# 2022 GLOBAL AIDS MONITORING

# Country Progress Report -Malaysia



MINISTRY OF HEALTH MALAYSIA

Disease Control Division



# The Global AIDS Monitoring Report 2022

This report was coordinated and produced by HIV/STI/Hepatitis C Section of Ministry of Health Malaysia.

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### **Foreword**

The year 2021 marks the second year of the COVID-19 pandemic for Malaysia, during which the country continued to battle a surge in cases as the contagious Delta variant circulated and became dominant.

At the same time, the HIV pandemic has raged for 36 years in Malaysia. Movement control measures continued to restrict access to many essential health services in 2021. In addition, the COVID-19 pandemic has disrupted the distribution of health workers in places they are needed the most. Consequently, Malaysia did not meet the fast-track targets for Ending AIDS, despite previous successes.



The 2022 Malaysian Country Progress Report presents the latest data for HIV-related indicators for the Sustainable Development Goals and the United Nations' 2021 Political Declaration to end AIDS as a public health threat by 2030.

The report also highlights the importance of community-based, people-centred services to prevent and control the spread of HIV, as well as the urgent need to focus on inequalities and key populations left behind: girls and young women, their male partners, men who have sex with men, transgender people, people who inject drugs, and all vulnerable populations.

The HIV and COVID-19 dual pandemics have shown us that solidarity, collaboration, and partnerships are needed to safeguard people's health. The Ministry of Health is thus committed to makingup lost ground by working closely with all partners – government, non-governmental organizations and private sectors– to close the gaps and get back on track to ending AIDS by 2030.

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### 1. Overall

Malaysia was off track for its 2021 goals of attaining 95-95-95 in testing-treatment-viral suppression cascade. This was in part contributed by major shifts in epidemiology landscape for HIV from needle-sharing to sexual transmission, and in part by stigma and discrimination faced by PLHIV which impedes efforts to link newly diagnosed PLHIV to care. In addition, the COVID-19 pandemic had disrupted community-based HIV screening and prevention activities. In 2021, ongoing movement control orders and various non-pharmacological prevention strategies such as physical distancing, limitations in face-to-face consultations continued to restricted PLHIVs' access to health care and other social support.

Table 1: overview of HIV epidemic, Malaysia 2021

Indicator	Number
Cumulative number of reported HIV	128,638
Cumulative number of reported AIDS	28,963
Cumulative number of deaths related to HIV/AIDS	60,816
Estimated people living with HIV (Spectrum 2022)	81,942
Total number of people living with HIV (surveillance data)	67,8221
Reported new HIV infections	2,760
HIV notification rate (per 100,000)	8.5
People living with HIV receiving ART as of December 2021	44,916

<sup>&</sup>lt;sup>1</sup> Ministry of Health Malaysia performed a second review on the total PLHIV in 2021, taking into account previously unreported HIV-related deaths.

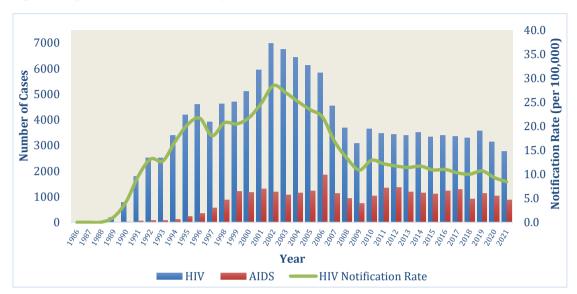


Figure 1 Reported HIV and AIDS, Malaysia 1986 - 2021

At the end of year 2021, there were estimated 81,942 people live with HIV (PLHIV) in Malaysia, 67,822 (83%) of whom were aware of their status and had been notified through the national surveillance system (Table 1). By December 2021, 66% of the reported PLHIV were receiving antiretroviral treatment (ART).

New HIV infection has declined by 70.2% from year 2002, with 6,978 cases new HIV notification (equivalent to 28 cases per 100,000 population), to 2,760 cases in 2021 (equivalent 8.5 cases per 100,000 population) (Figure 1), while the estimated HIV incidence rate per 1000 uninfected population had also gradually declined from 0.30 to 0.19 between 1990 and 2021<sup>2</sup>.

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<sup>&</sup>lt;sup>2</sup> Estimates from Malaysian AEM-Spectrum 2022

Figure 2 Estimated HIV incidence rate per 1000 uninfected population, Malaysia, 1990 - 2021

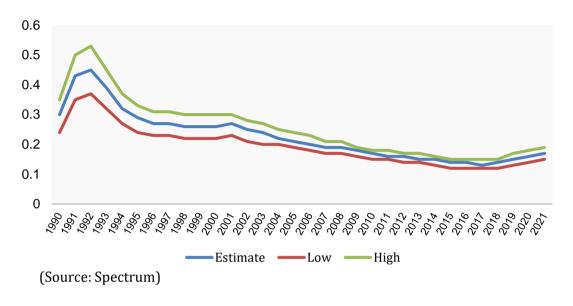
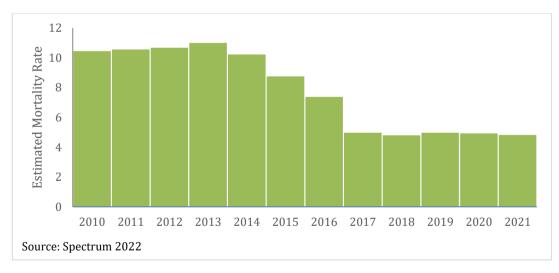


Figure 3 AIDS mortality per 100,000 population, Malaysia (2010 - 2021)



More than half of new HIV cases were notified from populous states such as Selangor, Federal Territory of Kuala Lumpur and Penang (Figure 4).

