

National Drug Observatory Report

Foreword



This is the second annual report of the National Drug Observatory of the Republic of Mauritius. The initiative to endow the country with a National Drug Observatory (NDO) started in November 2015 and the first NDO report was published in August 2016. The NDO is currently operating on a focal-person basis under the aegis of the Ministry of Health and Quality of Life, through its Harm Reduction Unit. It will shortly be developed in a more established and structured body following recommendations of the National Drug Control Masterplan currently under preparation.

Initially, at international level there was no reference framework available and drug observatories were set up using trial and error, considering national contexts and resources. Since the mid-1990s, the concept of evidence-based policy-making has emerged as a new benchmark in public management. Evidence-based policy is distinctive from opinion-based policy. Policy-decision makers cannot rely on speculative assumptions. Thus, the efficacy of drugs monitoring systems relies heavily on the soundness of the information they produce.

A national drug observatory is a key instrument for policymaking. Whilst the political responsibility remains in the hands of decision-makers, there is a growing consensus that they need objective, factual, reliable and comparable information in order to take informed decisions. In Mauritius, the current and evolving drug situation calls for a need for local policymakers to take actions, built on better informed decisions. On the other hand, the public at large is increasingly requesting this sort of information from its leaders, since they are also the first contacts or people who interact with drug users, be it in the family context, in localities, within socio-religious conjectures or through non-governmental organizations, amongst others.

Nationally, among the main current drug issues are; firstly, heroin which remains a serious concern in terms of the quantity of the substance smuggled into Mauritius recently, a phenomenon which has been observed similarly in some other Indian Ocean countries. Secondly, there is persistent use and cultivation of cannabis in small and large scales, as well as, the increase in circulating new psychoactive substances. Apart from the fact that, on one hand, different kinds of drugs are available, on the other hand, some Mauritian drug users have a particular inclination for polydrug use, resulting very often in various kinds of harms to their health. More people are being hospitalized following drug abuse. In addition, a proportion of drug users are engaged in risky injecting practices, with deleterious consequences on their health. Furthermore, drugs have real impact on the economy as well. Police arrests for drug-related money laundering are increasing.

The Republic of Mauritius has already started work on the elaboration of a National Drug Control Masterplan (NDCM). The NDCM is expected to encompass specific issues, namely; the crucial role of a coordination mechanism covering also legislation aspects; the importance of an implementation framework; the maintenance of monitoring and evaluation systems; the strengthening of both the drug supply and demand reduction programmes and strategies. Lately a high level Drug Control and HIV Council chaired by the Honourable Prime Minister has been set up.

The country determination against drug is not just a law-enforcement-centered project. It is above all a commitment focusing on a safer socio-economic environment and a healthier country, with main goal to enable each and every citizen, especially the young generation, to enjoy the right to health and freedom from any form of socio-economic exploitation. A national drug observatory is a combination of high level commitments and partnerships involving competences and resources. It's all about gathering people to work towards a noble cause and a common objective.

I make an appeal to all stakeholders that we pursue our unrelenting effort to prevent drug addiction and eradicate illicit drug dealing and trafficking.


Dr the Honourable Mohammad Anwar Husnoo
Minister of Health and Quality of Life

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Acronyms

ADSU	Anti-Drug Smuggling Unit (Mauritius Police Force)
CUT (NGO)	Collectif Urgence Toxida
CYC	Correctional Youth Centre
HCV	Hepatitis C Virus
IBBS	Integrated Biological and Behavioural Surveillance
ICD 10	International Classification of Diseases, 10th Revision
MOH&QL	Ministry of Health and Quality of Life
MRA	Mauritius Revenue Authority
NDCM	National Drug Control Masterplan
NDO	National Drug Observatory
NEP	Needle Exchange Programme
NGO	Nongovernmental Organization
PWID	People Who Inject Drugs

Second report of the National Drug Observatory

This report refers to the one-year period, from July 2016 to June 2017. Additional information and data for earlier periods are also included for trend analysis purposes.

Indicators are constructed using essentially secondary data. As a result, most indicators are of reported nature and should be used with careful interpretation given that they relate to institutional and administrative settings and performances.

This report attempts to give a picture of the drug situation in Mauritius by examining available factual and reliable drug-related data and information in the following areas; health problems resulting from drug use, measured mainly through admissions in public health institutions; specific diseases epidemics linkage with drug use, using routine service data as well as past surveys; the health response to drug use, through health programmes; the government national drug control and law enforcement activities, through data obtained from the Mauritius Police Force and the Mauritius Revenue Authority Customs; drug offences and imprisonment, through data obtained from the Mauritius Prisons Services and published reports of the Judiciary; and finally service-delivery-based observations on the drug situation from NGOs.

Data related to inpatient treatment cases have been provided by the Health Records Division of the Ministry of Health and Quality of Life.

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- the Harm Reduction Unit of the Ministry of Health and Quality of Life;
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 - *Dr Idriss Goomany Centre, Plaine Verte;*
 - *Crysalid, Bambous;*
 - *Centre de Solidarité Pour Une Nouvelle Vie, Rose Hill;*
 - *Actresa, Calebasses;*
 - *Centre d'Accueil de Terre Rouge ;*
 - *Etoile d'Espérance, Moka ;*
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Executive summary

Health effects of drug use

- In 2015 and 2016 there were respectively 552 and 914 inpatient treatment cases in public health institutions for drug problems and in the first six months of 2017, there were 689 corresponding cases (638 male cases, 51 female cases).
- In public health institutions, whilst a percentage increase of 66% was observed among drug-related inpatient treatment cases, from 2015 to 2016, between the 2nd semester period of 2016 and the 1st semester period of 2017, a corresponding increase of 47% was observed, from 469 cases to 689 cases respectively.
- Combining different sources of information, especially, health institutions and drug control agencies, there is evidence to say that the current drug use picture in Mauritius is characterized by the consumption of a variety of substances, namely; Heroin-(*opioid*), Cannabis, Cannabinoids-(*THC in cannabis*), Hashish-(*Cannabis resin*), Methadone-(*opioid*), Cocaine-(*Coca leaves -stimulant*), Methamphetamine-(*Central nervous system-stimulant*), Ecstasy-(*Methylenedioxyamphetamine-MDMA*), Rivotril-(*Clonazepam-benzodiazepine drug*), Valium-(*Diazepam-benzodiazepine drug*), Mogadon-(*Nitrazepam-benzodiazepine drug*), Panadeine-(*Paracetamol+CodeinePhosphate-opioid*), Cough syrup, Tramadol-(*Pain-treatment- opioid*), New psychoactive substances, Subutex-(*Buprenorphine-opioid*), Nova-(*Pregabalin*), among other unspecified substances.
- For the one-year period, from July 2016 to June 2017, significant inpatient treatment cases of suspected multiple drugs use were reported in public health institutions, namely; using methadone with heroin/brown sugar; heroin with rivotril; alcohol with new psychoactive substances; buprenorphine with rivotril; drug injection while on methadone; heroin (*brown sugar*) with new psychoactive substances, Nova with cough syrup, amongst others.
- In the first six months of 2017, out of the 689 inpatient treatment cases reported in public health institutions due to drugs problems, at least 44% of cases were problems following use of suspected new psychoactive substances and at least 17% inpatient cases were associated with use of opioids and opiates, while, at least 6% inpatient treatment cases were reported as problems following use of cannabis, amongst others.
- For the one-year period, from July 2016 to June 2017, in public health institutions, drug-related inpatient treatment cases for teenagers (*10-19 years*) accounted for 19%.
- For the one-year period, from July 2016 to June 2017, in public health institutions, out of 536 known inpatient treatment cases related to suspected use of new psychoactive substances, teenaged drug users accounted for 23% and 28% were in the age group 20-24 years, while, 50% were aged 25 years and over.
- Among drug-related inpatient cases in public health institutions, just around half (53%) of cases were reported to be from urban areas, against 47% from rural areas.
- For the one-year period, from July 2016 to June 2017, drug users have undergone inpatient treatment in public health institutions, for the following health problems; mental and psychotic disorders including acute psychosis; auditory hallucination; confusional state; depression; anxiety; drug overdose complications; unconsciousness; fits; vertigo; palpitation; breathlessness; vomiting; nausea; abdominal pain; headache; weakness; dizziness; agitation and restlessness; sleepiness; dyspnoea; withdrawal syndrome; suicidal tendencies; abnormal aggressive disorders; and slurred speech. Addiction to heroin during pregnancy was also reported among drug-related inpatient treatment cases.
- Based on information provided on death certificates and applying the principle of selecting the underlying cause of deaths according to the International Classification of Diseases (ICD 10) of the World Health Organization, 17 deaths were assigned to drug use in 2015 as compared to 23 in 2016. 18 deaths due to drugs have been registered in the period January to June 2017.

- Three previous IBBS surveys carried out among people who inject drugs respectively in 2009, 2011 and 2013, showed that Hepatitis C (HCV) was above 95% among this high-risk group, while, the rate of co-infection with HIV and HCV was 44% in the 2013 IBBS survey. In 2016, public laboratories' HCV positivity rate was 33.0 per 1,000, with 1,279 positive cases through 38,756 tested specimens. From 2004 to 2016, the number of laboratory positive hepatitis C cases, has decreased by 53%, from 2,713 cases to 1,279 cases, while, the positivity rate has decreased by 35% for the same period 2004-2016, from 51.0 per 1,000 (*peak of the epidemic*) to 33.0 per 1,000 tested specimens.
- Hepatitis C treatment through the use of Direct Antiviral Agents (DAA) is provided to patients according to the eligibility criteria established by the MOH & QL. Currently, Hepatitis C infected patients are being treated and followed up at the Medical Unit, Victoria Hospital.
- The proportion of people who inject drugs (PWID), among annual newly detected HIV cases, was at its peak in 2005, that is, 92%, it has thereafter declined to reach 33% in 2016. For the first six months of 2017, PWID was 41% of the annual newly detected HIV cases. People who are actively injecting drugs are estimated to be around 5,000 and an estimated 40% of this high-risk population is infected with HIV.

Health response to drug use

- As at June 2017, 4,021 people were on the Methadone Substitution Programme, through 42 methadone dispensing sites across the Island, including 3 sites within the prisons services.
- Between 2012 and 2016, the number of syringes distributed through the Needle Exchange Programme (NEP), has increased by 312% to reach a total of 697,861 syringes distributed in 2016, with 47% done by the Ministry of Health and Quality of Life (MOH&QL) and 53% by NGOs.
- A Suboxone-Naltrexone-based detoxification programme started at Mahebourg Hospital, in January 2016, with a 12-bed facility. At the end of June 2017, 457 cases, including 82 repeaters, have been admitted at Mahebourg Hospital for the programme. 80% were heroin injectors against 20% heroin smokers. On the other hand, an ongoing Codeine Phosphate treatment programme is conducted by five NGOs in collaboration with the MOH&QL who in addition provides medications, as well as, medical and health personnel for the programme.
- Since April 2016, the Ministry of Health and Quality of Life has launched a national drug use prevention campaign, with a team comprising of Nursing Officers and Health Care Assistants. This campaign focuses on several fronts, namely; schoolchildren and non-schoolchildren; communities; workplaces and the public at large. 1,013 awareness sessions in school settings were organized, with 48,417 participants. 6,828 participants were sensitized through 155 drug-related prevention sessions on a range of subjects such as; peer education initiation in schools; forums and rehabilitated drug addicts confessions; non-schoolchildren education; and education in youth centres and youth associations. 20,784 participants were embraced in Community Centres through 463 awareness sessions and 17,850 persons at main bus stations and commercial centres, in 9 sessions.

Drug offence and drug control

- Based on data obtained from the Mauritius Police Force, between 2012 and 2014, the annual drug offence ratio was on average 2.8 reported drug offences per 1,000 inhabitants. From 2015 to 2016, the number of drug offences registered, decreased by 3% from 3,468 to 3,370, resulting in stabilization of the drug offence rate to 2.7 per 1,000 population.

- In 2015 and 2016, there were respectively 1,772 and 1,776 reported Police ADSU arrests for drug offences and 1,133 arrests were reported for the period January to June 2017.
- Out of the 1,133 arrests by Police ADSU for drug offences, from January to June 2017, 838 arrests (74%) were arrests for possession of drugs, 278 arrests (25%) were for dealing of drugs, 12 arrests (1%) were for money laundering and 5 arrests were reported for causing obstruction to Police.
- For the period January to June 2017, out of 1,116 Police ADSU arrests (*i.e excluding arrests due to money laundering and obstruction to Police*), heroin offences accounted for 38%, followed by cannabis, 30%, cannabinoids, 20%, cultivation of cannabis, 5%, sedatives/tranquilizers, 4%, methadone, 2%, buprenorphine, less than one percent and finally hashish, cocaine and methamphetamine, less than one percent.
- There was a percentage increase of 19% in the number of arrests by Police ADSU for the 1st semester of 2017 with respect to the previous 2nd semester of 2016. For the same two semester periods, arrests for possession of drugs increased by 14%, arrests for dealing of drugs increased by 34% and arrests for obstruction to Police increased by 25%. Twelve arrests were reported for money laundering in the 1st semester of 2017 as compared to 3 corresponding arrests in the 2nd semester of 2016.
- Among other drug control activities of the Police ADSU, 14,866 plants of cannabis were uprooted during the period January up to June in 2017. In 2015 and 2016, 72,300 and 72,100 plants of cannabis were uprooted respectively.
- During the first semester of 2017, the Mauritius Revenue Authority (MRA) Customs carried out 42 drug seizure cases as compared to 32 cases in the second semester of 2016.
- Seizures of drugs for the one-year period, July 2016 up to June 2017, by the MRA, amounted to Rs 2.73 billion, out of which, Rs 2.66 billion (97%) were seized in the first semester of 2017.
- The amount of drugs seized in 2015 and in 2016 were Rs 178.5 million and Rs 170.4 million respectively as compared to Rs 2,656.6 million (*Rs 2.7 billion*) for the first six months of 2017.
- For the first six months of 2017, out of the Rs 2,656.6 million of drugs seized by the MRA, Rs 2,614.9 million (98.4%) were related to heroin seizures.
- 10.7 kg and 9.9 kg of heroin were seized by MRA Customs in 2015 and in 2016 respectively as compared to 174.3 kg in the first six months of 2017, that is, a percentage increase of 1661% for the 1st semester of 2017 with respect to the whole year 2016.
- Regarding cannabis, 9.4 kg and 3.1 kg were seized in 2015 and in 2016 respectively as compared to 50.1 kg in the first six months of 2017, that is, a percentage increase of 1516% for the 1st semester of 2017 with respect to the whole year 2016. Furthermore, 78 units of cannabis seeds were seized in 2015, 500 units in 2016 and 111 units in the first semester of 2017. 5.4 kg of hashish were seized in 2015, 0.1 kg in 2016 and 3.1 kg in the first six months of 2017.
- In 2015, 0.3 kg of new psychoactive substances were seized against 0.1 kg in 2016 and 2.1 kg in the first six months of 2017, that is, a percentage increase of 2000% for the 1st semester of 2017 with respect to the whole year 2016.
- 1.3 kg of cocaine was seized in 2016, while, no seizures involving this drug was reported in 2015 and in 2017 (*as at end of June*).

