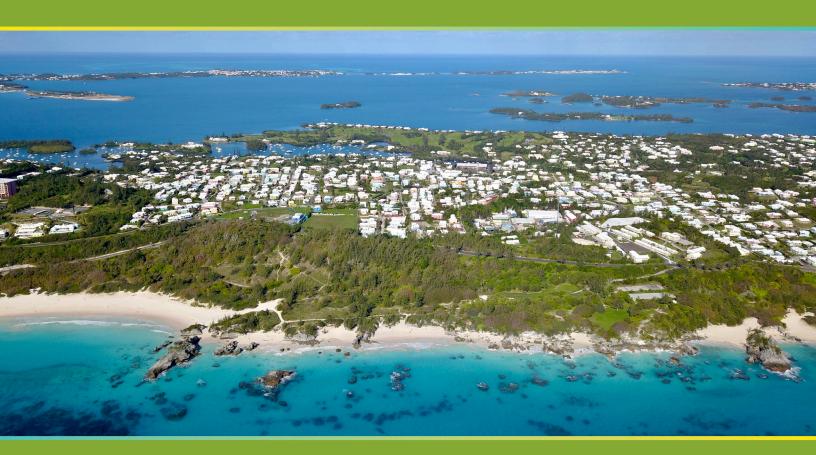


GOVERNMENT OF BERMUDA

Department for National Drug Control

2021 NATIONAL HOUSEHOLD SURVEY



REPORT OF THE NATIONAL HOUSEHOLD SURVEY ON DRUG USE AND HEALTH AMONG THE ADULT POPULATION IN BERMUDA



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FOREWORD

"The greatness of a community is most accurately measured by the compassionate actions of its members." - Coretta Scott King

I am pleased to present the National Household Survey on Drug Use and Health (NHSDUH) 2021, one of the Department for National Drug Control's (DNDC) oldest publications. This report provides up-to-date information on tobacco, alcohol, and drug use in Bermuda. NHSDUH began in 1995 and is conducted every four years. Information from NHSDUH is used to support prevention and treatment programs, monitor substance use trends, estimate the need for treatment, and inform public health policy.

The NHSDUH becomes more valuable every year. The findings make for fascinating reading and provide new data on drug trends in addition to crucial public health and policy issues. The DNDC's vision is to "lead efforts to reduce alcohol and drug misuse" in our community. We seek to do this by providing the best available evidence to support the development of informed and targeted drug policies and actions. This report gives stakeholders a timely overview of the local drug situation, which is necessary for developing effective responses to today's problems we face as an Island.

This year's report arrives at a critical time for reflection on drug policy developments, especially given that Bermuda, like the global community, is making every effort to better understand the impact of COVID-19 on people's lives with a specific focus on the use of alcohol and other drugs, mental health, and relationships. This survey will be key to understanding the effect, if any, the pandemic has had on the lives of residents.

To continue to be effective, balanced solutions to drug demand and supply must be rooted in evidence and shared responsibility. This is more important than ever, as illicit drug challenges become increasingly complex, and the COVID-19 crisis and economic downturn threaten to worsen their impacts on our community. It is in this spirit that I present to you the National Household Survey of Drug Use and Health 2021, and I urge all stakeholders to make the best use of this resource.

Oane

JOANNE DEAN Director Department for National Drug Control April, 2021

FOR NATIONAL DRUG CONTROL

DEPARTMENT

MISSION STATEMENT

Lead efforts to reduce alcohol and drug misuse through research, education, advocacy, service delivery, and interagency/department coordination.

NOTES, SYMBOLS, AND ABBREVIATIONS

Readers should note that all prevalence proportions presented in the accompanying tables are rounded to one decimal place. Details and percentages in tables do not necessarily add to totals on account of rounding. The data contained in this report are themselves subject to future revision. Other symbols and abbreviations used are as follows:

-	A magnitude of zero or a unit less than 0.1
••	Not applicable
ATOD	Alcohol, Tobacco, and Other Drugs
DNDC	Department for National Drug Control
DOS	Department of Statistics
NHSDUH	National Household Survey on Drugs Use and Health

EXECUTIVE SUMMARY

The NHSDUH is administered every four years in Bermuda. It endeavours to provide accurate data on the level and patterns of licit and illicit drug use (prevalence) and track trends in the use of alcohol, tobacco, marijuana, and various types of other drugs among the adult population at three reference points (lifetime, past year, and past month). This survey, therefore, allows for the assessment and monitoring of the nature of alcohol, tobacco, and other drug (ATOD) use. Further, it helps to identify groups with a high risk for drug misuse and how the prevalence of drug use affects their overall health.