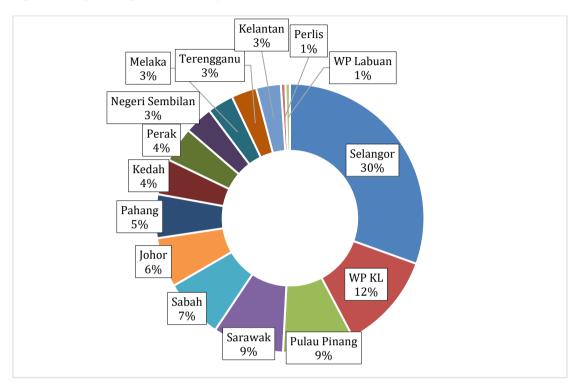


Figure 4: People living in HIV in Malaysia by state, 2021

From the beginning of the HIV epidemic, HIV case notification has shown a male preponderance pattern, with male/female ratio of 7.5 in 2021 (Figure 5).

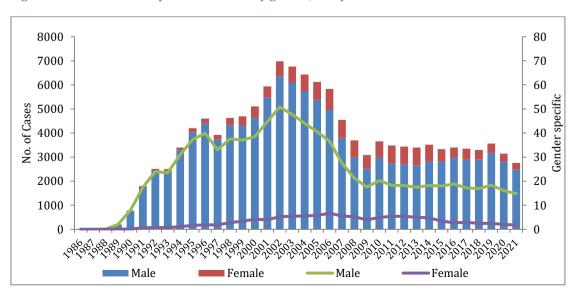


Figure 5: Distribution of reported HIV cases by gender, Malaysia 1986 - 2021

As mentioned previously, the initial driving force of HIV epidemic in Malaysia had been PWID followed by FSW, TG and MSM. In the last decade, sexual transmission became the main mode of transmission, and MSM is expected to become the main key population in Malaysia in year 2030 as projected using the Asian Epidemic Modelling (AEM) (Figure 6). Consistent with the projection, Figure 7 also shows trend of HIV transmission mode in Malaysia according to surveillance data, with PWID/sexual transmission ratio declining from 3.95 in 2000 to 0.04 in 2021.

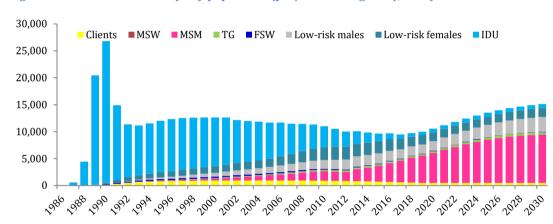
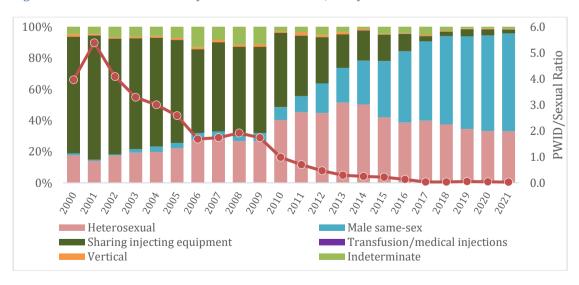


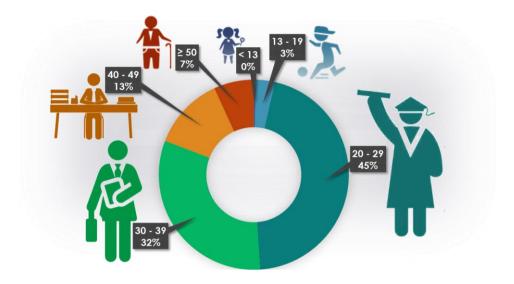
Figure 6: HIV infection trend by key population (projection using AEM), Malaysia 1986 - 2030





More than three quarter of HIV new infections were reported among people aged 20 to 39 years old in year 2021 (Figure 8).





# 2. HIV Testing and Treatment

#### 95-95-95 for HIV testing and treatment

The NSPEA highlighted testing and treatment as one of the main national responses towards the aim of ending AIDS. This was to ensure that all PLHIV in Malaysia have access to treatment through meeting the 95-95-95 targets by 2030. In 2017, Malaysia implemented the WHO recommendation for initiation of ART regardless of CD4 cell count. In addition, viral load testing is routinely performed for monitoring of ARV therapy in government treatment sites.

#### Progress towards 95-95-95 target (2021)

In regard to Malaysia's progress on the 95-95-95 treatment cascade target, by the end of 2021, 83% of the PLHIV were diagnosed to be HIV and knew their results. The treatment uptake among people diagnosed with HIV was 66% which indicated a gap in treatment and care, and out of those already on treatment, 82% became virally suppressed (Figure 9).

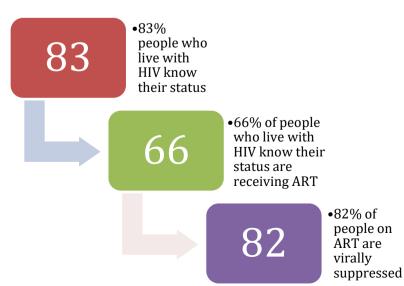
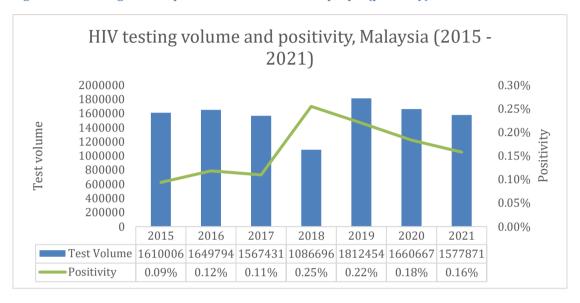


Figure 9: Progress towards 95-95-95 target, Malaysia (2021)