- There were no reported seizures of psychotropic substances by the MRA in 2015, as compared to seizures of 2,256 units (tablets) in 2016 and 1,529 units in the first six months of 2017.
- There were no reported seizures of ecstasy by the MRA in 2015 against seizures of 2,256 units (tablets) in 2016 and 1,529 units in the first six months of 2017.

Drug offence and imprisonment

- Out of 2,140 admissions in prisons, in the first semester of 2017, drug-offence imprisonment accounted for 6%. Among drug-offence admissions, 68% were associated with possession of drugs, 14% with dealing of drugs, 15% with drug trafficking and 3% for importation of drugs.
- During the first six months of 2017, among drug-offence imprisonment, most admissions were due to heroin-related offences, 47%, and cannabis-related offences, 69%, followed by new psychoactive substances offences, 14% and ecstasy, 8%. There were also very few cases, around one percent, for other specified drug offences, while, a significant proportion of drug-offence admissions were reported with unspecified drugs, 17%.
- 2,222 convicted drug offences were reported by the Judiciary, in 2016, as compared to 2,363 in 2015. In 2016, most convicted drug offences were given fines, 87%, against 10% imprisonment and 3% combined for probation, community services and conditional & absolute discharges.
- 57% of the 2,222 convicted drug offences reported by the Judiciary, in 2016, were associated with cannabis-related offences, that is, cultivation, possession and consumption of cannabis.

Drug use in schools

- For the first half of 2017, 19 cases of suspected illicit drug use, involving more than 35 students in 17 educational institutions, were reported, as compared to 43 students concerning 9 educational institutions in the first half of 2016.

General observation

- ❖ In Mauritius, even if drug offences represent only 6% of all offences (*excluding road traffic offences*), evidence-based information shows that there are some drug concerns in the country, specifically in terms of health, social and economic implications. Each year, around 3,000 drug offences are reported by the Mauritius Police Force, about 2,000 convicted drug offences are reported by the Judiciary. Regarding health, at least a thousand drug-related inpatient treatment cases are now expected annually at the public health institutions, while, nearly half of whom usually attend the specialized Mental Health Care Centre. Among patients receiving drug-related care, a high proportion (above 90%) is found in the age group 15 -49 years, that is, an important age segment of the active labor force. The national Hepatitis C and HIV epidemics are high-risk groups concentrated epidemics and are drug-use driven. The positive outcomes of the existing prevention and harm reduction programmes need to be maintained by consolidating and adapting the programmes. On the other hand, control by the authorities shows that importations of major illicit drugs are increasing, in terms of quantity and values. In addition, Police arrests due to money laundering are increasing.
- ❖ Inpatient treatment cases following drug abuse are increasing annually at public health institutions and drug abuse is causing a range of health problems such as; mental and behavioural disorders as

well as other systemic diseases. Since April 2016, in addition to the existing drug treatment and prevention programmes, the Ministry of Health and Quality of Life is implementing a strong national drug use prevention campaign among schoolchildren and non-schoolchildren, at workplaces and in the public at large. The objective of these programs is to build new and at the same time to strengthen existing protective factors and to reverse or reduce risk factors, particularly among the youth.

- ❖ Inpatient treatment cases in public health institutions have revealed that various categories of drugs are being used, namely; narcotics, hallucinogens, depressants, stimulants and other psychoactive drugs, amongst others. Health problems following suspected use of new psychoactive substances constitute one of the major reasons for drug-related inpatient treatment in public health institutions.
- ❖ Triangulation of information indicates that, female drug users generally account for 5% to 10% of drug users in Mauritius. For instance, 6% of the known suspected new psychoactive drug inpatient cases were females. It was 9% among heroin cases and 6% among cannabis cases. On the other hand, all IBBS surveys carried out so far have shown a proportion of 5% to 10% of female injectors among the whole population of people who inject drugs.
- ❖ People in need of inpatient treatment, due to drug problems, are from all age groups, ranging from teenagers to adults aged above 50 years old. It is most frequent among abusers in the 20-34 years age group, though there is a greater concentration within the 25-34 years age group. In addition, drug-related inpatients come from all parts of the country, the impact in the rural areas being as substantial as in the urban ones. Furthermore, Mauritian drug users are choosing an assortment of drugs and substances namely, heroin, cannabis, cannabinoids, hashish, methadone, cocaine, methamphetamine, ecstasy, Rivotril, Valium, Mogadon, Panadeine, Cough syrup, Tramadol, new psychoactive substances, buprenorphine and Nova, amongst others. The particular interest in the benzodiazepines class of drug is also to be noted.
- ❖ Polydrug use is causing quite a number of health harms to those who are addicted. Multiple drugs use is indicating the strong drug dependence nature of some drug users, not to mention the aggravated situation of drugs being taken with alcohol concurrently or sequentially. For instance, inpatient treatment cases at public health institutions have revealed circumstances where heroin has been used with alcohol, thus adding the risk of overdosing. Other sources of information reported to the National Drug Observatory are associating multiple drugs use to the poor quality of street drugs available. The increasing circulation of new psychoactive substances is also contributing to polydrug use.
- ❖ Hepatitis C (HCV) among people who inject drugs (PWID) was found to be high, above 95%. In addition, among this high-risk population, 44% were co-infected with HIV and HCV. High positivity rates of laboratory tested Hepatitis C among patients, as compared to the low positivity rates in the general population, observed through blood donors' laboratory tests, is an indication of a national concentrated hepatitis C epidemic. In Mauritius, deaths registered due to hepatitis C is low, around 10 deaths yearly, while, 9 in 10 deaths due to hepatitis C are acute cases against one chronic case.
- ❖ Management of Hepatitis C (HCV) and HIV co-infection should consider the health vulnerabilities of individuals touched by this condition. For instance, among the HCV-HIV co-infection issues are; firstly, the shorter interval for the development of liver diseases as compared to HCV mono-infected patients; secondly, the replication of HCV which is enhanced in the presence of HIV co-infection; thirdly, some studies have found HCV-HIV co-infection to be associated with an increased risk of death compared with HCV mono-infection, amongst others.
- ❖ The proportion of people who inject drugs, among the annual newly detected HIV cases, has declined drastically since 2011. HIV transmission in this high-risk population has been brought under control through the Harm Reduction programmes. The national HIV epidemic is still a concentrated one. The

population size of people who are actively injecting drugs is estimated to be around 5,000–6,000. Continuous monitoring of this high-risk group, through Integrated Biological and Behavioural Surveillance studies (IBBS) every two years, remains vital since it currently represents around 40% of newly detected HIV cases and that the prevalence of HIV among this key population is estimated to be around 40%.

- ❖ Collaboration and partnership in drug prevention and treatment programmes between the public and the private sector is ongoing. Government and NGOs interactions in the Needle Exchange Programme (NEP) and in the Codeine Phosphate Programme are examples of the public-private sector collaboration. Including NGOs in the demand reduction strategies and inviting consultation of NGOs at all levels of the policy is vital.
- ❖ Based on the regular and constant rate of monthly drug-offence arrests by Police ADSU, especially for possession of drugs (*monthly average of 131 arrests*), coupled with the steady increase of people seeking hospital drug-related inpatient treatment, there is an indication that there is a continuous dynamic supply of drugs.

Chapter 1

Health effects of drug use in Mauritius

This chapter gives an account of the different health problems encountered by some Mauritians following drugs use, for the one-year period July 2016 to June 2017. Information compiled and analyzed on drug-related inpatient treatment cases in public health institutions, shows evidence of how drug use can hurt health. It shows how drug use can affect the body, leading to various diseases such as mental

disorders as well as other systemic diseases. In addition to inpatient treatment cases in public health institutions, this chapter considers other information such as injecting drug use which causes harms when using and sharing dirty injecting equipment, resulting in transmission of HIV infection and hepatitis C.

1.1 Inpatient treatment cases in public health institutions due to drug use problems

1.1.1 Pattern and trend of inpatient treatment in public health institutions due to drug use problems

For the one-year period, from July 2016 to June 2017, there were 1,158 cases treated as inpatients in public health institutions, due to drug use problems, out of which, 7% were female cases.

From 2015 and 2016, inpatient treatment cases in public health institutions following drug use problems, increased by 66% (66% among males and 56% among females), that is, from 552 cases to 914 cases.

Between the 2nd semester period of 2016 and the 1st semester period of 2017, inpatient treatment cases in public health institutions, following drug use problems, increased by 47% (+46% among males and +65% among females). For the same period, there were increases for almost all kind of drugs used and also across all age groups, particularly among male inpatient cases in the age group 25-34 years, that is, a percentage increase of 52% between the two semester periods for this age group.

For the one-year period July 2016 up to June 2017, reported inpatient treatment cases for drug problems at Brown Sequad Mental Health Care Centre accounted for nearly 50% of all reported drug related inpatients treatment cases in all public health institutions. From 2011 to 2016, at Brown Sequad Mental Health Care Centre, inpatient treatment cases due to drug abuse have increased from 65 cases in 2011 to 300 cases in 2016. For the first six months of 2017, 337 drug-related inpatient treatment cases have been reported at this same care centre.

Table 1
Public Health Institutions
Inpatient treatment cases due to complications following drug use
by semester period
January 2015 - June 2017

	2015		2016		2017 1st semester	Percentage change of reported inpatient treatment cases	
	1st semester	2nd semester	1st semester	2nd semester		Year 2016 /Year 2015	1st semester 2017 / 2nd semester 2016
Male	207	297	401	438	638	+66%	+46%
Female	15	33	44	31	51	+56%	+65%
Both sexes	222	330	445	469	689	+66%	+47%

Figure 1
Public Health Institutions
Inpatient treatment cases due to complications following drug use
Quarterly trend, January 2015 - June 2017

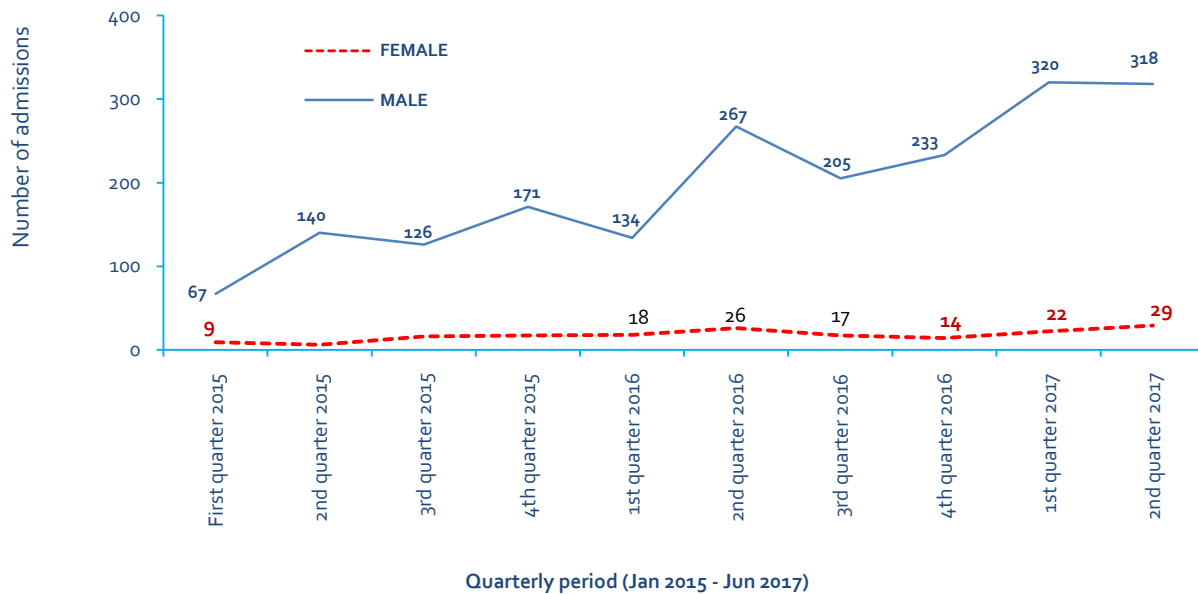
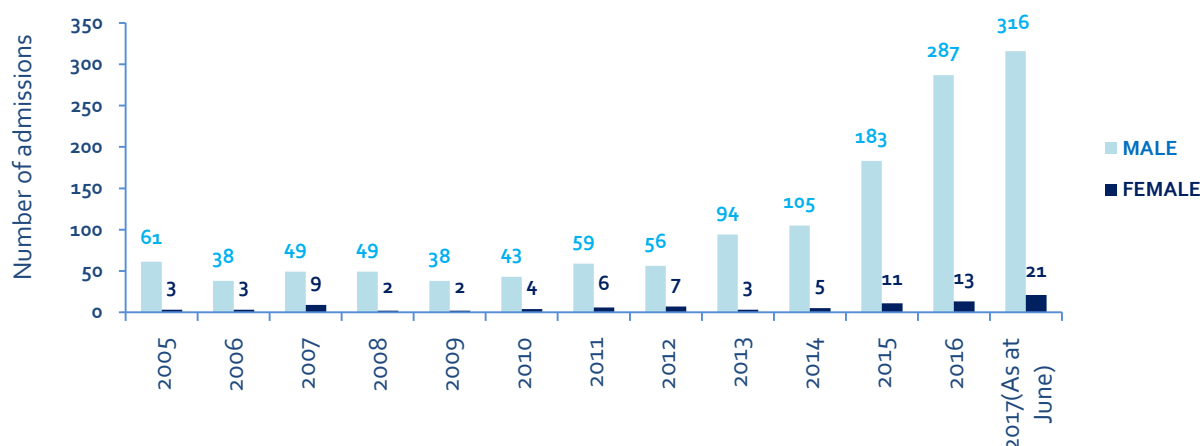


Figure 2
Brown Sequard Mental Health Care Centre
 Cases treated as inpatients
 due to mental and behavioural disorders following drug use
 2005 - 2017(As at June)



1.1.2 Age distribution of drug users treated as inpatients, in public health institutions

For the one-year period, from July 2016 to June 2017, the age distribution of patients for drug-related inpatient treatment cases in public health institutions, was as follows; 2% were aged 10-14 years, 17% were aged 15-19 years, 28% were aged 20-24 years, 31% were aged 25-34 years, 18% were aged 35-49 years and 4% were aged 50 years and above. Thus, inpatient treatment cases were essentially in the age band 15-49 years for male cases, 93%, while it was essentially in the age band 15-34 years for female cases, 91%.

