



**NATIONAL STD/AIDS
CONTROL PROGRAMME
SRI LANKA**

ANNUAL REPORT 2018



**MINISTRY OF
HEALTH
SRI LANKA**



**NATIONAL
STD/AIDS
CONTROL
PROGRAMME**



ANNUAL REPORT 2018

National STD/AIDS Control Programme

Email: info@aidcontrol.gov.lk

Tel : +94 11 266 7163

Web : www.aidcontrol.gov.lk

Address: 29, De Saram Place, Colombo 10, Sri Lanka

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Foreword

Sri Lanka has adopted the SDG target of “End AIDS by 2030” and has accepted the challenge of achieving this target five years before the rest of the world, i.e. by 2025. In this journey through the fast track, National STD/AIDS Control Programme is the pioneer government institution in Sri Lanka which is taking the leadership and decisions to guide the national response to HIV and reach this goal timely.

The year 2018 has been significant for the NSACP as many important steps towards achieving international goals were taken further. The country is at the verge of achieving the WHO certification for the Elimination of Mother to Child Transmission (EMTCT) of HIV and syphilis, and by the end of 2018, the necessary validation targets of impact and process indicators were achieved with the collaboration of the Maternal and Child health programmes and the island-wide STD clinic network. Further to this, HIV testing services have been rolled out throughout the country covering all the Base hospitals and above as well as community-based testing, with the introduction of rapid tests for HIV screening.

As the world is being digitalized, the National STD/AIDS Control Programme (NSACP) also took initiatives to incorporate digitalization and modern technology into the national programme to provide faster and more quality care by introducing the Electronic Information Management System. In 2018, almost all of the modules in this system were developed, and pilots have been started in the central and several peripheral STD clinics.

The annual report 2018 of NSACP is the reliable reference document which summarizes all the activities conducted by the NSACP and the network of island-wide STD clinics. Publication of this Annual Report would not have been possible without the continuous support from the staff in STD clinics and ART centres throughout the year.

I would like to take this opportunity to thank all the contributors to this document. The dedicated work of the team of the Strategic Information Management (SIM) unit and the staff of all reporting units of the NSACP are highly appreciated. It is my fervent hope that the information available in this document will be of value to further strengthen the national response to HIV and STI in Sri Lanka.

Dr. Rasanjalee Hettiarachchi
Director, National STD/AIDS Control Programme,
Ministry of Health, Nutrition & Indigenous Medicine,
Sri Lanka.

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Contributors for writing:

Dr Ariyaratne K. A. Manathunge¹, Dr L.I. Rajapaksa¹, Dr G. Weerasingha¹, Dr. H. P. Perera¹, Dr. C. Jayakody¹, Dr P.A.D.M.P. Perera², Dr J. Vidanapathirana³, Dr Sathya Herath³, Dr J.P. Elwitigala⁴, Dr H.M.A.H Karunaratne², Dr S. Muraliharan⁵, Dr S. Benaragama⁶, Dr M.P.V.R. Perera², Dr W.S.C. Dileka², Dr D.K.J. Thanthree², Dr P.I.M. Jayawardane², Dr L.P.P. Godakandarachchi², Dr I. L. Jayaweera², Dr H.M.P. Premachandra⁵, Dr P.I.M. Jayawardane², Dr Lahiru Rajakaruna⁹, Dr D.V.V. Kaluarachchi², Dr G.D.K. Dharmaratne²

Contributors for data management:

Dr Chathrini Gajaweera⁵, M.N. Chandima⁷, R.M.C.K. Rajakaruna⁸, Amila Maduranga¹⁰, Dr D.L.D.C. Liyanage², Dr K.A.C.R. Wijesekara²

Edited by:

Dr Ariyaratne K. A. Manathunge¹

Development of this report is financially supported by WHO, Country Office, Sri Lanka.

(¹Consultant Venereologist, ²Senior Registrar in Venereology, ³Consultant Community Physician, ⁴Consultant Microbiologist, ⁵Medical Officer, ⁶Consultant Epidemiologist, ⁷Development Officer, ⁸Public Health Nursing Sister, ⁹Medical Officer-Health Informatics, ¹⁰ICT Officer)

Abbreviations

• ABC	abacavir
• ABST	antibiotic susceptibility test
• AEM	AIDS Epidemic Model
• AIDS	Acquired Immune Deficiency Syndrome
• ANC	antenatal clinic
• ART	antiretroviral treatment
• ARV	antiretroviral drugs
• AZT	zidovudine
• BB	Beach boys
• BCC	Behaviour Change Communication
• BH	Base Hospital
• CD4	Cluster of differentiation
• CDC	Center for Disease Control
• CIN	cervical intraepithelial neoplasia
• CMV	Cytomegalovirus
• CSHW	Castle Street Hospital for Women
• DDG - PHS	Deputy Director General - Public Health Services
• DFM	Diploma in Family Medicine
• DGH	District General Hospital
• DGHS	Director General of Health Services
• DMH	De Soysa Maternity Hospital for Women
• DQA	data quality assessment
• DRV	darunavir
• DTM	Diploma in Transfusion Medicine
• DU	drug user
• ECS	early congenital syphilis
• EFV	efavirenz
• EIA	enzyme immunoassay
• EID	early infant diagnosis
• EIMS	Electronic Information Management System
• ELISA	enzyme linked immunosorbent assay
• EMTCT	elimination of mother to child transmission
• EQA	external quality assessment
• ETU	emergency treatment unit
• FPA	Sri Lanka Family Planning Association

- FSW Female sex worker
- FTC emtricitabine
- GFATM Global Fund to fight AIDS, TB and Malaria
- GH General Hospital
- GoSL Government of Sri Lanka
- HBsAg Hepatitis B Surface Antigen
- HCW Health care worker
- HDL high density lipoprotein
- HIV human immunodeficiency virus
- HPV human papilloma virus
- HSV herpes simplex virus
- HSS health system strengthening
- HTC HIV testing and counselling
- HTS HIV testing services
- HCG human chorionic gonadotropin
- IBBS Integrated Biological and Behavioural Surveillance
- ICU intensive care unit
- ICTA information and communication technology agency
- IDU Injecting drug user
- IEC information, education and communication
- KP Key population
- LFU lost to follow up
- LPV lopinavir
- LPV/r lopinavir and ritonavir
- LDL low density lipoprotein
- LoI letter of intent
- MAC mycobacterium avium complex
- MARP most at risk populations
- MCH maternal and child health
- MD Doctor of Medicine
- MDG Millennium Development Goals
- MLT Medical Laboratory Technologist
- MO Medical Officer
- MOH Ministry of Health
- MOIC Medical Officer in charge
- MSM Men who have sex with men
- MTCT mother to child transmission
- M&E monitoring and evaluation
- NAC National AIDS Committee
- NBTS National Blood Transfusion Service

• NDDCB	National Dangerous Drug Control Board
• NCPA	National Child Protection Authority
• NFM	New funding model
• NGO	nongovernmental organization
• NGU	non-gonococcal urethritis
• NIID	National Institute of Infectious Diseases (IDH)
• NNRTI	non-nucleoside reverse transcriptase inhibitor
• NRL	National Reference Laboratory
• NRTI	nucleoside reverse transcriptase inhibitor
• NSACP	National STD/AIDS Control Programme
• NS	Nursing student
• NSP	National strategic plan
• NVP	nevirapine
• OI	opportunistic infections
• OPD	Outpatient Department
• PA	particle agglutination
• PCR	polymerase chain reaction
• PCU	Primary Care Unit
• PDHS	Provincial Director of Health Services
• PE	peer educators
• PEP	post exposure prophylaxis
• PEPFAR	US President's Emergency Plan for AIDS Relief
• PGC	presumptive gonococcal infection
• PHI	Public Health Inspector
• PHLT	Public Health Laboratory Technician
• PHNS	Public Health Nursing Sister
• PI	protease inhibitor
• PICT	provider initiated counselling and testing
• PIU	Project Implementation Unit
• PLHIV	People living with human immunodeficiency virus
• PMTCT	prevention of mother to child transmission
• PSE	population size estimation
• PWID	people who inject drugs
• RAL	raltegravir
• RDHS	Regional Director of Health Services
• SGOT	serum glutamic oxaloacetic transaminase
• SGPT	serum glutamic pyruvic transaminase
• SOP	standard operational procedures
• SRH	sexual and reproductive health
• STD	sexually transmitted diseases

- STI sexually transmitted infections
- TA technical assistance
- TB tuberculosis
- TDF tenofovir
- TGW transgender women
- TOT Training of trainers
- TPPA Treponema pallidum particle agglutination assay
- TTI Transfusion transmissible infections
- UNAIDS Joint united nations programme on HIV/AIDS
- UNICEF United nations international children emergency fund
- UNFPA United Nations Population Fund
- USAID United States Agency for International Development
- VCT Voluntary Counselling and Testing
- VDRL venereal disease research laboratory test
- VOG Visiting Obstetrician and Gynecologist
- WAD World AIDS day
- WHO World Health Organization
- 3TC lamivudine

1. Introduction

The National STD/AIDS Control Programme (NSACP) of the Ministry of Health is the main government organization which coordinate the national response to sexually transmitted infections including HIV/AIDS in Sri Lanka. It collaborates with many national and international organizations such as the Global Fund to Fight Against AIDS, TB and Malaria (GFATM) and UN organizations while providing leadership and technical support to 33 island wide STD clinics and 21 ART centers. Furthermore, it provides quality STI and HIV laboratory services through a comprehensive laboratory network. National and subnational level monitoring and evaluation and surveillance are other important activities carried out by NSACP.

NSACP has achieved the task of providing best possible preventive and clinical services for key and vulnerable populations as well as for the general population. In addition, it supports the National Institute of Infectious Diseases (NIID) of Sri Lanka to provide clinical care for HIV infected individuals, which functions as an ART center as well as a center providing clinical care for HIV infected individuals, outside the NSACP in Sri Lanka.

The NSACP is working towards Ending AIDS by 2025 and elimination of mother to child transmission of HIV and syphilis by 2019.



Senior management team - NSACP, Sri Lanka

Our Mission

Contributing to a healthier nation through sexual health promotion, emphasizing prevention, control and provision of quality services for sexually transmitted infections including HIV.

Our Vision

Quality sexual health services for a healthier nation.

Objectives of National STD/AIDS Control Programme

1. Prevention of transmission of sexually transmitted infections (STIs) including HIV
2. Provision of care and support for those infected and affected with STIs including HIV

Main activities of the National STD/AIDS control programme

1. Coordinating the national response to HIV epidemic
2. Carrying out HIV prevention interventions
3. Helping to create an enabling environment for STI and HIV prevention
4. Provision of clinical services for sexually transmitted Infections
5. Provision of treatment and care for people infected and affected by HIV
6. Provision of laboratory services for STI and HIV diagnosis and management
7. Condom promotion for STI and HIV prevention
8. Provision of counselling services for STIs and HIV
9. Prevention of mother to child transmission of HIV and syphilis
10. Training and capacity building of health and non-health staff
11. Carrying out HIV and STI surveillance
12. Carrying out research in STI and HIV
13. Carrying out Monitoring and evaluation of STI and HIV services
14. Dissemination of Strategic information on STI and HIV

The NSACP staff is comprised of the Director as the head of the institution and a Senior Management team, who regularly discuss issues and pioneer in taking necessary actions related to the national response.

Figure 1.1 Organogram of the National STD/AIDS Control Programme, National Level

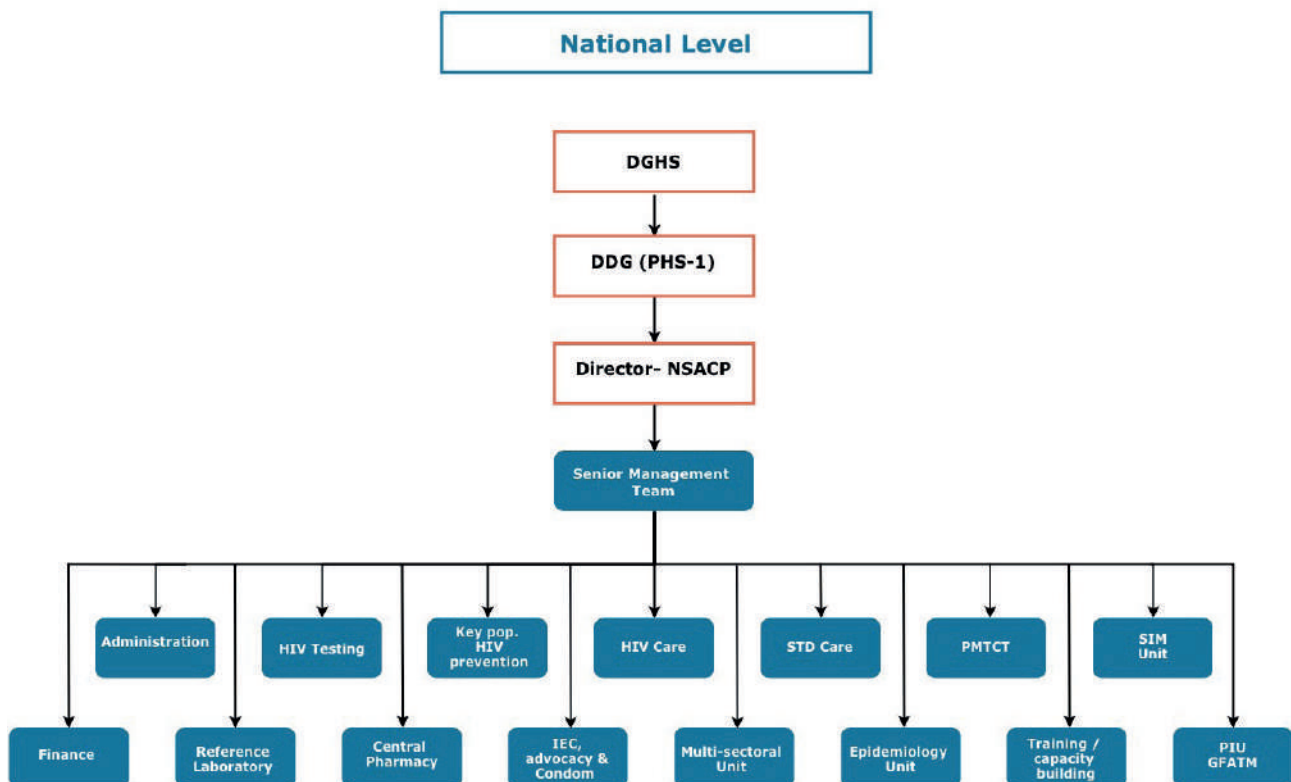
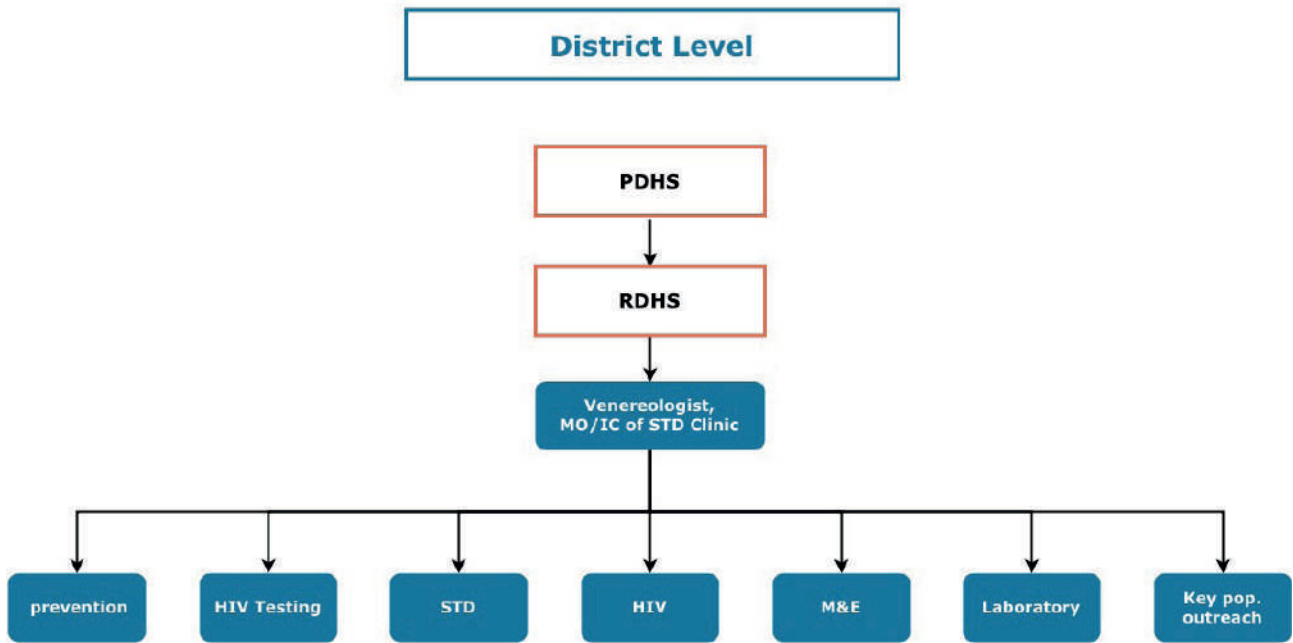


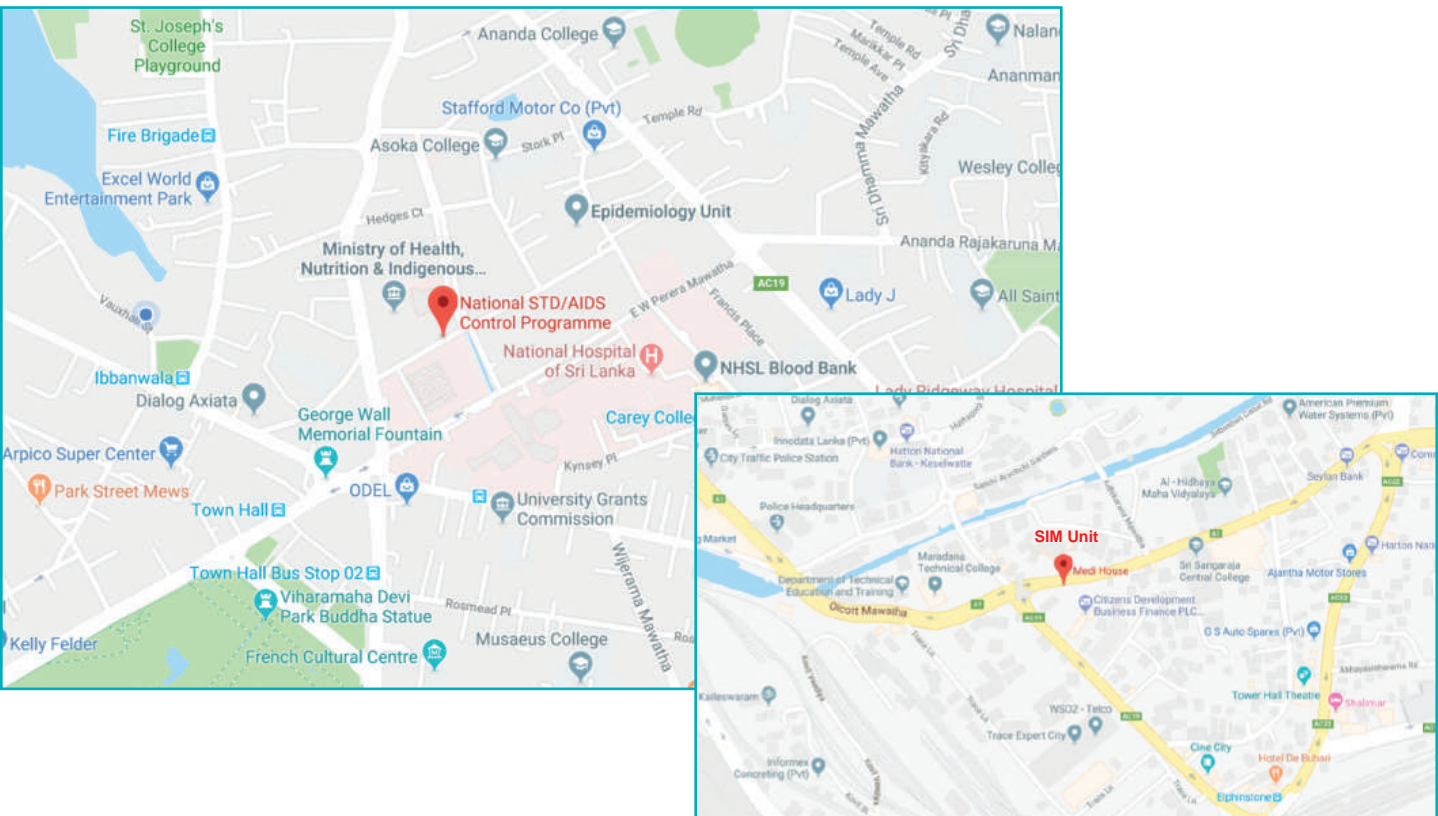
Figure 1.2 Organogram of the National STD/AIDS Control Programme, District Level



Location Details

Headquarters of the NSACP is situated at No. 29, De Saram Place, Colombo 10. Administrative and clinical services are located in this location. Three units i.e. SIM unit, Multi-sectoral unit and GFATM project implementation unit are located in the MOH building situated at No. 29, Medi house building, Sri Sangharaja Avenue, Colombo -10.

Figure 1.3 Location of the NSACP, Sri Lanka

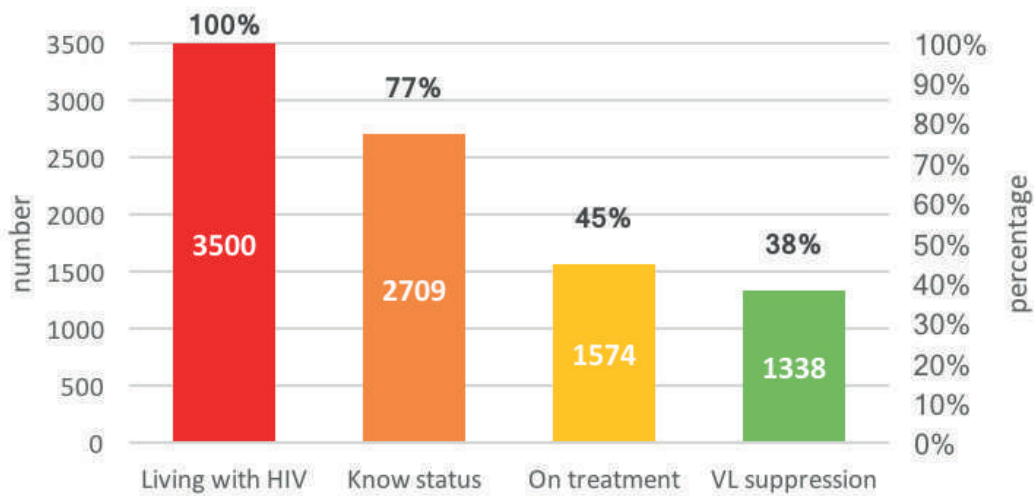


2. Situation of HIV epidemic in Sri Lanka

The estimated number of people living with HIV (PLHIV) in 2018 is 3500 (3100-4000). This is similar to 2017 HIV estimation. Total number of PLHIV diagnosed and alive is 2709 (cumulative reported number minus cumulative reported deaths). However, these are cumulative figures since 1987, and there are

deaths that are not reported as AIDS deaths. Out of the total 1656 PLHIV who are currently linked with HIV treatment and care services, 1574 have been started on antiretrovirals (ART), and 1338 were having viral suppression as given in the HIV cascade graph.

Figure 2.1 Cross-sectional HIV treatment cascade as of end 2018



The below figure illustrates the status of the “know the HIV status”, “on treatment” and “viral suppression” at the end of 2018. To achieve 90-90-90 targets, Sri Lanka needs to further improve HIV testing and treatment services.

Figure 2.2 Status of 90-90-90 targets as of end 2018

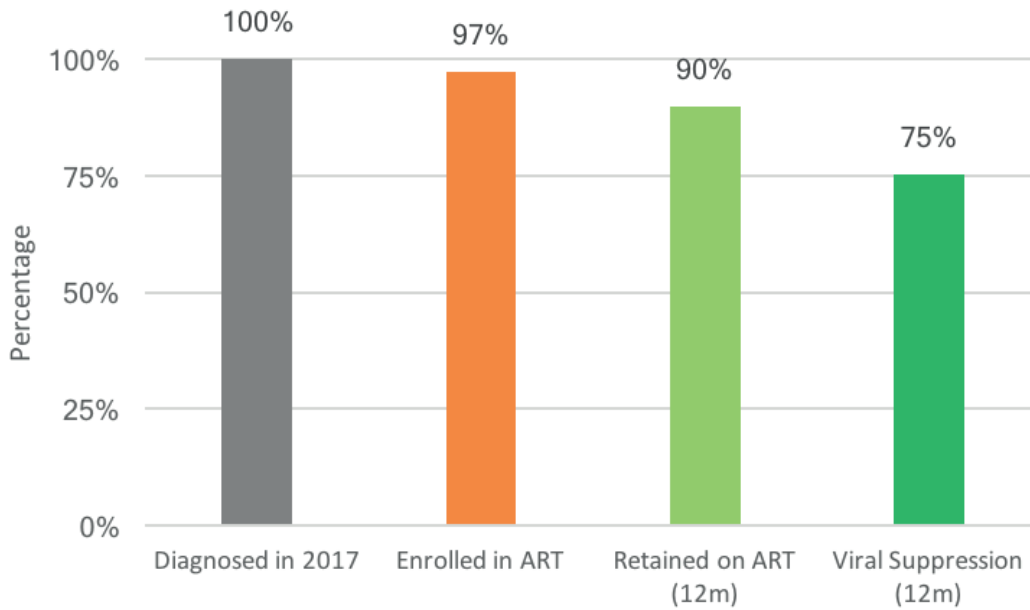


Since the cross-sectional HIV treatment cascade is dealing with cumulative numbers, there can be data issues. However, longitudinal treatment cascades which deal with the PLHIV diagnosed in one year are less likely to be affected by such data issues.

Longitudinal treatment cascades

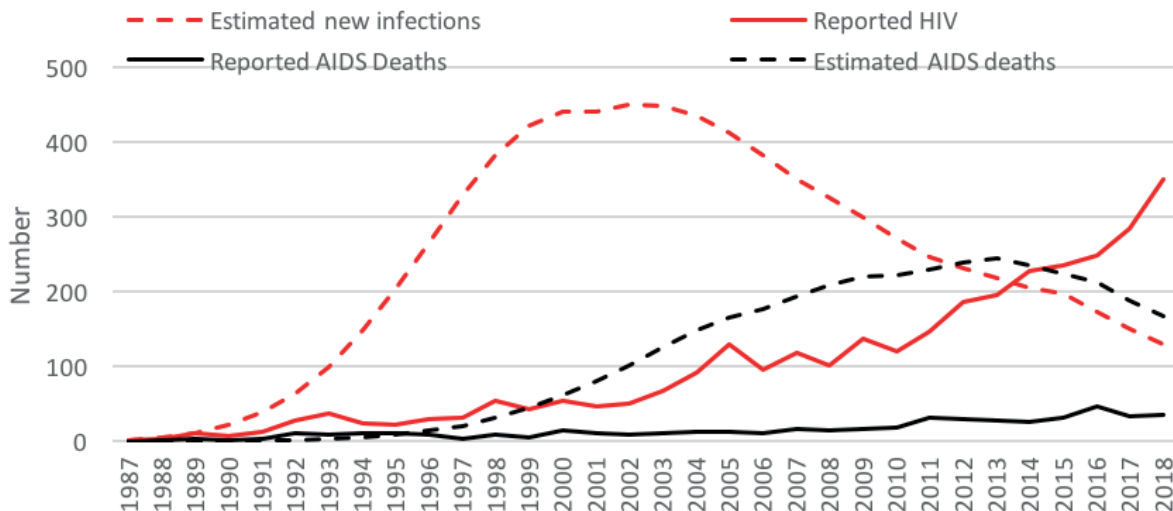
The following graph is a longitudinal cascade of PLHIV who were diagnosed with HIV in 2017, which shows that 90% of PLHIV were on ART after 12 months and 75% have achieved viral suppression.

Figure 2.3 Longitudinal HIV treatment cascade among PLHIV who initiated ART in 2017



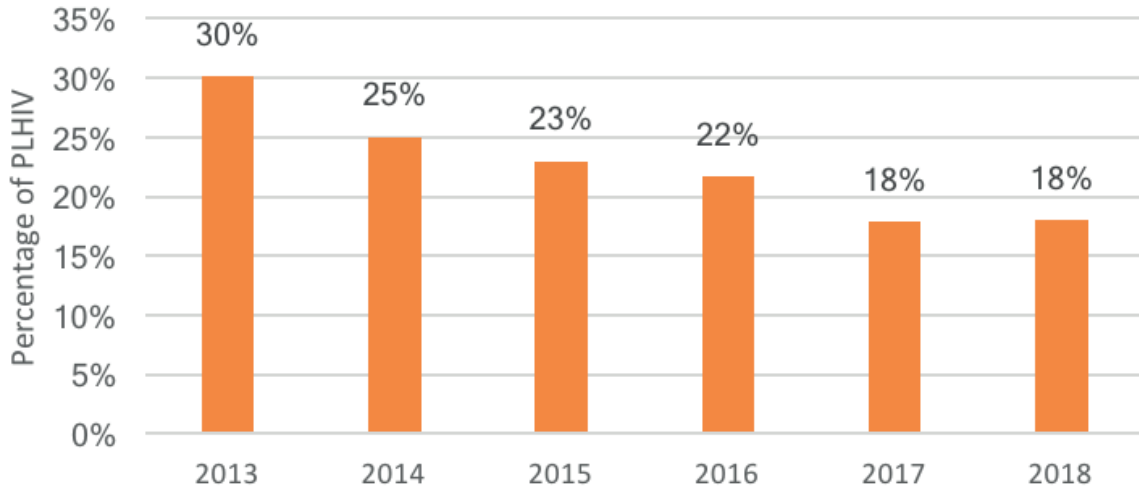
The below graph shows the trends of estimated and reported HIV infections and AIDS deaths. The trend of reported HIV infection shows an increase while the trend of estimated new HIV infections shows a gradual decrease after a peak in late 1990s and early 2000s. Estimated AIDS deaths show a peak in 2013 and a downward trend thereafter, while the reported AIDS deaths fluctuate below 50.

Figure 2.4 Trends of estimated and reported HIV infections and AIDS deaths, 1987-2018



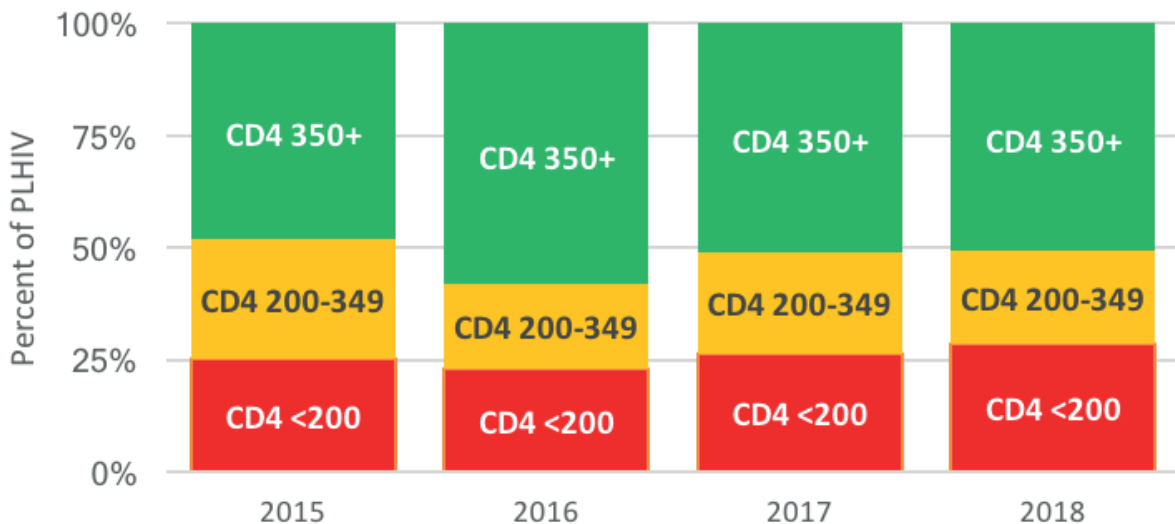
The below graph illustrates the percentage of HIV infections reported at the clinically AIDS stage. Currently, around one-fifth of reported persons are in this late stage of the HIV infection. These infections could have occurred nearly 6-10 years back and now getting detected due to clinical illnesses.

Figure 2.5 Percentage of PLHIV diagnosed at the AIDS stage



The following figure shows the CD4 Level of PLHIV who entered HIV care from 2015 to 2018. CD4 counts give a more specific indication on the duration of HIV infection compared to the clinical picture. This graph indicates 28% of PLHIV who entered HIV care in 2018 are in very late stage with a less than 200 CD4 count. Also, 45-50% of PLHIV are late-stage cases with CD4 counts less than 350. Therefore, over half of all newly diagnosed cases in a given year have been infected several years ago. These HIV infected persons may get detected by scaling up of HIV testing programmes as well as by increased awareness of the availability of HIV treatment services.

Figure 2.6 CD4 Level of PLHIV who entered HIV care, 2015-2018

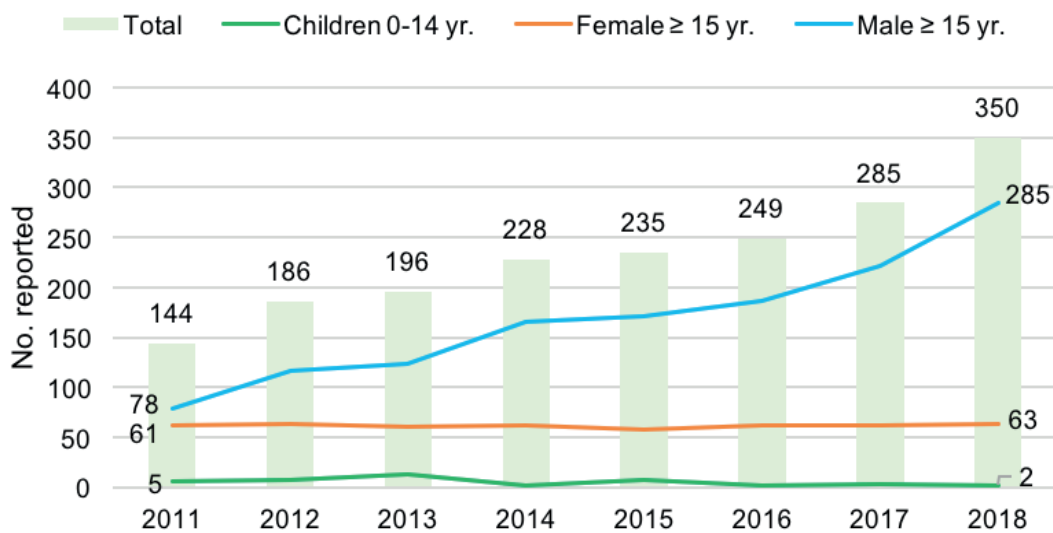


Reported data on HIV

HIV diagnosis is not a notifiable condition in Sri Lanka. However, because of the centralised HIV confirmatory system with Western Blot, all confirmed HIV seropositive persons are reported, and basic epidemiological information is collected by NSACP. A total of 350 HIV infected persons were newly reported during 2018. This is an increase of 23% from the number reported during 2017.

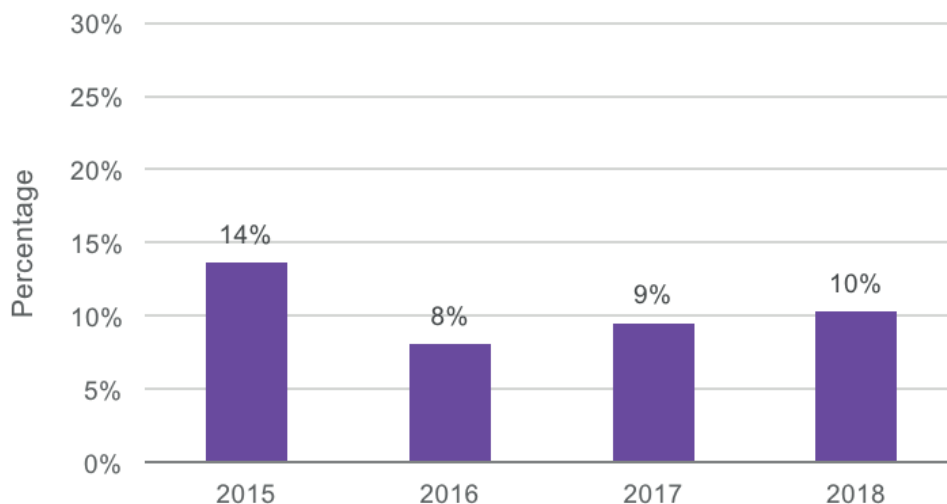
The below graph shows trends of reported HIV infections by age and sex during the 7-year period since 2011. Children below 15 show a reduction in numbers. During 2018, two pediatric HIV infections were detected who got infected 3 to 4 years ago due to mother-to-child transmission. During this time period, the trend of adult female HIV infections is seen to be stable around 60 cases per year. However, during the same period, the trend of adult males has been increasing exponentially from 78 cases to 285 cases, which is a 265% increase. Rising reported numbers are entirely due to increasing numbers in adult males.

Figure 2.7 Number of reported HIV infections by age and sex, 2011-2018



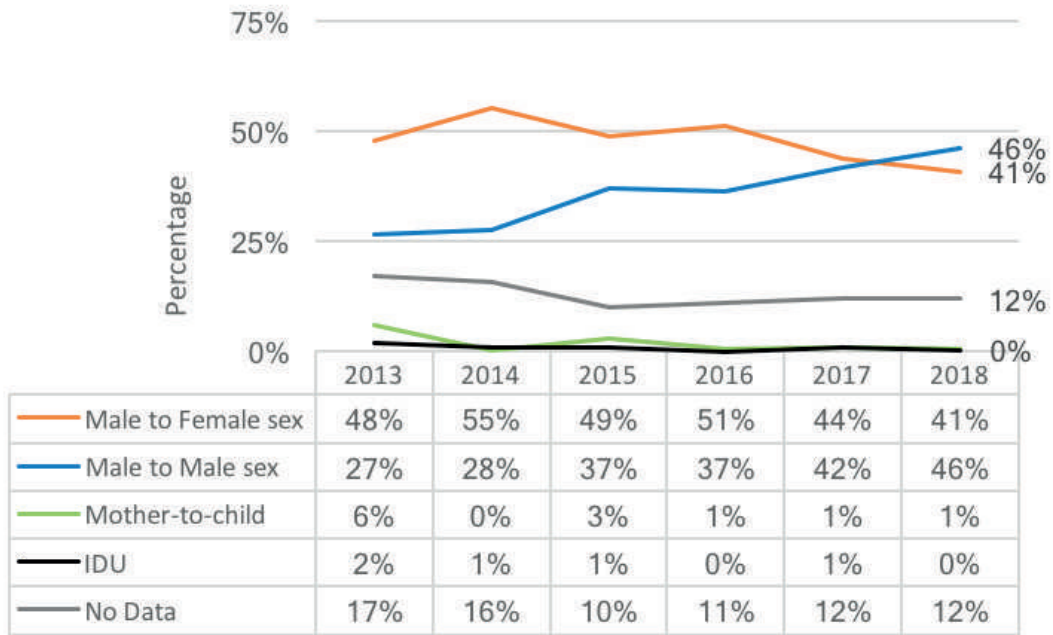
In some countries, HIV infections among young adults are increasing. The below graph shows the trend of HIV infections in this age group in Sri Lanka, which fluctuates around 10%.

Figure 2.8 Percentage of young adults (15-24) among reported HIV infections, 2015-2018



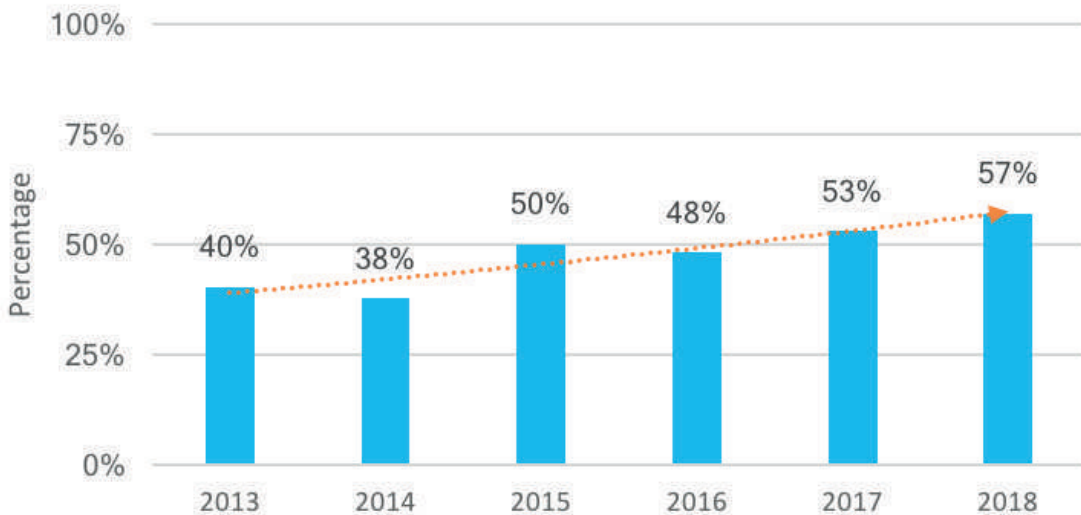
The below graph shows the probable mode of HIV transmission among HIV infected persons during the last six years. In around 12% of the cases, details were not reported to ascertain the probable mode of HIV transmission. As expected, the male-to-male and male-to-female sexual transmission are the most frequent modes of HIV transmission. Of these, male-to-male HIV transmission has become the predominant mode of HIV transmission since 2017. Very low rates of HIV transmission due to injecting drug use and mother-to-child HIV transmission are noticeable in the graph.

Figure 2.9 Probable mode of transmission among reported HIV infections, 2013-2018



The following graph shows that the proportion of male-to-male HIV transmission among reported males is nearly 60% in 2018. Unprotected sexual intercourse among males is driving the HIV epidemic in Sri Lanka. In addition to condom promotion, biomedical interventions such as pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis following sexual exposure (PEPSE) should be initiated and scaled up in Sri Lanka.

