	-
4	Sexually transmitted infections	Total number of people treated for STI	181	71% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	15,511	55% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	26	64% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	3,228	9% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	96%	3% ↑
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	45%	

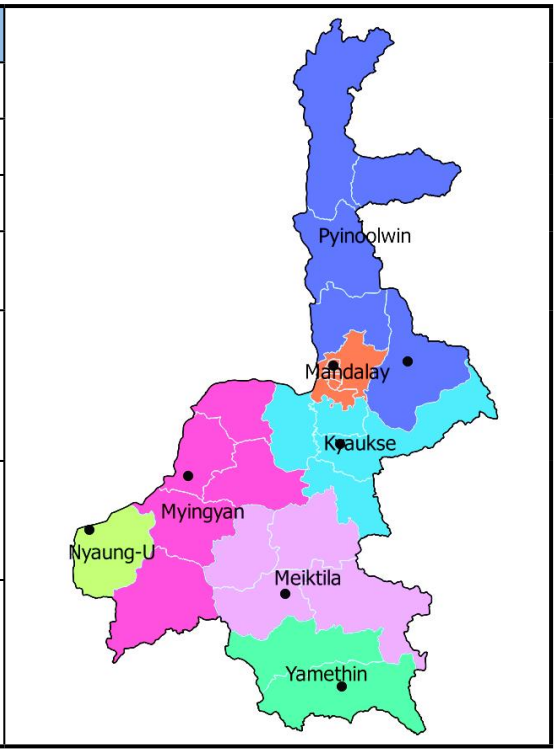
MAGWAY REGION (2022)	
Area	44,832 km^2
Population	3,935,764
No. of townships	25
No. of AIDS/STD teams in district	5
No. of HIV sentinel sites (2020)	ANC (2), FSW (2), Male STD (2), MSM/TGW (2), TB (2)
Key population size estimates (projection for 2022)	FSW – 3,120 (projection) MSM/TGW – 5,350 (projection) PWID – 2,350 (2022 PSE exercise)
Organizations working in state/region	MPG, MSI, NAP, UNION, PGK, PSI



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	927 453	66% ↓ 60% ↑
		FSW tested for HIV and knew the result	649	71% ↓
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	1,928	38% ↓
		MSM/TGW tested for HIV and knew the result	1,810	45% ↓
3	People who inject drugs	PWID reached with HIV prevention program	1	-
		PWID tested for HIV and knew the result	2	-
		PWID receiving methadone maintenance therapy	-	-
		Number of sterile needle/syringes distributed	-	-
4	Sexually transmitted infections	Total number of people treated for STI	470	38% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	26,616	58% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	63	63% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	7,540	4% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	96%	-
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	5%	

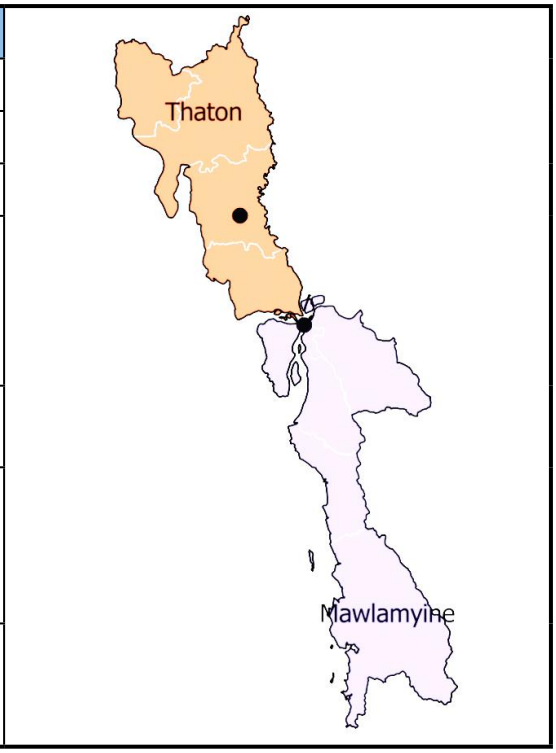
MANDALAY REGION (2022)	
Area	37,955 km^2
Population	6,507,334
No. of townships	28
No. of AIDS/STD teams in district	7
No. of HIV sentinel sites (2020)	ANC (5), Male STD (5), PWID (2), FSW (5), MSM/TGW (5), TB (5)
Key population size estimates (projection for 2022)	FSW – 11,150 (projection) MSM/TGW – 15,700 (projection) PWID – 17,100 (2022 PSE exercise)
Organizations working in state/region	Alliance, DDTRU, MANA, MPG, MSI, NAP, UNION, PSI



Coverage

HIV response program		Indicator	Achieved 2021	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	14,032 1,590	105% ↑ 25% ↓
		FSW tested for HIV and knew the result	16,275	95% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	21,166	113% ↑
		MSM/TGW tested for HIV and knew the result	25,729	98% ↑
3	People who inject drugs	PWID reached with HIV prevention program	3,549	15% ↓
		PWID tested for HIV and knew the result	6,992	49% ↑
		PWID receiving methadone maintenance therapy	2,021	13% ↓
		Number of sterile needle/syringes distributed	2m	15% ↑
4	Sexually transmitted infections	Total number of people treated for STI	2,819	37% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	57,813	42% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	225	42% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	24,968	2% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	96%	-
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	51%	

MON STATE (2022)	
Area	12,299 km^2
Population	1,989,717
No. of townships	10
No. of AIDS/STD teams in district	2
No. of HIV sentinel sites (2020)	ANC (1), Male STD (1), TB (1)
Key population size estimates (projection for 2022)	FSW – 3,400 (projection) MSM/TGW – 6,250 (projection) PWID – 560 (2022 PSE exercise)
Organizations working in state/region	Alliance, IOM, MAM, MPG, MSI, NAP, PGK, PSI