In public health institutions, for the one-year period, from July 2016 to June 2017, drug-related inpatient treatment cases for teenagers (10-19 years) accounted for 19% of all drug-related inpatient cases (18% among male teenagers, 33% among female teenagers).

Table 2
 Public Health Institutions
Inpatient treatment cases due to complications following drug use
 ONE-YEAR PERIOD: JULY 2016 TO JUNE 2017, by age group & sex of patient

Age group (Years)	Male	Female	Both sexes	Percent
10 - 14 years	22	5	27	2.3
15 - 19 years	169	22	191	16.5
20 - 24 years	300	22	322	27.8
25 - 34 years	339	25	364	31.4
35 - 49 years	197	6	203	17.5
50 years & above	49	2	51	4.4
TOTAL	1,076 (92.9%)	82 (7.1%)	1,158 (100.0%)	100.0

Figure 3
Public Health Institutions
Inpatient treatment cases due to complications following drug use
ONE-YEAR PERIOD: JULY 2016 TO JUNE 2017,
by age group of patient

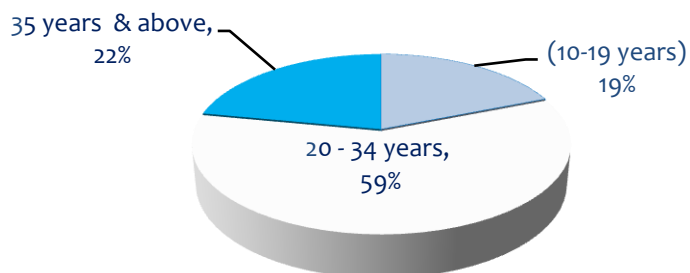


Table 3
Public Health Institutions
Inpatient treatment cases due to complications following drug use
by age group & sex of patient and semester period,

Age group (Years)	(July–December) 2016				(January–June) 2017			
	Male	Female	Both sexes	Percent	Male	Female	Both sexes	Percent
10 - 14 years	10	2	12	2.6	12	3	15	2.2
15 - 19 years	78	10	88	18.8	91	12	103	14.9
20 - 24 years	123	9	132	28.1	177	13	190	27.6
25 - 34 years	130	6	136	29.0	209	19	228	33.1
35 - 49 years	78	3	81	17.3	119	3	122	17.7
50 years & above	19	1	20	4.3	30	1	31	4.5
TOTAL	438	31	469	100.0	638	51	689	100.0
	(93.4%)	(6.6%)	(100.0%)		(92.6%)	(7.4%)	(100.0%)	

1.1.3 Suspected substances reported, among drug users treated as inpatients, in public health institutions

Information collected from public health institutions, indicates that from July 2016 to June 2017, Mauritian drug users have been on a range of substances. Among the reported specified suspected drugs used, there were the following:

- Heroin (*Brown sugar*),
- Buprenorphine,
- Cannabis,
- Rivotril,
- Valium,
- Mogadon,
- Panadeine,
- Cough syrup,

- Cocaine,
- Methadone,
- Tramadol,
- New psychoactive substances,
- and Nova.

Suspected use of new psychoactive substances related to hospital inpatient treatment cases have been reported under various names as follows:

- “La poussière tombée”
- “C’est pas bien”
- “Batte dans la tête”
- “Rambo”
- “Strawberry”
- “Murder”
- “Wasabi”
- “Black Mamba”
- “Résine”
- “Simin”

The Table below gives the distribution of drug-related inpatient treatment cases in public health institutions, by substances used, for the period July 2016 to June 2017. Although a substantial proportion (30%) of inpatient cases was reported with unspecified drugs, the use of new psychoactive substances appeared to be one of the major reasons why drug users have sought after hospital care.

Table 4
Public Health Institutions
Inpatient treatment cases due to complications following drug use
By type of drug & semester period,
July 2016 to June 2017

Drug	First semester 2017	Second semester 2016	Total (One-year period) July 2016 - June 2017	Percent
New psychoactive substances	305	231	536	46.3%
Opioids and opiates	120	79	199	17.2%
Cannabis	38	25	63	5.4%
Medicinal	3	5	8	0.7%
Buprenorphine	0	1	1	0.1%
Unspecified (including multiple drugs)	223	128	351	30.3%
TOTAL	689	469	1,158	100.0%

Table 5
Public Health Institutions
Inpatient treatment cases due to complications following drug use
by type of drug & sex of patient
One-year period, July 2016 - June 2017

Drug	Male	Female	Both sexes	Percent
New psychoactive substances	504	32	536	46.3%
Opioids and opiates	181	18	199	17.2%
Cannabis	59	4	63	5.4%
Medicinal	8	-	8	0.7%
Buprenorphine	1	-	1	0.1%
Unspecified drugs (Including multiple drugs)	323	28	351	30.3%
TOTAL	1,076	82	1,158	100.0%

Table 6
Public Health Institutions
Inpatient treatment cases due to complications following drug use
by type of drug & age group of patient
One-year period, July 2016-June 2017

	DRUG						Total	Percent
	Cannabis	Medicinal	New psychoactive substances	Opioids and opiates	Buprenorphine	Unspecified (Including Multiple drugs)		
10 - 14 years	4	0	14	1	0	8	27	2.3%
15 - 19 years	16	2	108	18	0	47	191	16.5%
20 - 24 years	20	2	148	56	0	96	322	27.8%
25 - 34 years	16	3	160	76	0	109	364	31.4%
35 - 49 years	5	0	90	35	0	73	203	17.5%
50 years & above	2	1	16	13	1	18	51	4.4%
Total	63	8	536	199	1	351	1,158	100.0%

1.1.4 Inpatient treatment cases in public health institutions, due to multiple drugs use

Cases of multiple drugs use were reported as follows: taking methadone with heroin/brown sugar; heroin with rivotril; brown sugar with caustic soda; alcohol with new psychoactive substances; buprenorphine with rivotril; drugs injection while on methadone; heroin (brown sugar) with new psychoactive substances, Nova with cough syrup; amongst others.

1.1.5 Diseases and health complications reported at public health institutions due to drug use

For the one-year period, from July 2016 to June 2017, among drug-related inpatient cases in public health institutions, several diseases associated with mental and behavioural disorders were reported, namely; auditory hallucination, psychotic disorders, acute psychosis, confusional state, depression and anxiety, amongst others.

Drug users treated as inpatients also presented the following symptoms, namely; unconsciousness, fits, vertigo, palpitation, breathlessness, vomiting, nausea, abdominal pain, headache, weakness, dizziness, agitation and restlessness, sleepiness and dyspnoea.

Other conditions which have necessitated inpatient treatment cases in public health institutions, following drug use, were withdrawal syndrome, suicidal tendencies, abnormal aggressive disorders and slurred speech. Addiction to heroin during pregnancy was also reported among drug-related inpatient treatment cases.

1.1.6 Inpatient treatment in public health institutions following complications due to suspected use of new psychoactive substances

For the one-year period, July 2016 to June 2017, out of 1,158 inpatient treatment cases in public health institutions, at least 536 cases, 44%, were specified as suspected use of new psychoactive substances, out of which, female inpatient cases accounted for 6%. It is to be noted, as already mentioned, that 30% of all drug-related inpatient cases were reported with unspecified drugs.

Out of the 536 known inpatient cases of suspected new psychoactive substances, 3% of cases were associated to patients aged 10-14 years, 20% were aged 15-19 years, 28% were aged 20-24 years, 30% were aged 25-34 years, 17% were aged 35-49 years and 3% were aged 50 years and over.

Thus, among the known inpatient cases of suspected use of new psychoactive substances, in public health institutions, teenagers' (10-19 years) inpatient cases accounted for 23%.

Table 7
Public Health Institutions
Inpatient treatment cases due to complications following suspected use of new psychoactive substances
One-year period, July 2016 to June 2017, by age & sex of patient

	Female	Percent	Male	Percent	Both sexes	Percent
Age group						
10 - 14 years	2	6.3%	12	2.4%	14	2.6%
15 - 19 years	11	34.4%	97	19.2%	108	20.1%
20 - 24 years	6	18.8%	142	28.2%	148	27.6%
25 - 34 years	9	28.1%	151	30.0%	160	29.9%
35 - 49 years	3	9.4%	87	17.3%	90	16.8%
50 years & above	1	3.1%	15	3.0%	16	3.0%
Total	32	100.0%	504	100.0%	536	100.0%

1.1.7 Inpatient treatment cases in public health institutions following complications due to drug use, by district of residence of patient

For the one-year period, from July 2016 to June 2017, the distribution of the place of residence of drug users attending public health institutions, for inpatient care, indicates that drug use was scattered in almost all areas of the Island of Mauritius, even if some regions were more affected than others. Drug users admitted to public health institutions were predominantly from the two districts constituting the urban region, namely, Port Louis and Plaines Wilhems. Nearly one-quarter of drug-related inpatient cases were from Port Louis and 28% were from Plaines Wilhems, making a total proportion of 53% for urban cases against 47% for rural cases.

Each rural district represented respectively 3% to 10% of all drug-related inpatient cases in the Island. The district of Savanne had the lowest proportion of admitted drug-users with only 3% of all inpatients cases in the Island. One percent of drug-related inpatient treatment cases, in public health institutions, were from correctional centres and from prisons.

Table 8 (a)
Public Health Institutions
Inpatient treatment cases due to complications following drug use
One-year period, July 2016 to June 2017
by place of residence & sex of patient

Place of residence	Male	Percent	Female	Percent	Both sexes	Percent
Port Louis	264	24.5%	22	26.8%	286	24.7%
Pamplemousses	101	9.4%	7	8.5%	108	9.3%
Rivière du Rempart	58	5.4%	3	3.7%	61	5.3%
Flacq	100	9.3%	5	6.1%	105	9.1%
Grand Port	51	4.7%	2	2.4%	53	4.6%
Savanne	33	3.1%	2	2.4%	35	3.0%
Plaines Wilhems	302	28.1%	24	29.3%	326	28.2%
Moka	53	4.9%	2	2.4%	55	4.7%
Black River	103	9.6%	13	15.9%	116	10.0%
Correctional centres	11	1.0%	2	2.4%	13	1.1%
Total	1,076	100.0%	82	100.0%	1,158	100.0%

Table 8 (b)
Public Health Institutions
Inpatient treatment cases due to complications following drug use
One-year period, July 2016 to June 2017
by place of residence & suspected substances used

(Number of inpatient treatment cases)

DRUG	PLACE OF RESIDENCE OF PATIENT										TOTAL
	Port Louis	Pamplemousses	R du Rempart	Flacq	Grand Port	Savanne	Plaines Wilhems	Moka	Black River	Correctional centre/ prison	
Cannabis	6	8	3	15	5	6	10	2	8	0	63
Medicinal	2	1	0	0	2	1	2	0	0	0	8
New psychoactive substances	145	50	28	32	27	12	156	24	53	9	536
Opioids and opiates	49	21	7	28	6	4	49	12	22	1	199
Buprenorphine	1	0	0	0	0	0	0	0	0	0	1
Unspecified	83	28	23	30	13	12	109	17	33	3	351
TOTAL	286	108	61	105	53	35	326	55	116	13	1,158
(Percentage inpatient treatment cases)											
DRUG	PLACE OF RESIDENCE OF PATIENT										TOTAL
	Port Louis	Pamplemousses	R du Rempart	Flacq	Grand Port	Savanne	Plaines Wilhems	Moka	Black River	Correctional centre/ prison	
Cannabis	2%	7%	5%	14%	9%	17%	3%	4%	7%	0%	5%
Medicinal	1%	1%	0%	0%	4%	3%	1%	0%	0%	0%	1%
New psychoactive substances	51%	46%	46%	30%	51%	34%	48%	44%	46%	69%	46%
Opioids and opiates	17%	19%	11%	27%	11%	11%	15%	22%	19%	8%	17%
Buprenorphine	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Unspecified	29%	26%	38%	29%	25%	34%	33%	31%	28%	23%	30%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 8 (c)
Public Health Institutions
Inpatient treatment cases due to complications following drug use
One-year period, July 2016 to June 2017
by place of residence, semester periods & suspected substances used

[Continue with next table below for further districts].