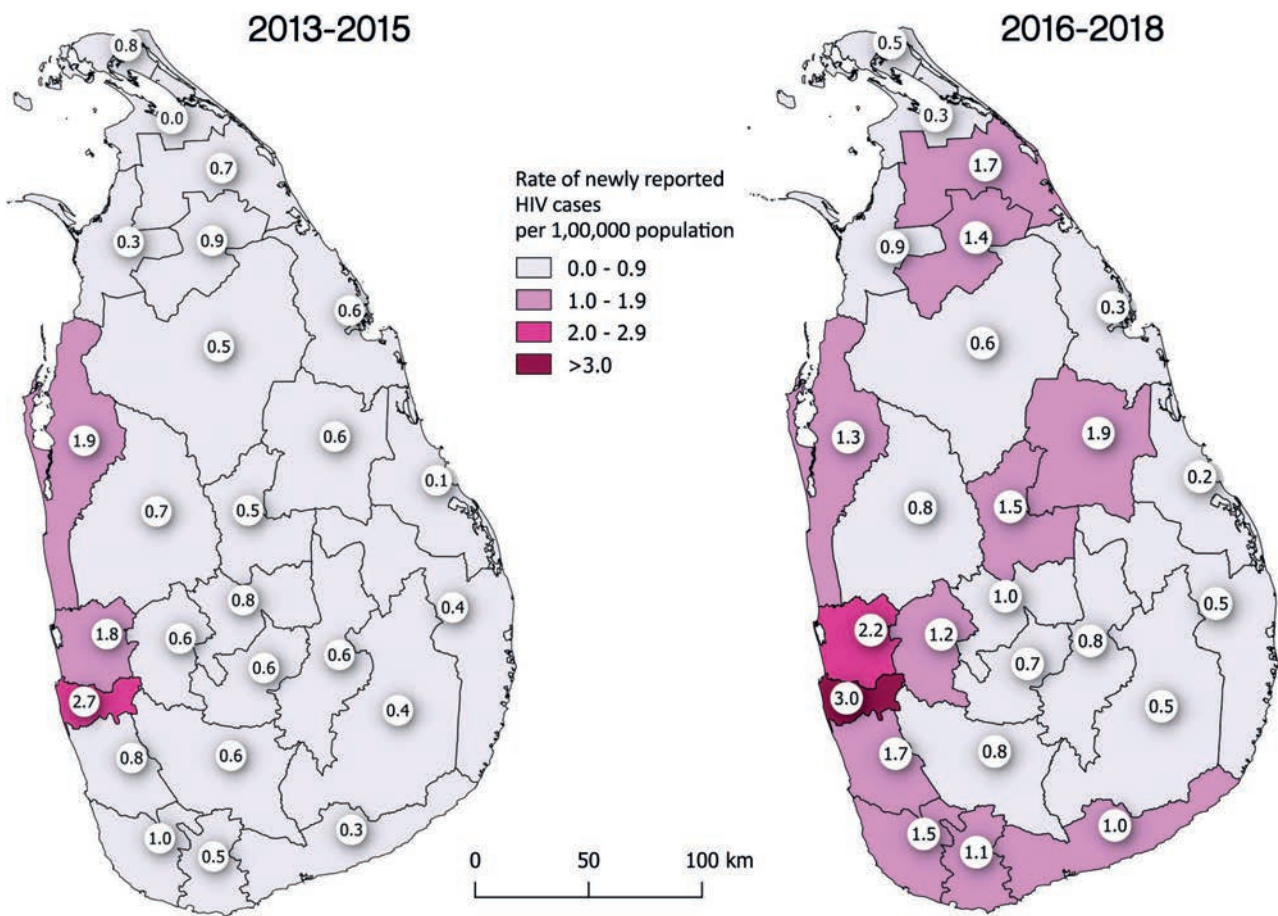
Figure 2.10 Percentage of male to male transmission of HIV among reported males



Geographical distribution of HIV infections

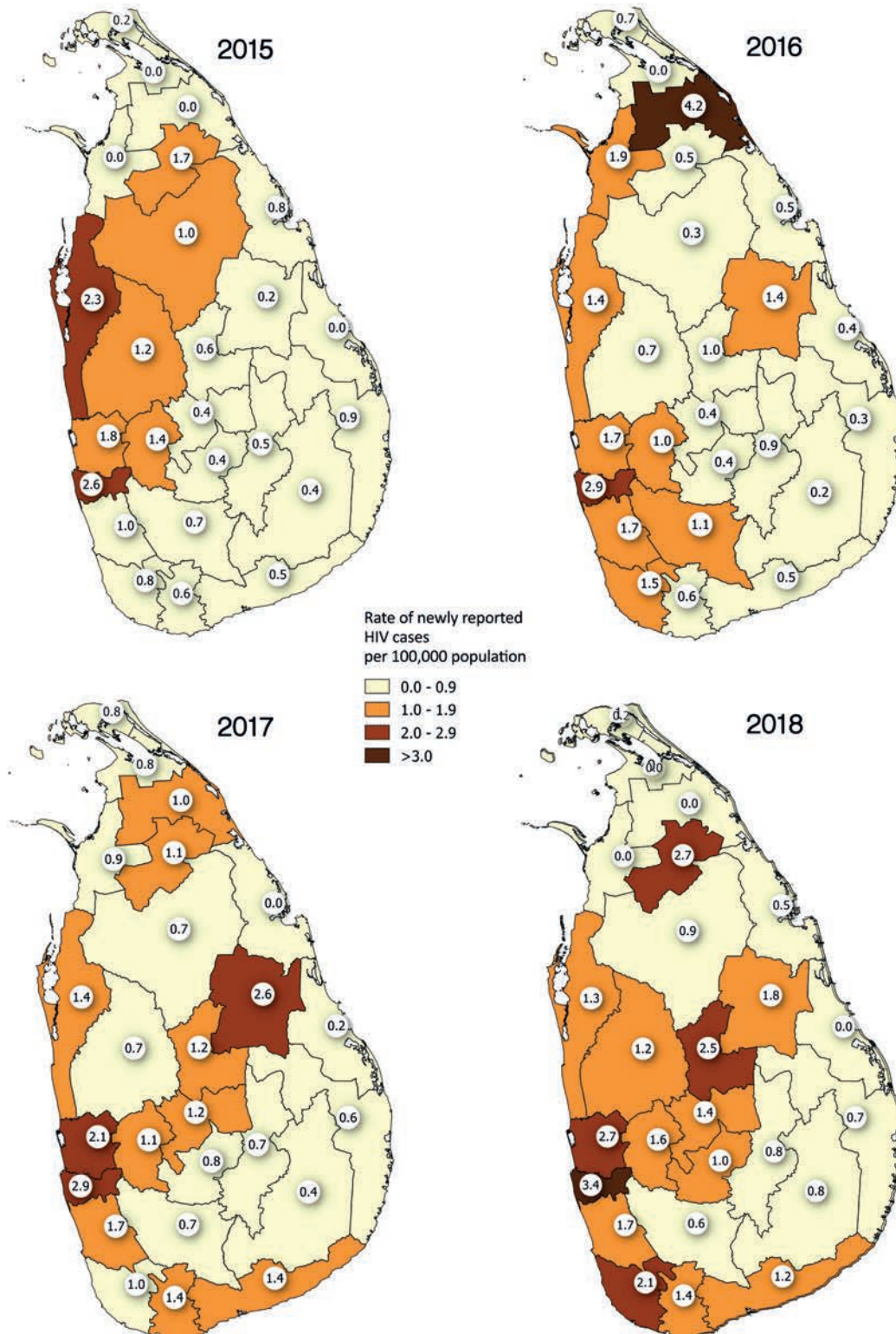
The maps given below indicate the average rate of HIV infections per 100,000 population in two “3-year periods” (2013-2015 and 2016-2018). These maps show that the HIV infection which was mostly concentrated in the Western and North-Western provinces have expanded to Southern province and some districts in North-Central and Northern provinces. Colombo and Gampaha districts are mostly affected with over 2 per 100,000 population during the recent three-year period (2016-2018).

Figure 2.11 The annual rate of newly reported HIV infections per 100,000 population
A comparison between 2013-2015 and 2016-2018



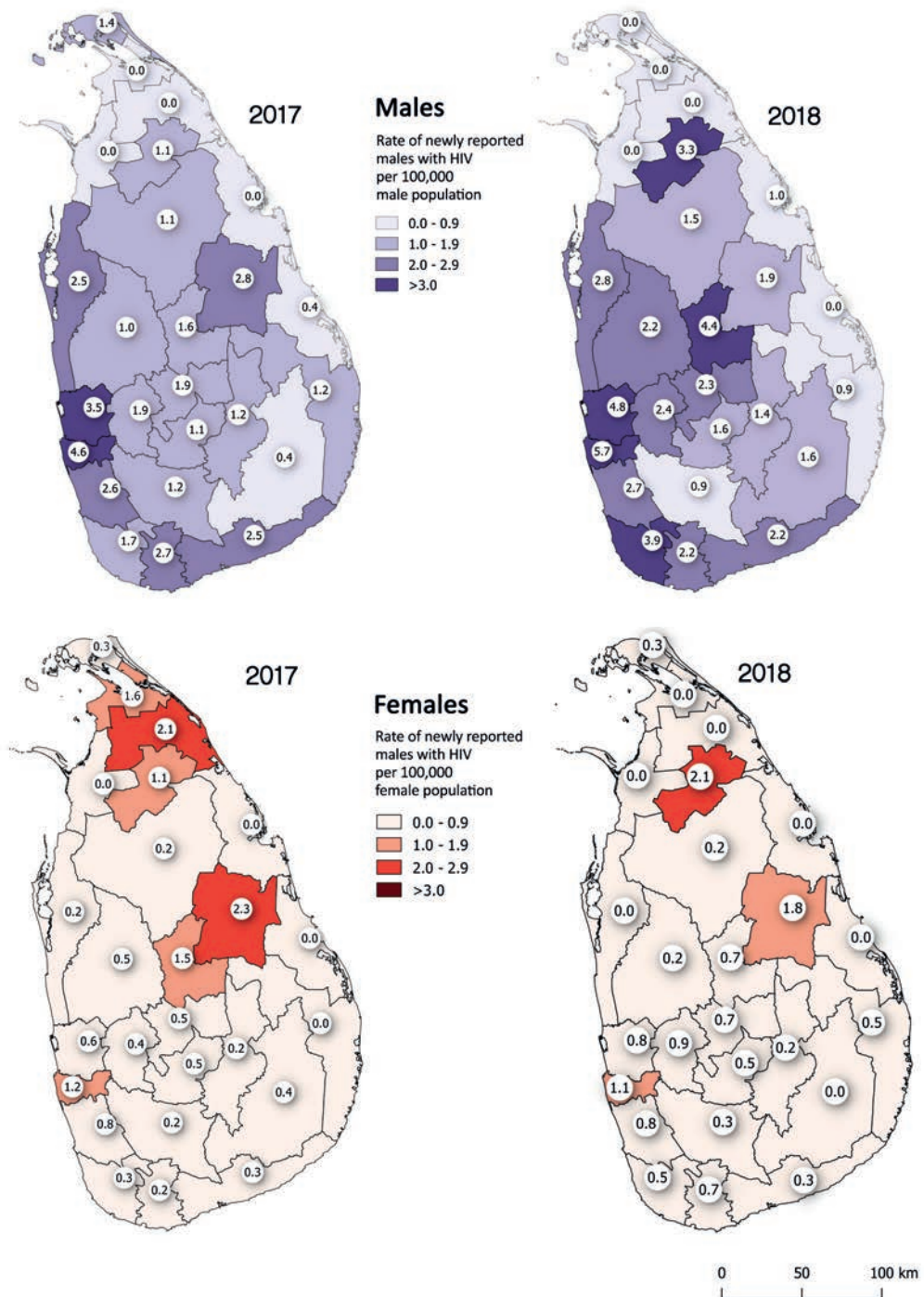
The four maps given below depict the rate of newly reported HIV infections per 100,000 population for years 2015, 2016, 2017 and 2018. Colombo district is the highest affected district in all four years. Of the 25 districts in the island, four districts have shown higher HIV rates in all four years. They are Colombo, Gampaha, Puttalam and Kegalle districts. During 2018, all districts in the Western province, North-Western province, Southern province and Central province have shown higher rates for HIV infection.

Figure 2.12 Rate of newly reported HIV cases per 100,000 population



The below maps show the rates of newly reported males and females in 2017 and 2018. Different patterns are seen when HIV infections are disaggregated by sex. Over three male HIV infections per 100,000 male population are seen in Colombo and Gampaha in 2017. During 2018, in addition to these two districts, Galle, Matale and Vavuniya districts also had over 3 per 100,000 population. None of the districts has over three female HIV infections per 100,000 female population. Higher HIV infection rates among females are seen in 3 districts i.e. Colombo, Polonnaruwa, Vavuniya in both 2017 and 2018. During 2017, most of the districts of Northern province showed a higher rate of HIV infection among females. However, this pattern was not seen in 2018.

Figure 2.13 Rates of newly reported HIV infections per 100,000 male and female population in 2017 and 2018



3. AIDS Epidemic modeling 2018

Introduction

Incidence (New HIV infections) of people living with HIV (PLHIV) in Sri Lanka had been estimated using Estimation and Projection Package (EPP) from 2009 to 2016. During 2017, the National estimation working group decided to use AIDS epidemic model (AEM) in place of EPP as this would provide more details such as building intervention scenarios and impact analysis etc.

However, mother-to-child transmission and infection of children related estimates cannot be generated by AEM as it estimates only adult infections. Spectrum software is used for this purpose.

The UNAIDS Reference Group on Estimates, Modelling and Projections provides technical guidance to countries to arrive at these estimates.

Strengths and limitations of AEM model

Strengths

- (1) AEM includes specific and considerable number of indicators per sub-population allowing the country to have a more realistic projection and model.
- (2) Since AEM is a process model, it allows the country to consider behavioural and biological data that are changing over a period of time secondary to prevention and treatment interventions.
- (3) Compared to other projection and modeling software, AEM is more suitable for Asian type of HIV epidemics.

Limitations

- (1) Some inputs necessary for AEM are not available in Sri Lanka and this creates data gaps. The assumptions used for these may or may not reflect a "real" epidemic.
- (2) Estimates related to mother-to-child

transmission, children infections and detailed age breakdown estimates are not available in AEM.

- (3) AEM tool does not have age disaggregation to describe the projections and interventions for different age groups. The AEM collectively addresses issues as all adults (15+age group).

The process of changeover to AEM in Sri Lanka.

Preparation of baseline scenarios in AEM

The NSACP conducted a workshop to develop the Sri Lanka AIDS Epidemic Model in Bangkok, Thailand in October 2017. The workshop was facilitated by East-West Center through the Policy Research and Development Institute Foundation and UNAIDS Asia and the Pacific Regional Support Team (UNADS-RST).

Policy and Impact analysis workshop-1

NSACP organised a workshop on AEM policy and impact analysis in April 2018 in Colombo, Sri Lanka with technical support from East West Center and USAIDS. Main objectives of this workshop were to update the AEM baseline model with new data, to analyse and estimate unit cost, coverage, and effectiveness of prevention and treatment programme, to develop intervention scenarios for possible policy options and to gain clarity on interpretations of impact analysis outputs.

Resource from NSACP, FPA, Global Fund and several other stakeholders provided inputs to this workshop. At the end of workshop a dissemination workshop was held on 27th of April, 2018 to present outputs of the workshop and to get a feedback from relevant stakeholders.

Table 3.1 Value used in AEM and Data sources

Indicator	Value	Remarks/assumption	Source
Percentage of Condom use by FSW with Client/ IDU/ MSM	76%	1. Calculated by considering the condom use in regular and non-regular partner, average condom use figures of IBBS 2017, 2014 and BSS in 2006 2. The condom use in 2017 is lower than 2014 according to the IBBS finding	Source: IBBBS 2014, 2017 and BSS 2006
Percentage of Condom use by MSM	67%	Calculated by considering the condom use in regular and non-regular partner.	Source: IBBS 2017
Percentage of male IDUs who share needles	62%		Rapid Assessment on IDU conducted by NSACP in 2017
Percentage of all injections shared (among those who share)	90%		IBBS 2017

Policy and Impact analysis workshop-2

During the dissemination meeting held in April 2018, it was decided to conduct another

interpretations of impact analysis outputs.

Dr Wiwat Peerapatanapokin from the East West Center provided technical support to this workshop. Relevant staff from NSACP, FPA and other stakeholders

Table 3.2 Coverage of specific programs

Indicator	Value	Remarks/assumption	Source
Effective programme coverage among FSW	21%	Based on number of FSWs who reached by NGO, HIV testing by STD clinic	Reports of NSACP, NGO sources
Effective programme coverage among MSM	26%	Based on number of MSMs who reached by NGO, HIV testing by STD clinic	Reports of NSACP, NGO sources
Effective programme coverage among IDU	0%	No current specific prevention programme for IDUs	

workshop using final results of IBBS and Population size estimation conducted in 2017/2018. Second workshop was held on 12th and 13th of June 2018

Objectives of this workshop were to update the current AEM baseline model with new data from the IBBS and PSE, to refine, validate, and finalize AEM baseline, to analyze and estimate unit cost, coverage, and effectiveness of prevention and treatment program, to develop intervention scenarios for possible policy options that will be used in the Global Fund Concept Note and National Strategic Plan and to gain clarity on

provided their inputs during this workshop.

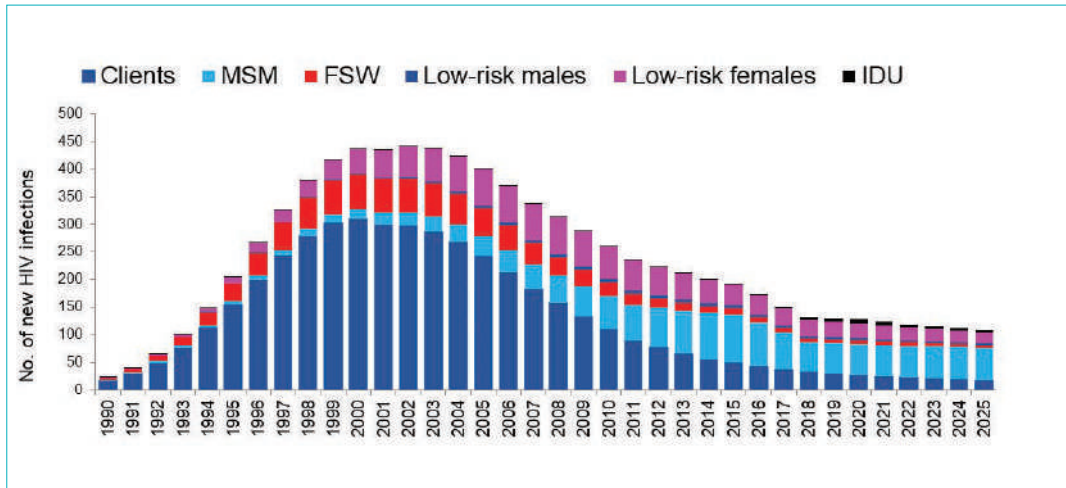
Summary of outputs from AEM modeling process held during June 2018.

Percentage of Condom use by FSW with Client/ IDU/ MSM	76%
Percentage of Condom use by MSM	67%
Percentage of male IDUs who share needles	62%
Percentage of all injections shared (among those who share)	90%

Following figures came as the output for PLHIV estimates for 2017. It should be noted that these are for all adult infections i.e. those over 15 years of age.

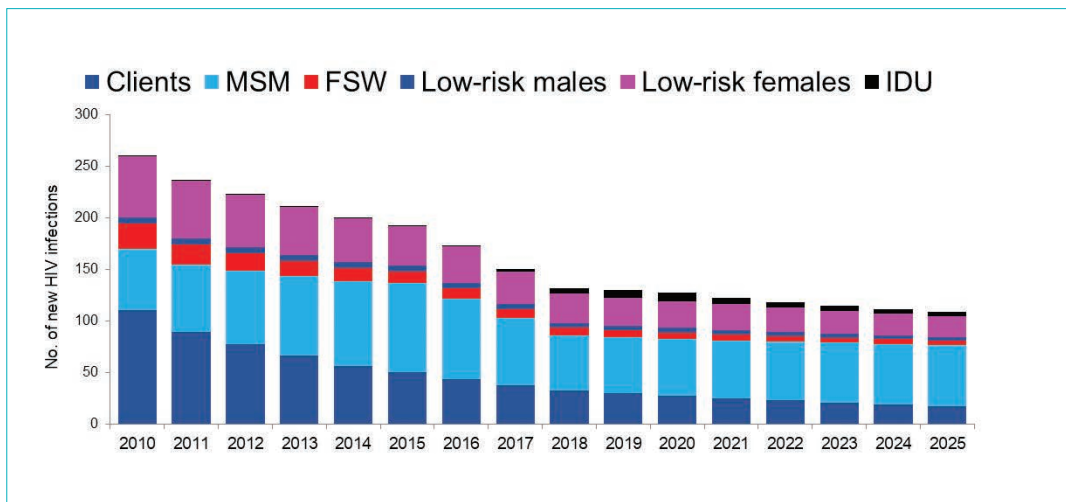
New HIV infections by Populations

Figure 3.1 Estimated number of new HIV infections by Populations, 1990-2025



According to the above graph new HIV infections peaked in early 2000's and thereafter gradually declined. However according to this baseline projection, if there is no change of intervention coverage and effectiveness in the future, reduction of new HIV infections stagnates after 2018.

Figure 3.2 Estimated number of new HIV infections by Populations, 2010-2025



This graph shows the percentages of new HIV infections according to the defined subpopulations. The highest proportion of new HIV infections comes from the MSM population. Clients of sex workers and low-risk females also contribute to a higher proportion of new HIV infections. Low risk males and females represent spouses and partners of high risk population groups.

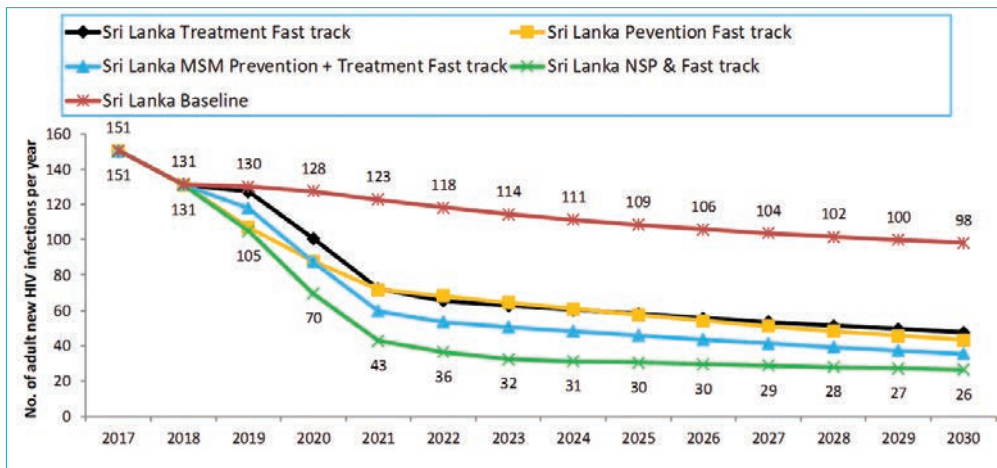
Results from Policy and Impact Analysis

Following 5 scenarios were included in the AEM model to see the projections up to 2030. However, it should be noted that these are hypothetical scenarios as prevention and treatment are interlinked. For an example treatment coverage cannot be increased to 90%, without significantly increasing prevention components such as reaching and testing.

- (1) *Baseline Scenario i.e. Continue current prevention and treatment coverage levels.*
- (2) *Treatment Fast Track Scenario i.e. ART coverage increased from current 36% to 81% in 2020 90% in 2030.*
- (3) *Prevention Fast Track Scenario i.e. Current FSW, MSM and IDU (21%, 26% and 0% respectively) programme coverages increased to 90% in 2020.*
- (4) *National Strategic Plan/Fast Track Scenario i.e. FSW, MSM and IDU program coverage increased to 90% in 2020 and ART coverage increased from current level of 36% to 81% in 2020, 90% in 2022.*
- (5) *MSM Prevention and Treatment Fast Track Scenario i.e. MSM programme coverage increased from 26% to 90% in 2020 and ART coverage increased to 81% in 2020, 90% in 2022.*

Number of adult New Infections, 2017-2030

Figure 3.3 Total Adult new infections by scenarios, 2017-2030



As shown in the above graph, a significant impact on new HIV infections can be achieved by scaling up of prevention and treatment coverage.

Comparison of resource needs for different scenarios

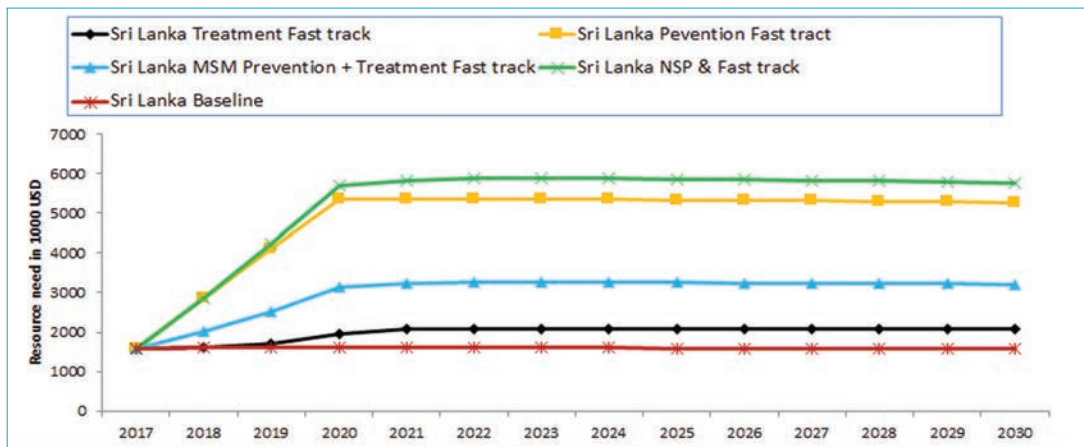
Resource need was calculated by the current unit costs of prevention and treatment programmes as given in the table below.

Table 3.3 Unit costs of prevention and treatment programmes

Type of Unit cost	Unit cost	Assumption/Remarks	Source/Basis
Unit cost for FSW	116 USD	Based on Expenditure on HIV intervention among FSW funded by GF and GOSL in 2017	Expenditure reports of NSACP and NGOs
Unit cost for MSM	114 USD	Based on Expenditure on HIV intervention among FSW funded by GF and GOSL in 2017	Expenditure reports of NSACP and NGOs
Unit cost for IDU	200 USD	Currently, as there is no prevention programme for IDU, the unit cost cannot be calculated. Instead the regional unit cost is used.	Based on discussion during the workshop
Unit cost for ART	324 USD	Cost include laboratory, procuring ART, cost for OI drugs.	Expenditure report of NSACP

Projection of resource need for different scenarios

Figure 3.4 Total Resource needs for different scenarios, 2017-2030



Sri Lanka NSP and treatment fast track is the most expensive and it needs nearly 6 million USD. However, 'MSM Prevention and Treatment Fast Track Scenario' which has a significant impact on reduction of new HIV infections, costs around 3 million USD per year. While 'Sri Lanka baseline' is the lowest resource needed scenario, it does not significantly reduce new HIV infections in future.

Can Sri Lanka End AIDS by 2025 ?

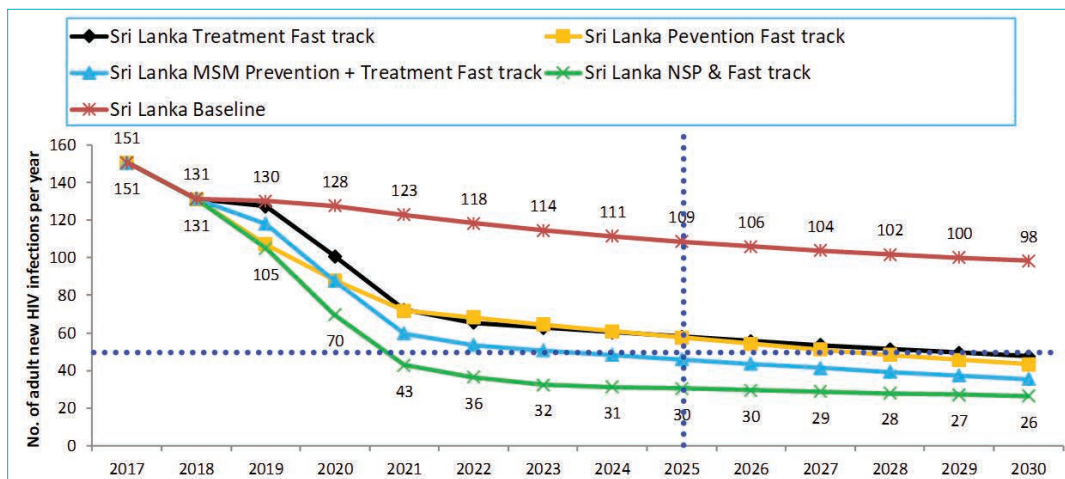
According to UNAIDS, Ending AIDS can be achieved by 2030 if we achieve 90-90-90 targets by the year 2020. Ending AIDS is defined by reduction of new HIV infections and AIDS related deaths by 90% relative to the estimated new infections and AIDS deaths in 2010. However, Sri Lanka has set the target of Ending AIDS by 2025, i.e. five years before the global target.

Baseline new HIV infections and AIDS related deaths in 2010 and the target for Ending AIDS

According to the Spectrum estimations carried out in 2018, there had been less than 500 new HIV infections and less than 500 AIDS related deaths in 2010. Therefore, Sri Lanka needs to achieve less than 50 new infections and 50 AIDS related deaths to End AIDS epidemic.

Ending AIDS targets

Figure 3.5 Ending AIDS targets by 2025 and 2030



According to the above graph, all scenarios except 'Sri Lanka baseline scenario' is capable of achieving Ending AIDS target for new infections i.e. less than 50, by 2030. However, only two scenarios i.e. 'National Strategic Plan/Fast Track Scenario' and 'MSM Prevention and Treatment Fast Track Scenario', will be able to achieve ending AIDS targets by 2025. However, the former scenario i.e. 'MSM Prevention and Treatment Fast Track Scenario' needs only half of the resources necessary for implementing 'National Strategic Plan/Fast Track Scenario'.

The challenge is to achieve these theoretical scenarios in the real world situations where issues like limited resources, stigma and discrimination on Key populations and programmatic issues are adversely affecting all these scenarios.



Working groups involved in the development of AIDS Epidemic Model baseline scenarios for Sri Lanka.



4. Sexually Transmitted Infections

Prevention of sexually transmitted infections (STI) plays a key role in controlling the HIV epidemic. Hence, prioritizing STI prevention and care by the National STD/AIDS Control Programme has been an important strategy during 2018 similar to previous years.

Genital herpes, non-gonococcal infections and genital warts consist of main STIs reported in 2018, showing a trend that is similar to previous years. Details of the number of STIs reported, and male to female distribution are described in the figure and table below. Non-gonococcal infections and genital herpes and trichomoniasis were more common in females, whereas genital warts, syphilis and gonorrhoea were more reported in males.

Figure 4.1 No. and percent of STIs reported during 2018

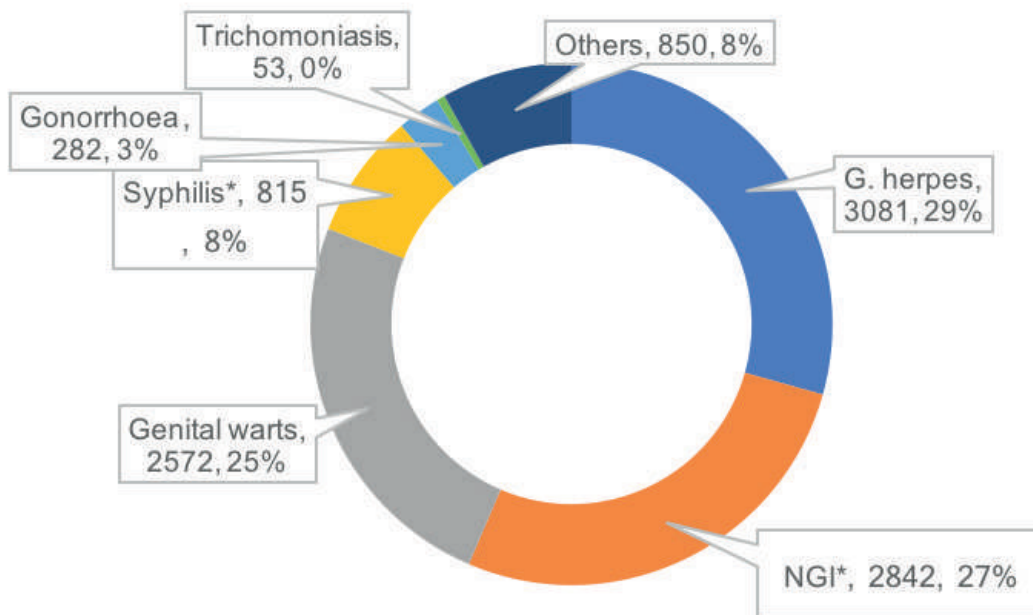
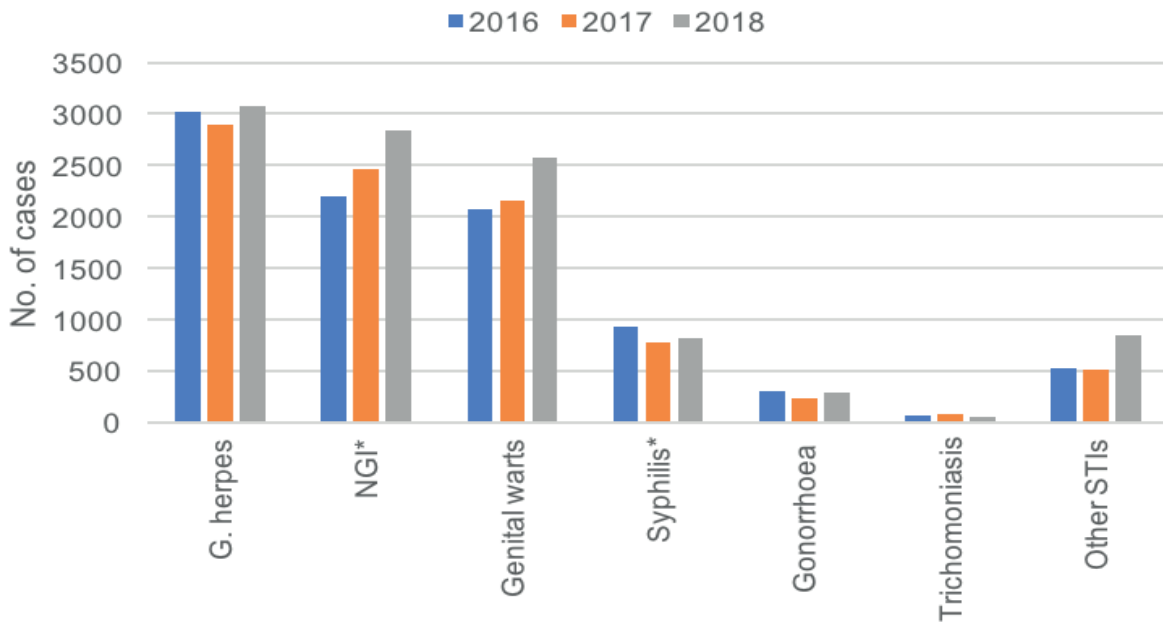
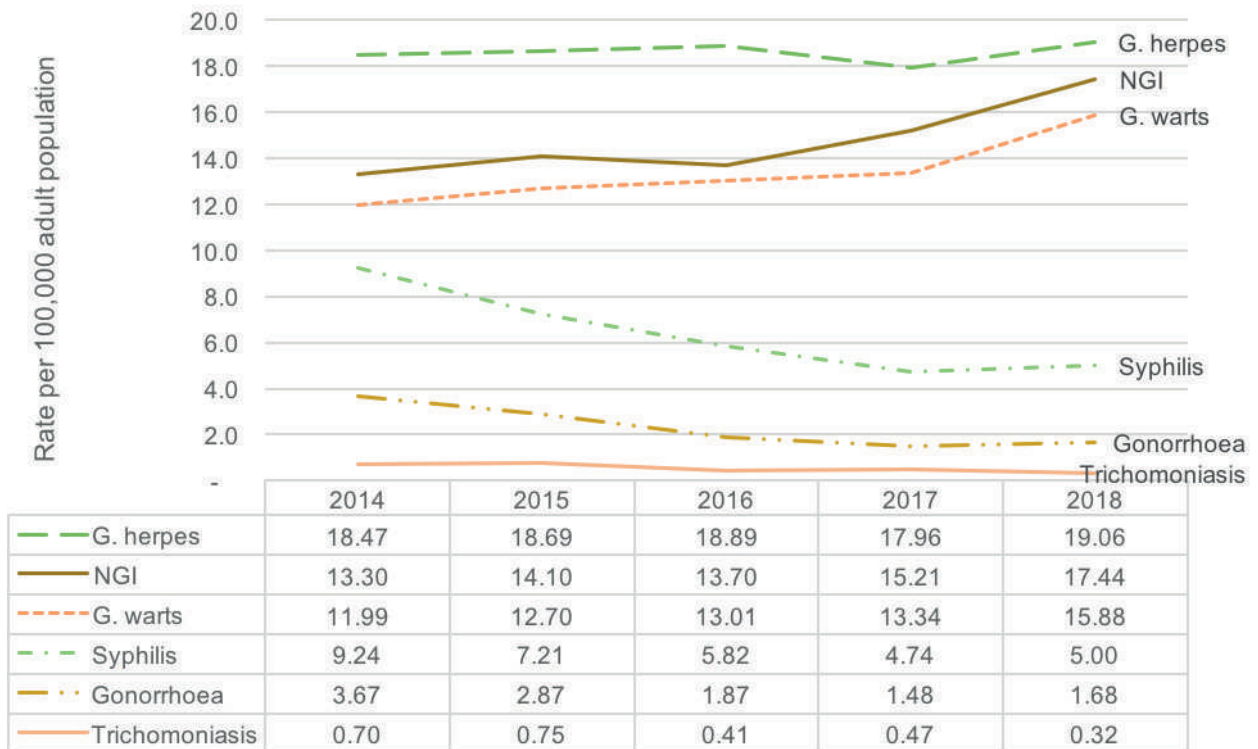


Table 4.1 STIs reported from STD clinics during 2018 by sex

Diagnosis	Male		Female		Total	
	No	%	No	%	No	%
Genital herpes	1268	26%	1813	32%	3081	29%
Non-gono. infections	886	18%	1956	35%	2842	27%
Genital warts	1416	29%	1156	21%	2572	25%
Syphilis	552	11%	263	5%	815	8%
Gonorrhoea	206	4%	76	1%	282	3%
Trichomoniasis	11	0%	42	1%	53	1%
Other STIs	528	11%	322	6%	850	8%
Total STIs	4867	100%	5628	100%	10495	100%

Figure 4.2 Trend of reported STIs, 2016-2018

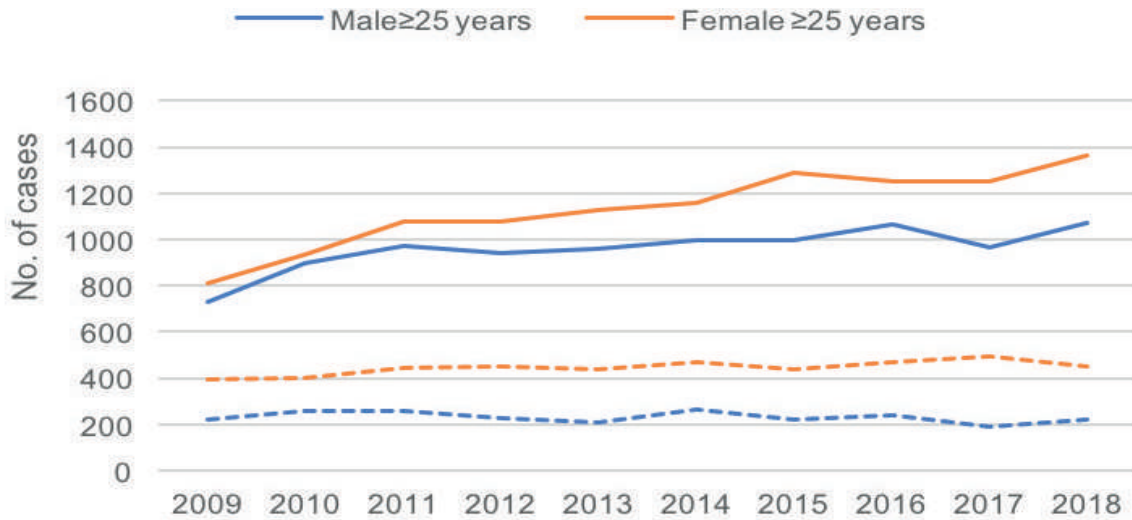
The above graph shows the number of different STIs reported during the past three years. Genital herpes, non-gonococcal infections and genital warts were the commonest STIs reported in all three years and showed a rising trend in 2018.

Figure 4.3 STI rates per 100,000 adult population (15+ years), 2014-2018

The above figure shows the STI rates per 100,000 adult population (15+ years). The trend of genital herpes is slightly increasing compared to 2017. Genital warts and non-gonococcal infection rates showed an increasing trend over recent years. However, there are declining trends of syphilis and gonorrhoea rates during the period of 2014 to 2018. It should be noted that the data represents only cases seen in public STD clinics.

1. Genital herpes

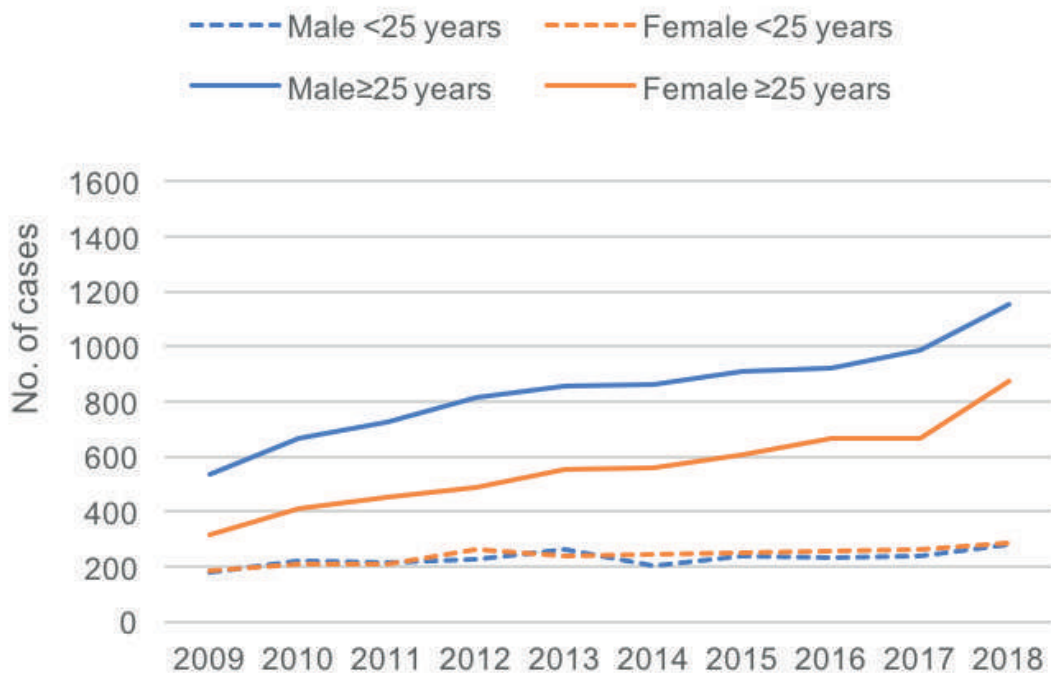
Figure 4.4 Reported cases of genital herpes by sex, 2009 – 2018



Genital herpes remains the commonest STI reported during the past years with a female predominance, probably an impact seen due to higher rates of symptomatic disease and recurrence rates among females than males. Three thousand and eighty-one (3081) cases were reported in 2018 with a total of 1813 cases among females and 1268 cases among males. The number of cases reported among people above 25 years of age was markedly higher than that of among people of less than 25 years. Even though the trend of the reported number of genital herpes had been somewhat stable over the last five years, a slight rise can be noted in 2018 among both genders who were more than 25 years of age.

2. Genital warts.

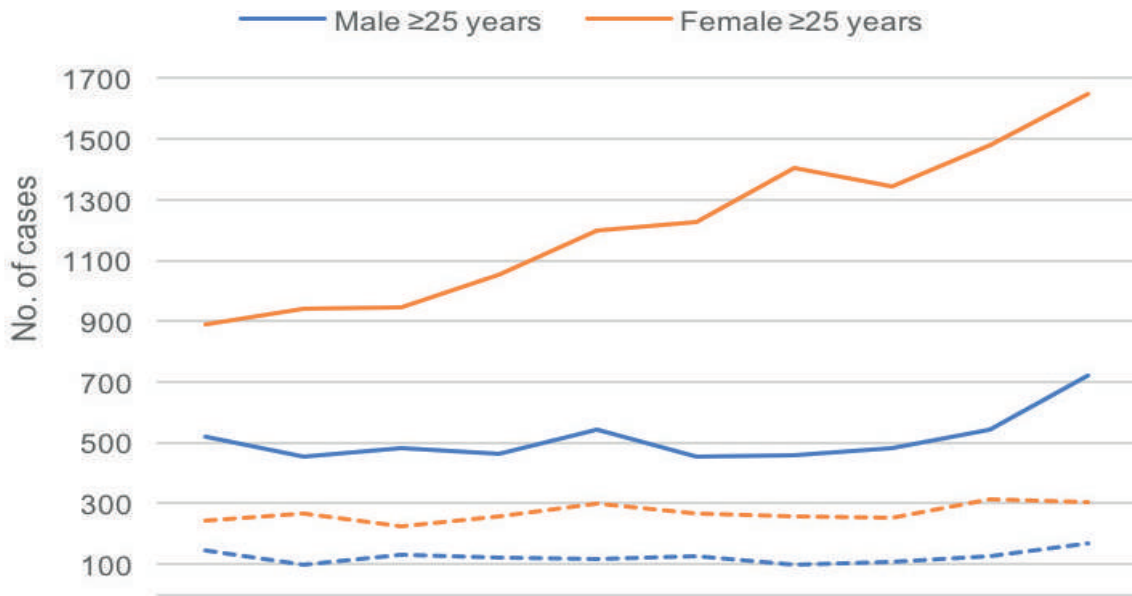
Figure 4.5 Reported cases of genital warts, 2009 – 2018



A higher number of genital warts cases have been reported among males in the older age group. An upward trend can be observed among both the males and females who are above 25 years, whereas the number of reported cases of genital warts among the younger population is more stable over the past five years.

3. Non-gonococcal urethritis and cervicitis.

Figure 4.6 Reported cases of Non- gonococcal urethritis and cervicitis, 2019 – 2018



Two thousand eight hundred and forty-seven (2847) cases of non- gonococcal urethritis and cervicitis were reported in 2018. Chlamydia infections are also included within this group, due to none availability of diagnostic facilities. A significant increasing trend is seen among females of more than 25-year age category culminating to over 1500 reported cases in 2018. A slight rise in the reported cases is also seen among the older male population during this year.

4. Chlamydia trachomatis

As mentioned above, specific diagnostic facilities were not available for the diagnosis of Chlamydia trachomatis during the year 2018. Hence all those cases are categorised under non-gonococcal infections.

