HIV/AIDS IN MAURITIUS

REPUBLIC OF MAURITIUS

COUNTRY PROGRESS REPORT
2010

UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV/AIDS DECLARATION OF COMMITMENT

Reporting Period: January 2008- December 2009

NATIONAL AIDS SECRETARIAT
PRIME MINISTER'S OFFICE

Foreword

Mauritius is one of the 189 member states that adopted the Declaration of Commitment on HIV/AIDS at the close of the United Nations General Assembly Special Session (UNGASS) in June 2001. It is with great pleasure and pride that the National AIDS Secretariat, Prime Minister's Office, Mauritius, presents the 2010 Country Progress Report on implementation of the Declaration of Commitment on HIV/AIDS.

This Country Progress Report presents data for a greater number of UNGASS indicators, which is an indication of the progress that has been made in data collection and in the Monitoring and Evaluation of the AIDS epidemic and the national response to it. Mauritius now has a stronger surveillance system in place and investments in the field of Monitoring and Evaluation are beginning to show results.

The Country Progress Report was prepared through a consultative process involving key stakeholders in the national response to HIV. Indicator data were collected from various sources such as programmes within Government Ministries, Non-Governmental Organisations, Private Sector and Multilateral partners. The National Composite Policy Index (NCPI) was completed through a participatory process in consultation with all partners.

I would like to express my gratitude to all partners – ministries, non-governmental organizations, the private sector as well as development partners and all individuals who contributed in the preparation of the Mauritius 2010 Country Progress Report. The National AIDS Secretariat is looking forward to continuing the close and fruitful cooperation with all partners and stakeholders in the national response to HIV and AIDS in Mauritius.

Dr Mrs Amita Pathack
National AIDS Coordinator
National AIDS Secretariat
Prime Minister's Office

Acknowledgement

This 2010 UNGASS Country Progress Report was prepared by the National AIDS Secretariat, Prime Minister's Office, with the support of the Ministry of Health and Quality of Life and the UNAIDS Country Office.

The report is based on contribution made by all key stakeholders involved in the National Response to HIV. Data on the UNGASS indicators were provided by the MOH &QL departments such as the AIDS Unit, National Day Care Centre for the Immuno-suppressed, NEP, MSM and CSW programmes, TB programme, and Central Health Laboratory. Lines Ministries, such as Education, Youth and Sports, Social Security, Labour and Industrial Relation. Women and Child development, Central Statistical Office also made valuable contribution through the NCPI and during the consensus meeting to validate all the data.

As the process was a multi- sectoral one, the contribution of civil society and private sector during consultative meetings and validation workshop need to be highlighted. As a result of their efforts, this report represents their inputs and manifold views of the civil society organisations at various levels.

Technical and managerial support was granted throughout the reporting process by the National AIDS Coordinator, Dr Mrs Amita Pathack and the Officer in Charge of the AIDS Unit, Dr Ahmed Saumtally.

Financial and additional technical support was made available to NAS by the focal point UNAIDS, Dr F. Oodally to conduct consultations meetings.

Specific technical assistance for the NASA was provided by Mr Y .Ramful, Principal Health Economist, MOH &QL.

Data was compiled , analysed and reported by Mrs Juliann Moodley, TSF Consultant; Mr Ramnarain Radhakeesoon ,M&E Officer ,NAS and Mrs Sarah Soobhany. Focal point M&E, MOH&QL,

List of Acronyms

Acronym/ Abbreviation	Meaning
AHC	Area Health Centre
AIDS	Acquired Immuno Deficiency Syndrome
AEN	AIDS Education Nurse
AF	Action Familiale
ANC	Ante Natal Care
ARV	Antiretroviral (anti-HIV drug)
BCC	Behavioral Change Communication
BSS	Behavioral Surveillance Survey
CBO	Community Based Organization
CCM	Country Coordinating Mechanism
CHC	Community Health Centre
CHL	Central Health Laboratory
CoR	Council of Religions
CRIS	Country Response Information System
CSW	Commercial Sex Workers
CUT	Collectif Urgence Toxida, a Network of NGOs working on Needle Exchange Program
FBO	Faith Based Organization
HCT	HIV counseling and testing
HIV	Human Immunodeficiency Virus
HSS	Health System Strengthening
IDUs	Injecting drug users
IOC	Indian Ocean Commission
IBBS	Integrated Behavioural and Biological Surveillance Survey
KAPB	Knowledge Attitude Practice and behaviour
MARP	Most At Risk Population
MBC	Mauritius Broadcasting Corporation
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MFPWA	Mauritius Family Planning and Welfare Association
MIH	Mauritius Institute of Health
MoH &QL	Ministry of Health and Quality of Life
MOSS	Ministry of Social Securities, National Solidarity and Senior Citizen Welfare & Reform Institutions
MST	Methadone Substitution Therapy
MoW	Ministry of Women's Rights
MYS	Ministry of Youth & Sports

Acronym/ Abbreviation	Meaning
NAC	National AIDS Committee
NAS	National AIDS Secretariat
NASA	National AIDS Spending Assessment
NATRESA	National Agency for the Treatment & Rehabilitation of Substance Abusers
NCD	Non-communicable disease.
NDCCI	National Day Care Center for Immuno-suppressed
NEP	Needle Exchange Program
NGO	Non Governmental Organization
NNBA	Nou Nouvo Baz
NRL	National Reference Laboratory
NSF	National Strategic Framework
NWC	National Women's Council
OI	Opportunistic Infection
OVC	Orphan & Vulnerable Children
PEP	Post Exposure Prophylaxis
PI	Prison Inmates
PILS	Prevention Information et Lutte contre le SIDA
PLWHA	People Living With HIV & AIDS
PMO	Prime Minister's Office
PMTCT	Prevention of Mother to Child Transmission
RAS	Rodrigues AIDS Secretariat
RAU	Rodrigues AIDS Unit
SRH	Sexual & Productive Health
SW	Sex Workers
TB	Tuberculosis
UNAIDS	Joint United Program on HIV/AIDS
UNDP	United Nations Development Program
UNFPA	United Nations Population Funds
UNGASS	United Nations General Special Session on HIV and AIDS
UNODC	United Nations Office on Drugs and Crime
VCT	Voluntary Counseling & Testing (for HIV)
WHO	World Health Organisation

Contents

SECTION ONE: STATUS AT A GLANCE

1.1 Introduction and Participation of Stakeholders in the reporting writing process

This is the third report from the Republic of Mauritius to the United Nations General Assembly Special Session (UNGASS): Declaration of Commitment on HIV and AIDS. In preparing the third Country Progress Report, the guidelines on construction of core indicators were followed as outlined in the document on Monitoring the Declaration of Commitment on HIV and AIDS: Guidelines on Construction of Indicators (2009) with minor adaptations to the national situation. The report, therefore, deals with National Commitment and Action Indicators, Knowledge and Behaviour Indicators as well as Impact Indicators.
The HIV and AIDS epidemic in the Republic of Mauritius can be characterised as a concentrated epidemic. The report details examples of best practice in mitigating the impact of HIV and AIDS, presents a brief outline of some of the challenges the country faces in meeting the goals it has set itself and the associated remedial action, it also outlines the role of the development partners in addressing the national response to the epidemic and the Monitoring and Evaluation environment. This approach seeks to build on the flow from the 2008 UNGASS report in a manner that highlights progress made.

With the constant improvement of the monitoring and evaluation system existing, the gaps and weaknesses identified in the second UNGASS report have been addressed to some extent in this report. Almost all of the indicators have been made available from the database of the HIV and AIDS epidemic. The Country's indicators have been harmonised with those of UNGASS in accordance with the definition and interpretation as detailed in the Core Indicator Document 2009. As part of the Country's National HIV and AIDS Sentinel Surveillance Plan, a biological and behavioural survey has been carried out among injecting drug users using the Respondent Driven Sampling method. Data issued from the survey has been used in this current report. Studies with the commercial sex workers and men having sex with men will be undertaken during 2010 and 2011.

Section one of the report present the status of the epidemic and an overview of the UNGASS Indicators. The second section provides an overview of the epidemic, the policies and programmes in place to address the current situation. The third section of the report is divided into three parts: NASA, NCPI and the National Programme Indicators and National performance over the last two years, from 1st January 2008 to 31St December 2009. The fourth section deals with the best practices and the fifth section is about major challenges and remedial actions. The sixth section of the report acknowledges the support of all development partners and section seven is an analysis of the M&E system in the Republic of Mauritius.

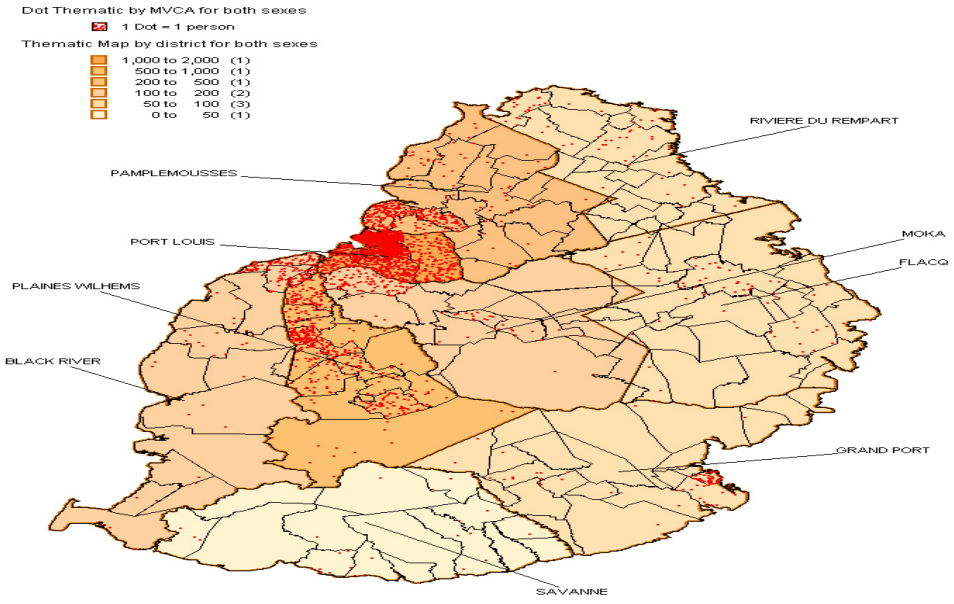
This Country Progress Report represents the broad stakeholder consensus position on the progress made and continuing challenges to meet the UNGASS Declaration of Commitment on HIV and AIDS. The process of compiling the Country Progress Report was taken through various stages of consultation. The initial stage was mainly a preparatory and planning stage; the second stage involved the collection of

data through interviewing key stakeholders from national, organisation-based data sources. The Lines Ministries which participated in providing access to available data were: the Ministries of Health and QL including the Virology Laboratory, Social Security, Finance, Education and the Prisons Department. Other data come from donors and development partners and non- governmental organisations.
All key stakeholders involved in the fight against HIV and AIDS were requested to complete the National Composite Policy Index questionnaire. The first draft Country Progress Report was presented and discussed at the meeting held on the 24th February 2010. The meeting agreed on a further consultative session arranged for the 2nd week of March 2010, to provide a further opportunity for comment and discussion on the pen-ultimate draft report before finalisation. Data verification was also done with all organisations that provided indicator data with a view to presenting a revised report at the abovementioned stakeholder meeting.

The third stage entailed discussion of the revised draft Country Progress Report through a constant exchange of mail by main stakeholders until consensus is reached. The pen-ultimate draft report was revised based on the comments and inputs made by stakeholders. This revised report was then submitted to the National AIDS Secretariat.

1.2 The Status of the Epidemic

Figure One: Distribution of HIV Infection across Mauritius



The Republic of Mauritius had very few HIV positive HIV and AIDS cases prior to 2000, with a range of 20 to 30 new HIV positive cases reported yearly till the end of 2000. During the period 2001-2005 there was a drastic change in the HIV situation, with an exponential rise in the number of detected cases to reach a peak of 921 cases in 2005. The majority (92%) of all new HIV infections in Mauritius by 2005 were injecting drug users. It can be surmised that this change was most likely due to increased HIV testing, particularly among IDUs in various institutions including the prisons and might not necessarily represent a sharp rise of new HIV infection. This situation characterises the epidemic as a 'concentrated' one, with HIV prevalence estimates among ANC women to be below 1% and above 5% among Most at Risk Populations (MARPs),[1] comprising Injecting Drug Users (IDUs), Female Sex Workers (FSWs), and Men having Sex with Men (MSM). The status of the MARPs is as follows:

Table 1: HIV Prevalence of High Risk Groups

Most at Risk Populations	%
Injecting Drug Users (IDUs)	47.4 (IBBS- 2009)
Female Sex Workers (FSWs)	Unknown
Men having Sex with Men (MSM)	Unknown
Prison inmates	Unknown

- ***Injecting Drug Users (IDUs) -*** The role of intravenous drug users (IDUs) play in spreading HIV to the wider population through unsafe sex has been recognised for a long time. This is principally because IDUs have little inclination to utilise condoms. In Mauritius, nearly all IDUs inject opiates/ Subutex and while Mauritius have consistently had the highest prevalence of opiate use in Africa, the incidence of HIV has been relatively low. However, the rate of notified HIV infections has increased rapidly in recent years. In 2007, UNAIDS estimated that the number of people living with HIV was 13,000 (7,000 – 28,000), equivalent to 1.8% (1% – 3.6%) of the adult population (15-49 years).