DRUG	Number of inpatient cases														
	Port Louis			Pamplemousses			R. D. Rempart			Flacq			Grand Port		
	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)
Cannabis	4	2	6	7	1	8	1	2	3	7	8	15	1	4	5
Medicinal	1	1	2	1	0	1	0	0	0	0	0	0	1	1	2
New psychoactive substances	90	55	145	30	20	50	12	16	28	14	18	32	14	13	27
Opioids and opiates	37	12	49	10	11	21	2	5	7	13	15	28	4	2	6
Buprenorphine	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Unspecified	57	26	83	17	11	28	13	10	23	20	10	30	7	6	13
TOTAL	189	97	286	65	43	108	28	33	61	54	51	105	27	26	53

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DRUG	Savanne		Plaines Wilhems			Moka			Black River			Correctional Centres			All public health Institutions			
	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)	First semester 2017	Second semester 2016	One-year (July 2016 - June 2017)			
	Cannabis	5	1	6	8	2	10	0	2	2	5	3	8	0	0	0	38	25
Medicinal	0	1	1	0	2	2	0	0	0	0	0	0	0	0	0	3	5	8
New psychoactive substances	7	5	12	95	61	156	14	10	24	23	30	53	6	3	9	305	231	536
Opioids and opiates	3	1	4	24	25	49	10	2	12	16	6	22	1	0	1	120	79	199
Buprenorphine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Unspecified	8	4	12	65	44	109	9	8	17	24	9	33	3	0	3	223	128	351
TOTAL	23	12	35	192	134	326	33	22	55	68	48	116	10	3	13	689	469	1,158

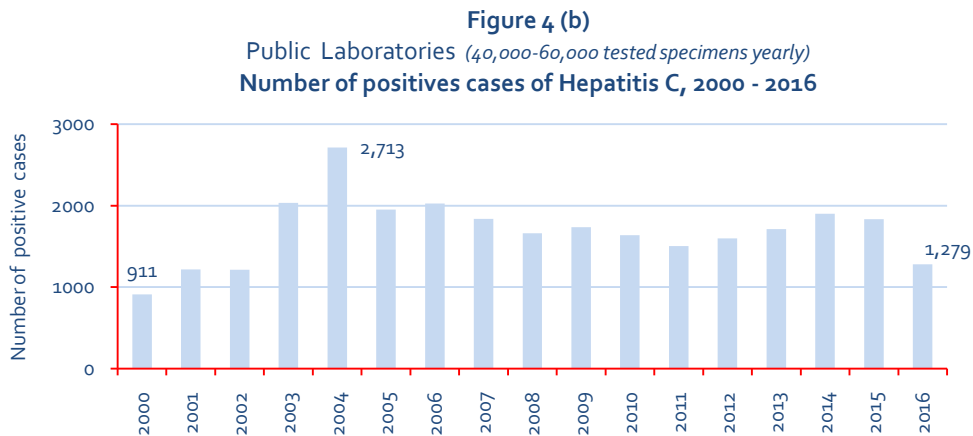
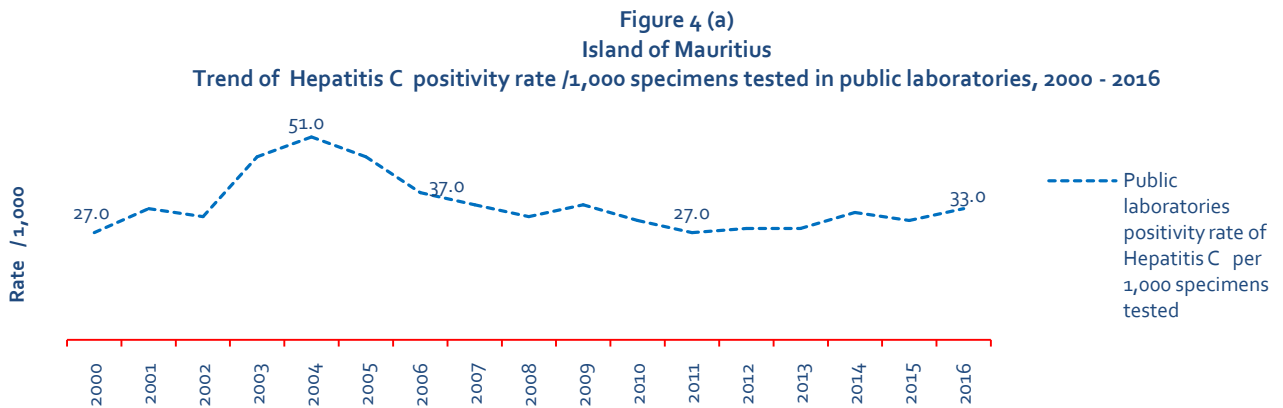
1.2 Drug use, Hepatitis C and HIV epidemics

1.2.1 Hepatitis C and drug injection

The link between drug use and hepatitis C has been widely documented by many countries and communities and is now evident globally. Hepatitis C is a disease of the liver caused by the hepatitis C virus (HCV), which if not resolved can lead to chronic liver disease such as cirrhosis. HCV which affects millions of people, globally, is communicable and is spread by contact with infected blood or other bodily fluids.

In Mauritius, three Integrated Biological and Behavioral Surveillance (IBBS) surveys carried out in 2009, 2011 and 2013 have shown that, at each point of time, above 95% of people who inject drugs were HCV infected, although these studies also showed a decrease in the size of this high-risk population from 10,000 to 5000 active drug injectors.

The evolution of the national Hepatitis C concentrated epidemic is portrayed through the trend of positivity rates of this pathogen confirmed through tests carried out in public laboratories from 2000 to 2016. The peak of the Hepatitis C epidemic was observed in 2004 when 2,713 positive cases were found among 52,713 specimens tested, that is a positivity rate of 51.0 per 1,000 and has since then constantly decreased to reach a positivity rate of 27.2 per 1,000, through 55,158 specimens tested in 2011. No further decrease has been observed as from 2011 to 2016 in the positivity rate, although it decreased in absolute numbers, respectively from 1,502 cases to 1,279 cases. In 2016, HCV positivity rate was 33.0 per 1,000 with 1,279 positive cases out of 38,756 specimens tested - (excluding blood donors in 2016).



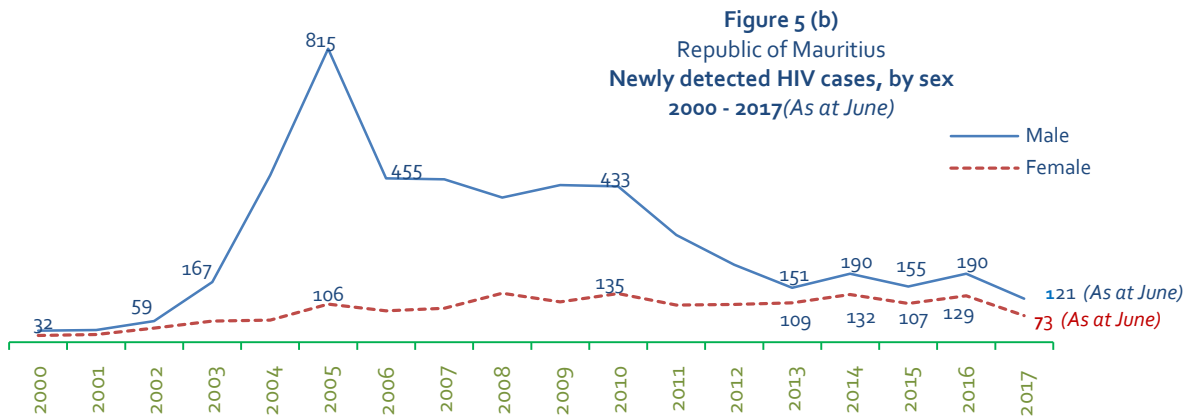
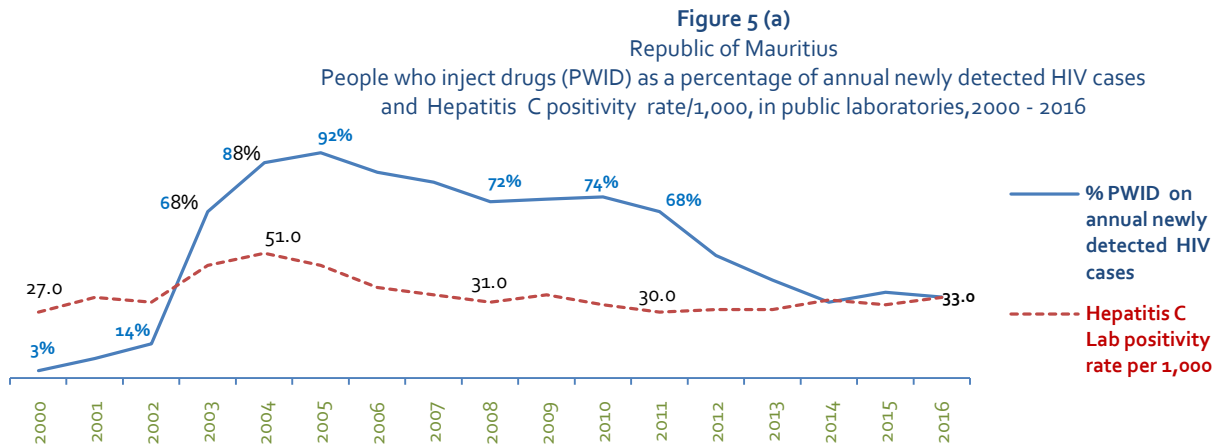
1.2.2 Drug injection, HIV and Hepatitis C linkages

In Mauritius, the Hepatitis C epidemic curve has followed almost the same pattern and trend as the HIV epidemic, thus indicating people who inject drugs as the driving element of the national Hepatitis C concentrated epidemic (See figure 5(a) below). The methadone substitution treatment set up in Mauritius as from 2006, coupled with provision of sterile injecting equipment, through needle and syringe programmes, have been the determinant prevention measures that have contributed to the control of the HIV epidemic and at the same time have curbed down the Hepatitis C epidemic.

It should be noted that, while a drastic decline in the number of annual newly detected HIV cases is observed as from 2011 to 2016 (see chart below), on another hand, for the same period, the positivity rates of Hepatitis C through public laboratories have remained constantly around 30 per 1,000.

In 2015, positivity rate of hepatitis C, in public laboratories, was 120 per 1,000 among patients (1,700 positive cases out of 14,125 specimens tested), while, it was 3 per 1,000 among blood donors (133 positive cases among 46,617 specimens tested) indicating a concentrated hepatitis C epidemic.

In 2013, HIV and Hepatitis co-infection was 44% among people who inject drugs.



The high prevalence of HCV can be explained by the high-risk drug injecting practices that were observed among people who inject drugs. For instance, 90% of PWID reported injecting heroin in the three months previous to the 2013 IBBS survey. 63% percent of them reported injecting drugs daily; more than two thirds

(69%) reported injecting two or more times in a day and only 25% had never shared a needle/syringe previously used by someone else and 25% had never shared injecting equipment such as cookers, vials, containers in the three months previous to the 2013 IBBS survey.

1.2.3 Hepatitis C morbidity and mortality

In 2016, based on the International Classification of Diseases (ICD 10), 12 deaths were registered due acute hepatitis C and all were in the age band 30-64 years. From 2010 to 2016, 68 deaths (63 males, 5 females) due to hepatitis C have been registered among adults aged 30 years & over, out of which, 61 deaths were acute cases against 7 chronic cases.

The three tables below give details of the morbidity and mortality trend of hepatitis C from year 2005 to 2016. For instance, in 2016, there were 1,279 positive hepatitis C cases detected by public laboratories (*excluding tests among blood donors*) and 11 inpatient treatment cases were reported in public hospitals due to hepatitis C, while, 13 deaths were registered due to hepatitis C in whole Island of Mauritius.

Table 9
HEPATITIS C
Trend of public laboratories positivity rates, morbidity and mortality, 2005 – 2016

YEAR	Number of specimens tested in public laboratories	Number of positive cases	Positivity Rate (%)	Number of deaths registered in Island of Mauritius	Cases treated as inpatients in public health institutions
2005	42,899	1,952	4.6	2	2
2006	55,135	2,026	3.7	1	6
2007	54,842	1,839	3.4	-	6
2008	54,262	1,660	3.1	5	5
2009	51,773	1,735	3.4	4	5
2010	54,950	1,637	3.0	7	6
2011	55,158	1,502	2.7	14	12
2012	57,586	1,598	2.8	7	13
2013	61,665	1,713	2.8	11	7
2014	58,951	1,901	3.2	5	10
2015	60,742	1,833	3.0	11	19
2016	38,756	1,279	3.3	13	11

Table 10
Island of Mauritius
Deaths registered due to Hepatitis C (Acute and Chronic) among adults aged 30 years and over

Hepatitis C	2010		2011		2012		2013		2014		2015		2016	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Acute	5	1	12	-	5	-	10	1	4	1	9	1	11	1
Chronic	1	-	2	-	2	-	-	-	-	-	1	-	1	-
Total	7	-	14	-	7	-	11	1	5	1	11	1	13	-

Table 11
Island of Mauritius

**Cases treated as inpatients in government general hospitals
Hepatitis C (Acute and Chronic) among adults aged 30 years and over
2010 - 2016**

Hepatitis C	2010		2011		2012		2013		2014		2015		2016	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Acute	5	1	12	-	8	5	4	3	1	5	7	1	2	1
Chronic	-	-	-	-	-	-	-	-	2	2	7	4	5	3
Total	6		12		13		7		10		19		11	

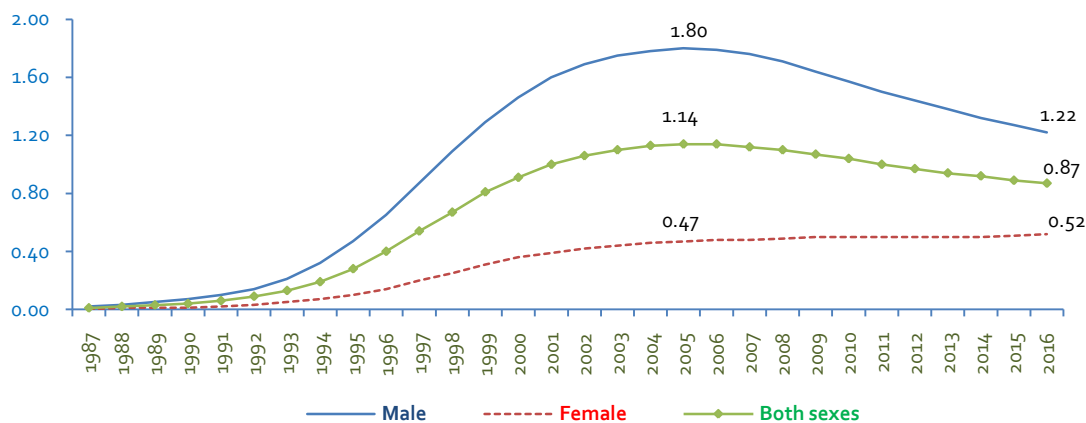
1.3 Injecting drug use

1.3.1 People who inject drugs (PWID) as the driving agent of the national HIV epidemic

At the beginning of the HIV epidemic, the mode of transmission of the HIV virus was mainly heterosexual. The escalating incidence as from year 2000 was propelled by PWID acting as the main mode of transmission. The gradual shift in mode of transmission from heterosexual to PWID became flagrant in 2003 when 68% of the new cases were detected among the PWID as compared to only 14% in 2002. The shift got to its peak in 2005, 92%, and declined to 68% in 2011. In 2016, PWID accounted for 33% of the annual newly detected HIV cases as compared to 35% in 2015. For the first six months of 2017, it was 41%.