5. Syphilis

Figure 4.7 Reported cases of early and late syphilis, 2009-2018

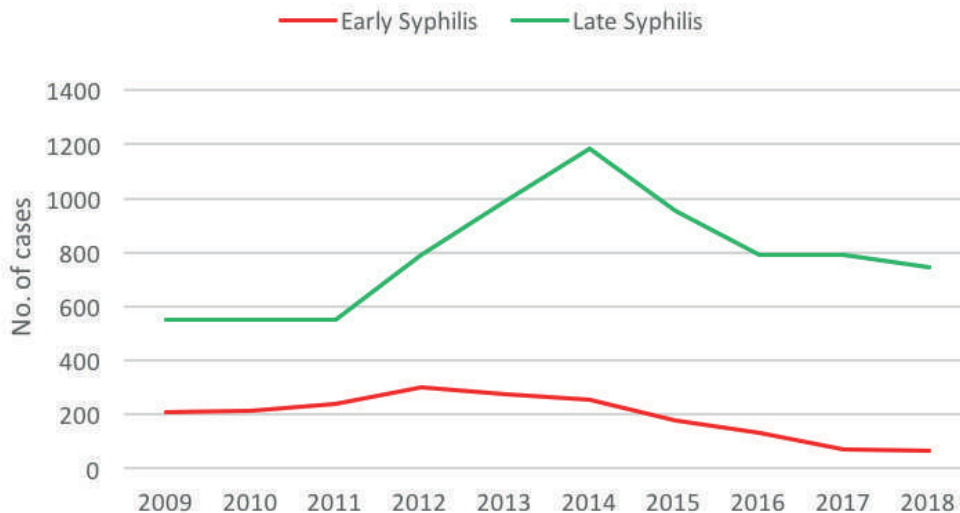
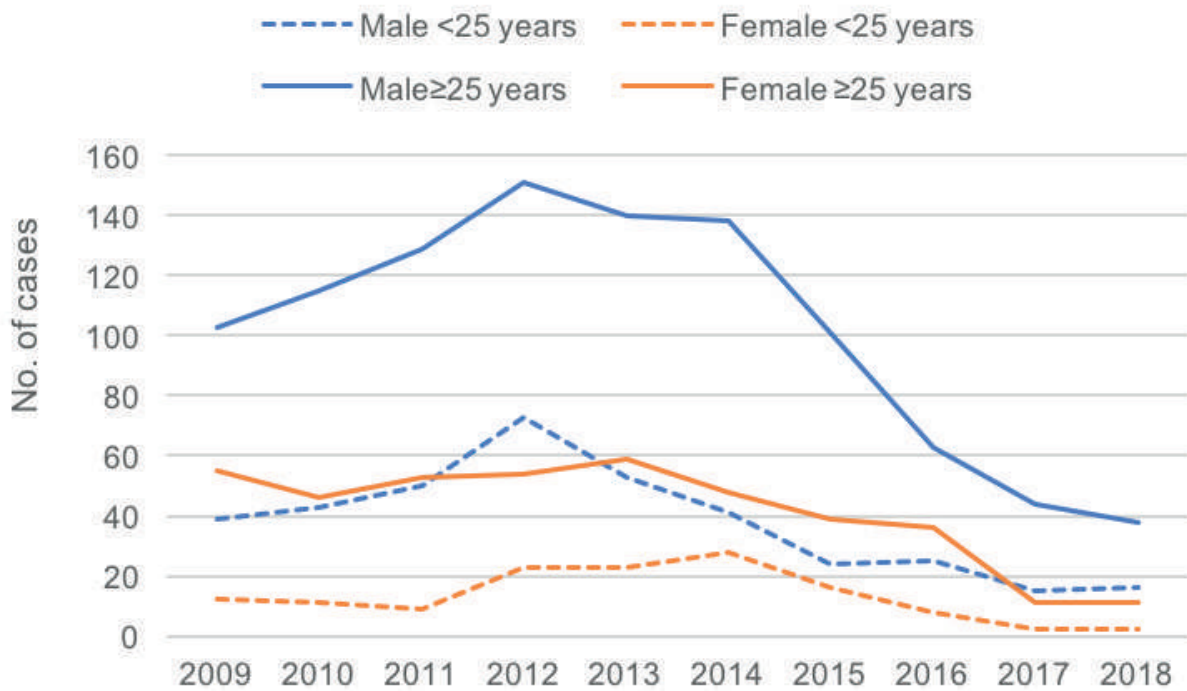
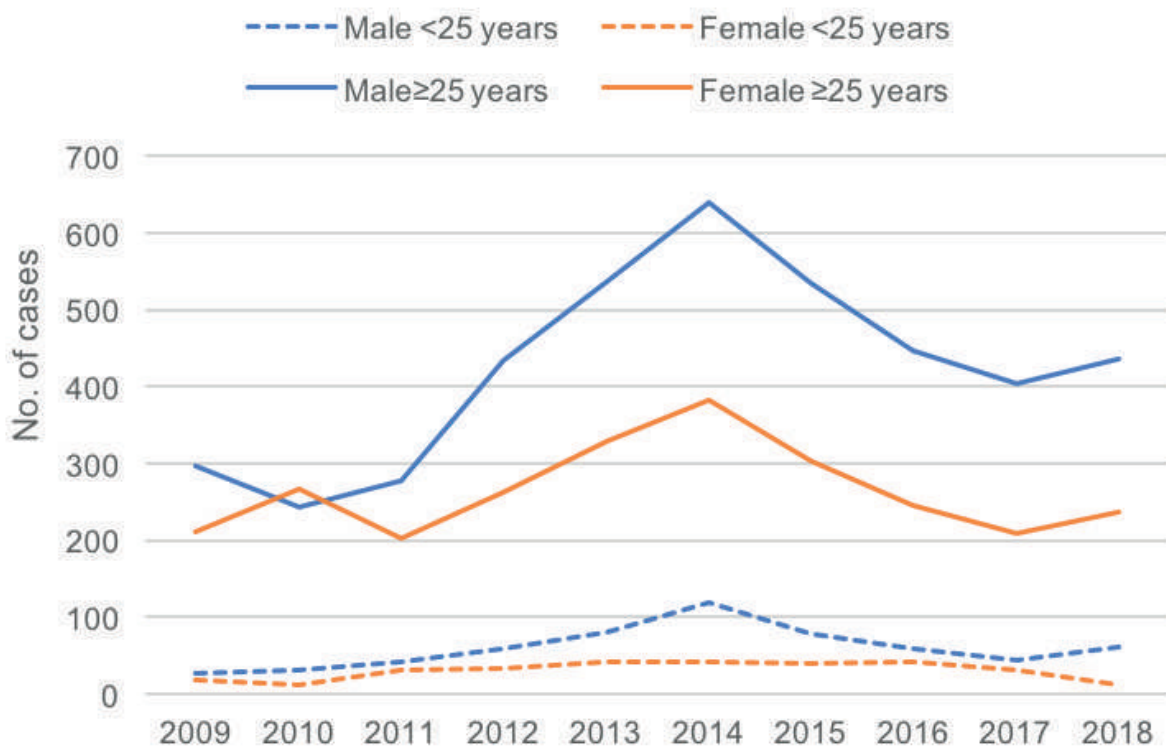
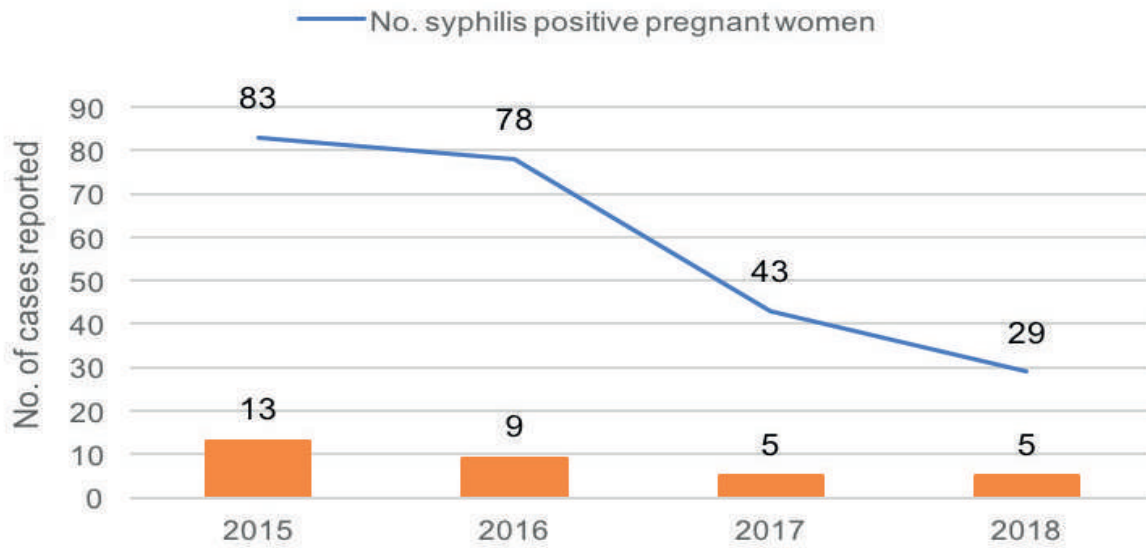


Figure 4.8 Reported cases of early syphilis by age and sex, 2009-2018**Figure 4.9** Reported cases of late syphilis by age and sex, 2009-2018

According to the above graphs, cases of late syphilis consisted the majority of the total reported number of syphilis cases over the past decade. In addition, over 25-year old males were reported more with both early and late syphilis during the last seven years. However, the trend of reported number of cases of early syphilis declined from 2014 to 2017 among all four age categories. In contrast, a slight rise is seen among cases of late syphilis in all the age categories in 2018 except in females of less than 25 years of age.

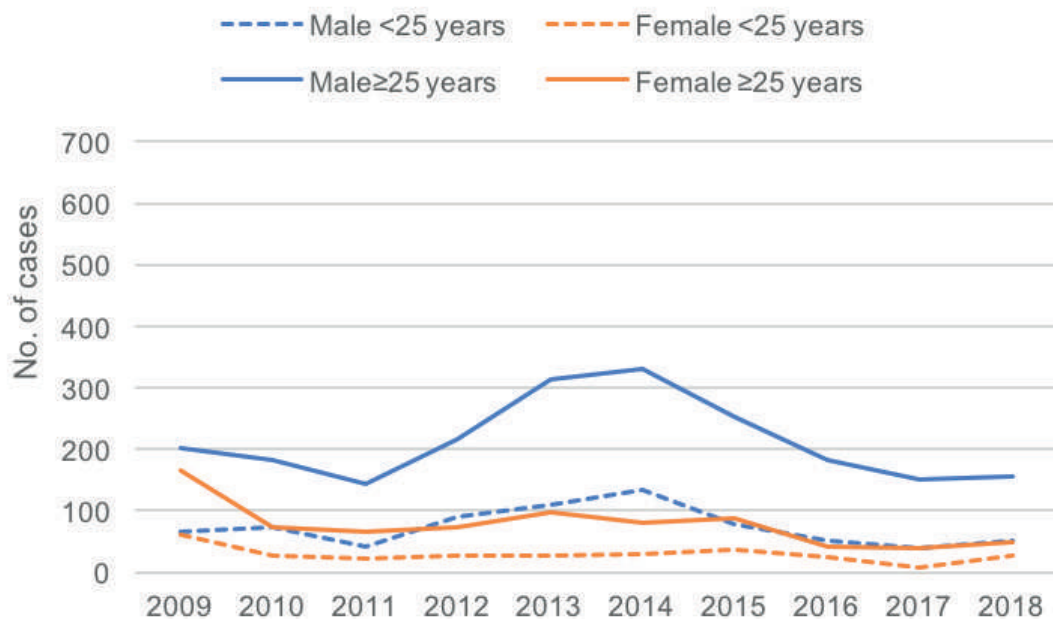
Figure 4.10 Reported cases of pregnant women with syphilis and congenital syphilis



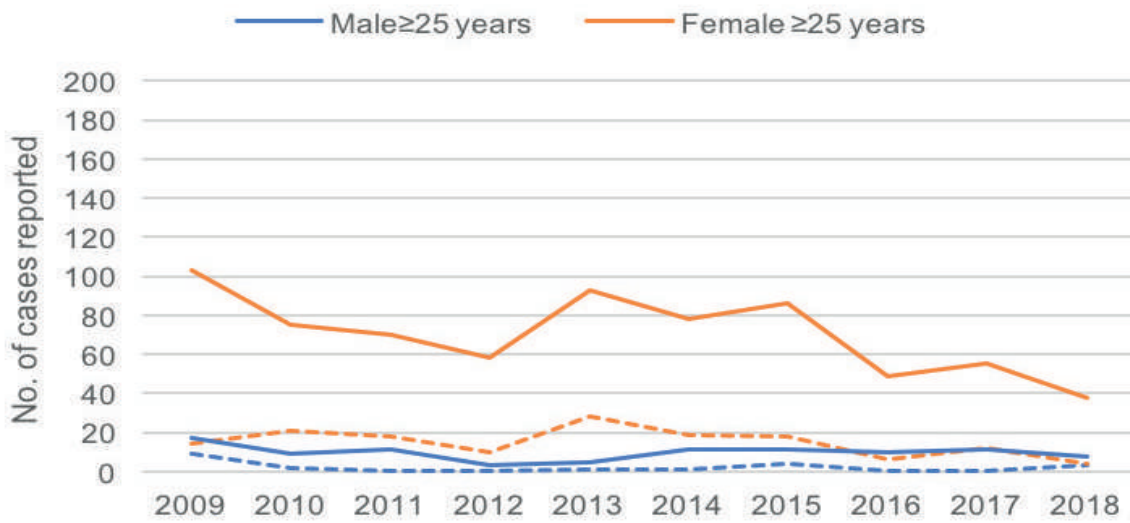
This graph illustrates the number of reported cases of pregnant mothers with syphilis and the number of reported congenital syphilis cases. Over the last three years, both the reported number of pregnant mothers with syphilis and the congenital syphilis cases have shown a gradual reduction.

6. Gonorrhoea

Figure 4.11 Reported cases of gonorrhoea by age and sex, 2009-2018



The above graph shows trends of reported gonorrhoea cases during the last nine years. Similar to syphilis, gonorrhoea cases are more in males and among the older age group (25 and over age group). A downward trend which is seen in all four age categories since 2015. However, there is a slightly increasing trend seen in cases in 2018.

Figure 4.12 Reported cases of trichomoniasis by age and sex, 2009-2018

The number of reported cases with Trichomoniasis annually are depicted in the above graph, disaggregated by gender and age categories. Reported cases with trichomoniasis are low compared to the other STIs. It is more among the older female group. A gradual decline in reported cases is seen during the last three years especially among females of the older age group.

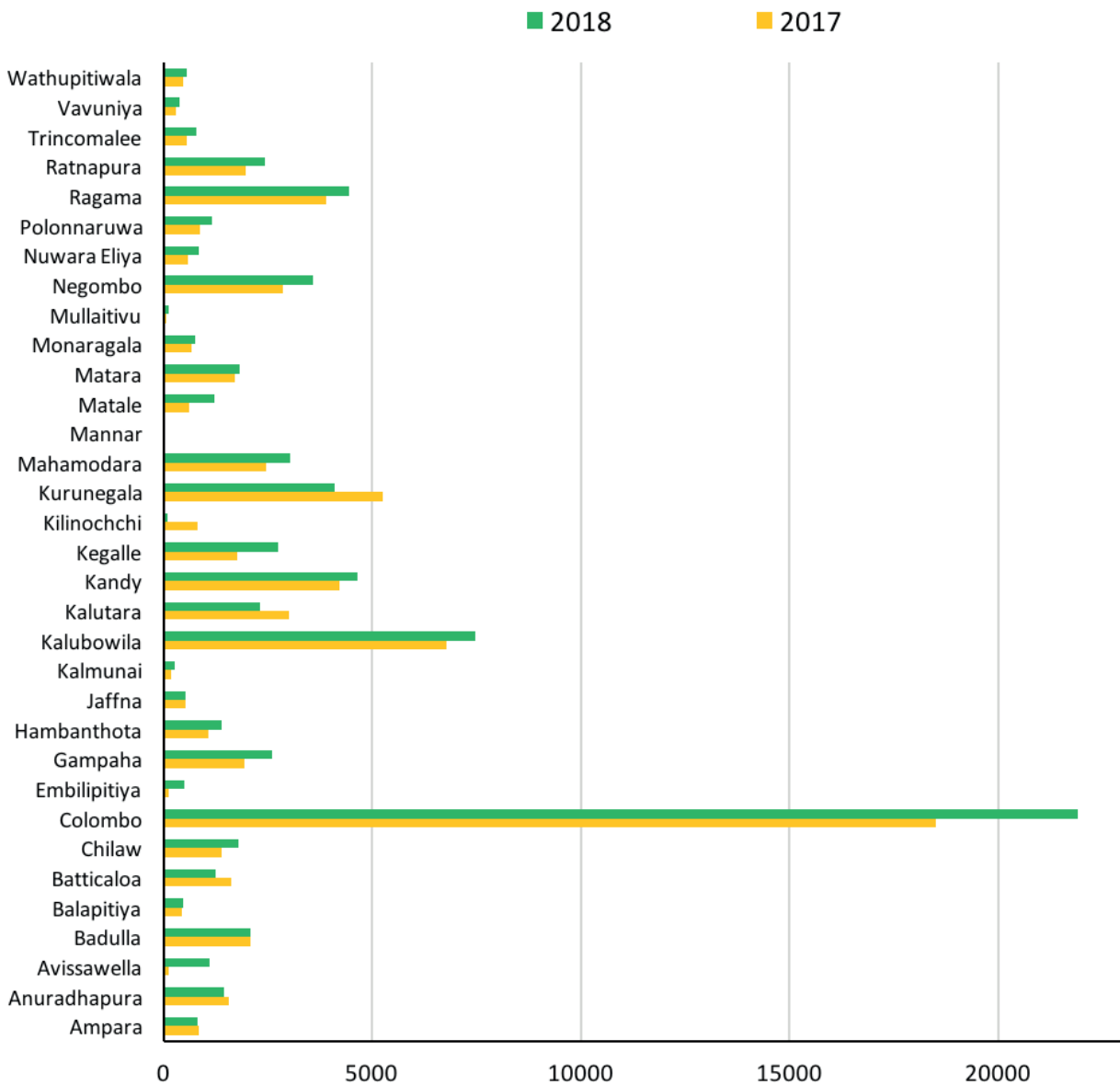
5. Monitoring of STD services

Monitoring and evaluation of the services provided by the STD clinics are one of the important tasks of the Strategic Information Management unit of the NSACP. During 2018, 33 STD clinics functioned full time, and among them, 21 had the capacity to prescribe ART for the PLHIV. In addition, Infectious Disease Hospital which provides treatment and care for the PLHIV is considered as an ART facility.

Figure 5.1 Full-time STD clinics in Sri Lanka, 2018



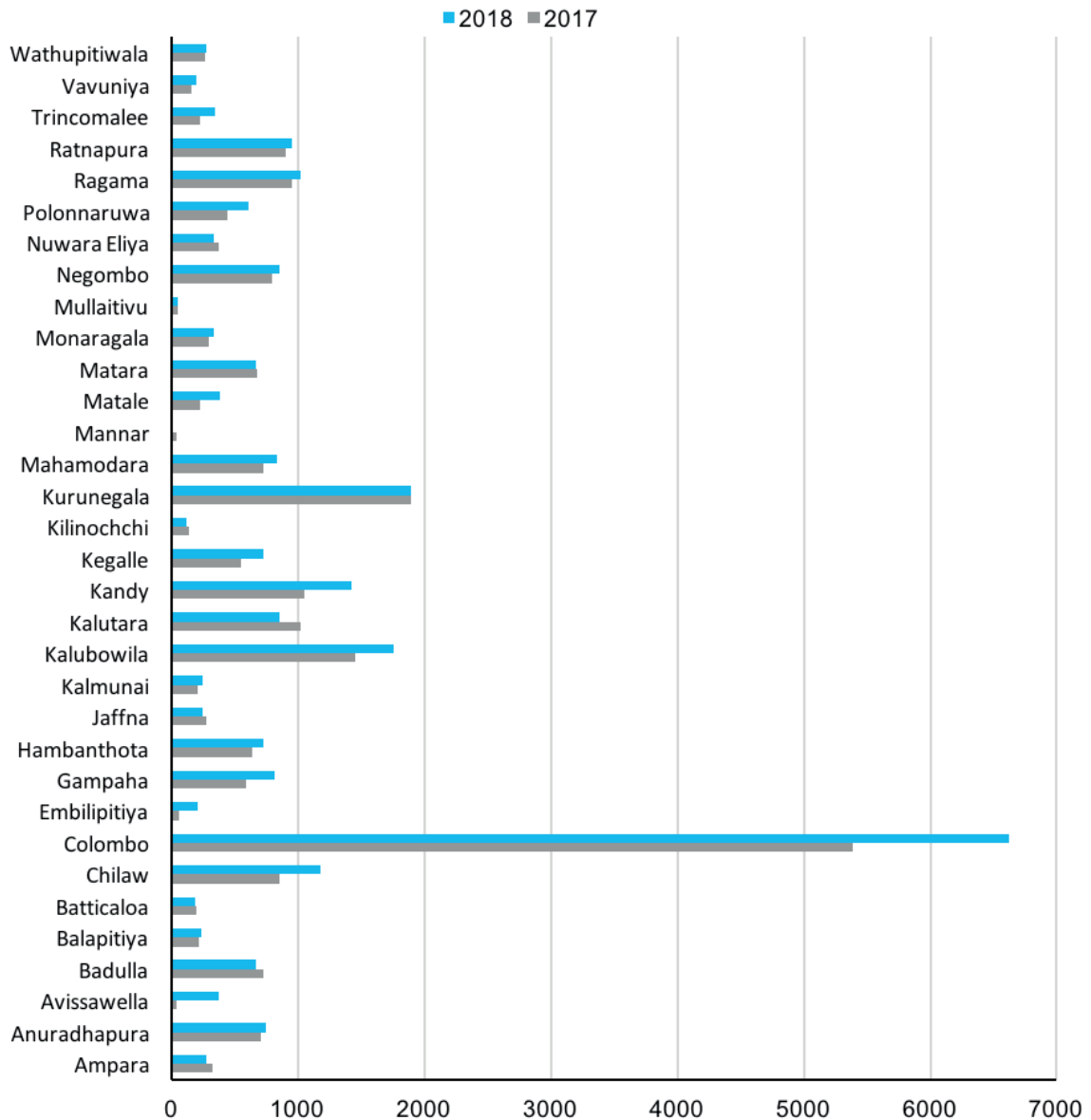
The network of STD clinics provides services for a range of populations such as the general population as well as key and vulnerable populations. At present, the monitoring and evaluation are carried out using the paper-based recording and reporting system. However, during 2018, an electronic information management system (EIMS) was developed and is being implemented in a few STD clinics for testing purposes. This effort was funded by the Global Fund. Rolling out of this system to the other STD clinics will be done during the year 2019. This electronic system is expected to replace the paper-based system in the near future in order to carry out better and more efficient method of monitoring and evaluation.

Figure 5.2 Total number of consultations for STD Patients, 2017-2018

According to the above graph depicting the number of consultations by STD patients during 2017 and 2018, Central clinic Colombo has provided more than 20,000 consultations in 2018. This was followed by STD clinics Kalubowila, Kandy, Ragama, Kurunegala and Negombo in the same year.

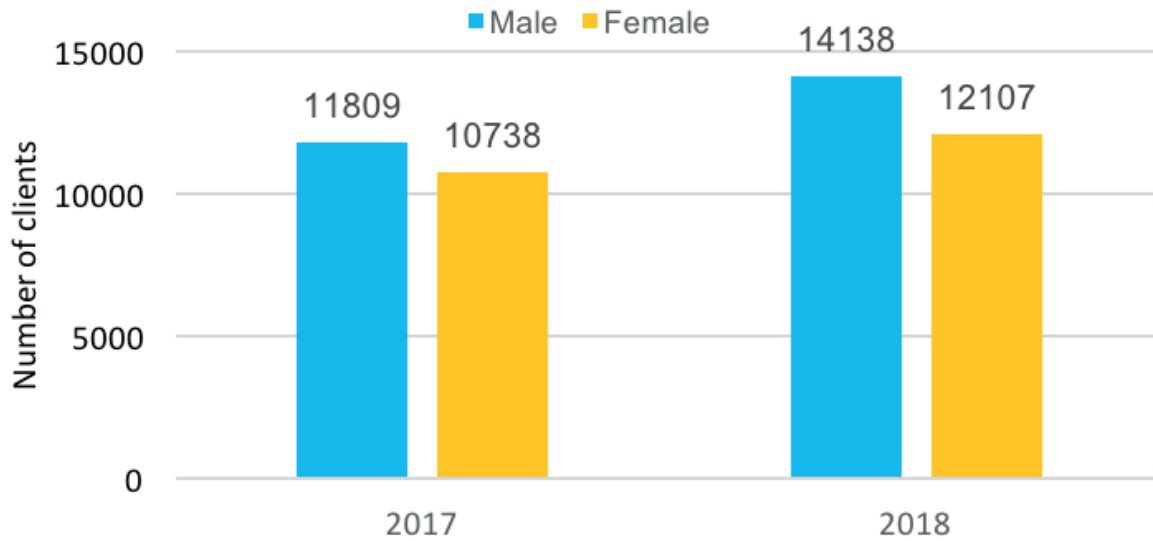
During the year 2018, a total of 209,476 clinic visits were generated by all the STD clinics. Of these, 38% were STI patients while the rest being categorized under "others", namely: pre-employment and visa screening, ANC blood testing on OPD basis etc.

Even though the overall provision of curative services by STD clinics had increased in 2018 when compared with the previous year, it is important to note that several clinics have had lesser number of consultations during 2018 which needs to be taken into consideration when taking future programmatic decisions.

Figure 5.3 Number of new STD patients registered during 2017 and 2018

Above graph illustrates the number of new STI patients registered in all STD clinics during 2017 and 2018. As expected, the central clinic, Colombo has provided services for the majority, with well above 6000 new clients being registered during 2018 and more than 1000 new registrations compared to 2017. Kurunegala, Kalubowila, Kandy and Chilaw STD clinics are also included in the top five clinics for newly registered STI patient numbers, and each had over 1000 new STD patients registered for the year 2018.

Of the total 26,245 new patients, 15,424 have been diagnosed with STIs and had received services through an island-wide network of STD clinics.

Figure 5.4 Newly registered STD patients by sex in 2017 and 2018

Above graph represents newly registered STD patients by sex in 2017 and 2018. Overall it can be seen that the males outnumbered females in new STD patient registrations in both 2017 and 2018.

Figure 5.5 Number of newly registered key population STD clinic attendees

The peer leaders escort key populations to STD clinics under the peer-led outreach programme supported by the Global fund. The above graph depicts the number of newly registered key population STD clinic attendees according to their escort status. FSW were the highest number escorted to STD clinics whereas a significant number of MSM attended the clinics voluntarily. Majority of the TG and BB populations attended the clinics through escorts.

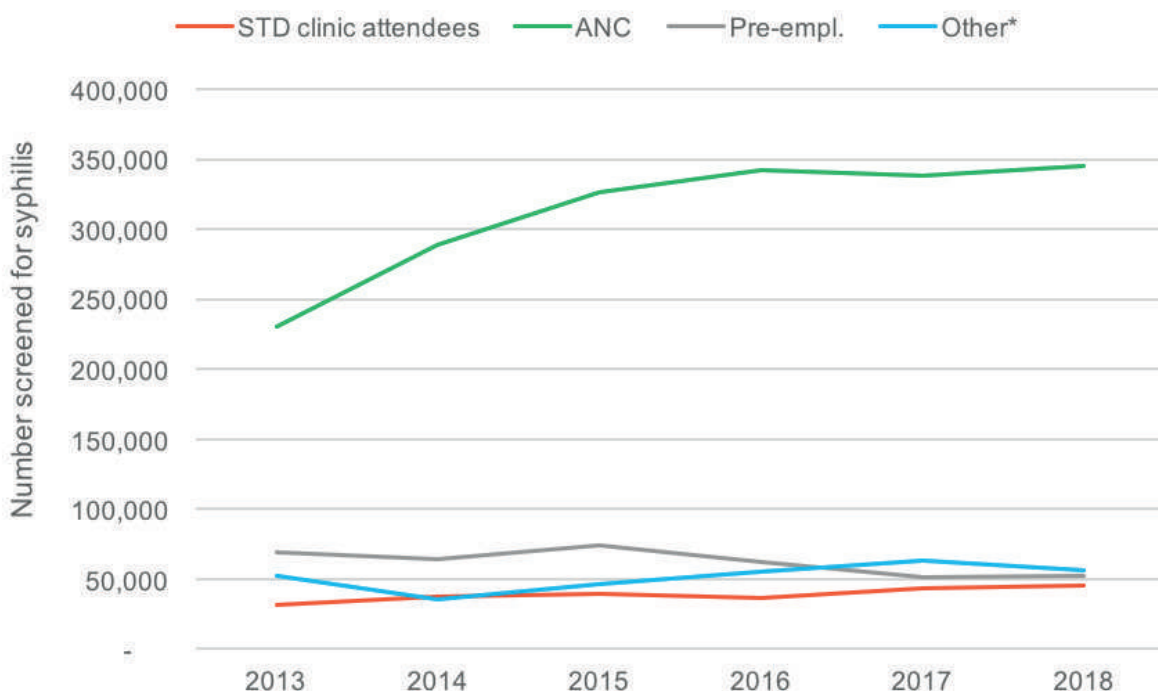
Table 5.1 Number of STI diagnoses among Key populations

	FSW	DU/IDU	Prisoners	MSM / MSW	Transgender	Beach boys
Infectious syphilis	1	0	0	14	0	0
Late syphilis	39	20	21	77	15	1
Gonorrhoea	8	2	1	34	2	0
NGU/NGC	375	10	25	109	4	0
Chlamydia	0	0	0	0	0	0
Genital herpes	11	6	5	86	3	0
Genital warts	52	2	9	123	11	1
Trichomoniasis	6	0	3	0	0	0
Other STDs	276	11	30	121	12	0

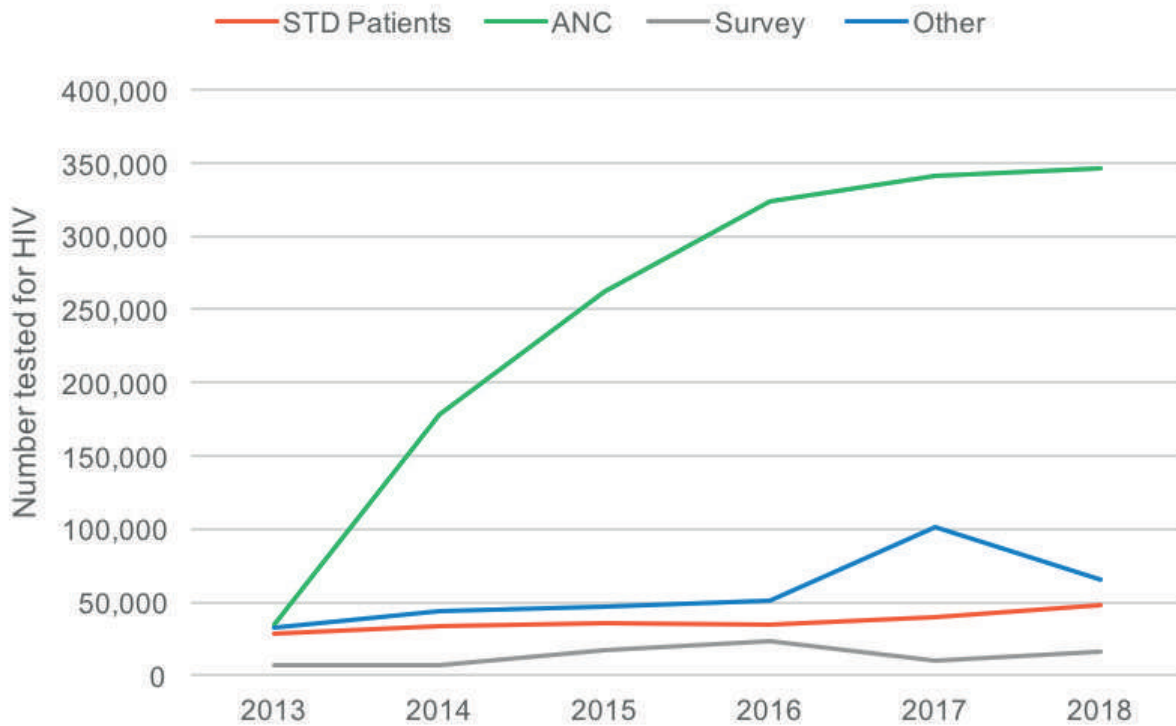
Majority of the key and vulnerable populations were diagnosed with Non-gonococcal cervicitis/ urethritis during 2018. However, as testing facilities for chlamydia infection were not available, a specific diagnosis of chlamydia was not possible. The category of "other STDs" ranked second and Syphilis (including both infectious and late syphilis) ranked third in number of STIs diagnosed.

The highest number of STIs were reported among female sex workers followed by MSM from the key and vulnerable populations. However, diagnosis of genital warts, both types of syphilis, gonorrhoea infections and genital herpes were more among MSM than FSWs.

The National STD/AIDS Control programme provides screening facilities for syphilis for a range of clients, such as the STD clinic attendees, ANC mothers, Pre-employment screening and Other category consisting of visa screening, surveys, ward referrals etc. The below graph summarizes the total number of samples from each category tested for syphilis during the last five years. Due to the scaling up of antenatal syphilis screening, the number of ANC mothers screened has markedly increased over the last five years.

Figure 5.6 Number screened for syphilis in 2018

* visa screening, surveys, ward referrals etc

Figure 5.7 Number screened for HIV in 2018

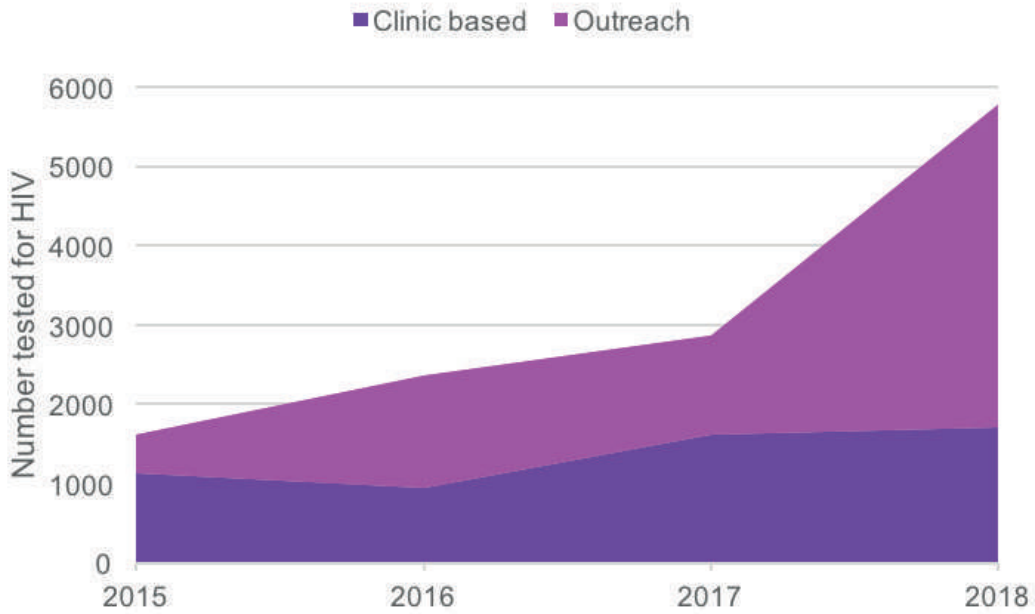
Out of a total of 1,183,517 HIV screening tests, STD clinics have conducted 475,800 tests during 2018. There is an increase of almost 12000 tests in the total number of HIV screening tests conducted compared to that of 2017. Testing for HIV in antenatal samples, STD clinics samples and survey samples have been higher compared to the previous year. Total number of HIV positive persons detected for the year 2018 was 350.

Table 5.2 HIV testing by Key populations

	Key Population HIV testing							
	Female sex workers		MSM		Drug Users		Prisoners	
	Clinic-based	Outreach	Clinic-based	Outreach	Clinic-based	Outreach	Clinic-based	Outreach
2015	1135	490	1708	237	1586	1072	906	11384
2016	953	1408	1407	379	67	975	666	12776
2017	1625	1248	1986	483	136	1188	849	13088
2018	1715	4064	2543	2423	216	1899	482	16453

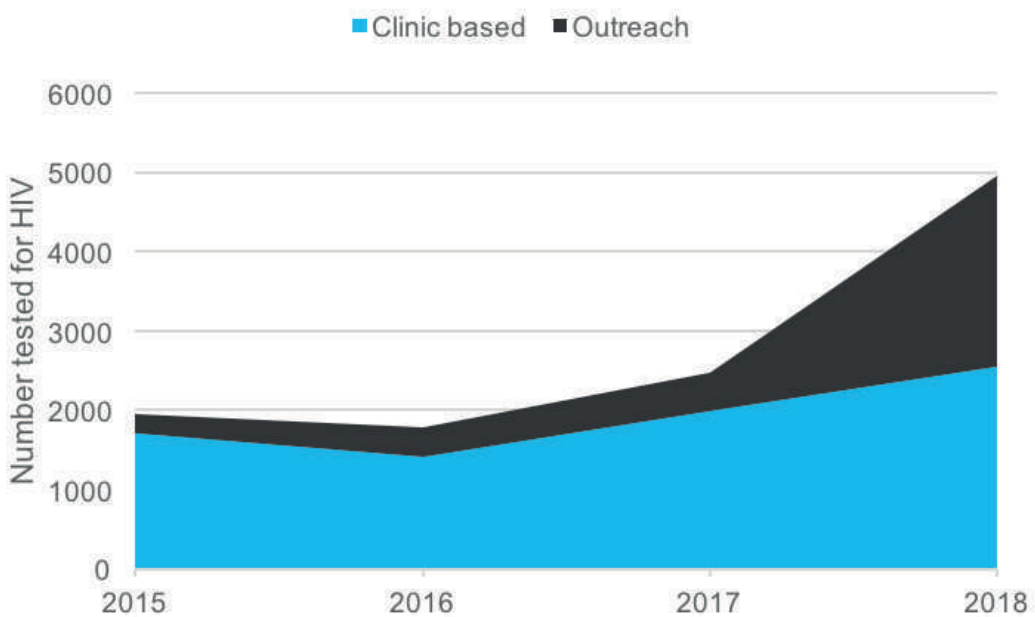
HIV screening among key populations is carried out from STD clinics through clinic attendance as well as outreach testing services. According to the above table, most of the tests have been carried out among prisoners as outreach. All categories show an improvement in testing over the past three years. Lower numbers of HIV testing among drug users is probably due to programmatic decisions taken to limit the escorting only to injecting drug users.

Figure 5.8 HIV testing of Female Sex workers

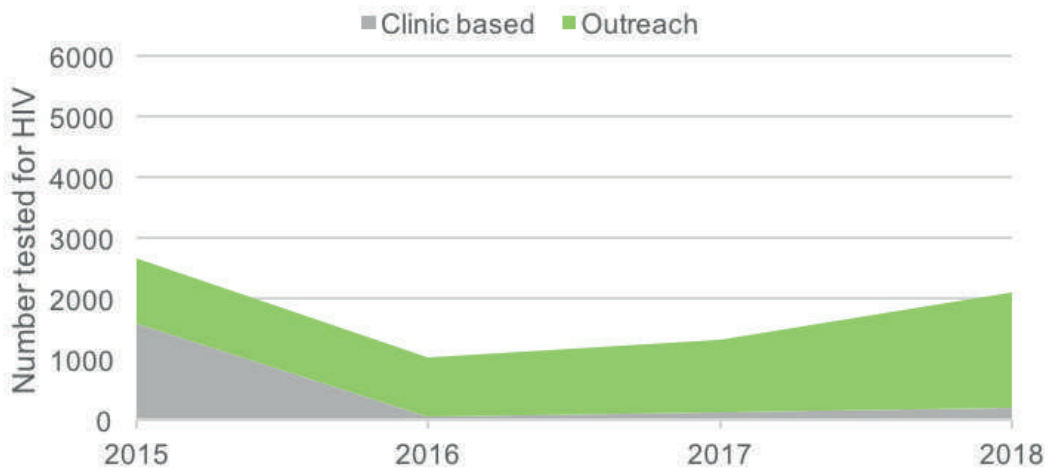


As illustrated by the above graph, the number of HIV tests carried out on female sex workers by outreach, has markedly risen by 137% during 2018. However, the number tested in the clinic setting had remained stable over the past two years.

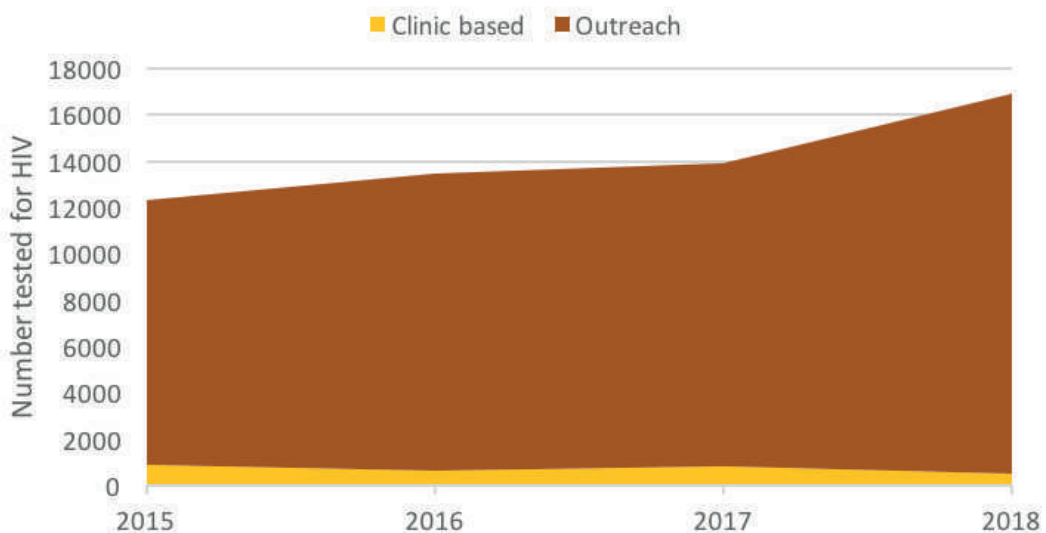
Figure 5.9 HIV testing of MSM



The above graph depicts how HIV testing among MSM has escalated since 2016. While clinic-based HIV screening showed only a marginal increase, that of outreach had increased significantly from 483 in 2017 to 2423 in 2018.

Figure 5.10 HIV testing of drug users

The graph given above represents how HIV testing among drug users had changed over the past four years. Even though there is a sharp decline in 2016 in both, clinic-based and outreach samples, which can be attributed to a programmatic decision to address intravenous drug users only, an increase in HIV testing carried out on drug users can be seen towards 2018 mainly as outreach blood testing.

Figure 5.11 HIV testing of Prisoners

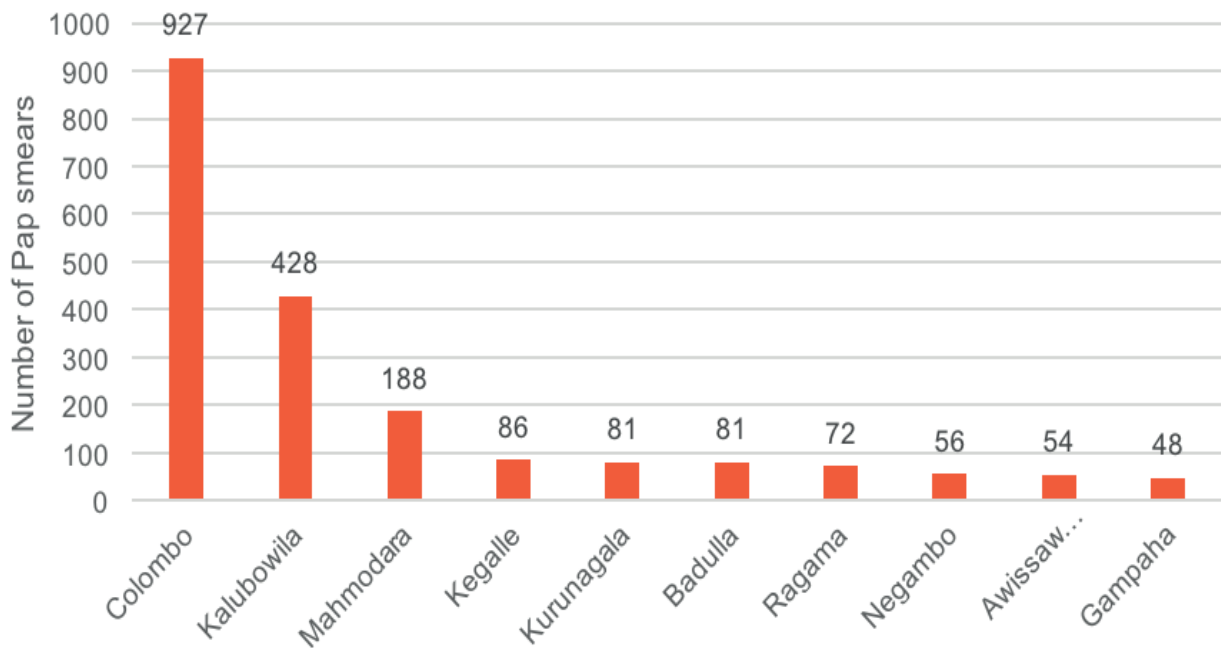
HIV screening among prisoners during the past years were mainly carried out by outreach activities as shown in the above graph. There is a growth of 3365 in the number of HIV screening tests done among them via outreach services in 2018, compared to 2017. However, the clinic-based HIV tests carried out have nearly halved in 2018 compared to 2017.

