



GOVERNMENT OF BERMUDA
Ministry of National Security

Department for National Drug Control

A collaboration with the Department of Corrections

Report of the 2014 – 2015 **DRUG ABUSE MONITORING SURVEY**



Copyright © 2015 Department for National Drug Control

Authors:

Kyla Raynor, DrPH CHES, Senior Research Officer/Policy Analyst, Department for National Drug Control
Tashema Bholanath, Research Officer, Department for National Drug Control

Published by:

Government of Bermuda, Ministry of National Security, Department for National Drug Control
P. O. Box 480, HM CX, Bermuda

Telephone: (441) 292-3049

Fax: (441) 295-2066

E-mail: dndc@gov.bm

Website: www.dndc.gov.bm

April, 2015

Data from this publication may be reproduced with acknowledgement from source.

Reference as:

Department for National Drug Control. (2015). *Report of the 2014-2015 Drug Abuse Monitoring Survey*. Government of Bermuda.

FOREWORD

This Drug Abuse Monitoring Survey has now been conducted for the fourth time in Bermuda, during the period of April 2014 to March 2015. Similar surveys were done in 2004-2005, 2007-2008, and 2011-2012, all implemented by the Department for National Drug Control (DNDC) in collaboration with the Department of Corrections.

As part of the Drug Abuse Monitoring Programme (DAMP), this survey tracks self-reported drug use by criminal offenders upon reception at the Westgate Correctional Facility and the Co-Ed prison facility. Though participation is voluntary, and despite the fact that the response rate was about 72%, the results of this survey still will prove useful in monitoring drug use in the offender population in Bermuda. This round of the survey also saw fewer inmates being incarcerated compared to other previous years when this survey has been undertaken; thereby affecting the participation rate.

This report presents the survey findings in nine main sections in the form of text, tables, and charts. In addition, there are relevant background and methodological information, as well as discussion and recommendations, based on the results.

The connection between alcohol, drugs, and crime is clear in Bermuda as evidenced by the high percentage of offenders reporting drug and/or alcohol abuse within the prison population. In order to break the link between drug/alcohol addiction and crime, punishment must be tempered with the willingness and ability to provide treatment and rehabilitation to those in need within the offending population. Not surprising, prison alone has little effect on the reduction of drug addiction or in promoting recovery and often does not impede re-offending. Imprisoning someone addicted to drugs and/or alcohol, without access to treatment and without specific plans for treatment and recovery support upon release, is not only ineffective in reducing crime and re-offending behaviour, but it is expensive. For many in the criminal justice system, preventing future crime and re-arrest after release is impossible without treatment for, and recovery from, addiction to alcohol and drugs, as drug and alcohol use play a major role in their offending behaviours.

Although drug and alcohol abuse has negatively impacted our Island extensively, we must continue to identify and treat persons with addictions, including those who may be participating in criminal activity. Reports of this nature provide quality information for policy development and programmes, but to effect real change and reduce substance use and abuse amongst those engaging in criminal activity. It will take all of us in the community, working with each other, standing by each other, helping each other, and supporting each other to rehabilitate for change. This is a community responsibility and each of us has a part to play in reducing the drug problem in Bermuda.

A handwritten signature in black ink that reads "Joanne Dean". The signature is fluid and cursive, with the first name "Joanne" and the last name "Dean" clearly distinguishable.

JOANNE DEAN
Director
Department for National Drug Control
April, 2015

CONTENTS

Foreword-----	i
Survey Highlights-----	1
Background-----	6
Methodology-----	9

SECTION 1: DEMOGRAPHIC CHARACTERISTICS 14

Tables 1.1 – 1.5: Profile of Survey Participants

SECTION 2: DRUG USE AND DRUG SCREENING 18

Table 2.1: Lifetime and Current Prevalence of Substance Use by Proportion of Respondents

Table 2.2: Prevalence of Two-Substance Combination of Poly Drug Use

Table 2.3: Proportion of Positive Results from Drug Screening

Table 2.4: Comparison of Self-Reported Current Users of Substances and Positive Urine Tests

Figure 2.1: Lifetime and Current Prevalence of Substance Use by Proportion of Respondents

Figure 2.2: Average Age of Onset for All Lifetime Users by Type of Substance

SECTION 3: MENTAL HEALTH, DRUG OVERDOSE, & SUBSTANCE ABUSE TREATMENT 24

Figure 3.1 Prescribed Medication for Mental or Emotional Problems in the Past Year

Figure 3.2: Substance Abuse Treatment and Counselling

SECTION 4: CRIMINAL RECORD 25

Table 4.1: Proportion of Respondents by Current and Past Charged Offence and Outcome

Table 4.2: Proportion of Respondents by Outcome of Category of Offence

Table 4.3: Proportion of Respondents by Type of Court Order

Table 4.4: Drug and Alcohol Connection with Offence

Figure 4.1: Number of Times in Prison Excluding Current Imprisonment by Proportion of Respondents

Figure 4.2: Proportion of Respondents by Outcome of Offence

Figure 4.3: Proportion of Respondents by Punitive Outcome of Category of Offence

Figure 4.4: Drug and Alcohol Connection to Offence by Proportion of Respondents

Figure 4.5: Two Drug and Alcohol Connections to Offence

SECTION 5: HIV/AIDS & HEPATITIS B STATUS AND ABUSE HISTORY	30
Table 5.1: Self-Reported History of Physical Abuse, Sexual Abuse, Neglect, and Abandonment	
SECTION 6: DRUG PRICES	31
SECTION 7: DRUG MARKET	32
Table 7.1: Self-Report of Other Drugs Used on the Streets	
Figure 7.1: Drug Market in Past Year and Month	
SECTION 8: DRUG ABUSE SCREENING TEST (DAST)	33
Table 8.1: Proportion of Respondents by Level of Severity of Substance Abuse	
Table 8.2: Responses to the DAST-20 Items	
Table 8.3: Responses to Additional 8 Items on DAST-28	
Figure 8.1: Personal Impact of Drug Abuse from DAST Items	
Figure 8.2: Impact of Drug Abuse on Family and Friends from DAST Items	
Figure 8.3: Social Impact of Drug Abuse from DAST Items	
Figure 8.4: Physiological Impact of Drug Abuse from DAST Items	
SECTION 9: GANG INVOLVEMENT	38
Figure 9.1: Gang Involvement of Self or Family/Friend	
Discussion-----	39
Appendix I: Questionnaire-----	42
Appendix II: Trend Analysis of Drug Use and DAST – 2004, 2007, and 2011-----	55
Appendix III: Definitions of Street Drugs in Use-----	56
References-----	59

SURVEY HIGHLIGHTS

- Of all inmates within the Department of Corrections, during the period March 2014 to April 2015, 188 persons responded to the survey; and no participant was a repeat offender during this time.
- There were more male offenders (89.9%) than females (10.1%); and 81.4% of offenders said they were “Black”, with 55.9% being 35 years or younger.
- Almost half (49.5%) of the respondents reported to have earned an annual income of less than \$25,000.
- Overall, 98.9% ($n = 186$) of the respondents have reported use of at least one drug in their lifetime, and three in five (56.9%) were poly drug users.
- The highest lifetime consumption was observed for alcohol (95.7%), marijuana (92.0%), cigarettes/tobacco (91.0%), crack cocaine (27.7%), and heroin (22.3%).
- Respondents indicated the highest consumption for alcohol (73.4%), cigarettes/tobacco (69.1%), and marijuana (61.7%) in the 30-days prior to the survey.
- Age of initiation of drug use ranges from a low of 14.4 years for marijuana to a high of 30 years for methadone.
- Alcohol and cigarette/tobacco use began around 14.8 and 15.2 years, respectively; and the use of heroin and cocaine began after 20 years, on average.
- THC, the principal psychoactive constituent of the cannabis plant, was found in about half (60.1%) of offenders’ urine screens, followed by cocaine (14.9%), and opiates 7.4%.
- Of all respondents, 13.8% said they had been treated by a doctor as a result of use of any substance, while 33.5% indicated they had received substance abuse counseling or rehabilitation treatment as a result of their use of alcohol and/or drugs.
- Of all the respondents interviewed, 32.6% were never in prison before the current imprisonment, followed by 35.8% who admitted to being in prison for two to five times and 16.0% being in prison for more than five times.
- Of all possible outcomes for sentencing, the majority were violent offenders (29.0%) who served a prison term, followed by persons committing property (22.5%) and drug-related crimes (16.7%).
- In terms of the type of outcome, 79.8% reported serving a prison term, while 36.1% paid a fine, and 35.6% were placed on probation.
- Almost one-third of the respondents reported that drugs were connected to their current (28.9%) and past (27.4%) offence(s); about one out of every four persons felt that alcohol was connected to their current (24.1%) and past (18.3%) offence(s).
- 17% of the respondents indicated that the offence was because of personal use or possession of drugs; 16.5% of the respondents indicated that the offence(s) was committed while under the influence of drugs; and 15.4% of them indicated that the offence was committed to provide money to buy drugs to support their drug habit.
- Of all respondents, 19.3% admitted to having friends or family members belonging to a gang, and 7.5% of respondents admitted to belonging to a gang themselves.

- Of all survey respondents, 12.2% of the offenders indicated being physically abused, 9.6% said they had been sexually abused, 5.9% reported they had been neglected by their parents, and 5.3% indicated being abandoned.
- Overall, 43.1% of reception offenders were classified as having “*intermediate to severe*” drug abuse problems prior to their current arrests and incarceration.
- 83% of the respondents reported that they have used drugs other than for medical reasons.
- More than half (48.4%) of all offenders indicated their spouse/parents complained about their involvement with drugs.

2014-2015 COMPARISON WITH 2011-2012

- The prison population during the 2014-2015 survey administration period of 260 was about half the size (47.3% lower) of the 2011-2012 target population of reception inmates; participation rate, however, was higher in 2014-2015 at 72% vs. 60% in the previous round.
- There was a 1.5% increase in the younger age (less than 35 years) reception inmates; 55.9% vs. 54.3% in the previous round.
- There was a slightly higher proportion of lifetime users of cigarettes (up 4%) and ecstasy (up 2.6%) in 2014-2015 compared to the previous round.
- Persons started using marijuana one year earlier (14.4 vs. 15.1 years); average age of onset for the use of designer drugs such as ecstasy and methamphetamine was at a younger age in 2014-2015 than in 2011-2012, at 22.3 vs. 26.1 years and 17 vs. 20 years, respectively.
- About 10% more inmates tested positive for marijuana on reception than before (60.1% vs. 50.2%).
- Fewer persons (6.4%) were charged with possession of drugs (down 5.5% from 2011-2012).
- There was a marked decline in the proportion of persons who reported to have bought or sold drugs in the past year (from 64.8% to 50.4% and 24.2% to 13.8%, respectively).
- A greater proportion of persons were charged with “assault” (12.8% vs. 7.8%), “other violent offences” (9.6% vs. 7.8%), and “other public disorder” (9.6% vs. 1.7%) offences in 2014-2015. Persons charged with fraud offences, including money laundering, increased from 1.7% in 2011-2012 to 5.9% in the current round.
- There was a decline in the proportion of respondents who had an outcome to their charge such as served a prison term, had been fined, or placed on probation (from 77.5% in 2011-2012 to 71.1% in 2014-2015).
- There was a 1.2% increase in the proportion of respondents indicating that their offence was committed while under the influence of alcohol (24.9% in 2011-2012 vs. 26.1% in 2014-2015).
- While there has been a decline in the proportion of persons reporting being physically abused, neglected, or abandoned by 18 years, there has, however, been a reported increase from 5.8% to 9.6% of persons being sexually abused by this age.

- A few new drugs have been reported to be in use on the street such as molly, mushroom, 'Special K', 'K2'/synthetic marijuana, among others.

BACKGROUND

In 2004, the task of monitoring drug abuse among the incarcerated population became a priority for the Department for National Drug Control as the rates of recidivism increased among particular offenders, which may have been drug-induced or drug-related criminal activity. Questions were crafted on persons' involvement in criminal behaviour and their arrest record, along with the Drug Abuse Screening Test (DAST) survey instrument; after which, data collection commenced within two correctional facilities in Bermuda (Westgate and Co-Ed). This allowed the DNDC to ascertain the relationship between drug use and criminal behaviour. While limited national data existed at that time, numerous studies in other jurisdictions had found a high prevalence of homicide deaths among identified drug addicts, a high prevalence of substance use, typically alcohol, among victims of homicide, and a high proportion of persons positive for drug use among arrestees for violent offenses.

Drugs are related to crime in multiple ways. Most directly, it is a crime to use, possess, manufacture, or distribute drugs classified as having a potential for abuse. Cocaine, heroin, marijuana, and amphetamines are examples of drugs classified to have abuse potential. Drugs are also related to crime through the effects they have on the user's behavior and by generating violence and other illegal activity in connection with drug trafficking. Research studies have reported large increases in drug-related homicides or other violence associated with drug use.¹ Results of a review of 30 studies showed that the odds of offending were three to four times greater for drug users than non-drug users. The odds of offending were highest among crack users and lowest among recreational drug users. This relationship held true across a range of offence types, including robbery, burglary, prostitution and shoplifting.²

THE DRUG ABUSE MONITORING PROGRAMME

The Drug Abuse Monitoring Programme (DAMP) has tracked patterns of illicit drug use among the incarcerated population in Bermuda since 2004. The DAMP consists of assessing the inmate population on problem drug use via a survey comprising of the Drug Abuse Screening Test (DAST), along with the collection of urinalysis results for illicit substances of interest. The year 2004-2005 marked the first implementation of the DAMP, with the second implementation taking place in 2007-2008, and the third installment taking place in 2011-2012. Each data collection period lasted one year. The current data collection period, 2014-2015, marked the fourth implementation of the DAMP. Facilities participating in survey administration included the Westgate Correctional Facility and the Co-Ed facility. One-on-one survey interviews were

¹ M. L. Bryan, E. Del Bono, & S. Pudney. (2013). *Drug-related crime* (No. 2013-08). ISER Working Paper Series.

² T. Bennett, K. Holloway, & D. Farrington. (2008). The statistical association between drug misuse and crime: A meta-analysis. *Aggression and Violent Behavior*, 13(2), 107-118.

conducted by contracted interviewers and officers at each facility. Urine results were obtained by the nurse and forwarded to the senior case manager who recorded the urine results on the questionnaire corresponding to each inmate who participated in the interview. Completed questionnaires were then forwarded to the DNDC on a monthly basis. The DAMP process is explained in detail in the Methodology section of this report.

The DAST questionnaire is a widely recognised screening tool traditionally used to classify degrees of severity of substance abuse problems among persons. It is a 28-item self-report scale that has exhibited valid psychometric properties and has been found to be a sensitive screening instrument for the abuse of drugs other than alcohol. The methodology section of this report describes the distribution of scores for this psychometric assessment tool and examines the potential utility of the measure for treatment assignment purposes.

PURPOSE

The Drug Abuse Monitoring Programme serves several purposes. Surveillance of drug use in Bermuda is a focal point of the DNDC's Research Unit, especially monitoring drug consumption among high risk populations such as the inmate population. The collection of data related to drug of choice and length of use, allows for the classification of offenders based on level of severity of substance abuse problems, which is a good indicator of those requiring substance abuse treatment. Lastly, the data obtained in these three surveys allow for trend analysis, which is used to gauge drug consumption and criminality among this particular subset over a longer duration. The information provided also highlights the type of crimes committed by substance users, especially by the type of drug consumed.

STRENGTHS AND LIMITATIONS

Unlike other studies among this population, the current study utilised both subjective and objective measures to determine the proportion of the inmate population that was currently using drugs. Objective measurement, through urinalysis, allowed for more reliable data collection of current drug use, while self-reported drug use allowed for comparisons in the accuracy of such perceptions. This study provided important information on current and lifetime drug use, criminal history, history with substance abuse treatment, social background of the inmate, and the drug market, which has only been collected among this population in Bermuda.