Based on the UNAIDS Spectrum, the number of people living with HIV was estimated to stand around 7,900 in 2016, with an HIV prevalence of 0.87% among the Mauritian population age 15-49 years.

Figure 6
Republic of Mauritius
Estimated HIV prevalence (%) among adult 15 - 49 years
1987 - 2016



Two Integrated Biological and Behavioral Surveillance (IBBS) surveys, carried out in the years 2009 and 2011 provided an estimated population size of around 10,000 active PWID in Mauritius. Another similar survey, carried out in 2013, provided an estimated population size of 5,000 active PWID. An estimate of the PWID population size in 2016, using the UNAIDS Spectrum, is around 5,000–6,000 active injectors. It is to be

highlighted that over 6,500 PWID have been induced on methadone since 2006 and as at June 2017, around 4,000 PWID were on the methadone maintenance programme.

1.3.2 Characteristics of people who inject drugs

The IBBS study, carried out in 2013, revealed that male drug injectors made up 93% of the population of people who inject drugs against 7% female drug injectors. The majority of drug injectors, 80%, were aged between 20 – 49 years for both sexes. Those aged 15 – 19 years constituted 7% among female injectors and less than 1% among male injectors. Regarding their educational attainment, it was observed that at least 95% of drug injectors had reported that they have not completed the secondary education cycle. Concerning civil status, only 2% of PWID were widows or widowers and the remaining 98% of this population was equally distributed within those who were singles, those living in common whether civilly or religiously and those divorced or separated couples.

85% of PWID reported they have ever been arrested by police and mostly, 69%, for drug-related problems, while, 21% were arrested for larceny, 6% for violence, 3% for prostitution and 2% for other matters. 81% of those that have ever been arrested have ever been incarcerated, which means that roughly 70% of PWID have ever been incarcerated.

Most drug injectors started injection in the age group 15 – 19 years (43%), 27% started in the age group 20 – 24 years, 23% started as from 25 years and above. 7% started under the age of 15 years. The median duration on injecting drug use was 18 years with 11% who claimed a duration of 30 years and above of drug injection practice.

Regarding the age of initiation to drugs, it is worth underlying the link between injecting drug and non-injecting drug practice. In fact, 95% of PWID reported they have ever used non-injecting drug and once they have started with this type of drug use, 16% have started with injecting practices on the same year, 15% have started injecting one year after the first non-injecting drug, 34% have started injecting 2 – 4 years after first the non-injecting drug, 20% have started injecting 5 – 10 years after first the non-injecting drug and finally only 7% have started with injecting drug more than 10 years after first non-injecting drug use.

1.3.3 Mode of initiation to injecting drug

The 2013 IBBS survey showed that the age at first injecting drug use was independent of the mode of initiation, i.e. age at first drug injection was not associated with whether injecting drug initiation was done by a friend, in a group or the drug user himself/herself. On the other hand, a significant decrease was observed from 85% in 2011 to 68% in 2013 with respect to the percentage of those who used to inject drug with another person or use to inject in a group. Forty-three percent of PWID reported they have been initiated to injecting drug practice by a friend while 32% reported the initiation was made on their own. 18% admitted they had started injecting drugs within a group (not in prison). Only 5% have had their first injecting drug by a partner.

1.3.4 Injecting drug practices

According to the 2013 IBBS survey, the two main places chosen by drug users to inject were at home (63%) and on unoccupied land (32%) and the remaining 5% at other miscellaneous spots. In the 2013 IBBS survey, 69% of PWID were estimated to inject drugs more than once on any particular day. Although a majority (80%) of them reported they used sterile equipment, it was observed that injecting more than once in a day slightly increased the probability of using non-sterile equipment. Furthermore the use of sterile or non-sterile equipment was found to be independent of the person who injected the drug user. It is to be noted that usually 81% of PWID were self-injecting their drug and 15% were done by any friend of the drug user, while, very few (4%) were done by either a peer or other persons. 23% of PWID reported they have ever had drug overdose.

The 2013 study showed that 75% of PWID have ever shared used needles and among this sub-group 46% have ever shared used needles either “always” or “most of the time”. Among PWID who have ever shared used needles, 80% were cleaning the used needles (mostly with cold water), out of which, only 27% were using hot or boiled water for the cleansing. On the other hand, 76% had shared cookers/vials in the last three months prior to the 2013 study. Ease of access to new, unused needles and/or syringes was high (95%) with pharmacies being reported as the most common place for obtaining them (51%), followed by needle exchange programmes, 37%.

1.4 Death due to drug use

Based on information provided on death certificates and applying the principle of selecting the underlying cause of deaths according to the International Classification of Diseases (ICD 10) of the World Health Organization (WHO), 17 deaths were assigned to drug use in 2015 as compared to 23, in 2016. Eighteen deaths due to drugs have been registered in the period January to June 2017.

Chapter 2

The health response to drug use

The complexity of the drug problem calls for a multipronged approach since there is no one-fits-all solution for those who unfortunately have fallen prey to the use of substances. The Ministry of Health and Quality of Life (MOH&QL) spearheads the health response to the drug scourge through an array of services in collaboration with NGOs. These services comprise harm reduction, treatment, detoxification and after care, namely; the Needle Exchange Programme; the Methadone Substitution Therapy;

The Suboxone-Naltrexone-based detoxification; psychosocial support services and the codeine programme. Since April 2016, following the dismantlement of the National Agency for the Treatment and Rehabilitation of Substance Abuse (NATReSA), the MOH&QL, through the Harm Reduction Unit, is implementing a drug prevention programme in view of reducing the demand for drugs particularly among the youths.

2.1 The Needle Exchange Programme

The Needle Exchange Programme (NEP) is implemented both by the MOH&QL and NGOs and currently, 46 NEP sites are operational throughout the Island of Mauritius, out of which, 35 sites are under the MOH&QL, while, 11 sites are covered by NGO CUT (*Collectif Urgence Toxida*).

The number of syringes distributed, in 2012, was 169,209 through 39 sites of the MOH&QL, and 113,407 syringes by 17 sites of NGOs, making a total of 282,616 syringes. Between 2012 and 2015, the number of syringes distributed has increased by 153% to reach a total of 715,524 syringes, out of which, MOH&QL with 35 sites, accounted for 317,568 syringes, i.e 44%, against 397,956 syringes with 11 sites, i.e 56%, for NGOs. In 2016, 697,861 syringes were distributed, with 47% by MOH&QL and 53% by NGOs, both with same respective number of sites as in 2015.

2.2 The Methadone Substitution Therapy

The Methadone Substitution Therapy programme started in November, 2006. Over 6,500 people who inject drugs have been induced on methadone, between 2006 and July 2015. In July 2015, the intake of new clients on the programme was halted because of the numerous complaints regarding loitering and antisocial behaviours of some beneficiaries at the dispensing sites. Subsequently, a Suboxone detoxification programme was introduced in January 2016. However, around 4,500 clients, who were on the maintenance at that time, continued to have their doses and the related services. As at June 2017, there were 42 methadone dispensing sites across the island, including 3 sites within the prison services. The dispensing sites and the number of clients were distributed as given in the table below.

Table 12
Methadone Substitution Programme
Number of clients, as at June 2017, by dispensing region

Dispensing region	Number of sites	Male	Female	Both sexes
Port Louis	13	1,625	66	1,691
Upper Plaines Wilhems	6	647	26	673
Lower Plaines Wilhems	5	449	30	479
Grand Port region	5	354	10	364
Northern region	6	279	8	287
Eastern region	3	197	1	198
Western region	1	18	0	18
Prison	3	303	8	311
TOTAL	42	3,872	149	4,021

It is to be noted that in view of the mitigated results of the suboxoned programme, methadone induction has been reintroduced as from June 2017 and is being carried out on a day care basis at two methadone centres, namely, at Sainte Croix and Mahebourg, while females are being induced at Bouloux Methadone Centre, Cassis.

2.3 The Suboxone Programme

The Suboxone-Naltrexone-based detoxification programme started at Mahebourg Hospital, in January 2016, with a 12-bed facility. The residential induction phase lasts for a period of 15 days. As at end of June 2017, 457 cases have been admitted at Mahebourg Hospital for the programme, including 82 repeaters. 80% were heroin injectors against 20% heroin smokers, while 3% were females.

The **age distribution** of patients was as follows: 12% were under 20 years, 47% were in the age group 20-29 years, 41% were aged 30 years and above.

Of those who were heroin injectors, the duration **from smoking to injecting** was reported as follows: 28% went straight into injecting heroin; 37% smoked heroin for one year before injecting it; 20% smoked heroin for 2 years before injecting it; and 16% smoked heroin for 3 years or more before injecting it.

The chart below shows the course of opioid abstinence in treated patients over time:

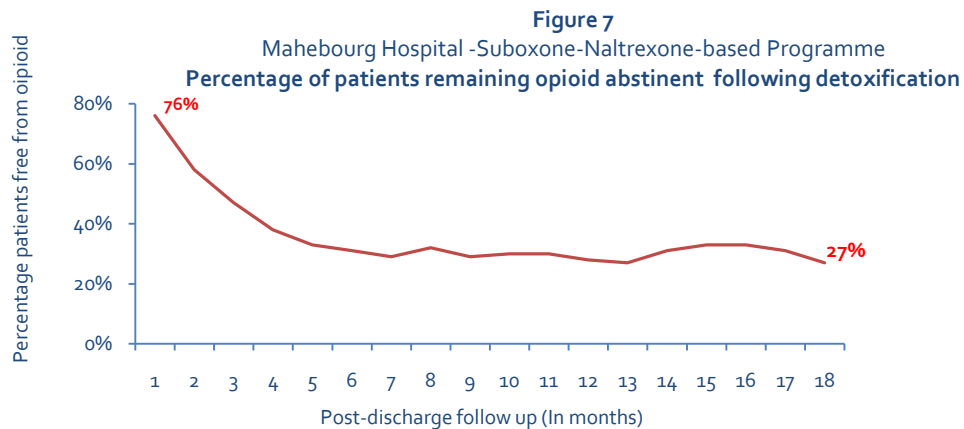


Table 13
Mahebourg Hospital – Suboxone-Naltrexone-based Programme
Extent of poly-substance misuse
Urine drug screen tests results on admission to the Detoxification Centre
(Based on 379 patients)

Poly-substance used with heroin	Percentage testing positive	Percentage of patients being drug free
Benzodiazepines (BDZ)	25%	25%
Methadone	20%	29%
THC	13%	31%
BDZ + Methadone	9%	18%

About 90% of **patients initiated on naltrexone** stopped their naltrexone within 3 months of initiation.

The common reasons reported are as follows:

- Craving for opioid drugs
- Side effects of naltrexone (*opioid withdrawal-like side effects*)
- Belief that naltrexone is no longer necessary.

Table 14
Mahebourg Hospital
Suboxone-Naltrexone-based Programme
Treatment outcome in specific groups

Category of patients	Proportion of patients being drug free	Percentage of patients being drug free
Gender		
Male	122/372	33%
Female	1/12	8%
Mode of heroin use		
Injecting heroin	81/303	27%
Smoking heroin	36/81	44%
Previous addiction treatments:		
Methadone substitution therapy	7/60	12%
Prior detoxification with Suboxone	19/75	25%
Duration of heroin use:		
< 5 years	79/237	33%
5 years – 9 years	22/75	29%
10 years & over	16/67	24%
Amount of heroin use: (Money spent on heroin)		
< Rs 1000	65/207	31%
Rs 1000 – Rs 1999	25/81	31%
Rs 2000 & over	27/91	30%

2.4 The Codeine Phosphate programme

The codeine phosphate treatment programme is an ongoing programme being conducted by five NGOs in collaboration with the Ministry of Health and Quality of Life, namely:

- Dr Idriss Goomany Centre (Plaine Verte)
- HELP de Addiction Centre (Hindu House)
- Sangram Sewa Sadan (St Paul)
- Centre de Solidarité Pour Une Nouvelle Vie (Rose Hill)
- Chrysalide Centre (Bambous)

The Ministry of Health and Quality of Life provides a Medical Officer to each NGO on a roster basis. The Medical Officer visits the centre once a week, except for Dr Idriss Goomany Centre, where sessions are conducted twice weekly. The Ministry of Health and Quality of Life also provides medications for this programme.

2.5 Prevention against drug use

Since April 2016, the Ministry of Health and Quality of Life has launched a national drug use prevention campaign, with a team comprising of Nursing Officers and Health Care Assistants, focusing on several major fronts namely:

- The schoolchildren and non-schoolchildren
- The community, including outreach
- The workplace
- The Public at large

2.5.1 The schoolchildren and non-schoolchildren campaign

The risk and protective factors are the primary targets of effective drug prevention programs used in educational and training institutions, as well as, in the community. It is agreed that, in order to be effective, prevention programs should be on long-term basis, with repeated interventions (i.e. booster programs) to reinforce the original prevention goals. From May 2016 to June 2017, an array of interventions at the level of educational and training institutions have been carried out, including talks, training sessions for young peers, ‘temoignages’ sessions by rehabilitated drug users, as well as, peer education sessions by students themselves.