Pap smear screening for STD clinic attendees

During 2018, nineteen STD clinics provided pap smear screening for the female clinic attendees, with an island wide coverage. This year the Family Health Bureau collaborated with the Colombo STD clinic to provide this service resulting in scaling up of the service provision for a higher number of female clinic attendees.

A total of 2242 pap smears has been performed in 2018 and of these 41.3% were performed at the Colombo Central STD clinic followed by Kalubowila STD clinic with a 19%.

Figure 5.12 Top ten STD clinics for provision of pap smears in 2018



Twenty women were identified with CIN 1 or more changes in Colombo STD clinic and 22 more women were identified from Kalubowila, Mahamodara, Kegalle and Kurunegala STD clinics.



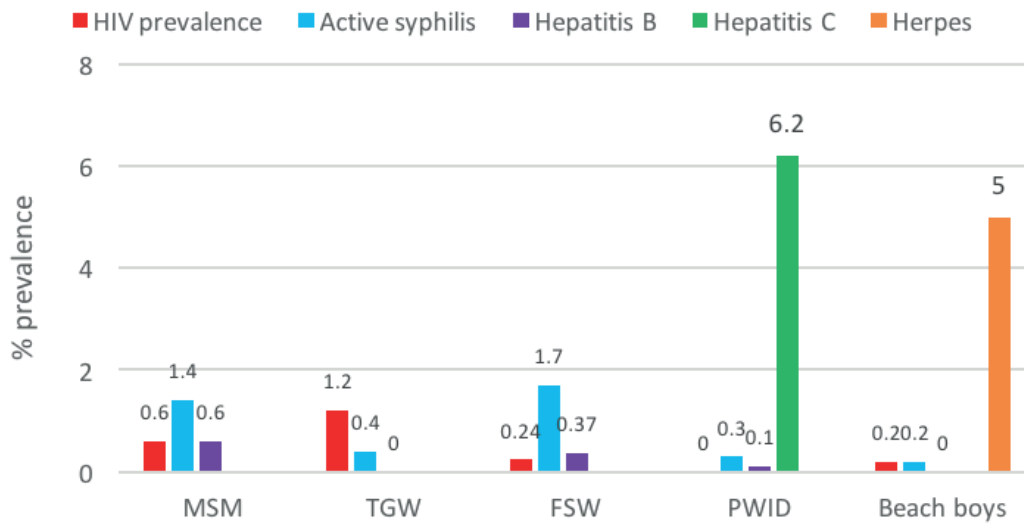
6. Integrated Biological & Behavioural Surveillance, 2017/18

During 2017/2018, the second round of the IBBS was conducted among key populations, covering five key populations in Sri Lanka, namely female sex workers (FSW), men who have sex with men (MSM), people who inject drugs (PWID), beach boys (BB), and transgender women (TGW). TGW were included for the first time during this survey.



Objectives of the IBBS were to collect reliable and comparable data on the prevalence of HIV, Syphilis, Hepatitis B, Hepatitis C (among PWID) and Herpes (among BB) and associated risk behaviours amongst the five key populations. Furthermore, the survey aimed to assess the use of and access to health and social welfare programs amongst key populations in Sri Lanka and to inform policies, programmes and interventions to upgrade KP needs. The survey was done utilizing a robust methodology and standardized indicators which enable comparisons over time and between countries.

Figure 6.1 Sero-prevalence among key populations



A formative assessment was undertaken after the first IBBS in late 2017 which indicated respondent-driven sampling (RDS) would again be a suitable sampling methodology for this follow-up IBBS survey. It also provided information to assist with the planning of survey logistics.

This survey was conducted by Management Frontiers Pvt Ltd and consultants from the WHO collaborating centre for HIV Strategic Information in Zagreb, Croatia

Table 6.1 Locations and Key populations covered by the IBBS Survey 2018

District	Type of Key pop. Surveyed
Colombo	FSW, PWID, MSM, TGW
Kandy	FSW
Galle	FSW, MSM, BB
Anuradhapura	MSM
Jaffna	TGW



Methodology of IBBS

A total number of 3,431 key population members were surveyed in the study, including 1,180 FSW, 1,067 MSM, 305 PWID, 373 BB, and 506 TGW. Respondent Driven sampling was used for data collection. Participants who met the eligibility criteria were interviewed using a structured interviewer-administered questionnaire with the help of electronic data collection via tablets. Testing for HIV, syphilis, hepatitis and herpes was carried out through blood sample collection via intravenous blood draw. Data were analysed using RDS Analyst (RDS-A) software to estimate prevalence levels.

Ethical clearance for the survey was obtained from the Ethics review committee, Faculty of Medicine, Sri Jayawardenapura University.

Findings

Overall, the prevalence of HIV and STIs remains very low across all key population groups in Sri Lanka. However, the presence of risk behaviour including inconsistent condom usage, poor HIV health-seeking behaviour, and poor knowledge of HIV, combined with poor coverage of HIV prevention programmes, could result in increases in prevalence.

FSW - An increase in syphilis among FSW is not worthy in Colombo specifically, from 1.6% in 2014/15 to 2.2% in 2018. Behavioural indicators amongst FSW are poor except for the condom usage, as more than three-quarters of the population have used a condom at last sex with a client.

MSM - HIV and STI prevalence amongst MSM remains low. Only Colombo resulted in any HIV positive MSM cases. While increases in behavioural indicators are noted, overall these indicators are still performing poorly. On a positive note, condom usage at last anal sex increased from just over half to over three quarters, which is a significant difference.

TGW - Overall, HIV and STI prevalence are low among TGW in Sri Lanka (0.48% HIV and 0.24% syphilis), with only a few cases of HIV and Syphilis reported in Colombo, and no cases of hepatitis. The only well-performing behavioural indicator is condom use. It is significant to note that just over one third was reached by HIV prevention programmes and discriminatory attitudes were present in a third

of the population, and nearly half the population avoided HIV services due to discrimination.

PWID - The overall prevalence of HIV and STIs is low, which is no change from the previous round of IBBS survey. Knowledge of HIV status remains unchanged, and the difference in coverage of prevention programmes has shown a slight decrease from 4.1% to only 2.7% coverage currently. However, in a positive trend, safe injecting practices have significantly increased, from half the population in 2014/15 to over three quarters in 2018.

BB - The overall prevalence of HIV and STIs is 0.2%, which is slightly higher than that in 2014/15, but the difference is negligible. Behavioural indicators, however, have increased across the board.

Summary of the key recommendations

- *Increase condom awareness and usage across all groups with the use of innovative social marketing methods.*
- *Increase HIV testing with consideration to the alternative testing modalities such as moonlight and mobile testing and engagement with the private sector.*
- *Increase community participation to address HIV via engagement of civil societies.*
- *Reduce stigma around key populations and HIV by refining advocacy and stigma reduction messaging.*
- *Innovate with HIV interventions using methods such as m-health and dating applications and conduct research to find out more in this regard.*
- *Explore comprehensive multi-sectoral programming to reduce risk and generally increase living conditions and quality of life for FSW*
- *Increase general health-seeking behaviour especially among FSW*
- *Address sexual violence against FSW*

7. National size estimation of Key populations in Sri Lanka

National size estimation of the key populations (KPs) for HIV in Sri Lanka was completed in 2018. Female sex workers (FSW), men who have sex with men (MSM), male sex workers (MSW), transgender women (TGW), people who inject drugs (PWID) and beach boys (BBs) were identified as key populations.



This activity was carried out by Management Frontiers (Pvt) Ltd with the technical assistance from University of Sri Jayawardenapura and WHO Collaborating Centre, Zagreb, Croatia under the leadership of National STD/AIDS Control Programme (NSACP). Financial support was through the Global Fund.

Objectives were to generate size estimates of the specified key population groups and distribution in each site, by different categories in the selected sites and extrapolate the results to generate district, provincial and national level figures and to provide locations of hotspots.

The size estimation was done with geographical mapping and enumeration and the multiplier methods. Consensus/Delphi process was used for the final population size estimates (PSE).

Mapping and enumeration method

In the mapping and enumeration method, the DS (Divisional secretariat division) or ‘zone’ was selected as the unit area for geographical mapping similarly to the last size estimates done in 2013. DSs were divided into three categories as high density, medium density and low density, based on the general population census done in 2012. Random sampling was applied using the Random Integer Set Generator (random.org) to select 25% of DSs from high, medium and low-density DSs, respectively.

Data collection was carried out through two types of activities: Level-1 and Level-2. Level-1 activities entailed the collection of information from the secondary key informants (KIs) about locations of hotspots where KPs socialise in selected DSs and interviewing KIs about the minimum and the maximum number of KP individuals that socialise at those hotspots. A total of 1170 primary KIs were interviewed during Level-1 activities.

Level-2 activities included visits to the spots identified at Level-1 to validate their existence. In Level-2, interviews were conducted with KPs themselves (primary KIs) about operational characteristics of the hotspots: the minimum and maximum number of KP members that socialize at the hotspot on peak days and during an average month, type of the hotspot (public place, brothel, night club, etc.) and locations of other hotspots that they might know.

Multiplier method

Several service-based and unique object-based multipliers were obtained to estimate the size of KPs in cities where IBBS were carried out, and these were:

- FSW: Colombo, Kandy and Galle
- MSM: Anuradhapura, Galle and Colombo
- PWID: Colombo
- Beach boys: Galle
- Trans-gender women: Colombo and Jaffna

Results

Female Sex Workers

In the Mapping of FSW, 456 spots were validated and average FSW number of 2,811 (range 2,370-3,251) in an average month was identified. Highest proportion of FSW in a DS was found in Echchilampattu (88, 0.76%), Rathmalana (716, 0.75%) and Dickwella (344, 0.63%). Extrapolated estimated number of FSW in Sri Lanka is 31,748 (27,148- 37,131). Through multiplier method median estimated size in Colombo is 2,155 and 1,134 in Galle. According to the consensus estimation, the national estimate of FSW is 30,000 (20,000- 35,000).

Men having Sex with Men

A total of 164 spots were identified and average 994 (range 833-1,155) MSM were estimated for an average month. Extrapolated estimated number of MSM in Sri Lanka is 8,120 (6,739-9,381). According to multiplier data, the estimated number of MSM in Colombo is 2,960 and 2,491 in Galle. A consensus estimation of 40,000 (30,000- 50,000) was arrived.

Male Sex Workers

One hundred fifty-eight spots were identified, and there was an average of 587 MSW (range 469-704) during an average month. The extrapolated number of MSW in Sri Lanka is 4,024 (3,240- 4,848). In the Delphi estimations, estimated 6,000 (4,000-8,400) of MSW in Sri Lanka was based on the assumption that 15% of MSM are engaged in Sex work.

People Who Inject Drug

Seventeen hotspots were identified, and 368 average number of PWID were identified in a month. The extrapolated number of PWID in Sri Lanka is 2,672 (2,333- 3,012). Multiplier data in Colombo is 682. The estimate for Sri Lanka is 900 (650-1,200) according to the consensus.

Transgender women

Fifty-five spots were visited, and 189 of the average estimated were identified during an average month. The extrapolated number of TGW in Sri Lanka is 1,711 (1,393-1,966). The multiplier method estimated 531 in Colombo and 117 in Jaffna. The consensus process estimated 2,200 (2,000-3,500) TGW in Sri Lanka.

Beach Boys

Thirty-one spots in Colombo and Galle were observed, and an average of 2,355 of BBs was estimated for an average month. The extrapolated estimated number of BBs in Sri Lanka is 11,439 (10,162-12,717). The multiplier method identified 1,022 of BBs in Galle district. Consensus process estimated 4,500 (3,000-6,000) BBs in Sri Lanka.

Table 7.1 Summary of final population size estimates of key populations - 2018

Category of Key pop.	Estimate (average)	Range	No of Hot Spots
FSW	30,000	20,000-35,000	456
MSM	40,000	30,000-50,000	164
TGW	2,200	2,000-3,500	55
PWID	900	650-1,200	17
BB	4,500	3,000-6,000	31

Recommendations in brief

- (1) Need to improve the quality of programmatic data from NGOs and other service providers
- (2) Crucial to collect more programmatic indicators of high quality, if the multiplier method will be used in next PSE
- (3) Additional studies, such as national level surveys are recommended to determine the extent of same-sex behaviour in men.
- (4) Formative research to understand issues relevant to transwomen and to study the mobility of BBs
- (5) Need to improve data regarding PWID, BB and transwomen to identify more spots with the support of organizations who provide services to them
- (6) Explore whether a network scale-up survey, in conjunction with another general population-based survey is feasible as this will be a useful source of data for PSE
- (7) Suggested that mapping is not a suitable method for the MSM population.

8. HIV testing services in 2018

The NSACP further scaled-up HIV testing services during 2018, exploring newer service delivery methods and diversifying testing strategies. The table below shows the total number of HIV tests carried out in the country in 2018.

HIV testing details in 2018

Table 8.1 HIV testing details in 2018

Types of blood samples screened for HIV	Number tested	Number positive	% positivity rate
Antenatal mothers	345,985	10	0.003%
Blood donor screening (NBTS and private blood banks)	417,000	34	0.01%
Tri-Forces	67,395	6	0.01%
Private hospitals, laboratories and Sri Jayawardenapura GH	186,767	71	0.04%
Prison HIV testing programme	16,935	8	0.05%
HIV Rapid tests done in Hospitals	8,196	10	0.12%
TB screening	8,168	11	0.13%
STD clinic samples*	129,815	194	0.15%
Community-based testing in drop-in-centres	1266	2	0.16%
Survey sample	1,990	4	0.20%
Total	1,183,517	350	0.03%

*(STD clinic samples include; clinic attendees, pre-employment screening, outreach samples and testing of contacts)

A total of 1,183,517 HIV tests had been carried out in 2018. The total number of HIV positive persons detected during the year was 350. While the usual biggest contributors to testing numbers remained blood donors and antenatal mothers, the highest number of HIV positives (194) were from "STD clinic samples". During the previous year (2017) the same group (STD) gave the highest number of positives (170 out of 127,897 tests). Therefore, the "STD clinic samples" need further clarification. In general, STD clinic samples include HIV testing offered to persons who attend STD clinics in the country, all outreach testing services provided by STD clinics on their own initiations, escorting by NGO partners, key population-led testing in selected districts and community-based HIV testing services etc. This fact

highlights the importance of targeted HIV testing to increase the detection rate which will help to End AIDS in Sri Lanka by 2025.

HIV testing services in healthcare settings

During 2018, NSACP introduced HIV testing services in healthcare settings, especially to the Base hospitals and above. Early detection of HIV infection facilitates early initiation of ART which will improve clinical outcomes as well as it will reduce onward transmission of HIV.

It is crucial to test patients attending healthcare settings based on clinical suspicion. The strategy was to offer HIV rapid testing facilities at healthcare settings. Therefore, rapid test-kits were provided to relevant hospitals during 2018. There was an initial training programme targeting healthcare personnel attached to STD clinics and to hospital laboratories.

A poster was developed with indicator diseases for offering HIV tests. Leaflets were produced in Sinhalese, Tamil and English languages to improve awareness among the public. Other documents such as request forms etc. which were required to establish HIV testing services in hospitals were also developed and they were introduced during training programmes. A circular was issued by Director General of Health Services (DGHS) guiding and encouraging healthcare providers in hospitals to provide HIV testing services for patients with indicator conditions. This activity was launched by DGHS, and real implementation began in the last two quarters of 2018. Towards the end of 2018, there were provincial level review meetings to examine the progress of the activity.

During 2018, a total of 8196 rapid HIV tests had been conducted in healthcare settings and detected 10 confirmed HIV positive persons (positivity rate - 0.12%).

The table below shows the HIV testing services provided by STD clinics in the country.

Table 8.2 HIV tested and results given by all STD clinics for key populations 2018

Type Key population	Number tested by outreaching	Number tested in STD clinics	Total
Prisoners	16,527	408	16,935
Female sex workers	4043	1506	5549
Men having sex with men and TG	2422	2433	4855
Drug users	1803	142	1945
Beach boys	2385	241	2626
Total	27,180	4,730	31,910

Outreaching with HIV testing services was further enhanced during 2018. While the Central STD clinic was able to carry out such programmes daily, district level STD clinics were encouraged to do at least one outreach programme a week. Enhanced HIV testing is one of the reasons for detecting more HIV positives in 2018.

Escorting Key populations to STD clinics

Promotion of care-seeking behaviour is one component of the service package provided through peer-led targeted interventions programme. It includes 'escorting of peers' for services and they are always offered HIV testing. The following table shows an increase in HIV testing among key populations through escorting component of the service package.

Table 8.3 HIV tested for key populations 2017 and 2018

Type of Key population	Number of HIV tests 2017	Number of HIV tests 2018
Female Sex workers	2873	3783
MSM & TG	2469	3070
Beach Boys	1205	1156
Drug users	1042	782
Total	7589	8791

Community-based HIV testing

Community based HIV testing services continued to be available throughout the year within the drop-in centre facilities for FSWs, MSM and drug user populations. Though the services were not utilised as expected, several positive cases were detected through community-based HIV testing.

Table 8.4 HIV testing through community-based testing in drop-in centres

Type of Key population	Number of HIV tests	No. positive	Positivity rate
Female Sex workers	317	0	0
Men who have sex with men/TGW	227	2	0.9
Drug users	722	0	0
Total	1266	2	0.16%

Key population led HIV testing services

Key population led HIV testing promotion campaign, was another strategy which was added to the national response in 2018. This intervention was piloted in Puttalam and Kalutara districts targeting FSW, MSM, BB and drug users and TGW in Colombo and Gampaha districts. The pilot has yielded impressive results.

Table 8.5 Key population led HIV testing (pilot project in districts of Puttalam, Kalutara, Colombo & Gampaha)

Key population	No. tested for HIV	HIV Screening test +ve	HIV Confirmatory test +ve	Description of HIV screen positives	Positivity rate
Transgender (TGW)	681	11	6	6- Confirmed previously undiagnosed positives 5- Defaulted from confirmatory testing	0.9%-1.6%
MSM	803	5	5	1- Confirmed positive already diagnosed case 4- Confirmed positive previously undiagnosed cases	0.60%
FSW	924	1	0	1- Defaulted from confirmatory testing	0.10%
Beach boys	945	3	2	1-Confirmed negative 2-Confirmed positive already diagnosed cases	0.20%
Drug users	362	0	0	-	-
TOTAL	3715	20	13	6- Confirmed positive previously undiagnosed cases,7-Confirmed positive already diagnosed case,6- Defaulted from confirmatory testing,1-Confirmed negative	0.3%-0.5%

INDICATOR CONDITIONS FOR HIV TESTING AT HEALTH CARE SETTINGS

People with undiagnosed HIV may potentially present to any hospital, clinic or primary care/general practice setting. HIV testing should be considered during any clinical contact when a person presents with an indicator condition.

Legend: System (Yellow), Consider (Light Green), Recommended (Green), Strongly Recommended (Red)

- Respiratory / Pulmonology**
 - Community acquired pneumonia
 - Tuberculosis
 - Pneumocystis jirovecii pneumonia
 - Recurrent Pneumonia
 - MAC lung disease
 - Histoplasmosis/disseminated (extra pulmonary)
 - Herpes Simplex (Borrelia/borreliaemulgi)
 - Candidiasis bronchial/lung
- Neurology and neurosurgery**
 - Primary space occupying lesion of the brain
 - Guillain-Barre syndrome
 - Menoritis
 - Subcortical dementia
 - Multiple sclerosis like disease
 - Peripheral neuropathy
 - Cerebral toxoplasmosis
 - Cryptococcosis
 - Progressive neurological leucoencephalopathy
 - Infection of American trypanosomiasis (meningoencephalitis or myocarditis)
- Dermatology/ Dermatovenereology/ genitourinary medicine**
 - Subacute dermatitis/scarletina - Severe or recurrent pustules
 - Herpes zoster
 - Sexually transmitted infections
 - Candidiasis
 - Hepatitis B or C (acute or chronic)
 - Candidiasis
 - Kaposi's sarcoma
 - Herpes Simplex ulcer(s)
 - Atypical disseminated (skin/anal)
 - Penicilliosis, disseminated
- Gastroenterology/ Hepatology**
 - Hepatitis B or C (acute or chronic)
 - Unexplained chronic diarrhoea
 - Cryptosporidiosis diarrhoea, >1 month
 - Microsporidiosis, >1 month
 - Isosporiasis, >1 month
 - Candidiasis, oesophageal
- Oncology**
 - Cancer requiring aggressive immuno-suppressive therapy
 - Primary lung cancer
 - Anal cancer/dysplasia
 - Lymphoma, non-Hodgkin
 - Kaposi's sarcoma
- Gynaecology/ Obstetrics**
 - Sexually transmitted infections
 - Hepatitis B or C (acute or chronic)
 - Pregnancy (implications for the unborn child)
 - Cervical dysplasia
 - Cervical cancer
- Haematology**
 - Thrombotic thrombocytopenic purpura
 - Malignant lymphoma
 - Unexplained leukopenia/ thrombocytopenia/ leucopenia lasting >4 weeks
 - Unexplained lymphadenopathy
 - Lymphoma, non-Hodgkin
- Rheumatology**
 - Auto-immune disease treated with aggressive immuno-suppressive therapy
- Ophthalmology**
 - Cytomegalovirus retinitis
- Ear Nose Throat**
 - Mononucleosis-like illness
 - Candidiasis tracheal/oesophageal
- Nephrology**
 - Unexplained chronic renal impairment
- General practice**
 - Symptomatology fitting any of the listed conditions
- Emergency Medicine**
 - Symptomatology fitting any of the listed conditions
- Dentistry**
 - Oral hairy leukoplakia
 - Candidiasis, oral and oesophageal
 - Kaposi's sarcoma

For further information contact nearest STD Clinic



9. HIV treatment & care services

During 2018, a total of 305 were newly started on ART. This comprised of 246 males and 59 females. The median CD4 count of those who started ART in 2018 was 355 cells/ μ l. There were 22 clinics which provide ART services. Of these 21 were STD clinics. National Institute of Infectious Diseases (NIID) in Angoda is the only ART facility outside STD clinic network of NSACP. Comprehensive care services including ART were provided to all PLHIV attending for HIV services. During 2018, many activities were conducted to improve HIV care services further.

Figure 9.1 Clinics with ART Facilities 2018

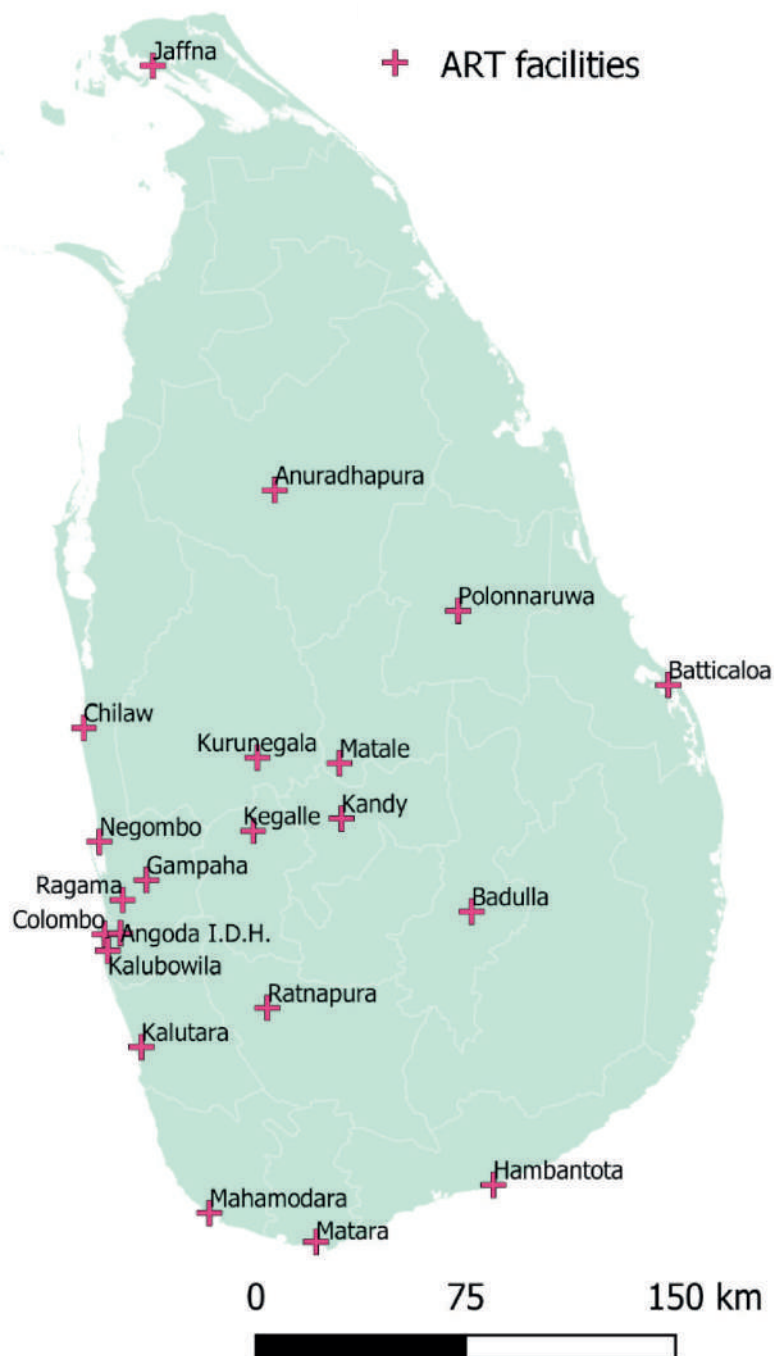


Table 9.1 Number of PLHIV in HIV care in HIV clinics during 2018

Clinic	ART	Pre-ART	Total	Percent
Colombo	777	33	810	49.2%
Ragama	169	1	170	10.3%
Kandy	81	5	86	5.2%
IDH	79	2	81	4.9%
Mahamodara	58	3	61	3.7%
Kalubowila	56	2	58	3.5%
Kurunegala	47	6	53	3.2%
Kalutara	39	2	41	2.5%
Anuradhapura	33	3	36	2.2%
Gampaha	26	3	29	1.8%
Jaffna	29	0	29	1.8%
Negombo	27	1	28	1.7%
Chilaw	22	2	24	1.5%
Kegalle	24	0	24	1.5%
Matara	17	4	21	1.3%
Ratnapura	21	0	21	1.3%
Polonnaruwa	17	2	19	1.2%
Badulla	16	1	17	1.0%
Matale	14	2	16	1.0%
Nuwara Eliya	11	0	11	0.7%
Hambantota	6	0	6	0.4%
Batticaloa	5	0	5	0.3%
Grand Total	1574	72	1646	100.0%

Antiretroviral treatment

In Sri Lanka, the ART services were initiated in 2004. By the end of 2018 the total number of patients receiving HIV care services from government HIV clinics were 1656. This total included 43 children aged less than 15 years. A total of 1574 PLHIV were on ART. Colombo HIV clinic had the highest number of PLHIV receiving ART followed by Ragama, IDH and Kandy.

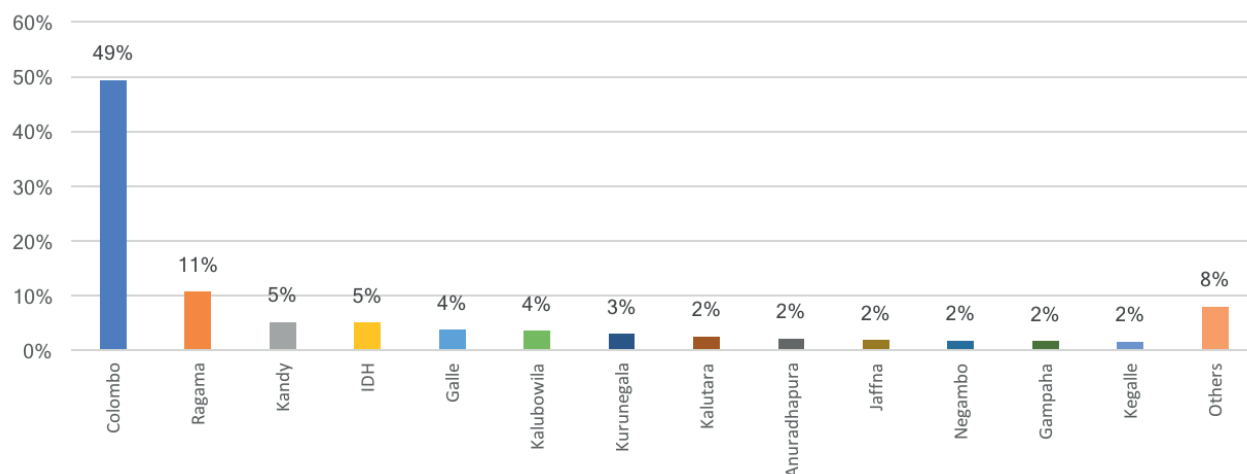
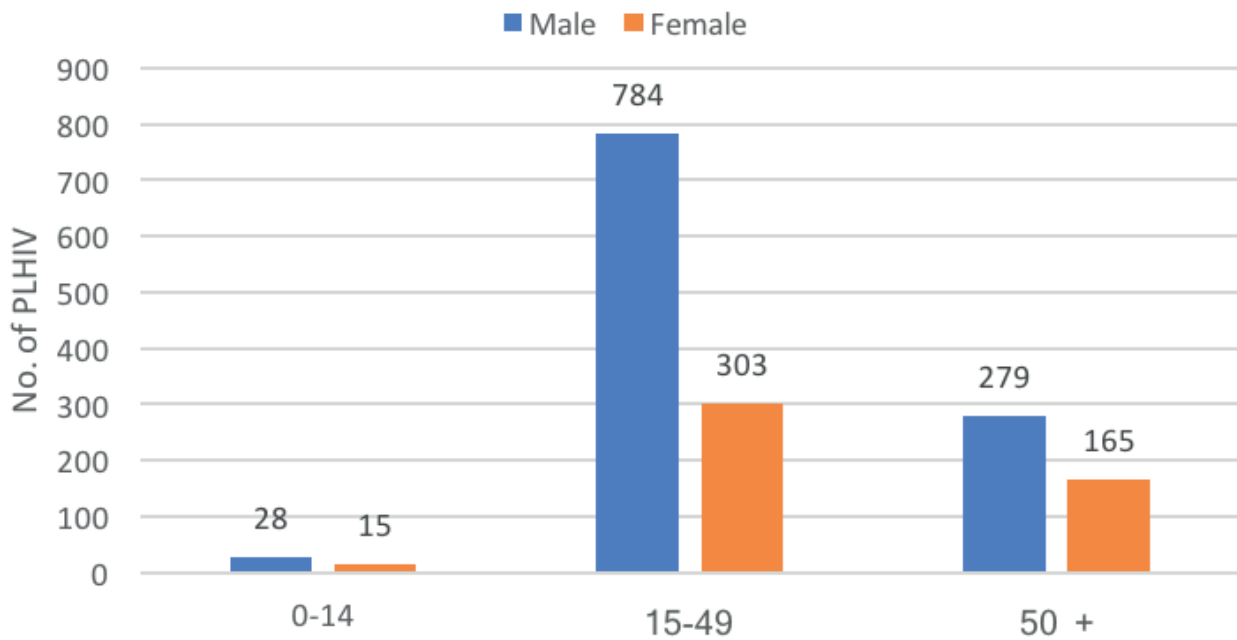
Figure 9.2 Percentage distribution of PLHIV on ART (N=1574)

Figure 9.3 Age and Sex of PLHIV on ART

All newly diagnosed PLHIV were offered ART based on the policy decision taken in 2016 to treat all PLHIV irrespective of their CD4 count. By the end of 2018, the cumulative number on ART was 1574. This included 1499 who were on first line ARV regimen together with 75 on second-line regimen. All groups of ARV drugs including nucleoside/tide reverse transcriptase inhibitors (NRTI), non-nucleoside reverse transcriptase inhibitors (NNRTI), protease inhibitors and integrase inhibitors were available last year. According to WHO guidelines, the preferred first-line ART regimen is TDF+FTC+EFV fixed dose combination. However, only 71% of the patients were on this regimen. Though TDF+FTC+EFV is the preferred regimen, there was a reasonable percentage of PLHIV who could not be given this ARV regimen. Among PLHIV, 9% were on TDF+FTC with boosted atazanavir/ lopinavir/ darunavir or raltegravir. This created disparities in 2018 with regard to ART estimates and problems were experienced due to limited stocks of TDF+FTC.

PLHIV who started ART with AZT based regimens many years ago continued the same drugs during the year 2018. While 12% of patients were on AZT+3TC+EFV, 3% were on AZT+3TC+NVP. Tenofovir has been used in ART regimens since 2013. As Sri Lanka is facing an epidemic of chronic kidney disease of unknown aetiology, the PLHIV on tenofovir-based ART regimen were observed over the years, to identify any notable increase in occurrence of

renal complications. However, a significant increase of renal complications were not observed due to Tenofovir when compared to studies done in other countries. Therefore, those who are on AZT+3TC+EFV/ NVP as first line ARV regimen, will be switched to fixed-dose combination TDF+3TC+EFV in 2019 based on the willingness of the PLHIV to change the ARV regimen.

Raltegravir and darunavir have been identified as third-line options. However, raltegravir had to be used for first-line regimens in special situations such as for pregnant women who were diagnosed in late stages of pregnancy and HIV and TB coinfections.

Among the PLHIV who were on ART by end 2018, 85% had viral suppression of less than 1000 copies /ml.

In 2018, four drugs were included in the National formulary: dolutegravir, atazanavir/ritonavir, lamivudine/abacavir combination which are adult ARV formulations and dispersible zidovudine/ lamivudine for pediatric use.

The procurement review committee which functions as the National quantification working group met regularly and decided on the ARV needs of the country. The long time taken for procurement process is a concern.

Table 9.2 Types of ART regimens by sex of PLHIV

Row Labels	Female	Male	Total	%
TDF+FTC+EFV	303	807	1110	71%
AZT+3TC+EFV	60	131	191	12%
TDF+FTC+LPV/r	31	37	68	4%
TDF+FTC+ATV/r	17	28	45	3%
AZT+3TC+NVP	17	24	41	3%
AZT+3TC+LPV/r	13	14	27	2%
TDF+FTC+RAL	11	11	22	1%
ABC+3TC+EFV	11	10	21	1%
ABC+3TC+LPV/r	4	9	13	1%
TDF+FTC+DRV/r	1	6	7	0%
ABC+3TC+RAL	1	3	4	0%
AZT+3TC+ATV/r	0	4	4	0%
AZT+3TC+DRV/r	3	1	4	0%
AZT+3TC+RAL	2	2	4	0%
TDF+FTC+NVP	4	0	4	0%
TDF+FTC+RAL+LPV/r	2	1	3	0%
ABC+3TC+ATV/r	2	0	2	0%
ABC+3TC+DRV/r	1	1	2	0%
RAL+3TC+DRV/r	0	1	1	0%
TDF+FTC+RAL+DRV/r	0	1	1	0%
Grand Total	483	1091	1574	100%

Multidisciplinary involvement in providing Services

In the management of PLHIV, the Venereologist acts as the focal point and takes responsibility in overall management of PLHIV for lifetime. However, many other disciplines are involved in the management as well.

Venereologists participate in the TB advisory committee to improve services with regard to TB and HIV management.

HIV care subcommittee which met quarterly included, administrators from Ministry of Health including State Pharmaceutical Corporation, Medical Supplies Division, TB control programme, national coordinators of NSACP, venereologists, physician from IDH, microbiologists, NGO and three PLHIV support groups as members. In addition, NDDCB, NCPA and Department of social services were invited to identify additional services. It is important to include hepatologists, chest physicians, psychiatrists and Director, Mental health from 2019.

HIV clinic, Colombo

As the main HIV care facility in the country, HIV clinic, Colombo had to improve the quality of services for PLHIV.

TB screening clinic: A major step was taken to improve Tuberculosis screening and Chest disease management in HIV clinic, Colombo by establishing weekly chest clinic at this location on Wednesdays since August 2018. The main objective of this implementation was to provide necessary services for PLHIV under one roof. The clinic is conducted by a visiting medical officer from NPTCCD under the guidance of the Consultant Chest Physicians at Central Chest Clinic, Borella. A cough centre was also established in the premises of NSACP in July 2018 to facilitate the collection of sputum samples on the spot for Gene Xpert and TB Culture. The sputum samples were sent to the National Reference Laboratory, Welisara for testing during the

year 2018. National Reference Laboratory of NSACP is taking steps to provide this facility from 2019. NPTTCD facilitated the provision of these services and provided isoniazid stocks regularly for isoniazid prophylaxis.

The psychiatry clinic continued services in 2018 under the guidance of Dr Saman Weerawardhana, Consultant Psychiatrist, National Institute of Mental Health. Clinics are held once in two weeks and some drugs such as Sertraline, Clonazepam and Risperidone are available at the pharmacy of NSACP.

It was identified as important to appoint a social service worker to the main HIV clinic in the country to provide services for social, legal and ethical issues of PLHIV in the community. Therefore, a request has been made to the MOH to identify cadre for a social service worker.

PLHIV who are drug addicts do not show a satisfactory response to treatment mainly due to poor adherence. A coordinated effort is being planned currently to address this issue through Psychiatrists and Director/Mental health services.

The nutrition clinic was commenced on January 16th, 2018 in collaboration with the Nutrition Unit, Colombo under the guidance of Dr Renuka Jayatissa, Consultant Nutritionist. The services are provided on every Tuesday for PLHIV who are underweight and/or have non-communicable diseases.

In the year 2019 steps will be taken to scale up these services to other STD clinics providing HIV care services.

During the year 2018, the public health team of the HIV clinic was strengthened with the addition of PHNS. PHI and PHNS are expected to develop close relationships with male and female PLHIV respectively. NOIC was appointed to the HIV clinic, Colombo to streamline the service provision.

Defaulter tracing and contact tracing

During the year 2018 more attention was paid to the defaulter tracing and contact tracing. Guideline on defaulter tracing and partner notification in HIV is given in the publication 'A guide to HIV care services and Management of Opportunistic Infections'.

HIV clinic, Colombo has the highest case load with PLHIV registered since 1987. Antiretroviral treatment was not available in Sri Lanka prior to 2004. Many PLHIV may have died during this period, but only few deaths had been reported to NSACP. There were 248 defaulters over three decades from 1987 to 2018 at the HIV clinic, Colombo. Measures were taken by the PHI and PHNS of HIV clinic to trace all defaulted PLHIV through home visits and other methods in 2018.

There were 57 files which could be excluded including those of foreigners or patients who migrated abroad (32), silent transfers (12), deaths (4). Eight (08) PLHIV attended the clinic after home visits. Even after home visits, 37 could not be located as they have given wrong addresses or moved away from the given address. There were 17 who could not be convinced to attend for services after several attempts including home visits. Thirty-four files were handed over to the district STD clinics to continue defaulter tracing.

NSACP started ART services in 2004. There were 77 defaulters registered during the 1987 – 2004 period. Most of them may have died as ART services were not available during this period.

Contact tracing will give the opportunity to identify undiagnosed PLHIV in the community and would give a higher yield through testing. Other STD clinics and NIID followed the same guidelines with regard to defaulter tracing and contact tracing.

Scaling up of HIV care services

HIV care services were further scaled up to cover all provinces with specialist services. By end 2018, out of 33 district STD clinics, 21 clinics had specialist services provided by a consultant venereologist. However, during the latter part of 2018 North and East specialist services for PLHIV were provided by consultants from Anuradhapura and Colombo respectively.

Differentiated care services were introduced, and PLHIV who were stable with undetectable viral loads were issued ARV drugs for three months. In special instances when PLHIV having undetectable viral loads got opportunities for overseas employment they were supported by providing ARV drugs for longer periods.

In the year 2019 more attention will be paid to expand services of district STD clinics through provision of INAH prophylaxis, chest referrals, psychiatry services and nutrition services under one roof for PLHIV.

PLHIV groups

There are three positive support groups for PLHIV; Positive women's network, Positive hopes alliance and Lanka Plus. These groups work closely with NSACP with regard to prevention and care services. They participate in regular meetings including the HIV care subcommittee. National AIDS Foundation provides support to PLHIV regularly together with services for pregnant women. Resource persons from NSACP conducted programmes on positive living for PLHIV with the help of PLHIV support groups and FPA.

Management of opportunistic infections

Table 9.3 Opportunistic Infections reported among PLHIV during 2018.

Opportunistic infection	Number of PLHIV	%
Candidiasis (include only oral or oesophageal)	69	19%
Toxoplasmosis	69	19%
Newly diagnosed active TB (Both PTB and EPTB)	45	12%
Cryptococcal Meningitis	45	12%
Pneumocystis jiroveci pneumonia (PJP)	35	10%
Mycobacterium avium complex (MAC)	35	10%
Other	23	6%
Pneumonia	15	4%
Chronic Diarrhoea	11	3%
CMV (any of the end organ diseases)	11	3%
Herpes Zoster	8	2%
Total	366	100%

Capacity building of Health care workers

Training programmes for health care workers continued in the year 2018 stressing the issue of stigma and discrimination. Programmes were conducted for hospital health care workers in 13 hospitals, private practitioners and physicians to increase awareness on available services, encourage HIV testing and linking with services.

Challenges

During the year 2018, NSACP strengthened the links with NPTCCD with the provision of TB screening and isoniazid prophylaxis at the main HIV clinic. Defaulter tracing covered all defaulters since 1987 and steps were taken to improve contact tracing. As the numbers of PLHIV are increasing gradually, STD clinics need to be prepared to provide long term care services which require more resources. Lack of space and lack of human resources are areas which need urgent attention of authorities. Estimating the ARV drug need is a challenge, and the long procurement process further affects the continuous supply of ARV drugs. However, it is encouraging to note that the services for PLHIV have increased in quality through specialist services and accessibility has increased through island-wide network of STD clinics.

10. Post-exposure prophylaxis services for HIV

National STD/AIDS control programme mainly provides post-exposure prophylaxis (PEP) for prevention of HIV transmission following exposure to potentially hazardous material, for the healthcare workers. Furthermore, in certain circumstances, PEP is provided for non-health care workers after analyzing the exposure. A circular on PEP was released in 2017, and awareness regarding the actions to be taken following such an accidental injury has increased among health care workers, leading to a rise in access to PEP in 2018.

NSACP provides post-exposure prophylaxis during clinic hours to the exposed, and in addition, it serves as the central station to provide starter-packs to other healthcare institutes to initiate PEP as soon as possible following an exposure. Starter packs of ART have been provided to an identified, 24 hours functioning unit of many hospitals as it is optimal to start PEP within 2 hours of the exposure.

Antiretroviral drugs are always issued following thorough counselling regarding the importance of taking PEP and the possible side effects. Post-

exposure prophylaxis should be continued for 28 days with good compliance to prevent HIV by the exposure.

Post-exposure prophylaxis was given by 27 STD clinics and starter-packs were available at 67 hospitals islandwide during 2018.

A total of 3,735 persons attended for PEP services following exposure, and of them, 3535 (95%) were occupational exposures, and 200 (5%) were non-occupational exposures. One hundred and twelve occupational exposures were started on PEP throughout the country which is 3.1% from all occupational exposures reported. Out of the 112 occupational exposures started with PEP, only 37 people (33%) have completed PEP for 28 days.

Majority accessed these services from the Colombo, Anuradhapura and Kalutara STD clinics. In addition to occupational exposures, 3 people were started on post-exposure prophylaxis following non-occupational exposures at Gampaha and Kalubowila STD clinics.