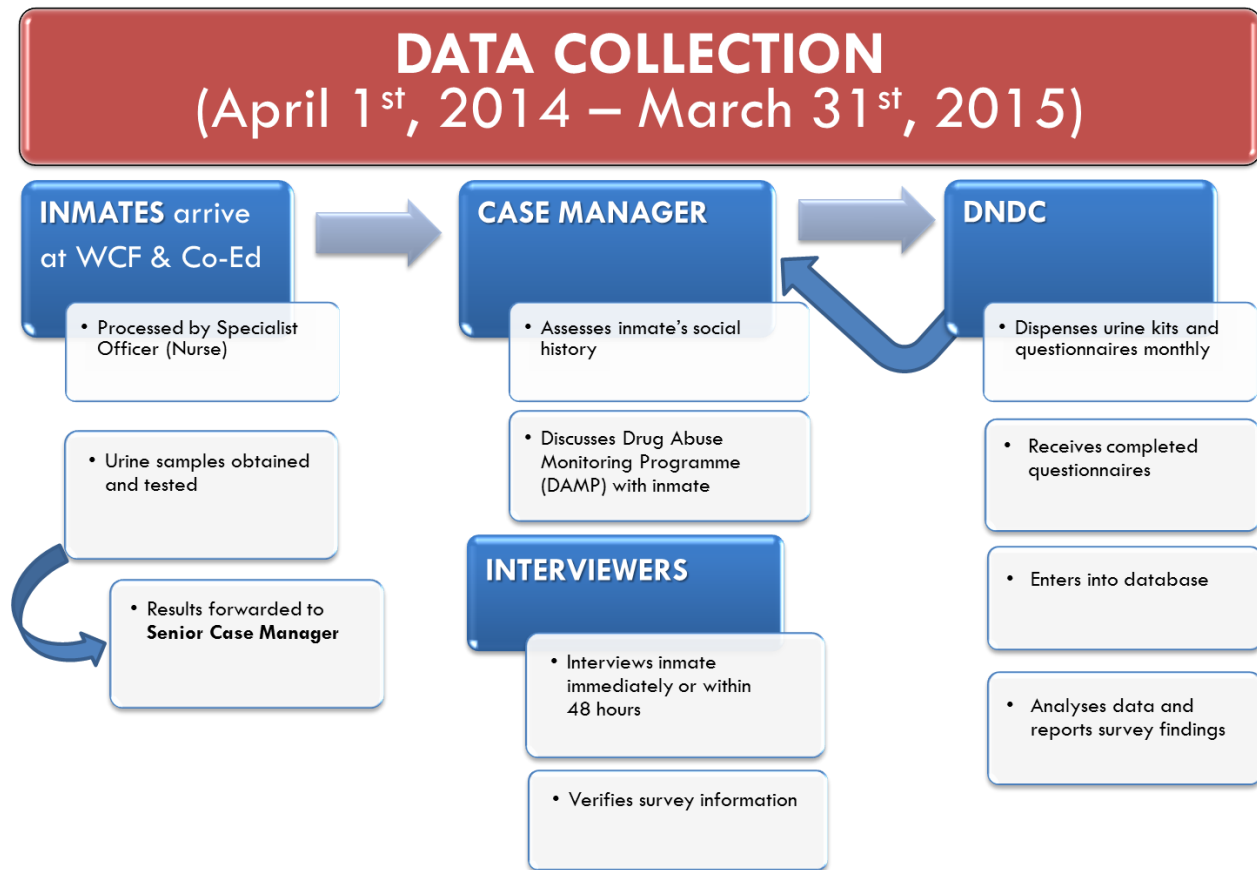
There are, however, a few limitations that must be mentioned. Unfortunately, staffing challenges meant that the DNDC had to hire interviewers to conduct the surveys as case managers were not able to participate. Additionally, data collectors were unable to capture responses from a number of the inmate population. For the first time, there were a large number of refusals to participate which affected the response rate (72.3%). This type of data has the disadvantage of

being derived from self-reports of the inmate population and, therefore, the results should be interpreted with caution. To minimise these limitations, the responses to certain questions were validated against the responses to other questions for accuracy. Additionally, by analysing the urine results, self-reported current drug use could be confirmed.

METHODOLOGY

SURVEY DESIGN

The Drug Abuse Monitoring Survey was conducted for one year, from April 1st 2014 to March 31st 2015 to offenders on reception at two correctional facilities in Bermuda. The survey design is summarized on the diagram below and briefly described in the subsequent sub-sections.



POPULATION COVERAGE

The survey targeted all persons who were presented to two correctional facilities for an offence, either at the Westgate Correctional or the Co-Educational facility (reception offenders). In other words, this survey targeted the incarcerated population. Persons who are received at the Westgate Correctional facility would be offenders 18 years and above whereas persons at the Co-Ed facility would be offenders below the age of 18 years. Therefore, the ages of the respondents are wide-ranging.

QUESTIONNAIRE

The questionnaire utilised in this survey comprised both the DAST, other questions to assess patterns of substance use among the incarcerated population, as well as a record of the urinalysis results (see *Appendix I*). This instrument was utilised in the two previous rounds of this survey with only minor modifications in the design made for the current survey implementation. The survey instrument contained pre-coded questions under nine main themes as follows:

1. Demographics,
2. HIV/AIDS & Hepatitis B Status and Abuse History
3. Drug Use and Drug Screening,
4. Mental Health, Drug Overdose, and Substance Abuse Treatment,
5. Criminal Record,
6. Drug Prices,
7. Drug Market,
8. Gang Involvement, and
9. DAST

There were several skip instructions for questions which were not relevant to the respective respondent. It contained similar questions, for example, on prevalence, comparable to those used in the survey of the adult and student populations. This offers a way of providing evidence of any similarities or differences between these populations and the offender population, and help to measure the special features of the latter population.

NEW SURVEY ITEMS

In this round of the survey, questions were added for two new areas: gang involvement and drug prices, while additional questions on income, being prescribed medication for mental or emotional problems, past drug overdose episodes, and number of prison times prior to current offence were added to existing sections. Two questions on gang involvement, typically used to assess association and participation, were included for the first time to benchmark this activity for the inmate population. Questions on the prices of various quantities of drugs were added to corroborate data obtained from other surveys, which ask these questions, and secondary sources that provide this type of data.

DRUG ABUSE SCREENING TEST

The Drug Abuse Screening Test (DAST) asked questions concerning offenders' involvement with drugs. This test was developed in 1982 and is still an excellent screening tool. It is a 28-item self-report scale that consists of items that parallel those of the Michigan Alcoholism Screening Test (MAST). The DAST has "exhibited valid psychometric properties" and has been found to be "a

sensitive screening instrument for the abuse of drugs other than alcohol”.³ However, the 28-item test in 1982 has since been revised to a 10- or 20-item test for more reliable and valid psychometric properties. In this report Drug abuse refers to (1) the use of prescribed or “over-the-counter” drugs in excess of the directions, and (2) any non-medical use of drugs. The various classes of drugs may include: cannabis (e.g., marijuana, hash), solvents, tranquilisers (e.g. valium), barbiturates, cocaine, stimulants (e.g., speed), hallucinogens (e.g., LSD), or narcotics (e.g., heroin). The questions do not include consumption of alcoholic beverages.

Scoring and interpretation: A score of “1” is given for each “Yes” response, except for items 4 and 5, for which a “No” response is given a score of “1”. The DAST total score is computed by summing all items that are endorsed in the direction of increased drug problems; that is, score of “1” on the 20 items. Thus, the total score can range from zero to 20 and places individuals along this continuum with respect to their degree of problems or consequences related to drug abuse. Based on data from a heterogeneous psychiatric patient population, cutoff cores of six through 11 are considered to be optimal for screening for substance use disorders. Using a cutoff score of six has been found to provide excellent sensitivity for identifying patients with substance use disorders as well as satisfactory specificity (that is, identification of patients who do not have substance use disorders). Using a cutoff score of less than 11 somewhat reduces the sensitivity for identifying patients with substance use disorders, but more accurately identifies the patients who do not have a substance use disorder. Over 12 is definitely a substance abuse problem. In a heterogeneous psychiatric patient population, most items have been shown to correlate at least moderately well with the total scale scores.

DATA COLLECTION

The questionnaire was administered by a case worker, staff or officer attached to either of the two facilities, or a trained external interviewer in the form of a face-to-face interview, on reception of each inmate or within 48 hours. In total, six interviewers administered the survey over the one-year period. The interviews occurred from April 2014 to March 2015. Each interview was estimated to have lasted approximately 25 minutes. The questionnaires were sent to the senior case worker who then distributed them to the various interviewers. In addition, the DNDC provided the Department of Corrections (Medical Officer) with drug test kits for the urinalysis. Urine results were obtained by the Medical Officer and forwarded to the respective case worker, who then recorded the urine result on each questionnaire. Upon completion, the senior case worker notified the DNDC that questionnaires were ready to be uplifted. This usually occurred at the end of each month.

³ H. Skinner. (1982). *The Drug Abuse Screening Test (DAST)*. http://www.drtepp.com/pdf/substance_abuse.pdf (accessed May 1st, 2012).

SUPERVISION AND CONTROL

The survey team comprised of staff from the DNDC, who worked closely with the case management workers within each facility. The DNDC was mainly responsible for planning the survey, printing the questionnaires, organizing logistical arrangement, analysing the survey results, and preparing the survey report.

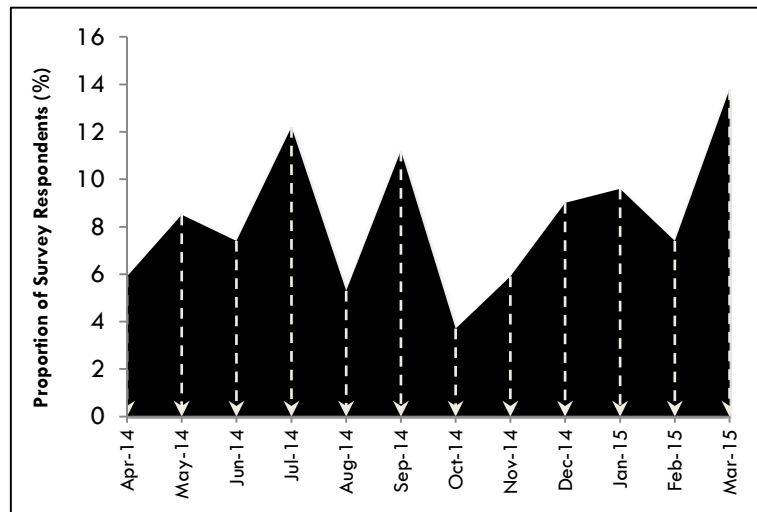
DATA QUALITY

RESPONSE RATE

Of the combined total of 260 reception offenders in the two facilities over the survey period, 188 persons responded to the survey. The survey response rate was, therefore, 72.3%. Participation in the survey was voluntary and therefore the non-respondents comprise of those offenders who refused to participate, those who were missed by the interviewers, and those who were released on bail before the interviewers were able to conduct the interviews.

The table and chart below shows the proportion of persons who were interviewed in each month during the survey period. On average, 15.7% new offenders volunteered to participate in the survey, per month. Most interviews were done in July 2014, September 2014, and March 2015, which could be indicative of the number of offenders who were presented to the facilities during these months.

INTERVIEW DATE	(n = 188) % RESPONDENTS
April 2014	5.9
May 2014	8.5
June 2014	7.4
July 2014	12.2
August 2014	5.3
September 2014	11.2
October 2014	3.7
November 2014	5.9
December 2014	9.0
January 2015	9.6
February 2015	7.4
March 2015	13.8
Average per month	15.7



MISSING DATA

Imputations were not made for missing responses since it would be difficult to ascribe responses founded on self-report. Hence, missing data was treated as “not stated” and comprised part of the total responses.

VALIDATION

Given the manageable number of responses it was easy to validate all the questionnaires and responses for any possible errors which can be corrected. Checks were made for exaggeration; for example, number of days of drug use greater than 31 days. Another validation check was done to eliminate responses on patterns of drug use which were logically inconsistent; for instance, a report of current drug use but not a report of lifetime use, or a report of not being charged for a crime but provided responses for offences or outcomes, which required one to be charged with an offence. Any of these instances were corrected, if possible, or treated as missing data.

DATA PROCESSING AND ANALYSIS

Responses to the survey questions were captured directly onto the questionnaire by the case worker. Data entry was then done using SPSS by staff of the DNDC. The data capture screen was first prepared for data entry at the beginning of the survey in April 2014. The data entry process took at most two days following the receipt of the questionnaires. No coding of the questionnaire was required since the questionnaire was pre-coded. To guard against transcription errors, care was taken in entering the responses from the paper questionnaires on to the computer.

DNDC staff then performed the data analyses for this report. This included the generation of appropriate tables and descriptive statistics for inclusion in this final report.

Analyses were done by the nine sections previously mentioned in addition to one other section on the relationship between drug use and crime. The results of the survey are presented for the overall surveyed population. Frequencies of count (number) and percent were generated for all variables. Basic descriptive analyses were carried out for all variables under the various sections. Descriptive statistics, such as the mean, mode, and range, were also derived and used in the analysis.

SPSS v.22 software was used for the analysis of survey data. Charts were created in Microsoft Excel and tables and text were prepared in Microsoft Word.

SECTION 1: DEMOGRAPHIC CHARACTERISTICS

The majority (86.7%) of survey respondents were from the Westgate Correctional Facility (see Table 1.1). There were more (89.9%) male offenders than females; and 81.4% of all the offenders were “Black”. Over half (55.3%) of the respondents were 35 years or younger. However, 17.5% of offenders were above 50 years of age, and 12.2% who were 21 years or younger. The average age of offenders is, therefore, 35.2 years, ranging from 16 to 67 years. None of the 188 persons was a repeat offender within the one year of survey administration.

While 8.5% of the survey respondents indicated they were married, 69.1% said they were single and an additional 15.9% were either divorced (8.5%) or separated (7.4%) (see Table 1.2). Of all the respondents, 60.6% indicated they have dependents and 47.9% had dependents less than 18 years of age (with 37.8% having at most two dependents younger than 18 years). Most (44.1%) of the respondents were raised by a single parent and a further 8.5% indicated that they were raised with grandparents.

DEMOGRAPHIC CHARACTERISTIC	% RESPONDENTS
FACILITY	
Westgate	86.7
Co-Ed	13.3
SEX	
Male	89.9
Female	10.1
RACE	
Black	81.4
White	7.4
Portuguese	-
Mixed	8.0
Other	2.7
Not Stated	0.5
AGE (Years)	
< 18	2.2
18 – 21	10.6
22 – 30	33.0
31 – 35	10.1
36 – 40	10.1
41 – 45	8.5
46 – 50	6.9
51 – 55	8.5
56 – 65	8.5
65+	0.5
Don't Know/Not Stated	1.1

DEMOGRAPHIC CHARACTERISTIC	% RESPONDENTS
MARITAL STATUS	
Single	69.1
Married	8.5
Divorced	8.5
Separated	7.4
Common-Law Arrangement	4.3
Widowed	1.1
Not Stated	1.1
DEPENDENTS	
Have Dependents? (Yes)	60.6
Dependents Under 18 Years	47.9
1 Dependent	24.5
2 Dependents	13.3
3 Dependents	4.3
4 Dependents	1.6
5+ Dependents	4.2
PARENTAL UPBRINGING	
Raised with both parents	37.8
Raised by single parent	44.1
Raised with grandparents	8.5
Raised by foster parents	2.1
Raised by sibling or other relative	1.6
Other arrangement*	3.2
Not Stated	2.6

* Includes: mother and stepfather, divorced parents in separate house, sunshine league observatory cottage.

The majority (38.3%) of the respondents were from the western parishes of Sandys, Southampton, and Warwick (see Table 1.3). About one-quarter (20.7%) or one in five respondents resided in Pembroke parish. Fewer respondents lived in Paget (5.3%) or Smith's (3.7%). At the same time there were 4.3% of the participants who said they do not live in Bermuda. The majority (88.8%) of persons surveyed indicated they were born in Bermuda, while 5.9% were born in the USA and others were from as far as the Middle East. However, 17.3% of the offenders indicated they have other citizenship; for instance 5.9% were now Bermudians.

Most of the respondents (44.1%) indicated that they rented a private house or apartment; while 38.3% indicated that they own the house or apartment in which they resided (see Table 1.4). There were some respondents (47.8%) who reported that they lived on the street or had no fixed abode. The survey participants were asked how many times they have moved in the past year and a substantial proportion (59.0%) reported that they never moved, while 18.6% said they moved once, and 9.0% moved three or more times.