Coverage

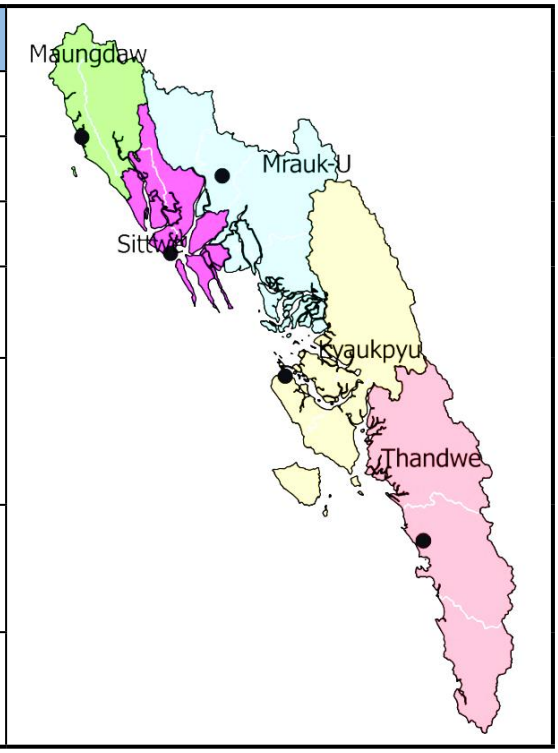
HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program	4,262	57% ↑
		Clients of FSW reached with HIV prevention program	1,278	393% ↑
		FSW tested for HIV and knew the result	4,205	52% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	5,026	60% ↑
		MSM/TGW tested for HIV and knew the result	6,069	85% ↑
3	People who inject drugs	PWID reached with HIV prevention program	-	-
		PWID tested for HIV and knew the result	1	-
		PWID receiving methadone maintenance therapy	-	-
		Number of sterile needle/syringes distributed	-	-
4	Sexually transmitted infections	Total number of people treated for STI	576	33% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	30,643	23% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	109	22% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	8,117	13% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	94%	2% ↓
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	19%	

NAY PYI TAW UNION TERRITORY (2022)	
Area	7,054 km^2
Population	1,279,571
No. of townships	8
No. of AIDS/STD teams in district	2
No. of HIV sentinel sites (2020)	ANC (1), Male STD (1), TB (1), FSW (1), MSM/TGW (1)
Key population size estimates (projection for 2022)	FSW – 1,040 (projection) MSM/TGW – 1,950 (projection) PWID – 560 (2022 PSE exercise)
Organizations working in state/region	DDTRU, MPG, NAP, PSI

Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	182 50	59% ↓ 88% ↓
		FSW tested for HIV and knew the result	387	37% ↓
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	161	70% ↓
		MSM/TGW tested for HIV and knew the result	146	81% ↓
3	People who inject drugs	PWID reached with HIV prevention program	-	-
		PWID tested for HIV and knew the result	75	60% ↑
		PWID receiving methadone maintenance therapy	84	83% ↑
		Number of sterile needle/syringes distributed	-	-
4	Sexually transmitted infections	Total number of people treated for STI	42	-
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	18,754	12% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	76	57% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	3,744	5% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	93%	6% ↑
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	75%	

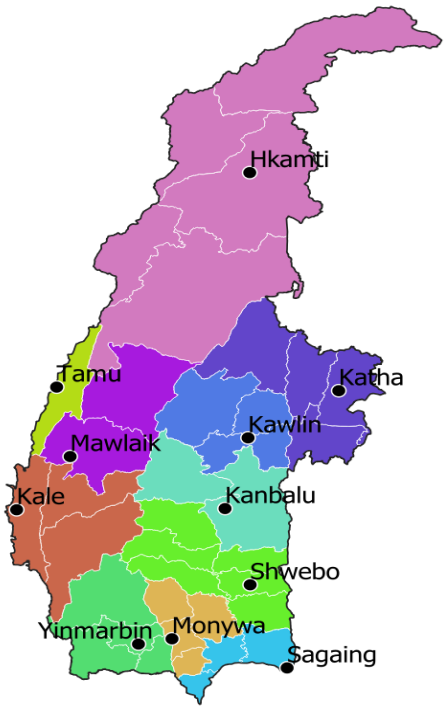
RAKHINE STATE (2022)	
Area	36,787 km^2
Population	3,333,435
No. of townships	17
No. of AIDS/STD teams in district	5
No. of HIV sentinel sites (2020)	ANC (1), FSW (1), Male STD (1), MSM/TGW (1), TB (1)
Key population size estimates (projection for 2022)	FSW – 1,680 (projection) MSM/TGW – 2,550 (projection) PWID – 1,350 (2022 PSE exercise)
Organizations working in state/region	MPG, NAP



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	1,189 532	61% ↑ 27% ↑
		FSW tested for HIV and knew the result	433	133% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	1,720	113% ↑
		MSM/TGW tested for HIV and knew the result	640	158% ↑
3	People who inject drugs	PWID reached with HIV prevention program	26	-
		PWID tested for HIV and knew the result	2	-
		PWID receiving methadone maintenance therapy	-	-
		Number of sterile needle/syringes distributed	-	-
4	Sexually transmitted infections	Total number of people treated for STI	136	87% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	50,083	1% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	57	24% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	3,339	27% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	92%	1% ↓
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	100%	

SAGAING REGION (2022)	
Area	93,727 km^2
Population	5,570,006
No. of townships	37
No. of AIDS/STD teams in district	10
No. of HIV sentinel sites (2020)	ANC (3), Male STD (3), MSM/TGW (3), TB (3), FSW (3), PWID (2)
Key population size estimates (projection for 2022)	FSW – 7,150 (projection) MSM/TGW – 13,700 (projection) PWID – 26,700 (2022 PSE exercise)
Organizations working in state/region	AHRN, Alliance, DDTRU, MANA, MPG, MSI, NAP, UNION, PGK, PSI, SARA



Coverage

HIV response program		Indicator	Achieved 2021	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	2,474 287	2% ↑ 2% ↓
		FSW tested for HIV and knew the result	1,633	33% ↓
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	5,695	4% ↑
		MSM/TGW tested for HIV and knew the result	5,080	5% ↓
3	People who inject drugs	PWID reached with HIV prevention program	13,601	25% ↑
		PWID tested for HIV and knew the result	11,823	11% ↓
		PWID receiving methadone maintenance therapy	7,241	12% ↓
		Number of sterile needle/syringes distributed	6.6m	26% ↑
4	Sexually transmitted infections	Total number of people treated for STI	573	50% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	8,454	92% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	41	89% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	17,854	5% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	86%	9% ↓
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	13%	