Figure 10.1 Summary of PEP provided for occupational exposures in 2018

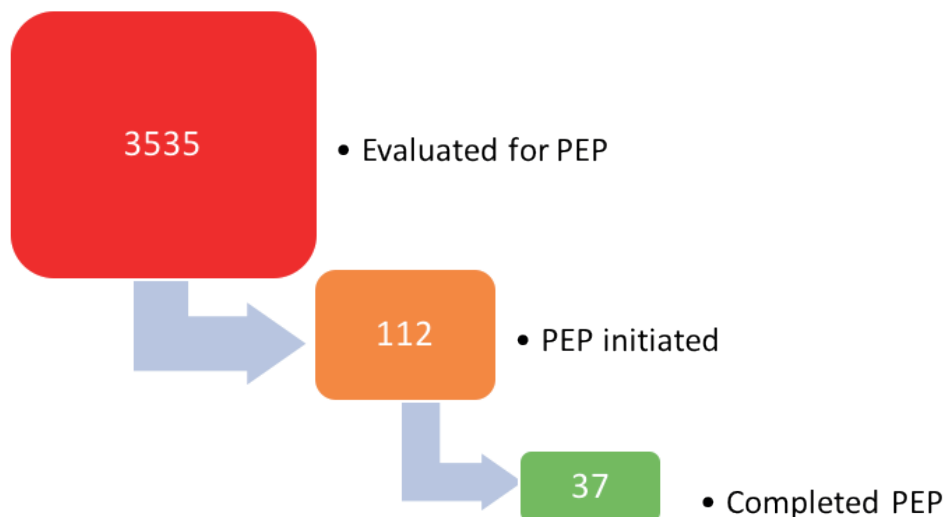


Table 10.1 Location information of ART for PEP in Sri Lanka during 2018

District	Institution	Unit of location	Contact Number	
Ampara	DGH- Ampara	ETU	063 222 2262	
Anuradhapura	TH – Anuradhapura	Medical ICU	0252222261- Ext 700/701	
		STD Clinic	025 2236461	
	BH- Thambuththegama	Medical ward	025 2276262	
	BH – Padaviya	Medical ward	025 2253261	
	DH – Madavachchiya	Medical ward	025 2245661	
Badulla	PGH – Badulla	ETU/ ICU	055 2222261 Ext.322	
		STD Clinic	055 2222578	
	BH – Welimada	Ward 04 – medical ward	057 2245161	
	BH – Diyathalawa	ETU	057 2229061	
	BH – Mahiyanganaya	ETU	055 4936722	
Batticaloa	TH Batticaloa	STD clinic	0652057078	
Colombo	NHSL	OPD room number 08	011 2691111 Ext 2417	
	Lady Ridgeway Hospital	Indoor Dispensary	011 2693711-2, Ext. 219, 242	
	De Zoysa Maternity Hospital	Emergency theatre (OT2)	011 2696224-5 Ext.326	
	Castle Street Hospital for Women	Intensive care unit(ICU)	011 2696231-2 Ext.2230	
	National Eye hospital	Room 4 (OPD)	011 2693911-5 Ext.231	
	TH- Sri Jayawardenapura	Indoor pharmacy	011 2802695-6 Ext.3032	
	TH- Kalubowila	Infection Control unit (From 7am-4pm)	OPD room number 20	011 2763261 Ext. 129
			(after 4pm)	011 2763261 Ext. 218
		STD clinic	114891055	
	NIID- IDH	Infection control unit,Ward 03	011 2411284 Ext.264,210	
BH- Homagama	PCU	011 2855200 Ext. 224		
Galle	TH Mahamodara	STD clinic	0912245998	
		Indoor Dispensary	0912222261, 0912234951	
		ETU	0912232267, 0912232176	
	BH Balapitiya	STD clinic	0912 258 261	
	BH Elpitiya	ETU	0912 291 261	
Gampaha	TH Ragama	SICU	011 2960224 Ext 258	
		STD Clinic	011 2960224	
	DGH – Gampaha	PCU	033 2222261 Ext 200	
		STD Clinic	033 2234383	
	DGH Negombo	MICU	031 2222261 Ext 439	
BH – Wathupitiwala	ICU & STD Clinic	033 2280261		
Hambantota	DGH – Hambantota	PCU & STD Clinic	047 2222247	
Jaffna	TH Jaffna	ETU	021 2222261	
		STD Clinic	021 2217756	
Kalutara	GH- Kalutara	Accident and emergency unit	034 2222261, Ext.250	
		STD Clinic- Kalutara	034-2236937	
	BH- Panadura	ETU	038 2222261 Ext.243	
	BH- Horana	PCU	034 2261261 Ext.1135	

District	Institution	Unit of location	Contact Number
Kandy	TH- Kandy	ETU	081 2233338, 081 2234208
		STD Clinic	081 2203622
	BH- Gampola	ETU	081 2352261
	DBH- Teldeniya	ETU	081-2374055
Kegalle	TH- Kegalle	ETU	035 2222261
		STD Clinic	035 2231222
	BH- Mawanella	ETU	035 2247835
	BH- Karawanella	ETU	036 2267374
Kilinochchi	BH- Warakapola	ETU	035 2267261
		ETU & STD clinic	021 2285329, 021 2283709
Kurunegala	TH- Kurunegala	STD Clinic	037 2224339
		A&E & ICU	037 2233909
	BH- Kuliypitiya	A&E	037 2281261
	BH- Nikawaratiya	ICU	037 3378060
	BH- Dambadeniya	PCU	037 2266592
	BH- Galgamuwa	PCU	037 2253061
Matale	DGH- Matale	STD clinic	066 2053746
Matara	DGH- Matara	ETU	041 222226 1Ext.161
		STD Clinic	0412232302
Monaragala	DGH Monaragala	Primary care unit	055 2277024
		STD Clinic	055 2276826
	BH Bibila	PCU	055 2265461 Ext 135
	BH Wellawaya	PCU	055 2274861 Ext 159
	BH Siyambalanduwa	PCU	055 2279460 Ext 109
Mullaitivu	DGH Mullaitivu	STD clinic	021 2061412
Nuwara Eliya	GH Nuwara Eliya	OPD & STD Clinic	052 2234393, 052 2223210,
	BH Dickoya	OPD	051 2222261
	BH Rikillagaskada	OPD	081 2365261
Polonnaruwa	GH- Polonnaruwa	ETU & STD Clinic	027 2222384, 027 2225787
Puttalam	DGH Chilaw	PCU & STD clinic	032 2223261, 032 2220750
Ratnapura	PGH- Ratnapura	ICU	045 2225396, Ext.225, 337
		STD Clinic	045 2226561
	BH- Balangoda	Ward 02 (Medical ward)	045 2287261 Ext 273
	BH- Embilipitiya	OPD & STD Clinic	047 2230261
Trincomalee	GH Trincomalee	ICU, Wards, ETU, OT-A, STD Clinic	026 2222261, 026 2222563
	BH Kanthale	ICU & Wards	026 2234261
	BH Pulmoddai	Wards	026 2256161
	BH Muthur	Wards	026 2238261
	DH Gomarangadawala	Wards	026 3261073
Vavuniya	DGH Vavuniya	ETU & STD Clinic	024 2224575, 024 2224575

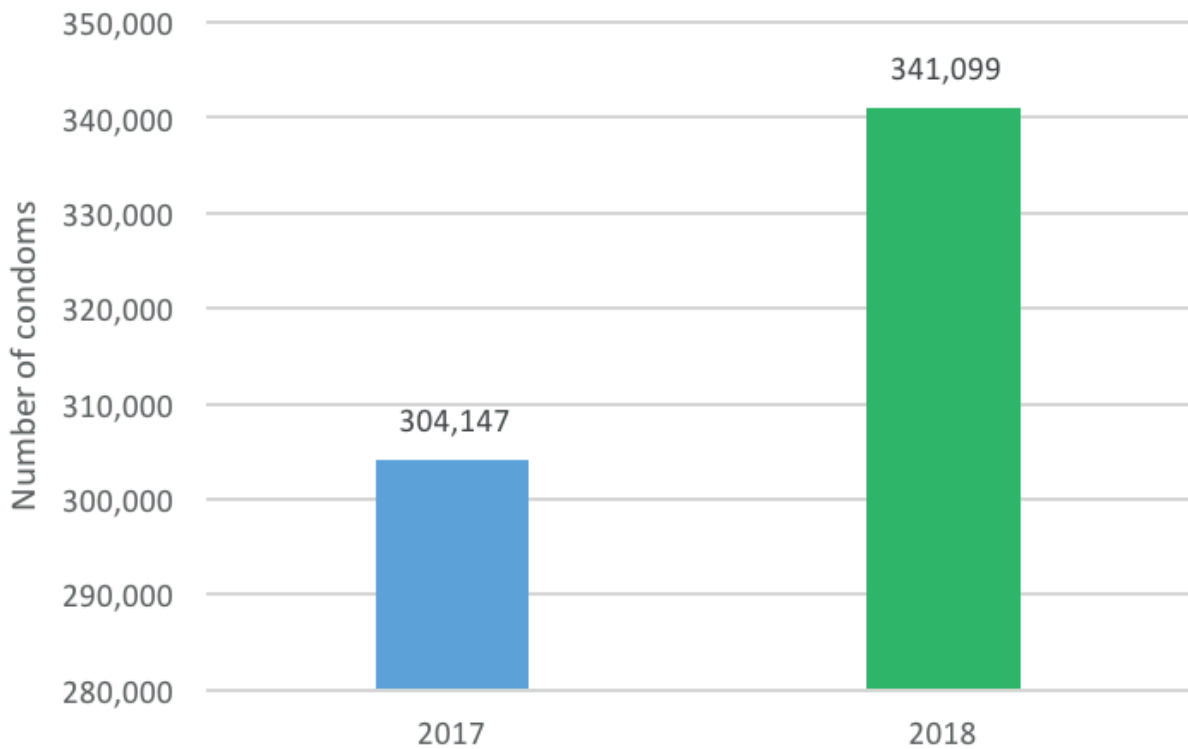
11. Condom Promotion

Condoms are physical barriers that can reduce the risk of sexual exposure to HIV and STIs. This makes condoms a highly effective strategy to reduce the risk of HIV transmission when used consistently and correctly. Condoms also protect from other sexually transmitted infections (STIs).

Many players promote condoms in the country for different purposes. Family Health Bureau (FHB) promotes condoms as a family planning method. Private sector promotes condoms on a commercial basis, which nevertheless, contribute to the above stated sexual and family planning objectives.

NSACP promotes condoms through its island-wide network of STD clinics and peer-led targeted intervention programmes among key populations. During 2018, 341,099 condoms have been distributed via STD clinics. This is a 12% rise in the distribution compared to 2017.

Figure 11.1 Condom Distribution by STD clinics, 2017 and 2018



Fourteen (14) STD clinics have distributed more condoms during 2018 compared to 2017 as illustrated by the below graph. Also 54,240 lubricant sachets have been distributed by 15 STD clinics.

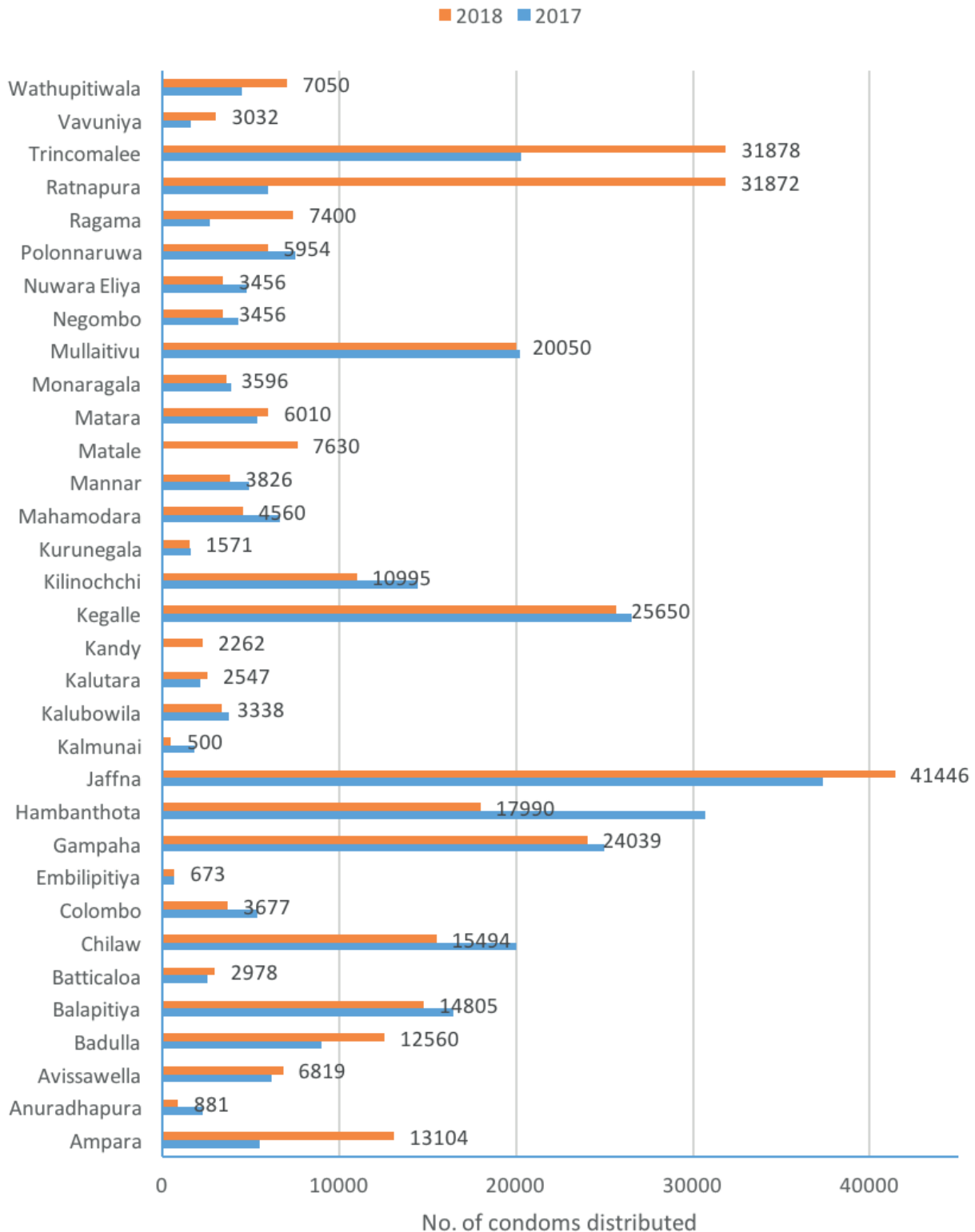
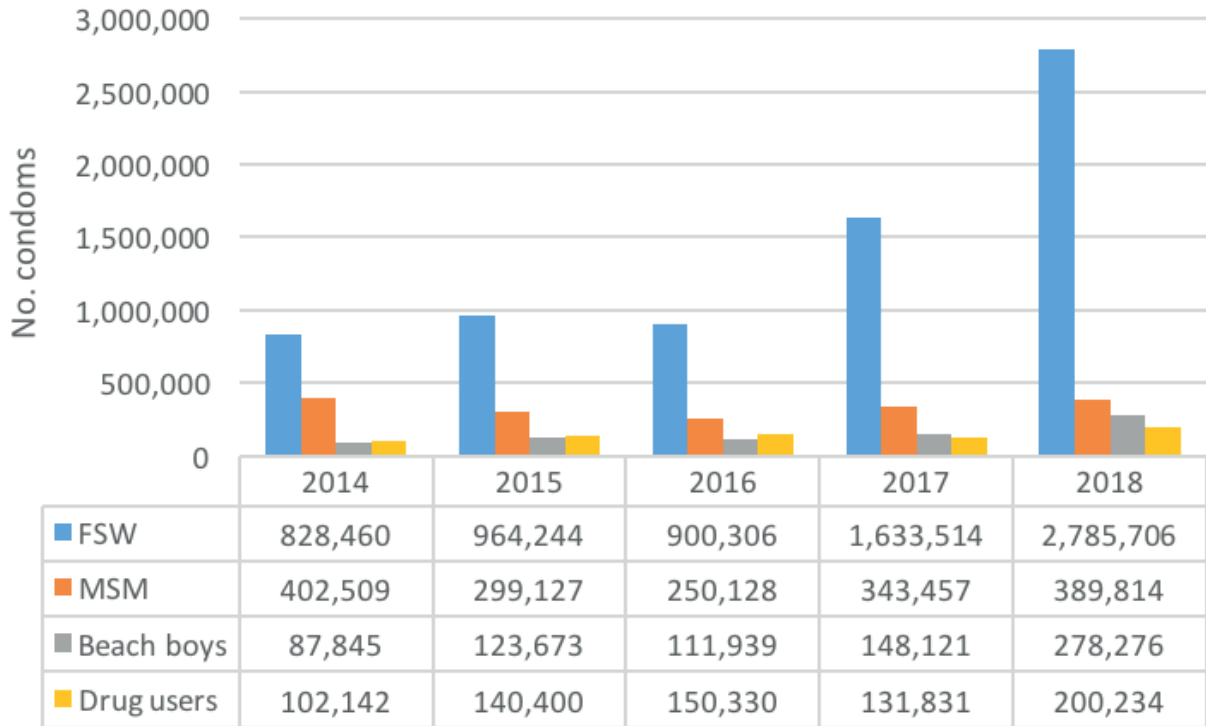
Figure 11.2 Number of condoms distributed by STD clinics, 2017 and 2018

Figure 11.3 Condom distribution for Key populations, 2014-2018



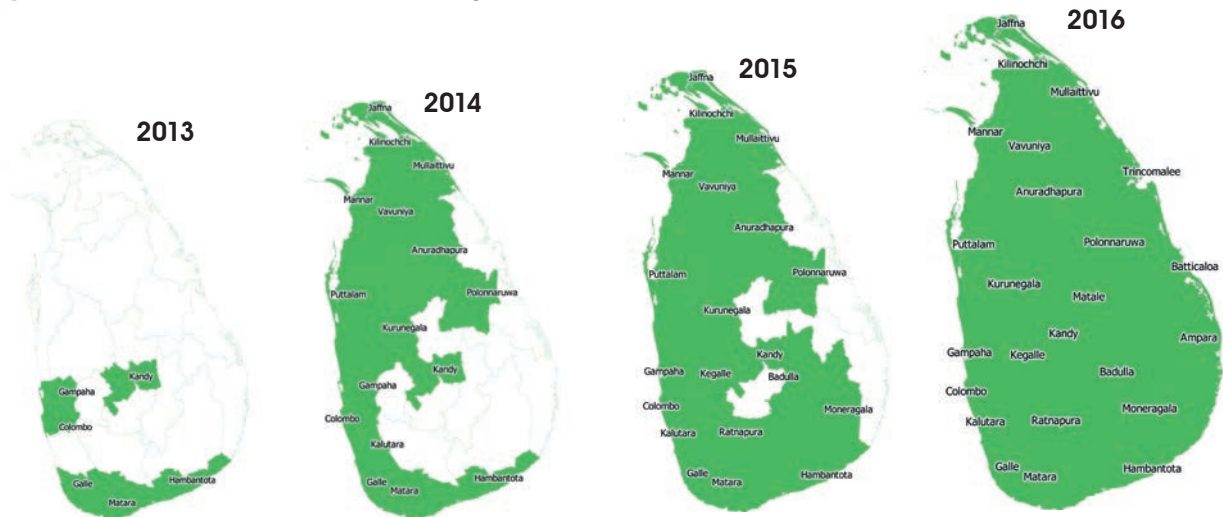
The above graph shows the condom distribution for the key populations through the peer-led targeted interventions funded by the GFTAM and implemented by NGO organizations. FSW received the highest number of condoms through this intervention, and this was increased significantly in 2018.

Evaluation of condom and lubricant

The evaluation of condoms and lubricants are carried out by the NSACP. Many varieties of condoms and lubricants which are manufactured and produced by various companies are evaluated by the NSACP before the recommendation given by National Medical Regulatory Authority.

12. Elimination of mother-to-child transmission (EMTCT) of HIV and syphilis

Figure 12.1 Expansion of PMTCT coverage in Sri Lanka



Validation of EMTCT of HIV and syphilis programme

The year 2018 was an important year for the EMTCT of syphilis and HIV programme. EMTCT programme which was scaled up from 2013 aimed to achieve certain targets by the end of 2017. Out of them, the most challenging target was to increase the HIV testing coverage among pregnant women to >95%, and this target was achieved by the end of 2017. With this achievement, the programme was strengthened further in 2018 to reach rest of the indicator targets required for validation of the EMTCT programme.

What does the term “validation” mean?

According to the WHO, the term “validation” is used when a country has successfully met the criteria for eliminating mother-to-child transmission (EMTCT) of HIV at a specific moment in time.

Additionally, validation “implies that countries will also need to maintain ongoing, routine, effective programme interventions and quality surveillance systems to monitor EMTCT of HIV.”

According to the global minimum criteria, a country is eligible to apply for validation of the EMTCT programme if it has achieved the impact indicators for one year and process indicators for 2 years. The plan is to apply for the validation based on the achievements during 2017 and 2018.

The programme continued the multidisciplinary approach with the involvement of the Family Health Bureau, Maternal and Child Health Services, Provincial and Regional health authorities, Tertiary care hospitals, STD clinics and National Reference laboratory of NSACP.

The National Steering Committee met regularly to assess the progress of the country programme. The National Validation Committee was formed with participants included representatives from the Ministry of Health, UN agencies, Department of Medical Statistics, Department of Registrar General, Ministry of Justice as well as many other stakeholders such as NGOs, key affected populations including PLHIV.

Four working groups continued to work in the four

main domain areas. The following coordinators continued to lead the working groups.

- (1) *Treatment and care services*– Dr Lilani Rajapaksa, Dr Irosha Nilaweera
- (2) *Laboratory* – Dr Jayanthi Elwitigala, Dr Loshan Munasinghe
- (3) *Data management*– Dr K A M Ariyaratne, Dr Kaushalya Kasturiaratchi
- (4) *Human rights* – Dr G Weerasinghe, Ms. K Thalasingham

The working groups met regularly and improved respective domain areas while working on developing the main chapters for the country report. Eight meetings were held with two each for every domain to improve the programme in all areas. All relevant stakeholders attended the programme representing MCH, STI services, Medical Statistics Department, Registrar General Department, Legal Draftsman's Department, key populations, NGOs and PLHIV.

The meeting to introduce the final steps to reach elimination targets of EMTCT of syphilis and HIV programme of Sri Lanka was held on 19.10.2018 at the Hotel Kingsbury, Colombo. There were 106 participants as representatives of the 25 districts including Regional Directors of Health, Venereologists, MO-MCH, CCP, PLHIV and NGOs representing key populations. All of them were playing a major role in either providing ANC services or managing patients with syphilis and HIV.

The main issue identified in the above programme was on data management. Therefore 4 meetings were organized with DMH, CSHW, NSACP and Municipality staff to improve data maintenance and reporting.

A two-day residential workshop was organized at the Citrus, Waskaduwa on the 16th and 17th November 2018 to review the programme and to improve data management by four main domains. All Venereologists attached to NSACP and provinces, consultants from FHB and important stakeholders participated in the meeting.

District monitoring teams met regularly to review the progress of the EMTCT programme in respective districts. Provincial reviews were held in all provinces except Western province, during the 4th quarter of

2018 under the leadership of PDHS of the province. These meetings allowed understanding the progress of the EMTCT programme and also identified the challenges and steps forward. The support extended by the provincial and district authorities and MO MCH has to be appreciated.

Healthcare workers of STD clinics, MCH staff and institutional staff, were trained to improve capacity to provide EMTCT services by the consultant venereologists of the district clinics.

What does the term “elimination” mean for this validation process?

Typically, when disease or infection incidence falls to zero within a geographical area, it is considered “eliminated.” However, currently the minimum EMTCT impact targets as outlined by the WHO are:

- **Less than 50 new pediatric HIV infections per 100 000 live births**
- **HIV Transmission rate of either <2% in non-breastfeeding populations**
- **Less than 50 cases of congenital syphilis per 100 000 live births**

Additionally, to accomplish EMTCT of HIV and syphilis, there are five process targets that need to be met:

- **Antenatal care coverage (at least one visit) of more than or equal to 95%**
- **Coverage of HIV testing of pregnant women of more than or equal to 95%**
- **Treatment of HIV-positive pregnant women of more than or equal to 95%**
- **Coverage of syphilis testing of pregnant women of more than or equal to 95%**
- **Treatment of syphilis-seropositive pregnant women of more than or equal to 95%**

Guidelines

EMTCT guide for health care workers was printed in all three languages and distributed to all MOH offices through STD clinics.

Surveys

A rapid assessment survey was done in the postnatal units of the major tertiary care units by the area STD clinic staff to understand the coverage, quality and accessibility to EMTCT services.

A private hospital survey was done in November during 2017 and 2018 by the epidemiology unit of NSACP, and the findings were used to improve services further.

MTCT of HIV

Sixteen (16) HIV positive women delivered in the year 2018. All 16 infants were started on nevirapine prophylaxis, and early diagnostic tests were arranged including DNA PCR at birth, at 8 and 16 weeks. All mothers who received EMTCT services for HIV delivered uninfected babies.

Early infant diagnosis

The services for early infant diagnosis were further improved in 2018 by establishing DNA PCR testing at the National reference laboratory of NSACP and DNA PCR tests were offered at birth, at 2 and 4 months after delivery. None of the babies born during 2018 was infected with HIV.

Children living with HIV

In the year 2018, two children were identified comprising of a two-and-half-year-old and a four-year-old from Anuradhapura and Nuwara Eliya respectively. None of the children who were delivered during 2018 were diagnosed with HIV.

Figure 12.2 HIV testing coverage

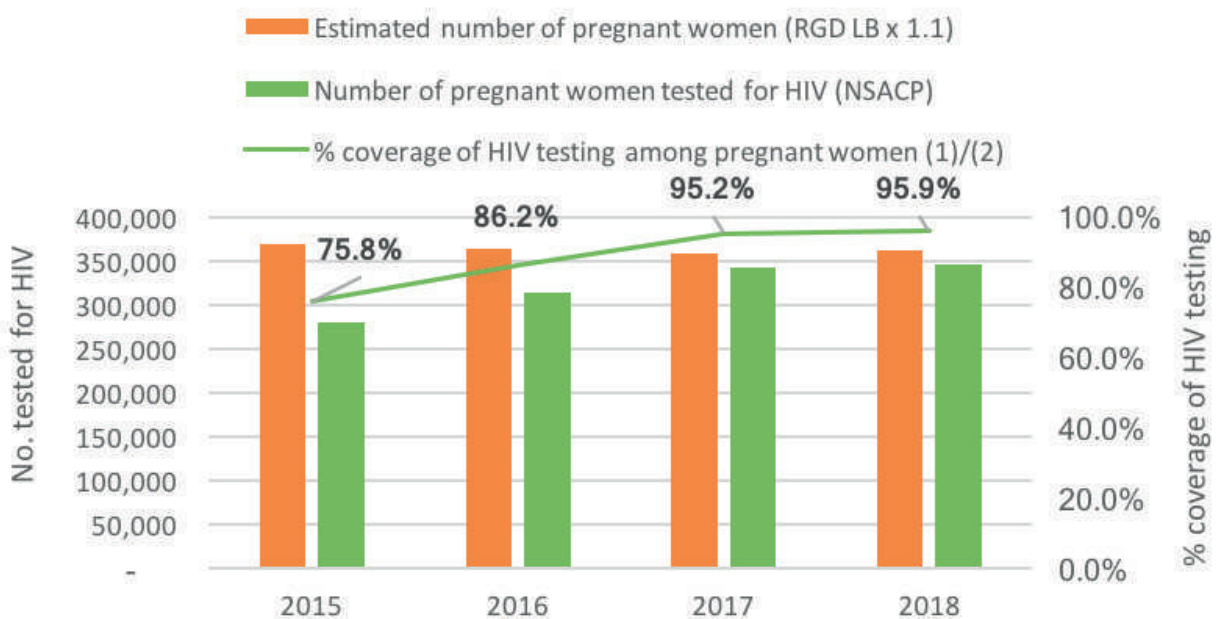
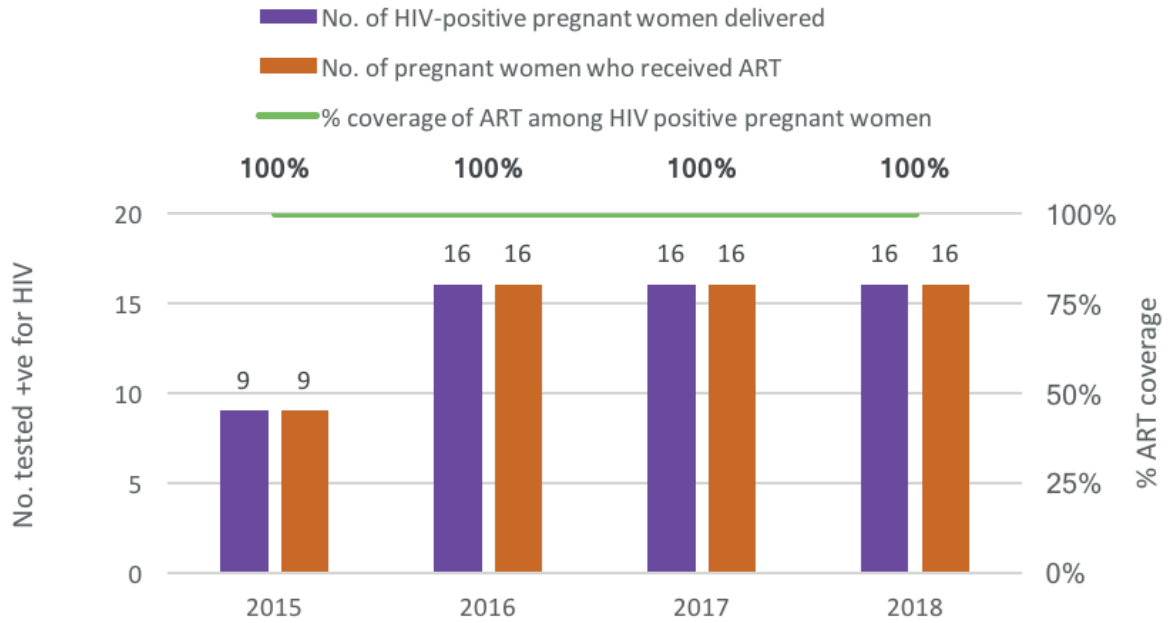
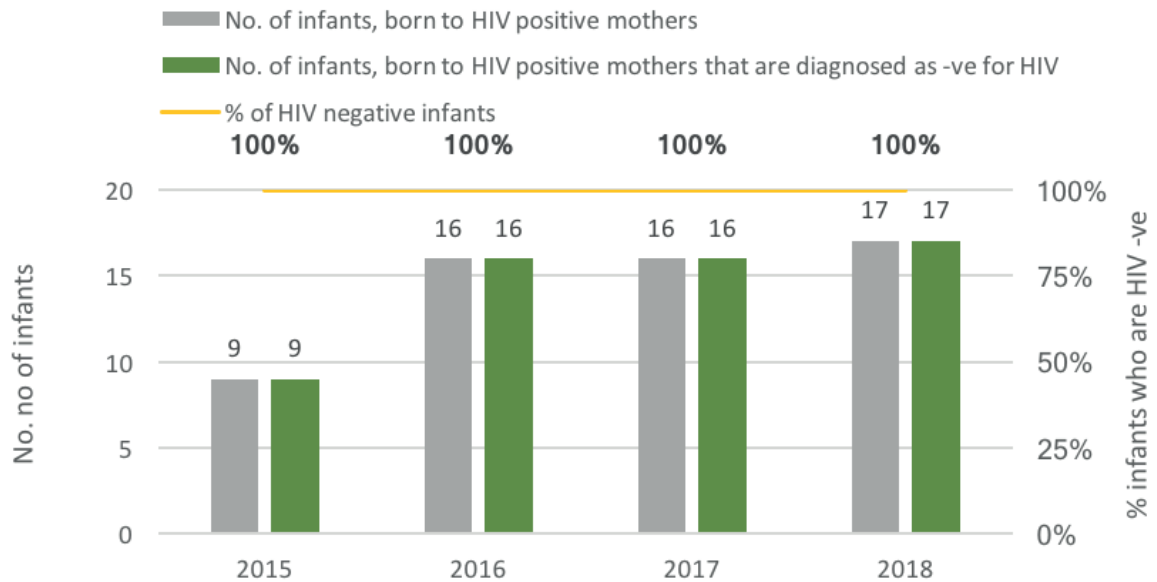


Figure 12.3 HIV Treatment Coverage**Figure 12.4 Percentage of HIV negative infants born to HIV positive mothers**

UNICEF funded programmes

UNICEF provided funds worth of Rs. 6,000,000.00 in 2018 both through MOH and through direct payments. UNICEF funds were used mainly for capacity building, advocacy, laboratory development and programme reviews.

UNICEF facilitated two symposiums organised by the Sri Lanka College of Sexual health and HIV medicine together with the Perinatal society of Sri Lanka to introduce the concept of validation of EMCT programme to medical personnel representing multiple health disciplines.

WHO Assistance

On request of NSACP, WHO facilitated the visit of Dr Richard Stein from 16th to 24th May 2018 to review the EMCT programme and to compile a draft country report. According to the report of the consultant, the country can request for validation of the EMCT programme by the end of 2018.

Global Fund support

The visit of external consultant Dr. Richard Stein was funded by the GFATM. GFATM supported laboratory services for pregnant women and children including viral load testing and EID.

MTCT of syphilis

Since 2017 there was a marked decline of pregnant mothers diagnosed with syphilis. This decline continued further in 2018 with only 38 pregnant women identified with syphilis. Mothers and babies received appropriate services. One pregnant woman had to be treated with non-penicillin treatment during pregnancy and another received services after delivery. Both babies were adequately treated for congenital syphilis. There were six children reported as diagnosed with congenital syphilis.

Figure 12.5 Syphilis testing coverage

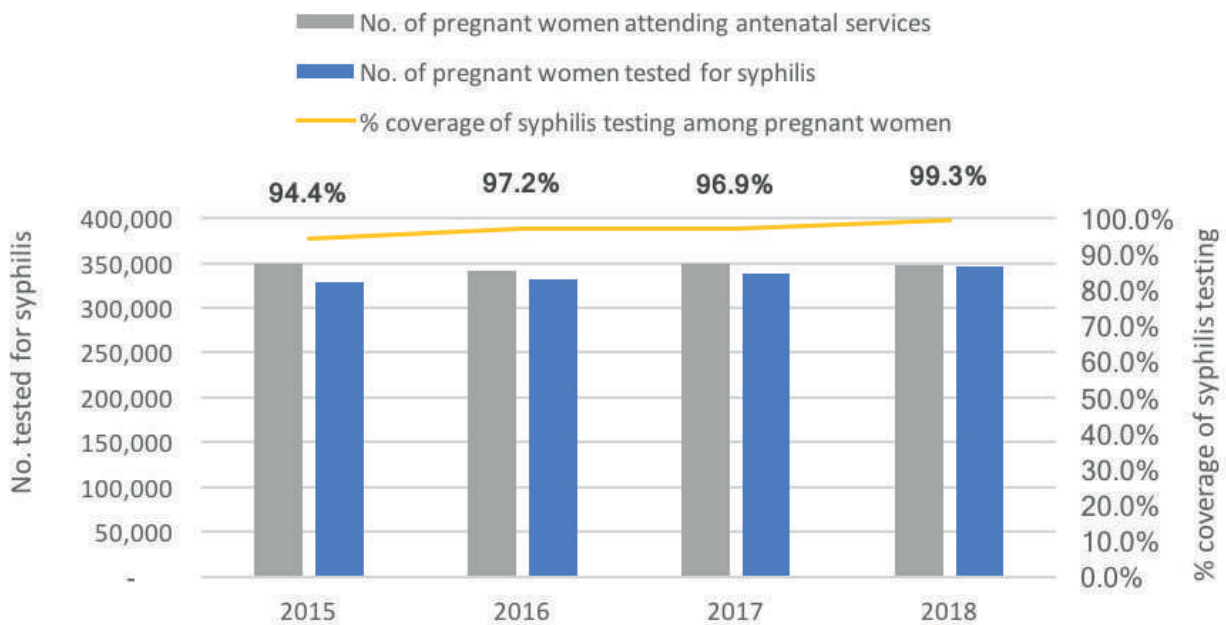
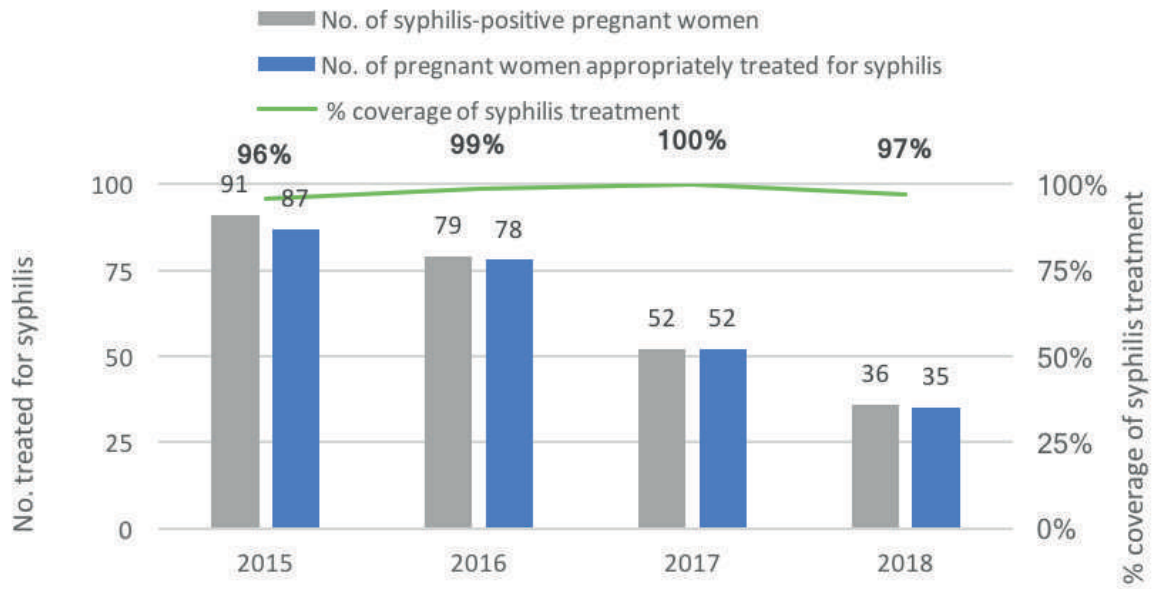


Figure 12.6 Syphilis Treatment Coverage**Table 12.1 Summary of Key monitoring indicators**

Indicators	Target	2017				2018	
		%	Numerator	Denominator	%	Numerator	Denominator
Impact Indicators							
1 MTCT rate of HIV	≤2%	0%	0%	16	0%	0	16
2 Annual rate of new pediatric HIV infections per 100,000 live births	≤50	0	0	326052	0	0	328112
3 Annual rate of congenital syphilis per 100,000 live births	≤50	1.5	5	326052	1.5	5	328112
Key process indicators							
1 Antenatal care coverage	≥95%	97%	349524	358657	96%	347954	360923
2 HIV testing coverage of pregnant women	≥95%	95%	341318	358657	96%	345985	360923
3 Syphilis testing coverage of pregnant women	≥95%	97%	338662	349524	99%	345657	347954
4 ART coverage of HIV-positive pregnant women	≥95%	100%	16	16	100%	16	16
5 Treatment coverage of syphilis-positive pregnant women	≥95%	100%	52	52	97%	35	36

Mass media campaign

The media campaign was conducted in October and November through TV and radio commercials for which GOSL funds were utilized. The media campaign was started in October to coincide with the Children's day activities. TV commercials (5-second) were aired during prime times in ITN channel while through SLBC, a radio commercial (30-second) was broadcasted in ten channels including provincial channels giving a wide coverage to the EMTCT programme. However, due to increased cost, the expected outcome could not be achieved and attention should be paid in 2019 to have a wider media coverage through newspapers, social media and other means as well.

Introducing the validation process to

key populations and PLHIV groups

With the help of Family Planning Association of Sri Lanka, several meetings were organized to make key population groups and PLHIV aware of EMTCT services available in Sri Lanka. This opportunity was used to introduce the validation process of EMTCT programme as well.

Multi-disciplinary approach

Throughout the year the support extended by all relevant parties starting from the MOH, FHB, provincial authorities, tertiary care hospitals as well as NRL and STD clinics has to be commended. Ministry of Health was the main sponsor of the programme and UN funding agencies such as UNICEF, WHO and GFATM supported to further strengthen the programme in 2018.

EMTCT programme continued to maintain the increased coverage of services while improving quality of services. Sustained efforts through 2018 helped to achieve elimination targets under Global Minimum Criteria. Ministry of Health is planning to request WHO SEARO office to validate EMTCT of syphilis and HIV programme of Sri Lanka in 2019.

13. Laboratory Services of NSACP

Provision of laboratory services is an important component of the National STD/AIDS Control Programme. The laboratory services for the NSACP is provided by the National Reference Laboratory (NRL) of NSACP and the peripheral network of laboratories. The NRL provides technical guidance to the laboratories of the network to diagnose and monitor the disease progression of STI and HIV. Diagnosing STI and HIV

Laboratory network of NSACP

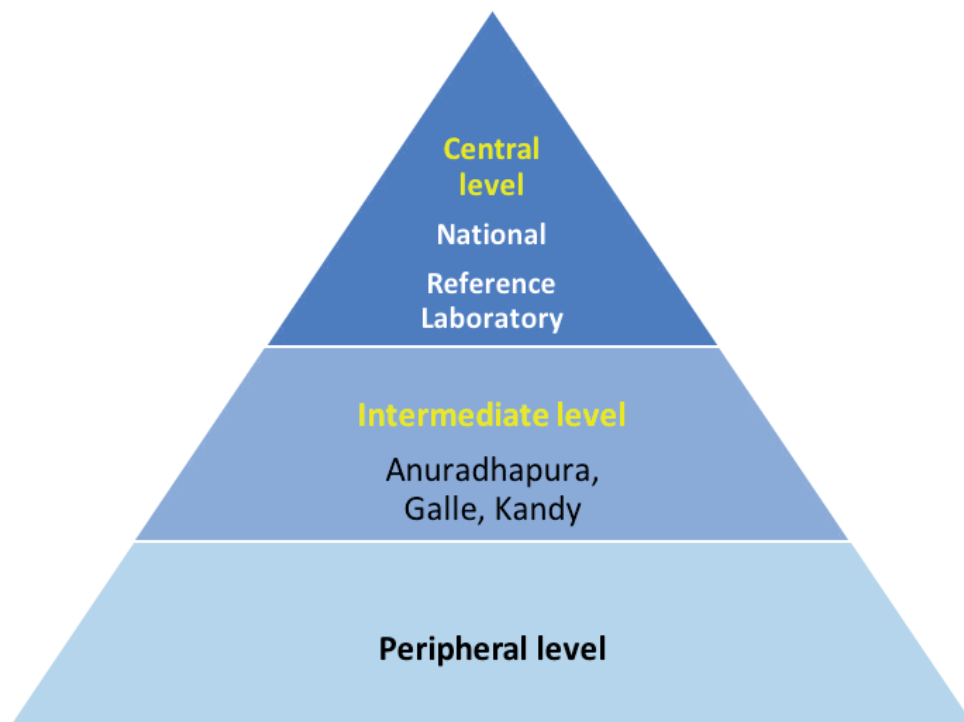
The NRL is the apex body of the lab network with 27 peripheral laboratories island wide, located in district STD clinics. It provides the reference facilities countrywide and all the testing for Colombo STD clinic. Anuradhapura, Galle and Kandy act as intermediate level laboratories with testing facilities for disease monitoring of people living with HIV

(PLHIV) in addition to the routine testing services of a peripheral laboratory.

NRL facilitates quality assurance in testing for STI and HIV and provides HIV confirmatory testing for all public and private sector laboratories. Confirmatory testing for Neisseria species is carried out by the NRL as a reference service. It also plays a key role in distributing test kits and reagents to peripheral laboratories. NRL supports by supplying peripheral laboratories with essential equipment and calibration of equipment as well.

In summary, the NRL and the network of laboratories support protecting the Sri Lankan population from STI and HIV through testing services.

Figure 13.1 Diagrammatic presentation of the laboratory network



At present all the laboratories in the network are capable of performing routine HIV screening using the ELISA technique. Rapid tests using finger prick blood are used in the field setting for HIV screening. If the rapid test is reactive, the patient is then linked to the nearest STI clinic for further testing and management. The confirmatory test for HIV is performed only in the reference laboratory of NSACP. The NRL provides HIV confirmatory services to the National blood transfusion service and private sector laboratories free of charge.

The laboratories provide STI services with screening and confirmatory testing for syphilis island wide. Gonococcal testing services are provided with microscopy in all the laboratories and with culture in some of the laboratories. The NRL provides the reference facility for antibiotic sensitivity and identification of *Neisseria* species and the molecular testing facilities for HSV and Chlamydia. Testing for Hepatitis B, and Hepatitis C are also available at the reference laboratory of NSACP. The diagnosis of other STIs are supported with microscopy in all the laboratories.

Diagnostic facilities are on continuous improvement with regard to quality and quantity. Expansion of the services is planned in a stepwise manner to meet with the requirements of the centre and periphery. During 2018, Batticaloa and Monaragala laboratories started to function, though they are facing some difficulties with human resources. Lack of human resources for technical services is a major drawback in developing the laboratories to the optimum level to diagnose STI and HIV. Most resources are used at present to cover the services provided for the elimination of mother to child transmission of HIV and Syphilis. The upward trend in testing quantities needs to be matched with human resources if a quality assured laboratory service to be ensured for the future.