In addition to demographic questions, this survey contains questions on age of first use, recency of use, lifetime use, past year use, and past month use of marijuana, cocaine (and crack), hallucinogens, heroin (and opium), ecstasy, hash, inhalants, alcohol, tobacco, nonmedical or prescription drugs, and vaping among respondents aged 16 and older. In addition, questions were asked on the perception of the harm associated with ATOD use and ease of access to drugs, participation in the drug market, and the effects of ATOD use on a person's health. In the current round, this survey was expanded to include questions on the prevalence of vaping and the ATOD's impact on the population's health.

Overall, 52.4% females and 47.6% males were represented in the sample; 51.3% were Black or African, 33.2% White, and 15.5% were of other races. Most (60.5%) of the respondents were employed or selfemployed, finished at least a secondary-level education (30.3%), and worked in the financial services industry (12.3%).

Key findings include:

Risky behaviours, in terms of illicit drug use, continue to be a concern

- Drinking alcoholic beverages sometimes, doing so often, and becoming drunk remain the most harmful of the risky behaviours even more so than smoking marijuana often.
- Most behaviours involving use of illicit drugs were perceived to be "high risk", with "using crack cocaine often" (87.4%) and "using heroin often" (87.1%) reported to be the most risky behaviours.
- There were 94.0% (77.1% in 2017) of the respondents who reported that "smoking marijuana often" and 93.2% (76.9% in 2017) who said that "smoking marijuana sometimes", respectively, were of some level of risk.

Access to illicit drugs are generally very difficult

- Marijuana was reported to be the easiest drug to obtain of the illegal drugs.
- The majority of respondents did not know how to access marijuana (46.5 %), cocaine (68.2%), crack cocaine (70.4%), and ecstasy (70.4%), neither could they have access to them.

Alcohol use has increased over the past five years

- Consuming alcoholic beverages with the following alcohol content levels (low: 15.1%, medium: 21.4%, and high: 13.0%) remained the highest on the weekends.
- Binge drinking was most prevalent between '1 to 5 times' (13.2%) in the past 30 days.
- Nearly three in 10 or 29.6% of respondents reported having friends and family who get drunk.
- A significant number (36.2%) of participants indicated that they had been a passenger of a car or bike for which the driver had consumed alcohol.

Tobacco use is evidently high

- Respondents (3.9%) indicated consuming more than five packs of cigarettes in the past 30 days.
- Nicotine and marijuana (0.2%) were mainly vaped between '3 to 5 times' in the past month, with nicotine being the most (0.8%) vaped substance.

Prevalence-of-use has increased over the past five years

- Approximately nine out of 10 survey respondents or 92.3% have indicated use of at least one drug in their lifetime (including alcohol and cigarettes).
- More than one-fourth (29.6%) of survey respondents have used an illegal drug in their lifetime, 7.9% in the past year, and 4.8% in the past 30 days.
- Lifetime prevalence-of-use of a legal substance, such as alcohol and cigarettes, stood at 92.2%, annual use at 76.6%, and current use was 56.5%.
- Current use of alcohol was at 54.0% compared to lifetime use at 91.1%.
- Lifetime use of marijuana was high at 96.1% and 7.8% have used it in the past year, while 4.6% reported using marijuana in the past 30 days.

Gender differences in use of substances

- The 91.1% of lifetime users of alcohol consisted of 46.7% females and 44.4% males; the 68.8% annual users comprised of 34.1% females and 35.2% males, and of the 54.0% current users, 25.7% were females and 30.8% were males.
- Males reported higher prevalence for cigarettes, marijuana, cocaine, crack, and other named illegal drugs at all three reference periods.

Age of onset has increased

- The average age of onset for all survey participants ranged from as young as 17.4 years for cigarettes to as old as 31.5 years for non-prescribed tranquilliers, with marijuana use beginning at 18.4 years.
- Average age of onset for males was slightly earlier at 17.3 years (for cigarettes) than that of the overall population or their female counterparts, which stood at 17.4 years (also for cigarettes).
- Females indicated onset at an earlier age for hash (19.2 years vs. 19.7 years), ecstasy (19.2 years vs. 23.4 years), and hallucinogens (19.6 years vs. 21.7 years).

Other findings

- Respondents who indicated "mixed" race demonstrated the highest proportion of use for cigarettes, alcohol, and marijuana when compared to other races.
- Irrespective of the reference period, persons who were living together or cohabitating, represented the largest proportion of respondents who drank alcohol.
- About one in five respondents or 18.1% said that they were curious to try an illicit drug.
- Roughly one in nine or 11.2% of respondents said they had a problem with their mental health in their lifetime or considered themselves to be in recovery or recovered from their mental health problems.