  For the period 2006-2009 the average number of new HIV positive cases reported annually was approximately 500. Despite fewer cases being reported in the period 2006-2009, the HIV prevalence in the general population increased from <1% in 2003 to 1.8% (around 12,000 people in the 15-49 population) in 2008[2]. Among detected cases as at December 2009, 73% of positive cases are among IDUs[3] .The overall percentage is still alarming and is primarily due to the use of non-sterile needles and syringes and other injecting drug equipment. This mode of transmission remains a critical factor exacerbating the HIV epidemic among drug users worldwide.

- ***Female Sex Workers (FSWs)*** - In general, sex workers have relatively high numbers of sexual partners. This in itself does not necessarily increase their likelihood of becoming infected with HIV –

[1] HIV Sentinel Surveillance, AIDS Unit, MOH &QL

[2] UNAIDS. Accessed on 27 December 2009 at: http://data.unaids.org/pub/Report/2008/mauritius_2008_country_progress_report_en.pdf.

[3] HIV sentinel Surveillance , AIDS Unit,MOH& QL.

if they use condoms consistently and correctly then they will probably be protected no matter how many people they have sex with. The reality, however, is that sex workers and their clients do not always use condoms. In some cases, this is because sex workers have no access to condoms, or are not aware of their importance. In other cases, sex workers are simply powerless to negotiate safer sex, even if they try to do so. Clients may refuse to pay for sex if they have to use a condom, and use intimidation or violence to enforce unprotected sex. They may also offer more money for unprotected sex – a proposal that can be hard to refuse if the sex worker in question is in desperate need of an income.

According to law "soliciting or importuning another person in a public place for an immoral purpose is considered as an offence punishable either by imprisonment for a term not exceeding 12 months or a fine not exceeding 5,000 rupees. Research conducted by the Ministry of Women, family welfare, child development and consumer protection, on prostitution among minors in 1998 and 2002, indicated that the regions where sex work is concentrated are Port-Louis and its suburbs, Rose-Hill, Beau-Bassin, Quatre-bornes and Curepipe, Tourists centres and coastal region (e.g Grand-bay in the northern part of the island, Flic en Flac in the west, Flacq in the east and Mahebourg in the south). 2,600 girls below the age of 18 are currently exploited in commercial sex. Reports indicate that children generally enter prostitution between the ages of 10 and 17, the average age being 13. Child prostitution is quite prevalent in Port Louis, the capital city, and also occurs in other regions of the country, such as Rodrigues. Most of the demand for sex with children comes from local perpetrators.

Gender norms, the increased risk of violence, stigma and discrimination, poor work environments, and lack of legislative frameworks all play a critical role in intensifying vulnerability to HIV infection for those engaged in sex work. Deeply entrenched social standards marginalize sex workers and seriously limit their access to quality health services, particularly STI management.

High rates of infection among sex workers may not only be due to multiple partners but rather due to a combination of factors that compound this risk. Multiple approaches are therefore, necessary to prevent HIV/STI among sex workers and their partners, as experience and data show there is no single determinant risk for infection (e.g. lack of information, low self-esteem, or lack of social support, drug dependant). There is a myriad of inter-related factors (e.g. individual, relational, socio-cultural, and environmental-structural) that influence HIV-related risk behaviour, all of which must be recognized and addressed in order to curb this epidemic.

- ***Men having Sex with Men (MSM)*** – In Mauritius like in many countries, men who have sex with men are less visible and are most difficult to reach. Sex between men is stigmatized and officially denied. This adds to the vulnerability of men who have sex with men, and it is challenging to carry out relevant HIV prevention campaigns. In Mauritius although homosexuality is tolerated, men who have sex with men often hide their same-sex relations from their friends and families to avoid persecution. Many are bisexual and married, and this means that they may transmit HIV to their female partners if they become infected.

Addressing the lack of services for marginalized groups in the global HIV epidemic, including men who have sex with men, Ban Ki-moon, the UN Secretary-General remarked, "not only is it unethical not to protect these groups; it makes no sense from a health perspective. It hurts all of us".

In Mauritius there is growing evidence that transmission through MSM is a significant problem. Though data from Mauritius is severely lacking, studies of African men who have sex with men have shown that unprotected anal sex is common place and HIV prevalence among men who have sex with men is as high as 25.3% in some African countries. To address this situation the AIDS Unit, MOH and QL, have developed a network of LGBT in 2000 (lesbian,Gay,Bisexual, and Transgender), where regular awareness session, HIV testing and condom distribution were organized. In 2006, in spite of opposition from various segment of the Mauritian Society, an NGO for LGBT "Collectif Arc en Ciel was launched. UNAIDS had a regional project in its 2008-2009biennium and because of varied issues, the project has finally been postponed to 2010.

1.3 UNGASS Indicator Data

Table 2: Overview of the UNGASS Indicators

Indicator	2008	2009	Data Source
National Commitment and Action			
Indicator 1: Domestic and international AIDS spending by categories and financing sources	2008		See Annex A
Indicator 2: National Composite Policy Index (Areas covered: gender, workplace programmes, stigma and discrimination, prevention, care and support, human rights, civil society involvement, and monitoring and evaluation)		Completed	See Annex B
National Programmes (blood safety, antiretroviral therapy coverage, prevention of mother-to-child transmission, co-management of TB and HIV treatment, HIV testing, prevention programmes, services for orphans and vulnerable children, and education)			
Indicator 3: Percentage of donated blood units screened for HIV in a quality assured manner	100% (42713)	100% (42196)	The Mauritius Virology Department, Central Health Laboratory, Candos
Indicator 4: Percentage of adults and children with advance HIV infection receiving antiretroviral therapy	35.6% (491)	41% (652)	National Day Care Centre for the Immuno-suppressed, MOH &QL (Patients Register)
Indicator 5: Percentage of HIV positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission	52.6%	68.3%	National Day Care Centre for the Immuno-suppressed, MOH &QL (PMTCT Register)

Indicator	2008	2009	Data Source
Indicator 6: Percentage of estimated HIV-positive incident TB cases that received treatment for TB and HIV	100% (10)	100% (7)	TB Consultant, Dr Rujeedawah, Chest Clinic, Port-Louis
Indicator 7: Percentage of women and men aged 15-49 who received an HIV test in the last 12 months and who know their results	42%[4]		National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008
Indicator 8: Percentage of most-at-risk populations that have received an HIV test in the last 12 months and who know their results			
Injection Drug Users		74.8%	Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009
Commercial Sex Workers		100%	Programme Data
Prison Inmates	85%		Prison Statistics
Indicator 9: Percentage of most-at-risk populations reached with HIV prevention programmes			
Injection Drug Users	14.2%	15.4%	The Mauritius Virology Department, Central Health Laboratory, Candos[5]
Commercial Sex Workers	6.8%	4.1%	MOH, AIDS Unit 2009[6]
Indicator 10: Percentage of orphaned and vulnerable children aged 0 – 17 years whose households received free basic external support in caring for the child.	100%	100%	Ministry of Social Security Statistics
Indicator 11: Percentage of schools that provided life skills based HIV education in the last academic year	87%		National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius, 2008
Knowledge and Behaviour			
Indicator 12: Current school attendance among orphans and among non-orphans aged 10-14 years		83,314	Economic and Social Indicators (Education), 2009
Indicator 13: Percentage of young women and men aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	85%		National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius.2008
Indicator 14: Percentage of most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission		13.5%	Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009 **(Data available for IDUs only)**

[4] This study reflects only on the 15 – 24 age group

[5] All that take up a VCT test are given prevention messages, hence of an estimated population of 9253 IDUs, there were 1317 specimens from IDUs in 2008 and 1432 in 2009. The assumption made is that the IDUs that were tested received the prevention message.

[6] Of the 4800 CSWs, the MOH conducted prevention programmes with 330 in 2008 and 200 in 2009.

Indicator	2008	2009	Data Source
Indicator 15: Percentage of women and men aged 15-24 who have had sexual intercourse before the age of 15	7.3%		National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008
Indicator 16: Percentage of women and men aged 15-49 who have had sexual intercourse with more than one partner in the last 12 months	12.8 %		National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008
Indicator 17: Percentage of women and men aged 15-49 who had more than one partner in the last 12 months reporting the use of a condom during their last sexual intercourse	34.3%[7]		National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008
Indicator 18: Percentage of female and male sex workers reporting the use of a condom with their most recent client	NA	NA	IBBS scheduled in 2010
Indicator 19: Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	NA	NA	IBBS scheduled in 2010
Indicator 20: Percentage of injecting drug users reporting the use of a condom the last time they had sexual intercourse		30.8%	Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009
Indicator 21: Percentage of injecting drug users reporting the use of sterile injecting equipment the last time they injected		71.7 %	Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009
Impact			
Indicator 22: Percentage of young people aged 15-24 who are HIV-infected	0.52%	0.31%	ANC data, Central Health Laboratory, Candos
Indicator 23: Percentage of most-at-risk populations who are HIV infected **-IDUs**		47.4%	Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009 **(Data available for IDUs only)**
Indicator 24: Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	93%		National Day Care Centre for the Immuno-suppressed, MOH &QL (Patients Register)

[7] This study reflects only on the 15 – 24 age group

SECTION TWO: OVERVIEW OF THE AIDS EPIDEMIC

2.1 Context

In recent years, Mauritius has been experiencing a preoccupying exponential increase of its HIV/AIDS infection rate, with a prevalence of more than 5% among Intravenous Drug Users (IDU), and an overall upward trend estimated at 1.8% within the 15-49 age group for 2007. Erratic compliance with Prevention of Mother to Child Transmission (PMTC) prophylaxis, observed in the case of pregnant sex workers on intravenous drug use, also adds further cause for concern. Over an estimated 12,000 HIV positive persons, only 4,000 have been detected, out of which only 2,000 are being actively followed up. The persistence of risk-taking behaviours among Most at Risk Populations (MARPs) and their implications for a potentially rapid extension of the disease to the wider population now place Mauritius in a situation of emergency which will require the sustained mobilization and close coordination of all national stakeholders.

Aware of this necessity, the Government of Mauritius and NGOs jointly undertook, with the support of **UNDP**/**UNAIDS** and **WHO**, the development of a National Multi-sectoral Strategic Framework (NSF) for 2007-2011. To accompany the various phases of its implementation, a Multi-sectoral Communications Strategy was also formulated with the technical assistance of UNAIDS. In May 2007, a National AIDS Secretariat (NAS) was officially established, and positioned as lead coordinator of the national response, in line with the "Three Ones" Principle advocated by UNAIDS. The proclamation, in August 2007, of an HIV/AIDS Act marked yet another crucial step in the building of a conducive legal and institutional framework, and created the basis for a wider consensus and stronger unity of action among national State and non-State stakeholders. An immediate positive effect of this legislation has been the introduction of a Needle Exchange Programme (NEP) rolled out by the Ministry of Health, and relayed on the ground by a network of partner NGOs. Significant progress has also been registered from a harm reduction perspective, with the launch of a Methadone Substitution Therapy (MST) Programme in November 2006, which also received technical assistance from UNAIDS and WHO.

2.2 Strategic directions

The adoption of a Strategic Framework for HIV/AIDS 2007-2011 provides the national vision, goals, objectives and broad strategies to guide the country's response. Plans developed and implemented under the framework are expected to demonstrate greater creativity and responsiveness ensure flexibility and promote more realistic and focused targeting of interventions. The framework respects the evolving nature of an HIV & AIDS epidemic and accommodates the dynamics of such a changing environment.

Advocacy by the National Authorities with UN Support made access to Global Fund resources available after eligibility criteria were reviewed and access granted to countries with concentrated epidemic.

The National Strategic Framework for HIV/AIDS 2007-2011 responds to the identified national priorities, thus providing the means for a rapid response to reverse the present course of the epidemic, especially among the IDU population. The National HIV/AIDS Strategic Framework (NSF) 2007-2011 recognizes that mitigating the epidemic is a long-term investment of time, effort and resources. The NSF implemented in August 2007, is currently due for midterm review.

2.2.1 National Priorities

The national priorities identified in the National HIV/AIDS Strategic Framework 2007 encompass a number of key themes such as:

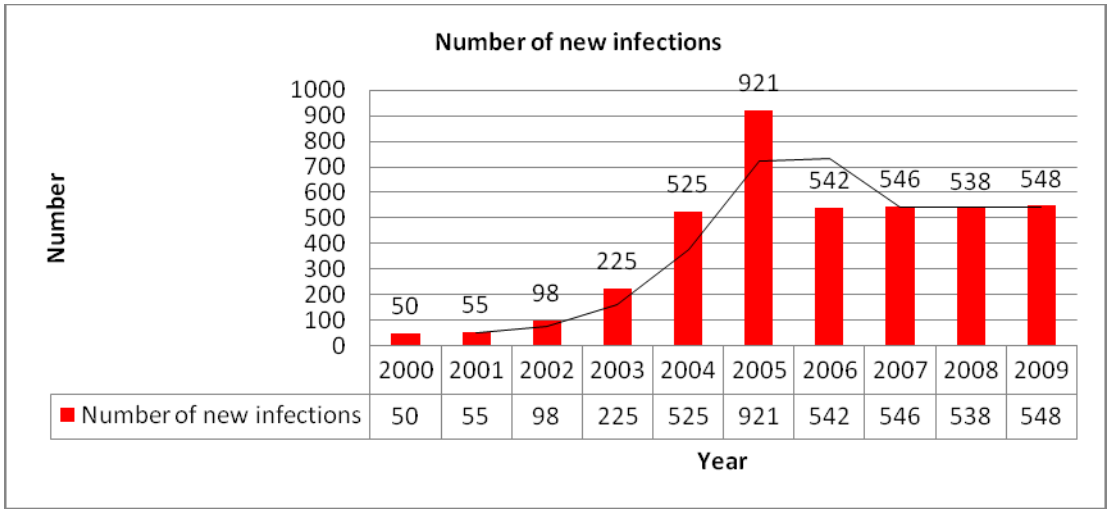
- To strengthen the National Coordination, management and resource mobilization in line with the "Three Ones Principles".
- To strengthen the generation and appropriate use of strategic information of the epidemic
- To improve the quality of life of PLWHA through effective and efficient comprehensive treatment, care and support.
- To create an enabling environment for sustained behavioural change for the population at large.
- To minimize the transmission of HIV among IDU's, PIs and SWs through intensified primary prevention efforts.
- To reduce transmission of HIV and AIDS among women, men who have sex with men, STI clients and mobile populations
- To create and sustain an enabling environment to fight stigma and discrimination associated with HIV&AIDS
- To strengthen the health system for an optimal response to the epidemic
- To address the social, economic and environmental HIV and AIDS vulnerability.