Figure 13.2 Number of HIV screening tests and confirmatory tests done in NRL 2013-2018

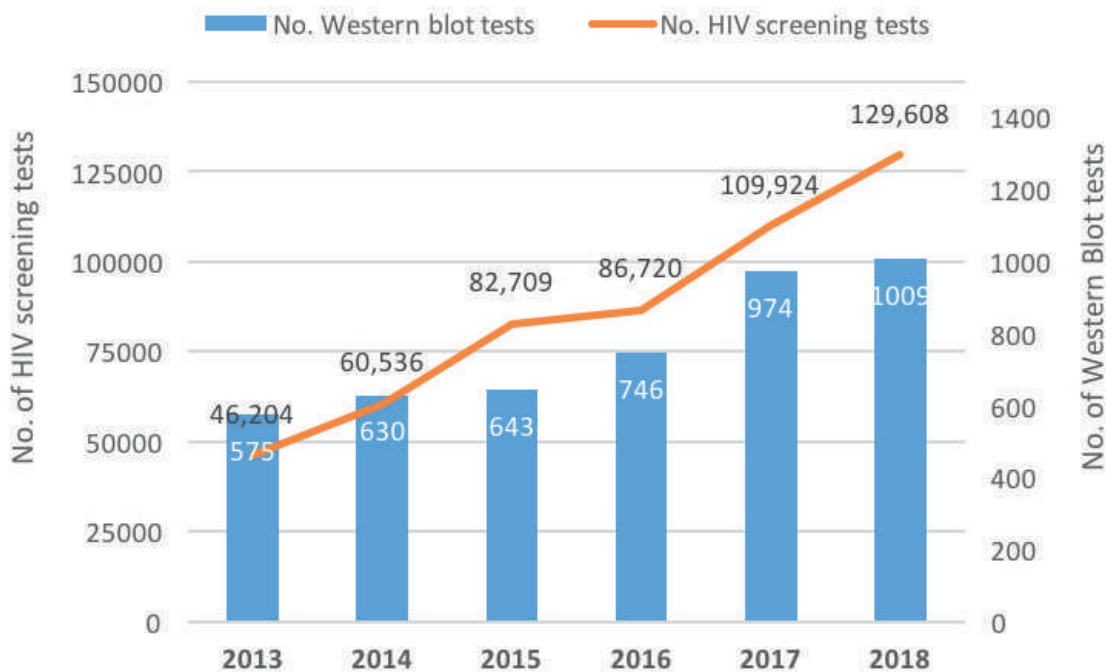
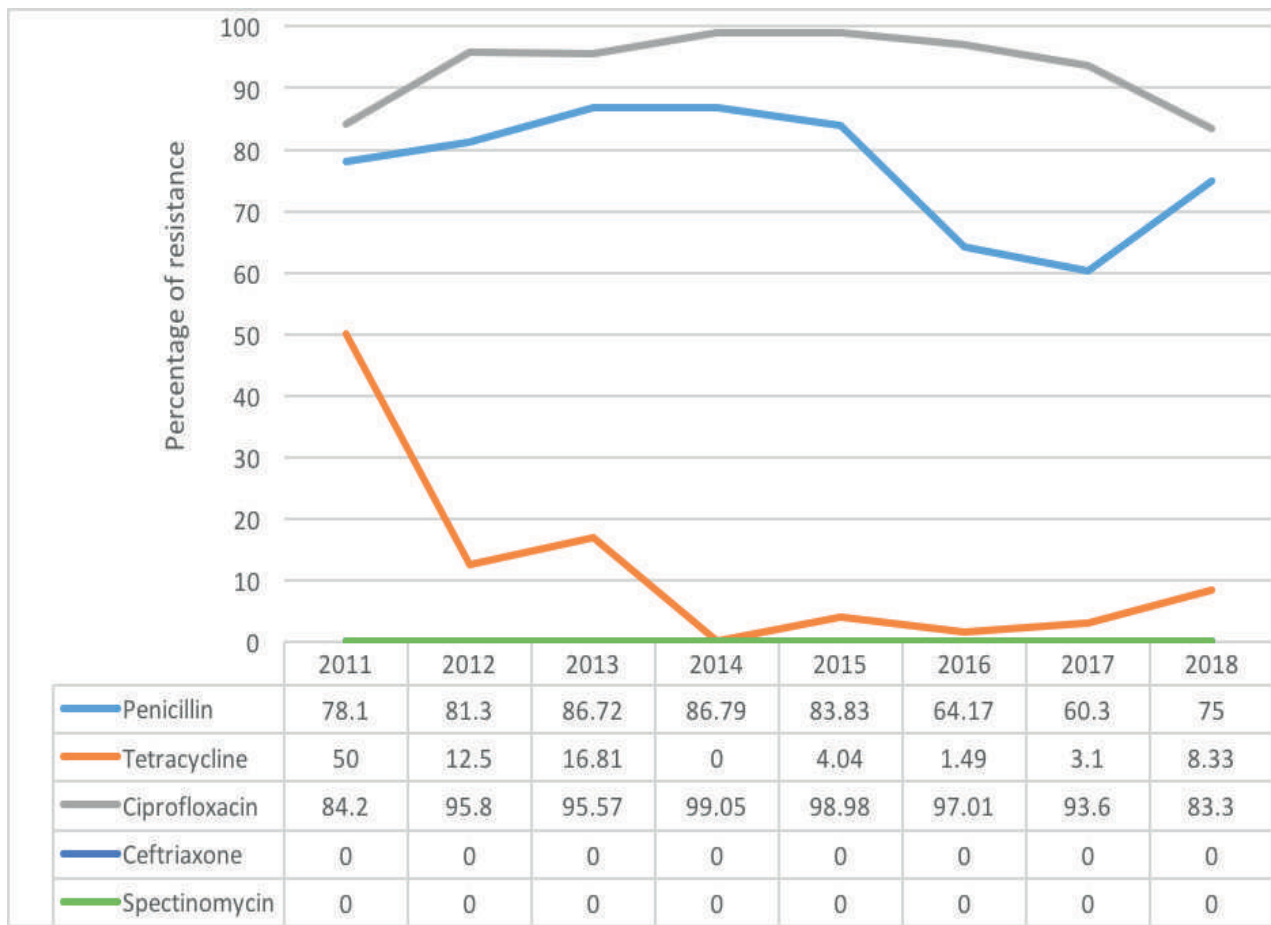
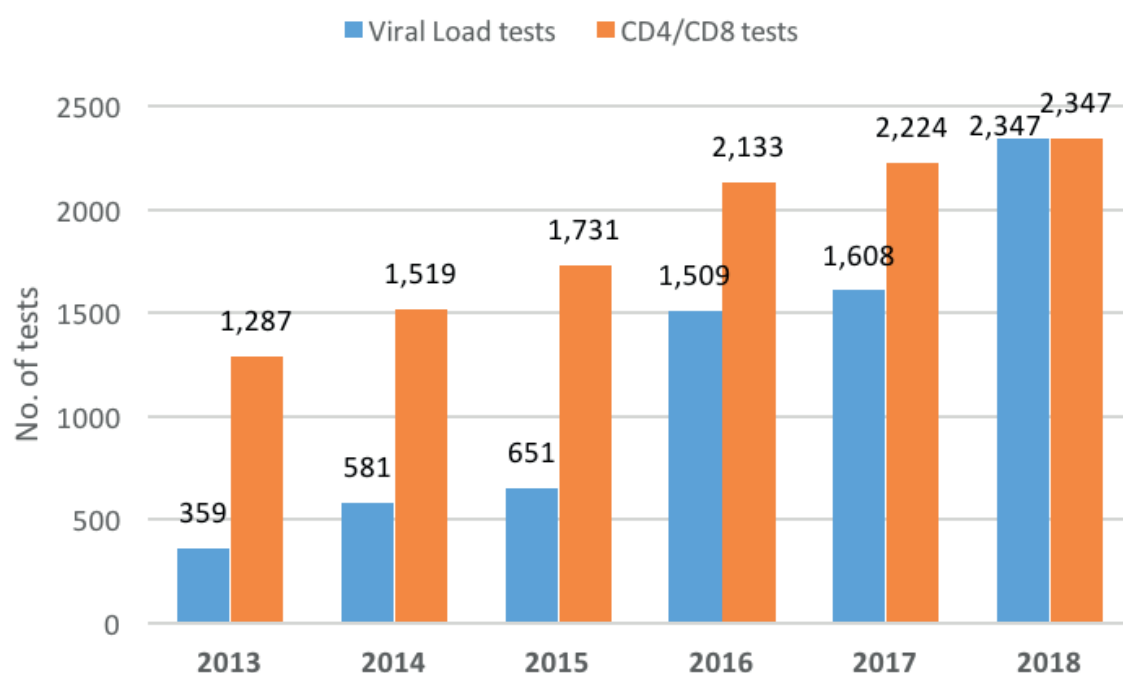


Figure 13.3 Antimicrobial resistance pattern of *Neisseria gonorrhoea*, 2011-2018

Disease monitoring of patients with STI and HIV

To facilitate the management of PLHIV in peripheries, the testing facility for viral load assessment have been made available in Galle and Anuradhapura. In addition, CD4 testing facilities are available at Galle and Kandy laboratories. HIV DNA PCR facilities are available at NRL for early infant diagnosis. Services for HIV drug resistance testing are provided by NRL in collaboration with the National AIDS

Research Institute of India. In 2018, 49 patients were tested for drug resistance. The biochemical and haematological testing facilities are also offered from the NRL for people living with HIV. The monitoring of STIs can be done in all peripheral clinics for Syphilis.

Figure 13.4 Number of HIV Viral load tests and CD4/CD8 tests done in NRL, 2013-2018

Test kits and reagents

Test kits for diagnosing and monitoring of HIV and syphilis are procured centrally and distributed from reference laboratory of NSACP to STD clinics islandwide. Furthermore, in the year 2018, guidelines for stock management for syphilis and HIV test kits and reagents were introduced to all the laboratories to streamline the stock management of the kits and reagents.

In addition, two training programmes to Venereologists, MOICs, MLTs and PHLTs were conducted on supply chain management and to prepare estimates. The technical support of the Medical Supplies Division was taken in 2018 to conduct these workshops.

In view of improving HIV detection in the community, rapid tests for HIV were issued to general practitioners and the district hospitals of Sri Lanka in 2018. The testing algorithms were also updated for HIV in the year 2018.

Table 13.1 Tests done by the central and peripheral STD microscopy laboratories during 2018

Clinic	Dry Smears	Wet Smears	Urine Tests	EQA Smears	Total
Central Laboratory	10712	5221	6143	4611	26687
Peripheral Laboratories	32438	11904	4064	–	48406
Total	43150	17125	10207	4611	75093

Table 13.2 No. of tests done at the reference laboratory during 2017 and 2018

	2017	2018	Increase %
HIV screening test	109924	129608	18%
VDRL	89392	108718	22%
TPPA	12237	24288	98%
GC culture	7575	8618	14%
SGPT	1651	2528	53%
SGOT	1601	2505	56%
CD4/CD8 count	2224	2347	6%
Viral Load Assay	1608	2315	44%
Full blood count	1650	2140	30%
Creatinine	1132	2073	83%
Blood Urea	1113	2071	86%
Alkaline Phosphatase	1461	1750	20%
HBsAg	964	1630	69%
Western blot	974	1006	3%
Cervical cytology	903	927	3%
Cholesterol	644	662	3%
Blood sugar	734	655	-11%
Triglycerides	641	647	1%
HDL	633	646	2%
LDL	633	646	2%
ESR	288	474	65%
Serum Bilirubin	236	394	67%
Direct Bilirubin	236	300	27%
Indirect Bilirubin	236	300	27%
Pregnancy test	136	164	21%
EID	33	74	124%
Drug Resistance	51	49	%-4
GC ABST	63	24	-62%

Quality assurance in testing for STI and HIV

In the year 2018, six workshops were conducted for quality improvement in both the reference laboratory and the peripheral laboratories with the funding support from UNICEF. Following important aspects of quality assurance were discussed, and training was provided to relevant healthcare workers both at the reference laboratory and peripheral laboratories.

(1) Internal quality control

(2) External quality assurance

(3) Test kit verification

(4) Test kit storage and transport

(5) Monitoring of quality indicators

(6) Laboratory assessment tool for EMTCT validation

Internal Quality Control & External Quality Assurance

Implementation of internal quality control and participation in External quality assessment (EQA) by a laboratory is an essential component in laboratory services. The preparation and use of IQC materials were introduced for all the laboratories in the year 2018 in order to streamline the IQC of testing. It is mandatory for all the peripheral laboratories to participate in the EQA conducted by the NRL. EQA panels of HIV screening, syphilis and microscopy are prepared from NRL, NSACP and are sent to peripheral laboratories to maintain the high quality of testing in peripheral laboratories for STI.

The National reference laboratory participates in the external quality assessment programmes conducted by international organizations to maintain the high quality of testing. The NRL participates in the EQA for HIV screening and confirmatory testing, Proficiency testing for syphilis serology, the quality assessment programme for Gonococcal Antimicrobial Susceptibility testing and EQA for CD4 testing. EQA for the viral load will be established from 2019 onwards.

Developments in 2018

Infrastructure development

The NRL was able to have the sample reception counter renovated through the financial support of the International Organization for Migration. This was a great achievement as the lab did not have a proper sample collection counter previously.

Introduction of sample collection manual

Receiving a good quality sample at the laboratory is a prime requirement in producing an accurate report. In this sense, the importance of obtaining the right sample from the right site is mandatory in STI and HIV diagnosis. The necessity of a manual for sample collection, transport and storage was a long felt need for the STI and HIV field. The reference laboratory could achieve this target during this year, and it is the initial step of the journey towards accreditation of laboratories for STI and HIV. In addition, a manual on 'sample collection in antenatal clinics' for the use of EMTCT validation was also introduced.

The financial assistance for the launching of the sample collection manual was provided by the PEPFAR CDC/CMAI collaboration.

Improving the Laboratories with the necessary equipment

It is necessary for a STD clinic to have a properly equipped laboratory for detecting and monitoring patients with STIs. The reference laboratory facilitated the procurement of essential equipment to laboratories in the Northern and Eastern provinces during 2018, with GFATM funding support. The laboratory equipment were distributed to Jaffna, Mannar, Mullaitivu, Vavuniya, Ampara, Kilinochchi, Kalmunai and Trincomalee clinics and it was an enormous support to reduce the equipment gap in the Northern and Eastern provinces.



Launching ceremony of the sample collection manual

Equipment calibration

Properly calibrated equipment plays an utmost important role in giving an accurate test result to the patient. In addition, during the journey towards the EMTCT validation, equipment calibration is an important requirement. Therefore, the equipment calibration in peripheral laboratories with the support of the Industrial technology institute, Sri Lanka was achieved in 2108.

Scaling up of the laboratory system towards accreditation

Quality improvement of the laboratory system towards accreditation is taken care of with the technical assistance of CDC/CMAI India under the PEPFAR support. Many activities including local and regional training, exposure visits webinars, and onsite mentoring has been provided to the technical staff through this project. Many workshops have been conducted to improve the knowledge and skills of the technical staff mainly the MLT staff.

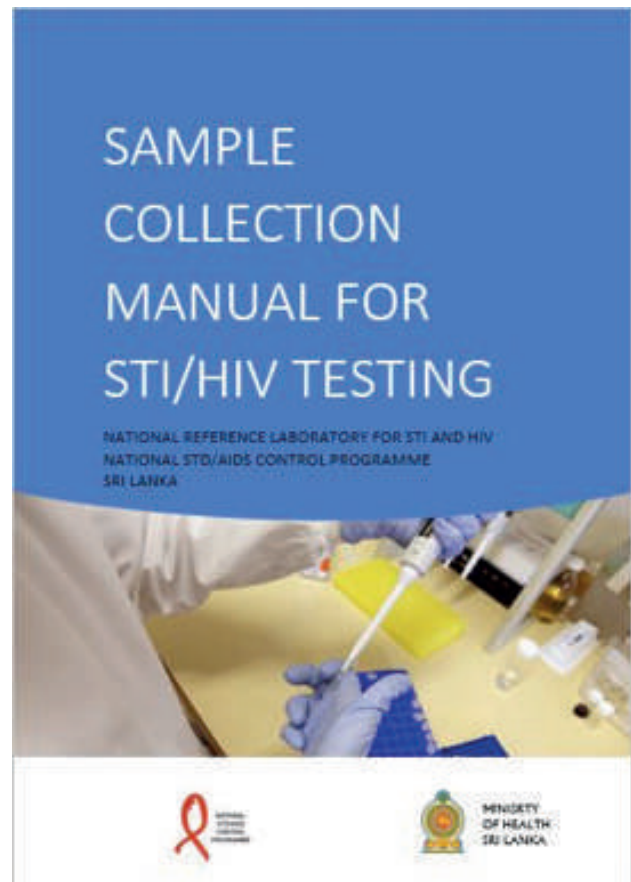
Assessment of the laboratory system was undertaken at the initiation of project activities, and a midterm assessment of the NRL was conducted in 2018. In addition, the project supported the internal audit which is a requirement to fulfil when applying accreditation of laboratories by Sri Lanka Accreditation Board.



Towards EMTCT validation

The reference laboratory of NSACP and the peripheral STD laboratories are expected to move towards EMTCT validation through;

- *Improving laboratory quality management*
- *Improving the quality of test kits used for testing*
- *improving the quality of testing done for screening of antenatal mothers*
- *Improving the quality of laboratory data of antenatal mothers*
- *The support extended from the UNICEF in achieving some of the targets is highly appreciated.*
- *To achieve these objectives, the STD clinic laboratories should further be strengthened with infrastructure, human resources and other facilities.*



14. Multi-sectoral response to the HIV epidemic

The multi-sectoral unit of NSACP coordinates and works in partnership with public, private, civil society organisations, and development partners. The unit provides technical support for advocacy, capacity building, awareness and internalisation of STI and HIV prevention activities for these institutions. It has its focus mainly on the activities conducted aiming the vulnerable groups which have been identified in the National HIV strategic plan. Multi-sectoral sub-committee meeting is conducted with the participation of stakeholders from relevant sectors.

Prison sector HIV prevention programme

Prisoners are more likely to be living with HIV than adults in the general population. Life skill-based education and health promotional activities are used in the prison sector programme to prevent HIV/AIDS and other sexually transmitted infections among the prison community in Sri Lanka. The new funding model of Global Fund supported the prison programme and the prison community received an intervention package which was improved under the theme of "Light for Life". The interventions were based on a communication strategy developed for the prison sector. On average, 19,278 prisoners were occupying the prisons in Sri Lanka in a given day, according to the annual report of the prison department. Of these, 9,036 were convicted prisoners, and the remaining 10,242 were remand prisoners. Narcotic drug offenders consisted of 46.4% of the convicted prisoner admissions. Interventions done for these prisoners were overseen by a steering committee consisting of members of the prison department and the National STD/AIDS Control Programme (NSACP). The steering committee has met four times during 2018 and NSACP has conducted several advocacy meetings for prison authorities. Annual review of prison sector HIV programmes was held, and two-day refresher training on sexual health promotion for prisoners was given for Rehabilitation officers and prison sector authorities.

Young prisoners' staff training programmes were

held at Wataraka and Pallansena prisons in 2018, and 95 officers participated. Training programme on Life Skills for young offenders was conducted at Wataraka, Pallansena and Ambepussa prisons and 107 participants were trained.

Forty (40) prison peer educators selected from the new inmates were trained for behaviour change communication at a single time and three times per year. A total of 3600 prisoners were trained by rehabilitation officers in 30 prisons island wide during 2018. Review meetings for peer educators were held at Welikada, Magazine and Remand prisons in Colombo and also in Galle, Jaffna and Vavuniya prisons. Three thousand six hundred badges were developed for peer leaders in 2018 and to be distributed among them. Prison department took part in the walk with hundred participants including the dancing troupe to commemorate World Aids Day 2018 organised by NSACP and in the special activities conducted in 30 prisons across the country.

HIV testing promotion in the prison setup

HIV testing was done according to the HIV testing guidelines for the prison setup. This guideline was circulated among both STD clinic staff and relevant prison staff before testing. Prison inmates volunteered for HIV testing after the formal and informal discussions carried out by peer educators. During 2018, thirty-one mobile HIV testing clinics were held per month by 20 STD clinics. The confirmed positive cases were referred for treatment and care services at STD clinics. To assess the syphilis infectivity status among prison inmates, the same blood samples were used. Group counselling method was adopted for counselling prisoners before the drawing of blood for HIV testing with their consent. Negative test results were conveyed to the prisoners by the prison medical officer after conducting the post-test counselling. Positive results were conveyed by a trained medical officer of the relevant STD clinic. During 2018, a total of 16,453 inmates underwent voluntary HIV testing in the prisons. Of them, nine

(9) were HIV positive. Prison health staff was trained on HIV rapid testing from the Central Laboratory of the National STD/AIDS Control Programme. In 2018, 15,500 rapid diagnostic test kits (HIV/Syphilis duo) were distributed among STD clinics to scale up HIV testing among prisoners.

Prison HIV prevention, treatment and care policy.

The National STD/AIDS Control Programme developed a policy on prison HIV prevention, treatment and care. This was done after several consultative meetings with stakeholders and opinions were taken from international experts. The Global Fund financially supported this activity. The approval for prison policy has been given from the Cabinet in 2018 and dissemination of the contents of this policy was carried out for superintendents of prisons.

The main objective of the policy is to prevent HIV among all prisoners and prison staff to ensure the prevention of new HIV transmission in prison settings.

Specific objectives are

- (1) *Enable prisoners to know their HIV status by promoting voluntary, confidential HIV counselling and testing and follow up.*

- (2) *Provide access to treatment, care and support for HIV, hepatitis, tuberculosis and STI.*
- (3) *Preserve and protect the rights of people living with and affected by HIV.*
- (4) *Ensure that the prison environment is conducive to promote and preserve the health of the prisoners and prison staff.*
- (5) *Conduct regular assessments to ensure the policy and programmes are effective.*

Distribution of IEC material on HIV prevention via entertainment in prisons

Data loaded 250 USB pen drives with lectures and telefilms and documents were distributed among rehabilitation officers. Also, banners, posters, leaflets and stickers containing HIV testing promotion and stigma reduction messages were printed in Sinhala and Tamil and distributed among all prisons. The peer leaders were encouraged to perform entertainment activities such as street dramas to educate the prisoners.

Armed forces HIV prevention programme

Interventions for the tri-forces have been identified in the National HIV strategic plan as the majority of them belong to the sexually active population. The



main objective of the training of the tri-forces was to promote HIV testing while promoting safe sexual behaviours. Training of trainers programmes using the training module were carried out among armed forces across the country. These trainers were given three days of training and were provided with all necessary communication material to carry out programmes in their respective duty stations using formal and informal communication methods. During the year 2018, 151 tri-force personnel were trained as trainers through these programmes. Tri-forces actively participated in commemorating the World AIDS Day 2018. The NSACP facilitated these initiatives by providing communication material (posters, banners, and leaflets) to distribute among the camps island wide.

A two-day programme was held at Naval base, Trincomalee which included a street drama, an advocacy programme for Navy officers and HIV testing programme with the participation of the local STD clinic. Awareness programme on sexual health promotion and HIV prevention was conducted by resource persons from the Multisectoral unit for 100 lady officers at the air force base Katunayake.

Police sector HIV prevention programme

Police officers often deal with members of the key populations. They play a vital role in creating a conducive environment for HIV prevention among key populations. Two-day programmes of training of trainers were conducted for police officers, and 117 officers participated in three such programmes held during 2018. Workshops were conducted by resource persons from the NSACP. During 2018, an advocacy programme on HIV prevention among key populations was conducted in 24 districts for high-rank police officers. These programmes were conducted by resource persons from STD clinics island-wide. IEC material including banners, posters, leaflets, and pocket calendars was distributed to the police divisions across the country via public health unit of the police to commemorate the World AIDS Day.

Youth sector HIV prevention programmes

The Youth steering committee for HIV prevention has recognised the need for taking immediate actions to prevent the HIV epidemic among youth. Two training of trainer programmes were conducted

for Youth Corps officers from youth centres island wide. A total of 72 Youth Corps officers were trained during 2018. A two-day training and all necessary communication material were provided to carry out programmes by them at the peripheral level. These trainers were instructed to implement HIV/STD programmes in their respective areas, using both formal and informal methods. There are 49 Youth Corps centres island-wide. Around 12,000 youth are trained each year for career guidance by the Youth Ministry. A nine-hour lecture period to promote sexual health has been incorporated into their regular training curriculum. The selected officers were trained as trainers by the staff of the Multi-sectoral unit, using a training module. In addition, the Multisectoral unit facilitated special awareness programmes in all Youth Corp centres with the support of the respective medical officers island-wide.

NSACP data shows an increase in new HIV infections among the age group of 15-24 during the last three years. In 2018, research was conducted to identify the knowledge, attitudes on STI and current sexual practices among newly recruited youth in the National Youth Corp institutions. This study was conducted among the recruits of youth before undergoing the sexual health curriculum. Data collection was done by youth corps officers in youth corps centres island wide, and they were trained in a workshop before the data collection. The evidence of this study will be helpful for decision makers in the future to strengthen skill development programmes on the prevention of sexually transmitted infections including HIV among youth who are attending the National Youth Corp. Furthermore, it would assist in improving the knowledge, attitudes and practices of STIs including HIV and support in achieving 2020 targets and 2025 targets.

One hundred and twenty-two officers from the Youth Council were given two-day training on behaviour change communication to promote safe sex and HIV testing among youth council trainees. All these officers were provided with DVDs with lectures and telefilms on HIV prevention. Banners, posters, leaflets and pocket calendars and stickers containing messages on sexual health promotion were distributed among the youth sectors.

Education sector - HIV prevention programme

National Institute of Education has taken initiatives for incorporating sexual health, within the subject of 'Health and wellbeing' for students who follow the vocational training stream (also called 13 years' compulsory education stream) since 2017. The subject area is covered under the topics of sexuality, overcoming sexual challenges, prevention of sexually transmitted diseases and HIV/AIDS. National Institute of Education arranged a training programme for capacity building among the school teachers to implement this curriculum and 120 teachers were trained this year. The Women and Gender subcommittee of the parliament has recognised the need for age-appropriate comprehensive sexual education for school children. As a result, the Ministry of Education has developed a training module together with other stakeholders. Multisectoral Unit contributed to the module and had conducted training of trainers programme for teachers.

A school education programme on Life skills to promote reproductive health and STI prevention was held at Kottawa Dharmapala Vidyalyaya, Kolonnawa Balika Vidyalyaya, Janadhipathi Balika Vidyalyaya, Kudabuthgamuwa Rajasinghe Vidyalyaya, Mahamathya Vidyalyaya in Sri Jayawardhanapura Education zone and Gothami Balika Vidyalyaya Colombo.

Migrant sector HIV prevention programme

A significant proportion of people living with HIV have a history of external migration. Therefore, carrying out HIV prevention activities among migrant worker population was identified as a priority area. The Sri Lanka Foreign Employment Bureau (SLFEB) is working in collaboration with NSACP in HIV prevention services. Banners, posters, leaflets and pocket calendars which contain messages on sexual health promotion and HIV prevention were handed over to authorities of SLFEB.

Tourism sector HIV prevention programme

Over two million tourists have arrived in Sri Lanka during 2018. According to the World Health Organization, travel and tourism may enhance the

probability of having sex with casual partners and increase the risk of contracting sexually transmitted infections including HIV/AIDS. Country's popularity for sex tourism also has been identified as a risk factor which could potentially increase the rate of HIV transmission within the country. Hence, the goal of this programme is to sensitize leaders and key influencers in professional training in the tourism sector. The integration of HIV/STI prevention education in the fast-growing tourism industry is expected to minimize the exposure to these risk behaviours. A refresher consultative workshop for training of trainers among tourist professionals on HIV prevention was conducted for 15 participants, who provide training to young professionals entering tourism industry in collaboration with the Sri Lanka Institute of Tourism and Hotel Management (SLITHM). A training programme for 80 tourist guide trainees on HIV prevention was held. Banners, posters, leaflets and stickers containing HIV prevention messages were distributed within the tourist sector.

HIV programmes for Child Protection Officers

A two-day training of trainers programme on behavioural change communication for sexual health promotion among officers and district coordinators of Child Protection Authority was conducted for 114 participants. IEC materials including DVDs were distributed among them.

Mobile Application Solution for HIV Risk assessment

A Mobile application solution for HIV risk assessment was developed for high-risk groups and also for the general public. The key aim of this application is to be a vital information tool for those seeking information on HIV. It provides a risk level for HIV for each sexual activity and thereby promotes HIV testing. They can also obtain information on how to minimize risk and also be linked to relevant resources. Moreover, users will also be provided with convenient features such as clinic locators making it easier for them to access the health services.

Workshop on the finding of stigma assessment of PLHIV

The second stigma assessment of people living



with HIV in Sri Lanka was conducted using the stigma index with the support of the United Nations Population Fund. (UNFPA)

Development of National Condom Security Guidelines

A guideline for the National condom security was developed with the funding support from the UNFPA based on the recommendations of the assessment of the national condom programme and the National Condom Strategy for 2016-2020.

15. CDC Supported activities during 2018

PEPFAR/CDC's Regional Technical Assistance for Laboratory System Strengthening

The U.S. President's Emergency Plan for AIDS Relief (PEPFAR) provides technical assistance to the National STD/AIDS Control Program on laboratory system strengthening. Christian Medical Association of India (CMAI) is CDC's implementing partner for this initiative.

The overall goal of the project is to strengthen the HIV and STI laboratory network under NSCAP. The specific objectives are to build the capacity of the National Reference Laboratory (NRL) towards achieving accreditation; technical assistance for the implementation of External Quality Assurance Program for HIV and syphilis for STI clinic labs and strengthen lab data management and reporting.

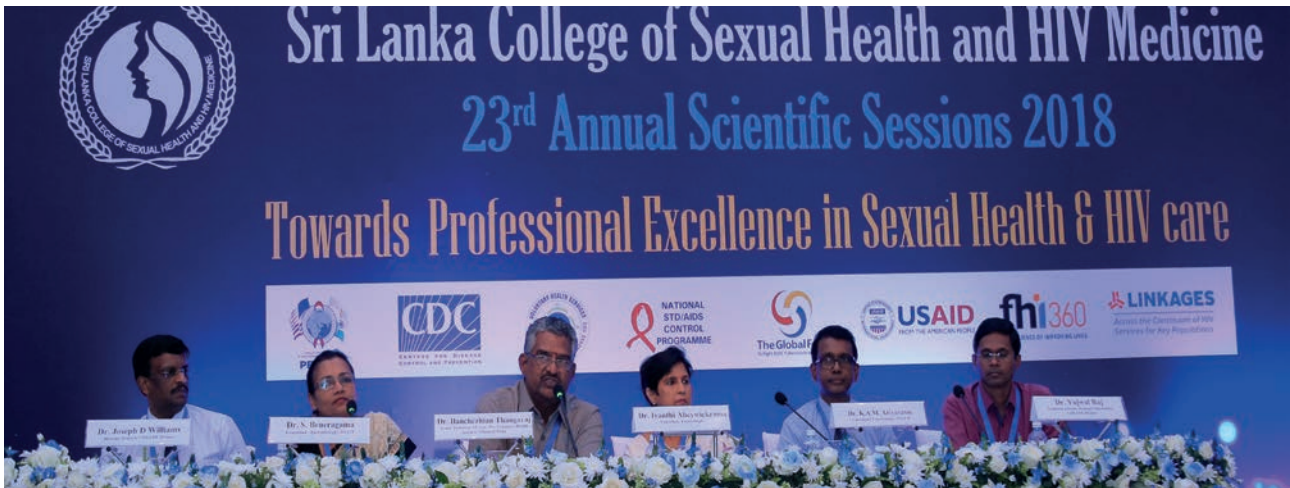
The collaborative initiative has resulted in substantial improvements in many technical aspects and the major activities completed in 2018-19 are,

- (1) **Training on Quality Assurance and lab accreditation:** A workshop on quality assurance and laboratory accreditation was conducted on 8th August 2018 in Colombo, which was organized by the Sri Lanka College of Microbiologists as a part of the 27th Annual Scientific Sessions 2018. Four participants from the National Reference Laboratory of STD/AIDS Control Programme participated. The technical areas covered were, ISO 15189 standards with reference to laboratory accreditation, issues related to internal quality control, calibration, uncertainty of measurement and use of statistical control procedures, adverse event reporting, appropriate handling of complaints, laboratory audits, laboratory risk assessment and critical components of an EQA program.
- (2) **Refresher training on ISO standards, accreditation and self-assessment:** A refresher training on "ISO standards, accreditation and self-assessment" was conducted on 26th and 27th September 2018 at NSACP. Twenty two participants which included senior medical laboratory technologists, public health laboratory technicians and medical officers of the National Reference Laboratory attended the training. The technical sessions included an overview of ISO standards, accreditation and facilitated-self-assessment using a standard tool for identifying the gaps in laboratories. The team reaffirmed their commitment towards improving the quality of STI and HIV diagnostic services in the country. Dr H.S.R. Perera, Deputy Director General-Public Health Services and Dr Lilani Rajapakse, Director, National STD/AIDS Control Programme were the key officials who attended the programme
- (3) **Workshop on "Quality Improvement" for STD laboratories:** A workshop on Quality improvement for STD laboratories was conducted under the chairmanship of Dr Lilani Rajapakse, Director, NSACP in October 2018. Dr Sarika, Technical Consultant, CMAI delivered a session on "Quality improvement in NRL and peripheral laboratories". Various issues and challenges of laboratories such as daily monitoring of quality improvement were discussed.
- (4) **Workshop on Supply chain management:** A workshop on "supply chain management in laboratories" was conducted for the NRL and peripheral laboratory personnel in November 2018.

The laboratory personnel were oriented on the methods to avoid stock outs and ensure uninterrupted supply of kits, reagents and other required materials.

- (5) **Workshop on kit verification:** Considering the gaps in kit verification at NRL and peripheral laboratories, a one-day workshop was conducted. The technical sessions were handled by Dr Jayanthi Elvitigala, Consultant Microbiologist, NRL and Dr Sarika, CMAI. Around, 20 lab personnel participated.
- (6) **Onsite mentoring support:** The project has been providing regular mentoring and handholding support to the technical staff of NRL to address the specific gaps in documentation such as preparation of Quality manual/QSPs/SOPs, compliance with QMS requirements such as IQC, EQA monitoring, equipment management, inventory management, capacity building and process improvement.
- (7) **E-learning (Webinars):** Onsite training is complemented with periodic online technical support to regularly update the technical knowledge and skills of the NRL laboratory staff. Six webinar contents on molecular techniques have been developed with the technical support of NIMHANS, Bangalore and CMC, Vellore. Four webinars have been completed so far, on basics of QMS, basics of molecular techniques and current molecular techniques for viral load estimation.
- (8) **Project debriefing meeting:** A project debriefing meeting was also organized under the chairmanship of Dr. H.S.R. Perera, Deputy Director General-Public Health Services and Dr. Lilani Rajapakse, Acting Director, National STD/AIDS Control Programme on 10th September 2018. The activities accomplished and the action plan towards achieving accreditation were briefed by the CMAI project staff.

CDC support on Technical Assistance to NSACP on Strategic Information



The President's Emergency Plan for AIDS Relief (PEPFAR) is a United States Governmental initiative to address the global HIV/AIDS epidemic. PEPFAR and Center for Disease Control and Prevention (CDC) is providing support to NSACP through its cooperative agreement implementing partner, the Voluntary Health Services (VHS) through the VHS-CDC project. The overall goal is to enhance the contribution of Strategic Information (SI) towards the national HIV/AIDS response in Sri Lanka by facilitating technical assistance (TA) and cooperation on identified priority areas. The key strategies on TA to NSACP being adopted will include evidence-based TA; horizontal exposure and vertical expertise; bottom-up strategy; and comprehensive in outlook.

The VHS-CDC project and the NSACP jointly facilitated the exploratory visits, inter-agency visits, interactions with senior officials of Ministry, NSACP and key stakeholders and facilitated field visits. Through this process, CDC, VHS-CDC project and NSACP jointly identified the specific areas of TA on SI.

The signing of the Letter of Intent (LoI):

VHS-CDC project, CDC and NSACP have jointly organized a meeting for signing of Letter of Intent (LoI) at the Ministry of Health. Mr Janaka Sugathadasa, Secretary, Ministry of Health, Nutrition and Indigenous Medicine Sri Lanka and Dr Timothy Holtz, Country Director, CDC/DGHT-India jointly signed the LoI and exchanged. Several high officials representing the CDC/DGHT India, VHS – CDC team and NSACP participated in this meeting.

Key accomplishments from this collaboration:

- (1) **Situation assessment of strategic information management system and strategies and approaches of technical assistance to SI under NSACP.**
- (2) **Training needs assessment and training plan for strategic information at NSACP:** A study, "Accelerating Strategic Information Management Capacity" was undertaken for SI team considering the existing and emerging roles and responsibilities. This study identified the required capabilities in terms of strategic information management and areas for comprehensive training and capacity building. A training plan was developed to cater to these needs.
- (3) **Technical report on comprehensive dashboard indicators on HIV/AIDS:** This document will assist in deciding the appropriate ways of data visualization in the dashboard and will enable the EIMS developers and SIM unit to decide on further modification needed in future. It will also help in automated generation of reports, SMS alerts or emails, once programmed. TA will be provided for comprehensive dashboard, interactive graph builder and social media campaigns.
- (4) **Documentation and dissemination of best practices in Sri Lanka and South East Asia region:** VHS-CDC project has extended TA for the documentation of existing best practices and emerging best practices in Sri Lanka to be disseminated at the national, regional and global level with the collaboration of main stakeholders. These were disseminated as publications - Best practices on SI, best practices series and an abstract book. In addition, best practices from the SEA were identified and shared. Furthermore, the findings were presented in the SIM symposium as oral and poster presentations at the 23rd annual scientific sessions of the Sri Lanka College of Sexual Health and HIV Medicine (SLCoSHH) on 5th October 2018 in Sri Lanka.



- (5) **Exposure visit, technical update and cross-learning:** *VHS-CDC project facilitated participation in the Chennai ART symposium 2018 and exposure visit to YRG CARE to understand the research and M&E systems with cross-learning opportunities.*

Table 15.1 Best practices in Strategic Information Management in Sri Lanka.

Existing Best Practices	Emerging Best Practices
1. STI Surveillance and Programme Monitoring under NSACP - An Indigenously evolved best practice in Strategic Information	1. Electronic Information Management System (EIMS). An effective case and programme management tool for HIV/AIDS
2. HIV case tracking and management system under NSACP - Gearing up for Ending AIDS targets	2. Comprehensive dashboard for effective programmatic decision making
3. Data archiving and dissemination practices under NSACP - A model for South East Asia	3. Social media outreach for NSACP
4. Cohort tracking of PLHIV on ART in Sri Lanka	

Ongoing and proposed TA initiatives:

- Capacity building of SI team
- Development of dashboard indicators, animated analytic graphs and infographics
- Update M&E plan aligning with NSP
- Provide support on post-EIMS process including the development of M&E operational plan
- TA for developing analytic reports based on SI relevant stakeholders and dissemination
- Documentation and transition.

Dr Joseph D Williams, Director Projects, VHS, Dr T. Ilanchezhian, Senior technical advisor, VHS-CDC Project and their team, coordinates and closely work with NSACP and SIMU team to provide ongoing technical assistance on strategic information.

16. USAID-FHI360 partnership with Sri Lanka

The Government of Sri Lanka (GoSL) and USAID HIV/AIDS Technical Assistance Partnership was launched on December 7, 2017. This partnership is being implemented by FHI 360 in close collaboration with NSACP and civil society organizations working with key populations namely, Female Sex Workers (FSW), Men who have Sex with Men (MSM) and People Who Use/Inject Drugs (PWU/ID) to achieve the goal of Ending AIDS by 2025 in Sri Lanka. FHI 360 will bring experiences from the Global LINKAGES project to strengthen the key population program response.

During the month of July 2018, the Memorandum of Understanding (MoU) on the Government of Sri Lanka - USAID HIV & AIDS Technical Partnership was signed between Ministry of Health, Nutrition and Indigenous Medicine and USAID Sri Lanka and Maldives Mission; and Mission Director, USAID India.

The six areas of technical support identified under the MoU are described below.

Technical Assistance Area 1:

Improve the uptake of HIV testing services by involving general practitioners

Over the past few years, the National STD/AIDS Control Program has scaled up HIV testing across the island through existing government and private health facilities. In line with the National Strategic Plan (2018-2022), NSACP and FHI 360 planned to engage General Physicians for HIV screening through Provider Initiated Testing and Counseling (PITC) approach and active screening of key population/most at risk population amongst the clinic attendees. GoSL provides Rapid Diagnostic Test (RDT) kits to these general physicians, and FHI 360 provides technical support to implement this activity. Colombo and Gampaha districts were prioritized to pilot this activity under this partnership, and 100 general physicians are expected to be trained and will be provided mentoring support to offer HIV screening. STD clinics will act as a hub for supply chain management,



Memorandum of Understanding (MoU) signed between Mr. Janaka Sugathadasa, Secretary, Ministry of Health, Nutrition and Indigenous Medicine and Mr. Reed Aescheliman, Mission Director, USAID Sri Lanka and Maldives Mission on HIV/AIDS Technical Assistance Partnership (July 2018)

reporting and referral linkages. Upon successful demonstration of scaling up of HIV testing, this strategy will be scaled up across the country.

A total of 75 GPs has commenced providing HIV rapid testing services, and by the end of December 2018 General Practitioners reported testing 198 clients, and none of the clients screened was reactive.

Technical Assistance Area 2:

Support, design and roll-out of social media communication strategy targeting key population and interactive BCC materials for community outreach

This activity is aligned with the National Communication Strategy (2017) of NSACP. To inform the evidence base of the existing pattern of social media use and to understand the popular social media and dating apps being used in Sri Lanka, FHI 360 carried out community consultations with MSM

and TGW community members. Furthermore, FHI 360 carried out a virtual mapping of social media pages used by key populations in Sri Lanka and could identify 40 pages for female and 155 pages for male users interacting for sex and/or dating purposes. Similarly, to inform the design of the key population specific Social and Behaviour Change Communication (SBCC) materials, USAID and FHI 360 carried out rapid qualitative formative SBCC needs assessment using country-specific immersion tools and reached out to key population members in Colombo and Kandy district.

Based on the above evidences, FHI 360 and NSACP have finalized the elements and functions of a social media platform named "Know4Sure.lk" to be hosted on web which will help the user to undertake self-risk assessment and book an appointment for STD and HIV services available through Government STD clinics or at a nominal rate through trained General Practitioners.

Developing SBCC materials and tools to strengthen community outreach and peer education is another activity undertaken through this programme. FHI 360 and NSACP launched a new Facebook page under the theme "Know Your Status to End AIDS in Sri Lanka by 2025."

Technical Assistance Area 3:

Pilot roll-out of client feedback system to inform the quality improvement of the clinic and community-based services

Client feedback systems have been helpful to improve the quality of services, to train the staff better on soft skills, and to improve service uptake in various programs. Based on several consultations with NSACP and the three learning site partners (three sub-recipient organizations of GF programme), FHI 360 is supporting polling booth activities and exit interviews/outbound calls to capture feedback and information from key population members in community settings. Similarly, client feedback systems will be introduced in STD clinics to seek feedback and improve clinic services.

Technical Assistance Area 4:

Support development of National Key Population Program Monitoring Dashboard

During 2018, the key indicators for the dashboard were finalized in consultation with GFATM-Principal Recipient for the Key Population Program and NSACP. Further, FHI 360 completed the procurement of the vendor to develop the dashboard. During 2019, training will be provided to the relevant staff and program managers on the use of the dashboard in key population program monitoring.

Technical Assistance Area 5:

Demonstrate improvement in coverage of HIV testing of the existing key population program by enhancing the capacity of the partners

For improved coverage and testing services for key populations, the three learning site partners (three sub-recipient organizations of the GF programme) were provided with intensive technical support in three areas namely: hotspot validation and mapping; risk profiling and micro planning; implementation of the enhanced peer outreach activities (EPOA) and HIV testing services for never tested / due for testing key population members.

Technical Assistance Area 6:

Enhance the capacity of community champions for HIV, positive prevention and social protection

Under this area following activities were carried out;

- Capacity building of learning site partners (three sub-recipient organizations of the GF programme) to address social vulnerabilities of key populations to improve access to HIV services.
- Address livelihood and vocational training needs of key populations to reduce vulnerabilities and improve access to HIV services.

5-C OF HIV SCREENING

1 Counseling

As part of pre-test counseling, share basic information on HIV and counsel client on benefits of early HIV testing

2 Confidentiality

Assure the client that result of HIV screening will be kept strictly confidential

3 Consent

Seek verbal consent from client before initiating HIV testing

4 Correct result

Read the result correctly and share with client

5 Connect

If reactive, connect the client to a STD clinic for confirmatory test

STEPS IN HIV SCREENING USING RAPID DIAGNOSTIC TEST (RDT) KIT

- 1 Wash hands with an antiseptic soap and water
- 2 Wear Gloves
- 3 Tear one strip from the right and remove cover
- 4 Label the test strip with the client identification number
- 5 Place the test strip on the tray
- 6 Clean the fingertip with an alcohol swab
- 7 Prick the clean finger with the lancet
- 8 Wipe away the first drop of blood with a sterile gauze pad or cotton ball. Apply intermittent pressure in the base of the punctured finger several times
- 9 Ensure filling the tube with blood as necessary. Avoid getting air bubbles trapped in the tube
- 10 Add 50 µL of whole blood to the Sample Pad. When all the blood is transferred from the tube to the Sample Pad, immediately apply one drop of Chase Buffer to the Sample Pad. Caution: Do not lift the capillary tube from the Sample Pad before the blood has been transferred.