SHAN STATE – EAST (2022)	
Area	41,489 km^2
Population	983,914
No. of townships	9
No. of AIDS/STD teams in district	3 (Kyaing Tong, Tachileik, Monghsat)
No. of HIV sentinel sites (2020)	ANC (2), Male STD (2), PWID (1), MSM/TGW (2), TB (2), FSW (2)
Key population size estimates (projection for 2022)	FSW – 2,700 (projection) MSM/TGW – 1,700 (projection) PWID – 2,270 (2022 PSE exercise)
Organizations working in state/region	DDTRU, MANA, MPG, NAP, PSI

Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	375 255	64% ↓ 54% ↓
		FSW tested for HIV and knew the result	705	52% ↓
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	79	82% ↓
		MSM/TGW tested for HIV and knew the result	126	82% ↓
3	People who inject drugs	PWID reached with HIV prevention program	554	27% ↓
		PWID tested for HIV and knew the result	982	152% ↑
		PWID receiving methadone maintenance therapy	302	30% ↑
		Number of sterile needle/syringes distributed	0.3m	18% ↑
4	Sexually transmitted infections	Total number of people treated for STI	34	81% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	7,477	45% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	18	76% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	2,352	7% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	-	-
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	7%	

SHAN STATE – NORTH (2022)	
Area	58,255 km^2
Population	2,760,792
No. of townships	22
No. of AIDS/STD teams in district	7
No. of HIV sentinel sites (2020)	ANC (2), Male STD (2), PWID (2), MSM/TGW (2), FSW (2), TB (2)
Key population size estimates (projection for 2022)	FSW – 5,370 (projection) MSM/TGW – 6,300 (projection) PWID – 26,400 (2022 PSE exercise)
Organizations working in state/region	AHRN, DDTRU, MANA, MPG, MSF-Holland, NAP, UNION, PSI

Coverage

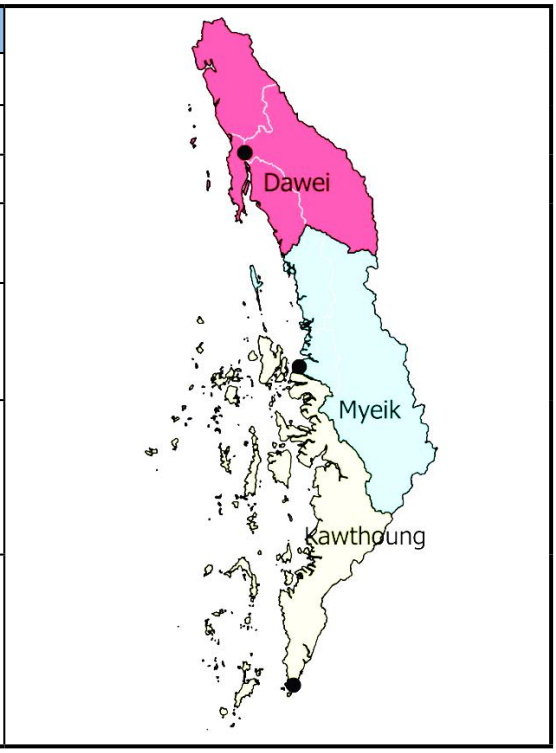
HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	FSW reached with HIV prevention program Clients of FSW reached with HIV prevention program	3,491 276	336% ↑ 43% ↑
		FSW tested for HIV and knew the result	3,101	106% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	2,110	58% ↑
		MSM/TGW tested for HIV and knew the result	2,029	106% ↑
3	People who inject drugs	PWID reached with HIV prevention program	12,028	31% ↓
		PWID tested for HIV and knew the result	16,533	9% ↑
		PWID receiving methadone maintenance therapy	3,118	14% ↑
		Number of sterile needle/syringes distributed	6.8m	23% ↓
4	Sexually transmitted infections	Total number of people treated for STI	1,128	8% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	20,168	52% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	91	58% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	8,910	9% ↓
		% PLHIV on ART achieved viral load suppression among those tested for ART	94%	-
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	54%	

SHAN STATE – SOUTH (2022)	
Area	55,242 km^2
Population	2,635,610
No. of townships	21
No. of AIDS/STD teams in district	3
No. of HIV sentinel sites (2020)	ANC (1), Male STD (1), PWID (1), MSM/TGW (1), FSW (1), TB (1)
Key population size estimates (projection for 2022)	FSW – 3,100 (projection) MSM/TGW – 4,950 (projection) PWID – 4,500 (2022 PSE exercise)
Organizations working in state/region	MANA, MPG, NAP, UNION, PGK, PSI

Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	Female sex workers Clients of FSW reached with HIV prevention program	2,174 1,965	6% ↓ 789% ↑
		Female sex workers tested for HIV and knew the result	2,170	49% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	2,193	25% ↑
		MSM/TGW tested for HIV and knew the result	2,192	47% ↑
3	People who inject drugs	PWID reached with HIV prevention program	592	43% ↓
		PWID tested for HIV and knew the result	784	53% ↑
		PWID receiving methadone maintenance therapy	-	-
		Number of sterile needle/syringes distributed	0.3m	35% ↓
4	Sexually transmitted infections	Total number of people treated for STI	284	3% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	30,550	36% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	33	64% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	4,066	4% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	96%	1% ↓
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	53%	