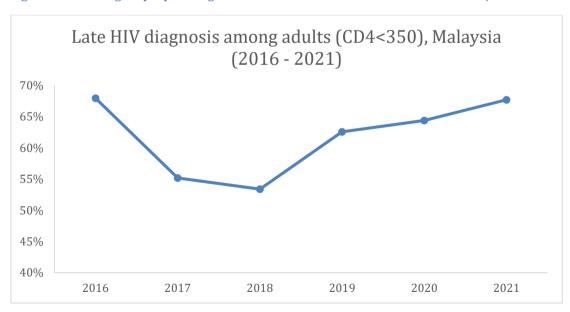
#### HIV testing volume and positivity, Malaysia

Figure 10 Percentage of HIV -positive results returned to people (positivity)



#### Late HIV diagnosis, Malaysia (2016 - 2021)

Figure 11 Percentage of people living with HIV with the initial CD4 cell count <350 cells/mm3 in 2021



HIV testing programme in Malaysia continues to expand over the years. It now encompasses static facility-based testing as well as community-based testing which specifically targets hard-to-reach key populations. As a result, the proportion of PLHIV knowing their status had been slowly progressing towards 95%, although the progress had stalled in years 2020 – 2021 due to COVID-19 pandemic. In 2021, 68% of the new

patients were diagnosed at a late stage. This reflected a need to increase population awareness so that people with high-risk behaviours would get tested at least annually.

# People living with HIV on antiretroviral therapy, Malaysia (2011-2021)

Initiating and retaining patient on ART treatment remained the biggest challenge. Between 2011 and 2021, there was a modest increase in PLHIVs who were on treatment. However, this progress had stall from 2019 onwards, likely due to health service disruption during the early phases of COVID-19 pandemic, which in turn compounded pre-existing system-level and individual-level barriers to ART uptake.

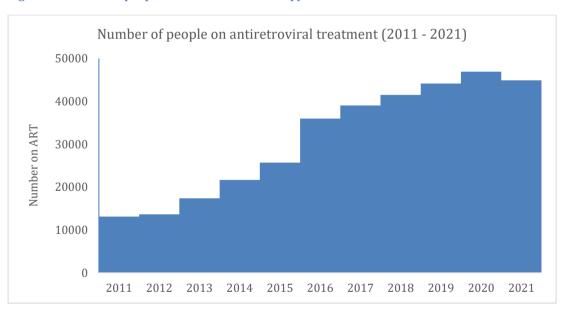


Figure 12 Number of people on antiretroviral therapy

## People living with HIV on antiretroviral treatment who have suppressed viral load, Malaysia (2017-2021)

People living with HIV on antiretroviral treatment who have suppressed viral load, Malaysia (2017-2021)

100.0%

95.0%

90.0%

85.0%

75.0%

2019

2020

2021

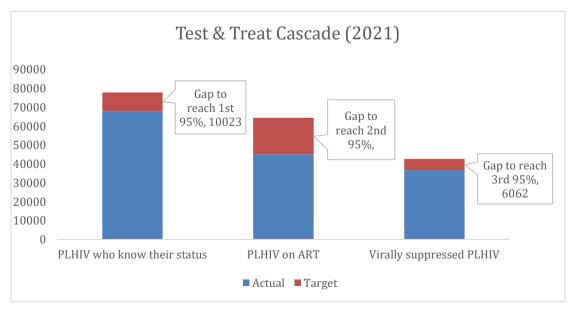
Figure 13 Number of people living with HIV with suppressed viral loads



2018

70.0%

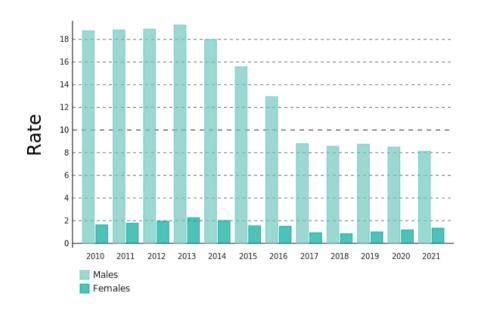
2017



Expansion of availability and accessibility of antiretroviral treatment to all PLHIVs had contributed to steady decline in AIDS mortality from 12.27 per 100,000 population in 2010 to 4.82 per 100,000 population in 2021 (Figure 15).

#### 1.6 AIDS mortality rate per 100 000, Malaysia (2010-2021)

Figure 15 Total number of people who have died from AIDS-related causes per 100 000 population



Source: Spectrum file Malaysia AEM-Spectrum 2022

# 3. End Paediatric AIDS and Eliminate Vertical Transmission

#### Eliminate new HIV infections among children by 2021

Prevention of Mother-To-Child Transmission (PMTCT) programme for HIV was implemented countrywide in 1998, whereas PMTCT of Syphilis had started a decade earlier. In line with the WHO guideline<sup>3</sup>, Malaysia adopted the programmatic target of less than 2.0% for HIV mother-to-child transmission rate, and a Congenital Syphilis case rate of  $\leq$ 50 per 100 000 live births.

All HIV-exposed infants get free ARV prophylaxis and free replacement feeds for two years. The programme had been able to avert more than 98% vertical transmission in HIV-exposed infants in 2017 compared to 30-40% had there been no intervention, subsequently leading to Malaysia being certified as the first country in Western Pacific Region having eliminated vertical HIV transmission. In 2021, Malaysia was able to maintain the mother-to-child-transmission of HIV rate at 1.61%.