Table 1.3 Profile of Survey Participants (n = 188)	
DEMOGRAPHIC CHARACTERISTIC	% RESPONDENTS
PARISH OF RESIDENCE	
Devonshire	8.0
Hamilton	9.0
Paget	5.3
Pembroke	20.7
Sandys	16.5
Smith's	3.7
Southampton	10.1
St. George's	9.0
Warwick	11.7
Do not live in Bermuda	4.3
Not Stated	1.6
COUNTRY OF BIRTH	
Bermuda	88.8
USA	5.9
Israel	1.6
Jamaica	1.1
Other Country*	2.0
Not Stated	0.5
*Include: Columbia, Costa Rica, England, and Nigeria.	
Other Citizenship (Yes) 17.0	
Bermuda	5.9
USA	7.4
UK	1.6
Other Country*	1.5
Not Stated	0.5
*Include: Canada, Germany, Granada	

Table 1.4 Profile of Survey Participants (n = 188)	
DEMOGRAPHIC CHARACTERISTIC	% RESPONDENTS
TYPE OF HOUSING	
Rented private house/apartment	44.1
Own house/apartment	38.3
Rented government house/apartment	6.9
Street or no fixed abode	4.8
A treatment centre or hospital	1.6
Transitional housing	1.1
In prison or other custody	1.1
Shelter	0.5
House boat/boat/sail boat	-
Not Stated	1.6
TIMES MOVED (in last 12 months)	
None	59.0
Once	18.6
Twice	11.7
Three or more times	9.0
Not Stated	1.6

The highest level of education completed by most of the respondents was high (38.3%) or middle (19.1%) school, with 2.7% indicating they have completed their General Educational Development (GED). There were also quite a number of persons who had completed college (14.4%) or had some level of college education (11.7%).

Table 1.5 Profile of Survey Participants	
(n = 188)	
DEMOGRAPHIC CHARACTERISTIC	% RESPONDENTS
EDUCATION (Highest Level Completed)	
None, No School	2.1
Primary	6.9
Middle	19.1
High School	38.3
Some College	11.7
College	14.4
Other ¹	6.4
GED	2.7
Not Stated	1.1

¹ Includes: home school, technical or trade school, university.

A one-third (31.9%) of persons surveyed reported that their main source of (legal) income is from self-employment, and this accounted for the majority of the respondents; while slightly fewer (28.7%) respondents indicated that part-time work or odd jobs provided their income (see Table 1.6). The survey results also showed that 7.4% of the persons reported that they had no source of income.

In terms of respondents' regular legal occupation, most (28.2%) of them fall within the major group of craft and related trades workers, which includes occupations such as painter, carpenter, plumber, electrical repairer, and mechanic, just to name a few. In addition, 16.0% were in service and sales occupations and 13.0% indicated income from some sort of elementary occupation, for example, handyman and labourer. Very few were professionals or para-professionals.

At the time of reception into the respective facility, slightly less than one-third (31.4%) of the respondents indicated they were working full-time, that is, 36 or more hours per week. However, the majority (38.8%) of survey participants reported working part-time (less than 36 hours per week). There were some persons (4.8%) who indicated they were not working neither were they looking for work.

Table 1.6 Profile of Survey Participants (n = 188)	
DEMOGRAPHIC CHARACTERISTIC	% RESPONDENTS
SOURCE OF INCOME	
Family or friends	5.3
Full-time work	19.7
Self-employed	31.9
Welfare or government benefit	4.8
Part-time work or odd jobs	28.7
None	7.4
Other	-
Not Stated	2.1
ANNUAL INCOME	
\$0 to < \$25000	49.5
\$25000 to < \$50000	18.6
\$50000 to < \$75000	6.9
\$75000 to < \$100000	4.3
> \$100000	1.6
Don't Know/Not Stated	19.2
OCCUPATION¹	
Senior Officials and Managers	2.7
Professionals	3.7
Technicians and Associate Professionals	4.2
Clerks	-
Service & Sales Workers	16.0
Skilled Agricultural Workers	11.1
Craft and Related Trades Workers	28.2
Plant and Machine Operators	2.7
Elementary Occupations	10.1
None	4.3
Not Classified/Not Stated	17.0
CURRENT WORK STATUS	
Working full-time (36+ hours per week)	31.4
Working part-time (< 36 hours)	38.8
Not working and looking	19.1
Not working and not looking	4.8
Sick or disabled and unable to work	1.6
Student	1.6
Retired	0.5
Not Stated	2.1

¹ Major groups according to the Bermuda Standard Classification of Occupations 2011.

SECTION 2: DRUG USE AND DRUG SCREENING

DRUG USE

LIFETIME AND CURRENT PREVALENCE

Respondents were asked to report if they have “*ever taken or used (...)?*” Their negative responses (“No”) to these questions provide the number of respondents who reported that they have never tried any of the drugs surveyed. Overall, 98.9% ($n = 186$) of the respondents have reported use of at least one drug in their lifetime.

Lifetime and current prevalence of substance use are presented in Table 2.1 and Figure 2.1. The results show that respondents recorded the highest lifetime consumption for alcohol (95.7%), marijuana (92.0%), cigarettes/tobacco (91.0%), crack cocaine (27.7%), and cocaine powder (22.3%). Other lifetime prevalence ranges from a low of 0.5% for methamphetamine to a high of 21.5% for heroin and ecstasy. In terms of current use, respondents indicated the highest consumption for alcohol (73.4%), cigarettes/tobacco (69.1%), and marijuana (61.7%). Consumption of other substances in the current use period ranges from a low of 0% for LSD, methamphetamine, and valium or benzodiazepine to a high of 14.9% for crack cocaine.

Table 2.1
Lifetime and Current Prevalence of Substance Use by Proportion of Respondents

SUBSTANCE	LIFETIME USE (%) ($n = 188$)	AVERAGE AGE OF FIRST USE (YEARS)	CURRENT USE (%) ($n = 188$)	AVERAGE NUMBER OF DAYS USED IN LAST 30 DAYS
Cigarettes/Tobacco	91.0	15.2	69.1	23.1
Alcohol	95.7	14.8	73.4	14.3
Marijuana	92.0	14.4	61.7	18.5
Crack Cocaine	27.7	24.0	14.9	14.1
Cocaine Powder	22.3	23.3	3.7	8.6
Heroin	20.7	23.6	7.4	20.1
Ecstasy	20.7	22.3	1.1	1.0
LSD	3.7	18.8	-	-
Methamphetamine	0.5	17.0	-	-
Valium/Benzodiazepine	1.6	22.5	-	-
Methadone	4.8	31.0	0.5	30.0
Other Street Drugs	4.8	25.9	0.5	3.0

The respondents used drugs as seldom as one day in the last month to as frequent as every day. On average, the respondents who reported current use of substances indicated use of four substances for more than half of the preceding 30-day period: methadone (30 days), followed by cigarettes/tobacco (31.1 days), heroin (20.1 days), and marijuana (18.5 days) (see Table 2.1).

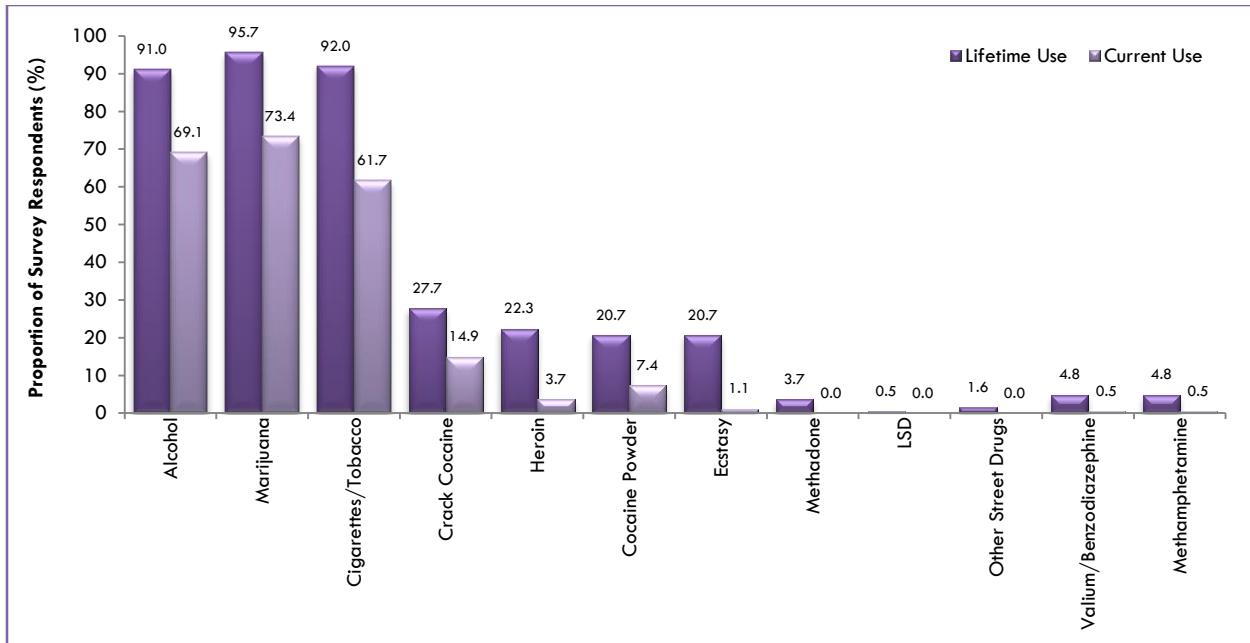


Figure 2.1. Lifetime and current prevalence of substance use by proportion of respondents.

TECHNICAL NOTE

What is Prevalence?

The terms prevalence refers to the proportion of a population who has used a drug over a particular time period. In this population survey of middle and senior school students, prevalence is measured by asking respondents to recall their use of drugs. Typically, the three most widely used recall periods are: lifetime (ever used a drug), last year (used a drug in the last 12 months), and last month (used a drug in the last 30 days).

Lifetime prevalence: the proportion of survey respondents who reported ever having used the named drug at the time they were surveyed; that is, at least once. A person who records lifetime prevalence may – or may not – be currently using the drug. Lifetime prevalence should not be interpreted as meaning that people have necessarily used a drug over a long period of time or that they will use the drug in the future.

Last month (past 30 days) prevalence: the proportion of survey respondents who reported using a named drug in the 30-day period prior to the survey. Last month prevalence is often referred to as **current use**; and also classified as lifetime and recent prevalence. A proportion of those reporting current use may be occasional (or first-time) users who happen to have used in the period leading up to the survey – it should therefore be appreciated that current use is not synonymous with regular use.

POLY DRUG USE

Poly drug use refers to the use of two or more psychoactive drugs in combination, whether at the same time or on the same occasion, or within a certain period but not necessarily the same time, to achieve a particular effect. In many cases, one drug is used as a base or primary drug, with additional drugs to lighten or compensate for the side effects of the primary drug and make the experience more enjoyable with drug synergy effects, or to supplement for primary drug when supply is low.

Poly drug use often carries with it more risk than use of a single drug, due to an increase in side effects, and unique pharmacological interactions. The potential effect of one drug on another is sometimes considerable and the licit drugs and medicines – such as alcohol, nicotine and antidepressants – have to be considered in conjunction with the controlled psychoactive substances. The risk level will depend on the dosage level of both substances. Concerns exist about a number of pharmacological pairings: alcohol and cocaine increase cardiovascular toxicity; alcohol or depressant drugs, when taken with opioids, lead to an increased risk of overdose; and opioids or cocaine taken with ecstasy or amphetamines also result in additional acute toxicity. Benzodiazepines are notorious for causing death when mixed with other depressants such as opioids, alcohol, or barbiturate.

The survey results revealed that of the 188 inmates, 69 (36.7%) were non-poly drug users, in that they used only one (mainly tobacco or alcohol) or no substance. On the other hand, 107 (56.9%) inmates or about three out of every five were, in fact, poly drug users. The non-responses of the remaining proportion of inmates ($n = 12$) did not allow for the determination of poly drug use among them. Of the 107 poly drug users, 80 used a combination of only two substances (mainly tobacco and alcohol), while 27 used combinations of three or more of these drugs.

Prevalence of two-substance combinations among poly drug users, in the current use period, is shown in Table 2.2. There was a combined total of 96.3% ($n = 103$) of the poly drug users who reported using tobacco and alcohol; 89.7% ($n = 96$) using alcohol and marijuana; and 81.3% ($n = 87$) using tobacco and marijuana. Worthy of note, is the proportion (19.6% or $n = 21$) of poly drug users who reported use of crack cocaine and marijuana in the past 30-day period. In addition, there were quite a few of the poly drug users who reported using crack with tobacco ($n = 27$) and alcohol ($n = 20$). At the same time there were 13 users of heroin with tobacco and 10 users of heroin with marijuana.

Table 2.2
Prevalence of Two-Substance Combination of Poly Drug Use

($n = 107$)

DRUG	DRUG								
	TOBACCO	ALCOHOL	MARIJUANA	CRACK	COCAINE	HEROIN	ECSTASY	METHADONE	OTHER
Cigarette/Tobacco	-	103	87	27	6	13	1	1	1
Alcohol		-	96	20	5	8	2	1	1
Marijuana			-	21	5	10	2	1	1
Crack Cocaine				-	4	8	1	1	-
Cocaine Powder					-	2	1	1	-
Heroin						-	-	1	-
Ecstasy							-	1	1
Methadone								-	-
Other									-

AGE OF FIRST USE OF DRUGS

Using age-of-initiation data to coordinate the timing of prevention efforts can be an important tool for optimizing programme effectiveness. For instance, programmes delivered after the majority of potential drug users have already initiated the behaviour may have limited impact. On the other hand, very early intervention might prove less effective because it is not close enough to the critical initiation period.

Respondents were asked to report the age at which they first used 12 listed substances. Some of these substances are generally considered to be the major gateway drugs, usually preceding the use of hard drugs.⁴ The average age of onset is based only on the ages of first use of respondents who indicated ever engaging in the behaviour, that is, lifetime users.

As can be seen from Table 2.1 and Figure 2.2, the average age of initiation of drug use for the overall surveyed population ranges from a low of 14.4 years for marijuana to a high of 31.0 years for methadone. There were persons who began using marijuana as early as five years and methadone as early as 18 years. Alcohol use began around 14.8 years and the use of heroin and cocaine began after 20 years, on average. There were persons who reported age of first use for these substances as early as 13 and 15 years, respectively.

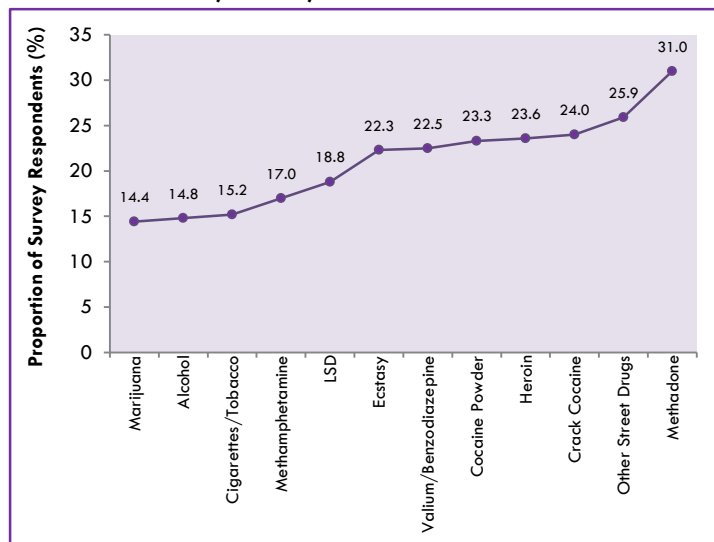


Figure 2.2. Average age of onset for all lifetime users by type of substance.

INJECTED DRUG USE

Respondents were asked questions on whether or not they ever injected drugs. Of all the offenders, 2.7% reported that they had injected drugs in their lifetime; and none of these persons reported to have injected drugs in the 30 days prior to being interviewed.

⁴ National Center on Addiction and Substance Abuse. (1994). National Study Shows “Gateway” Drugs Lead to Cocaine Use. In R. J. Hackett (Ed.), *Columbia University Record*, 20(4). Columbia University, NY: Office of Public Information. http://www.columbia.edu/cu/record/archives/vol20/vol20_iss10/record2010.24.html (accessed January 25, 2012).