Although the NHSDUH provides useful information, it has certain limitations: 1) the data are selfreports of drug use, and their value depends on respondents' willingness to provide information as well as their ability to recall past experiences; 2) a cross-sectional survey design was used rather than longitudinal; that is, individuals were interviewed only once and were not followed for subsequent interviews and: 3) because the survey population is defined as the civilian residential, non-institutionalized Bermudian population, a small proportion is excluded: those living in institutional group quarters (for example, prisons, nursing homes, treatment centers), and the homeless population.

I. INTRODUCTION

This report summarizes key findings from the 2021 National Household Survey on Drug Use and Health for national indicators of substance use among the civilian, non-institutionalized population aged 16 or older in Bermuda. The last adult population survey was conducted in 2017. In this report, overall statements use terms such as "increased," "decreased," or "declined" to describe a trend from 2017 to 2021 that was significant.

This report, which includes six sections, presents the survey results under the following topics: 1) demographics; 2) risk of harm; 3) access to drugs; 4) prevalence-of-use; 5) drug market; and 6) health.

BACKGROUND

The 2021 NHSDUH is a primary source of statistical information on the use of illegal drugs, alcohol, and tobacco by residents in Bermuda aged 16 or older. Drug surveys can do well to track changing levels of drug prevalence. Research indicates that household surveys serve two general purposes: 1) any survey, even if carried out only once, can provide information on prevalence of drug use and 2) when surveys are repeated using the same methods, they can track changing levels of drug use. On the other hand, comparatively small groups of people, such as the homeless or those living in communal establishments, are excluded from household surveys. Additionally, the more chaotic drug users may be under-represented, either because they do not live in households or because they are never available for an interview. Therefore, the results presented should be interpreted with caution as the prevalence of alcohol, tobacco, and other drug use may be understated.

This survey targets a wide segment of the population over 16 years of age. The topics covered include consumption of alcohol, tobacco, and other drugs, but also health and risk behaviour, in general. New items added to the 2021 survey include questions related to vaping and health issues. With the 2021 survey, these indicators can now be directly measured and monitored in the future.

PURPOSE

The 2021 NHSDUH represents the latest information on drug consumption in Bermuda, among its adult population, and serves many purposes. Foremost is the provision of accurate and reliable national-level data to monitor the drug situation in Bermuda. Additional objectives of the NHS are to:

- Provide data on the level, patterns, and trends in the use of alcohol, tobacco, and other substances, and;
- Identify groups with a high risk for drug misuse.

SURVEY LIMITATIONS

The NHS is the only survey that regularly produces estimates of drug use among residents of the Bermuda civilian, non-institutionalized population aged 16 or older and within the household. The survey is an appropriate vehicle for estimating prevalence rates for different drugs because it reports drug use that does not ordinarily come to the attention of administrative, medical, treatment, or correctional authorities.

Although the NHSDUH provides useful information, it has certain limitations. First, the data are selfreports of drug use, and their value depends on respondents' willingness to provide information as well as their ability to recall past experiences. However, over the years, studies have established the validity of self-reported data (Harrison, 1997). Second, the survey is cross-sectional rather than longitudinal; that is, individuals were interviewed only once and were not followed for subsequent interviews. Therefore, the survey provides an overview of the prevalence of drug use at specific points in time, rather than a view of how the drug use behaviour of individuals changes over time. Third, because the survey population is defined as the Bermudian civilian, non-institutionalized population, a small proportion is excluded: those living in institutional group quarters (for example, prisons, nursing homes, and treatment centers), hospitalized persons, homeless people, residents living abroad, and residents travelling abroad during the data collection period. If the drug use of these groups differs from that of the household population, the NHSDUH may provide slightly inaccurate estimates of drug use in the total population. This may be particularly true for prevalence estimates of drugs such as heroin, cocaine, and crack cocaine.

The information obtained from this survey provides partial insight into current substance use and misuse in Bermuda. However, to better understand current substance users, studies of sub-groups within this population will provide more accurate information, along with supporting data from other studies and reports. While the methodology applied to the NHSDUH has good construct validity, nevertheless, the results should be interpreted with caution as underreporting of prevalence-of-use, particularly with illegal substances, is possible and the findings, therefore, can be viewed as conservative.