2.3 Situational Analysis

2.3.1 Epidemiology

The HIV/AIDS epidemic in Mauritius started in 1987 when the first HIV-positive was detected. The progression was thereafter stable until 2000 when the incidence increased by 100 %. This rate of the increase in annual HIV incidence has persisted until 2005 when the epidemic seemed to reach a plateau and this is further confirmed by the number of cases detected in 2009.

Graph 1: Number of new HIV cases detected



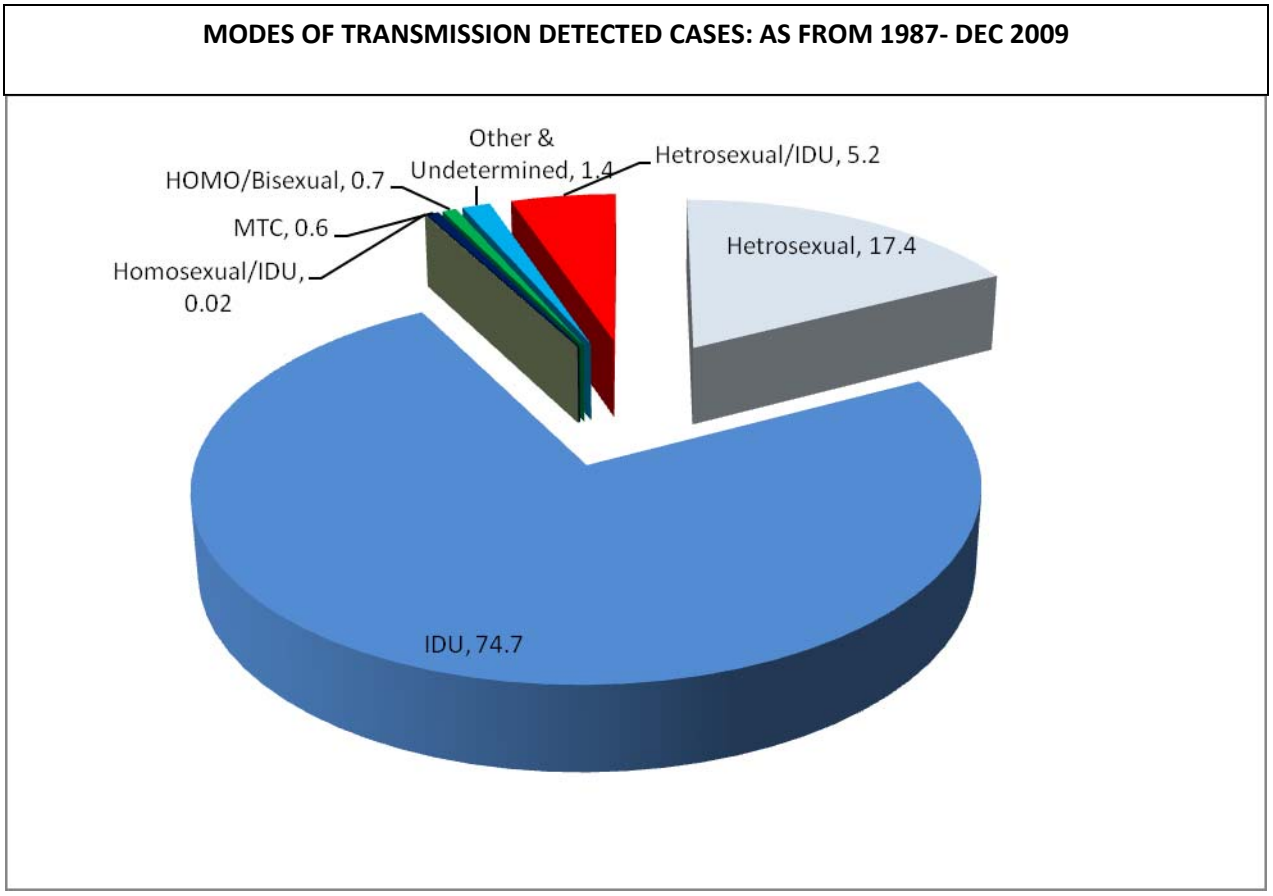
Total number of new infections among Mauritians per year, [AIDS Unit, MoH - 2010]

As at December 2009, 4,396 cases of HIV/AIDS have been detected cumulatively, out of which 4,219 are Mauritian (3,430 males and 789 females). The total number of known deaths registered among PLWHA is 281 (222 males and 59 females). At present, there are 3938 recorded / detected cases (3,208 males and 730 females) of Mauritian living with HIV/AIDS.

Parallel to the exponential rise in the number of new cases detected there has been a significant shift in the reported mode of transmission of HIV from heterosexual to Injecting Drug Users (IDUs). In the year 2000, only 2% of the new infected cases were among IDUs, this increased to 14% in 2002, 66% in 2003, and by 2005, 92% of all new infections were IDUs. The number of new infections amongst IDUs declined in 2006 to 85.9% and 73% over the last two years. The corresponding decline in the IDU population means that there is an increase in new infections amongst the heterosexual population. This permeation into the general population is confirmed by the increase in the prevalence of HIV infected pregnant women, (from 0.1 in 2004 to 0.48 in 2008[8] and 0.40 in 2009), thus increasing incidence amongst newborns.

[8] Health statistics Report, 2008, MOH &QL

Graph 2: Mode of Transmission



From the information that is available, it's clear that HIV is a significant burden to communities of IDUs in Mauritius. Currently, injecting drug use comprises the bulk of HIV infections in Mauritius. Whereas in 2002 injecting drug use accounted for 14% of all new HIV infections in Mauritius, this percentage increased dramatically to 92% in 2005.[9] Among detected cases as at December 2009, 73% of positive cases are among IDUs.[10] The use of non-sterile needles and syringes and other injecting drug equipment is an extremely efficient mode of HIV transmission and remains a critical factor exacerbating the HIV epidemic among drug users worldwide. In the absence of early prevention measures, HIV can quickly enter the IDU population and rapidly spread to other populations.[11]

The homosexual and bi-sexual population account for a small proportion of the new infections, mainly because these sub-population groups are difficult to reach. Though lately there has been an increased coverage in certain newspaper "Defi Plus" and films broadcasted by the Mauritius Broadcasting Coorperation,stigma and discrimination still exist.

[9] UNAIDS. Accessed on 27 December 2009 at: http://www.unaids.org/en/CountryResponses/Countries/mauritius.asp.
[10] HIV Sentinel Surveiilance, AIDS Unit, MOH &QL
[11] Integrated Behavioral and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009

Table 3: Status of Blood Specimens tested

Category	No of Specimens		New HIV Positive		Male		Female		
	2008	2009	2008	2009	2008	2009	2008	2009	
ANC	15687	15026	47	32	0	0	47	32	100
Donors	42713	42196	19	6	19	5	Nil	1	100
IDU	1317	1432	206	198	165	169	41	29	85
CSW	244	131	12	5	0	Nil	12	5	100
Prison Inmates	4113	4466	191	219	186	213	5	6	50
MSM	13	25	1	4	1	4	0	0	100
Total	85152	83354	538	548	402	436	136	111	

The data contained in Table 3 reflects the number of specimens. As there is no unique identifier, it is difficult to establish the exact number of people being tested. It was established from the interviews that IDUs may often undertake multiple tests, prison inmates would be subjected to an HIV test during incarceration. This could happen several times a year if the person is in frequent conflict with the law. The information that is reflected in Table 3, indicates that of the total number of specimens tested 85152 in 2008, 538 were positive and in 2009 of the 83354 specimens tested 548 were positive.

Age and Sex Distribution of detected HIV-positive persons

Table 4: Age Distribution

Age Group	%
15 - 24	**17.6 %**
25 - 39	**54.6%**
15 - 39 (Total)	**72.2 %**

The sex ratio among the cumulated number of HIV cases is 4.3 male to 1 female. However, the women's vulnerability is acute; they are infected as a consequence of their partners being IDUs and/or having sex with multiple concurrent partners. All the three known factors that increase women's vulnerability to HIV, namely biological, epidemiological and social are factors contributing in increasing transmission of HIV in this group, in Mauritius.

HIV/AIDS and Children

As at December 2009, 21 children were detected HIV positive among whom 4 have died. Eight were born before the implementation of the Prevention of Mother to Child Transmission (PMTCT) and diagnosed through contact tracing. The exact number of orphans to HIV infection is estimated as being quite low but a more thorough assessment remains outstanding. There are currently 8 children on ARV

2.3.2 Treatment

Antiretroviral drugs (ARV) were introduced as prophylactic treatment in December 1999, within the Prevention of Mother To Child Transmission (PMTCT) programme and the Post Exposure Prophylaxis (PEP) protocol for accidental injuries and for victims of rape. Since April 2002 the combined ARV therapy has been provided free of charge to all patients. This treatment is presently being provided through the National Day Care Center for the Immuno-suppressed [NDCCI], which is a public health institution. The number of patients under ART has increased steadily from 20 patients in 2002 to 725 patients as at December 2009. The treatment protocol was revised in 2009 and patients are currently benefiting from an ARV protocol based on European ARV guidelines. Drugs are being purchased via international tendering. Current ARV protocols are being administered using a combination of generic and brand molecules.

2.3.3 PMTCT Programme

The Prevention of Mother To Child Transmission (PMTCT) was initiated in December 1999, through a pilot project supported by the National Agency on AIDS Research (NAAR) and later sustained by the MOH & QL. In 2009, a new PMTCT protocol was introduced to improve management of HIV + pregnant mothers. Though there has been an increase of 15.7% in the uptake of PMTCT in 2009, non-adherence from IDU pregnant mothers is the main issues and innovative strategies need to be put in place to reach a 100% uptake of PMTCT.

SECTION THREE: NATIONAL RESPONSE TO THE AIDS EPIDEMIC

3.1 Indicator 1: Domestic and international AIDS spending by categories and financing sources (See Annex A)

3.2 Indicator 2: National Composite Policy Index (Areas covered: gender, workplace programmes, Stigma and discrimination, prevention, care and support, human rights, civil society involvement, and monitoring and evaluation) (See Annex B)

3.3 Indicator 3: Percentage of donated blood units screened for HIV in a quality assured manner

The Blood Bank, Central Health Laboratory is located in the premises of the Regional Hospital at Candos and caters for the whole island. For the reporting period the total number of units donated was 42,713 in 2008 and 42,196 in 2009. The Central Health Laboratory relies on a pool of voluntary blood donors and organised regular mega blood donations sessions across the island.

The service has Standard Operating Procedures (SOP's) as well as a rigorous Quality Assurance programs. 100% of donated blood units are tested for HIV, Hepatitis B and Hepatitis, C HBsAg and for syphilis (TPHA).

Quality control and assessment of blood Units for transfusion.

The Virology Department runs a very comprehensive screening programme for Transfusion Transmisible infections (TTI). The TTI section of the Virology Department is manned by a Senior Medical Laboratory Technician with more than 20 years experience and shouldered by two Medical Laboratory technicians.

Pilot blood samples are collected from blood donors and these samples have the same accession number to the blood bag in which the donated blood is collected.

On receipt, the samples are placed in numerical order and then a testing protocol is put in place. Samples to be tested are then labelled on a template that corresponds to a 96 well Microtitre plateplate. This template also contains 6 controls to validate the test being run. These controls include 5 controls that are provided in the testing kit and 1 internal control that has been prepared in the laboratory with a specific antibody concentration measured on a spectrophotometer by the team working on routine HIV testing section.

The first 5 controls are placed in consecutive wells in the first column. The internal control is randomly included in one well in the 96 well microtitre plate. controls are set as follows: 2 positive controls, one with a high value and a second one with a low value and 3 negative controls. The samples to be tested are then dispensed in each well according to the template that has been filled.

The tests are performed according to local SOP and then the results are recorded as per protocol. Values can be either :

(1) Clearcut negative

(2) Grey zone

(3) Clearcut positive

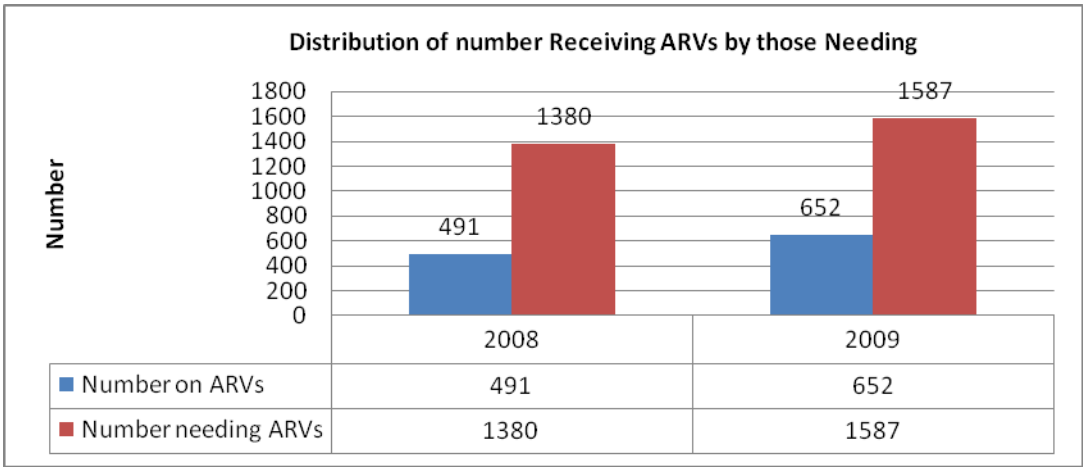
The Grey Zone and the Clearcut positive are repeated and if found positive are then referred to the HIV section for further testing by ELISA. If found HIV positive, the samples are confirmed by Western Blot. A repeat sample is then requested for confirmation.