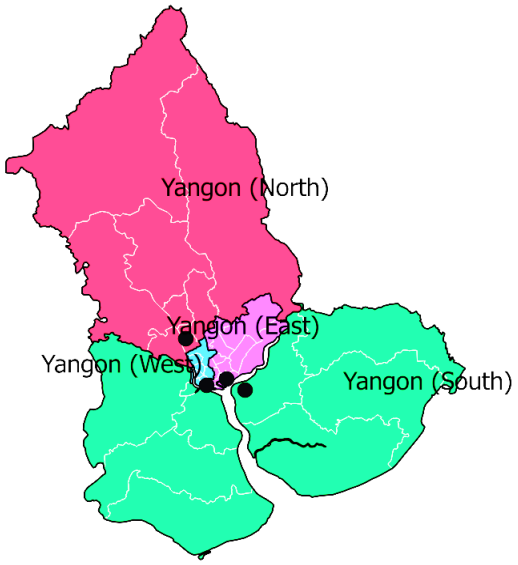
TANINTHARYI REGION (2022)	
Area	43,356 km^2
Population	1,485,488
No. of townships	10
No. of AIDS/STD teams in district	3
No. of HIV sentinel sites (2020)	ANC (3), Male STD (2), TB (3), MSM/ TGW (3), FSW (3)
Key population size estimates (projection for 2022)	FSW – 2,870 (projection) MSM/TGW – 4,350 (projection) PWID – 930 (2022 PSE exercise)
Organizations working in state/region	Alliance, MPG, MSF-CH, NAP, PGK, PSI



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	Female sex workers Clients of FSW reached with HIV prevention program	2,160 1,288	26% ↑ 244% ↑
		Female sex workers tested for HIV and knew the result	1,973	11% ↓
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	3,386	28% ↑
		MSM/TGW tested for HIV and knew the result	3,304	1% ↑
3	People who inject drugs	PWID reached with HIV prevention program	2	-
		PWID tested for HIV and knew the result	2	-
		PWID receiving methadone maintenance therapy	-	-
		Number of sterile needle/syringes distributed	-	-
4	Sexually transmitted infections	Total number of people treated for STI	231	77% ↓
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	7,418	75% ↓
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	56	56% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	6,264	2% ↓
		% PLHIV on ART achieved viral load suppression among those tested for ART	95%	1% ↓
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	60%	

YANGON REGION (2022)	
Area	10,279 km^2
Population	8,294,107
No. of townships	45
No. of AIDS/STD teams in district	4
No. of HIV sentinel sites (2020)	ANC (1), Male STD (1), PWID (1), FSW (1), MSM/TGW (1), TB (1)
Key population size estimates (projection for 2022)	FSW – 13,700 (projection) MSM/TGW – 29,600 (projection) PWID – 4,470 (2022 PSE exercise)
Organizations working in state/region	Alliance, DDTRU, MAM, MdM, MPG, MSF-Holland, NAP, UNION, PSI, PUI



Coverage

HIV response program		Indicator	Achieved 2022	Improvement/ reduction from 2020
1	Sex workers/clients of SW	Female sex workers Clients of FSW reached with HIV prevention program	16,935 5,171	31% ↑ 118% ↑
		Female sex workers tested for HIV and knew the result	19,469	60% ↑
2	Men who have sex with men/ Transgender women	MSM/TGW reached with HIV prevention program	31,268	83% ↑
		MSM/TGW tested for HIV and knew the result	31,874	103% ↑
3	People who inject drugs	PWID reached with HIV prevention program	970	488% ↑
		PWID tested for HIV and knew the result	1,412	162% ↑
		PWID receiving methadone maintenance therapy	964	28% ↑
		Number of sterile needle/syringes distributed	0.2m	414% ↑
4	Sexually transmitted infections	Total number of people treated for STI	11,904	2% ↑
5	Elimination of mother-to-child transmission of HIV	Pregnant women attending ANC received HIV testing	100,869	6% ↑
		HIV-positive pregnant women received antiretrovirals to reduce the risk of mother-to-child transmission	524	41% ↓
6	Comprehensive care, support and treatment	People living with HIV receiving ART	61,465	5% ↑
		% PLHIV on ART achieved viral load suppression among those tested for ART	97%	-
		New and relapse TB patients on ART during TB treatment		
		% PLHIV on ART who initiated TPT among those eligible	40%	

Township-level HIV response data for high-priority townships in NSP IV

Ayeyarwady (6 townships)

	Bogale	Hinthada	Maubin	Myaungmya	Pathein	Pyapon
FSW reached	133	717	676	648	4699	625
FSW tested and knew the result	31	718	617	725	4259	620
MSM/TGW reached	197	600	721	620	5143	580
MSM/TGW tested and knew the result	48	549	657	637	5238	597
PWID reached	-	-	-	-	-	-
PWID tested and knew the result	-	-	-	7	7	10
PWID receiving MMT	-	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	-	-
Pregnant women received HIV testing	3601	4713	4926	5625	7261	5418
HIV-positive PW received antiretrovirals	12	30	15	8	44	18
PLHIV receiving ART	666	1709	991	1169	2960	1084
% PLHIV on ART achieved viral load suppression among those tested for ART	-	96%	96%	-	97%	95%
% PLHIV on ART who initiated TPT among those eligible	4%	99%	3%	65%	100%	24%

Bago (7 townships)

	Bago	Kyauktaga	Phyu	Pyay	Shwegyin	Taungoo	Thayawady
FSW reached	3285	-	115	1815	-	1003	89
FSW tested and knew the result	2701	-	83	1173	-	818	-
MSM/TGW reached	5963	-	260	2260	-	1791	66
MSM/TGW tested and knew the result	5750	-	12	2001	-	1767	-
PWID reached	-	-	-	-	-	-	-
PWID tested and knew the result	-	-	-	-	-	-	-
PWID receiving MMT	-	-	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	-	-	-
Pregnant women received HIV testing	7859	2986	3117	2582	1420	4221	1508
HIV-positive PW received antiretrovirals	29	5	2	11	2	0	1
PLHIV receiving ART	3703	293	478	2481	53	1494	812
% PLHIV on ART achieved viral load suppression among those tested for ART	96%	-	-	96%	-	97%	-
% PLHIV on ART who initiated TPT among those eligible	100%	-	-	-	-	79%	-

Chin (1 township), Kayah (1 township), Kayin (3 townships)