<sup>&</sup>lt;sup>3</sup> Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis, 2<sup>nd</sup> Edition. Geneva: World Health Organization; 2017 (https://www.who.int/reproductivehealth/publications/emtct-hiv-syphilis/en/)

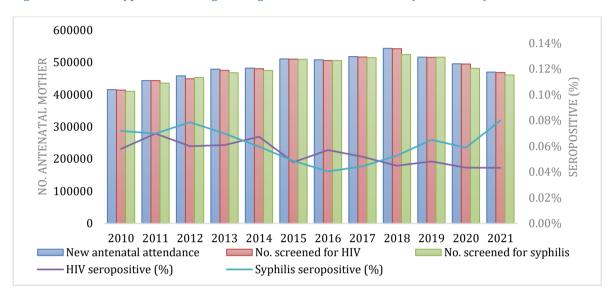
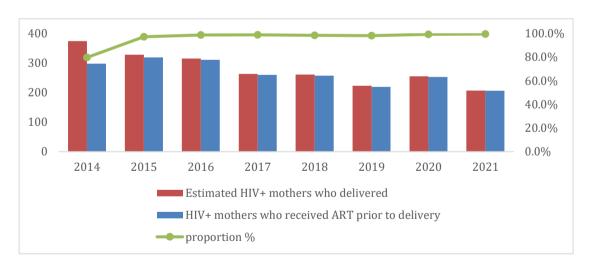
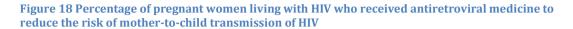


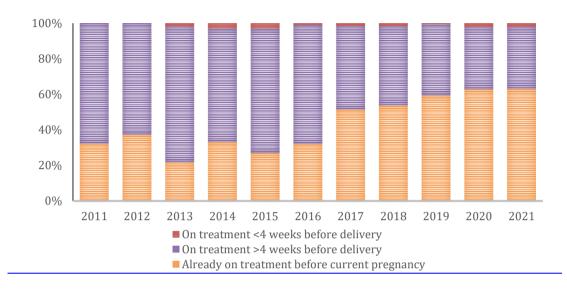
Figure 16: HIV and syphilis screening coverage and seroconversion rate (2010 - 2021)





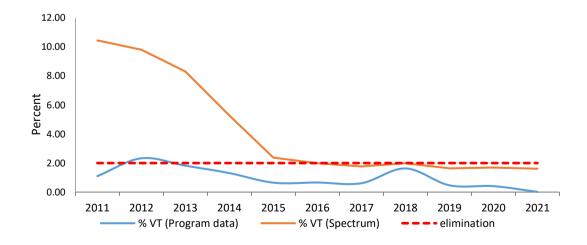
Source: Spectrum file Malaysia AEM-Spectrum 2022





Pregnant women living with HIV and already on ART at booking contributed to the largest proportion of HIV-infected mothers attending antenatal care. Being on treatment before pregnancy increases the likelihood of mothers being virally suppressed throughout pregnancy and birth, hence minimizing the risk of vertical transmission.

Figure 19: Vertical transmission rate of HIV, Malaysia (2011-2021)



#### Early infant diagnosis, Malaysia (2011-2021)

Since the inception of the national PMTCT programme, Malaysia has used HIV DNA PCR test for HIV diagnosis of infants for all babies born to HIV+ mothers. All HIV-exposed infants should have PCR testing at birth and 6 weeks. The national surveillance system reported the percentage of early infant diagnosis (HIV-exposed infants receiving an HIV test within two months of birth) as 99.5% in year 2021 with three (3) new HIV paediatric infections<sup>4</sup>.

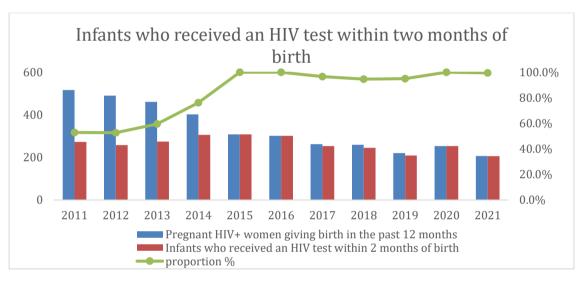


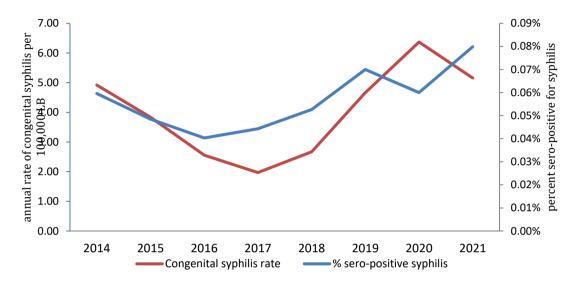
Figure 20 Early infant diagnosis

#### Syphilis among pregnant women, Malaysia (2021)

Malaysia has been able to maintain a low syphilis MTCT rate at below 10 cases per 100,000 live births (Figure 21). This could be attributed to effective treatment of women attending antenatal care services with a positive syphilis serology, which prevented vertical transmission. The treatment coverage for syphilis-infected mothers had remained above 95% over the past decade, and was 96% for 2021.

<sup>&</sup>lt;sup>4</sup> HIV-exposed infant who has two concordant EID (PCR) positive at birth (0-2 weeks) and 6 weeks of life





# 4. Combination HIV Prevention for All

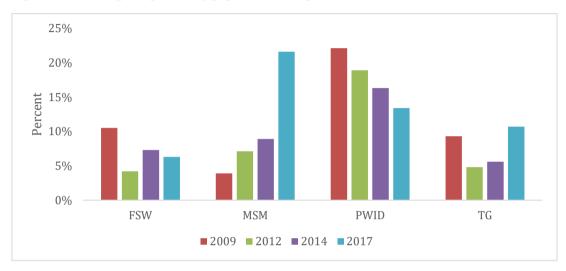
Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 95% of people by 2025, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners

Prevention of HIV transmission among key populations is prioritized as one of the key strategies in the NSPEA 2016 – 2030. As such, HIV prevention outcomes hinge heavily on various outreach programs conducted online and offline, which are also supplemented by internet-based campaigns.