The results are then transmitted electronically to the Blood Transfusion service.

In addition to Internal Quality Assurance for HIV, the Virology Department also participate in an external Quality assurance scheme. This scheme is run by the NICD (National Institute for Communicable diseases) In South Africa. This scheme runs twice yearly, once in March and the second one in October of each year.

3.4 Indicator 4: Percentage of adults and children with advance HIV infection receiving antiretroviral

Graph 3: ***Number of*** adults and children with advance HIV infection receiving antiretroviral Therapy **35.6 in 2008 and 41% in 2009 .**



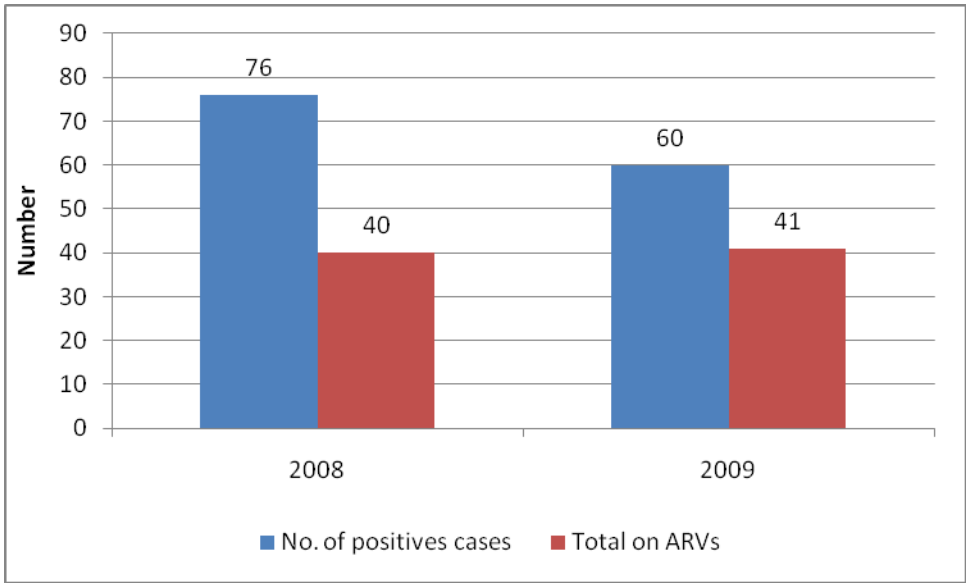
The estimated number of people needing treatment (children and adults) in Mauritius was 1,380 by the end of 2008 and 1587 by the end of 2009. Out of 491 (35.6%) enrolled in the ART programme in 2008 and 652 (41%) in 2009. Approximately 82% of the people receiving treatment were male and 18% female for both years. Currently 8 children (<15years) are on treatment (2 F, 5M).

The proportion of HIV-infected persons who need ART in a given year is linked to the evolution of the epidemic within the country and changes over time as the epidemic matures.

The public health sector has continued to ensure universal coverage for persons in need of ART. By the end of 2009, the Day Care Centre for the Immuno-suppressed was decentralised. Actually there are 2 public health facilities providing the comprehensive services to PLWHA. Further decentralisation of services are scheduled for the year 2010-2011.
These facilities are linked to the Mauritius Virology Department, Central Health Laboratory who is responsible for conducting CD4 count tests, the viral load tests and the Polymerase Chain Reaction (PCR). Laboratory services are critical elements of this programme. Despite the progress being made, some of the main challenges that need to be addressed in the scaling up of services include recruitment of adequate numbers of human resources, and strengthening of national health information systems.

3.5 Indicator 5: Percentage of HIV positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission

Graph 4: Number of HIV positive pregnant women who received antiretrovirals



The overall HIV prevalence amongst pregnant women of ANC in 2009 is 0.4% of which 0.31% is in the 15-24 age group and 0.45% is in the 25-49 year age group.

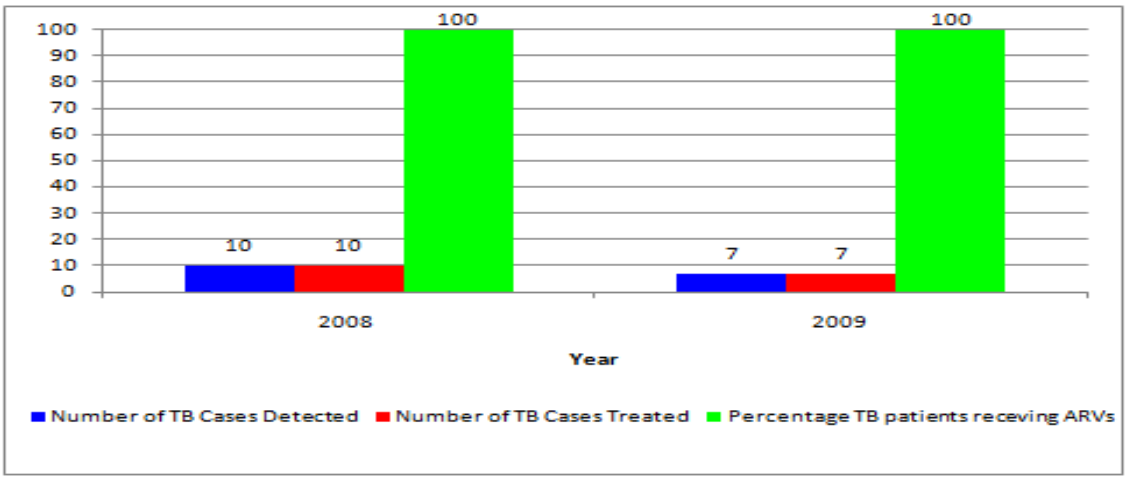
Based on the antenatal statistics the number of HIV+ women in 2008 and 2009 were 76 and 60 respectively. The total number of HIV+ pregnant women identified and enrolled into the PMTCT programme in 2008 was 40 resulting in a 52.6% uptake and for 2009, it was 41 (68.3%). Overall there was an increase from 2008 to 2009 of 15.7 % in the women who received ARVs in the PMTCT programme.

3.6 Indicator 6: Percentage of estimated HIV-positive incident TB cases that received treatment for TB and HIV

The prevalence of co-infected HIV-TB cases in the population of TB patients is very low as compared to other regions (3.9 in South-east Asia, 4.7% in Europe and 33 % in Africa). In 2008 a total number of 10 cases were registered and in 2009 7 cases were recorded. Most of the cases were male.

The major co-infection that is a matter of concern for the Government of Mauritius is the rate of Hepatitis B and C among the IDUs.

Graph 5: Number of HIV positive incident TB cases that received treatment for TB and HIV



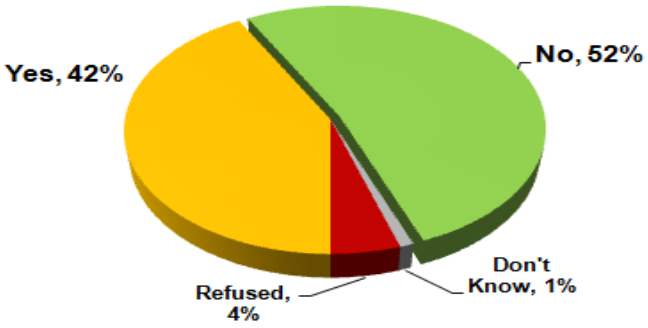
3.7 Indicator 7: Percentage of women and men aged 15-49 who received an HIV test in the last 12 months and who know their results.

The data reflected in Graph 6 is based on the National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius in 2008. The following results have emerged:

- In the sample interviewed, 127 (12.7 %) reported that they have had an HIV/AIDS test done in the last 12 months.

- Of those who took an HIV/AIDS test in the last 12 months, 42% claimed to have had received the results of the test against 52%.
- Among respondents who have done an HIV/AIDS Test in the past 12 months, it is noted that 35% of them did so voluntarily whereas the rest undertook the test either during a procedure (42%) or a follow-up visit to the doctor (2%).[12]

Graph 6: Number of women and men aged 15-24 who received an HIV test in the last 12 months and who know their results



n = 1000

3.8 Indicator 8: Percentage of most-at-risk populations that have received an HIV test in the last 12 months and who know their results

Table 5: Number of IDUs that have received an HIV test in the last 12 months and who know their results

Has ever had an HIV test	N	%
No	208	42.0
Yes	303	58.0
Participant received HIV test result at last testing		
No	75	25.2
Yes	228	74.8
HIV test result among those who received a result		
Negative	184	79.9
Positive	42	20.1

- Among the 42% of IDUs who reported ever having an HIV test, almost three quarters of them received their test result. For those who did receive their test result, 79.9% tested negative for HIV antibodies[13]

[12] National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008
[13] Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009

- The reasons provided by the majority (52%) of IDUs who reported never having had a HIV test (n=208) was because they did not know where to go (26.7%), followed by not feeling at risk for HIV (22.6%), and it not being important for them (22.2%). Eighteen percent of IDUs reported that they never had an HIV test because they were afraid of learning their status. Few IDUs reported not ever having an HIV test due to concerns about not liking the staff or that the testing site was too inconvenient to get to (8.2%).

Programmatic Data

- The total number of specimens received for FCSWs was 244 in 2008 and 131 in 2009 of whom 12 and 5 were positive for the respective years. It is most likely that the number of specimens tested equals the number of people as repeat tests are not frequent occurrence. All the commercial sex workers taking the test know their results
- The total number of specimens received for MSMs was 13 in 2008 and 25 in 2009 of whom 1 and 4 were positive for the respective years. It is most likely that the number of specimens tested equals the number of people as repeat tests are not frequent occurrence
- The total number of specimens received for Prison Inmates was 4113 in 2008 and 4466 in 2009 of who 191 and 219 were positive for the respective years. Eighty- five percent of the prison inmates know their results. The remaining 15% who did not get their results is due to release from prison prior to the results being available.
- During its outreach programme (July - December 2009) PILS, carried out 85 test among FCSW out of which 25 were positive. Rapid Tests were done and all received their results.

3.9 Indicator 9: Percentage of most-at-risk populations reached with HIV prevention programmes

IDUs: Each IDU accessing the NEP Programme have the opportunity of benefitting from a prevention services, for e.g pamphlets, counselling , condoms and referral to other services. In the period May 2008- June 2009 , 4300 IDUs accessed the NEP services.

CSW: The programme implemented by the MOH&QL indicated that prevention programmes were held with 330 CSW in 2008 and 200 CSWs in 2009. The outreach is fairly low amongst CSWs and there is a need to increase interventions among this vulnerable group.
PILS outreach interventions (July-December 2009) targets 130 sex workers .

MSM:, MSM network at the AIDS Unit, MOH &QL, reached about 200 with prevention activitiesin 2008-2009.
The only LGBT NGO, Collectif Arc en Ciel reached about 500 LGBTs in its Gay Rally in 2008.

3.10 Indicator 10: Percentage of orphaned and vulnerable children aged 0 – 17 years whose households received free basic external support in caring for the child.

Table 6: Number of orphaned and vulnerable children aged 0 – 17 years whose households received free basic external support in caring for the child.

Children receiving Social Aid by social status,age group & sex Republic of Mauritius 2008												
Age-Group Years	**Children living with lone parent**			**Abandoned/deserted children**			**Other Children**			**Total**		
	Male	Fem	**Both sexes**	Male	Fem	**Both sexes**	Male	Fem	**Both sexes**	Male	Fem	**Both sexes**
<5	1,217	1,111	**2,328**	111	130	**241**	632	606	**1,238**	**1,960**	**1,847**	**3,807**
5-9	1,370	1,390	**2,760**	204	251	**455**	884	774	**1,658**	**2,458**	**2,415**	**4,873**
10-14	1,485	1,537	**3,022**	270	284	**554**	1,111	999	**2,110**	**2,866**	**2,820**	**5,686**
15-19	835	923	**1,758**	144	165	**309**	444	498	**942**	**1,423**	**1,586**	**3,009**
Total	**4,907**	**4,961**	**9,868**	**729**	**830**	**1,559**	**3,071**	**2,877**	**5,948**	**8,707**	**8,668**	**17,375**

In the Republic of Mauritius there is a universal scheme for all orphans irrespective of their socio-economic status. If registered as an orphan or vulnerable child (abandoned, parent in prison etc), the latter will benefit from a range of social aid.

- Financial Aid
- Education is free at primary and secondary level
- Transport to educational institutions is provided free to all students
- Assistance with school books
- Assistance for examination fees
- Free distribution of school kit in needy areas of the island.