	Tedim	Loikaw	Hpa-an	Kyainseikgyi	Myawaddy
FSW reached	-	131	995	-	932
FSW tested and knew the result	-	-	1048	-	859
MSM/TGW reached	-	263	1342	5	337
MSM/TGW tested and knew the result	-	-	1378	5	241
PWID reached	-	-	-	-	-
PWID tested and knew the result	-	-	-	-	-
PWID receiving MMT	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	-
Pregnant women received HIV testing	488	792	4939	2991	1709
HIV-positive PW received antiretrovirals	-	1	8	8	7
PLHIV receiving ART	155	348	1325	131	1560
% PLHIV on ART achieved viral load suppression among those tested for ART	-	-	-	-	96%
% PLHIV on ART who initiated TPT among those eligible	-	-	36%	-	72%

Kachin (15 townships)

	Bhamo	Chipwi	Hpakant	Machanbaw	Mansi	Mogaung	Mohnyin
FSW reached	399	25	1061	-	-	713	646
FSW tested and knew the result	373	21	699	-	-	669	486
MSM/TGW reached	217	-	-	-	-	607	485
MSM/TGW tested and knew the result	235	-	3	-	-	536	446
PWID reached	2384	471	9172	-	965	3549	6543
PWID tested and knew the result	1460	214	3880	-	419	1492	2125
PWID receiving MMT	564	54	2634	-	97	1260	2182
Number of sterile NS distributed	1127500	264990	7080337	-	295470	2859219	2764315
Pregnant women received HIV testing	2489	269	1240	208	1004	2588	2358
HIV-positive PW received antiretrovirals	37	7	10	-	11	24	17
PLHIV receiving ART	2761	532	4423	44	168	2671	3627
% PLHIV on ART achieved viral load suppression among those tested for ART	82%	87%	90%	-	-	94%	93%
% PLHIV on ART who initiated TPT among those eligible	28%	-	73%	-	-	100%	92%

	Momauk	Myitkyina	Puta-O	Shwegu	Sumprabum	Tanai	Tsawlaw	Waingmaw
FSW reached	-	507	1	-	-	-	-	455
FSW tested and knew the result	-	827	1	-	-	-	-	409
MSM/TGW reached	-	371	-	-	-	-	-	375
MSM/TGW tested and knew the result	1	865	-	-	-	-	-	387
PWID reached	1811	4861	2341	1376	-	-	-	4054
PWID tested and knew the result	767	2689	1659	729	-	5	-	1420
PWID receiving MMT	244	2312	479	542	-	582	-	1186
Number of sterile NS distributed	677776	2550616	932670	738112	-	-	-	1897200
Pregnant women received HIV testing	1332	1972	2145	1016	35	467	-	3924
HIV-positive PW received antiretrovirals	19	63	32	7	1	10	-	40
PLHIV receiving ART	423	11898	1408	422	-	1036	-	2925
% PLHIV on ART achieved viral load suppression among those tested for ART	-	96%	95%	-	-	93%	-	97%
% PLHIV on ART who initiated TPT among those eligible	-	100%	-	-	-	-	-	27%

Magway (6 townships)

	Aunglan	Chauk	Magway	Pakoku	Taungdwingyi	Yenangyaung
FSW reached	-	-	1050	238	-	-
FSW tested and knew the result	6	115	447	67	2	-
MSM/TGW reached	20	-	2110	516	-	-
MSM/TGW tested and knew the result	8	111	1532	157	-	-
PWID reached	-	-	1	-	-	-
PWID tested and knew the result	-	1	-	1	-	-
PWID receiving MMT	-	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	-	-
Pregnant women received HIV testing	3412	1674	2842	770	2227	1408
HIV-positive PW received antiretrovirals	5	6	14	5	4	5
PLHIV receiving ART	521	592	2429	2205	368	110
% PLHIV on ART achieved viral load suppression among those tested for ART	-	-	96%	-	-	-
% PLHIV on ART who initiated TPT among those eligible	-	6%	-	5%	-	-

Mandalay (22 townships)

	Amarapura	Aungmyaythazan	Chanayethazan	Chanmyathazi	Kyaukpadaung	Kyaukse	Madaya
FSW reached	1219	1033	1568	1109	1096	699	127
FSW tested and knew the result	447	2534	1155	4300	848	834	227
MSM/TGW reached	1529	2612	2362	2971	536	1200	207
MSM/TGW tested and knew the result	1757	4196	1748	7351	529	1424	483
PWID reached	154	1315	342	491	-	164	-
PWID tested and knew the result	239	1516	772	652	-	384	-
PWID receiving MMT	-	-	296	-	-	-	-
Number of sterile NS distributed	116787	439270	196485	77588	-	15671	-
Pregnant women received HIV testing	1486	1258	5588	1396	2870	1743	1208
HIV-positive PW received antiretrovirals	8	5	59	7	-	10	13
PLHIV receiving ART	846	1696	5431	2418	233	1337	365
% PLHIV on ART achieved viral load suppression among those tested for ART	96%	97%	97%	97%	96%	97%	-
% PLHIV on ART who initiated TPT among those eligible	91%	88%	47%	73%	-	-	49%

	Mahaaungmyay	Mahlaing	Meiktila	Mogoke	Myingyan	Nyaung-U	Patheingyi
FSW reached	1943	168	1633	163	350	641	1299
FSW tested and knew the result	569	2	1461	333	491	471	521
MSM/TGW reached	2138	359	2449	312	305	226	2435
MSM/TGW tested and knew the result	574	100	2214	458	494	194	882
PWID reached	313	-	-	707	-	-	328
PWID tested and knew the result	391	-	-	1212	54	2	434
PWID receiving MMT	-	-	-	367	-	-	1173
Number of sterile NS distributed	64189	-	-	382804	-	-	54530
Pregnant women received HIV testing	1265	1596	4124	1347	1604	2772	1695
HIV-positive PW received antiretrovirals	5	-	27	14	12	3	16
PLHIV receiving ART	1876	35	2422	772	1187	550	595
% PLHIV on ART achieved viral load suppression among those tested for ART	99%	-	92%	91%	-	96%	96%
% PLHIV on ART who initiated TPT among those eligible	83%	-	36%	-	73%	59%	79%