DRUG SCREENING

In this round of the survey the DNDC has moved from a five- to a 12-drug panel, which now includes some of the other emerging substances that have been reported to be in use such as methamphetamine, oxycodone, barbiturates, and the like. Tetrahydrocannabinol (THC), the principal psychoactive constituent of the cannabis plant, was found in about half (60.1%) of offenders' urine screens, followed by cocaine, which was found in 14.9% of their drug tests (see Table 2.3). Slightly less than one in 10 (7.4%) offenders tested positive for opiates, while 1.1% had positive test results for benzodiazepine, methadone, and methamphetamine.

Table 2.3
Proportion of Positive Results from Drug Screening
(n = 188)

RAPID DRUG PANEL*	% POSITIVE
Marijuana	60.1
Cocaine	14.9
Opiate	7.4
Benzodiazepine	1.1
Methadone	1.1
Methamphetamine	1.1
Amphetamines	0.5
Barbiturates	0.5
Oxycodone	0.5
Phencyclidine	0.5
Propoxyphene	0.5
Buprenorphine	-

* 6.9% of respondents refused drug screening.

In Table 2.4 below, the data suggests that, although there was self-reported current use of substances, in some instances, these did not show as positive in the urine tests. For instance, of the 113 positive urine tests for THC, only 95 were positive THC current users. In other words, there were 18 offenders who tested positive for THC but who did not self-report to be current users. At this same time, this result also suggests that there were persons who indicated that they were current users of marijuana but the results of the urine tests did not confirm their claim. Likewise, of the 14 positive urine tests for heroin, only 10 were positive heroin current users. This relationship of fewer positive current users also holds true for cocaine and methadone as compared to those who tested positive for these substances on their urine tests.

Table 2.4
Comparison of Self-Reported Current Users of Substances and Positive Urine Tests
(n = 188)

SUBSTANCE	CURRENT USE		POSITIVE URINE TEST		CURRENT USE AND POSITIVE URINE TEST	
	n	%	n	%	n	%
Marijuana	116	61.7	113	60.1	95	50.5
Cocaine	7	3.7	28	14.9	5	2.7
Opiate	14	7.4*	14	7.4	10	5.3
Methadone	1	0.5	2	1.1	1	0.5

Notes:

* taken as current use of heroin.

Current use not asked for the following substances tested on the rapid drug panel: benzodiazepine, methamphetamine, amphetamines, barbiturates, oxycodone, phencyclidine, propoxyphene, and buprenorphine.

WHAT IS DRUG TESTING?

Drug testing is a way to evaluate the type and possibly the amount of legal or illegal drugs taken by a person. Drug testing, you can be sure, is not an exact science. A great number of factors influence testing results. Not all people are alike, nor are the drugs they take alike. Some of the factors that influence test results are: the individual's drug absorption rate, metabolism rate, distribution in the body, excretion rate, drug quantity, drug quality and the testing method employed.

Urine testing is probably the most common drug testing procedure used today. Drugs, in order to be detected in the urine must be absorbed, circulated in the blood and deposited in the bladder. This process takes approximately three hours for most drugs – except alcohol – which can take only 30 minutes. Thus, an individual who was tested just 15 or 20 minutes after using drugs would probably (but not always) test negative unless he was a chronic user who would have identifiable drug residue in his/her urine at all times. Chronic users of marijuana, for example, may test positive for marijuana use several months after use of the drug.

Urine specimens are preferred for testing because large sample volumes can be collected non-invasively. Drugs generally remain detectable in urine for two to three days, longer than in blood. THC can remain positive in urine for several weeks after the last use, especially in chronic users. A positive THC urine drug test however does not necessarily imply impairment of the donor, because THC is usually inactivated by the liver within a few minutes or hours after administration.

SECTION 3: MENTAL HEALTH, DRUG OVERDOSE, AND SUBSTANCE ABUSE TREATMENT

This round of the survey asked participants whether they have been prescribed any medication for mental or emotional problems in the last 12 months. There were 12.8% of the respondents who indicated that they had, in fact, taken such medication (see *Figure 3.1*).

Further, 4.3% of the persons indicated that they have had a drug overdose episode that required professional intervention (by a physician, nurse, or ambulance); most of which occurred over two years ago.

Offenders were asked about their experience with being treated by a doctor as a result of using a substance. Of all respondents ($n = 188$), 13.8% said they had been treated by a doctor as a result of use of any substance. When asked about the type of substance for which they received treatment from a doctor, 7.4% reported alcohol, 1.1% each for marijuana, tobacco, and powdered cocaine, 3.2% heroin, 4.3% crack cocaine, and 2.7% were treated for other substances such as prescription drugs, such as morphine. More specifically, 33.5% indicated they had received substance abuse counseling or rehabilitation treatment as a result of their use of alcohol and/or drugs. Substance abuse counseling was reported for alcohol at 12.8%, marijuana at 13.3%, tobacco at 1.6%, heroin at 9.0%, crack cocaine at 13.3%, cocaine (powdered) at 2.7%, and some other drug at 1.1%.

Interestingly, when asked their perceptions regarding whether or not they felt they needed treatment for drug or alcohol use, slightly over one-fifth (21.3%) indicated that they needed treatment, while 1.1% were unsure. On another note, 21.3% of respondents indicated they had taken drugs which were not prescribed by a doctor in the last three days.

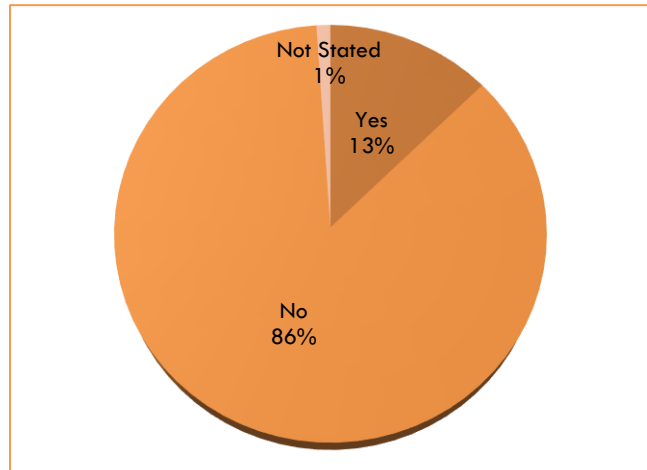


Figure 3.1. Prescribed medication for mental or emotional problems in the past year.

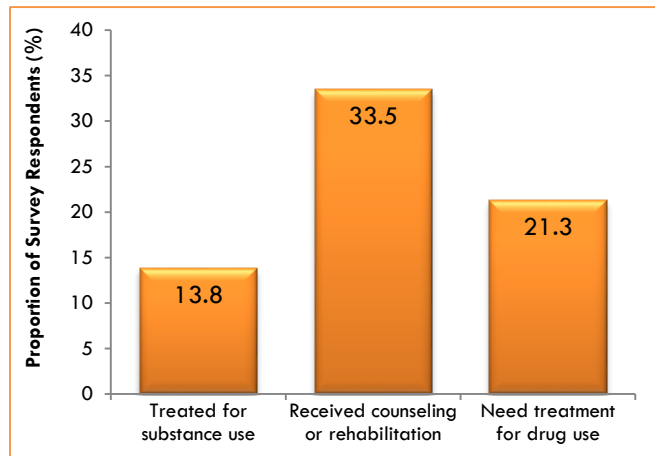


Figure 3.2. Substance abuse treatment and counseling.

SECTION 4: CRIMINAL RECORD

CRIMINAL HISTORY

Of all the respondents interviewed, 32.6% were never in prison before the current imprisonment followed by 35.8% who admitted to being in prison for two to five times and 16.0% being in prison for more than five times (see *Figure 4.1*).

When it came to the current offence with which the respondent was charged, assault was the most frequent charge followed by other violent crime and other public order offences (see *Table 4.1*).

In the 12 months prior to being interviewed for the survey, 22.0% (n = 42) (27.0% in 2011) of the respondents reported that they had been charged with an offence(s). There was a small proportion of respondents who committed offences in the past year. Of these persons, assault or larceny/theft was the offence committed most frequent at 4.3% (see *Table 4.1*). Similar small proportions were observed for other violent offences, burglary, stolen property, and road traffic accidents at 2.1%. Unlike previous years, there were very few respondents arrested for drug charges in the past 12 months.

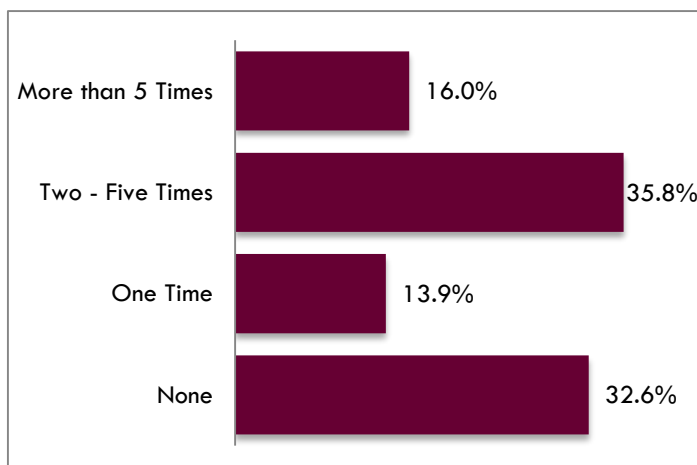


Figure 4.1. Number of times in prison excluding current imprisonment by proportion of respondents.

OUTCOME OF OFFENCE

Offenders were also asked if they had ever served a prison term, been fined, or placed on probation for an offence(s). Overall, 71.1% (77.5% in 2011) of all survey respondents served a prison term, had been fined, or placed on probation in their lifetime for a committed offence. In terms of the type of outcome, 79.8% reported serving a prison term, while 36.1% paid a fine and 35.6% were placed on probation (see *Figure 4.2*).

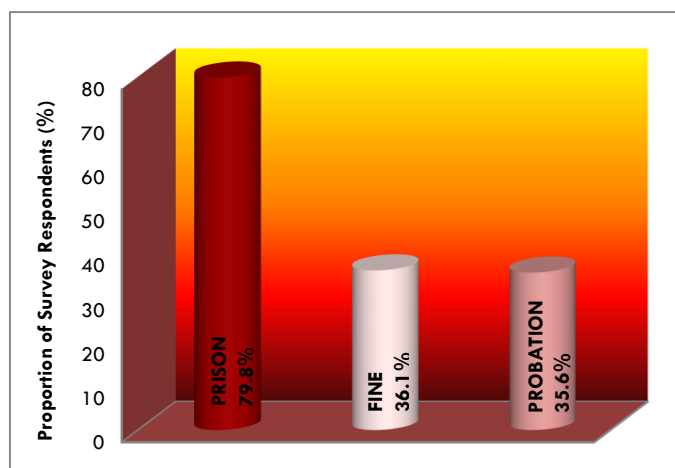


Figure 4.2. Proportion of respondents by outcome of offence.

Table 4.1
Proportion of Respondents by Current and Past Charged Offence and Outcome

(n = 188)

OFFENCE	% RESPONDENTS		
	CURRENT CHARGE ¹	CHARGED ¹ IN PAST YEAR	OUTCOME ² (Prison, Probation, Fine)
VIOLENT			
Murder	2.1	-	-
Manslaughter	-	-	-
Rape	-	-	-
Carnal Knowledge	3.7	1.6	2.1
Other Sexual Offences	3.2	1.1	1.1
Robbery	1.6	0.5	6.4
Assault	12.8	4.3	13.3
Other Violent	9.6	2.1	11.2
PROPERTY			
Burglary	5.9	2.1	11.2
Larceny/Theft	5.9	4.3	13.8
Motor Vehicle Theft	1.1	-	1.6
Fraud	5.9	-	4.3
Stolen Property	4.3	2.1	10.6
Other Property	4.3	1.1	2.7
DRUG			
Possession	6.4	0.5	10.6
Possession with Intent to Supply	5.3	0.5	2.1
Trafficking/Importation	6.4	-	1.1
Other (Handling, Paraphernalia)	1.1	-	1.1
PUBLIC ORDER			
Weapons	2.1	0.5	4.8
Obstruction of Justice	0.5	0.5	2.1
Driving while Intoxicated	2.1	0.5	2.1
Drunkenness/Morals	0.5	-	1.1
Violation of Parole/Probation	6.4	-	1.1
Immigration Violation	-	-	0.5
Civil Offence	-	1.6	12.8
Road Traffic Offence	5.9	2.1	20.2
Other Public Order	9.6	1.1	8.0
OTHER³			
	4.8	-	1.6

¹ Person could have been charged with one or more offence.
² Outcome relates to any offence in their lifetime and not only to current offence or offence in the past year.
³ Includes 'recall' or threatening behaviour.

In terms of the outcome by the main category of offence, serving a prison term was the most prevalent outcome in all offence categories (see Table 4.2 and Figure 4.3). In other words, most persons served a prison term than being fined or placed on probation for all categories; with the exception of public order offences for which the “prison” and “fine” outcomes were at equal proportion (25.5%).

Table 4.2
Proportion of Respondents by Outcome of Category of Offence
(n = 188)

OFFENCE	OUTCOME (% RESPONDENTS)		
	PRISON	FINE	PROBATION
Violent	20.2	2.1	12.8
Property	23.4	4.3	15.4
Drug	9.0	3.7	3.2
Public Order	25.5	25.5	3.7
Other	1.6	0.5	0.5

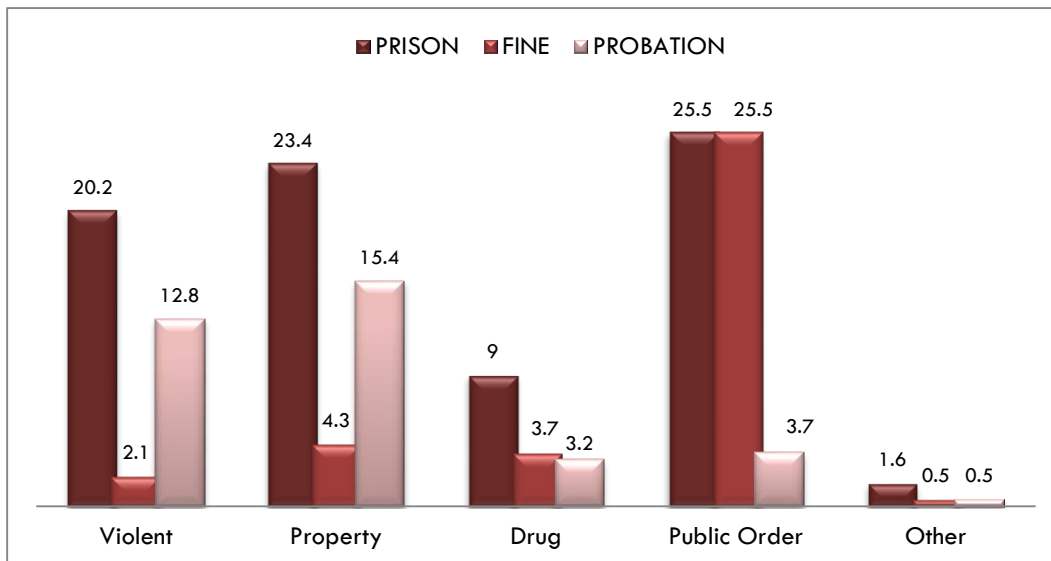


Figure 4.3. Proportion of respondents (%) by punitive outcome of category of offence.

COURT ORDER

Almost three-quarters (75.5%) of the respondents were on no court order, while 6.4% indicated they were “on bail” and 13.9% were on “probation order”. No person reported being on a “community service order”.

Table 4.3
Proportion of Respondents by Type of Court Order
(n = 188)

COURT ORDER	% RESPONDENTS
No Order	75.5
Probation Order	13.9
On Bail	6.4
Ordered to Keep the Peace	-
Community Service Order	-
Conditional Discharge	-
Other*	2.7
Not Stated	1.1

Includes: child support, drug court, mental health court, parole, remand.

DRUG AND ALCOHOL CONNECTION WITH OFFENCE

Respondents were asked specific questions to determine whether or not drugs and/or alcohol were in any way connected to their current or previous offence(s). Noteworthy of mention, is the number of drug-connected offences, in that almost one-third of people reported that drugs were connected to their current (28.9%) and past (27.4%) offence(s) (see *Table 4.4 and Figure 4.4*). On the other hand, about one-quarter or one out of every four persons felt that alcohol was connected to their current (24.1%) and past (18.3%) offence(s).