3.11 Indicator 11: Percentage of schools that provided life skills based HIV education in the last academic year

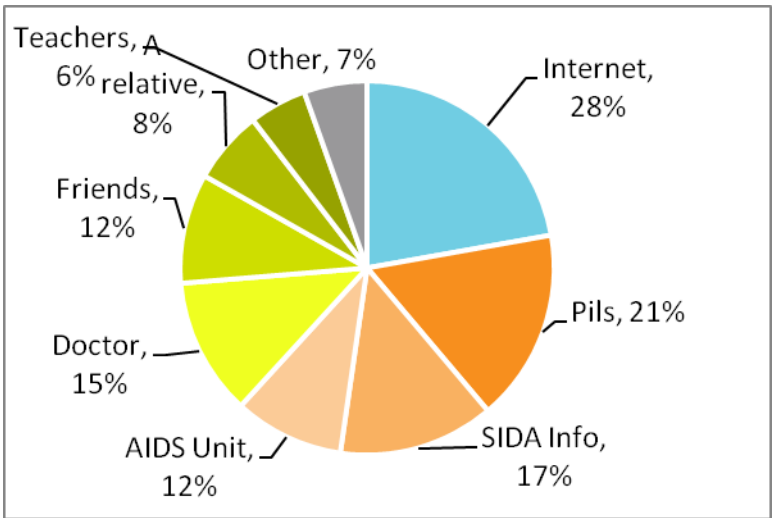
The Republic of Mauritius had a total of 302 primary and 179 secondary schools. Enrolment in 2008 in primary school was 119022 of which 58329 were female and 60693 were male and in 2009 the enrolment was 117922 of which 59,948 were male and 57,974 were female. The enrolment in 2008 in secondary was 116503 of which 60630 were female and 55873 were male and in 2009 the enrolment was 116226 of which 55,389 were male and 60837 were female[14].

The in-school HIV & AIDS education is challenged by policy inertia. For years the multisectoral members have tried to get the commitment of the Ministry of Education in the fight against HIV and AIDS. For years advocacy to mainstream HIV/AIDS issues in school curriculum has remained unsuccessful.

Recently the Ministry of Education has announced the introduction of "Sexual Education" in the Curriculum at the level of Secondary schools. This is being done in view of a more effective integrated life skills education in the school curriculum. This is a good initiative but a survey need to be carried out in the next two year to establish implementation, knowledge, and behavioural change.

.

Graph 7: Source information[15]



[14] Economic and Social Indicators (Education), Central Statistical Office, 2009

[15] National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008

- The National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius indicates that when and if information with regards to HIV/AIDS is required, the major source of information will be through AIDS organizations such as PILS, SIDA Info or AIDS Units (50%), then Internet (28%), and finally through friends / relatives / teachers (26%) and doctors (15%).

  It is noted that the family is an essential vector in developing a tolerant attitude towards HIV/AIDS. Family discussions created a level of awareness and encouraged the youth to take more precautions.
- The National Study on Knowledge, Attitudes, Behaviors and Beliefs notes that only 6% of the information comes from teachers. Despite this low figure data from the KABB, 2008 indicates that agencies such as Pils (21%) the MOH Aids Unit (12%) and the Mauritius Family Planning and Welfare Association (18%) provide HIV prevention programmes to schools.[16]

Table 7: Programmatic data – Yr 2009

	Number of school covered	**Number of sessions**	**Number of students reached**
AIDS Unit, MOH &QL	76 (Secondary)	169	11,271
MFPWA	26 (Primary) 18 (Secondary)	79 30	4,144 2,282
NATReSA	13 (Secondary)		1,750

The Ministry of youth and sport in collaboration with UNFPA and MFPWA has organised in March 2009, a workshop with 100 in – school youth on various theme pertaining to Life Skills (teenage pregnancy, STIs and HIV, Human Values, problem-solving skills and decision making.

- Although the coverage of life skills programmes in schools to date is approximately 87%, the following is unknown:
  - The programme content
  - The percentage of the life skills curriculum that focuses on HIV and AIDS issues
  - The method of delivery of life skills education
  - The time spent and the frequency of programme
  - The technical capacity of the educator to deliver the HIV and AIDS life skills programme

[16] Mauritius Family Planning and Welfare Association , 2009

3.12 Indicator 12: Current school attendance among orphans and among non-orphans aged 10-14 years

In the Republic of Mauritius schooling is mandatory up to 16 years old. Though there is no system in place to verify if all children are attending school, non-attendance are tackled by NGOs and CBOs on a case to case basis. Nevertheless Mauritius has a literacy rate of 85% among the 12+

Data available for this indicator comprised of school attendance for both orphans and non-orphans,

Table 8: Current school attendance among students aged 10-14 yrs

Grade	Number of students	Age group (YRS)
CPE (Certificate of Primary Education)	18,282	10-11 yrs
Repeaters (CPE)	4,312	12 yrs
Prevocational	8,033	12-13 yrs
Form I	16,809	12 yrs
Form II	17,246	13 yrs
Form III	18,632	14 yrs
Total	83,314	10-14 yrs

3.13 Indicator 13: Percentage of young women and men aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission[17]

- According to respondents, HIV/AIDS transmission is especially associated with 'having non-protected sex with multiple partners' and 'sharing syringes/needles'
- 44% of the interviewees are aware that HIV/AIDS can be transmitted from mother to child if the latter is HIV positive.
- Overall, respondents seem to be relatively well-informed (87%) about the most common ways of the disease transmission. Females (88%) seem to be slightly more aware than their male counterpart (86%)
- These are still a few misconceptions about HIV/AIDS transmission: through mosquito bites, by smoking marijuana, sniffing drug, sitting next to an HIV infected people and it can be caught in the air.

[17] Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009

3.14 Indicator 14: Percentage of most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission

Few IDUs were able to describe signs and symptoms of STIs in females and males and aggregated HIV transmission knowledge[18] was low. Although, 98.9% of IDUs answered correctly in response to the question about whether someone could be infected with HIV by 'getting injections with a needle that was already used by someone else', IDUs still have incorrect knowledge about sexual risk behaviours related to HIV transmission.

IDUs have extremely low levels of aggregated knowledge (12.8%) about HIV transmission. For disaggregated HIV transmission knowledge, IDUs are knowledgeable about the risks associated with sharing needles which corresponds with a high percentage of IDUs reporting that they clean their needles before reusing them. IDUs reported low knowledge of sexual risks associated with HIV transmission. Given that most IDUs reported having sexual intercourse in the past three months, there is an urgent need for widespread education about reducing sexual risks associated with HIV and other STI infections. An introduction to some HIV education should be initiated during primary school to capture potential IDUs, the majority of which (43.3%)[19] only completed up to primary school.

3.15 Indicator 15: Percentage of women and men aged 15-24 who have had sexual intercourse before the age of 15[20]

Table 9: Women and men aged 15-24 who have had sexual intercourse before the age of 15

Age	Numerator		Denominator		Result (%)	
	Male	Female	Male	Female	Male	Female
15-19	32	15	141	60	22.7	25.0
20-24	18	8	164	110	11.0	7.3
Total	50	23	305	170	16.4	13.5

[18] Correct HIV tranmission knowledge was measured by answering affirmatively that a people can protect themselves from HIV by using a condom correctly every time they have sex, by having one uninfected faithful sex partner, by abstaining from sexual intercourse, by getting injections with a needle that was already used by someone else, that a pregnant woman infected with HIV can transmit the virus to her unborn child, that a HIV positive pregnant woman can prevent transmission of HIV to her baby by taking antiretroviral drugs and that a woman with HIV can transmit the virus to her newborn child through breastfeeding; And negatively to a person can get HIV from mosquito bites and by sharing a meal with someone who is infected.

[19] National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008

[20] National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008

- Of the total number of respondents (1000), 475 responded to the question. Of the total that responded to the question 16.4% of males and 13.5% of females stated that they have had sexual intercourse before the age of 15
- A larger proportion of males 22.7% and females 25.0% in the age group 15 – 19 stated that they had sexual intercourse before the age of 15 when compared to the 20-24 year age group (11.0 %male; 7.3 % female).

3.16 Indicator 16: Percentage of women and men aged 15-49 who have had sexual intercourse with more than one partner in the last 12 months

Table 10 Women and men aged 15-24 who have had sexual intercourse more than one partner in the last 12 months[21]

Age	Numerator		Denominator		Result (%)	
	Male	Female	Male	Female	Male	Female
15-19	58	6	140	60	41.4	10.0
20-24	57	7	156	119	36.5	5.9
Total	115	13	296	179	38.8	7.2

- The total number of respondents participating in the study was 1000, however only 475 (296 males and 179 females) responded to the question.
- 38.8% and 7.2 % females reported multiple sexual partners.
- More male (41.4%) and female (10%), 15 to 19 year olds reported having had sexual intercourse with more than one partner in the last 12 months than the 20-24 year olds. The main reason postulated for the 15-19 year olds having sexual intercourse with more than one partner was put forward as the need for seeking experiment.

[21] National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008

3.17 Indicator 17: Percentage of women and men aged 15-49 who had more than one partner in the last 12 months reporting the use of a condom during their last sexual intercourse

Table 11: women and men aged 15-24 who had more than one partner in the last 12 months reporting the use of a condom during their last sexual intercourse[22]

Age	Numerator		Denominator		Result (%)	
	Male	Female	Male	Female	Male	Female
15-19	27	1	58	6	46.6	16.7
20-24	15	1	57	7	26.3	14.3
Total	42	2	115	13	36.5	15.4

- 95% of males and 82% of females who ever had sex have used condoms at some point in time. Condoms usage is more prevalent amongst males, youngsters aged 15-19, those belonging to the higher income groups and rural residents
- Amongst those who ever had sex, more than 80% of the young respondents have used condoms be it amongst males or females. However, usage of condoms is more prevalent amongst males. 44% of males who have had sex used a condom for their first sexual intercourse against 32% for females
- A positive change in behaviour is noted among the 15-19 year old respondents, where 46% males declared that they used a condom in the last 12 months and 16% females. There is a decline in the 20-24 age groups amongst both males and females. The reason posited was that majority were in a stable relationship with one sexual partner and they trusted the partner; hence there no need to use a condom.

[22] National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008

3.18 Indicator 18: Percentage of female and male sex workers reporting the use of a condom with their most recent client.

Indicator 19: Percentage of men reporting the use of a condom the last time they had anal sex with a male partner.

For Indicators 18 & 19 data is not available as IBBS is scheduled in the last trimester of 2010.

Programmatic data will give us an idea of the number of condoms distributed among CSW and MSM. The IBBS scheduled for 2010 will provide evidence –based data about actual use.

Table 12- Condom distribution among CSW and MSM (programmatic data)

	YEAR 2008		YEAR 2009	
	Male Condom	**Fem/Condom**	**Male Condom**	**Fem/ condom**
MSM (MOH &QL)	12,000	100	15,600	NIL
CSW (MOH & QL)	10,000	1550	15256	1000
PILS(CSW)			12312	185

3.20 Indicator 20: Percentage of injecting drug users reporting the use of a condom the last time they had sexual intercourse

Table 13: General Condom use and condom use at last sexual intercourse by partner types among IDUs, Mauritius, 2009[23]

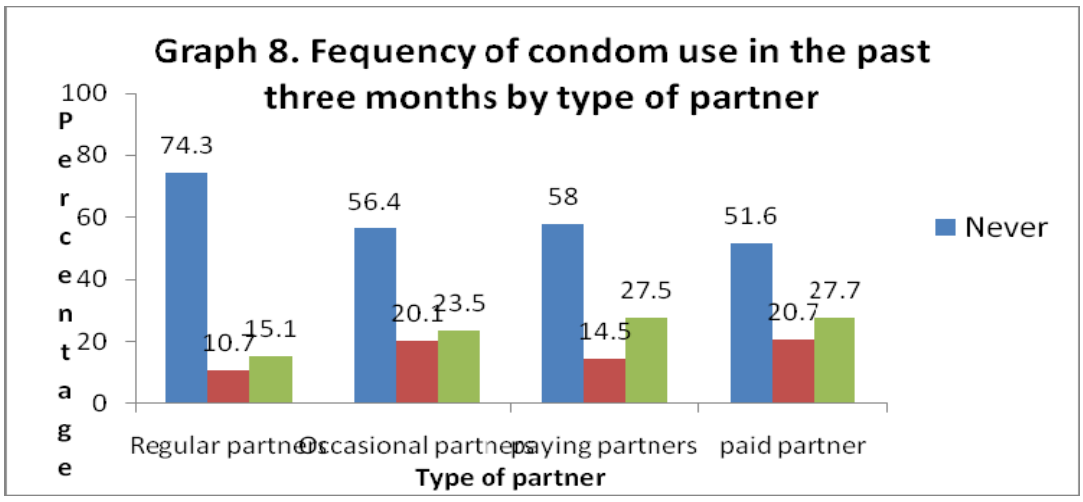
	N*	%
Knows a place (or person) from where to obtain male condoms		
No	26	7.6
Yes	484	92.4
Used a condom at last sexual intercourse		
Regular	62	20.1
Occasional	11	32.5
Paid	11	27.7
Paying	11	32.5
Ever used a female condom		
No	488	97.2
Yes	23	2.8

Table 13 provides findings on general condom use and condom use at last sexual intercourse by partner types. Despite the fact that almost all IDUs reported that they knew from where or from whom they could obtain a male condom, condom use among IDUs at last sexual intercourse was very low (30.8%) with all partner types. Condom use was lowest with regular partners (20.1%), followed paid partners (27.7%). Condom use at last time sexual intercourse with occasional and paying partners (32.5%) was equally low among IDUs. Very few IDUs reported ever using a female condom.