11 Interpret Results

Read the test results within 15 minutes. Do not read test results after 15 minutes. The test results are available for 30 minutes. Do not read test results after 30 minutes.

Result	Line 1	Line 2
Positive	+	+
Negative	-	-
Invalid	-	+

- Set timer for 30 minutes and wait till for the test strip to process
- Interpret the results
 - Positive results—Report as Reactive → Link to the clinic
 - Negative results → Report as Non-reactive
 - Invalid result! Need to repeat the test! report invalid

Caution: In case the time lapsed is more than 30 minutes - Do not Read.



17. Sexual health services in Northern & Eastern provinces

Provincial STI/HIV Review

Routine provincial reviews have been conducted to strengthen sexual health services in Northern and Eastern provinces since 2014. Northern and Eastern provinces were significantly affected by the civil conflict which ended 10 years ago. This has led to a decline of sexual health services due to lack of human resources, infra-structure, and technical support. Establishment of a provincial AIDS committee and evaluation of STI/HIV services through provincial STI/HIV review was an extra effort to mitigate the gaps and improve infrastructure and coverage of services within these provinces. The provincial STI/HIV review enabled the provincial directorate, regional directorate of health services and district STD clinics to work towards the national strategic plan, and facilitate the national goal of ending AIDS by 2025. Provincial STI/HIV review is a platform to communicate the grass root level problems to the central level and enables efficient solutions. Further, it provides an opportunity for the district level workers to showcase their achievement and encourage grass root level workers.

Representatives of the districts presented activities done during 2018 and the action plans for 2019. Probable solutions from provincial as well as central level were discussed.

Provincial STI/HIV review is represented by stakeholders from all 5 districts of Northern province i.e. Kilinochchi, Vavuniya, Mullaitivu, Mannar and Jaffna.

Challenges identified in the Northern and Eastern STD clinics

- (1) *Lack of human resources and trained staff severely affects Mannar and Kalmunai clinics where a Medical Officer has not*

been appointed since many years.

- (2) *Laboratory facilities and transport problems were identified as constrains to achieve the smooth flow of the programme. Non availability of a vehicle was identified as a general issue in all 9 STD clinics. Laboratory facilities were not available in Kilinochchi, Mannar and Mullaitivu. Non-functional state of STD laboratory in spite of proper renovation at Mannar was pointed out and was instructed to make it functioning to the optimal level by 1st of April 2019. Lack of medical laboratory technologists (MLTs) in Kilinochchi was also identified as a major issue, which has resulted in non-use of the ELISA machine at this clinic. As shortage of MLTs in the Northern Province was identified as a pressing issue, the provincial directorate decided to give immediate attention to solve this problem. Mullaitivu district was instructed to develop a laboratory and request equipment from the NSACP.*
- (3) *Jaffna STD clinic is having problems due to inadequate space in the clinic with the expansion of many interventions.*
- (4) *Vavuniya STD is having problems due to non-availability of a MLT, a pharmacist, a vehicle and a waste management system.*

Provincial AIDS Committees

Both Northern and Eastern provincial AIDS committees meet in relevant provinces annually since 2016. Provincial, district directorates, multi-sectoral government officials, NGO/CBOs, armed

forces, and other relevant stakeholders participate in the provincial AIDS committees.

During 2018, the discussions of AIDS committee highlighted the importance of working towards achieving the Ending AIDS by 2025. Special attention was given for elimination of mother-to-child transmission (EMTCT) of HIV and syphilis to facilitate getting WHO validation in 2019. Moreover, the following areas were identified to improve the sexual health services in these provinces.

- (1) *Establishment of District AIDS committees*
- (2) *Strengthening multi-sectorial involvement i.e. educational sector, strengthening private sector involvement, strengthening partnerships with NGOs and coordination with programs, involvement of Civil Task Force in HIV prevention and capacity building of Civil Task Force members*
- (3) *Reduce stigma and discrimination of HIV affected individuals by improving awareness about available services, and sensitisation of general public on HIV.*
- (4) *Attention towards prisoners, as they are considered as a key population*
- (5) *Upscaling the services of STD clinics, by concentrating more on preventive services such as community outreach programmes, initiating awareness programmes on sexual health and HIV, Condom promotion and STI screening*
- (6) *Surveillance systems of STI and HIV should be strengthened*
- (7) *Attention was given to establish mobile clinic services from the main clinic of each district*
- (8) *Key population intervention was piloted by the NSACP as an initial step towards transition from funding support by the Global fund. Men having sex with men (MSM) and Transgender (TG) components from Jaffna were included in this intervention. The intervention was conducted from the 1st August 2018 to 31st December 2018. Service package included awareness about STI/HIV, leaflets, condoms and lubricants distribution, condom demonstration, and STI/HIV screening. Using Grinder app and*

Social media, KPs were identified through peers. Challenges identified through the pilot were stigma and the unwillingness to identify themselves as KP

HIV testing event in Mannar

HIV testing day was a great opportunity for public awareness on HIV/AIDS and HIV testing.

Mannar has been severely affected by poor sexual health services for many years. Main challenge is the lack of human resource in the district. Therefore, the Northern provincial AIDS Committee held in 2018 decided to organize a HIV testing event in Mannar. Public Awareness Campaign on this event was continuously conducted from the 1st of June 2018, through which general public was made aware about the event.

The public health staff was trained on organizing the event in aspects such as allocating staff for HIV testing, identifying the community for testing, carrying out HIV testing through Rapid Diagnostic Tests, reporting the test results and final data reporting.

A Media conference held on 10th July 2018 at the RDHS office Mannar, further enhanced community awareness about the event. This event was successfully conducted on 12th July 2018.

Ten community-based testing centres were established within the district and 2500 people of ages between 18-65 were tested and none reported positive. The continuous financial support to this series of events was provided by the Hatton National Bank.

18. Global Fund supported activities

New Funding Model Grant 2016-2018

The New Funding Model (NFM) Grant 2016-2018 of the GF completed successfully with significant physical and financial progress especially during 2018. The total allocation for the grant period was USD 5,323,102 to the Ministry of Health; where the National STD/AIDS Control Program is the Principal Recipient (PR)-1. The net absorption rate as of December 2018 was 71% (USD 3,795,645) of the PR1 allocation.

The key activities under the grant were proposed under the following modules, and the progress was monitored by the GF annually by the Progress Update (PU). The modules are as follows;

- *HSS - Health information systems and M&E*
- *Prevention programs for other vulnerable populations*
- *Prevention programs for MSM and TGs*
- *Prevention programs for people who inject drugs (PWID) and their partners*
- *Prevention programs for sex workers and their clients*
- *Program management, and treatment, care and support*

As the Key populations (KP) activities were considered important in controlling the HIV epidemic in Sri Lanka, a major proportion of the budget was allocated to the KP (MSM, FSW, PWU/ID, BB Prisoners and PLHIV) activities. This funding was invested in peer-led interventions, supporting human resources to smoothly conduct peer-led interventions, procurement of HIV rapid diagnostic tests and condoms, infrastructure for PR2 and community-based organizations. Moreover, prevention programs for other vulnerable populations such as migrant workers and tourists are also supported by GF. Furthermore, conducting capacity building programs for health care workers island wide, strengthening the National reference laboratory and equipping district STD clinic laboratories, improving

the infrastructure of STD clinics in the Northern and Eastern provinces, especially in Mannar STD clinic were significant GF investments during the grant period.

In order to enhance the quality of services to PLHIV, the GF supported the procurement of GeneXpert, CD4 machines and cartridges and the establishment of DNA PCR testing in Sri Lanka. Moreover, for the first time in Sri Lanka, Quality Control and Quality Assurance (QC/QA) of ART was initiated with the support of the GF by identifying a technical support laboratory (SGS India) in India.

Strategic investments in the development of program management and data management were maximized by GF support. External review of the national STI/HIV response, development of prison HIV policy, review and development of strategic information (data quality), reporting documents, national, provincial STI/HIV reviews, clinic and KP program supervision visits, development of National M & E plan, development of national strategic plan (2018-2022), rapid assessment of drug use patterns in Sri Lanka, World AIDS day, and several implementation research were supported financially by the GF. Both the IBBS and PSE of 2017-2018 were supported by the GF which are integral parts in the national HIV response.

Development of an electronic database has been identified as a sustainable investment since the recent past. The GF supports the development of EIMS which networks central and district clinics closely, resulting in minimal delays due to paper-based reports and returns in routine reporting.

Sustainability of the peer-led interventions after GF transitioning was felt important; therefore, piloting KP interventions by the district STD clinics was supported by GF. Implementation of comprehensive programs for PWUD/ID which was a struggle, was done so successfully using GF funds. As HIV surveillance among suspected groups is also important, this was carried out among returning migrants in the Northern and Eastern provinces of Sri Lanka.

Funding Request (FR) Grant 2019-2021

International funding for prevention of HIV and STI is mainly coming from the Global Fund. Sri Lanka currently is in the “transition preparedness” stage considering the upper-middle income status and the low HIV burden of the country. Hence the funding from the Global Fund has declined over the years and is expected to end in 2024. Funding allocation for 2019-2021 is USD 6,948,043, which is around a 30% decline from previous NFM grant of USD 10,885, 482.

Of the total allocation, the National STD/AIDS Control Program being the Principal Recipient 1 (PR1) received USD 3,346,218 (48%) for the period of 2019-2021.

Men who have sex with men (MSM), People who inject drugs (PWID) and their partners, Sex workers and their clients, Transgender persons (TG), People in prisons, other vulnerable populations: beach boys (BB), and People Living with HIV (PLHIV) have been identified as target groups for Global Fund related activities.

Activities supported by GF Funding Request Grant, 2019-2021

- *Recruitment of Key population (KP) members to work in collaboration with the STD clinics and CBO/NGO in districts to reach out to other KPs in order to sustain KP prevention programs during the gradual takeover of peer-led and KP-led interventions from Family Planning Association, Sri Lanka to National STD/AIDS control programme of the Ministry of Health.*
- *Procurement of condoms, lubricants, and rapid diagnostic tests (HIV, HBV, HCV and syphilis), viral load and CD4 equipment and cartridges.*
- *Provide HIV testing services; community-based testing (CBT), outreach through KPs, outreach by STD clinics, STD clinic-based testing and piloting other testing models such as anonymous testing, testing by general practitioners (GPs) and hospitals, and self-testing.*
- *National level clinical monitoring meetings*

to improve treatment adherence. National level training on new updates of ART to improve ART facilities, streamline government ART procurement, follow-up on treatment defaulters, and support treatment adherence.

- *Training to the private sector to improve basic clinical HIV knowledge, addressing HIV related stigma and discrimination and improve private sector reporting.*
- *Conduct drug resistance surveillance through obtaining TA for the drug resistance surveillance.*
- *Continue the improvements of the EIMS developed under 2016-18 GF grant, conduct refresher training to sustain the system.*
- *Ensure the use of standardized recording and reporting formats, one National Unique Identifier Code (UIC) and unified electronic data systems for all HIV prevention programs for KPs implemented in the country.*
- *Conduct operational research in topics relevant to the NSACP and country.*
- *Conduct a survey among police officers regarding legal barriers to KPs to support activities aimed at sensitization of law enforcement agents.*
- *Advocacy programs engaging media editors on how to report non-stigmatising information in the media. Developing and printing of media guidelines on HIV stigma and discrimination reduction.*
- *Supporting conducting National AIDS Committee and its sub-committees under each strategic direction; coordination of the provincial and district AIDS committees and conducting supervision of KP-led activities.*

Monitoring the grant activities

The progress of grant activities is monitored through a set of coverage, impact and outcome indicators which are described in the table below. Physical and financial progress is reported to the Global Fund country office yearly, and the program is regularly audited by the Local Funding Agent Sri Lanka (LFA), Annual External Audit and the government audit.

Table 18.1 Impact and Outcome indicators

Impact Indicators	Outcome Indicators
Percentage of men who have sex with men who are living with HIV	Percentage of men reporting the use of a condom the last time they had anal sex with a male partner
Percentage of transgender people who are living with HIV	Percentage of transgender people reporting the use of a condom the last time they had sex with a partner
Percentage of sex workers who are living with HIV	Percentage of sex workers reporting the use of a condom with their most recent client
Percentage of people who inject drugs who are living with HIV	Percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected
	Percentage of other vulnerable populations who report the use of a condom at last sexual intercourse
	Percentage of adults and children with HIV, known to be on treatment 12 months after initiation of antiretroviral therapy

Table 18.2 Coverage Indicators

Prevention reach	HIV testing	Treatment, care & services
Percentage of men who have sex with men reached with HIV prevention programs	Percentage of men who have sex with men that have received an HIV test during the reporting period and know their results	Percentage of people living with HIV currently receiving antiretroviral therapy
Percentage of transgender people reached with HIV prevention programs	Percentage of transgender people that have received an HIV test during the reporting period and know their results	Percentage of people living with HIV that initiated ART with a CD4 count of <200 cells/mm ³
Percentage of sex workers reached with HIV prevention programs	Percentage of sex workers that have received an HIV test during the reporting period and know their results	Percentage of people living with HIV and on ART, who have a suppressed viral load at 12 months (<1000 copies/ml)
Percentage of people who inject drugs reached with HIV prevention programs	Percentage of people who inject drugs that have received an HIV test during the reporting period and know their results	
Percentage of other vulnerable populations reached with HIV prevention programs	Percentage of people in prisons and other closed settings that have received an HIV test during the reporting period and know their results	
Percentage of people in prisons and other closed settings reached with HIV prevention programs		

19. Peer-led targeted interventions

Targeted interventions in response to the HIV epidemic were further intensified in 2018 to achieve higher coverage and to improve the quality of the programmes. Diversified programmes targeting key populations were conducted as an important part of the national response to the HIV epidemic.

Peer-led targeted interventions

The largest contribution to this intervention was from the Family Planning Association Sri Lanka and their partner NGOs in collaboration with the National STD/AIDS Control Programme. The programme was supported by the Global Fund.

The peer-led targeted intervention programme was able to increase coverage while improving quality. The coverage is shown in the below table. Many efforts were directed to improve the quality of interventions by regular training for care providers and increased monitoring and evaluation of the implementation of this programme.

Table 19.1 Achievements of the peer-led targeted interventions by PR1 and PR2 during 2018

Key population	Prevention interventions				
	Reaching with services		Escorting to STD clinics (tested for HIV)	Distribution of condoms in 2018	
	Target	Achievements			
	Number	%			
FSW	9,575	8,470	88.5%	3,783	2,785,706
MSM	5,260	5,793	110.1%	3,070	389,814
BB	2,309	2,257	97.7%	1,156	278,276
PWUD/ID	12,315	12,907	104.8%	782	200,234

Around 30,000 members of key populations were reached, and 8,791 persons were escorted for services of STD clinics. Over three and a half million (3,654,030) condoms were distributed among members of different key populations under this programme.

Table 19.2 Field level staff and geographic coverage of peer-led programmes

		Target to enroll	Number in position	Districts covered
FSW	Peer- educators	383	308	Polonnaruwa, Anuradhapura, Colombo, Gampaha, Galle Kurunegala, Matara, Hambantota, Kandy, Ratnapura
	Field supervisors	77	62	
MSM	Peer- educators	240	223	Colombo, Galle, Gampaha, Kandy, Matale, Anuradhapura
	Field supervisors	48	44	
BB	Peer- educators	93	60	Hambantota, Matara, Galle, Kalutara, Colombo, Gampaha, Puttalam
	Field supervisors	18	12	
DU	Peer- educators	296	247	Colombo, Gampaha, Puttalam, Kurunegala, Kandy, Matale, Ratnapura, Galle, Matara, Hambantota
	Field supervisors	76	70	

The services were delivered by a total of 838 peer-educators and 189 field supervisors in 2018.

Pilot project on targeted interventions under the direct supervision of STD clinics

A pilot project on targeted interventions under the direct supervision of STD clinics was attempted in four (04) districts during the last two quarters of 2018. This programme was piloted as a cost-effective intervention in response to transition from Global Fund.

Table 19.3 Results of Pilot project on KP targeted interventions.

Districts	Human resources	Targets	Achievements
Jaffna (MSM & TGW)	MSM peer-educators- 07	MSM- 175	MSM reach – 211
	TG peer-educators - 03	TG - 175	TGW reach – 57
Kurunegala (MSM)	MSM peer-educators- 06	MSM- 150	MSM reach – 150 HIV testing – 83
* Badulla (FSW)	-	-	-
* Anuradhapura (Drug users)	-	-	-

**Unable to implement successfully during 2018*

Key population-led interventions

A newer strategy was implemented to promote HIV testing among key populations in districts of Puttalam and Kalutara (covering all key population groups), Colombo and Gampaha (only for TGW population). The details are given in the HIV testing services chapter. The interventions were carried out on a pilot basis and have provided impressive results. Therefore, the new approach will be implemented for all key population groups in Colombo and Gampaha districts in integration with other components of service package in 2019.

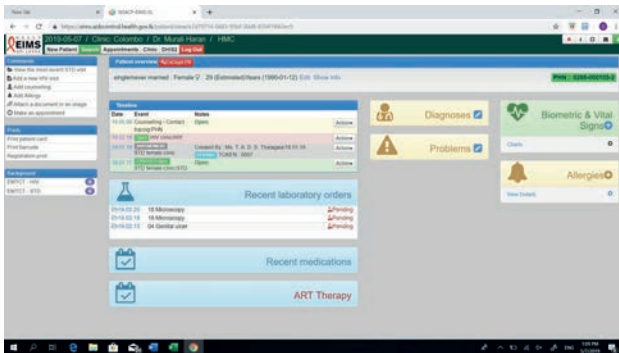
20. Electronic Information Management System (EIMS) Major Activities- 2018

Development of an Electronic Information Management System to National STD/AIDS Control Programme

National STD/AIDS Control programme initiated development of an Electronic Information Management System (EIMS) during 2017. This project is funded by GFATM through Ministry of Health, Nutrition & Indigenous Medicine.

Objectives

To Develop an automated Electronic Information Management System (EIMS) for NSACP which gives timely information for efficient patient management and monitoring of HIV care and ART Programme.



Components of EIMS:

- (1) STD Clinic Management System
- (2) HIV care, ART management and Monitoring System
- (3) Laboratory Information Management System
- (4) Pharmacy Management System
- (5) Reporting Module (DHIS2)
- (6) Queue Management System
- (7) Private Sector Module

Software were developed and were installed to Sri Lanka Telecom cloud server during this year with the domain name of <https://www.eims.aidscontrol.health.gov.lk/>. This domain got the domain validation SSL with green bar (EV SSL) on 21st of December 2018 and it will be valid for the next ten years. Electronic Information Management System (EIMS) can be accessed online (with cloud server) as well as off-line (with local server)

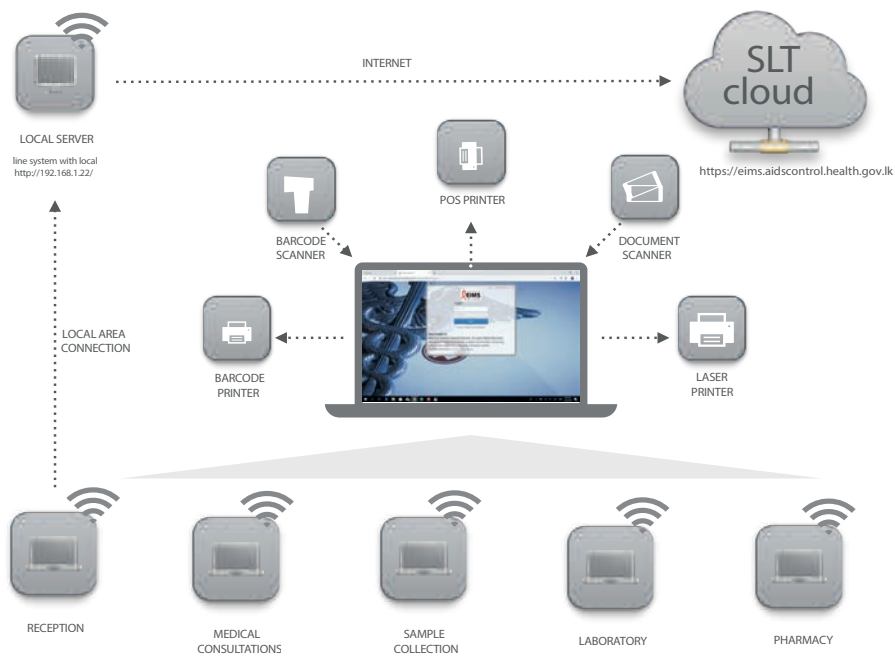
The procurement of all the hardware needed for the entire STD clinics and beta testing has been initiated by the NSACP.

Table 20.1 Hardware items procured for EIMS

Items	Quantity
No. of computers	245
No. Bar code Readers	241
No. of Label printers	78
No. of Scanners	38
No. of POS printers	36
Laser printer	38
Wi-Fi Routers	36
TV Screen	39
Webcam	42
Local Server with UPS	20



Figure 20.1 Functional Diagram of the EIMS



21. Training and capacity building during 2018

National STD /AIDS Control Programme (NSACP) is responsible for the training of all categories of STD clinic staff island wide. Training unit of NSACP conducts comprehensive training programmes throughout the year according to the annual plan. Training programmes consist of pre-service training, in-service training, refresher training, undergraduate, postgraduate training and international training.

Pre-service training

All categories of healthcare workers of STD clinics should undergo mandatory training, within six months of enrolment to the clinics. Medical officers attached to the STD clinic undergo compulsory two months of theory and practical training at NSACP, Colombo. Other major health staff such as nursing officers, public health nursing sisters, matrons, medical laboratory technicians, pharmacists, public health laboratory technicians, dispensers and public health inspectors undergo two weeks of training which consist of theory, practical, case discussion, small group discussion and outreach work. Minor staff such as attendants, Saukya Karya Sahayaka and Lab Orderly are also given one-week training which consists of relevant theory and hands-on experience, especially in the laboratory and clinic settings.

In-service training

Two training programmes on counselling relevant to STD and HIV were conducted in February and August 2018. These were 5-day training programmes targeting Medical Officers, Nursing Officers and Public Health Inspectors. The training was given via educating on theory, conducting role plays, small group discussions and brainstorming activities in view of building capacity of these health care workers. Also, several numbers of government medical laboratory technicians have been trained in performing the HIV rapid test.

Refresher training

These consisted of one or two days programmes which were either held at NSACP or peripheral STD clinics to refresh the health care workers' knowledge on HIV/STD and to improve their attitudes in patient management. Seven provincial refresher training programmes were conducted in Southern, Central, Northwestern, North Central, Uva, Northern and Sabaragamuwa in 2018.





International training

Five Nursing Officers (5) and four (4) Public Health Inspectors participated in a HIV practice course in Singapore for five days. Nine (9) Medical Officers attended the key population programme in Thailand. Colposcopy training was given to two Venereologists who are attached to the NSACP. Three Venereologists participated in the drug user programme held in India and Thailand. Microbiologist of NSACP attended the trainings in India and in Netherlands.

Undergraduate training

Nineteen (19) student groups from Colombo medical faculty and three (3) student groups from Kothalawala Defense University attended for one-week and two-week training at NSACP respectively. They received theory and practical experiences during their appointment. Undergraduate nurses, pharmacists, MLTs and PHLTs also were trained according to their objectives and curriculum.

Postgraduate training

Postgraduate training of venereology has been conducted since 2002 in collaboration with the Postgraduate Institute of Medicine (PGIM) of University of Colombo. Diploma trainees, MD trainees and post-MD trainees in venereology are trained under the supervision of Consultants in NSACP and other STD clinics that are accredited by PGIM. Trainees in other specialities such as diploma trainees of microbiology, family medicine and child health, MD trainees of microbiology, virology and dermatology were also exposed to STD and HIV management during their attachments to the NSACP.



Special Training Programmes

Asia Pacific HIV practice course

Asia Pacific HIV practice course was held in collaboration with Australasian Society for HIV Medicine (ASHM), National University Hospital Singapore and NSACP from 9th to 13th August at NSACP and Sri Lanka Foundation Institute, for postgraduate trainees in venereology and medical officers attached to peripheral STD clinics.

GIS and Applications course

Short course on "GIS and its applications" was held from 13th to 18th August at the Postgraduate Institute of Science, University of Peradeniya. Eight Venereologist, four postgraduate trainees in Venereology, one (1) Medical Officer and seven (7) Public health inspectors were trained in the course.

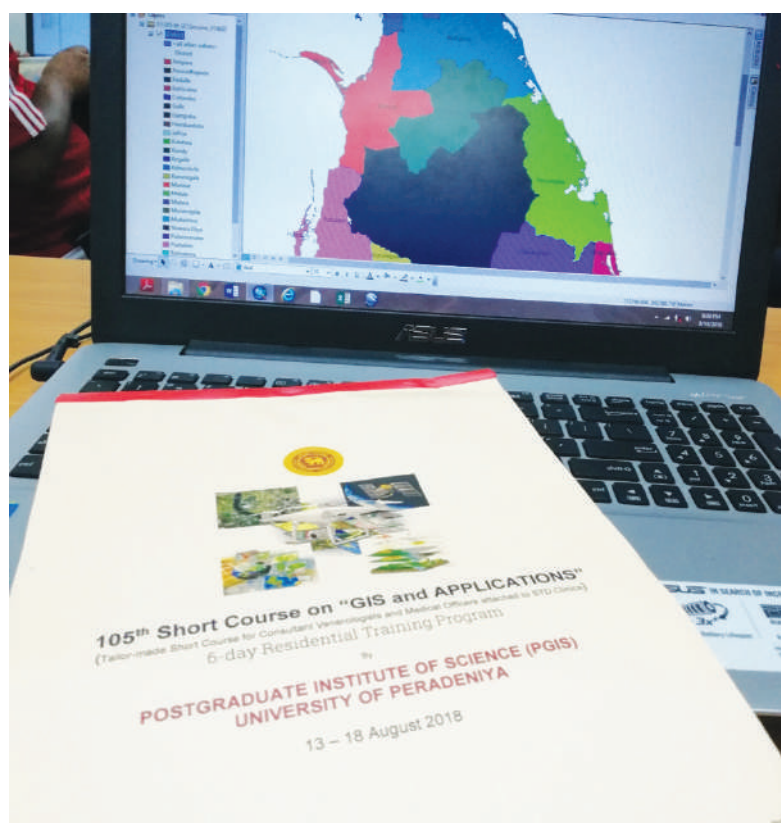


Table 21.1 Summary of training and capacity building by NSACP

Staff category	Number trained	%
Medical students- University of Colombo	253	33.9%
MLT students	90	12.0%
Venereology PGIM trainees	34	4.6%
Nursing officers (pre-service & in-service)	80	10.7%
Laboratory staff (pre-service & in-service)	63	8.4%
Medical Officers (pre-service & in-service)	57	7.6%
Medical students – K.D. University	53	7.1%
PHI (pre-service & in-service)	35	4.7%
Minor staff (pre-service & in-service)	20	2.7%
Venereologists	8	1.1%
Nursing students	6	0.8%
Pharmacist and dispensers (in-service)	5	0.7%
Medical students- University of Rajarata	3	0.4%
Other PGIM trainees	40	5.4%
Total	747	100.0%

In addition, 1860 major staff were trained in HIV prevention, treatment and care and PMTCT during 2018.

Training need assessment

VHS-CDC project has provided technical support to NSACP and undertook a study on the training need assessment (TNA) especially for the staff involved in Strategic Information Management, considering the existing and emerging roles and responsibilities. This study has identified the required capabilities in terms of strategic information management; subsequent comprehensive training needs; existing systems and mechanisms for capacity building within NSACP.

22. IEC and Advocacy Programmes

Information, education and communication (IEC) activities can be very effective in bringing about appropriate changes in behaviour, among populations with high-risk behaviour as well as in general population. IEC is also important for advocacy to motivate policy and decision-makers to create enabling environments for provision of STI and HIV services. Activities pertaining to IEC and advocacy programmes are sphere headed by the NSACP and its network of district STD clinics.

Different methods of communication are necessary to reach populations of diverse social, cultural and educational backgrounds. These include lectures, discussions, exhibitions, media conferences, public campaigns as well as through print and electronic media.

Table 22.1 IEC activities conducted during 2018

Type of programme	Number of programmes	%	Number of participants	%
Lectures	1,950	77.8%	161,685	56.2%
Exhibitions	54	2.2%	95,185	33.1%
Workshops	101	4.0%	5,432	1.9%
Other	400	16.0%	25,436	8.8%
Total	2,505	100.0%	287,738	100.0%

Advocacy programmes for education sector

National STD/AIDS control programme has also understood the importance and the timely necessity to increase awareness on STI/HIV and life skills among school children. One hundred school programmes were done during 2018, liaising with the Ministry of Education under the “13-year guaranteed education programme”.



Prior to the implementation of the islandwide STI/HIV awareness programme catering for school children, an advocacy programme was held among all the stakeholders including provincial and district education directors, school medical officers and STD staff. During the initial stage of the programme, STI/HIV awareness messages in the form of lectures to school children were introduced. In order to maintain the uniformity of the programme and to tailor made the information for school children, NSACP in collaboration with the Ministry of Education, prepared a PowerPoint presentation in Sinhala and English languages. Furthermore, currently, a series of educational video clips are being developed which could be circulated via social media such as Facebook.

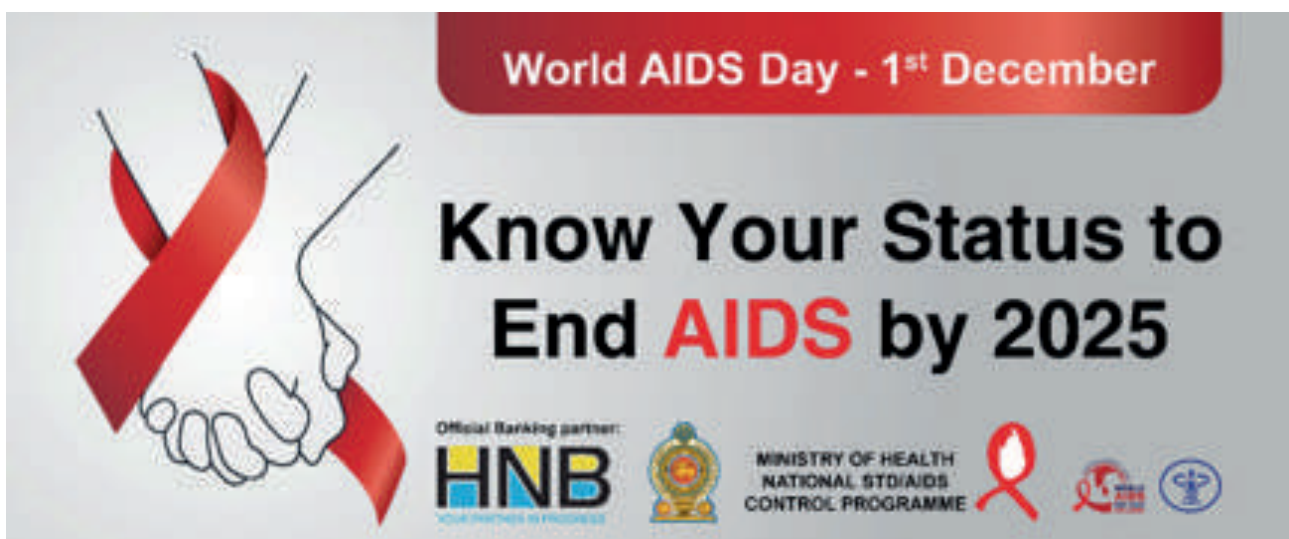
Scaling up of HIV testing and preventive services in Kalutara

As a concept of the Minister of Health, Nutrition and Indigenous Medicine, Kalutara STD clinic with the collaboration of the National STD/AIDS Control Programme implemented a pilot project on HIV testing and STI/HIV awareness to extensively cover key populations, vulnerable groups and the general population in Kalutara district. The programme was officially launched on 27th August 2018 with 125 participants including many stakeholders representing governmental and non-governmental organizations. The main objective of the programme was to introduce this new project on HIV awareness and to get the support from the relevant authorities for the scaling up of testing services in Kalutara district.

Galle district advocacy programme

There are multiple vulnerability factors in the Southern coastal area which is a popular tourist destination. It is very important to advocate the stakeholders regarding the peer-led targeted activities carried out by the NSACP and district STD clinics, to create an enabling environment to carry them out. Therefore, NSACP has organized an advocacy programme with the help of district STD clinics for all the authorities in Galle district to make them aware of the peer-led targeted interventions and to enhance their contribution to these activities.

IEC material developed during 2018





HIV සඳහා
රුධිර පරීක්ෂාව
කර ගනිමු

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නව HIV
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වළක්වමු

HIV සම්භ
ජීවත්වන්නන්
කොන් නොකරමු

HIV ගැන දැනගනිමු - ආරක්ෂා වෙමු



23. World AIDS Day 2018

National STD/AIDS Control programme commemorates the World AIDS day on 1st of December in collaboration with its partner organisations. The theme for this year was “Know your status to end AIDS by 2025”, and a common logo was developed to maintain the unique identity. The organising committee which included multisectoral representation and chaired by NSACP, launched an island-wide campaign to raise the public awareness on this epidemic and to promote HIV testing among vulnerable and high-risk populations.



National level activities

Awareness campaigns

Nearly 1400 banners in three languages were developed by the NSACP with the technical support of the Health Promotion Bureau and funding from Hatton National Bank. These banners were displayed all over the country during this period.

Social Media Campaign

The publicity of the world AIDS day programme and the distribution of facts related to HIV/AIDS prevention were done through a social media campaign during the month of November with the support of FHI 360. It reached about 120,000 people on Facebook.

Mobile text messages

A short text message (SMS) to promote HIV testing was designed and sent with the support of Mobitel-e channelling portal.

“HIV හඳුනා ගත හැක්කේ රුධිර පරීක්ෂාවකින් පමණි. දැන්ම HIV/ඒඩ්ස් සඳහා නොමිලේ රුධිර පරීක්ෂාවක් කර ගනිමු. තොරතුරු රහසිගතයි. ප්‍රතිකාර ගෙන සුවෙන් සිටිමු

දු: ක: 0703 533 633,
වෙබ්: www.aidscontrol.gov.lk,

සියලු විස්තර STAY SAFE mobile app එකෙන්, ඒඩ්ස් මර්දන වැඩසටහනේ පනිවිඩයක්”

World AIDS Day - 1st December

HIV ලේ පරීක්ෂාව කර ගනිමු ප්‍රතිකාර ගෙන සුවෙන් සිටිමු

Official Banking partner:

YOUR PARTNER IN PROGRESS

MINISTRY OF HEALTH
NATIONAL STD/AIDS
CONTROL PROGRAMME



Media conference

Support from the mass media is vital to make the general public aware of HIV which is a hidden/taboo topic in the society. Hence, a media conference was conducted on 13/11/2018 with the support of the Health Promotion Bureau. Approximately 120 media personnel participated in the event. Numerous articles in electronic and print media and several TV programs were conducted to draw the attention of the public.

District level world AIDS day awareness activities

All the district STD clinics were granted Rs. 50,000 each to carry out world AIDS day awareness programmes. Highlights of these activities were

exhibitions, dramas, lectures, street walks, essay competitions and awareness programmes among vulnerable and key populations. In addition, the clinics were provided with banners and AIDS day t-shirts for the staff to be used in the WAD activities.

Outreach awareness and testing programs

Twenty-one outreach programs were conducted in Colombo district during November 2018 with the support of Colombo municipal council and many other organisations such as urban development authority. Various government and non-governmental institutions and community-based populations were targeted for this campaign in which more than 2000 people were screened for HIV. Family Planning Association of Sri Lanka sponsored the programme.





World AIDS day walk

One of the major activities in this commemoration was the World AIDS Day walk which commenced from the front lawn of the Colombo Municipal Council (CMC) with nearly 3,000 participants marching to the Bandaranaike Memorial International Conference Hall.

The parade comprised of many entities such as brass bands of the Tri-Forces and police, two "Papare" bands, traditional dancing teams, muppets dressed as condoms, decorated vehicles etc.

All the partners and stakeholders working towards the prevention of HIV and representatives from people living with HIV-communities participated in the event with much enthusiasm. Participants wore caps and t-shirts pinned with red ribbons, developed for this event, which displayed health education messages. Over 100 banners and 75 placards were carried by the participants.

The Secretary of the Ministry of Health and Director General of Health Services along with many other distinguished invitees participated in this event. Over 5000 pocket calendars which displayed health education messages were distributed during the walk.





World AIDS day meeting

Following the walk, a meeting was conducted at the front lawn of the BMICH. Honourable secretary of health was the chief guest for the meeting. For the first time in history, a fully-equipped mobile testing clinic was made available to the public. Mobile blood testing using this vehicle is planned to be started in Colombo and Gampaha districts.

An oath was taken by all the participants to prevent HIV and End AIDS by 2025.

From the ten new clinics which are to be established as part of the service expansion, three clinics from Kuliapitiya Base Hospital, Dambulla and Gampaha District General Hospitals were symbolically opened on this day.





24. News from provincial STD clinics

STD/AIDS Clinic - Badulla

The staff of STD clinic Badulla commemorated World AIDS Day on 1st of December 2018 at Badulla town and Municipal grounds. Main attractions were a walk and an exhibition with 600 participants representing various stakeholders.



STD/AIDS Clinic - Kegalle

The staff of STD clinic Kegalle conducted their World AIDS Day events with the participation of youth in the area. An outreach blood testing was organized at Mawanella. HIV rapid testing was launched in the Base hospital with the participation of consultants, medical officers and senior administrative officers from all 4 main hospitals in the district. Dr S. Beneragama participated at this event from NSACP.



STD/AIDS Clinic - Ampara

World AIDS day celebration of Ampara STD clinic was held targeting youth in the area.



STD/AIDS Clinic - Batticaloa

The world AIDS day celebration for year 2018 was conducted at Batticaloa district from 1st of December to 10th of December at all 14 MOH divisions in the district. Financial assistance for the event came from the National STD/AIDS control Programme and Regional Director of Health Services office Batticaloa.



STD/AIDS Clinic - Kandy

Staff of Kandy STD clinic had number of educational sessions to commemorate the World AIDS day.



STD/AIDS Clinic - Kurunegala

STD clinic Kurunegala had organized a walk and educational activities on the World AIDS day 2018.



STD/AIDS Clinic - Mahamodara

Educational sessions and HIV testing campaigns for garment factory workers have been organized from the STD clinic Mahamodara.



STD/AIDS Clinic - Rathnapura

To commemorate World AIDS day 2018, a HIV testing programme was conducted for 3 days in Rathnapura district. Total of 250 volunteers including gem businessmen were tested using rapid tests kits for HIV infection. Leaflets on HIV prevention were distributed among the community.



25. Publications during 2018

The NSACP is the main technical body responsible for guiding the national response to HIV and STD. Similar to previous years, it produced several publications during 2018. This year the focus was more on research publications as two important surveys were conducted, i.e. the IBBS and the National size estimation of the most at-risk populations for HIV. These surveys assist in monitoring and evaluation of the national response to HIV and STIs.

This chapter describes the publications of NSACP during 2018. Following are the list of publications in alphabetical order.

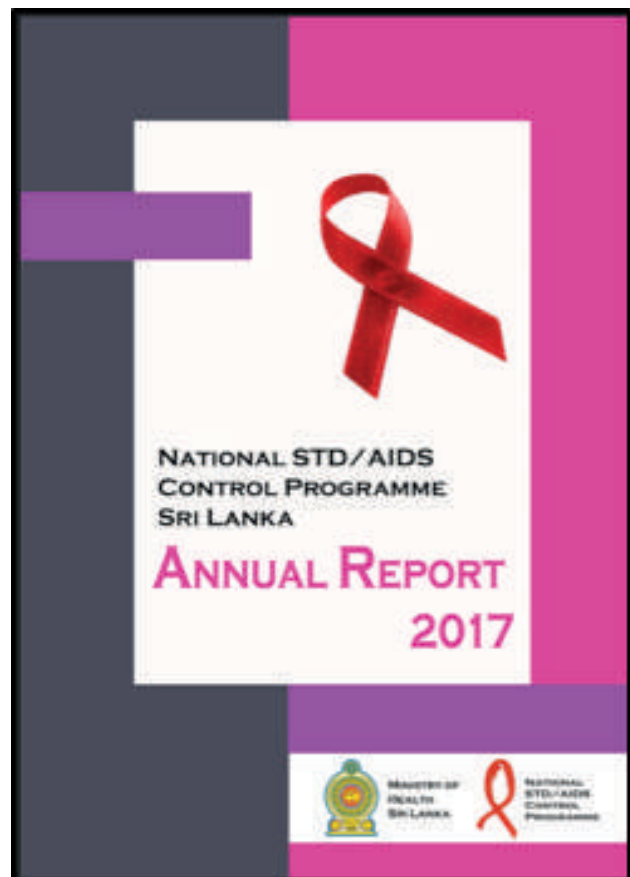
- Annual report – 2017
- Integrated Biological and Behavioural Surveillance (IBBS) survey among Key populations at higher risk of HIV in Sri Lanka
- National Sizes estimation of the most at-risk population for HIV in Sri Lanka
- Prison HIV prevention, treatment and care policy
- Rapid assessment of drug use patterns (RADUP) in Sri Lanka

Annual report 2017

Early in 2018, the annual report of NSACP was published by aggregating data and information collected from over 30 service delivery centres (STD and ART centres).

Annual report 2017 highlights activities conducted by NSACP and peripheral STD clinics while giving useful insight about the HIV and STI epidemic situation of the country.

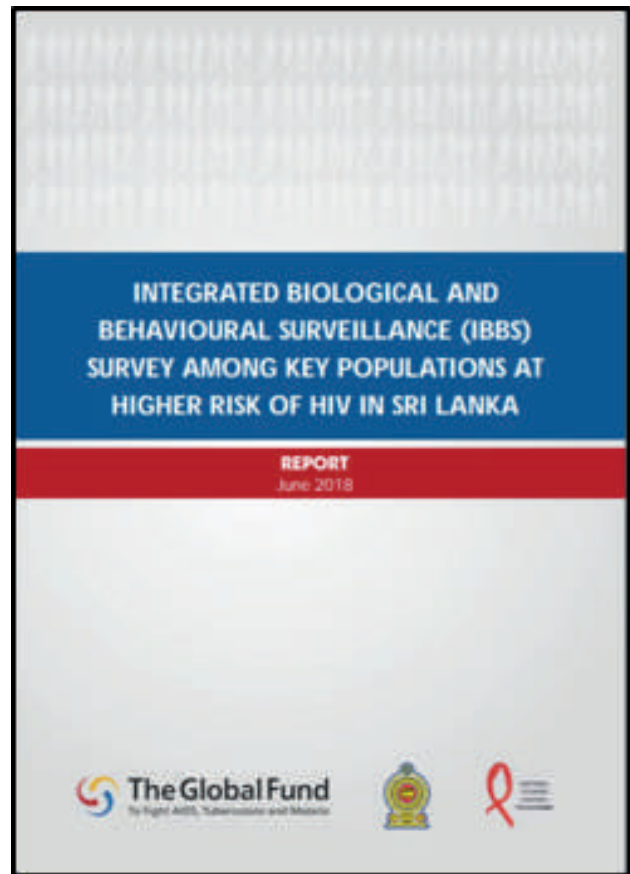
This year it included information on NSACP and international collaborations which supported the national response. This report is referred by all the stakeholders and the funding agencies to gather information and data on the Sri Lankan context.



Integrated Biological and Behavioural Surveillance (IBBS) Survey among Key Populations at Higher Risk of HIV in Sri Lanka

This report gives the results of the second IBBS survey conducted in Sri Lanka during 2017-2018. This survey covered an overall sample size of 3,431, including FSWs, MSM, Intravenous drug users, Beach boys and Transgender women. Bio-behavioural data collection was done from November 2017 to March 2018.

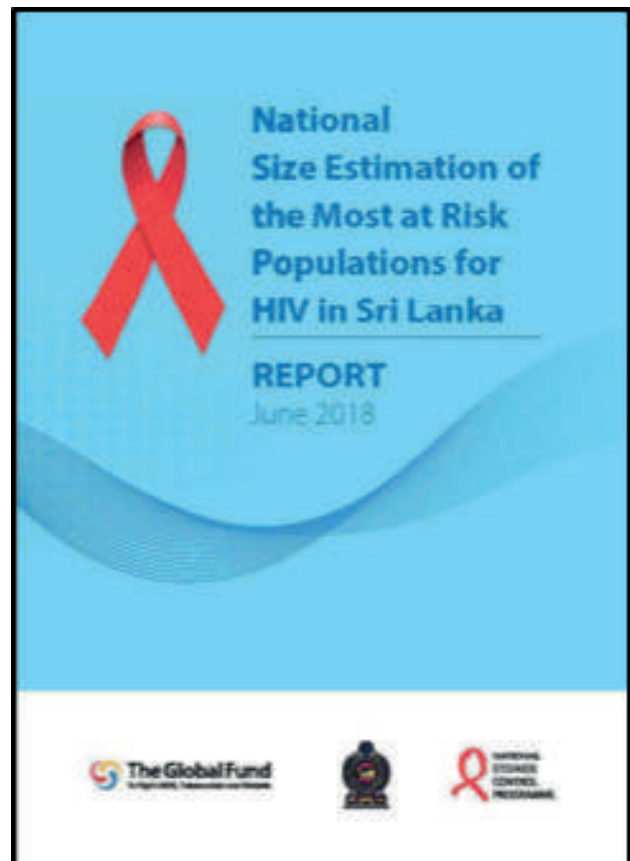
This report gives comprehensive information on the methods and the results obtained. Recommendations for further actions are also provided.