Drugs were more connected to both past and current offence(s) than alcohol. When asked about the ways in which drugs and alcohol were connected to the offence(s), 17.0% indicated that the offence was because of personal use or possession of drugs. Likewise, 16.5% of the respondents indicated that the offence(s) was committed while under the influence of drugs and 15.4% of them indicated that the offence was committed to support their drug habit by providing money to buy drugs. The connection to the offence(s) being committed while under the influence of alcohol is equally as concerning when compared to offences being committed while under the influence of drugs. The results show that alcohol played a significant role in respondents offending, in that there were about one-quarter (26.1%) or one out of every four respondents who reported that the offence(s) was committed while under the influence of alcohol.

Table 4.4 <i>Drug and Alcohol Connection with Offence</i>	
(n = 188)	
DRUG CONNECTION TO OFFENCE(S)	% RESPONDENTS
Drug connection to current offence(s) (Yes)	28.9
Drug connection to previous offence(s) (Yes)	27.4
WAYS DRUGS WERE CONNECTED TO OFFENCE(S)	
	% RESPONDENTS
Offence committed while under the influence of drugs	16.5
Offence committed to support drug habit (for money to buy drugs)	15.4
Through being involved with the drug trade	7.4
Personal use of drugs (possession)	17.6
Other	0.5
No answer	3.2
ALCOHOL CONNECTION TO OFFENCE(S)	
	% RESPONDENTS
Alcohol connection to current offence(s) (Yes)	24.1
Alcohol connection to previous offence(s) (Yes)	18.3
WAYS ALCOHOL WAS CONNECTED TO OFFENCE(S)	
	% RESPONDENTS
Offence committed while under the influence of alcohol	26.1
Offence committed to support alcohol habit (for money to buy alcohol)	0.5
Drunk driving	3.2
Other ¹	0.5
No answer	3.2

¹ Includes: stealing alcohol and was intoxicated when the police were called.

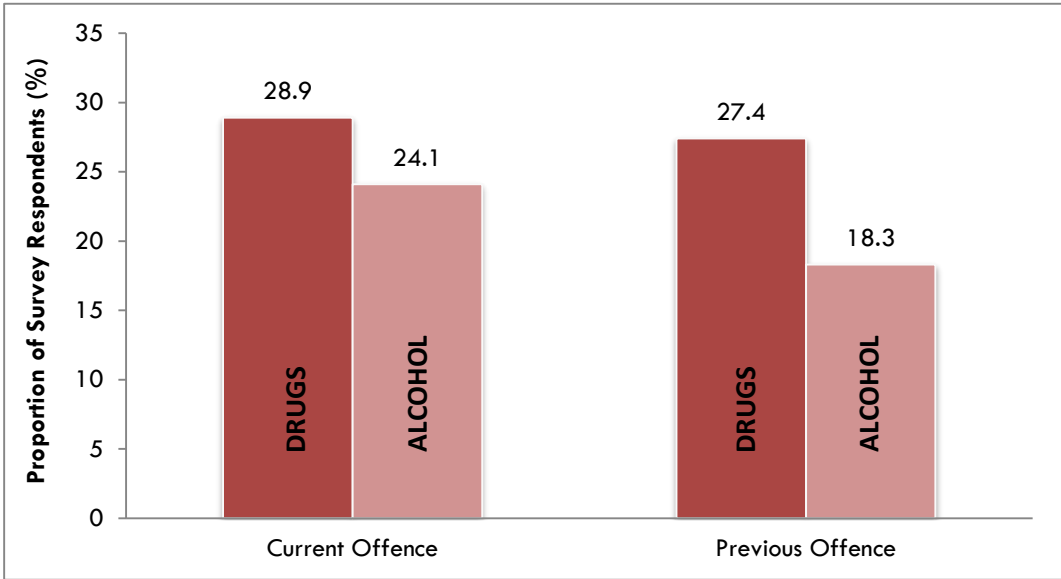


Figure 4.4. Drug and alcohol connection to offence by proportion of respondents.

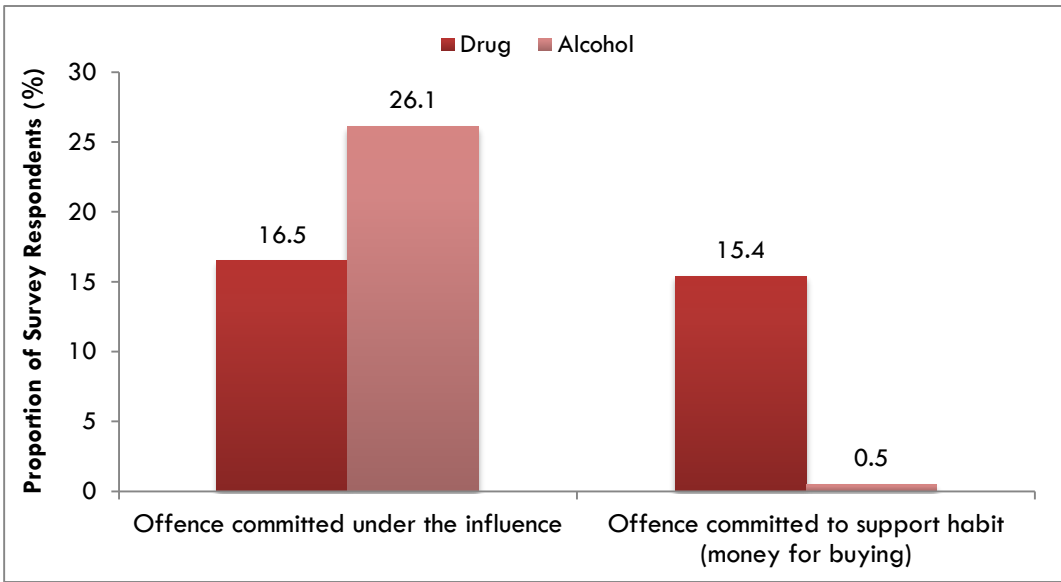


Figure 4.5. Two drug and alcohol connections to offence.

SECTION 5: HIV/AIDS & HEPATITIS B STATUS AND ABUSE HISTORY

Of all respondents taking part in the survey, 99% admitted that they were not HIV positive, and 50.5% said their HIV test results (whether positive or negative) had been confirmed by testing (for those who responded to this question as it was not mandatory). Similarly, almost all of the participants indicated that they did not have Hepatitis B with 43.6% indicating that their status has been confirmed by testing (again, this was not a mandatory response question).

History of a range of abuse, neglect, and abandonment items were included as part of the survey. By definition, physical or sexual abuse was classified for acts against children 18 years or younger, while neglect or abandonment was classified for acts against children by parents before age five. When asked about abuse, 12.2% ($n = 23$) of offenders indicated being physically abused, whereas 9.6% ($n = 18$) said they had been sexually abused by age 18 years (see Table 5.1). On the other hand, 5.9% or 11 respondents indicated they had been neglected by their parents before age five, and a similar proportion, 5.3% or 10 persons, reported being abandoned by the same age.

Table 5.1
Self-reported History of Physical Abuse, Sexual Abuse, Neglect, and Abandonment

TYPE OF ABUSE	n	%
Physical Abuse	23	12.2
Sexual Abuse	18	9.6
Neglect	11	5.9
Abandonment	10	5.3

Cross tabulation analysis was conducted on drug use and factors such as physical abuse, sexual abuse, neglect, and abandonment. Respondents who admitted to being physically and sexually abused as a child (18 years or younger) were more likely to indicate trying crack cocaine at least once in their lifetime (physically abused 43.5%; sexually abused 55.6%) ($p < .05$). Similarly, respondents who were sexually abused also said they used cocaine (50.0%) at least once in their lifetime ($p < .05$). When it came to respondents who were abandoned before the age of five, 50.0% indicated use of heroin in the past 30 days ($p < .05$).

SECTION 6: DRUG PRICES

Reported prices paid for drugs seemed very volatile. At the same time, not all of the reception inmates were able to provide answers to the questions in this section of the questionnaire. While there was, in fact, extremities in the prices reported for the various quantities of the different substances, a modal price (the price most often reported by those who did provide responses) was evident, for some commonly purchased quantities of drugs.

For instance, the prices paid for an ounce of cannabis is reported to be about \$500 to \$600 as reported by 56 of the 75 persons who provided an answer to this question. Other modal prices, as reported by respondents, include: \$25 to \$50 for a gram of cannabis (48 of 77 respondents); \$100 for a gram of cannabis resin (eight of 11 respondents); \$3000 to \$4000 for an ounce of cocaine (nine of 23 respondents); \$50 for a rock of cocaine (15 of 17 respondents); \$50 for a rock of crack (23 of 25 respondents); \$400 for a gram of heroin (seven of 18 respondents); \$50 for a deck of heroin (seven of 14 respondents).

Despite the instability of drug prices reported in this survey, they do, however, add to the existing data on drug prices from other primary and secondary sources.

SECTION 7: DRUG MARKET

Respondents were asked to indicate if they bought any illegal drugs, for “yourself” or “others” over the past 12 months. Interestingly, half (50.5%) of survey respondents said they had, while 43.1% reported buying illegal drugs for themselves or others during the past 30 days prior to being arrested (see Figure 7.1). When asked if they had sold illegal drugs to make money in the past 12 months, 13.8% or 26 people indicated they had sold drugs. On the other hand, when it came to selling illegal drugs during the past 30 days, prior to being arrested, 10.6% ($n = 20$), admitted they had sold drugs.

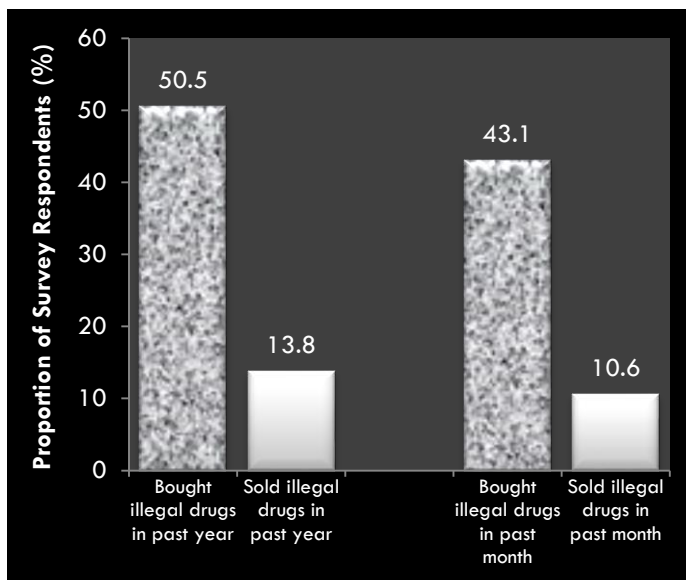


Figure 7.1. Drug market in past year and month.

Of all offenders surveyed, 16.5% indicated they had “heard” of other drugs being used on the street. Such drugs include those substances listed in Table 7.1. Other drugs of use would exclude main drugs that were assessed in this survey such as alcohol, tobacco, crack cocaine, powdered cocaine, marijuana, heroin, and ecstasy.

Other Drugs* Used	
Acid	MDA
Aerosol spray	Molly
Black coloured mix of dope and cocaine	Mushroom
Codeine	Parachutes (MDMA & Crystal Meth)
Glue	Salvia
K2/ Synthetic Marijuana	Special K
Lean	Xanax
Marley	

*Refer to Appendix III for the description of these drugs.

SECTION 8: DRUG ABUSE SCREENING TEST (DAST)

The DAST is the principal component of the DAMP. As stated in the methodology section of this report, it is used to classify the levels of severity of substance abuse problems among reception offenders. The DAST yields a quantitative index of the degree of consequences related to drug abuse. This section of the report describes the distribution of these scores for this psychometric assessment tool. Though this round of the survey utilised the original DAST-28 items, the analysis of the scores will be done using the shortened DAST-20 since these items proved to be good discriminators (excellent internal consistency reliability) and measure the same construct as the longer scale⁵ (that is, 8 items from the DAST-28 were excluded (see Table 7.3)). The DAST-20 item scores can be transformed to yield classification of substance abuse problems in terms of “none” (a score of 0), “low” (a score between 1 and 5), “intermediate” (a score between 6 to 10), “substantial” (a score between 11 to 15), and “severe” (a score between 16 to 20) (see Table 7.1). While a score of 0 indicates that no evidence of drug-related problems were reported, as the DAST score increases, there is a corresponding rise in the level of drug problems reported; where the maximum score of 20 would indicate substantial problems. Thus, as the DAST total score increases one may interpret that a given individual has accrued an increasingly diverse range of drug-related consequences. For instance, offenders who are classified in the “intermediate to severe” range of this scale, or those who score above 6, exhibit problems, which are similar in magnitude to the level of problems experienced by individuals in the community who seek professional help for alcohol and drug problem. In other words, this range of scores indicates substance abuse or dependence. Specific problem domains or areas or impact are addressed later in this section.

Table 8.1 presents the distribution of the DAST scores for the 188 offenders who participated in the survey. About one in 10 (9.6%) offenders reported no substance abuse problems, while a small proportion (4.8%) was assessed as having severe substance abuse problems. Overall, 43.1% of reception offenders were classified as having “intermediate to severe” drug abuse problems prior to their current arrests and incarceration, with 22.3% classified as “intermediate” and 16.0% as “substantial”. This, therefore, means that slightly less than half of the reception population, or about two out of every five, requires some type of assistance or intervention for substance abuse problems.

	LEVEL OF SEVERITY	% RESPONDENTS
	None (0)	9.6
	Low (1-5)	46.8
Substance abuse or dependence	Intermediate (6-10)	22.3
	Substantial (11-15)	16.0
	Severe (16-20)	4.8

Note: there was not stated response not included in the table.

A low score, however, does not necessarily mean that the offender is free of drug-related problems. There are other factors which must also be considered, for example, the length of time

⁵ H. Skinner. (n.d.). *Guide for Using the Drug Abuse Screening Test (DAST)*. p. 2.

the person has been using drugs, their age, level of consumption, and other data collected in the survey in order to interpret the DAST scores. However, according to the American Society of Addiction Medicine Placement Criteria (ASAM)⁶, those offenders with no reported substance abuse problem will require monitoring, those 46.8% with a low score will require brief counseling, those 22.3% with intermediate scores will require some form of intensive outpatient treatment, and those 16.0% whose scores were in the substantial and severe categories will require intensive treatment.

PSYCHOLOGICAL AND SOCIAL IMPACT OF DRUG USE

PERSONAL IMPACT

A considerable proportion (83.0%) of offenders reported using drugs other than those required for medical reasons (see *Figure 8.1 and Table 8.2*). Although a relatively small proportion (9.6%) of respondents indicated a history of prescription drug abuse, it still points to an area of concern, as this is equivalent to about one out of every 10 offenders. The DAST results also show that slightly less than one-third (31.9%) or three in 10 offenders reported abuse of more than one drug at the same time (poly drug use). Further, about four out of every five offenders (85.1%) reported that they could not get through the week without using drugs. This is indicative of chronic drug use. Stopping drug use seems to be a difficult feat in that 78.6% of the offenders indicated that they could not always stop using drugs when they wanted to quit. There were 18.6% of offenders who had “blackouts” or “flashbacks” as a result of their drug use. Also, about two out of every five offenders (40.4%) reported that they felt bad about their drug use.