	Pyawbwe	Pyigyitagon	Pyinoolwin	Singu	Sintgaing	Tada-U	Thabeikkyin	Yamethin
FSW reached	257	2094	641	352	163	-	-	332
FSW tested and knew the result	38	696	475	172	305	-	-	613
MSM/TGW reached	417	2325	1001	332	226	14	308	476
MSM/TGW tested and knew the result	85	685	668	137	450	14	109	880
PWID reached	-	671	144	23	-	-	-	-
PWID tested and knew the result	-	998	267	65	-	-	6	-
PWID receiving MMT	-	-	185	-	-	-	-	-
Number of sterile NS distributed	-	641001	8068	708	-	-	-	-
Pregnant women received HIV testing	2419	1454	4222	1975	1278	1458	2374	2928
HIV-positive PW received antiretrovirals	5	10	11	2	3	2	5	4
PLHIV receiving ART	364	1568	1417	394	146	142	139	415
% PLHIV on ART achieved viral load suppression among those tested for ART	-	98%	96%	-	-	-	-	-
% PLHIV on ART who initiated TPT among those eligible	64%	90%	-	25%	-	-	-	-

Mon (5 townships)

	Mawlamyine	Paung	Thanbyuzayat	Thaton	Ye
FSW reached	3035	292	211	326	530
FSW tested and knew the result	2197	4	342	285	502
MSM/TGW reached	3754	357	84	481	205
MSM/TGW tested and knew the result	4658	-	142	476	207
PWID reached	-	-	-	-	-
PWID tested and knew the result	1	-	-	-	-
PWID receiving MMT	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	-
Pregnant women received HIV testing	4096	3174	2465	3334	3792
HIV-positive PW received antiretrovirals	32	7	15	5	16
PLHIV receiving ART	4873	-	520	1065	954
% PLHIV on ART achieved viral load suppression among those tested for ART	96%	-	95%	95%	87%
% PLHIV on ART who initiated TPT among those eligible	19%	-	100%	62%	6%

Nay Pyi Taw (4 townships)

	Lewe	Poke Ba Thi Ri	Pyinmana	Tatkon
FSW reached	-	-	182	-
FSW tested and knew the result	-	-	383	4
MSM/TGW reached	-	-	161	-
MSM/TGW tested and knew the result	-	-	145	1
PWID reached	-	-	-	-
PWID tested and knew the result	-	-	75	-
PWID receiving MMT	-	-	84	-
Number of sterile NS distributed	-	-	-	-
Pregnant women received HIV testing	4195	1569	1987	2536
HIV-positive PW received antiretrovirals	9	3	11	6
PLHIV receiving ART	26	94	1591	322
% PLHIV on ART achieved viral load suppression among those tested for ART	84%	-	94%	90%
% PLHIV on ART who initiated TPT among those eligible	-	-	-	-

Rakhine (3 townships)

	Kyaukpyu	Sittwe	Thandwe
FSW reached	162	460	236
FSW tested and knew the result	72	296	-
MSM/TGW reached	277	837	227
MSM/TGW tested and knew the result	56	524	19
PWID reached	26	-	-
PWID tested and knew the result	-	2	-
PWID receiving MMT	-	-	-
Number of sterile NS distributed	-	-	-
Pregnant women received HIV testing	2327	8896	1613
HIV-positive PW received antiretrovirals	-	27	4
PLHIV receiving ART	330	1464	392
% PLHIV on ART achieved viral load suppression among those tested for ART	92%	-	100%
% PLHIV on ART who initiated TPT among those eligible	100%	100%	100%

Sagaing (22 townships)

	Banmauk	Hkamti	Homalin	Indaw	Kale	Kalewa	Kanbalu
FSW reached	-	-	388	-	381	-	-
FSW tested and knew the result	-	-	-	-	409	-	-
MSM/TGW reached	-	-	505	-	531	-	-
MSM/TGW tested and knew the result	-	-	-	-	455	-	1
PWID reached	1186	1167	2155	1462	1651	-	-
PWID tested and knew the result	1605	499	1405	766	1189	-	12
PWID receiving MMT	498	253	1382	1295	731	-	70
Number of sterile NS distributed	485500	215727	668713	497940	1022800	-	-
Pregnant women received HIV testing	-	-	1509	747	7	-	2200
HIV-positive PW received antiretrovirals	-	-	7	2	-	-	13
PLHIV receiving ART	521	450	1522	713	2937	5	432
% PLHIV on ART achieved viral load suppression among those tested for ART	-	-	77%	-	-	-	-
% PLHIV on ART who initiated TPT among those eligible	-	-	100%	-	-	-	-

	Katha	Kawlin	Kyunhla	Mawlaik	Mingin	Monywa	Paungbyin
FSW reached	8	-	-	1	-	1046	-
FSW tested and knew the result	8	-	-	-	-	545	-
MSM/TGW reached	-	-	-	-	-	3503	-
MSM/TGW tested and knew the result	-	-	-	-	-	2872	-
PWID reached	442	1263	398	1528	-	1158	632
PWID tested and knew the result	211	823	322	425	-	833	681
PWID receiving MMT	182	338	92	383	-	218	468
Number of sterile NS distributed	270260	170802	208025	957000	-	285600	235118
Pregnant women received HIV testing	-	-	340	628	-	125	-
HIV-positive PW received antiretrovirals	-	-	-	3	-	3	-
PLHIV receiving ART	1150	712	-	511	-	3528	311
% PLHIV on ART achieved viral load suppression among those tested for ART	-	-	-	83%	-	95%	-
% PLHIV on ART who initiated TPT among those eligible	-	-	-	-	-	9%	-