Among those IDUs who reported having sexual intercourse with specific partner types in the past three months, 'never' using a condom was highest with regular partners (74.3%, and lowest with paid partners[24] (51.6%,). Only 23.5% of IDUs reported 'always' using a condom with occasional partners (Graph 8).

[23] Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009

[24] Only males reported having paid partners in the past three months.



When IDUs who reported having intercourse with a regular partner were asked reasons why they did not use a condom at last sex with that partner , the majority responded that they 'trust' their partner (64.6%,), followed by that using a condom was not pleasurable (25.5%,)[25].

3.21 Indicator 21: Percentage of injecting drug users reporting the use of sterile injecting equipment the last time they injected

Fewer than one third of IDUs (n=144, 29.4%) reported sharing a needle or syringe at their last injection drug use. Although the majority (76.6%) of those who reported sharing needles/syringes at last injection drug use reported 'always' cleaning needles and/or syringes in the past three months, most of them reported usually cleaning them with water (86.2%) rather than bleach (2.9%).

Accessibility to new, unused needles and/or syringes was high (98.9%) with pharmacies being reported as the most common place for obtaining them (60.9%), followed by needle exchange programs (36.5%). Roughly one quarter (25.4%) of IDUs said that they had ever overdosed on injection drugs. Two-thirds (65.7%) of IDUs reported that they had received treatment for injecting drug use sometime in their past, indicating a high level of relapse. Almost 30% of participants reported that they were currently receiving treatment for injection drug use, however given that the eligibility criteria of the study included those who had injected drugs in the past three months, it is unsure as to whether these participants are still injecting illicit drugs while undergoing treatment (i.e., methadone, codeine and psycho-social support such as

[25] Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009

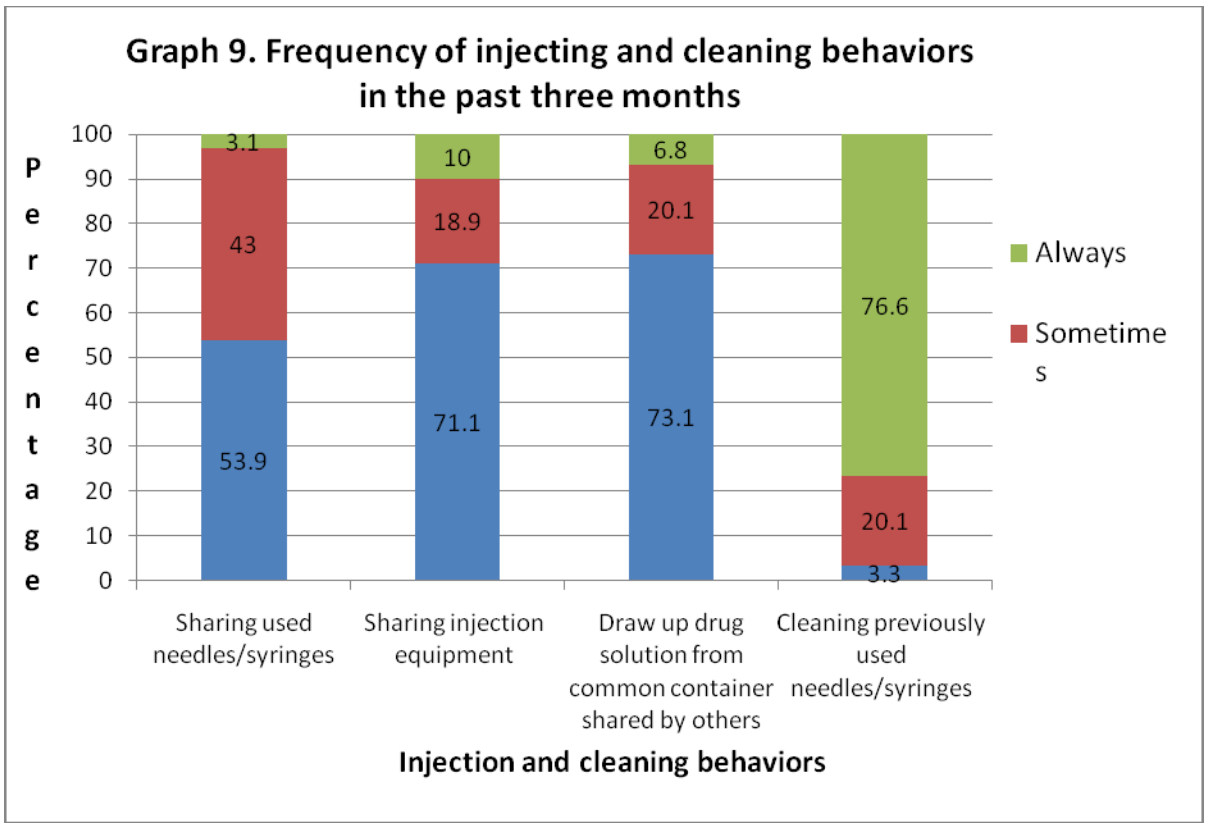
counselling and self-help group) or enrolled in treatment within the last three months and recently stopped injecting.[26]

Table 14. Needle/syringe sharing and access to clean needles/syringes among IDUs, Mauritius, 2009

	N*	%
Shared a needle/syringe at last injection drug use		
No	365	70.7
Yes	144	29.3
Agents most often used for cleaning injecting items in the past three months		
Water	168	86.2
Bleach	7	2.9
Hot/Boiling/Vinegar	22	10.9
Accessibility to new, unused needles/syringes in the past three months		
No	4	1.1
Yes	506	98.9
Most common places for obtaining new unused needles/syringes		
Pharmacy	285	60.9
Needle Exchange	203	36.5
Other	18	2.7
Ever overdosed while using injection drugs		
No	112	74.6
Yes	56	25.4
Ever received treatment because of injecting drug use		
No	339	65.7
Yes	172	34.3
Receiving treatment now because of injecting drug use		
No	127	70.9
Yes	45	29.1

More than half of IDUs reported 'never' sharing used needles and/or syringes (53.9%), injection equipment (71.1%) or drawing up a drug solution from a common container shared by others (73.1%) in the past three months (Graph 9).

[26] Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009



3.22 Indicator 22: Percentage of young people aged 15-24 who are HIV-infected

Table 15: Percentage of young people aged 15-24 who are HIV-infected

Age	Numerator: **Number of antenatal clinic attendees (aged 15-24)tested whose HIV test results are positive**		Denominator: **Number of antenatal clinic attendees (aged 15-24) tested for their HIV infection status**		Result %	
	2008	2009	2008	2009	2008	2009
15-19	12		1721		0.70%	
20-24	18		3990		0.45%	
15 - 24	30	17	5711	5481	0.52%	0.31%

3.23 Indicator 23: Percentage of most-at-risk populations who are HIV infected

Table 16: Prevalence of HIV, HBV, HCV, and Syphilis among IDUs in Mauritius, 2009

Disease prevalence	N*	%
HIV		
Negative	258	52.6
Positive	230	47.4
HBV		
Negative	472	91.0
Positive	39	9.0
HCV		
Negative	16	2.7
Positive	495	97.3
Syphilis		
Negative	500	97.3
Positive	10	2.7

HIV prevalence among IDUs was 47.4% (CI 40.7, 54.5). IDUs in Port Louis have the highest HIV prevalence (63.3%), followed by those in Pamplemousses (14.6%) and Plaines Wilhems (12.3%). Males had a higher prevalence of HIV compared to females (86.3% vs. 18.7%). However, among female IDUs, 70.6% were infected with HIV A higher percentage of IDUs who tested positive for HIV reported not sharing a needle and/or syringe at last injection drug use compared to those who did share a needle and/or syringe at last injection drug use (69.6% vs. 30.4%) A higher percentage IDUs who tested positive for HIV reported never receiving treatment for injection drug use compared to those who had received treatment (66.2% vs. 33.8%).

Among IDUs who tested positive for HIV, those who reported not using a condom at last sexual intercourse with regular or occasional partners or with partners to whom the participant sold sex or the participant bought sex (only males) had higher HIV prevalence than those who reported that they did use a condom with these partner types (Regular partner 71.0% vs. 20%; occasional partner 81.3% vs. 18.7%; partner to whom participant sold sex 81.3% vs. 18.7%; partner from whom participant bought sex 59.3% vs. 40.7%). IDUs who had incorrect knowledge of HIV transmission had higher prevalence of HIV than those who had correct knowledge of HIV transmission (86.3% vs. 13.7%).

Among IDUs who tested positive for HIV, HIV prevalence was not higher for those infected with with HBV (7.4%) or Syphillis (5.2%), but was almost 100% for those co-infected with HCV.

3.24 Indicator 24: Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy.

Table 17 : Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy (Yr 2008)[27]

Sex and Age	**Numerator:** Number of adults and children who are still alive and on ART at 12 months after initiating treatment	**Denominator**: Total number of adults and children who initiated ART during the 12 months prior to the beginning of the reporting period, including those who have died, those who have stopped ART. And those lost to follow-up	**Precentage**: of adults and children who are still alive and on ART at 12 months after initiating treatment
<15	0		
15+ (Female)	17	20	85%
(Male)	116	123	94.3%
Total : All ages	133	143	93%

[27] National Day Care Centre fro the Immuno-suppressed, MOH&QL (Pts Register)

SECTION FOUR: BEST PRACTICES

4.1. Scaling up HIV testing and counselling towards universal access

Achieving universal access to treatment, prevention and care implies attaining universal knowledge of HIV status. This will depend on the health system's capacity to identify those who are HIV-positive, notably at an early stage of infection, and link the newly diagnosed to effective treatment and care. Testing and counselling is recognised as a pivotal entry point for the prevention, treatment and care of HIV. The goal of testing and counselling is to know your status and do something meaningful with the information.

In Mauritius testing for HIV was implemented as early as in 1988, according to WHO guidelines, that is the three C's principles - Counselling, Consent and Confidentiality. In yr 2000 decentralisation of HIV testing started with the setting-up of five regional Voluntary Counselling and Testing Units across the island based in the five regional Hospitals. In 1999 when the first National Day Care Centre for the Immuno-suppressed was launched , it was yet another testing site made available in the region of Port-Louis.

To further accelerate uptake of HIV testing, a Hotline Service was initiated in 2000 to provide among other services : information, referrals for counseling and testing, treatment services, and various support systems.

Integration of HIV testing in programme.

HIV testing is not a goal in itself and should always be linked to prevention, care and support for every individual tested, while ensuring that access to treatment, where required is as rapid, as possible. Integrating HIV testing in antenatal care, outreach programme among IDUs, MSM, SW and Prison Inmates allow for a greater number of people to be counselled and tested while providing information on the prevalence of the epidemic. Efforts to scale up access to HIV testing and counseling has also led to efforts to scale-up access to ART and evidence- based prevention.

Creation of a supportive policy and legal framework for HIV testing and counseling.

Prior to any legal framework governing HIV testing, the Republic of Mauritius has always aligned its strategies with WHO and UNAIDS Guidelines and Protocol on HIV/AIDS, thereby ensuring the protection of Human rights of any individual undergoing a test.

In 2007, the Government enacted a law " HIV and AIDS Act" with the following objective:

1. To provide measures for control and prevention of propagation of HIV and AIDS.
2. To safeguard the Human rights of persons affected or not with HIV.

The Act also provides regulations for:

- Testing services
- Introduction of Needle Exchange Pprogramme
- Human Rights dimensions.

The Act make provision for private laboratory and institutions to carry out HIV testing , thus increasing accessibility of test.

Client-Initiated HCT services

The dominant testing intervention has been client-initiated where an individual seeks a test from an established testing centre offering pre- and post-test counselling in order to know his/her HIV status. Unfortunately this approach has not yielded the desired degree of uptake leading to the decision of a shift in approach- the provider- initiated testing .

In 2007, the prevalence of HIV and AIDs was estimated at 1.8 % in the population aged 15- 49 yrs old that is about 12,800 Mauritian living with HIV and AIDS. With only 4300 HIV cases detected, it leaves a 66.4 % remained undetected. New strategies have been developed to reach out the undetected cases.

Improving uptake of HIV Testing.

Different approaches, reflecting the will of the Government of Mauritius to commit itself to combat this epidemic on multiple fronts were initiated.

I. Providers initiated testing:

The MOH and QL launched the mobile caravan across the island proposing an integrated NCD and HIV testing format.

II. Testing day:

Testing days is not only during the World AIDs Day, but are organized throughout the year either by the AIDs Unit, MOH & QL or by the NGOs. In any case it is a joint venture to reach out to people creating , an opportunity to dispel the myths and fears that often keep many from coming forward for HIV testing. The MOH & QL has played a leading role in accelerating access to HIV Test through Rapid Testing.

III. Integrating HIV testing in Area Health Centers

Currently many opportunities for diagnosing and counseling individuals at health facilities are being missed. In 2009, after a comprehensive training of Health Care workers at the level of the Area Health Centres on "HIV counseling and Testing", the MOH & QL decided to initiate HIV testing at the level of 21 AHCs across the island. The uptake of services is still low as reflected through the 78 counselling sessions and 68 HIV tests carried as from February to December 2009. Barriers identified by the service providers are as follows:

- Despite having received formal training at MIH, staff at AHCs, often claimed during infection control visits and PMTCT sessions, that they faced many difficulties in tackling some counseling issues.
- Some staff acknowledged lack of experience and shortcomings in the development of certain skills.

- Lack of appropriate recording has been noticed even after AEN visit to AHCs that fall under their responsibility.

To date no single strategy has proved to be equally effective in all settings. Challenges to scaling-up testing and counseling persist and it is clear that innovative strategies need to be put into place to increase HIV multi-skilling of Health staff before substantial increase in HIV testing and counselling can be achieved.