Trained HIV outreach workers, who are members of key population-led organizations, will deliver a defined package of preventions services to key populations. The prevention package will be tailored for each population with regard to types of prevention commodity distributed and frequency of contact. Outreach workers will also provide referrals for key population members to further health services, social and legal support.

#### HIV prevalence among key populations, Malaysia (2009-2017)

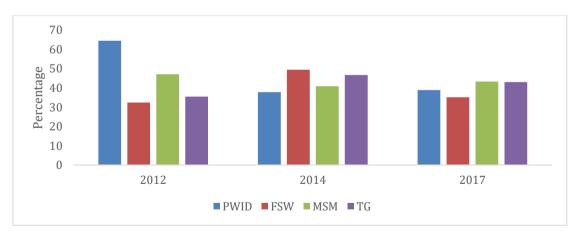
Figure 22 Percentage of specific key populations living with HIV



Source: IBBS Malaysia

#### HIV testing among key populations, Malaysia (2012-2017)

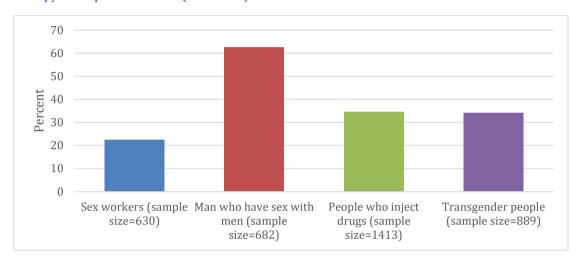
Figure 23 Percentage of people of a key population who tested for HIV in the past 12 months, or who know their current HIV status



Source: IBBS Malaysia

# Antiretroviral therapy coverage among people living with HIV in key populations, Malaysia

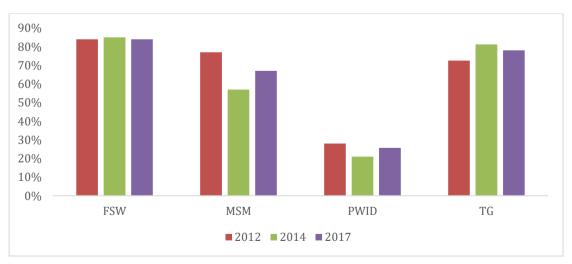
Figure 24 Percentage of the people living with HIV in a key population receiving antiretroviral therapy in the past 12 months (IBBS 2017)



Source: IBBS Malaysia

#### Condom use among key populations, Malaysia (2012-2017)

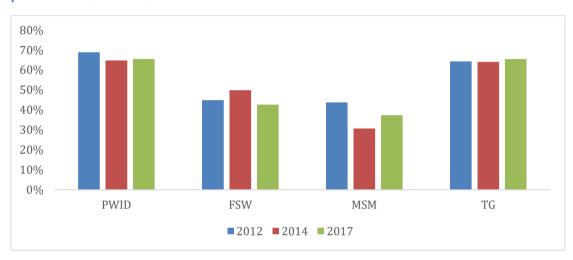
Figure 25 Percentage of people in a key population reporting using a condom the last time they had sexual intercourse



Source: IBBS Malaysia

# Coverage of HIV prevention programmes among key populations, Malaysia (2012-2017)

Figure 26 Percentage of people in a key population reporting having received a combined set of HIV prevention interventions



Source: IBBS Malaysia

## Harm reduction programme for people who inject drugs, Malaysia (2016-2021)

Opioid substitution therapy (OST) programme had been implemented at selected government and private health facilities since 2006. Over the years, it has reached majority of the estimated PWID population. At the end of 2021, 74% of PWIDs were receiving OST (Figure 27).

As OST became the mainstay of harm reduction strategies, the demand for needle-syringe exchange programme (NSEP), implemented through MOH-NGO partnership at selected outreach spots throughout the country, had gradually decreased.

From 2019 to 2020, there was a 15% reduction in needle-syringe distributed. Apart from actual decrease in demand because of PWIDs transitioning fully to OST and changing pattern of drug use, this could also be due to COVID-19 related movement control order implemented nationwide. As a temporary measure to improve access for PWIDs, government health clinics had been made NSEP points during lockdowns. However, movements for all Malaysians were still restricted and this resulted in less needles distributed. In 2021, however, we observed a modest recovery in the number of needles and syringes distributed to PWID by 19% compared to 2020.

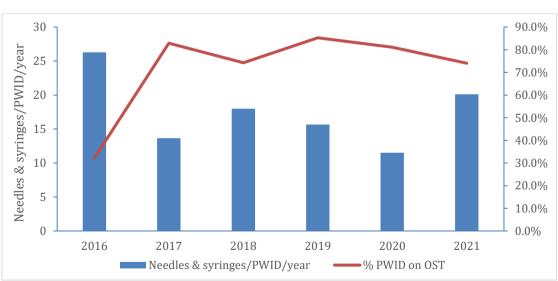
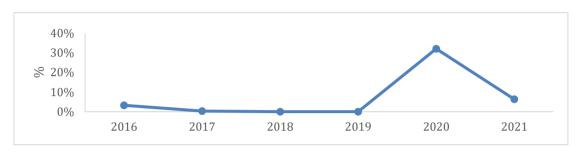


Figure 27 Needle-syringe exchange programme (NSEP) and Opioid Substitution Therapy (OST) Coverage among PWID, 2016 – 2021

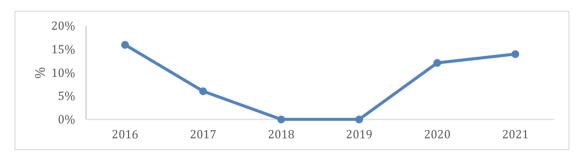
#### Active syphilis among sex workers, Malaysia (2016-2021)

Figure 28 Percentage of sex workers with active syphilis



# Active syphilis among men who have sex with men, Malaysia (2016-2021)

Figure 29 Percentage of men who have sex with men with active syphilis



# 5. Realize Human Rights and Eliminate Stigma And Discrimination

Ensure political leadership at the highest level to eliminate all forms of HIV-related stigma and discrimination, including by promoting greater policy coherence and coordinated action through whole-of-government, whole-of-society and multisectoral response; Ensure that all services are designed and delivered without stigma and discrimination, and with full respect for the rights to privacy, confidentiality and informed consent.