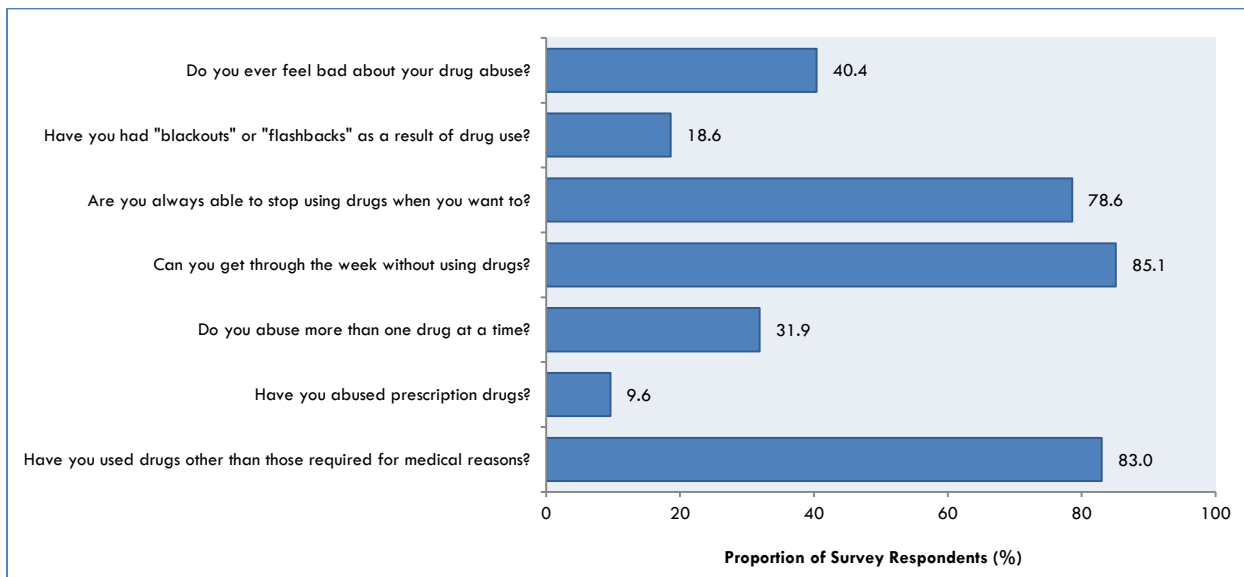


Figure 8.1. Personal impact of drug abuse from DAST items.

⁶ H. Skinner. (n.d.). p. 5.

Table 8.2
Responses to the DAST-20 Items

QUESTION	OVERALL (YES) (n = 188)	
	n	%
Have you used drugs other than those required for medical reasons?	156	83.0
Have you abused prescription drugs?	18	9.6
Do you abuse more than one drug at a time?	60	31.9
Can you get through the week without using drugs (other than those required for medical reasons)?	160	85.1
Are you always able to stop using drugs when you want to?	148	78.7
Have you had "blackouts" or "flashbacks" as a result of drug use?	35	18.6
Do you ever feel bad about your drug abuse?	76	40.4
Does your spouse (or parents) ever complain about your involvement with drugs?	91	48.4
Has drug abuse ever created problems between you and your spouse?	63	33.5
Have you ever lost friends because of your use of drugs?	51	27.1
Have you ever neglected your family or missed work because of your use of drugs?	56	29.8
Have you ever been in trouble at work because of drug abuse?	32	17.0
Have you ever lost a job because of drug abuse?	31	16.5
Have you gotten into fights when under the influence of drugs?	74	39.4
Have you engaged in illegal activities to obtain drugs?	47	25.0
Have you ever been arrested for possession of illegal drugs	65	34.6
Have you ever experienced withdrawal symptoms as a result of heavy drug intake?	40	21.3
Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, etc.)?	16	8.5
Have you ever gone to anyone for help for a drug problem?	66	35.1
Have you ever been involved in a treatment program specifically related to drug use?	63	33.5

(See Appendix II for comparison of 2004-2005, 2007-2008, and 2011-2012 DAST results.)

Table 8.3
Responses to Additional Eight Items on DAST-28

QUESTION	OVERALL (YES) (n = 188)	
	n	%
Do you abuse drugs on a continuous basis?	59	31.4
Do you try to limit your drug use to certain situations?	100	53.2
Do your friends or relatives know or suspect you abuse drugs?	108	57.4
Has any family member ever sought help for problems related to your drug use?	45	23.9
Have you ever been arrested because of unusual behaviour while under the influence of drugs?	49	26.1
Have you ever been arrested for driving while under the influence of drugs	34	18.1
Have you ever been in hospital for medical problems related to your drug use	24	12.8
Have you been treated as an outpatient for problems related to drug abuse?	38	20.2

IMPACT ON FAMILY AND FRIENDS

Slightly less than half (48.4%) of all the offenders indicated that their spouse/parents complained about their involvement with drugs (see *Tables 8.2 and 8.3 and Figure 8.2*). In addition, about one-third (33.5%) of them reported that their drug abuse created problems with their spouse. The results also showed that a relatively large proportion (57.4%) of offenders reported that their friends or relatives knew or suspected that they abused drugs. Further, 23.9% of the respondents indicated that a family member has sought help for problems related to the offender's drug use. There were 27.1% of offenders who indicated that they have lost friends because of their drug use, while 29.8% indicated that they have neglected their family or missed work because of their drug use.

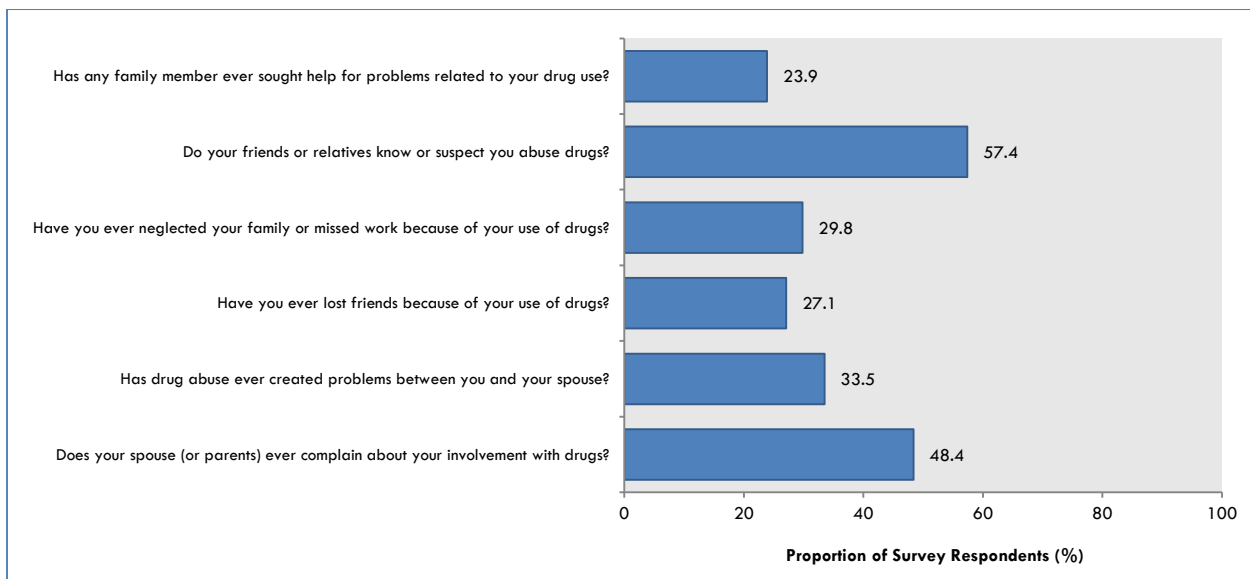


Figure 8.2. Impact of drug abuse on family and friends from DAST items.

SOCIAL IMPACT – CRIMINALITY

The DAST results showed that about two of every five (39.4%) offenders have gotten into fights when under the influence of drugs (see *Tables 8.2 and 8.3 and Figure 8.3*). Offenders were also asked if they had ever been arrested because of unusual behaviour while under the influence of drugs. About one in four offenders (26.1%) indicated that they had, in fact, been arrested. Further, about one in five (18.1%) offenders reported that they have been arrested for driving under the influence of drugs. One-quarter (25.0%) of the offenders said that they were engaged in illegal activities to obtain drugs. In addition, slightly over one-third (34.6%) of the offenders reported that they had been arrested for possession of illegal drugs.

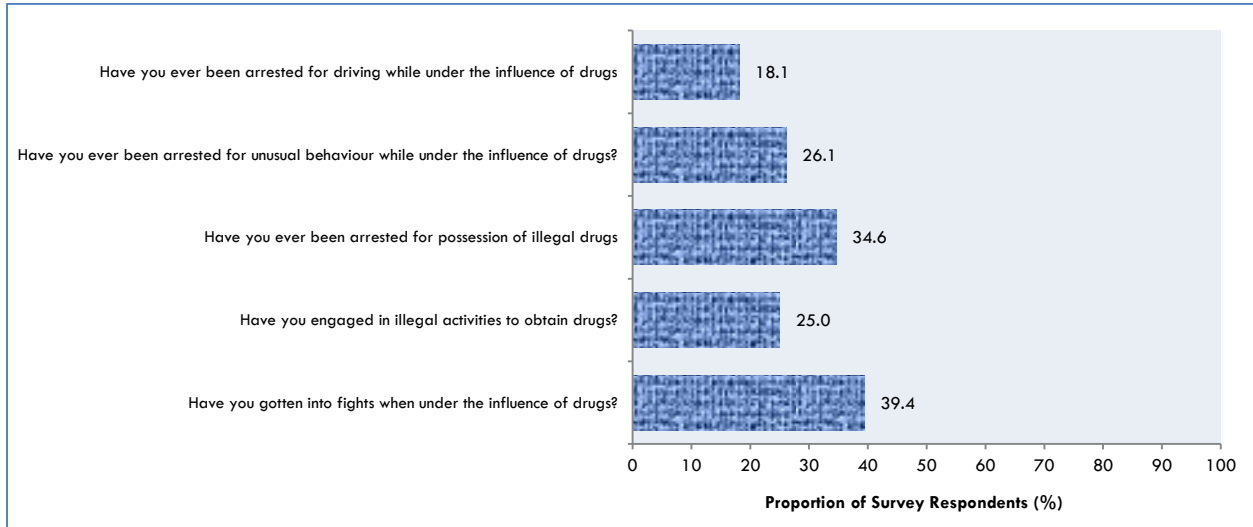


Figure 8.3. Social impact of drug abuse from DAST items.

PHYSIOLOGICAL IMPACT – TREATMENT AND REHABILITATION

About one-fifth or one in five (21.3%) of the offenders indicated that they had experienced withdrawal symptoms as a result of heavy drug intake, while 20.2% reported that they had been treated as an outpatient for problems related to drug abuse (see Tables 8.2 and 8.3 and Figure 8.4). There were 8.5% of offenders who reported having medical problems as a result of their drug use. Likewise, 12.8% of the offenders indicated that they had been in the hospital for medical problems related to their drug use. However, the DAST results showed that 35.1% of the offenders had gone to someone for help for their drug problem, while 33.5% or about one in three had been involved in a treatment programme specifically related to drug use.

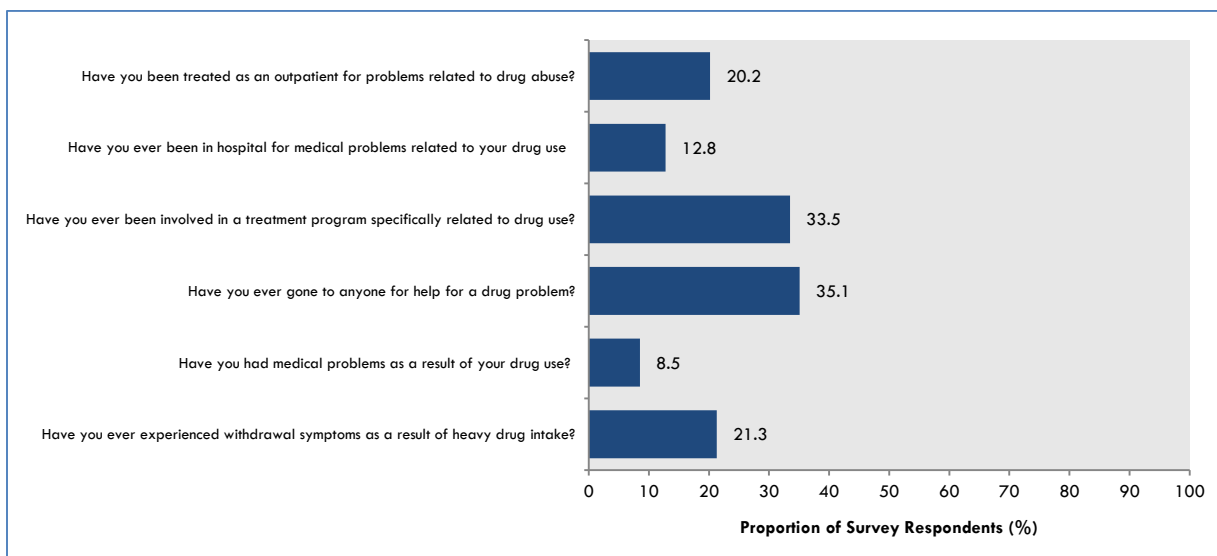


Figure 8.4. Physiological impact of drug abuse from DAST items.

SECTION 9: GANG INVOLVEMENT

Two new items were added addressing gang involvement. Respondents were asked “Do any of your friends or family members belong to a gang?” and “Would any of your friends or family members say YOU belong to a gang?”. Of all the respondents, 19.3% or 36 admitted to having friends or family members belonging to a gang, with MOB, Parkside, and ORC identified as the gang of membership. Similarly, 7.5% of respondents admitted to belonging to a gang themselves.

In the assessment of relationships, particularly gang involvement and drug use, a significant relationship was found between belonging to a gang and age of first use of marijuana ($p < .05$). Among those who indicated gang membership, the majority said they had used marijuana by age 12 (85.7%).

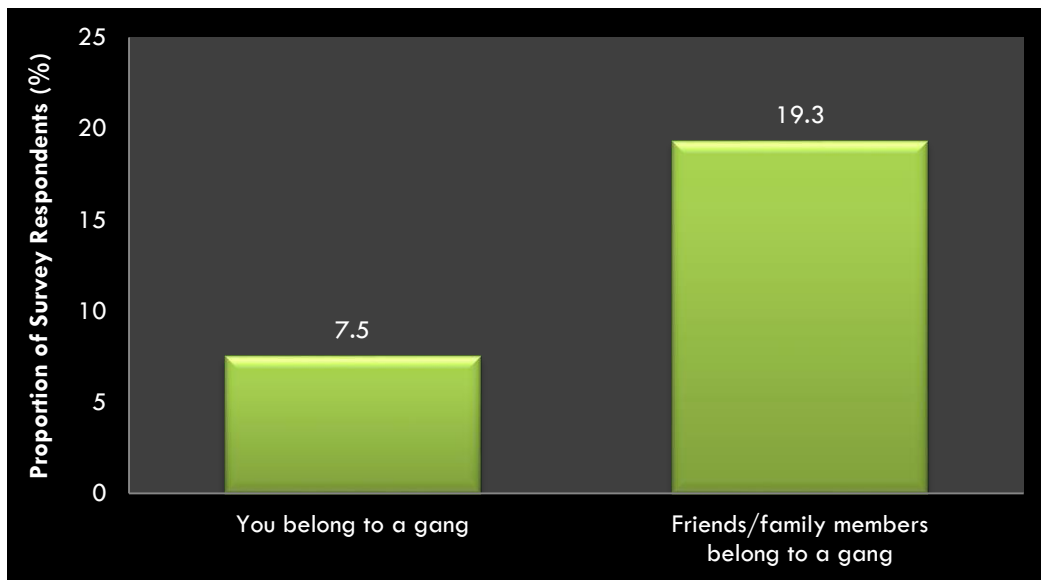


Figure 9.1. Gang involvement of self or family/friends.

DISCUSSION

The DAMP was implemented to provide researchers, counselors, correctional staff, policy makers, and others working with the incarcerated population, information regarding offenders' patterns of drug use, especially the level of severity of problem drug use. A growing body of research has established an association between drug use and criminality. In the current survey, almost all respondents (98.9%) admitted to using at least one drug in their lifetime. More specifically, substances consumed in both lifetime and current use periods appear to be similar in nature in that most offenders reported higher use of alcohol, cigarettes, marijuana, and crack cocaine. Consequently, poly drug use, a strong indicator of severity of drug addiction, continues to be observed among offenders at the time of reception (56.9% in 2015). The increase observed in poly drug use in the current survey over the previous survey is as a result of the inclusion of licit substances (alcohol and tobacco) in combination with the illicit substances in contrast to only illicit combinations previously reported.

Current drug use by offenders was further assessed through urinalysis, which is a more objective measure than self-report. As observed in 2011, drug screening results confirmed that marijuana/THC, cocaine, and opiates (usually heroin) continue to be the main drugs of choice among Bermuda's incarcerated population, as they were indicated in a greater proportion than any other drugs of choice. Discrepancies, however, existed between the self-reported data on current use and the results highlighted from the urinalysis, in that there were more persons who self-reported current use than those whose urine showed positive for a particular substance, mostly cocaine. There may be a few reasons for this discrepancy such as the rate of metabolism of the drugs in the body or persons smoking marijuana laced with drugs unknowingly. On the other hand, only 3.7% of the respondents admitted to being current cocaine users but urinalysis results showed that 14.9% tested positive for cocaine on entry.