	Pinlebu	Sagaing	Shwebo	Tamu	Tigyaing	Wetlet	Wuntho	Ye-U
FSW reached	-	890	82	257	12	-	-	-
FSW tested and knew the result		685	-	6	-	-	-	-
MSM/TGW reached	-	1704	259	178	-	-	-	-
MSM/TGW tested and knew the result	-	1672	-	-	-	-	-	-
PWID reached	423	681	-	1740	238	-	1498	-
PWID tested and knew the result	296	963	-	995	176	-	616	-
PWID receiving MMT	-	183	105	662	184	-	197	-
Number of sterile NS distributed	131785	294507	-	858492	130600	-	155183	-
Pregnant women received HIV testing	-	-	814	796	-	-	-	272
HIV-positive PW received antiretrovirals	-	-	3	7	-	-	-	1
PLHIV receiving ART	576	1170	1459	638	422	-	-	354
% PLHIV on ART achieved viral load suppression among those tested for ART	-	96%	-	-	90%	-	-	-
% PLHIV on ART who initiated TPT among those eligible	-	17%	-	-	-	-	-	-

Shan (E) (4 townships)

	Kengtung	Monghsat	Mongla	Tachileik
FSW reached	147	-	-	228
FSW tested and knew the result	140	-	-	564
MSM/TGW reached	4	-	-	75
MSM/TGW tested and knew the result	4	-	-	122
PWID reached	-	-	-	718
PWID tested and knew the result	48	-	-	927
PWID receiving MMT	117	-	-	185
Number of sterile NS distributed	-	-	-	332675
Pregnant women received HIV testing	3687	580	-	-
HIV-positive PW received antiretrovirals	7	5	-	-
PLHIV receiving ART	701	150	152	1208
% PLHIV on ART achieved viral load suppression among those tested for ART	-	-	-	-
% PLHIV on ART who initiated TPT among those eligible	7%	-	-	-

Shan (N) (17 townships)

	Hseni	Hsipaw	Kunlong	Kutkai	Kyaukme	Lashio
FSW reached	-	154	-	-	174	1884
FSW tested and knew the result	-	117	-	-	153	1479
MSM/TGW reached	-	256	-	-	207	959
MSM/TGW tested and knew the result	-	203	-	-	141	925
PWID reached	722	1066	346	2404	1000	4279
PWID tested and knew the result	924	812	601	3190	684	2484
PWID receiving MMT	270	155	-	330	325	483
Number of sterile NS distributed	356052	291800	108481	905469	272700	2068854
Pregnant women received HIV testing	1335	1582	703	1338	2132	1998
HIV-positive PW received antiretrovirals	6	2	1	14	11	18
PLHIV receiving ART	210	412	63	551	696	3579
% PLHIV on ART achieved viral load suppression among those tested for ART	-	-	-	-	79%	95%
% PLHIV on ART who initiated TPT among those eligible	68%	100%	63%	-	20%	81%

	Laukkaing	Mabein	Mongmit	Mongyai	Muse	Namhkam
FSW reached	536	-	-	-	1012	-
FSW tested and knew the result	275	-	-	-	772	152
MSM/TGW reached	-	-	-	-	854	-
MSM/TGW tested and knew the result	-	-	-	-	758	2
PWID reached	592	239	729	-	2137	1456
PWID tested and knew the result	203	207	457	-	2077	2319
PWID receiving MMT	51	-	229	-	240	622
Number of sterile NS distributed	247600	261530	263050	-	821487	481259
Pregnant women received HIV testing	1327	179	1008	660	41	917
HIV-positive PW received antiretrovirals	6	1	1	-	-	11
PLHIV receiving ART	219	96	231	22	1323	642
% PLHIV on ART achieved viral load suppression among those tested for ART	-	100%	-	-	-	-
% PLHIV on ART who initiated TPT among those eligible	-	-	-	-	100%	-

	Namhsan (N)	Namtu	Nawnghkio	Pangsang	Tangyan
FSW reached	-	-	-	-	-
FSW tested and knew the result	-	-	-	176	-
MSM/TGW reached	-	-	-	-	-
MSM/TGW tested and knew the result	-	-	-	-	-
PWID reached	394	329	732	207	555
PWID tested and knew the result	677	255	722	207	567
PWID receiving MMT	5	93	120	-	195
Number of sterile NS distributed	79529	169811	240950	46100	191135
Pregnant women received HIV testing	774	299	1799	674	1776
HIV-positive PW received antiretrovirals	4	1	7	-	6
PLHIV receiving ART	218	121	264	184	-
% PLHIV on ART achieved viral load suppression among those tested for ART	100%	-	88%	84%	-
% PLHIV on ART who initiated TPT among those eligible	-	34%	-	-	-

Shan (S) (10 townships)

	Hopong	Hsihseng	Kalaw	Kunhing	Lawksawk
FSW reached	-	-	528	-	358
FSW tested and knew the result	-	-	550	-	429
MSM/TGW reached	16	-	402	-	336
MSM/TGW tested and knew the result	9	-	434	-	384
PWID reached	-	-	-	-	-
PWID tested and knew the result	-	-	50	-	-
PWID receiving MMT	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	-
Pregnant women received HIV testing	1232	1531	3250	-	1339
HIV-positive PW received antiretrovirals	3	-	5	-	1
PLHIV receiving ART	39	58	299	31	98
% PLHIV on ART achieved viral load suppression among those tested for ART	-	-	91%	-	-
% PLHIV on ART who initiated TPT among those eligible	-	-	69%	-	-

	Loilen	Monghsu	Nansang (S)	Nyaungshwe	Taunggyi
FSW reached	23	-	323	61	849
FSW tested and knew the result	27	-	372	68	721
MSM/TGW reached	154	-	262	73	898
MSM/TGW tested and knew the result	160	-	243	99	840
PWID reached	-	-	1	-	790
PWID tested and knew the result	4	-	26	-	604
PWID receiving MMT	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	292997
Pregnant women received HIV testing	1359	320	1294	1889	6782
HIV-positive PW received antiretrovirals	2	-	3	2	11
PLHIV receiving ART	384	128	142	53	2681
% PLHIV on ART achieved viral load suppression among those tested for ART	93%	100%	-	100%	97%
% PLHIV on ART who initiated TPT among those eligible	-	-	-	-	52%

Tanintharyi (4 townships)