To assess the discriminatory attitudes towards the PLHIV, we had conducted an online survey in 2021 among general population. 299 respondents aged between 15 to 49 years participated in this survey. One in five respondents said they would not buy vegetables from a seller with HIV, and one in four respondents believed that children living with HIV should not be allowed to attend school with other children. This showed that stigma and discriminatory attitudes of the general population towards PLHIV still prevail in the community (Figure 30).

This finding was consistent with that from an online survey in 2020<sup>5</sup> that demonstrated that only 39% of the general population had sound and comprehensive knowledge of the essential facts about HIV and AIDS. The overall inadequate awareness about HIV in the population had probably contributed to the high level of discriminatory attitudes towards PLHIV among study respondents.

<sup>&</sup>lt;sup>5</sup> The Global AIDS Monitoring Report 2021 (https://www.moh.gov.my/moh/resources/Penerbitan/Laporan/Umum/20211130\_MYS\_country\_report\_2021.pdf)

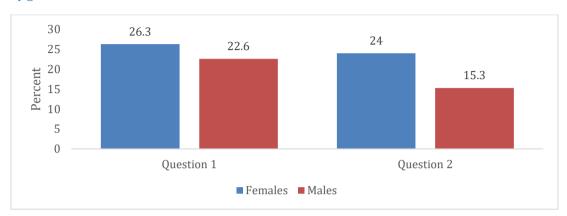


Figure 30 Discriminatory attitudes towards PLHIV among general population (aged 15 to 49 years) $^6$  by gender

#### Malaysia Stigma Evaluation Survey (MySES) 2021

In 2021, the first national study on stigma and discrimination faced by PLHIVs, the Malaysia Stigma Evaluation Survey (MySES) was conducted. This was a quantitative study which used an online survey questionnaire. Participation from the PLHIV community was sought to ensure that all issues pertaining to HIV-related stigma and discrimination were being thoroughly examined and addressed. A total of 1107 respondents above 15 years old participated in the survey.

Internalized stigma was prevalent among the MySES 2021 respondents, with 70.1% reporting feeling ashamed because of their PLHIV status (Figure 31).

Respondents were also asked about their experiences of HIV-related stigma and discrimination in the 12 months leading up to the date of survey. 9.5% had suffered at least one of the three enacted stigma in their household or community? (

Figure 32). In contrast, almost half of the respondents reported experiencing at least one form of stigma and discrimination within health-care settings (

Table 2).

<sup>6</sup> Who respond No to Question 1 - "Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?"; Question 2 - "Do you think that children living with HIV should be able to attend school with children who are HIV negative?"

 $<sup>^{7}</sup>$  Experience stigma or discrimination 1 – "People had talked badly about me because of my HIV status"; 2 – "Someone else disclosed my HIV status without my permission"; 3 – "I had been verbally insulted, harassed or threatened because of my HIV status"



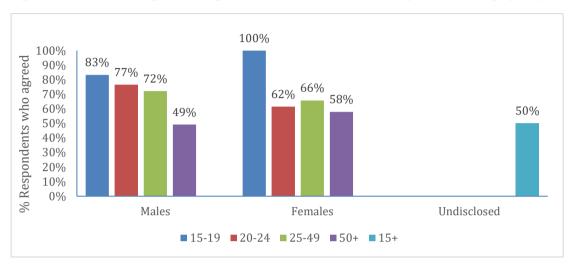


Figure 32 People living with HIV report experiencing stigma and discrimination in community settings (2021)

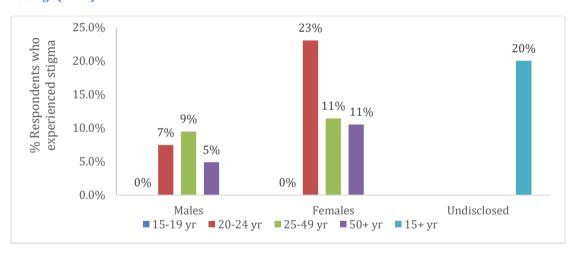


Table 2 Experience of HIV-related discrimination in health-care settings, disaggregated by type

Type	Respondents who experienced discrimination (n/%)
'Denial of care due to HIV status'	28 (2.53%)
'Advised not to have sex because of HIV status'	515 (46.52%)
'Talked badly or gossiped about because of HIV status'	33 (2.98%)
'Verbal abuse because of HIV status'	13 (1.17%)
'Physical abuse because of HIV status'	2 (0.18%)
'Avoidance of physical contact because of HIV status'	69 (6.23%)
'Telling others about HIV status without consent'	27 (2.44%)

# 6. Investment and Resources

Fully fund the HIV response by increasing annual HIV investments in low- and middle-income countries to US\$ 29 billion by 2025

#### FINANCING THE HIV AND AIDS RESPONSE

Since the beginning of the epidemic, HIV response in Malaysia rely heavily on domestic public funding (>80%). In 2021, the total expenditure for HIV response was RM82.9 million (USD19.8 million) (Table 3). Majority of the funding came from domestic fund (92%). 75% of the funding was spent on NSPEA strategy 1, testing and treat to reduce the gap on the first and second 95 of HIV treatment cascade.