On another front, activities have been conducted with children out of the educational institutions, through youth centres, clubs, as well as in close settings. The table below indicates the number of activities conducted and the number of students and trainees reached.

Table 15
Number of drug prevention activities conducted for young citizens
and the number of students/ trainees reached
May 2016 – June 2017

Activities	Number of sessions	Number of participants
Awareness sessions in school settings	1,013	48,417
Initiation of peer education through health clubs in school settings	25	530
Forum/debate in schools	5	500
“Temoignage” by rehabilitated drug addicts in schools	5	850
Awareness sessions in MITD including “Témoignage” by rehabilitated drug addicts	5	600
Awareness sessions with non-schoolchildren	50	1,618
Sensitization sessions in Youth Centres/Clubs	50	2,285
Sensitization sessions among youth in voluntary associations	10	359
RYC/CYC	5	86

2.5.2 The community drug prevention programme

Community prevention programs are reaching populations in multiple settings, for example; community centres; social welfare centres; clubs and socio religious organizations. The target is to reach as many members of the community with targeted prevention messages regarding drugs. In view of facilitating the

implementation of activities, networks have been established at different levels with the existing communities and institutions settings. Advocacy has been initiated with community leaders and it is believed that these programmes need to be scaled up consistently, while, involving more and more families. The Table below shows the different activities conducted within the community.

Table 16
Number of community drug prevention activities conducted
May 2016 – June 2017

Activities	Number of sessions	Number of participants
Advocacy sessions with community leaders/Members of Municipal District Councils	3	121
Awareness sessions with communities at large, in Community Centres/Social Welfare Centres	463	20,784
Awareness sessions for women, in Women Centres	28	2,536
Awareness sessions with representatives of different religions denominations	2	30
Sensitization sessions in religious and socio-cultural organizations	14	660

2.5.3 The workplace drug prevention campaign

Drug abuse often affects people during their most productive years, and the entrapment of young adults in drug use, as opposed to engagement in regular employment and educational opportunities, poses distinct barriers to the development of individuals and communities. Most heads of households and community members can also be reached at the workplace. Thus, the workplace represents a unique opportunity of transmitting prevention messages since it can provide an accessible audience without the extensive canvassing required in the community. This endeavor needs the full collaboration and support of the employers as well as the trade unions.

Table 17
Drug prevention activities conducted at the workplace
May 2016 – June 2017

Activities	Number of sessions	Number of participants
Awareness sessions in the manufacturing sector	38	930
Awareness sessions among Public Officers of different Ministries/Municipalities/District Councils	42	1,339
Awareness sessions among employees of the Tourism sector	38	1,004
Transport sector	10	288
Construction sector	19	199
CMEs in Regional Hospitals	4	200
Awareness sessions among the nursing personnel	15	382
Awareness sessions among the paramedical staff	16	165
Seafarers	12	310

2.5.4 Public awareness

Effective public awareness campaign is not just billboards, or social media, but, should include outreach efforts and be able to have full interactions with audiences. The awareness sessions conducted in public places are given below.

Table 18
Awareness sessions conducted in public places
May 2016 – June 2017

Activities	Implemented	
	Number of sessions	Number of participants
Monthly awareness sessions at main bus stations/commercial sites	9	17,850
Outreach monthly drug prevention programmes in high-risk areas in collaboration with stakeholders	12	588

Chapter 3 Situation of drug use and trafficking in Mauritius

3.1 Drug control by the Mauritius Police Force

3.1.1 The Mauritius Police Force reported drug offences

Between 2012 and 2014, drug offence ratio was on average 2.8 reported drug offences per 1,000 inhabitants annually. From 2015 to 2016, the number of drug offences registered, decreased by 3% from 3,468 to 3,370, resulting in stabilization of the drug offence rate to 2.7 per 1,000 inhabitants.

Based on the Mauritius Police Force data, the proportion of reported drug offences, with respect to all reported offences (*excluding road traffic contraventions*), was 6.9% in 2010. This proportion decreased steadily to 5.7% in 2013 and went up slightly to 6.4% in 2014. In 2015 it was 6.0% and in 2016 it stood at 5.6%.

In 2010, for every 14 non-drug offences (*excluding road traffic contraventions*), there was one drug offence. In 2016, the ratio was 18 non-drug offences (*excluding road traffic contraventions*) for one drug offence.

In 2016, out of the 3,370 drug offences reported, 57% were cannabis-related offences, 25% heroin-related offences, 5% for sedatives/tranquilizers and 1% for buprenorphine. The remaining 12% represented other types of drugs, including mainly cannabinoids, methadone and hashish.

Table 19
Drug offences and non-drug offences, reported by the Mauritius Police Force , 2010 - 2016
[Excluding road traffic contraventions]

Year	Offences reported (excluding road traffic contraventions)			% drug offences on total offences (excluding road traffic contraventions)	Ratio non-drug offences per drug offence (excluding road traffic contraventions)
	Drug offences	Non-drug offences	Total offences reported		
2010	3,943	53,600	57,543	6.9	14
2011	3,721	53,758	57,479	6.5	14
2012	3,472	52,724	56,196	6.2	15
2013	3,227	53,272	56,499	5.7	17
2014	3,631	53,526	57,157	6.4	15
2015	3,468	54,759	58,227	6.0	16
2016	3,370	56,321	59,691	5.6	18

3.1.2 Arrests by Police ADSU for dealing of drugs, possession of drugs, money laundering and obstruction to Police

In 2015 and 2016, there were respectively 1,772 and 1,776 reported Police ADSU arrests for drug offences, while 1,133 arrests were reported for the period January to June 2017. For the one-year period, July 2016 to June 2017, there were 2,084 arrests by Police ADSU (2,021 males, 63 females).

There was an overall percentage increase of 19% in the number of arrests by Police ADSU for the 1st semester of 2017 with respect to the previous 2nd semester of 2016. For the same two semester periods, arrests for possession of drugs increased by 14%, arrests for dealing of drugs increased by 34%, arrests for obstruction to Police increased by 25%, while, 12 arrests were reported for money laundering in the 1st semester of 2017 as compared to only 3 corresponding arrests in the 2nd semester of 2016, that is a percentage increase of 300% for money laundering between the two semester periods.

There was a percentage increase of 19% in the number of arrests of male drug offenders by Police ADSU for the 1st semester of 2017 with respect to the previous 2nd semester of 2016, as compared to a percentage increase of 25% for female drug offenders between the same two periods.

For the one-year period, July 2016 up to June 2017, arrests by Police ADSU for drug offences amounted to 2,084, out of which 1,574 arrests (76%) were arrests for possession of drugs and 486 arrests (23%) were for dealing of drugs, while, fifteen arrests were reported for money laundering, as well as, nine arrests for causing obstruction to Police.

From July 2016 to June 2017, there was a monthly average of 173 arrests (168 males, 5 females), by Police ADSU. There was a monthly average of 131 arrests (128 males, 3 females) for possession of drugs, while, there was a monthly average of 40 arrests for dealing of drugs. For every arrest for dealing of drugs, there were 3 arrests for possession of drugs.

For the one-year period, from July 2016 to June 2017, out of 2,060 Police ADSU arrests (*i.e* excluding arrests due to money laundering and obstruction to Police), heroin offences accounted for 38%, followed by cannabis, 31%, cannabinoids, 19%, cultivating (cannabis), 6%, sedatives/tranquilizers, 4%, methadone, 2%, buprenorphine one percent and finally hashish, cocaine and methamphetamine, less than one percent.

Table 20
Arrests by Police Anti-Drug & Smuggling Unit (ADSU)
One-year period, July 2016 – June 2017

Number of arrests

Drug offence	2 nd semester 2016			1 st semester 2017			Percentage change (1st semester 2017 over 2nd semester 2016)	One-year period July 2016 - June 2017			
	Male	Female	Total	Male	Female	Total		Male	Female	Total	Percent
Possession	714	22	736	821	17	838	+14%	1535	39	1,574	75.5%
Dealing	202	6	208	264	14	278	+34%	466	20	486	23.3%
Obstruction to Police	4	-	4	5	-	5	+25%	9	-	9	0.4%
Money laundering	3	-	3	8	4	12	+300%	11	4	15	0.7%
TOTAL	923	28	951	1,098	35	1,133	19%	2,021	63	2,084	100.0%

Figure 8
 Monthly drug-offence arrests by Police ADSU
 July 2016 - June 2017, by gender

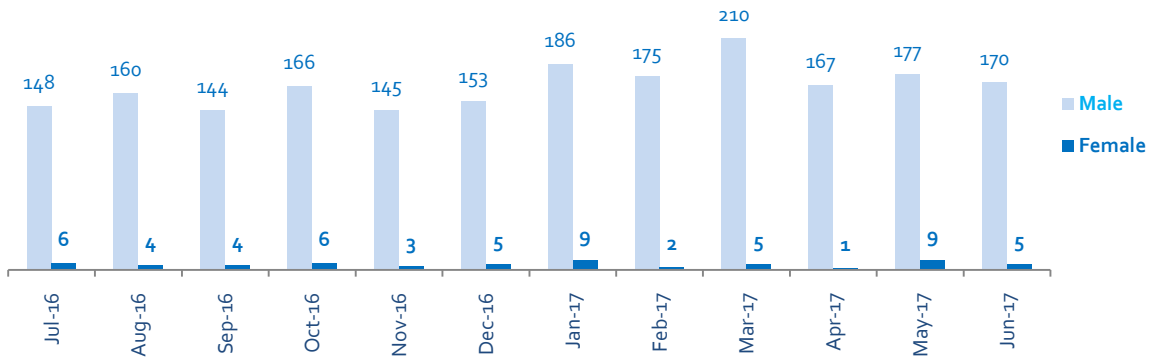


Figure 9
 Monthly drug-offence arrests by Police ADSU
 July 2016 - June 2017
 by type of drug offence

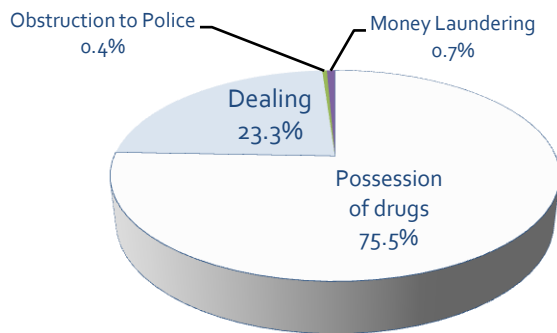
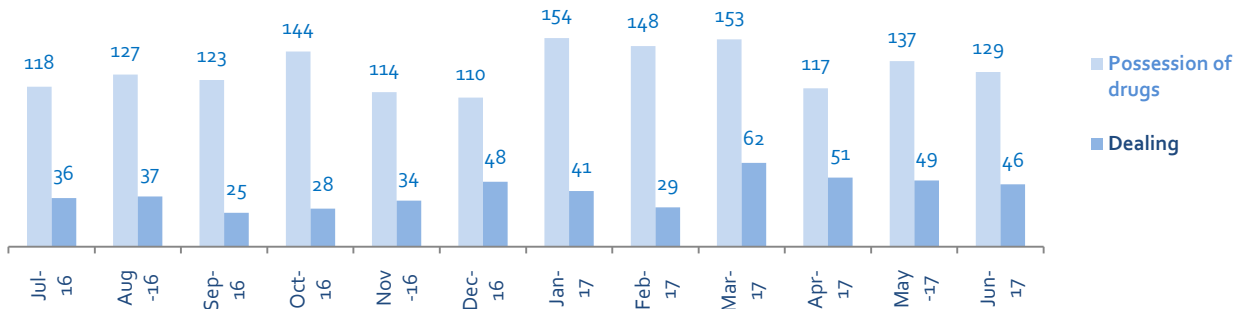


Figure 10
 Arrests by Police ADSU
 July 2016-June 2017
 by type of drug offence

3.1.2 (a) Six-month period, July to December 2016

In 2016, from July up to December, arrests by Police ADSU for drug offences amounted to 951, out of which, 736 arrests (77%) were arrests for possession of drugs and 208 arrests (22%) were for dealing of drugs, while, three arrests were reported for money laundering as well as four arrests for causing obstruction to Police.

For the period July to December 2016, out of 944 Police ADSU arrests (i.e excluding arrests due to money laundering and obstruction to Police) , heroin offences accounted for 37%, followed by cannabis, 32%, cannabinoids, 17%, cultivating (cannabis), 7%, sedatives/tranquilizers, 4%, methadone, 2%, buprenorphine, 1% and finally hashish, cocaine and methamphetamine, less than one percent.

3.1.2 (b) Six-month period, January to June 2017

In 2017, from January to June, arrests by Police ADSU for drug offence, amounted to 1,133 out of which, 838 arrests (74%) were arrests for possession of drugs and 278 arrests (25%) were for dealing of drugs, while twelve arrests were reported for money laundering as well as five arrests for causing obstruction to Police.

For the period January to June 2017, out of 1,116 Police ADSU arrests (i.e excluding arrests due to money laundering and obstruction to Police), heroin offences accounted for 38%, followed by cannabis, 30%, cannabinoids, 20%, cultivating (cannabis), 5%, sedatives/tranquilizers, 4%, methadone, 2%, buprenorphine less than one percent and finally hashish, cocaine and methamphetamine, less than one percent.