Innovative Strategies

- Couples counseling and testing.
- Post-marital counselling and testing especially if at risk behaviour is encountered.
- To develop a climate in which knowledge of HIV status is more likely to result in sustained behavior change.
- Comprehensive post-test support services to improve the psychosocial health of PLWHA and helping those who test negative to maintain their HIV negative status.
- Prohibiting mandatory or compulsory testing.
- Client-initiated voluntary counseling and testing services that are responsive and sensitive to the communities served need to be promoted and scaled up.
- Strategies to improved post-test counselling and disclosing both positive as well as negative results.

4.2 Needle Exchange Programme (NEP)

Mauritius has witnessed an exponential rise in the number of HIV infection among intravenous drug users as at year 2003- 2005. The sharing of contaminated injecting equipment has become a driving force behind the HIV epidemic, demonstrated in 2003 with 66% of new infections among individuals reporting injecting drug use. This trend reached a maximum of 92% in 2005.

With IDUs identified as the main driver, Mauritius faces the risk of an HIV and AIDS epidemic spreading to the general population. Thus reversing the evident trend in rising HIV infections among IDUs in Mauritius has become an urgent national priority. To respond to this challenge the Mauritian Government has taken strong leadership and committed itself to implement a three- pronged Strategy consisting of:

1. HIV and AIDS Legislation
2. Methadone Substitution therapy
3. Needle Exchange Programme.

Prior to the HIV and AIDS Act,the Dangerous Drug Act sanctioned the following actions illegal:

- Possession of dangerous drug
- Illegal Drug trafficking
- Illegal drug consumption
- Possession of any article that can be used for smoking, sniffing, inhaling or injecting is

The HIV and AIDS Act enacted in2007, paves the way for the introduction of the NEP within a legal framework.

Objective:

In line with the Strategic Objective 5 of the HIV/AIDS National Multisectoral Strategic Framework 2007-2011 and target set in the Global Fund Performance Framework, the main objective of the NEP is to curb down the incidence of blood borne infections common (Hep C & HIV)among IDUs. (NEP Status Report June 2009).

Operationalization of the NEP

The NEP programme started in November 2006 on a pilot basis on two sites by NGOs (CUT). It was initially through community outreach with volunteers who had been recruited from within the community. After a few months of operation, the programme was given full support by the MOH &QL through the provision of consumables and payment of allowances to field worker engaged in the project. (NEP Status Report June 2009).

Scaling –up of NEP

However with NGOs operating on a minimum of sites (4 sites) due to an evident lack of resources and limited capacity, the MOH & QL launched its Needle Exchange Programme through the mobile caravans on the 19th May 2008.

The NEP caravans operate on a weekly (same day, same time , same site) basis concept and it has been able to rapidly scale-up to a maximum of 31 sites throughout the island with emphasis on more densely IDUs populated areas as at end of June 2009.

The NEP mobile caravans are managed by an Officer responsible for the NEP and a team composed of Nursing officers and Health Care Workers . A package of comprehensive services including the following are being offered:

- HIV/AIDS Education and Counselling.
- Condom distribution to prevent sexual transmission of HIV and other Sexually Transmitted Infections
- Referrals to substance abuse treatment and other medical and social services
- Distribution of alcohol swab to prevent abcesses and other bacterial infections.
- Screening for Hepatitis B&C and other STIs.

The NEP programme encourages service users to return soiled needles and syringes and the percentage of returned syringes has reached an overall of 63.7% at the end of the first year with nearly 150,000 potentially contaminated syringes removed from the community and sent for incineration.

Table 17: Services provided May 2008 –June 2009. (NEP Status Report June 2009).

Total number of sites	31
Number of registered Clients	4300
Syringes distributed	233,765
Needles distributed	128,258
Returns (Used Needles and syringes)	149,062
Condoms	64,000
Number of HIV tests	1001
Number of positive cases	113

Such achievement within a year has been possible because of :

- Experience of the Officer managing the NEP in outreach activity among the MARPs
- Close networking with IDUs on field
- Recruiting ex –IDUs as peer educators to help in the programme.
- A dedicated team work.

Challenges(NEP Status Report June 2009).

1. Eliminate interventions of the Anti Drug Smuggling Unit (ADSU) officers on and around NEP sites through advocacy and training of ADSU officers on harm reduction issues.

2. Scaling- up of NEP remains a challenge but plan to increase coverage and uptake has already been submitted to the MOH &QL.

3. Inclusion of Primary care in view of improving quality service and increase access to care for these marginalized group.

4. Ensure in-service training to assist NEPs to develop agreements and conflict resolution protocols with local law enforcement.

5. Ensure that NEPs share the *Best Practice* among partners within the region

In general it is believed that NEP are best implemented by CBO and NGOs , however the MOH & QL through the AIDS Unit has successfully risen up to the challenge by spearheading this major component of Harm Reduction. This has been possible due to the dedication and hard work of the Officer Responsible for the NEP Programme, unwavering support of the Minister and administrative staff of the Ministry of Health and Quality of Life, the officer in charge of the AIDS Unit, the NEP team and NGos support.

4.3 COMMUNITY OUTREACH PROJECT AMONG MARPS (CSW)- NGO

In 1996, the first NGO known as PILS – Prevention, Information et Lutte contre le Sida was founded to address HIV and AIDS issues. This NGO has been on the forefront of all battles concerning HIV and AIDS in Mauritius, thus maintaining issues pertaining to HIV and AIDS high on the agenda. Important achievements include advocacy, Regional Networking, lobbying for the introduction of Harm Reduction strategies and empowering PLWHA.

Rationale of the Project

Sex work in Mauritius like in any other country is widely spread but remains illegal and severely sanctioned by Law. According to Cornu &Greenwall, 2008[28], many forms of sex work exist depending on the site where it takes place. According to researchers, those with the least control over their working environment are the most vulnerable to HIV and other sexually transmitted diseases. These are sex workers, women who are linked to pimps and those selling sex on the street. The street sex workers are quite often victims of violence from clients and vagrants.

Data also indicate a strong correlation between commercial sex work and drug use. Some drug users turn to sex work out of financial necessity to support their addiction, while sex workers often seek an escape from their harsh lives through drug use. Addiction to drugs reduces appropriate judgement around negotiating safer sexual bahaviours with clients. And clearly , the sharing of needles and syringes is a well-documented mode of HIV and Hepatitis C transmission in this vulnerable group.

Finally Cornu & Greenwall, highlighted the fact that there is no dedicated health services or any outreach STIs services for CSW. These evidence-based information led to the development of the " Caravane De Prevention"

Objectives of the project

1. Initiate HIV test for IDUs and CSW and referral to other services.
2. Reduce transmission of STIs and HIV.
3. Prevent unwanted pregnancies.

[28] Analyse de la situation des populations cles les plus exposees ua risqué D'infection au VIH dans les pays de L'ocean Indien, C.Cornu et M. Greenwall, 2008

4. Offer a better quality of life to the IDUs and CSW on their site of operation
5. To encourage this marginalised group to integrate the society.

The team

Outreach is an educational intervention conducted by peer educators face-to-face with at-risk individuals in their neighbourhoods or other areas where they typically congregate. Our HIV Prevention unit engages those who would not seek treatment or education otherwise.

Mobile outreach allows staff to move to different locations in response to movement of a transient population, while providing greater privacy, safety, and resources. The mobile outreach van is equipped with a welcoming corner, an area for VCT and a dedicated team composed of full time social worker and freelance volunteers from PILS and other NGOs; Qualified nurses and Health Care Assistants from the MOH and QL.

Services provided

- Outreach visits
- Distributing IEC material
- Establishing peer education activities through rehabilitated Sex worker.
- Ensuring that condoms and Gel are available and accessible.
- Referrals to services offered by PILS (psychological support), MOH & QL (ARV , STIs, Contraception)

Achievements:

Table 18: Services offered/clients reached

Services offered	IDUs	CSW
Total number of clients accessing the service	618	130
Regular clients	366	85
Condoms distributed (Male/Female)	6156	12312/85
Lubricant	605	1893
Primary Care(Dressings, etc)	453	30
IEC material distributed	356	153

Way forward

This is a fairly new project, initiated in june 2009. A survey conducted among users of the outreach service has allowed PILS to build on the strengths and to work out new strategies to improve on the weaknesses.

- To improve on sensitisation messages
- To ensure the security of staff working in the caravan
- Reinforce peer education to increase adoption of safe behaviour.
- Work in collaboration with other programmes to empower CSW to stop sex work
- Increase sites of interventions
- Increase human resource, capacity building and funding.
- Targeting MSM involved in sex work

SECTION FIVE : MAJOR CHALLENGES AND REMEDIAL ACTION

Table 19: Major Challenges in 2008, Remedial Actions and Progress Achieved

	KEY CHALLENGES REPORTED IN 2008 UNGASS COUNTRY PROGRESS REPORT	PROPOSED REMEDIAL ACTION IN 2008	PROGRESS ACHIEVED 2008-2009
1	Baseline data from Sero-Prevalence Survey and updated Behavioural Surveillance Survey are not available	Scheduled surveys for baseline data.	RDS for IDUs carried in 2009 RDS for CSW and MSM scheduled in 2010.
2	The nascent M&E Unit has limited Human and logistic resources.	International and National technical assistance for capacity building of the M&E unit	Financial support from the IDF grant(World Bank) to set-up a functional M&E system
3	HIV/AIDS data not centralised	An intranet system between the Central Health Laboratory, NAS, AIDS Unit and NDCCI to facilitate capture and analysis of data in a timely manner.	Still a challenge.
4	Low uptake of ART and PMTCT protocol of PLWHA and HIV + pregnant women	Training of dedicated outreach workers to reach out to more PLWHA and HIV+ pregnant women.	Training and capacity building of outreach worker scheduled in 2010-2011 under the Global fund A survey carried out in 2009 by the MIH to determine factors constituting barriers against optimum uptake of services.

		Provision of logistic support for the follow-up of patients including those on ARV	Decentralisation of ART treatment. Training on ESOPE to NDCCI staffs by the IOC done (A software to facilitate follow-up and projections of future Needs)
5	Needle Exchange Programme not yet optimal	Support for strengthening strategies for scaling-up of NEP.	Fully operational and scaling-up in progress especially since the MOH &QL started its NEP caravan in 2008
6	Life skills based education remains piecemeal and is not yet standardized.	Consolidated actions on the part of the Ministry of Education and Human Resources	Still a challenge Recent announcement by the Minister of Education to introduce sexual education in Secondary Schools
7	No baseline data available and no precise definition for vulnerable children	To work in collaboration with the Ministry of Social Security to reach a consensus	Still a challenge
8	Scaling –up of Methadone Substitution Therapy	Support for strengthening strategies for substance abuse prevention and reduction and scaling-up of MST	Fully operational, scaling-up plan drawn and implementation in progress Psycho social support still a challenge
9	Persistent stigmatization and discrimination of PLWHA	On-going sensitization at all levels including the general public	Sensitization at the level of community ongoing. Training of Health Care Workers to mitigate S&D

			in hospital settings
10	A Behavioral Change Communication strategy among Youth and MARPs	Ongoing sensitisation	A Multisectoral Media Communication Plan set-up (2010) to guide coordinated interventions (MOH &QL & NGOs).
11	Low involvement of private sector	Advocacy towards the private sector for greater involvement.	40 private doctors trained on HIV/AIDS, still 260 to be trained.
12	Unavailability of Viral Load monitoring	Acquisition of a viral load machine for a better management of PLWHA on ART.	A performing viral load machine with more sustainable features made available to the virology laboratory under UNDP funds
13	Poor coordination and monitoring of the epidemic in Rodrigues	The setting up of a Rodrigues AIDs unit (RAU) for a comprehensive response to HIV and AIDS epidemic.	RAU and the Rodrigues HIV/AIDS workplan 2007-2011 set-up to guide the Rodriguan response. Funding for the Rodrigues Plan remains a challenge. It is proposed for Rodrigues plan to be integrated in the National plan at midterm review in 2010

Challenges faced during the 2009-2010 reporting

1. Baseline data on vulnerable children and a clear definition of street children in the Mauritian context so as to be able to design appropriate prevention strategies targeting children at high risk and out of school children in particular including street children.
2. No integral data on HIV death.
3. Low uptake of services and low adherence to ARV therapy. Still constitutes a major challenge in the management of PLWHA.
4. To reach a 100% uptake of PMTCT protocol by HIV+ pregnant mothers.
5. Inadequate psychosocial support to PLWHA/IDU on MST And NEP
6. During the validation workshop there was a lot of discussion pertaining to home- based care and what is being offered either by the Government or NGOs is still embryonic.
7. There are still a limited number of surveys and surveillance data and this constitute major barriers in reporting: funding for iterative surveys is a major limiting factor and still needs international collaboration
8. The setting up of a functional surveillance system remains a challenge
9. Minimal participation of workplace and business sector in the fight against HIV and AIDS.
10. Need for capacity building of all partners involved in the fight against HIV have been highlighted, especially technical know-how to capture funding for the NGOs.
11. A functional national M&E System with optimal use of designed tools by both government and CSO partners (See section- Monitoring and Evaluation)
12. Life skills education in school not yet well defined and catered for mostly by other Ministries and NGOs
13. Post-test counseling and giving negative tests results is still a challenge in some cases.
14. Public and Private medical sector involvement should be reinforced specially for the PMTCT protocol.
15. Stigma and discrimination still present.
16. Rodrigues and outer island- Capacity building for implementation of programme and M&E still needed
17. Written policies for all HIV/AIDS issues to help remain focused

Proposed Remedial Actions

1. Liase with Ministries concerned and NGOs to facilitate retrieval of data, either through a survey or programmatic data on vulnerable children.
2. Because adherence to ART is a complex process, multifaceted interventions need to be design to improve adherence e.g Patient's education, patient's – Health Care Workers relationship, psychosocial support and introduction of DOTS.
3. Training of trainers in psychosocial support scheduled under the IDF grant .
4. A dedicated staff for contact tracing and visit of HIV positive pregnant mother in the community.
5. A protocol and a model of practice on Home-Based Care need to be set- up to guide planning, implementation through the creation of a register for all HIV/AIDS patients needing such care and to facilitate its monitoring and evaluation.
6. Provide means and dedicated human resources to implement the surveillance Plan .
7. Work place and Business sector participation need to be scaled-up and documented by regular report submitted to the National AIDS Secretariat.
8. Capacity building for all partners involved in the fight against HIV.
9. It is becoming imperative for the Ministry of Education and Human Resource to develop a policy after a multi sectoral round table and consultancies on the design, planning of a comprehensive and standardized lifeskills-based education so as to empower the in- school youth to adopt a safe behavior.
10. Strategies need to be developed to facilitate post test counseling and giving negative tests results amomg ANC attendees ,Blood donors, Prison Inmates on remand.
11. Coordinating, Monitoring and evaluation of activities undertaken by NGOs, Line ministries and Civil societies involvement in the implementation of the NSF through regular reporting to the NAS including data on agreed indicators .
12. Amendments of laws that may constitute barriers to prevention and treatment.
13. Capacity building of service providers to scale-up HIV testing, prevention activities and treatment.
14. Technical Assistance for the elaboration of HIV/AIDS policies
15. A National HIV and AIDS policy may pave the way to a closer involvement of the private medical sector in the management of PLWHA.