Table 3: Source of approximate AIDS expenditure, 2019 - 2021

Source of funding	2019(RM)	%	2020 (RM)	%	2021 (RM)	%
Domestic	56,064,853	93	75,830,930	88	73,199,598	88
Public						
Domestic	1,943,924	3	3,444,475	4	3,605,839	4
Private						
International	2,040,387	3	6,587,757	8	6,129,134	7
Total	60,049,163	100	85,863,162	100	82,934,572	100

 $Table\ 4: AIDS\ Spending\ category\ -\ Approximate\ total\ expenditure\ from\ domestic\ (public\ \&\ private)$  and international sources,  $2018\ -\ 2020$ 

Strategies / indicator	2019 (RM)	%	2020 (RM)	%	2021 (RM)	%
Treatment, care and support	42,526,230	70.8	65,593,214	76.4	62,220,996	75.0
Prevention of HIV transmission	11,388,544	19.0	9,761,898	11.4	11,741,602	14.2
Social protection	56,259	0.1	96,946	0.1	97,356	0.1
Gender programmes	51,988	0.1	33,645	0.0	22,000	0.0
Programmes for children and adolescents	460,872	0.8	144,814	0.2	160,320	0.2
Community mobilisation	337,140	0.6	1,180,431	1.4	1,369,242	1.7
Governance and sustainability	5,105,925	8.5	8,910,758	10.4	7,184,396	8.7
Critical enablers	88,606	0.1	36,441	0.0	3,950	0.0
TB/HIV coinfection	33,600	0.1	105,016	0.1	134,709	0.2
Total	60,049,163	100%	85,863,162	100%	82,934,572	100%

# 7. Universal Health Coverage and Integration

Accelerate integration of HIV services into universal health coverage and strong and resilient health and social protection systems, building back better in a more equitable and inclusive manner from COVID-19 and humanitarian situations, and strengthening public health and enhancing future pandemic response and preparedness.

Commonly reported coinfections among PLHIVs are tuberculosis, blood-borne viral hepatitis and sexually transmitted infections. Among the coinfections, tuberculosis is of particular importance because annually, more than 1000 PLHIVs are diagnosed with TB disease. Furthermore, TB is the number two (2) cause of death among communicable, maternal, neonatal & nutritional diseases<sup>8</sup>.

To combat coinfections, several policies are in place for the care of PLHIVs. These include Isoniazid preventive therapy (IPT) or latent TB infection (LTBI) prophylaxis for PLHIVs, Intensified TB case finding among PLHIVs, TB infection control in HIV health-care settings, Co-trimoxazole prophylaxis, Hepatitis B and C screening, treatment and management in HIV clinics.

In addition, surveillance and case management of sexually transmitted infections have been an integral part of HIV programme in Malaysia. This is because STIs, similar to majority of newly diagnosed HIV cases, are transmitted sexually. Evidence also showed that STIs increase the risk of HIV infection<sup>9</sup>. STI screening in Malaysia is not limited to HIV clinic, instead it is integrated into primary health services.

<sup>&</sup>lt;sup>8</sup> Stop TB Partnership. (2021). Tuberculosis Situation In 2019 (http://www.stoptb.org/resources/cd/MYS\_Dashboard.html)

<sup>&</sup>lt;sup>9</sup> US CDC. (2021). STDs and HIV – CDC Fact Sheet (https://www.cdc.gov/std/hiv/stdfact-std-hiv-detailed.htm)



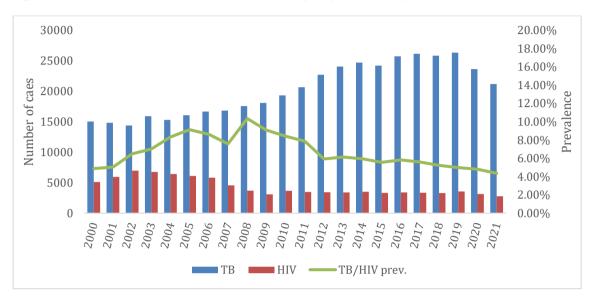
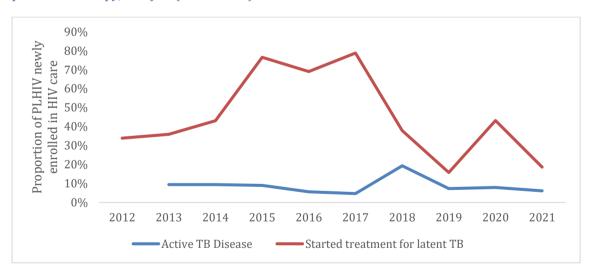
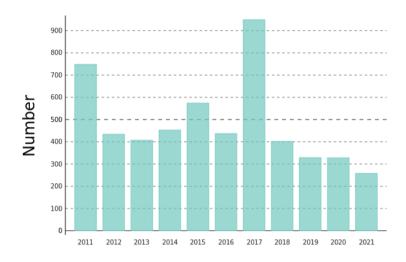


Figure 34: Proportion of PLHIV newly enrolled in HIV care with active TB disease and started on TB preventive therapy, Malaysia (2012 - 2021)



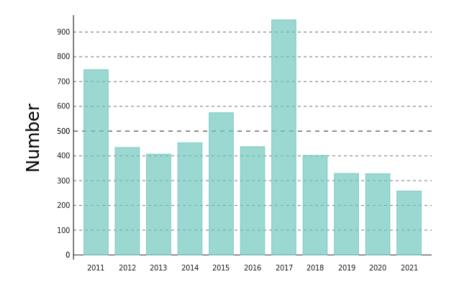
#### Co-managing TB and HIV treatment, Malaysia (2011-2021)