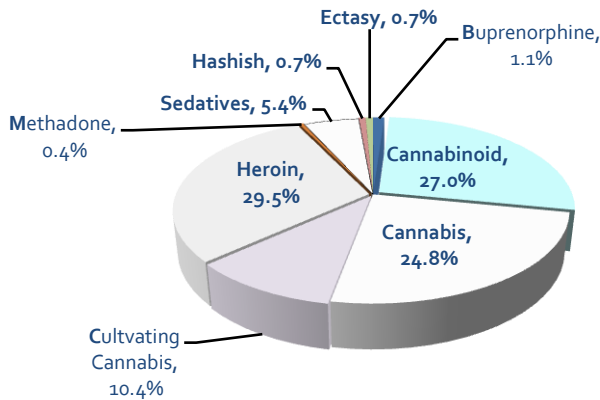


Figure 11
Arrests by Police ADSU
FOR DEALING OF DRUGS
January - June 2017
By type of drug

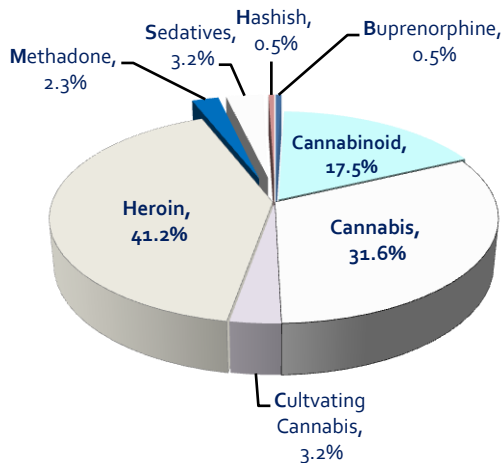


Figure 12
Arrests by Police ADSU
FOR POSSESSION OF DRUGS
From January - June 2017
by type of drug

Table 21
Arrests by Police Anti-Drug & Smuggling Unit (ADSU)
by type of drug, drug offence and sex of offender
2016 (JULY - DECEMBER)

Drug and drug offence	Possession of drugs				Dealing of drugs				TOTAL ARRESTS				Percent
	Male	Female	Both sexes	Percent	Male	Female	Both sexes	Percent	Male	Female	Both sexes	Percent	
Buprenorphine	9	1	10	1.4	1	0	1	0.5	10	1	11	1.2	1.2
Cannabinoid	114	2	116	15.8	43	0	43	20.7	157	2	159	16.8	16.7
Cannabis	227	7	234	31.8	67	3	70	33.7	294	10	304	32.2	32.0
Cultivating cannabis	38	3	41	5.6	25	1	26	12.5	63	4	67	7.1	7.0
Heroin	288	6	294	39.9	52	1	53	25.5	340	7	347	36.8	36.5
Methadone	14	2	16	2.2	0	0	0	0.0	14	2	16	1.7	1.7
Sedatives	18	1	19	2.6	13	1	14	6.7	31	2	33	3.5	3.5
Hashish	4	0	4	0.5	0	0	0	0.0	4	0	4	0.4	0.4
Cocaine	0	0	0	0.0	1	0	1	0.5	1	0	1	0.1	0.1
Methamphetamine	2	0	2	0.3	0	0	0	0.0	2	0	2	0.2	0.2
Ecstasy	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0	0.0
Sub total possessions and dealing of drugs	714	22	736	100.0	202	6	208	100.0	916	28	944	100.0	99.3
Obstruction to Police									4	-	4		0.4
Money laundering									3	-	3		0.3
TOTAL ARRESTS									923	28	951		100.0

Table 22
Arrests by Police Anti-Drug & Smuggling Unit (ADSU)
by type of drug, drug offence and sex of offender
2017 (JANUARY - JUNE)

Drug and drug offence	Possession of drugs				Dealing of drugs				TOTAL ARRESTS				Percent
	Male	Female	Both sexes	Percent	Male	Female	Both sexes	Percent	Male	Female	Both sexes	Percent	
Buprenorphine	4	0	4	0.5	2	1	3	1.1	6	1	7	0.6	0.6
Cannabinoid	146	1	147	17.5	73	2	75	27.0	219	3	222	19.9	19.6
Cannabis	257	8	265	31.6	68	1	69	24.8	325	9	334	29.9	29.5
Cultivating cannabis	26	1	27	3.2	26	3	29	10.4	52	4	56	5.0	4.9
Heroin	338	7	345	41.2	77	5	82	29.5	415	12	427	38.3	37.7
Methadone	19	0	19	2.3	1	0	1	0.4	20	0	20	1.8	1.8
Sedatives	27	0	27	3.2	13	2	15	5.4	40	2	42	3.8	3.7
Hashish	4	0	4	0.5	2	0	2	0.7	6	0	6	0.5	0.5
Cocaine	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0	0.0
Methamphetamine	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0	0.0
Ecstasy	0	0	0	0.0	2	0	2	0.7	2	0	2	0.2	0.2
Sub total possessions and dealing of drugs	821	17	838	100.0	264	14	278	100.0	1,085	31	1,116	100.0	98.5
Obstruction to Police									5	0	5		0.4
Money laundering									8	4	12		1.1
TOTAL ARRESTS									1,098	35	1,133		100.0

Table 23
Arrests by Police Anti-Drug & Smuggling Unit (ADSU)
by type of drug, drug offence and sex of offender
ONE-YEAR PERIOD (JULY 2016- JUNE 2017)

Drug and drug offence	Possession of drugs				Dealing of drugs				TOTAL ARRESTS				Percent
	Male	Female	Both sexes	Percent	Male	Female	Both sexes	Percent	Male	Female	Both sexes	Percent	
Buprenorphine	13	1	14	0.9	3	1	4	0.8	16	2	18	0.9	0.9
Cannabinoid	260	3	263	16.7	116	2	118	24.3	376	5	381	18.5	18.3
Cannabis	484	15	499	31.7	135	4	139	28.6	619	19	638	31.0	30.6
Cultivating cannabis	64	4	68	4.3	51	4	55	11.3	115	8	123	6.0	5.9
Heroin	626	13	639	40.6	129	6	135	27.8	755	19	774	37.6	37.1
Methadone	33	2	35	2.2	1	0	1	0.2	34	2	36	1.7	1.7
Sedatives	45	1	46	2.9	26	3	29	6.0	71	4	75	3.6	3.6
Hashish	8	0	8	0.5	2	0	2	0.4	10	0	10	0.5	0.5
Cocaine	0	0	0	0.0	1	0	1	0.2	1	0	1	0.0	0.0
Methamphetamine	2	0	2	0.1	0	0	0	0.0	2	0	2	0.1	0.1
Ecstasy	0	0	0	0.0	2	0	2	0.4	2	0	2	0.1	0.1
Sub total possessions and dealing of drugs	1,535	39	1,574	100.0	466	20	486	100.0	2,001	59	2,060	100.0	98.8
Obstruction to Police									9	0	9		0.4
Money laundering									11	4	15		0.7
									2,021	63	2,084		100.0

Plants of cannabis uprooted by Police ADSU

Among other drug control activities of the Police ADSU, 14,866 plants of cannabis were uprooted during the period January up to June in 2017. In 2015 and 2016, 72,300 and 72,100 plants of cannabis were uprooted respectively.

3.2 Seizures of drugs by the Mauritius Revenue Authority (MRA) Customs

3.2.1 Drug seizure cases by the MRA Customs

For the 12 months, from July 2016 up to June 2017, there were 74 seizure cases of drugs by the Mauritius Revenue Authority Customs, out of which, 42 cases were in the first semester of 2017, against 32 cases in the second semester of 2016.

Table 24
Mauritius Revenue Authority Customs
Number of drug seizure cases
by type of drug
Year 2015, Year 2016 and 2017 (January-June)

	Year 2015	Year 2016	2017 (January-June)
Heroin	7	29	11
Cannabis and cannabis seeds	15	10	15
Cannabis oil	2	-	-
Hashish	3	6	4
New Psychoactive Substances	7	5	4
Cocaine	-	1	-
Psychotropic substances (Tablets)	-	1	6
Ecstasy (Tablets)	-	2	2
Hemp	-	-	-
Oil	1	-	-
Cream	-	1	-
Seeds	3	-	-
Poppy seeds	-	1	-
Opium powder	-	1	-
TOTAL DRUG SEIZURE CASES	38	57	42

3.2.2 Street value of drugs seized by the MRA Customs

Drug seizures by the MRA Customs, for the one-year period, July 2016 up to June 2017, amounted to Rs 2.73 billion, out of which, Rs 2.66 billion (97%) were seized in the first semester of 2017.

The value of drugs seized in 2015 and in 2016 were Rs 178.5 million and Rs 170.4 million respectively, as compared to Rs 2,656.6 million (Rs 2.7 billion) for the first six months of 2017.

For the first six months of 2017, out of the Rs 2,656.6 million of drugs seized, Rs 2,614.9 million (Rs 2.6 billion), 98.4%, were related to heroin seizures, followed by Rs 30.1 million, 1.1%, for cannabis and cannabis seeds. Rs 7.8 million, 0.3%, were seized for hashish, Rs 3.4 million, 0.1%, for psychoactive drugs, Rs 0.2 million, 0.01%, for psychotropic substances (tablets) and finally Rs 0.1 million, 0.002%, for ecstasy tablets.

For the one-year period, July 2016 up to June 2017, out the Rs 2, 733.9 million (Rs 2.7 billion) of drug seizures by the MRA, Rs 2,672.3 million, 97.7%, were related to heroin seizures, followed by Rs 30.4 million, 1.1%, for cannabis and cannabis seeds. Rs 19.2 million, 0.7% were seized for cocaine, Rs 8.0 million, 0.3%, were seized for hashish, Rs 3.4 million, 0.1%, for new psychoactive substances, Rs 0.4 million, 0.01%, for psychotropic substances (tablets) and finally Rs 0.2 million, 0.01%, for ecstasy tablets.

Table 25
Mauritius Revenue Authority Customs
Street value of drugs seized (Mauritian rupee)
by type of drug
Year 2015, Year 2016 and 2017(January-June)

	Year 2015	Year 2016	2017 (January - June)	Percentage change 2017 (As at June) over Year 2016
Heroin	160,559,100	148,760,750	2,614,936,500	+1658%
Cannabis and cannabis seeds	4,276,379	1,892,779	30,086,628	+1490%
Hashish	13,514,750	215,407	7,846,450	+3543%
New psychoactive substances	144,225	72,870	3,439,650	+4620%
Cocaine	-	19,200,000	-	-
Psychotropic substances (Tablets)	-	169,200	191,300	+13%
Ecstasy (Tablets)	-	133,500	63,000	-53%
TOTAL	178,494,454	170,444,506	2,656,563,528	+1459%

Table 26
Mauritius Revenue Authority Customs
Street value of drugs seized
by type of drug
Year 2015, Year 2016 and 2017(January-June)

	(Million rupees)		
	Year 2015	Year 2016	2017 (January - June)
Heroin	160.56	148.76	2,614.94
Cannabis and cannabis seeds	4.28	1.89	30.09
Hashish	13.51	0.22	7.85
New psychoactive substances	0.14	0.07	3.44
Cocaine	-	19.20	-
Psychotropic substances (Tablets)	-	0.17	0.19
Ecstasy (Tablets)	-	0.13	0.06
TOTAL	178.49	170.44	2,656.56

3.2.3 Quantity of drugs seized by the MRA Customs

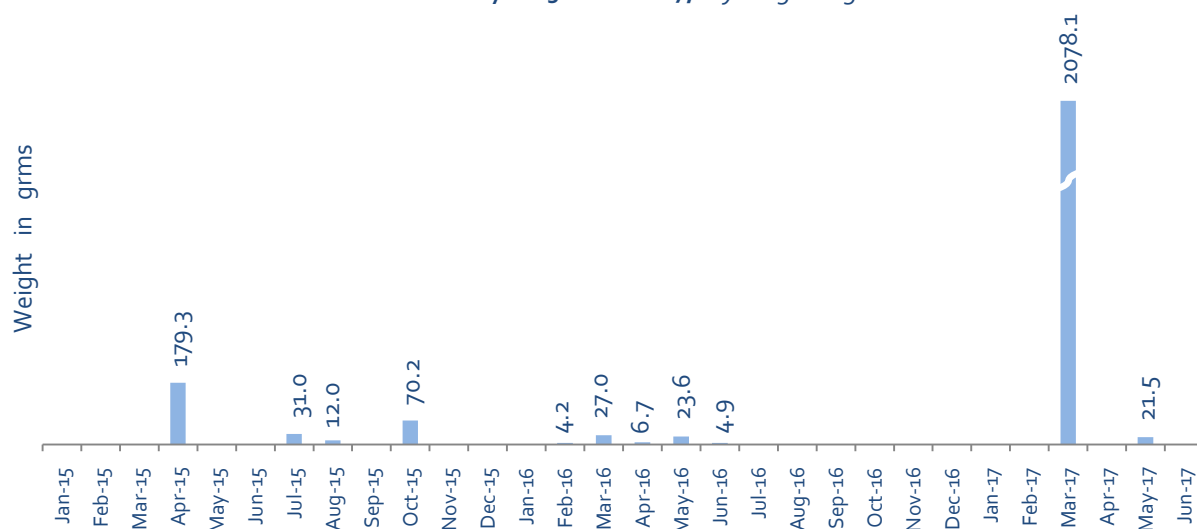
Drug seizures by the MRA, in the last two years 2015 and 2016 and in the first semester of 2017, were as follows:

- 10.7 kg and 9.9 kg of heroin were seized in 2015 and in 2016 respectively, against 174.3 kg in the first six months of 2017.
- Regarding cannabis, 9.4 kg and 3.1 kg were seized in 2015 and in 2016 respectively, against 50.1 kg in the first six months of 2017.
- 78 units of cannabis seeds were seized in 2015, 500 units in 2016 and 111 units in the first semester of 2017.
- 5.4 kg of hashish were seized in 2015, 0.1 kg in 2016 and 3.1 kg in the first six months of 2017.
- In 2015, 0.3 kg of new psychoactive substances was seized, against 0.1 kg in 2016 and 2.1 kg in the first six months of 2017.
- 1.3 kg of cocaine were seized in 2016. There were no seizures involving cocaine in 2015 and in 2017 as at end of June.
- There were no reported seizures of psychotropic substances by the MRA in 2015, against seizures of 2,256 units (tablets) in 2016 and 1,529 units in the first six months of 2017.
- There were no reported seizures of ecstasy by the MRA in 2015, against seizures of 2,256 units (tablets) in 2016 and 1,529 units in the first six months of 2017.
- Other seizures reported in 2015 and 2016, but not in 2017(*as at end of June*), were; cannabis oil, hemp oil, hemp cream, hemp seeds, poppy seeds and opium powder.