The age of first use amongst this sample appears to differ, according to drug of choice, from that of the general population. Offenders indicated the age of first use for alcohol was around 14.8 years and 14.4 years for marijuana, while the age of first use in the general adult population was indicated at 18.2 years⁷ and 17.9 years⁸, respectively, for these two substances. The fact that age of first use of marijuana occurred amongst the offender subset at a younger age than that of the general population is of no surprise.

The social implications of drug use are far-reaching, extending beyond the individual user to impact on the family and the community as a whole. Several bodies of research have demonstrated that having a family history of drug use and antisocial behaviour may increase the likelihood of children and teens using drugs and being involved in delinquent activities. The criminal and drug history of a parent not only has a negative impact on the family as a whole, but may also influence the perceptions, and normative behaviour of offspring. Social factors supporting this theory from the current survey was that 44.1% of offenders reported they were

⁷ Department for National Drug Control. (2014). 2013 *National household survey*. Government of Bermuda. p. 33.

⁸ *Ibid.* p. 33.

raised in single-parent households; 60.6% said they currently had dependents; 21.8% had been physically or sexually abused; and 11.2% of the offenders reported being neglected or abandoned by their parents prior to age five.

When it came to the types of criminal activity in which respondents were involved, a combined 56.3% reported a drug connection to the current offence for which they were being charged and the offence they had been charged with in the past year. Similarly, alcohol was said to be connected to current (24.1%) and previous offences in the past year (18.3%). Further supporting the association of substance use and criminality is the fact that a combined proportion of respondents (42.6%) admitted they had committed the offence under the influence of drugs and/or alcohol, and 15.9% suggested they had committed their crime to support a drug and/or alcohol habit. Added to this is the fact that there were a number of persons who are personally involved in gangs and have friends/family members who also belong to a gang.

Heroin and crack cocaine remained the drugs for which offenders sought treatment services in Bermuda. Despite the high reported proportions of use of marijuana by offenders at reception very few respondents indicated seeking treatment services for their use of this drug. Of the offenders who said that they had been treated by a doctor as a result of using a substance (13.8%) and those who admitted to having received substance abuse counseling or rehabilitation as a result of alcohol and/or drug use (33.5%), only 21.3% said they felt they needed to receive treatment. Additionally, 56.9% of reception inmates said they used more than one substance on one occasion (poly drug use) which was mostly a combination of alcohol and tobacco followed by alcohol and marijuana.

A more critical finding from the current survey is the results of the DAST screening. The DAST instrument provides an index of substance abuse severity or dependence. The current DAST results show no change in the level of intermediate to severe substance abuse dependence (43.1%) among Bermuda's incarcerated population since 2011 (43.7%) and a significant decline since 2007 (49.1%).⁹ Although intermediate to severe levels of substance abuse have declined, there remains a significant impact of drug use on the individual, family, friends, and society as a whole. For the individual, the personal impact of drug use appears to be significant in Bermuda's incarcerated population, given that four out of every five offenders said they could not get through the week without using drugs and 78.6% users of drugs admitted they could not always stop using drugs when they wanted to quit. Turning to family and friends, over half of the offenders who participated in the survey admitted that their spouse or parents had complained about their involvement with drugs (48.4%) and subsequently their use created problems with their spouse (33.5%). Offenders, however, felt that their friends or relatives knew about their drug abuse (57.4% compared to 76.8% in 2011) and 27.1% said they had lost friends because of that fact, but continued to abuse drugs despite the impact to themselves, family, or friends.

New and emerging trends in street drugs have become more evident from the current survey. Offenders provided information on "other" drugs that they have heard were being used on the

⁹ Department for National Drug Control. (n.d.). *Screening for drug and alcohol problems. A case for drug treatment while incarcerated*. Government of Bermuda. p. 18.

streets; some of which are new to Bermuda, such as synthetic marijuana. As the island is still without an early warning system, the feasibility of implementing such a system should be evaluated before the synthetic market escalates. This could be monitored by addiction professionals within institutions where persons are seeking services either voluntarily or through the court system (whether at the Bermuda Assessment and Referral Centre (BARC), Westgate, etc.).

The evidence indicates that drug users are more likely than non-users to commit crimes and that arrestees and inmates were often under the influence of a drug at the time they committed their offense. Assessing the nature and extent of the influence of drugs on crime requires that reliable information about the offense and the offender is available, and that definitions be consistent. In face of problematic evidence, it is impossible to say quantitatively how much drugs influence the occurrence of crime.

The 2014-2015 DAMP survey showed very little changes from the survey implemented in 2011-2012. The results of the current DAMP survey also suggest that drug use amongst Bermuda's incarcerated population remains constant. Further, the level of severity of drug abuse has remained constant over the past four years. However, of all illicit substances, a high proportion of offenders continue to use marijuana, crack cocaine, and heroin. Local and international data demonstrates that treating offenders for problem substance use provides benefits for the individual, families, and the community at large. Facilities such as the Right Living House, a substance abuse treatment facility for incarcerated persons located at the Prison Farm facility, must continue to admit persons meeting the established criteria for treatment. Then and only then, can changes in the level of recidivism within the criminal justice system be observed by individuals participating in drug-induced or drug-related crimes.

APPENDIX I: QUESTIONNAIRE



GOVERNMENT OF BERMUDA
Ministry of National Security

Department for National Drug Control

2014 – 2015 Drug Abuse Monitoring Survey

In collaboration with the Department of Corrections

Revised 03/31/2014

PRISONERS' ASSESSMENT QUESTIONNAIRE

This survey is part of an independent study and your participation is completely voluntary. It forms part of your overall assessment for the Department of Corrections. We are investigating the lifestyle of persons who are arrested and imprisoned in Bermuda with special emphasis on the role of drugs as well as the needs of these persons. All information given is strictly confidential and will not be shared on an individual basis with anyone from the police, the courts or any other part of the criminal justice system. Participation in this survey will not affect the outcome of your case or detention one way or the other. The interview should last for about 30 minutes but additional time would be given, if required.

Are you willing to participate?

1. Yes

2. No

Interview Date:

D	D	M	M	Y	Y	Y	Y
---	---	---	---	---	---	---	---

Prison Number:

--	--	--	--

Facility:

1. Westgate

2. Co-Ed

Interviewer's Initials: _____

SECTION A: DEMOGRAPHICS

This section asks questions about you and your lifestyle, I must remind you that all answers are strictly confidential and you can choose not to answer any question at any time.

Question 1

- 1.1 Sex** 1. Female 2. Male
- 1.2 Race** 1. Black 2. White 3. Portuguese
 4. Mixed 5. Other 6. Not Stated
- 1.3 Do you have dependents?** 1. Yes → If Yes, how many under 18 years _____
 2. No
 3. Not Stated
- 1.4 How old are you currently? (best estimate will do) _____ years**
 1. Don't Know/Cannot Remember 2. Not Stated
- 1.5 In which country were you born?** 1. _____ 2. Not Stated
- 1.6 Are you a citizen of any other country?** 1. Yes → If Yes, which country? _____
 2. No 3. Not Stated
- 1.7 In which Parish do you currently live?**
 1. Devonshire 4. Pembroke 7. Southampton
 2. Hamilton 5. Sandys 8. St. George's
 3. Paget 6. Smith's 9. Warwick
 10. Do not live in Bermuda 11. Not Stated
- 1.8 During the **past 30 days** what type of housing did you **mainly** live in? (**Read all options; tick only ONE**)**
 1. Rented Government House/Apartment 2. Transitional Housing
 3. Own House/Apartment 4. Street or No Fixed Abode
 5. Rented Private House/Apartment/Room 6. Shelter
 7. In Prison or Other Custody 8. A Treatment Centre or Hospital
 9. House Boat/Boat/Sail Boat 10. Not Stated
- 1.9 How many times have you moved within the **last 12 months**?**
 1. None 2. Once 3. Twice 4. Three or More Times 5. Not Stated

1.10 What is your marital status?

1. Single 2. Married 3. Separated 4. Divorced
 5. Widowed 6. Common-Law Arrangement 7. Not Stated

1.11 What is the **highest** level of education that you have **completed**?

1. None, No School 2. Primary 3. Middle
 4. High School 5. College 6. Some College
 7. Other _____ 8. Not Stated

1.12 What are your **main legal** sources of income? (**Read all options; tick only ONE**)

1. Family or Friends 2. Full-Time Work
 3. Self-Employed 4. Welfare or Government Benefit
 5. Part-Time Work or Odd Jobs 6. None (**Skip to Question 1.14**)
 7. Other _____ 8. Not Stated

1.13 What is your annual income? (**Read all options; tick only ONE**)

1. \$0 to <\$25,000 2. \$25,000 to <\$50,000 3. \$50,000 to < \$75,000
 4. \$75,000 to <\$100,000 5. ≥100,000 6. Don't Know/Not Stated

1.14 What is your **regular (legal)** occupation? (State) _____

- Recode:** 1. Professional/Technical 5. Service
 2. Administrative/Managerial 6. Production/Transport
 3. Clerical 7. Other
 4. Sales 0. None

1.15 What is your current work status? (**Read all options; tick only ONE**)

1. Working full-time (35+ hours per week) 6. Student
 2. Working part-time (less than 35 hours) 7. Retired
 3. Not working and looking 8. Not Stated
 4. Not working not looking
 5. Sick or disabled and unable to work

1.16 Which of these descriptions **best** describes your parental upbringing?

1. Raised with Both Parents 5. Raised by Sibling or Other Relative
 2. Raised by Single Parent 6. Other Arrangement _____
 3. Raised with Grandparents 7. Not Stated
 4. Raised by Foster Parents

Question 2

The following questions are about your personal health. As before, everything you say will be kept strictly confidential.

2.1 As far as you know are you **HIV positive**?

1. Yes 2. No 3. Don't Know 4. Not Stated

(if 'Yes' go to next question, else go to Question 2.3)

2.2 Has this been confirmed by testing?

1. Yes 2. No 3. Don't Know 4. Not Stated

2.3 As far as you know do you have **Hepatitis B**?

1. Yes 2. No 3. Don't Know 4. Not Stated

(if 'Yes' go to next question, else go to Question 2.5)

2.4 Has this been confirmed by testing?

1. Yes 2. No 3. Don't Know 4. Not Stated

2.5 Have you ever been: (physically or sexually abused as a child – 18 years or younger or neglected or abandoned by parents before age 5 years)?

Physically Abused 1. Yes 2. No 3. Don't Know 4. Not Stated

Sexually Abused 1. Yes 2. No 3. Don't Know 4. Not Stated

Neglected 1. Yes 2. No 3. Don't Know 4. Not Stated

Abandoned 1. Yes 2. No 3. Don't Know 4. Not Stated

2.6 Have you been prescribed any medication for mental or emotional problems in the **last 12 months**?

1. Yes 2. No 3. Don't Know 4. Not Stated

2.7 Have you ever had a drug overdose that required professional intervention (by a physician, nurse, ambulance)?

1. Yes → When was your last overdose? ____ years ago; ____ months ago

2. No 3. Don't Know 4. Not Stated

SECTION B: DRUG USE & CRIMINAL RECORD

Question 3

3.1 SELF REPORTED DRUG USE

Lifetime Use	Annual (use in the last 12 months)	Current (use in the last 30 days)	Age when you first use this substance	How many days in the last 30 days?
Have you ever taken or used cigarettes or tobacco? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used alcohol (beer wine rum, whisky)? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used marijuana (ganja, herb, weed)? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used crack cocaine (rocks)? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used cocaine powder (snow, coke)? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used heroin (horse, smack, dope)? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used ecstasy ? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used LSD ? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used methamphetamine (ice, speed)? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used valium or other benzodiazepines? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken or used methadone ? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
Have you ever taken any other drug on the street that has not been mentioned? [] 1. Yes [] 2. No [] 3. Not Stated	[] 1. Yes [] 2. No	[] 1. Yes [] 2. No	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

3.2 Have you ever injected drugs?

1. Yes 2. No (if "No", skip to Question 4.1)
 3. Not Stated

3.3 Have you injected drugs in the last 30 days?

1. Yes 2. No
 2. Not Stated

Question 4

4.1. Have you ever been **treated by a doctor** as a result of use of any substance?

1. Yes 2. No 3. Don't Know 4. Not Stated

If Yes, which substance(s) (Tick **ALL** that apply)

1. Alcohol 3. Tobacco 5. Crack-cocaine 7. Powdered cocaine
 2. Marijuana 4. Heroin 6. Ecstasy 8. Other _____
 9. Not Stated

4.2 Have you ever received **counseling or rehabilitation treatment** as a result of use of any substance? 1. Yes 2. No 3. Don't Know 4. Not Stated

If Yes, which substance(s) (Tick **ALL** that apply)

1. Alcohol 3. Tobacco 5. Crack-cocaine 7. Powdered cocaine
 2. Marijuana 4. Heroin 6. Ecstasy 8. Other _____
 9. Not Stated

4.3 Do you think that you need treatment for drug or alcohol use?

1. Yes 2. No 3. Don't Know 4. Not Stated

4.4 Apart from everything you have told me already, are there any other drugs on the street that you have heard are being used?

1. Yes (specify) _____
 2. No 3. Don't Know 4. Not Stated

4.5 In the last 3 days have you taken any drugs which **have not been prescribed** by a doctor? 1. Yes 2. No 3. Don't Know 4. Not Stated

The next few questions are about your arrest and criminal record. I remind you at this time that all of the answers given to these questions are protected by the confidentiality contract I have signed, so please keep your answers related to the questions I ask.

Question 5

5.1 How many times have you been in prison, **excluding** your current imprisonment?

1. None 2. One Time 3. Two to Five Times
 4. More than Five Times 5. Not Stated

Code	Offences	Question 5.2 What offence(s) are you currently charged with? (Check ALL that apply)	Question 5.3		Question 5.4		
			a) Have you been charged with any offence(s) within the past 12 months (do not include this present offence(s))? <input type="checkbox"/> 1. Yes → Go to Q5.3b <input type="checkbox"/> 2. No <input type="checkbox"/> 3. Don't Know <input type="checkbox"/> 4. Not Stated		a) Have you ever served a prison term, been fined, or placed on probation for an offence(s) <input type="checkbox"/> 1. Yes → Go to Q5.4b <input type="checkbox"/> 2. No <input type="checkbox"/> 3. Don't Know <input type="checkbox"/> 4. Not Stated		
			5.3 b) What offence(s) have you been charged with in the past year? (Check ALL that apply)		5.4 b) What was the offence, for which you served a prison term , was fined , or placed on probation? (Check ALL that apply)		
					<i>Prison Term</i>	<i>Fined</i>	<i>Probation</i>
Violent Offences							
1	Murder						
2	Manslaughter						
3	Rape						
4	Carnal knowledge						
5	Other sexual offences						
6	Robbery						
7	Assault						
8	Other violent						
Property Offences							
9	Burglary						
10	Larceny/theft						
11	Motor vehicle theft						
12	Fraud						
13	Stolen property						
14	Other property						
Drug Offences							
15	Possession						
16	Possession with intent to supply						
17	Trafficking/importation						
18	Other (handling, paraphernalia)						
Public Order Offences							
19	Weapons						
20	Obstruction of justice						
21	Driving while intoxicated						
22	Drunkenness/morals						
23	Violation of parole/probation						
24	Immigration violation						
25	Civil						
26	Road traffic accident (RTA)						
27	Other public order						
Other Offences							
28	Other						
Notes:							

5.5 Are you currently under a court order relating to an earlier offence? (that is, not related to the current charge)... meaning, are you.....