Figure 35 Number of HIV-positive new and relapse TB patients started on TB treatment during the reporting period who were already on antiretroviral therapy or started on antiretroviral therapy during TB treatment within the reporting year



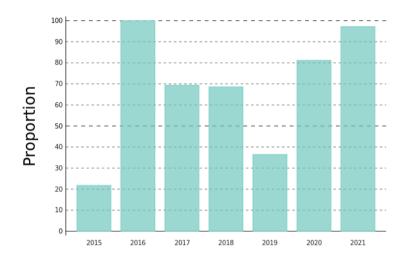
#### Sexually transmitted infections, Malaysia (2011-2021)

Figure 36 Number of men reporting urethral discharge and laboratory-diagnosed gonorrhea in the past 12 months



#### Hepatitis testing, Malaysia (2015-2021)

Figure 37 Proportion of people starting antiretroviral therapy who were tested for hepatitis C virus (HCV)



# 8. The Way Forward

In realizing SDGs through ending AIDS, full operationalization and effective implementation of national, sub-national and local development plans was initiated to achieve the target of reducing number of new HIV cases. With all the initiatives, HIV infections has declined from peak in 2002 (28 per 100,000) to a plateau since 2009 (11 per 100,000). At the end of 2021, HIV new case notification was at the level of 8.5 per 100,000 population.

The Ending AIDS by 2030 health goal is based on a mathematical model that estimates that HIV epidemic will end if adequate PLHIVs attain viral suppression. To ensure Malaysia's vision of ending AIDS by 2030, which is a mere nine years away, at least 95% of PLHIVs must be diagnosed, 95% of them must be on treatment, and 95% must be viral-suppressed. This is dependent on identifying undiagnosed individuals, linking and retaining them in care.

The current HIV treatment cascade of 83-66-82 demonstrated that there were still gaps and challenges that need immediate attention. Among the challenges were:

- 1. Expansion of HIV testing services at the community level i.e. CBT and self-testing
- 2. Improving surveillance of population-at-risk through continuous data collection at static health facilities and community outreach locations. Constantly updated estimation and projection of key populations, risk behaviour as well as coverage of prevention programme were needed to inform subsequent strategic planning.

Main activities planned for 2022 to address some of these challenges are:

- 1. IBBS 2022
- 2. PSE 2022
- 3. Expansion of stigma and discrimination reduction initiatives
- 4. Provision of PrEP at primary care

#### 8.1 IBBS 2022

Malaysia has incorporated Integrated Biological and Behavioural Surveillance (IBBS) survey since 2009 to complement the National HIV surveillance system. The IBBS is done at regular interval (two to three years) among key populations to track the behavioural and HIV prevalence trend, with the last IBBS being conducted in 2017.

The findings from this survey will be used to project and estimate the epidemic and disease progress over time which is crucial for better planning of preventive activities among KPs.

#### 8.2 PSE 2022

As Malaysia has a concentrated epidemic, lack of accurate population size data will negatively impact the development and implementation of any prevention, care, or treatment interventions for key populations.

Population size estimates, similar to IBBS, are conducted regularly to monitor intervention coverage and reach, obtain epidemic trends among key populations as well as assist programme monitoring and evaluation. The last PSE was conducted in 2017, and is due in 2022.

## 8.3 Stigma and discrimination reduction initiatives - Expansion

The Ministry of Health is piloting strategies to reduce stigma and discrimination experienced by PLHIVs in health settings. The intervention package includes improved quality of care via: people-centred care delivery, knowledge management, decision support. The outcome will be measured continuously to inform subsequent quality improvement strategies toward achieving less than 10% of PLHIV and key populations experience stigma and discrimination by 2025.

These have been implemented at selected hospitals and health clinics in 6 states namely: Penang, Sarawak, Kuala Lumpur, Selangor, and Johor. In 2022, the programme will be expanded to more health facilities in more states, with more health providers being trained in quality care without stigma and discrimination.

#### 8.4 PrEP delivery at primary care - Demonstration Project

As discussed in chapter 1, Malaysia is experiencing a major shift in HIV epidemic dynamics from needle-sharing to sexual transmission since 2010. Therefore it is not surprising that previous successful prevention programmes like needle-and-syringe exchange and Opioid substitution therapy, targeted at PWIDs, have not been successful in driving new infections closer to zero. Instead, HIV cases in Malaysia are projected to increase unchecked because sexual transmission is more complex and harder to control compared to blood-borne transmission.

Pre-exposure prophylaxis (PrEP), if used by a person at substantial risk of acquiring HIV infection before sexual exposuree, has been proven to be effective through numerous studies<sup>10</sup>. Consequently, the recommendation for PrEP has been included in the Malaysian Antiretroviral Therapy guideline since 2017<sup>11</sup>. However, uptake of PrEP among at-risk populations has been limited by cost concerns, as the users have to purchase PrEP from private practitioners or standard pharmacy at average cost of RM90-120 per bottle.

In an effort to halt sexual transmission and to put Malaysia back on track towards Ending AIDS by 2030, the Ministry will be conducting a demonstration project to deliver PrEP free-of-charge to key populations at government primary care facilities, set to commence in early 2023.

This project has two main objectives. Firstly, it aims to improve the uptake and coverage of PrEP among at-risk people. Secondly, data gathered during the demonstration project will inform the Ministry about the feasibility and acceptability of PrEP, and hence facilitating it to qualify for continuous government funding in the near future.

 $<sup>^{10}</sup>$  World Health Organization. (2015). Policy Brief: WHO Expands Its Recommendation on the Use of Oral PrEP

<sup>&</sup>lt;sup>11</sup> The Malaysian Society for HIV Medicine. (2017). Malaysian Consensus Guidelines on Antiretroviral Therapy 2017.