SECTION SIX: SUPPORT FROM THE COUNTRY'S DEVELOPMENT PARTNERS

Support from the country's development partners

In the Republic of Mauritius the percentage of the National Budget allocated to the health sector for the year 2008-2009 is 8.2 %. The Ministry of finance has allocated a budget of 40 million rupees for HIV and AIDS. An appeal was also made to the private sector to contribute to the fight against HIV and AIDS through their Corporate Social Responsibility Fund. The participation is still minimal but it is worth mentioning the contribution and support of the Rogers company, Barclays Bank, Mauritius Commercial Bank and Shell Company in terms of financial support to the NGOs, media campaign, awareness of their employees and financing surveys.

A number of international development partners are currently supporting the Republic of Mauritius to implement programme to mitigate the impact of the epidemic. Their support is both at a strategic level as well as at an operational level.

World Bank

The World Bank assistance has been crucial in the endeavour of initiating and implementing a comprehensive and fully operational M&E system. The steps envisaged follow a logical framework designed by the WB and NAS:

1. Assessing and strengthening capacity of key staff in monitoring and evaluation of HIV and AIDS
2. Initiating a Technical Working Group in M&E and providing resources
3. Revision and updating the previous 2006 M&E plan
4. Developing tools and training of trainers
5. Implementing the national M&E framework in time
6. Establishing a management mechanism to follow up on the quality of activities in M&E

UNDP / UNAIDS

UNAIDS is mandated to provide technical support to assist in the implementation of National AIDS programmes. Main areas of support has been:

- Technical support through the TSF.
- Technical support for the elaboration of the Global Fund proposals for HIV and aIDS and costing of the proposals.
- Capacity building in Mauritius and Rodrigues facilitating the setting-up of the Rodrigues AIDS Unit.
- Evaluation of the previous Action Plan 2004-2007 and the elaboration of the Rodriguan workplan 2009-2011.
- Financial and technical Support to conduct surveys.
- System strengthening so as to better manage the response to HIV and AIDS.
- Financial and technical support to the Council of Religion HIV/AIDS project.

WHO

The core strategic areas of WHO support to MOH & QL in line with national HIV/AIDS Strategic Plan and the pursuit of the expected results agreed upon are as follows:

- Development of multi-sectoral partnership for enhanced HIV/AIDS advocacy with special focus on groups exhibiting high risk behaviour;
- Support national capacity building of medical/paramedical staff in the management of care and treatment for PLWHA; and
- Provision of technical and financial support for introduction of new HIV investigations.
- Strengthening epidemiological and behavioural surveillance system ,data collection and analysis for informed and evidence decision- making and determining progress towards HIV targets

UNFPA

UNFPA supports a broad spectrum of initiatives to prevent the transmission of HIV. Main achievements in 2008-2009 have been :

- The mainstreaming of HIV in the Sexual and Reproductive Health services.
- Capacity building through training of Health Care Workers.
- Funding programmes for Sex workers and vulnerable women.
- Strenghtened female condom utilization through the establishment of a comprehensive training programme for all Community Health Workers, Community Midwives and women Officers in women centers.

Indian Ocean Commission – AIRIS Project

The AIRIS project is a regional based project funded by the African Development Bank with the main objective of stemming the spread of HIV and start to reverse the current trend in IOC member states. To strengthen Mauritian response , the

- Technical and financial support to NGOs.
- Capacity building:
    a) Referral doctors for management of PLWHA
    b) Laboratory technicians
    c) Nurses and Midwives on management of PLWHA
    d) Key stakeholders on M&E and Surveillance.
    e) Staff involved in the care and management of PLWHAS were trained on ESOPE (a software to better capture data on follow-up of PLWHA.)
    f) Key stakeholders in the region were trained in Harm Reduction strategies(Addictologie)
    g) Counselors for a hotline services.
- Setting up of a Monitoring, Evaluation and Surveillance system in the region.

Global Fund

The Mauritius proposal for 7.8 million Euros was approved and rated category 1 by the Global Fund Board in November 2008. The signature between GF portfolio manager and both PRs was on 23rd October 2009.

The Mauritius Grant

Total Grant amount: EU 7 890 632

1st phase (2 years): EU 3 649 169

Government PR (NAS) : EU 2 365 979

NGO PR (MFPWA): EU 1 283 190

The support is mainly for capacity building at all level and scaling –up of services (NEP, MST,HTC ,ART and PMTCT).

Continuous Support

It is hoped that Mauritian's development partners will continue supporting HIV/AIDS efforts through different sectors. Apart from the interventions above, areas requiring immediate support include

-Ensuring development of an effective and functional monitoring system is also a key area requiring both financial and technical support.

- Media campaign to sustain fight against stigma and discrimination and to accelerate prevention

-Surveys to gather timely data for a strategic response

-Strenghtening of the health system with the mainstreaming of HIV/AIDS and allied issues at Primary Health Community level.

- To review and reinforce the Hospital Information Management System .

SECTION SEVEN: MONITORING AND EVALUATION ENVIRONMENT

- **An Overview of the Current Monitoring and Evaluation System**

The Government of Mauritius received financial support from several donors including the UNAIDS and the World Bank for funding projects to establish an effective National HIV/AIDS Monitoring and Evaluation system.

Under the IDF Grant of the World Bank, the "Mauritius National HIV/AIDS M&E Framework and "Operational Manual" were developed in February 2009. In March 2009 M&E tools to collect, store or report data according to the needs of partners and national programme were developed . All these processes were done through collaborative consultation involving all stakeholders under the leadership of the National AIDS Secretariat. The system was made operational on the 1st July 2009.

- **Monitoring of HIV/AIDS situation and epidemic pattern**

Monitoring of HIV/AIDS situation and epidemic pattern is done at Sentinel Surveillance Sites mainly ANC,STI clinic, the population of Blood donors and the MARPs (IDUs, SWs, MSM and Prison Inmates). Data is also collected at service delivery point (HTC, NDCCI, Chest clinic, NEP, National Methadone Substitution therapy center). With regards to MARPs, programmatic data were feeding the surveillance system until last year when a Respondent Driven Sampling Survey was carried out among IDUs. Two surveys, one in CSW and another one in MSM are scheduled for this year. These surveys will set-up the baseline for each of the sub-populations including the size estimates.

The absence of a National HIV database at the level of the National AIDS Secretariat and accessible to major stakeholders via an intranet is slowing down the process of operationalisation of the M&E system.

- **Monitoring of HIV/AIDS responses**

Monitoring the National response or the national implementation on HIV prevention and mitigation strategies is mainly at the level of output and outcome. Impact evaluation was achieved through a KABB in 2008 among youngsters aged 15-24 yrs only and an RDS study in 2009 among the IDUs.

Monitoring at the level of results of implementation and service coverage is done by the M&E focal point at the AIDS Unit, MOH and QL.

Nevertheless to reflect the national service coverage, there is a need to empower the NGOs on Monitoring and Evaluation.and regular reporting. This mandate is being undertaken by the National AIDS Secretariat, funded by the Global fund and will be under the responsibility of the M&E Manager.

- **Monitoring resources spending**

To monitor resources spending for the HIV/AIDS responses, the database of AIDS spending was not available, nor was the system of data processing. In April 2009 , the NAS with the support of the World Bank, initiated an assessment of the AIDS resources spending with the following objectives:

1. To estimate the structure and scope of HIV/AIDS resources and expenditure.
2. To define gaps in HIV/AIDs related funding.
3. To evaluate the efficiency of funds utilization
4. To harmonise with GFTAM procedures.
5. The tools for NASA have been developed and a NASA for 2008/2009 is being carried out. A report is expected at the end of March 2010.

- **Estimation of target populations and PLWHAs in need of ART**

In September 2007, the UNAIDS provided the required technical expertise and in a workshop comprising of all the stakeholders involving in the fight against HIV/AIDs, all data was reassessed and using the "Estimate and Projection tools", the prevalence rate of HIV among the adult population aged 15-49 was estimated at (1.8% - around 12,000 Mauritian). A size estimation of the MARPs was also carried out, but programmatic data highlights the possibility of an over estimation of these groups.

The RDS among the IDUs in 2009, has reviewed the size estimate and brought it down to 10,000 from the 17,000 – 18,000 estimated in a situational analysis in 2004 The RDS scheduled for CSW and MSM in 2010 will allow us to have a better estimate of these hard-to-reach populations.

The estimation of PLWHAs in need of ART was done in 2007, using the software spectrum. In 2009 an attempt to refine this estimate was done in Dakar, but due to lack of appropriate data, the exercise was not completed. There is a need to gather data in order to have more accurate estimates in order to guide policy decisions.

- **Challenges Faced in the Implementation of a Unified M&E System**

An evaluation of the actual M&E system was done by the M&E focal point, MOH &QL in September 2009 and a Peer Review was conducted by the Indian Ocean Commission in October 2009 highlighted the following challenges:

1. To Establish a mechanism to operationalize the structure of a unified national M&E system, endorsed by the National AIDS Secretariat, and all stakeholders.

   It takes time to obtain the participation of all stakeholders, which would thus result in comprehensive and continuous monitoring and evaluation system.

2. The absence of a National database.
3. Capacity building of key stakeholders
4. The need to track AIDS spending and responses at all levels.
5. Linkage of the M&E system in the implementation of NGOs activities incorporated in the national system to consolidate data on the National response to HIV.
6. Lack of computerised system at delivery points for ease of transfer and access to data.
7. Low implementation of skills acquired during training.
8. Insufficient Management of data, support and supervision.

- **Remedial Actions Planned to Overcome the Challenges**

1. The need for M&E Technical Assistance and Capacity Building .
2. Post-training evaluation.
3. The creation of a National HIV data-base.
4. Database management for monitoring of the HIV/AIDS situation .
5. Operationalization of the M&E system

Having an operational M&E system would definitely benefit the National response as accurate and effective data would be available in a timely manner to guide policy makers and strategy development.

BIBLIOGRAPHY

ANC data, Central Health Laboratory, Candos

Christophe Cornu et Matthew Greenall,2008,Analyse de la situation des populations clés les plus exposées au risque d'infection au VIH dans les pays de l'océan indien,

Dangerous Drugs Act 2000. (2000).

DIgest of Demographic Statistics, 2008. Central Statistical Office

Economic and Social Indicators (Education), Central Statistical Office, 2009

Economic and Social Indicators (Social Security), Central Statistical Office, 2009.

Guidelines on Construction of Core Indicators, UNGASS, 2010 Reporting

Health Statistic Report 2008,Rep of Mauritius, MOH &QL.

HIV and AIDS Act, 2007.

Integrated Behavioural and Biological Surveillance Survey among Injecting Drug Users in Mauritius, 2009.

Ministry of Health and Quality of Life. (2007). *National Multisectoral HIV and AIDS Strategic Framework (NSF) / 2007-2011.*

Ministry of women's right,family welfare and child development, 1998,Study on Commercial Sexual Exploitation of Children in Mauritius and Rodrigues.

Ministry of women's right,family welfare and child development, 2002,Study on Commercial Sexual Exploitation of Children in Mauritius and Rodrigues.

National Youth Policy 2010- 2014, Ministry of Youth and Sports.

National Study on Knowledge, Attitudes, Behaviors and Beliefs related to HIV/AIDS among the Youth (15 to 24 years old) of Mauritius,2008

National Day Care Center for the Immuno-Suppressed (Patient register, PMTCT register)

PILS, Rapport D'activites Juillet- Decembre 2009- Caravane de Prevention

Prison data, Mauritius Prisons Service, Prime Minister's Office

Republic of Mauritius. (2008). *Country Progress Report - Declaration of Commitment of the United Nations General Assembly Special Session (UNGASS) on HIV/AIDS*.

S.Corceal,June 2009, Status Report: Needle Exchange Programme, MOH &QL.

WHO, Aug 2008, Situational analysis of Harm Reduction Strategies in Mauritius and suggestions for scaling up Methadone Maintenance Therapy and Needle Exchange and syringe Programme.