- | | |
|---|---|
| <input type="checkbox"/> 1. On Bail | <input type="checkbox"/> 5. Conditional Discharge |
| <input type="checkbox"/> 2. Probation Order | <input type="checkbox"/> 6. No Order |
| <input type="checkbox"/> 3. Ordered to Keep The Peace | <input type="checkbox"/> 7. Other (Specify) _____ |
| <input type="checkbox"/> 4. Community Service Order | <input type="checkbox"/> 8. Not Stated |

5.6 Do you think that **drugs** were, in any way, connected:

5.6.1 To your current offence(s)

1. Yes 2. No 3. Don't Know 4. Not Stated

5.6.2 To any previous offence(s)

1. Yes 2. No 3. Don't Know 4. Not Stated

(if "Yes" to either, go to next question, else go to Question 5.8)

5.7 In what way(s) were **drugs** connected to your offending? (Tick **ALL** that apply)

1. Offence committed while under the influence of drugs
2. Offence committed to support my drug habit (to get money to buy drugs)
3. Through being involved with the drug trade (supply/trafficking/importation)
4. Because of personal use of drugs (possession)
5. Other _____
6. Not Stated

5.8 Do you think that **alcohol** was connected in any way:

5.8.1 To your current offence(s)

1. Yes 2. No 3. Don't Know 4. Not Stated

5.8.2 To any previous offence(s)

1. Yes 2. No 3. Don't Know 4. Not Stated

(if "Yes" to either, go to Question 5.9, else go to Section C, Question 6.1)

5.9 In what way(s) was **alcohol** connected to your offending? (Tick **ALL** that apply)

1. Offence committed while under the influence of alcohol
2. Offence committed to support my alcohol habit (money to buy alcohol)
3. Because of drunk driving
4. Other _____
5. Not Stated

SECTION C: DRUG PRICES

Question 6

6.1 What are the prices for the following various quantities of each of the following drugs?

Drug	Price (\$) Per...							
	Ounce	Gram	Pound	Kilo	Rock	Deck	Don't Know	Not Stated
Cannabis								
Cannabis Resin								
Cocaine								
Crack								
Heroin								
Ecstasy (per tablet)								

SECTION D: DRUG MARKET

Question 7

7.1 During the **past 12 months** did you **buy** any illegal drugs, either for yourself or for others?

1. Yes
 2. No
 3. Don't Know
 4. Not Stated

(if "No" skip to Question 7.3)

7.2 During the **past 30 days** before your arrest did you **buy** any illegal drugs, either for yourself or for others?

1. Yes
 2. No
 3. Don't Know
 4. Not Stated

7.3 During the **past 12 months** did you **sell** any illegal drugs to anyone to make money?

1. Yes
 2. No
 3. Don't Know
 4. Not Stated

(if "No" skip to Section E, Question 8.1)

7.4 During the **past 30 days** before your arrest did you **sell** any illegal drugs to anyone to make money?

1. Yes
 2. No
 3. Don't Know
 4. Not Stated

SECTION E: GANG INVOLVEMENT

Question 8

8.1 Do any of your friends or family members belong to a gang?

1. Yes → If Yes, who _____
2. No 3. Don't Know 4. Not Stated

8.2 Would any of your friends or family members say **YOU** belong to a gang?

1. Yes 2. No 3. Don't Know 4. Not Stated

DAST (Drug Abuse Screening Test)

The following questions refer to situations **ever** experienced by a person over a lifetime.

Question		Response (Please circle)	
1	Have you used drugs other than those required for medical reasons?	Yes	No
2	Have you abused prescription drugs?	Yes	No
3	Do you abuse more than one drug at a time?	Yes	No
4	Can you get through the week without using drugs (other than those required for medical reasons)?	Yes	No
5	Are you always able to stop using drugs when you want to?	Yes	No
6	Do you abuse drugs on a continuous basis?	Yes	No
7	Do you try to limit your drug use to certain situations?	Yes	No
8	Have you had "blackouts" or "flashbacks" as a result of drug use?	Yes	No
9	Do you ever feel bad about your drug abuse?	Yes	No
10	Does your spouse (or parents) ever complain about your involvement with drugs?	Yes	No
11	Do your friends or relatives know or suspect you abuse drugs?	Yes	No
12	Has drug abuse ever created problems between you and your spouse?	Yes	No
13	Has any family member ever sought help for problems related to your drug use?	Yes	No
14	Have you ever lost friends because of your use of drugs?	Yes	No
15	Have you ever neglected your family or missed work because of your use of drugs?	Yes	No
16	Have you ever been in trouble at work because of drug abuse?	Yes	No
17	Have you ever lost a job because of drug abuse?	Yes	No
18	Have you gotten into fights when under the influence of drugs?	Yes	No
19	Have you ever been arrested because of unusual behaviour while under the influence of drugs?	Yes	No
20	Have you ever been arrested for driving while under the influence of drugs?	Yes	No
21	Have you engaged in illegal activities to obtain drugs?	Yes	No
22	Have you ever been arrested for possession of illegal drugs?	Yes	No
23	Have you ever experienced withdrawal symptoms as a result of heavy drug intake?	Yes	No
24	Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, or bleeding)?	Yes	No
25	Have you ever gone to anyone for help for a drug problem?	Yes	No
26	Have you ever been in hospital for medical problems related to your drug use?	Yes	No
27	Have you ever been involved in a treatment program specifically related to drug use?	Yes	No
28	Have you been treated as an outpatient for problems related to drug abuse?	Yes	No

You have now reached the end of the interview, I want to take this opportunity to thank you, and wish you the best for the future. The results will be used to show what percentage of arrestees is using substances in order to best service this population.

DRUG SCREENING

Rapid Drug Panel		(1)	(2)
		Positive	Negative
1. AMP	Amphetamines		
2. BAR	Barbituates		
3. BUP	Buprenorphine		
4. BZO	Benzodiazepines		
5. COC	Cocaine		
6. MTD	Methadone		
7. MET	Methamphetamines		
8. OPI 300	Opiates		
9. OXY	Oxycodone		
10. PCP	Phencyclidine		
11. PPX	Propoxyphene		
12. THC	Marijuana		
REFUSED			

APPENDIX II: TREND ANALYSIS OF THE DAST 2004, 2007, AND 2011

RESPONSES TO DRUG ABUSE SCREENING TEST (DAST):

2004-2005, 2007-2008, and 2011-2012

ITEMS ON THE DRUG ABUSE SCREENING TEST	04/05	07/08	11/12
Have you used drugs other than those required for medical reasons?	91.8	77.0	80.9
Have you abused prescription drugs?	6.2	12.4	6.8
Do you abuse more than one drug at a time?	37.7	38.9	25.9
Can you get through the week without using drugs (other than those required for medical reasons)?	79.4	80.9	84.6
Are you always able to stop using drugs when you want to?	68.1	74.7	77.8
Do you abuse drugs on a continuous basis?	31.1	42.7	36.9
Do you try to limit your drug use to certain situations?	61.5	59.0	64.2
Have you had "blackouts" or "flashbacks" as a result of drug use?	13.2	19.1	15.7
Do you ever feel bad about your drug abuse?	50.2	47.2	41.3
Does your spouse (or parents) ever complain about your involvement with drugs?	59.1	52.8	53.6
Do your friends or relatives know or suspect you abuse drugs?	73.2	73.0	76.8
Has drug abuse ever created problems between you and your spouse?	41.2	37.6	37.2
Has any family member ever sought help for problems related to your drug use?	29.6	26.4	27.3
Have you ever lost friends because of your use of drugs?	36.6	37.1	28.0
Have you ever neglected your family or missed work because of your use of drugs?	41.6	36.0	27.3
Have you ever been in trouble at work because of drug abuse?	22.6	23.6	20.5
Have you ever lost a job because of drug abuse?	26.5	24.7	18.4
Have you gotten into fights when under the influence of drugs?	31.9	42.7	30.4
Have you ever been arrested because of unusual behaviour while under the influence of drugs?	22.2	25.3	20.8
Have you ever been arrested for driving while under the influence of drugs?	11.7	17.4	10.2
Have you engaged in illegal activities to obtain drugs?	34.6	39.3	32.1
Have you ever been arrested for possession of illegal drugs?	38.5	43.3	55.6
Have you ever experienced withdrawal symptoms as a result of heavy drug intake?	29.6	38.8	24.2
Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, or bleeding)?	12.8	13.5	11.6
Have you ever gone to anyone for help for a drug problem?	43.6	43.8	34.5
Have you ever been in hospital for medical problems related to your drug use?	12.1	17.4	11.3
Have you ever been involved in a treatment program specifically related to drug use?	44.4	43.3	38.6
Have you been treated as an outpatient for problems related to drug abuse?	17.2	23.0	22.5

APPENDIX III: DEFINITIONS OF STREET DRUGS IN USE

Acid (LSD): (tabs, trips, blotters, microdots) Acid is a powerful hallucinogenic drug that alters your perception of the outside world. There are no known physical side effects associated with acid use, nor is there any evidence of brain damage. There are some psychological risks, however, particularly for those with a history of mental problems.

Aerosol Spray: Aerosol spray is a type of dispensing system which creates an aerosol mist of liquid particles. This is used with a can or bottle that contains a liquid under pressure. Deliberate inhalation of the contents to achieve intoxication from the propellant, also known as inhalant abuse or "huffing".

Codeine: is an opiate used for its analgesic, antitussive, and antidiarrheal properties. Codeine is the second-most predominant alkaloid in opium. Codeine is used to treat mild to moderate pain and to relieve cough.

K2: is a mixture of leafy looking herbs and spices that are sprayed with a psychoactive chemical, and then smoked. The mixture comes in several flavours; watermelon, cotton candy, and pineapple express. It is otherwise known as "fake" or synthetic pot, and is produced in China and Korea. It is sold online, and can be found in smoke shops and stores where incense or potpourri is sold. Merchants who sell these pricey bags of fragrant herbs cannot keep them on the shelves. Signs and symptoms include rapid heart rates, drastically raised blood pressure, hallucinations, delusions, can affect some users' neurological systems, can cause changes in behaviour and perception, seizures and death.

Lean: The mixed drink combination known as "lean", comprises of: promethazine with codeine (sizzurp, the active ingredient), original sprite soda (mixing ingredient, although different flavors of sprite are now used, such as sprite remix), jolly rancher candy (flavor additive). It is normally the color purple, due the added ingredient sizzurp, which is originally a dark purple syrup. There are other colors of sizzurp which can be added to create lean, but the purple is the true sizzurp. The codeine is mainly responsible for the euphoric feeling after drinking lean. Promethazine causes motor skill impairment, lethargy, extreme drowsiness, as well as a disassociative feeling from all other parts of the body, specifically the stomach and digestive system. It is also known as 'purple drank'.

Marley: a synthetic drug designed to copy the effects of cannabis.

MDA: Methylenedioxyamphetamine, also known as tenamfetamine (INN), or colloquially as "Sally", "Sass", "Sass-a-frass" or "Mellow Drug of America", is a psychoactive drug of the substituted methylenedioxyphenethylamine and substituted amphetamine classes of drugs that is consumed primarily for its entactogenic, psychedelic, and psychostimulant effects. Pharmacologically, MDA acts as a serotonin-norepinephrine-dopamine releasing agent and reuptake inhibitor. Possession of MDA is illegal in most countries. Some limited exceptions exist for

scientific and medical research. The recreational use of MDA predates its more widely used analog MDMA (ecstasy). While MDA is generally similar to MDMA, users report that MDA has more stimulant and psychedelic qualities and less intense entactogenic effects than MDMA. MDA is also considered less predictable than MDMA, with effects varying greatly from person to person. MDA is best known for its enhancement of the experiences of dancing and sex. Symptoms of acute toxicity may include agitation, sweating, increased blood pressure and heart rate, dramatic increase in body temperature, convulsions, and death. Death is usually caused by cardiac effects and subsequent hemorrhaging in the brain (stroke).

Mushroom: Psilocybin and psilocyn are the hallucinogenic principles contained in certain mushrooms. Psilocybin is structurally similar to serotonin, and produces its effects by disrupting normal functioning of the serotonin system. Once ingested, mushrooms generally cause feelings of nausea before the desired mental effects appear. The high from using magic mushrooms is mild and may cause altered feelings and distorted perceptions of touch, sight, sound and taste. Other effects can include nervousness and paranoia. Effects can be different during each use due to varying potency, the amount ingested, and the user's expectations, mood, surroundings, and frame of mind. On some trips, users experience sensations that are enjoyable. Others can include terrifying thoughts, and anxiety, fears of insanity, death, or losing control. Users are often unable to discern what is fantasy and what is reality. Some magic mushroom users experience "flashbacks", or hallucinogen persisting perception disorder (HPPD), which are reoccurrences of hallucinations long after ingesting the drug. The causes of these effects, which in some users occur after a single experience with the drug, are not known.

Parachutes (MDMA & Crystal Meth): Methylenedioxymethamphetamine (MDMA or ecstasy) and methamphetamine (METH) are illicit drugs that are increasingly used in combination. The acute and long-term effects of MDMA/METH combinations are largely uncharacterised. The dangerous poly-drug combination of methamphetamine and ecstasy can have severe health consequences, especially as both drugs have toxic effects on the brain. They both can interfere with the body's ability to regulate temperature, leading to sharp increases in body temperature (hyperthermia), which can result in liver, kidney and cardiovascular system failure and death. The potential for a life-threatening or fatal overdose is also increased when meth-laced ecstasy is combined with alcohol. Recent laboratory research suggests that ecstasy and meth combinations may produce greater adverse neurochemical and behavioral effects than either drug alone. MDMA and METH in combination may have greater adverse acute effects (head-weaving, body temperature) and long-term effects (decreased social interaction, increased emergence anxiety, dopamine depletion) than equivalent doses of either drug alone.

Salvia Divinorum: is a perennial herb in the mint family that resembles sage. The negative long-term effects may be similar to those produced by other hallucinogens such as LSD including depression and schizophrenia. Some users also indicate that long-term abuse can cause hallucinogen persisting perception disorder, or "flashback". High doses of the drug can cause unconsciousness and short-term memory loss.

Special K: or Ketamine is a dissociative anesthetic that has some hallucinogenic effects. It distorts perceptions of sight and sound and makes the user feel disconnected and not in control. The onset of effects is rapid and often occurs within a few minutes of taking the drug, though taking it orally results in a slightly slower onset of effects. Flashbacks have been reported several weeks after ketamine is used. It may also cause agitation, nausea, depression, cognitive difficulties, unconsciousness, dangerously slowed breathing, and amnesia. A couple of minutes after taking the drug, the user may experience an increase in the heart rate and blood pressure that gradually decreases. Ketamine can make the user unresponsive to stimuli. When in this state, users experience involuntarily rapid eye movement, dilated pupils, salivation, tear secretion, and stiffening of muscles.

Xanax: is a prescription drug considered a depressant that affects a person's central nervous system. It acts as a sort of tranquilizer, and so is commonly prescribed to calm a person's fears, ease anxiety, and prevent or fight off panic and anxiety attacks, depression and other mental symptoms.

REFERENCES

- Bennett, T., Holloway, K. & Farrington, D. (2008). The statistical association between drug misuse and crime: A meta-analysis. *Aggression and Violent Behavior, 13*(2), 107-118.
- Bryan, M. L., Del Bono, E. & Pudney, S. (2013). *Drug-related crime* (No. 2013-08). ISER Working Paper Series.
- Department for National Drug Control. (n.d.). *Screening for drug and alcohol problems. A case for drug treatment while incarcerated*. Government of Bermuda.
- Department for National Drug Control. (2012). *Report of the 2011-2012 drug abuse monitoring survey*. Government of Bermuda.
- Department for National Drug Control. (2014). *2013 National household survey*. Government of Bermuda.
- Department for National Drug Control. (2012). *Report of the 2011-2012 drug abuse monitoring survey*. Government of Bermuda.
- Department of Statistics. (2011). *The Bermuda standard classification of occupations*. Government of Bermuda.
- Publishers Group. (2011). *Streetdrugs 2011*. Publishers Group LLC. MN: Long Lake.
- Publishers Group. (2012). *Streetdrugs 2012*. Publishers Group LLC. MN: Long Lake.
- Publishers Group. (2012). *Streetdrugs. A drug ID guide 2012*. Publishers Group LLC. MN: Long Lake.
- Publishers Group. (2015). *Streetdrugs 2015*. Publishers Group LLC. MN: Long Lake.
- Skinner, H. A. (n.d.). *Guide for using the Drug Abuse Screening Test (DAST)*. Unpublished paper.
- Skinner, H. A. (1982). The Drug Abuse Screening Test. *Addictive Behaviors, 7*, 363-371.



GOVERNMENT OF BERMUDA

Ministry of National Security

Department for National Drug Control