Table 27
Mauritius Revenue Authority
Quantity of drugs seized
by type of drug
Year 2015, Year 2016 and 2017(January-June)

	Year 2015	Year 2016	2017 (January - June)
Heroin	10.7 kg	9.9 kg	174.3 kg
Cannabis	9.4 kg	3.1 kg	50.1 kg
Cannabis seeds	78 units	500 units	111 units
Hashish	5.4 kg	0.1 kg	3.1 kg
New psychoactive substances	0.3 kg	0.1 kg	2.1 kg
Cocaine	-	1.3 kg	-
Psychotropic substances (Tablets)	-	2,256 units	1,529 units
Ecstasy (Tablets)	-	89 units	42 units
Cannabis oil	20 ml	-	-
Hemp			
Oil	10 ml	-	-
Cream	-	300ml	-
Seeds	1 box+103 seeds+454 g	-	-
Poppy seeds	-	200 kg	-
Opium powder	-	Lamalaine: 25 "gelules" + 6 Suppositories	-

Figure 13
Monthly seizures of New Psychoactive Substances by MRA Customs
 January 2015 - June 2017, by weight in grms



3.3 Drug use in secondary educational institutions

For the first six months of 2017, 19 cases of suspected drug use, involving more than 35 students (30 males, 5 females) in 17 educational institutions, were reported, as compared to 43 students concerning 9 educational institutions, in the first half of 2016.

Regarding the drug use issue in schools, the following measures were taken by the Ministry of Education, Human Resources, Tertiary Education & Scientific Research (MOE, HM, TE&SCR), namely; a high level meeting chaired by the Senior Chief Executive, in December 2016, with representatives of Police ADSU, the Harm Reduction Unit of the Ministry of Health and Quality of Life, Directors of educational zones, Representatives of the Private Secondary Education Authority (PSEA), Mahatma Gandhi Institute (MGI) and the Service Diocésain d'Education Technique (SeDEC), to decide on a plan of action to fight drug abuse.

A zero tolerance of drug abuse cases in schools was advocated by the (MOE, HM, TE&SCR). There were close monitoring of schools identified as drug-use high-risk schools. There were also sensitization campaigns against drugs by schools management teams in collaboration with the Police ADSU, The Brigade Pour la Protection des Mineurs and the Harm Reduction Unit of the Ministry of Health and Quality of Life, in all schools.

Chapter 4

Imprisonment and the Judiciary convicted drug offences

4.1 Convicted drug offences reported by the Judiciary

2,363 and 2,222 convicted drug offences were reported respectively in 2015 and 2016, by the Judiciary of the Republic of Mauritius. Out of the 2,222 convicted drug offences in 2016, 87% were given fines, while 10% were sentenced to prison. Probation, community service and conditional & absolute discharges, stood respectively at one percent each.

In 2015 and 2016, out of all convicted drug offences, imprisonment accounted for 8% (193 cases) and 10% (222 cases) respectively.

Table 28
Judiciary of the Republic of Mauritius
Drug offences convicted, by type of sentence, 2015 and 2016

Sentence	Year 2015	Year 2016	Percent
Imprisonment	193	222	10%
Fine	2,131	1,943	87%
Probation	3	19	1%
Community service	21	23	1%
Conditional and absolute discharges	15	15	1%
Total convicted drug offences	2,363	2,222	100%

In 2016, out of the 2,222 convicted drug offences reported by the Judiciary, 64% were associated with possession of drugs, 13% with consumption of drugs, 9% with dealing of drugs, 6% for cultivation of cannabis, 1% for importation of drugs and 7% for other unspecified drug offences.

In 2016, out of the 2,222 convicted drug offences, possession and consumption of cannabis stood at 50% and possession and consumption of heroin at 24%.

Table 29
Judiciary of the Republic of Mauritius
Drug offences convicted, by type of offence
2013 - 2016

Type of convicted drug offence	2013	2014	2015	2016	
				Number	Percent
Importation	49	29	34	49	1.4%
Cultivation of cannabis	78	91	129	78	5.5%
Dealing	31	332	216	31	9.1%
Possession(+articles)	1,477	1,299	1,515	1,477	64.1%
Consumption	415	332	305	415	12.9%
Other	372	181	164	372	6.9%
Total convicted drug offences	2,422	2,264	2,363	2,222	100.0%

Table 30
 Judiciary of the Republic of Mauritius
Drug offences convicted, by type of drug
 2013 – 2016

Drug	Type of offence	2013	2014	2015	2016	
					Number	Percent
Heroin	Importation	27	15	6	4	
	Dealing	12	40	15	8	
	Possession(+articles)	256	207	407	497	
	Consumption	106	29	50	43	
	Other	-	12	8	9	
	Sub-total: Heroin		401	303	486	561
Cannabis	Importation	-	7	22	4	
	Cultivation	78	91	129	168	
	Dealing	2	25	87	33	
	Possession(+articles)	567	678	656	873	
	Consumption	131	182	187	239	
	Other	-	21	48	3	
Sub-total: Cannabis		778	1004	1129	1320	59%
Other drugs	Importation	22	7	6	1	
	Dealing	17	267	114	71	
	Possession(+articles)	654	414	452	238	
	Consumption	178	121	68	17	
	Other	372	148	108	14	
	Sub-total :Other drugs		1,243	957	748	341
TOTAL (All drug offences)		2,422	2,264	2,363	2,222	100.0%

4.2 Imprisonment and drug offences reported by the Mauritius Prisons Services

4.2.1 Six-month period, January up to June 2017

For the six-month period, from January up to June 2017, there were 2,140 admissions to prisons, out of which, five percent were female admissions, as compared to the previous six-month period, July to December 2016, with 1,828 admissions with five percent female admissions.

Out of these 2,140 admissions in prisons, in the first semester of 2017, 4.3% admissions were associated with possession of drugs, 0.9% with dealing of drugs, 0.9% with trafficking of drugs and 0.2% for importation of drugs, while, 93.6 % were related to non-drug offences. Thus, for the same period, drug-offence imprisonments stood at 6.4%.

During the first six months of 2017, among drug-related imprisonments heroin offences accounted for 47% and cannabis offences, 69%. There were also significant admissions due to new psychoactive drug offences 14%, ecstasy, 8%, and very few cases for other specified drugs, that is, around one percent, while, a significant proportion of admissions was reported with unspecified drugs, 17%.

4.2.2 Six-month period, July up to December 2016

During the 2nd semester of 2016, out of the 1,828 admissions in prisons, 5.4% admissions were associated with possession of drugs, 1.6% with dealing of drugs, 1.0% with trafficking of drugs and 0.2% for importation of drugs, while, 91.8 % were related to other non-drug offences.

Table 31
Mauritius Prisons Services
Imprisonment and drug offences
July 2016 - June 2017

Reason for Imprisonment	January-June 2017		July-December 2016	
	Number	Percent	Number	Percent
Possession of drugs	93	4.3%	98	5.4%
Dealing of drugs	19	0.9%	29	1.6%
Drug trafficking	20	0.9%	18	1.0%
Drug importation	4	0.2%	4	0.2%
SUB-TOTAL drug-related imprisonment	136 (6.4%)		149 (8.2%)	
Non-drug offences	2,004	93.6%	1,679	91.8%
Total	2,140	100.0%	1,828	100.0%

Table 32
Mauritius Prisons Services
Distribution of drugs responsible for imprisonment, among drug-related admissions in prisons
(July 2016 - June 2017)
by drug concern

Drug concern for imprisonment	January-June 2017	July-December 2016
Heroin	47%	47%
Cannabis	69%	42%
New psychoactive substances	14%	3%
Ecstasy	8%	<1%
Other opioids	<1%	<1%
Methamphetamine	1%	<1%
Other drugs	17%	18%

Chapter 5

Selected activities and observations from Rehabilitation Centres

5.1 The rehabilitation programme set up

Rehabilitation of drug addicts in Mauritius is essentially organized and dispensed by different registered nongovernmental organizations. They use different therapies, from drug free methods to medical treatment methods, coupled with a multi-factorial rehabilitation programme. One common working orientation of these centres, is to provide effective addiction treatment programs and services to support the families and loved ones of those recovering from addictions. At the level of most of these rehabilitation centres, it is agreed that a combination of expert counseling and a strong network of support, is very effective in achieving goals in the field of rehabilitation.

Most services at rehabilitation centres are offered on day-care basis and only a few residential centres exists. Duration of the rehabilitation programmes varies between centres. Most of the time programmes last for 9 to 10 weeks and long-term programmes, usually residential ones, can last up to 6 months.

The condition of acceptance among the different rehabilitation centres is a mixture of flexible and predetermined criteria. Some acceptances are fully opened, that is, the centres accept any substance abuser usually accompanied by a responsible party, while others have a fixed age limit criteria. Most of the time it is for substance abusers aged above 18 years. In addition, the condition of acceptance in some cases is done with authorization of a responsible party at the Day Care Centre. For some centres, a medical detoxification prior to the admission at the centre is required.

Medical detoxification at private rehabilitation centres are essentially codeine-based and all other detoxification and drug-related treatment are referred to hospitals, mainly to the public specialized Mental Health Care Centre and the Methadone Centres of the Harm Reduction Unit of the MOH&QL.

The services and education provided are follows:

- Psychosocial support by qualified Psychologists,
- prevention programmes and relapse prevention,
- counseling (individual and in group),
- information sessions on nutrition, welfare, sexuality, healthy lifestyle, Yoga etc.,
- treatment protocol based on codeine substitution therapy,
- referrals for suboxone treatment and methadone substitution therapy,
- family therapy and aftercare,
- teenagers' activities, prevention and education programmes in schools, community, etc,
- screening programmes in the Community and schools,
- recreational activities,
- positive thinking education,
- re-insertion programmes, social reinsertion through job placements,
- involvement in the pre-methadone induction and post-methadone psychosocial program,
- Ayurvedic treatment including medication and ayurvedic detoxification massage,
- domiciliary visits, hospitals and prisons visits,
- "Life Skills" including self-esteem, capacity building to be an educational peer
- weekly consultation with doctors, among other activities.

5.2 Activities carried out in 2016 at Rehabilitation Centres

From July 2016 to June 2017, seven rehabilitation centres carried out 53 prevention sessions in schools. Nine centres delivered 218 prevention sessions around the Island, in different localities and 4 centres visited 20 workplaces. The number of participants to these schools, communities and workplaces' sessions, amounted to 18,007, ranging from the minimum of 119 participants per centre, to a maximum of 9,408 participants per centre.

Table 33
Treatment and rehabilitation activities by rehabilitation centres
July 2016 – June 2017

Rehabilitation centres	Prevention sessions				Number of new treatment cases	Number of follow ups	Attendances at the rehabilitation centre
	No of Schools	No of sessions in Community	No. of sessions at Workplaces	No. of participants			
Actresa, Calebasses	1	27		2,316	40	135	
Centre d'Accueil de Terre Rouge	1	6	1	439	491	461	
Chrysalide, Bambous	2	36	2	1,036	87	85	
Centre de Solidarité, Rose Hill	26	31	8	2,043	302	459	
Etoile D'Espérance, Moka		12		284	34	197	
Dr Idriss Goomany Centre, Plaine Verte	13	65	9	9,408	409	174	
Help de Addiction, Cassis	4	27		642	273	780	
Groupe A de Cassis	6			1,250	140	631	7,119
Renaissance, Mahebourg		5		119	87	371	
Sangram Sewa Sadan, St Paul		9		470	46	97	

5.3 Selected current observations reported by Rehabilitation Centres.

At the level of rehabilitation centres offering services for both sexes, male drug-users seeking treatment are reported to be predominant with a sex-ratio of 9 males per female. On the other hand, female clients are observed with slight increase. People who inject drugs are using mostly heroin (*brown sugar*) and significant drug users are looking for treatment following use of new psychoactive substances. The fact that new psychoactive substances detoxification treatment is generally not available at the level of rehabilitation centres, there is a loss of follow up of respective clients. Drug users attending rehabilitation centres are expressing needs to have more information and knowledge on new psychoactive substances.

Regarding exclusive female rehabilitation centres, a shift in the female drug user population is being noticed. The age group is reported to be currently 19-35 years, while it is observed that some female drug users are leading a family life, educated up to secondary school level and are not financially deprived.

Some rehabilitation centres are reporting that multiple drugs use is associated with poor quality of drugs available in the streets and that the consumption of methadone on black market is causing some difficulties for residential drug patients to cope with codeine phosphate for detoxification and this causes relapse. The variety and availability of drugs make it difficult for some rehabilitation centres to contact female drug users and the new approach is the use of SMS and phone contacts.

Reference

- Integrated Biological and Behavioural Surveillance (IBBS) studies, MOH&QL.
- Health Statistics Reports of the Ministry of Health and Quality of Life.
- Crime, Justice and Security Reports of Statistics Mauritius.
- Annual Report of the Judiciary, 2016.
- Building a National Drug Observatory: A Joint Handbook 2013.

Annex

Ministry of Youth and Sports
Selected sensitization campaigns on substance abuse, in 2017

	Activity/event	Date	Place/organization	Number of young participants	
				Boys	Girls
1	Interactive drama programme on the danger of substance abuse	March 2017	1. Flacq Youth Centre 2. St. Mary's College	45 82	52 20
2	International Day Against Drug Abuse and Illicit Trafficking	29 th June, 2017	1. Mahatma Gandhi Institute (MGI), Moka Mobilization of young people from 6 regions <i>(Ministry of Health & Quality of Life in collaboration with the Prime Minister's Office)</i>	198	76
3	Sensitization campaign on substance abuse (Interactive sessions)	4 th August, 2017	Fashion and Design Institute, Ebene	27	46
4	Peer Education Course on Substance Abuse	From 13 th May, 2017 - to date <i>(Duration: 8 Saturdays)</i>	NPF, Rose Hill	16	18