National size estimation of the most-at-risk population for HIV in Sri Lanka

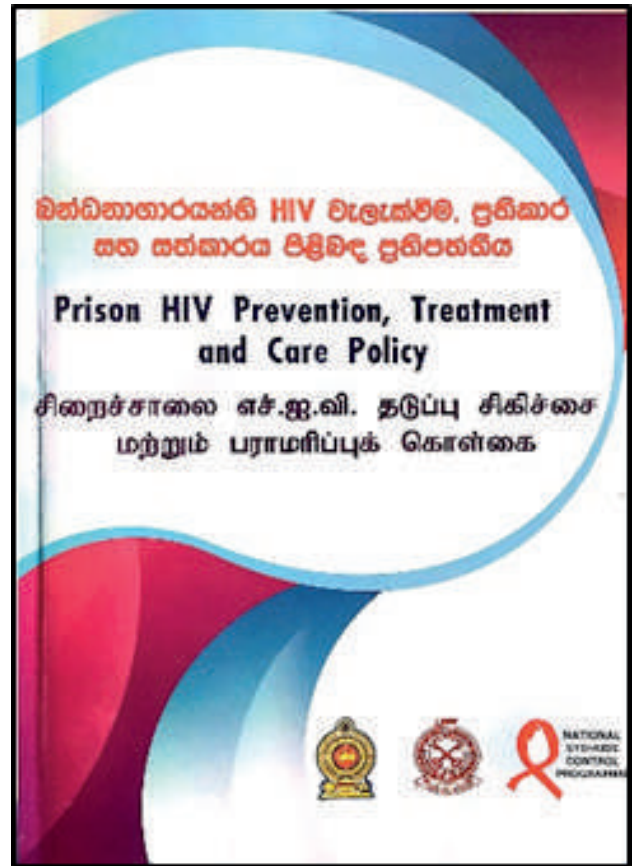
This report describes the process and the results of the National size estimation of key populations in Sri Lanka. The methods of size estimation include geographical mapping with enumeration and multiplier. Also, the results of the consensus building workshop that utilised the Delphi process to arrive at the final population size estimates were included. The KPs who were included in this study were FSWs, MSM, MSWs, transwomen, PWID and beach boys.

National size estimations are important in guiding the national response to HIV and STIs in the country.



Prison HIV Prevention, Treatment and Care Policy

The purpose of this policy for the prevention and treatment of HIV in the prison sector is to provide a framework for addressing HIV prevention and providing related health services in the Sri Lankan prison sector. This publication gives an overview of the guiding principles, objectives and strategies to achieve the objectives of this policy. This publication is in all three languages.



Rapid assessment of drug use patterns (RADUP) in Sri Lanka

This assessment was conducted by the NSACP along with the NDDCB, to inform risk reduction interventions for people who use drugs (PWUD) and people who inject drugs (PWID). The study was aimed at understanding the pattern of drug use among the non-institutionalized PWUD and PWID in selected districts in Sri Lanka and recommending policies and programmes related to drug use issues in Sri Lanka.

This was an exploratory, observational, cross-sectional, mixed-method study which used a combination of qualitative and quantitative methods.



26. Financial summary

Table 26.1. Summary of Financial Details for 2018

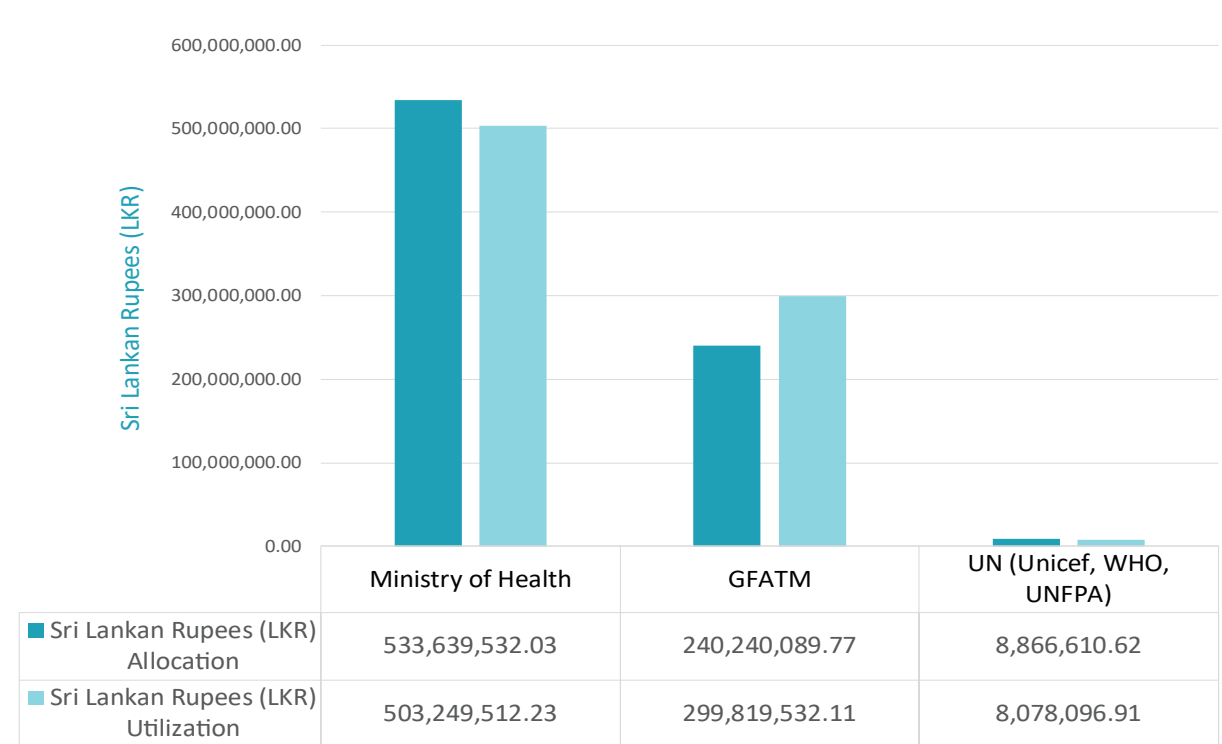
Financial Sources	Description	Fund Allocation (LKR)	Fund Utilization (LKR)
Capital Expenditure .1			
Ministry of Health	Budget Debate	50,000,000.00	28,187,901.66
	Construction	2,142,683.07	1,405,442.21
	Training and Research	670,000.00	670,000.00
	Annual Provision	26,000,000.00	24,195,201.16
	Furniture & Office Equipment	850,000.00	116,150.00
	Total		79,662,683.07
UNFPA	Consultative workshops, advocacy programme, printing of publication	327,477.71	-
WHO	Consultative workshops, review meetings. training module	2,539,132.91	2,078,096.91
UNICEF	Prevention of mother to child transmission	6,000,000.00	6,000,000.00
GFATM	Human Resources (HR)	31,158,650.43	20,811,922.86
	Travel related costs (TRC)	53,317,281.91	26,746,126.79
	External Professional services (EPS)	14,270,875.80	82,437,567.54
	Health Products- Pharmaceutical Products (HPPP)	0	0
	Health Products- Non-Pharmaceuticals (HPNP)	70,785,162.87	25,508,225.40
	Health Products- Equipment (HPE)	7151773.2	21,175,107.20
	Procurement and Supply-Chain Management costs (PSM)	2,166,337.12	61,128,469.93
	Infrastructure (INF)	4781285.465	2,751,914.76
	Non-health equipment (NHE)	51,216,773.61	48,735,380.49
	Communication Material and Publications (CMP)	0.00	3,860,307.50
	Indirect and Overhead Costs	5,391,949.37	6,664,509.64
	Sub Total	240,240,089.77	299,819,532.11
Total Capital Expenditure		328,769,383.46	362,472,324.05

The above figures show allocation and utilization of funds by NSACP during 2018. Utilization of funds allocated by Global fund is high as some of the major projects such as conducting the IBBS, population size estimations and development of an electronic information management system (EIMS) for NSACP were completed in this year which were

planned to be completed in 2017. Government of Sri Lanka (GoSL) has been funding 100% of all of the recurrent expenses completely over the years. However, it should be noted that the funds allocated by the Ministry of Health of GoSL for peripheral STD clinics through the provincial allocations have not been captured in the budget shown below.

Table 26.2 Summary of Financial Details for 2018

Financial Sources	Description	Fund Allocation (LKR)	Fund Utilization (LKR)
2. Recurrent Expenditure			
Ministry of Health	Personal Emoluments	117,100,000	116,477,171.52
	Travelling Expenses	400,000	196,459.25
	Supplies	3,050,000	2,070,567.01
	Maintenance Expenditure	3000000	1465622.59
	Services	15,800,000	14,034,479.21
	Transfers/Loan interest	850,000	653,668.66
	Total Recurrent Expenditure	140,200,000	134,897,968.24
Medical Supplies Division	Diagnostic Items	165,874,498	165,874,498
	Antiretroviral drugs	131,764,652.70	131,764,652.70
	Other drugs (Non- Antiretroviral drugs)	7,966,265.07	7,966,265.07
	Surgical Items	8,171,433.00	8,171,433.00
	Total Pharmaceutical Expenditure	313,776,848.96	313,776,848.96
Grand Total		782,746,232.42	811,147,141.25

Figure 26.1 Financial utilisation

27. Contact Information

Central Province

Kandy STD clinic	
Address	STD clinic, P.O. Box 207, Kandy
Email:	stdclinic.kandy@gmail.com
Telephone	081-2203622
Fax	081-2203923
Contact Persons	Dr (Ms.) Ganga Pathirana (Venereologist) Dr M.I.M. Lareef (MO/IC)

Matale STD clinic	
Address	STD clinic, District General Hospital, Matale
Email:	stdclinic.matale@gmail.com
Telephone	066-2053746
Contact persons	Dr Jagath Ranawaka (Acting Venereologist) Dr (Ms.) H.M.G. Wijerathna (MO/IC)

Nuwara Eliya STD clinic	
Address	STD clinic, General Hospital, Nuwara Eliya
Telephone	052-2223210
	0522222261- Ext 345 (GH Nuwara Eliya)
Fax	052-2223476 (GH Nuwara Eliya)
Contact persons	Dr D.O.C.de Alwis (Acting Venereologist) Dr D.S. Tissa Seneviratne (MO/IC)

Eastern Province

Ampara STD clinic

Address	STD clinic, General Hospital, Ampara
Email:	stdclinic.ampara@gmail.com
Telephone	063-2224239
Fax	063-2222988 (Ampara RDHS Office)
Contact person	Dr (Ms.) Sakunthala de Soyza (MO/IC)

Batticaloa STD clinic

Address	STD Clinic, Teaching Hospital, Batticaloa.
Email:	stdclinic.batticaloa@gmail.com
Telephone	066-2053746
Telephone	065-2222261 (TH Batticaloa)
Fax	065-2224401 (TH Batticaloa)
Contact persons	Dr S. Anusha (MO/IC)

Kalmunai STD clinic

Address	STD clinic, Ashrooff Memorial Hospital, Kalmunai.
Email:	stdkalmunai@gmail.com
Telephone	067-2223660
Fax	067-2223660
Contact person	Dr A.R.M. Haris (MO/IC)

Trincomalee STD clinic

Address	STD clinic, General Hospital, Trincomalee
Email:	stdunit2@gmail.com
Telephone	026-2222563
Fax	026-2222563
Contact person	Dr V. Goureshwaran (MO/IC)

North Central Province

Anuradhapura STD clinic

Address	STD clinic, Teaching Hospital, Anuradhapura
Email:	stdclinic.anuradhapura@gmail.com
Telephone	025-2236461
Fax	025-2223515 (TH Anuradhapura)
Contact persons	Dr Ajith Karawita (Venereologist) Dr H. B. L. P. Dharmasiri (MO/IC)

Polonnaruwa STD clinic

Address	STD clinic, General Hospital, Polonnaruwa
Email:	sticlinic.polonnaruwa@gmail.com
Telephone	027-2225787
Fax	027-2225787
Contact Person:	Dr (Ms.) Indra Peris (MO/IC)

North Western Province

Chilaw STD clinic

Address	STD clinic, General Hospital, Chilaw
Email:	std.rdhspu@gmail.com
Telephone	032-2220750
Fax	032-2223200 (GH Chilaw)
Contact person	Dr. Umeda Jayasinghe (Venereologist)
	Dr N. R. Amarajeewa (MO/IC)

Kurunegala STD clinic

Address	STD Clinic, Teaching Hospital, Kurunegala
Email:	stdclinic.kurunegala@gmail.com
Telephone	037-2224339
Fax	037-2224339
Contact persons	Dr Shayama Somawardhana (Venereologist)
	Dr (Ms.) P.G.N.M. Jayathilaka (MO/IC)

Northern Province

Jaffna STD clinic

Address	STD Clinic, Teaching Hospital, Jaffna
Email:	stdclinic.jaffna@gmail.com
Telephone	021-2217756
Fax	021-2222262 (TH Jaffna)
Contact persons	Dr A Rohan (MO/IC)

Kilinochchi STD clinic

Address	STD Clinic, District General Hospital, Kilinochchi
Email:	stdkilinochchi@gmail.com
Telephone	021-2283709
	021-2285329 (BH Kilinochchi)- Ext. 194
Fax	021-2285327 (BH Kilinochchi)
Contact person	Dr (Ms.) Chathurika Wickramaratne(Acting Venereologist) Dr Thilanka Dewapura (MO/IC)

Mannar STD clinic

Address	STD clinic, District General Hospital, Mannar
Email:	stdclinic.mannar@gmail.com
Telephone	023-2250573
Fax	023-2250748 (Mannar RDHS Office)
Contact person	Dr (Ms) Rajani Anton Sisil (MO/IC)

Mullaitivu STD clinic

Address	STD clinic, District General Hospital, Mullaitivu
Email:	stdaidscontrolprogramme.mtv@gmail.com
Telephone	021-2061414
Contact person	Dr A. Dayalan (MO/IC)

Vavuniya STD clinic

Address	STD clinic, District General Hospital, Vavuniya
Email:	stdclinic.vavuniya@gmail.com
Telephone	024-2224575
Fax	024-2222892 (Vavuniya RDHS Office)
Contact person	Dr K. Chandrakumar (MO/IC)

Sabaragamuwa Province

Kegalle STD clinic

Address	STD clinic, District General Hospital, Kegalle
Email:	stdunit.kegalle@gmail.com
Telephone	035-2231222
Fax	035-2231222
Contact persons	Dr H.A.C.W. Hathurusinghe (Venereologist) Dr (Ms.) Lilanthi Dayananda – MO/IC

Ratnapura STD clinic

Address	STD clinic, Provincial General Hospital premises, Ratnapura
Email:	stdclinic.ratnapura@gmail.com
Telephone	045-2226561
Fax	045-2226561
Contact persons	Dr (Ms.) Darshani Mallikarachchi (Venereologist) Dr K. Upasena (MO/IC)

Embilipitiya STD clinic

Address	STD clinic, District General Hospital, Embilipitiya
Telephone	047-2230261
Fax	047-2230141
Contact persons	Dr (Ms.) Inoka Munasinghe (Acting Venereologist) Dr. Malitha Muthugala (MO)

Uva Province

Badulla STD clinic

Address	STD clinic, Room No 73, Daya Gunasekara Mawatha, Badulla.
Email:	stdclinic.badulla@gmail.com
Telephone	055-2222578
Fax	055-2222578
Contact persons	Dr Niroshan Jayasekera (Acting Venereologist) Dr R.D. Sugathadasa (MO/IC)

Monaragala STD clinic

Address	STD clinic, District General Hospital, Monaragala
Email:	monaragalastd@gmail.com
Telephone	055-2276826
Fax	055-2276700 (RDHS Monaragala), 055- 2276912 (GH Monaragala)
Contact person	Dr (Ms.) T.M. Anuradha Perera (Acting Venereologist) Dr S.A.S. Pradeep Kumara (MO/IC)

Southern Province

Balapitiya STD clinic

Address	STD Clinic, Base Hospital, Balapitiya.
Email:	stdbalapitiya@gmail.com
Telephone	091-2256822
Fax	091-2256410 (BH Balapitiya)
Contact person	Dr Vino Dharmakulasinghe (Acting Venereologist) Dr M.W. Prasad de Silva (MO/IC)

Galle STD clinic

Address	STD clinic, Teaching Hospital, Mahamodara, Galle
Email:	stdclinic.mahamodara@gmail.com
Telephone	091-2245998
Fax	091-2232088
Contact person	Dr (Ms.) Darshani Wijewickrema (Venereologist) Dr C.M. Jayasooriya (MO/IC)

Hambantota STD clinic

Address	STD clinic, General Hospital, Hambantota
Email:	stdclinic.hambantota@gmail.com
Telephone	047-2222247
Fax	047-2222247
Contact persons	Dr P.I.M. Jayawardana (Acting Venereologist) Dr L.K.H.M. Jayaruwan (MO/IC)

Matara STD clinic

Address	STD clinic, No 43, General Hospital, Matara
Email:	stdclinic.matara@gmail.com
Telephone	041-2232302
Fax	041-2232302
Contact persons	Dr (Ms.) Nimali Jayasooriya (Venereologist) Dr S. Roshan Jayaweera (MO/IC)

Western Province

Awissawella STD clinic

Address	STD clinic, Room 5, OPD Complex, Base Hospital, Avissawella
Telephone	036-2222261/62 – BH Avissawella (Ext. 228)
Contact person	Dr (Ms.) Gayani Nanayakkara (Venereologist)
	Dr Suranga Liyanage (MO/STD)

Colombo Central STD clinic (National STD/AIDS Control Programme)

Address	29, De Saram Place, Colombo 10
Email	info@aidscontrol.gov.lk
Telephone	011-2667163 (Exchange)
Hotlines	011-2695420 (Female clinic), 011-2-695430 (Male clinic)
Fax	011-2665277
Contact persons	Dr (Ms.) R. Hettiarachchi (Director)
	Dr (Ms.) L.I. Rajapaksa (Venereologist)
	Dr K.A.M. Ariyaratne (Venereologist)
	Dr G. Weerasinghe (Venereologist)
	Dr (Ms.) S. Benaragama (Epidemiologist)
	Dr (Ms.) J.P. Elwitigala (Microbiologist)
	Dr (Ms.) J. Vidanapathirana (Community Physician)
	Dr (Ms.) S. Herath (Community Physician)
	Dr (Ms.) H.P. Perera (Venereologist)
	Dr (Ms.) W.C.J.K. Jayakody (Venereologist)

Gampaha STD clinic

Address	STD Clinic, District General Hospital, Gampaha
Email:	stdclinic.gampaha@gmail.com
Telephone	033-2234383
Fax	033-2222179 (GH Gampaha)
Contact person	Dr Priyantha Weerasinghe (Venereologist)
	Dr (Ms.) D.M.M.P.K. Pathiraja (Acting Venereologist)
	Dr S. B. S. Gamage (MO/IC)

Western Province contd.

Kalubowila STD clinic

Address	STD Clinic, Room 43, Sunandarama Road, Kalubowila.
Email:	stdclinic.kalubowila@gmail.com
Telephone	011 4891055
Contact person	Dr Nalaka Abeygunasekara (Venereologist) Dr S.K.A. Ranawella (MO)

Kalutara STD clinic

Address	STD Clinic, General Hospital, Nagoda, Kalutara
Email:	stdclinic.kalutara@gmail.com
Telephone	034-2236937
Fax	034-2236937
Contact persons	Dr (Ms.) Manjula Rajapaksha (Venereologist) Dr (Ms.) M.D.A. Krishani (MO/IC)

Negombo STD clinic

Address	STD clinic, District General Hospital, Negombo
Email:	stdclinic.negombo@gmail.com
Telephone	031-2239016 031-2222261(GH Negombo)
Contact persons	Dr (Ms.) Dilmini Mendis (Venereologist) Dr Lionel Halahakoon (MO/IC)

Ragama STD clinic

Address	STD clinic, Room 70, Teaching Hospital, Ragama
Email:	stdclinic.ragama@gmail.com
Telephone	011-2960224
Fax	011-2960224 011-2959266 (TH Ragama)
Contact persons	Dr (Ms.) Jayadari Ranatunga (Venereologist) Dr (Ms.) Samadi Thilakaratne (MO/IC)

Western Province contd.

Wathupitiwala STD clinic	
Address	STD Clinic, Base Hospital, Wathupitiwala
Email:	stdcampaign.bswathupitiwala@yahoo.com
Telephone	033-2280261
Fax	033-2280927
Contact person	Dr (Ms.) P.G. Nayani Dhanuska (MO/STD)

Annexure 1 Table 1: Reported infectious syphilis cases, 2016-2018

Province	STD Clinic	2016			2017			2018		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Central Province	Kandy	6	6	12	4	1	5	0	0	0
	Matale	1	0	1	0	0	0	0	0	0
	Nuwara Eliya	3	1	4	3	1	4	2	4	6
Eastern Province	Ampara	2	2	4	2	0	2	0	0	0
	Batticaloa	1	0	1	1	1	2	0	0	0
	Kalmunai	0	1	1	0	0	0	0	0	0
	Trincomalee	1	0	1	0	0	0	4	1	5
North Central province	Anuradhapura	0	0	0	0	0	0	0	0	0
	Polonnaruwa	0	0	0	0	0	0	0	0	0
North Western Province	Chilaw	0	0	0	0	0	0	1	0	1
	Kurunegala	2	0	2	4	0	4	5	0	5
Northern Province	Jaffna	1	1	2	0	0	0	2	0	2
	Kilinochchi	0	0	0	0	0	0	0	0	0
	Mannar	2	5	7	1	0	1	0	0	0
	Mullaitivu	0	0	0	0	0	0	0	0	0
	Vavuniya	0	1	1	0	0	0	0	0	0
Sabaragamuwa Province	Embilipitiya				0	0	0	1	0	1
	Kegalle	1	0	1	3	1	4	5	0	5
	Ratnapura	0	0	0	1	0	1	0	0	0
Southern Province	Balapitiya	4	2	6	2	0	2	0	0	0
	Hambanthota	0	0	0	3	0	3	0	0	0
	Mahamodara	2	1	3	3	1	4	0	1	1
	Matara	1	1	2	0	0	0	0	0	0
UVA Province	Badulla	1	1	2	0	1	1	0	0	0
	Monaragala	0	0	0	0	0	0	0	1	1
Western Province	Avissawella				0	0	0	1	1	2
	Colombo	36	11	47	20	3	23	8	1	9
	Gampaha	0	0	0	1	1	2	0	0	0
	Kalubowila	3	1	4	4	0	4	12	0	12
	Kalutara	13	8	21	0	0	0	1	1	2
	Negombo	3	1	4	2	1	3	2	0	2
	Ragama	5	1	6	4	2	6	9	0	9
	Wathupitiwala	0	0	0	1	0	1	0	0	0
Total		88	44	132	59	13	72	53	10	63

Annexure 1 Table 2: Reported late syphilis cases, 2016-2018

Province	STD Clinic	2016			2017			2018		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Central Province	Kandy	28	20	48	18	6	24	18	19	37
	Matale	1	0	1	4	3	7	13	3	16
	Nuwara Eliya	0	0	0	5	6	11	1	1	2
Eastern Province	Ampara	3	2	5	6	4	10	6	1	7
	Batticaloa	12	4	16	7	3	10	5	2	7
	Kalmunai	1	0	1	0	0	0	0	1	1
	Trincomalee	7	3	10	7	2	9	5	2	7
North Central province	Anuradhapura	8	8	16	4	2	6	5	5	10
	Polonnaruwa	18	12	30	10	6	16	15	7	22
North Western Province	Chilaw	9	10	19	12	7	19	14	13	27
	Kurunegala	28	24	52	19	14	33	24	16	40
Northern Province	Jaffna	8	2	10	6	4	10	5	0	5
	Kilinochchi	0	1	1	0	0	0	0	0	0
	Mannar	0	0	0	0	0	0	0	0	0
	Mullaitivu	0	0	0	0	0	0	0	0	0
	Vavuniya	2	5	7	3	1	4	1	0	1
Sabaragamuwa Province	Embilipitiya				0	0	0	1	1	2
	Kegalle	3	3	6	4	3	7	10	4	14
	Ratnapura	15	5	20	24	9	33	22	12	34
Southern Province	Balapitiya	5	3	8	9	6	15	2	1	3
	Hambanthota	0	1	1	4	8	12	12	7	19
	Mahamodara	36	13	49	28	4	32	32	19	51
	Matara	6	3	9	11	3	14	13	3	16
UVA Province	Badulla	14	11	25	15	4	19	12	2	14
	Monaragala	4	2	6	2	2	4	4	2	6
Western Province	Avissawella				0	0	0	5	5	10
	Colombo	182	84	266	153	98	251	176	79	255
	Gampaha	5	5	10	7	0	7	4	1	5
	Kalubowila	44	29	73	44	18	62	30	14	44
	Kalutara	13	10	23	5	9	14	18	14	32
	Negombo	15	11	26	18	6	24	8	8	16
	Ragama	32	15	47	22	11	33	36	7	43
	Wathupitiwala	6	2	8	2	1	3	6	3	9
Total		505	288	793	449	240	689	503	252	755

Annexure 1 Table 3: Reported gonorrhoea cases, 2016-2018

Province	STD Clinic	2016			2017			2018		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Central Province	Kandy	12	2	14	5	1	6	3	0	3
	Matale	2	1	3	7	1	8	6	1	7
	Nuwara Eliya	4	1	5	0	0	0	1	1	2
Eastern Province	Ampara	1	0	1	2	0	2	0	0	0
	Batticaloa	2	1	3	0	0	0	0	0	0
	Kalmunai	5	9	14	2	2	4	0	0	0
	Trincomalee	2	0	2	6	0	6	1	0	1
North Central province	Anuradhapura	9	0	9	2	0	2	1	0	1
	Polonnaruwa	31	16	47	11	3	14	21	26	47
North Western Province	Chilaw	3	2	5	3	0	3	7	1	8
	Kurunegala	8	1	9	2	1	3	2	1	3
Northern Province	Jaffna	1	1	2	2	0	2	3	0	3
	Kilinochchi	1	0	1	2	0	2	3	0	3
	Mannar	0	0	0	0	0	0	0	0	0
	Mullaitivu	1	0	1	0	0	0	0	0	0
	Vavuniya	7	0	7	6	0	6	0	0	0
Sabaragamuwa Province	Embilipitiya				0	1	1	1	0	1
	Kegalle	6	2	8	8	3	11	4	2	6
	Ratnapura	6	1	7	8	2	10	5	1	6
Southern Province	Balapitiya	3	1	4	2	0	2	1	0	1
	Hambanthota	5	4	9	9	6	15	21	15	36
	Mahamodara	5	1	6	4	0	4	5	0	5
	Matara	9	2	11	4	0	4	6	1	7
UVA Province	Badulla	1	0	1	5	4	9	3	3	6
	Monaragala	2	0	2	0	0	0	0	0	0
Western Province	Avissawella				0	0	0	1	0	1
	Colombo	60	11	71	54	15	69	38	15	53
	Gampaha	6	0	6	2	0	2	4	2	6
	Kalubowila	17	6	23	19	0	19	21	2	23
	Kalutara	8	1	9	11	5	16	15	3	18
	Negombo	7	0	7	8	3	11	19	3	22
	Ragama	11	3	14	6	0	6	16	0	16
Wathupitiwala	0	0	0	0	0	0	4	0	4	
Total		235	66	301	190	47	237	212	77	289

Annexure 1 Table 4: Reported non-gonococcal cases, 2016-2018

Province	STD Clinic	2016			2017			2018		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Central Province	Kandy	17	106	123	15	83	98	15	103	118
	Matale	6	14	20	8	38	46	6	11	17
	Nuwara Eliya	2	7	9	1	14	15	1	17	18
Eastern Province	Ampara	5	0	5	9	0	9	12	0	12
	Batticaloa	7	14	21	3	3	6	1	3	4
	Kalmunai	0	0	0	9	4	13	5	5	10
	Trincomalee	3	0	3	2	0	2	0	0	0
North Central province	Anuradhapura	24	19	43	19	20	39	12	0	12
	Polonnaruwa	2	1	3	10	1	11	12	1	13
North Western Province	Chilaw	6	154	160	5	57	62	5	70	75
	Kurunegala	89	364	453	153	562	715	149	371	520
Northern Province	Jaffna	12	3	15	6	1	7	13	2	15
	Kilinochchi	1	0	1	0	0	0	1	0	1
	Mannar	0	0	0	0	0	0	0	0	0
	Mullaitivu	2	0	2	3	0	3	0	0	0
	Vavuniya	6	1	7	1	0	1	3	3	6
Sabaragamuwa Province	Embilipitiya				2	0	2	4	1	5
	Kegalle	11	8	19	8	34	42	30	54	84
	Ratnapura	13	10	23	10	24	34	14	23	37
Southern Province	Balapitiya	2	10	12	4	6	10	8	11	19
	Hambanthota	14	1	15	20	7	27	20	8	28
	Mahamodara	11	31	42	10	15	25	16	11	27
	Matara	10	8	18	10	15	25	6	11	17
UVA Province	Badulla	3	2	5	2	2	4	11	6	17
	Monaragala	4	36	40	13	25	38	14	29	43
Western Province	Avissawella				1	2	3	13	7	20
	Colombo	162	327	489	160	358	518	174	471	645
	Gampaha	24	128	152	18	81	99	47	190	237
	Kalubowila	91	81	172	104	169	273	167	226	393
	Kalutara	14	35	49	28	34	62	19	18	37
	Negombo	22	104	126	12	160	172	27	134	161
	Ragama	23	116	139	24	64	88	75	111	186
Wathupitiwala	3	15	18	2	13	15	7	20	27	
Total		589	1595	2184	672	1792	2464	887	1917	2804

Annexure 1 Table 5: Reported herpes cases, 2016-2018

Province	STD Clinic	2016			2017			2018		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Central Province	Kandy	53	105	158	62	95	157	54	117	171
	Matale	27	30	57	14	42	56	39	60	99
	Nuwara Eliya	4	11	15	8	25	33	4	12	16
Eastern Province	Ampara	22	37	59	13	40	53	9	30	39
	Batticaloa	7	21	28	2	11	13	1	4	5
	Kalmunai	4	9	13	4	6	10	1	9	10
	Trincomalee	15	10	25	9	20	29	10	19	29
North Central province	Anuradhapura	78	68	146	47	74	121	36	51	87
	Polonnaruwa	49	63	112	39	58	97	46	77	123
North Western Province	Chilaw	33	63	96	32	59	91	37	48	85
	Kurunegala	90	150	240	60	143	203	84	129	213
Northern Province	Jaffna	13	14	27	12	16	28	13	10	23
	Kilinochchi	4	6	10	8	13	21	5	7	12
	Mannar	1	1	2	0	0	0	0	0	0
	Mullaitivu	4	2	6	10	2	12	4	4	8
	Vavuniya	43	29	72	10	20	30	12	22	34
Sabaragamuwa Province	Embilipitiya				1	2	3	19	26	45
	Kegalle	44	59	103	38	77	115	57	72	129
	Ratnapura	56	64	120	66	63	129	45	57	102
Southern Province	Balapitiya	18	38	56	21	38	59	19	35	54
	Hambanthota	28	39	67	30	49	79	37	53	90
	Mahamodara	58	74	132	37	86	123	30	86	116
	Matara	31	63	94	41	46	87	39	60	99
UVA Province	Badulla	28	83	111	39	91	130	38	70	108
	Monaragala	9	36	45	12	45	57	8	36	44
Western Province	Awissawella				3	3	6	27	47	74
	Colombo	220	180	400	208	177	385	247	210	457
	Gampaha	58	76	134	33	61	94	48	65	113
	Kalubowila	145	166	311	111	129	240	143	145	288
	Kalutara	30	73	103	56	83	139	48	92	140
	Negombo	26	44	70	38	69	107	34	69	103
	Ragama	89	77	166	74	66	140	86	74	160
	Wathupitiwala	15	27	42	15	35	50	21	45	66
Total		1218	1727	2945	1153	1744	2897	1301	1841	3142

Annexure 1 Table 6: Reported genital warts, 2016-2018

Province	STD Clinic	2016			2017			2018		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Central Province	Kandy	54	48	102	54	38	92	52	60	112
	Matale	10	5	15	16	18	34	47	40	87
	Nuwara Eliya	4	2	6	3	5	8	4	6	10
Eastern Province	Ampara	16	19	35	10	11	21	16	12	28
	Batticaloa	5	9	14	9	4	13	2	3	5
	Kalmunai	2	1	3	2	1	3	5	2	7
	Trincomalee	8	7	15	9	2	11	7	9	16
North Central province	Anuradhapura	56	41	97	62	37	99	59	40	99
	Polonnaruwa	29	27	56	30	35	65	29	26	55
North Western Province	Chilaw	41	27	68	49	33	82	60	48	108
	Kurunegala	93	116	209	96	101	197	86	81	167
Northern Province	Jaffna	24	7	31	21	10	31	23	9	32
	Kilinochchi	1	2	3	4	1	5	9	4	13
	Mannar	1	1	2	0	0	0	0	0	0
	Mullaitivu	4	0	4	1	0	1	0	1	1
	Vavuniya	25	10	35	12	5	17	15	14	29
Sabaragamuwa Province	Embilipitiya				4	2	6	17	16	33
	Kegalle	23	31	54	40	34	74	56	72	128
	Ratnapura	28	28	56	37	31	68	46	32	78
Southern Province	Balapitiya	18	16	34	21	8	29	15	10	25
	Hambanthota	41	55	96	35	27	62	27	30	57
	Mahamodara	48	46	94	44	36	80	50	63	113
	Matara	32	30	62	44	38	82	47	40	87
UVA Province	Badulla	24	27	51	27	20	47	37	32	69
	Monaragala	10	11	21	5	9	14	14	19	33
Western Province	Avissawella				4	6	10	36	35	71
	Colombo	237	100	337	232	102	334	302	146	448
	Gampaha	33	35	68	30	25	55	45	48	93
	Kalubowila	110	65	175	109	79	188	133	82	215
	Kalutara	34	45	79	66	79	145	50	50	100
	Negombo	52	42	94	49	52	101	67	57	124
	Ragama	76	57	133	87	59	146	95	72	167
Wathupitiwala	13	16	29	17	24	41	12	22	34	
Total		1152	926	2078	1229	932	2161	1463	1181	2644

Annexure 1 Table 7: Reported trichomoniasis cases, 2016-2018

Province	STD Clinic	2016			2017			2018		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Central Province	Kandy	0	5	5	0	3	3	0	0	0
	Matale	0	0	0	0	1	1	0	0	0
	Nuwara Eliya	0	0	0	1	2	3	0	0	0
Eastern Province	Ampara	0	0	0	0	0	0	0	0	0
	Batticaloa	1	7	8	0	1	1	0	1	1
	Kalmunai	0	0	0	0	0	0	0	0	0
	Trincomalee	7	1	8	2	1	3	0	0	0
North Central province	Anuradhapura	0	1	1	0	0	0	0	0	0
	Polonnaruwa	0	1	1	0	0	0	0	0	0
North Western Province	Chilaw	0	2	2	0	1	1	0	1	1
	Kurunegala	0	4	4	0	9	9	1	4	5
Northern Province	Jaffna	0	0	0	0	0	0	0	0	0
	Kilinochchi	0	0	0	0	0	0	0	0	0
	Mannar	0	0	0	0	0	0	0	0	0
	Mullaitivu	0	0	0	0	0	0	0	0	0
	Vavuniya	0	0	0	0	0	0	0	0	0
Sabaragamuwa Province	Embilipitiya	–	–	–	0	0	0	0	0	0
	Kegalle	0	3	3	0	5	5	0	3	3
	Ratnapura	0	1	1	0	4	4	2	7	9
Southern Province	Balapitiya	0	0	0	0	3	3	2	0	2
	Hambanthota	0	0	0	1	0	1	0	0	0
	Mahamodara	0	3	3	0	0	0	0	0	0
	Matara	0	0	0	0	3	3	0	0	0
UVA Province	Badulla	0	0	0	0	0	0	0	2	2
	Monaragala	0	11	11	0	0	0	0	0	0
Western Province	Avissawella	–	–	–	0	0	0	0	1	1
	Colombo	0	7	7	0	20	20	3	8	11
	Gampaha	0	1	1	0	0	0	0	0	0
	Kalubowila	1	4	5	1	8	9	1	7	8
	Kalutara	0	1	1	0	3	3	0	3	3
	Negombo	1	3	4	6	1	7	1	2	3
	Ragama	0	0	0	0	2	2	1	2	3
Wathupitiwala	0	0	0	0	0	0	0	0	0	
Total		10	55	65	11	67	78	11	41	52

Annexure 2 Table 1: Reason for attendance among new STD clinic attendees in 2018

Province	STD Clinic		Contact of patients			Voluntarily			Referral from magistrate/court			Others		
	Kandy	Matale	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
			Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Central Province			30	14	44	340	131	471	14	41	55	252	599	851
			14	19	33	68	37	105	0	2	2	103	145	248
			14	9	23	26	12	38	22	43	65	63	151	214
			6	9	15	56	27	83	12	28	40	61	75	136
Eastern Province			1	0	1	5	5	10	11	40	51	40	86	126
			10	2	12	80	56	136	3	10	13	29	55	84
			10	4	14	18	26	44	44	70	114	100	76	176
North Central province			7	7	14	206	166	372	31	40	71	153	136	289
			5	14	19	191	234	425	43	110	153	6	12	18
			55	25	80	124	118	242	36	76	112	413	338	751
North Western Province			102	84	186	389	256	645	84	183	267	244	551	795
			3	7	10	36	5	41	13	13	26	108	60	168
			0	1	1	10	6	16	0	12	12	60	33	93
Northern Province			0	0	0	1	1	2	1	4	5	0	0	0
			1	2	3	8	7	15	0	17	17	9	6	15
			9	5	14	19	5	24	12	54	66	50	49	99
Sabaragamuwa Province			4	4	8	61	23	84	8	35	43	31	41	72
			87	31	118	153	89	242	6	6	12	136	223	359
			12	18	30	158	86	244	154	148	302	209	170	379
Southern Province			10	7	17	47	21	68	3	18	21	71	65	136
			14	15	29	209	159	368	63	22	85	125	125	250
			34	28	62	146	61	207	32	46	78	212	277	489
UVA Province			19	12	31	126	48	174	124	89	213	117	140	257
			22	19	41	50	22	72	39	98	137	158	262	420
			16	6	22	25	20	45	27	79	106	57	111	168
Western Province			28	10	38	36	15	51	2	19	21	141	124	265
			163	91	254	2773	805	3578	34	170	204	1424	1163	2587
			41	28	69	151	99	250	29	65	94	178	224	402
Total			106	49	155	576	206	782	31	126	157	331	335	666
			117	114	231	202	194	396	34	69	103	71	57	128
			22	27	49	113	227	340	42	89	131	142	192	334
		32	29	61	157	77	234	62	77	139	343	249	592	
		0	1	1	52	39	91	0	10	10	79	94	173	
		994	691	1685	6612	3283	9895	1016	1909	2925	5516	6224	11740	

Annexure 2 Table 3: Details of awareness programmes conducted by STD clinics in 2018

Province	STD Clinic		Lectures		Exhibitions		Workshops		Other	
	No. of programmes	No. of participants	No. of programmes	No. of participants	No. of programmes	No. of participants	No. of programmes	No. of participants	No. of programmes	No. of participants
Central Province	Kandy	90	8693	3	11200	28	665	2	15	
	Matale	67	5405	2	250	6	230	1	28	
	Nuwara Eliya	29	1800	0	0	0	0	0	0	
Eastern Province	Ampara	63	6109	8	2020	0	0	0	0	
	Batticaloa	143	6073	0	0	0	0	0	0	
	Kalmunai	22	1720	0	0	0	0	1	200	
North Central province	Trincomalee	85	4606	0	0	0	0	5	154	
	Anuradhapura	64	5497	0	0	2	80	18	1366	
	Polonnaruwa	35	5299	1	300	2	200	0	0	
North Western Province	Chilaw	39	5212	1	1400	2	305	62	1516	
	Kurunegala	83	11346	5	4330	7	513	33	6251	
	Jaffna	73	4555	0	0	0	0	0	0	
Northern Province	Kilinochchi	68	5800	0	0	0	0	3	550	
	Mannar	24	2458	0	0	0	0	1	43	
	Mullaitivu	56	2015	0	0	6	1223	0	0	
Sabaragamuwa Province	Vavuniya	54	4180	0	0	4	130	1	280	
	Embiliptiya	0	0	0	0	0	0	0	0	
	Kegalle	65	7605	0	0	18	821	0	0	
Southern Province	Ratnapura	70	7114	2	4225	0	0	0	0	
	Balapitiya	26	2065	2	2950	2	72	2	65	
	Hambanthota	65	7792	1	2500	7	713	2	360	
UVA Province	Mahamodara	9	600	0	0	1	30	38	2567	
	Matara	153	10692	1	12000	3	105	0	0	
	Badulla	112	10123	1	600	1	40	0	0	
Western Province	Monaragala	114	6771	0	0	11	770	1	300	
	Avissawella	34	1765	0	0	0	0	0	0	
	Colombo	56	5334	18	46475	1	23	115	7094	
Total	Gampaha	64	8137	2	1650	0	0	7	301	
	Kalubowila	30	2571	6	1485	5	162	47	1705	
	Kalutara	103	7102	2	3500	0	0	12	1019	
Total	Negombo	6	1210	1	4000	0	0	11	31	
	Ragama	57	4282	0	0	0	0	34	1631	
	Wathupitiwala	18	2860	0	0	0	0	6	320	
Total	1977	166791	56	98885	106	6082	402	25796		

Annexure 2 Table 4: Number of patients with confirmed syphilis diagnoses completing treatment during 2018

Province	STD Clinic	Number of diagnosed with syphilis			Number completed treatment			No. of pregnant women diagnosed		No. completed treatment	
		Male	Female	Total	Male	Female	Total	Male	Female	Male	Female
Central Province	Kandy	19	19	38	13	16	29	0	0	0	0
	Matale	8	3	11	6	2	8	0	0	0	0
	Nuwara Eliya	3	4	7	3	2	5	1	1	1	1
Eastern Province	Ampara	6	1	7	5	1	6	0	0	0	0
	Batticaloa	5	2	7	5	1	6	1	1	1	1
	Kalmunai	0	1	1	0	1	1	0	0	0	0
North Central province	Trincomalee	9	3	12	4	3	7	5	5	4	4
	Anuradhapura	5	5	10	5	5	10	0	0	0	0
	Polonnaruwa	15	7	22	14	7	21	0	0	1	1
North Western Province	Chilaw	14	10	24	8	6	14	1	1	1	1
	Kurunegala	29	17	46	28	14	42	0	0	0	0
	Jaffna	7	0	7	7	0	7	0	0	0	0
Northern Province	Kilinochchi	0	0	0	0	0	0	0	0	0	0
	Mannar	0	0	0	0	0	0	0	0	0	0
	Mullaitivu	0	0	0	0	0	0	0	0	0	0
Sabaragamuwa Province	Vavuniya	2	0	2	1	0	1	0	0	0	0
	Embilipitiya	2	1	3	1	1	2	0	0	0	0
	Kegalle	16	4	20	13	4	17	2	2	2	2
Southern Province	Ratnapura	22	12	34	18	9	27	1	1	1	1
	Balapitiya	2	1	3	2	1	3	1	1	1	1
	Hambanthota	12	7	19	10	6	16	1	1	3	3
UVA Province	Mahamodara	32	20	52	30	19	49	3	3	3	3
	Matara	13	3	16	11	2	13	0	0	0	0
	Badulla	12	2	14	11	1	12	0	0	0	0
Western Province	Monaragala	4	1	5	5	0	5	2	2	2	2
	Avissawella	6	5	11	5	4	9	0	0	0	0
	Colombo	184	82	266	112	66	178	4	4	4	4
Total	Gampaha	5	1	6	2	1	3	0	0	0	0
	Kalubowila	42	14	56	32	9	41	0	0	0	0
	Kalutara	18	15	33	13	10	23	1	1	1	1
Total	Negombo	10	8	18	8	8	16	3	3	3	3
	Ragama	45	7	52	34	7	41	2	2	2	2
	Wathupitiwala	6	3	9	4	3	7	1	1	1	1
Total		553	258	811	410	209	619	29	29	31	31

FOR MORE INFORMATION, CONTACT;

**NATIONAL STD/AIDS CONTROL PROGRAMME,
29, DE SARAM PLACE, COLOMBO 10.
SRI LANKA.**

E-MAIL: info@aidcontrol.gov.lk

WEB : <http://www.aidcontrol.gov.lk>