	Dawei	Kawthoung	Myeik	Palaw
FSW reached	1208	338	556	13
FSW tested and knew the result	915	337	662	-
MSM/TGW reached	1975	381	821	451
MSM/TGW tested and knew the result	1948	381	873	-
PWID reached	-	2	-	-
PWID tested and knew the result	-	2	-	-
PWID receiving MMT	-	-	-	-
Number of sterile NS distributed	-	-	-	-
Pregnant women received HIV testing	831	-	3152	542
HIV-positive PW received antiretrovirals	32	-	15	1
PLHIV receiving ART	2932	829	1167	273
% PLHIV on ART achieved viral load suppression among those tested for ART	96%	95%	92%	77%
% PLHIV on ART who initiated TPT among those eligible	60%	-	-	-

Yangon (36 townships)

	Ahlone	Bahan	Botahtaung	Dagon	Dagon Myothit (E)	Dagon Myothit (N)	Dagon Seikkan
FSW reached	133	286	245	-	540	667	1400
FSW tested and knew the result	12	6	237	-	70	1095	1143
MSM/TGW reached	385	768	288	390	705	968	1101
MSM/TGW tested and knew the result	158	72	257	137	76	2283	1241
PWID reached	-	38	-	-	-	-	-
PWID tested and knew the result	-	65	-	-	167	1	1
PWID receiving MMT	-	-	-	-	670	-	-
Number of sterile NS distributed	-	1309	-	-	-	-	-
Pregnant women received HIV testing	17	235	858	81	951	1448	2601
HIV-positive PW received antiretrovirals	-	-	10	-	3	6	13
PLHIV receiving ART	-	86	459	227	315	1412	505
% PLHIV on ART achieved viral load suppression among those tested for ART	95%	100%	88%	100%	99%	97%	97%
% PLHIV on ART who initiated TPT among those eligible	-	100%	-	-	100%	29%	100%

	Dagon Myothit (S)	**Dala**	**Dawbon**	**Hlaing**	**Hlaingtharyar**	**Hlegu**	**Hmawbi**
FSW reached	517	295	234	541	1945	408	370
FSW tested and knew the result	1935	212	179	223	1320	196	272
MSM/TGW reached	1254	816	332	732	5013	1167	1331
MSM/TGW tested and knew the result	733	714	294	397	3730	312	925
PWID reached	2	-	-	5	486	-	-
PWID tested and knew the result	55	-	-	5	512	3	1
PWID receiving MMT	-	-	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	215115	-	-
Pregnant women received HIV testing	2756	2700	314	201	21230	5831	5011
HIV-positive PW received antiretrovirals	18	12	-	-	100	19	11
PLHIV receiving ART	1896	1095	-	1266	4429	655	782
% PLHIV on ART achieved viral load suppression among those tested for ART	95%	-	-	95%	96%	90%	97%
% PLHIV on ART who initiated TPT among those eligible	66%	13%	-	81%	24%	-	-

	Insein	Kamaryut	Kyauktada	Kyeemyindaing	Lanmadaw	Latha	Mayangone	Minglardon
FSW reached	1347	61	89	392	357	918	97	647
FSW tested and knew the result	1930	11	7	241	265	1008	20	109
MSM/TGW reached	1222	283	369	926	354	349	685	1193
MSM/TGW tested and knew the result	3187	-	-	188	387	204	188	224
PWID reached	-	-	-	6	-	-	-	-
PWID tested and knew the result	-	-	-	10	-	10	-	-
PWID receiving MMT	-	-	-	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	-	-	-	-
Pregnant women received HIV testing	1559	140	809	95	5208	79	1093	7223
HIV-positive PW received antiretrovirals	10	-	-	-	117	-	1	5
PLHIV receiving ART	6338	22	110	1808	145	6118	775	9068
% PLHIV on ART achieved viral load suppression among those tested for ART	96%	-	98%	97%	-	94%	99%	98%
% PLHIV on ART who initiated TPT among those eligible	42%	-	-	100%	100%	67%	23%	-

	Minglar Taungnyunt	North Okkalapa	Pabedan	Pazundaung	Sanchaung	Seikgyi Kanaungto	Shwepyithar
FSW reached	1403	1067	190	230	269	116	674
FSW tested and knew the result	1009	693	58	223	17	88	692
MSM/TGW reached	718	2152	292	276	573	295	525
MSM/TGW tested and knew the result	675	505	136	265	85	249	512
PWID reached	1	-	-	-	-	-	102
PWID tested and knew the result	-	-	-	-	6	-	83
PWID receiving MMT	-	-	-	-	-	-	-
Number of sterile NS distributed	-	-	-	-	-	-	11925
Pregnant women received HIV testing	164	5287	28	74	148	547	4782
HIV-positive PW received antiretrovirals	-	86	-	-	-	5	19
PLHIV receiving ART	695	5099	27	3	615	112	1744
% PLHIV on ART achieved viral load suppression among those tested for ART	98%	96%	100%	-	99%	89%	97%
% PLHIV on ART who initiated TPT among those eligible	1%	53%	-	-	21%	-	71%

	South Okkalapa	Tamwe	Thaketa	Thanlyin	Thingangyun	Twantay	Yankin
FSW reached	817	595	886	812	578	174	200
FSW tested and knew the result	523	3230	837	722	43	138	20
MSM/TGW reached	974	2632	1047	1319	929	497	488
MSM/TGW tested and knew the result	214	8670	983	1190	51	430	55
PWID reached	62	327	11	124	-	-	-
PWID tested and knew the result	5	397	11	79	1	-	-
PWID receiving MMT	-	-	-	-	294	-	-
Number of sterile NS distributed	3229	10665	-	1869	-	-	-
Pregnant women received HIV testing	2693	346	1360	1785	1710	4119	221
HIV-positive PW received antiretrovirals	7	2	5	2	35	3	-
PLHIV receiving ART	623	2393	6363	2421	1504	451	70
% PLHIV on ART achieved viral load suppression among those tested for ART	99%	98%	97%	97%	98%	97%	85%
% PLHIV on ART who initiated TPT among those eligible	25%	100%	20%	100%	9%	100%	-

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