II. METHODOLOGY

SURVEY DESIGN

The 2021 NHSDUH was a web-based telephone survey, administered during the period of February 1st to February 13th, 2021, targeting a representative sample of 1,170 adults age 16 years and older residing in Bermuda. A sample size of 1,170 households was selected to produce sufficiently reliable estimates with a low margin of error and that reflect true values of the population (that is, \pm 3% error at the 95% confidence interval). Sampling error was further reduced by utilising an efficient sample design as outlined below.

As in previous rounds of the survey, a three-stage probability sample design was used:

- **Stage one:** a systematic sample of 5,980 households or residential addresses was selected from the 243 census districts (CDs) in Bermuda, proportional to the total number of households in each CD. This accounted for 25 households in each CD or all the households in CDs with less than 25 households. That is, before the sampling frame was drawn, the total number of households in Bermuda (32,095), as of December 2020, was adjusted to exclude 9,783 or 30.5% of the households [those without a telephone contact]. It was drawn by the Department of Statistics (DOS) from its Population Frame Repository, which is a combined list of information obtained from Land Valuation, Parliamentary Registry, and the Transport Control Department. This sampling method ensured that households from each Parish were represented in the sample.
- **Stage two:** a random sample of 1,200 households was then selected by the DNDC from the sampling frame of 5,980, with replacement; that is, if the household could not be reached or there was a refusal, the next randomly selected household was chosen to participate in the survey. This sampling method allowed for each household to have an equally likely chance of being surveyed.
- Stage three: a random choice of a household member from the selected household, 16 years or older, was selected to participate in the survey, using the Kish grid selection method (Appendix 4). This stage was done by the survey interviewers. Again, this method allowed each household member, who met the selection criteria, to have an equally likely chance of being chosen to participate in the survey.

POPULATION COVERAGE AND PARTICIPANTS

The survey targeted 1170 residents in Bermuda (persons who were residing, or intended to live, at the sampled house address for at least six months) who were16 years and older. Persons (nationals or foreigners) who did not meet the six-month criterion were not included in the survey. The target population also excluded the non-civilian, institutionalized population, such as persons living in hotels, boarding houses, hospices, and senior residential care facilities as their lifestyle, environment, and living arrangements differ from the non-institutionalized or household population, whose responses could confound and skew the results obtained. In addition, persons with a known disability or illness that could affect their responses were also excluded, for example, persons with a hearing disability, mental illness, or similar issues.

DATA COLLECTION

Due to the COVID-19 pandemic, the way in which the 2021 NHSDUH was administered, meant that the data collection process had to be outsourced. As such, the DNDC contracted the professional services of Profiles of Bermuda. Profiles of Bermuda was responsible for the management of the data collection process, along with the processing of the data and ensuring its quality was in alignment with previous National Household Survey undertakings and international best practices. Throughout, the DNDC continued to collaboratively work alongside staff of Profiles of Bermuda to ensure the 2021 NHSDUH was completed accurately and within the allotted timeframe given.

Prior to commencement of the data collection period, letters were mailed to 1,500 households in the sample that were randomly selected to participate in the survey (an additional 300 over the intended target in the event of non-participation). The letter explained the purpose of the survey, when it will be administered, the random selection of the household to participate, that participation of a randomly selected household member, though voluntary, was encouraged; the expectation of the participant in terms of the time requirement; and the confidentiality of the responses.

Questionnaire Design

The survey questionnaire, with the actual wording of the questions and response options, is included in Appendix 5 of this report. It comprised of standard questions on alcohol, tobacco, and other drug use that the Inter-American System of Uniform Data on Drug Use (SIDUC) utilizes to assess prevalence in the general adult population and is commonly used in countries worldwide.

While the main questions in the questionnaire are repeated in each round of the survey, review, modifications, and updates of some questions during the planning stage of the current survey by DNDC Research staff can occasionally affect comparison to previous surveys. In the current round of this survey, questions were introduced on the respondents' household size; nationality; perceived risk level of using e-cigarettes; whether being a passenger of a car or bike by someone who had been drinking alcohol and on a separate occasion whilst using marijuana; the amount of money spent on marijuana in a typical week; the type(s) of marijuana used; which form(s) of marijuana have been used; frequency of use when combining marijuana use with tobacco; whether marijuana use has led to health, social, legal or financial problems; whether in the past 12 months there was marijuana use within two hours of driving a motor vehicle, as well as if there was marijuana combined with alcohol use within two hours of driving a motor vehicle; the prevalence-of-use of vaping; and a section on health. For this round of the survey, the alcohol and marijuana policy section was removed.

The instrument consisted of 145 questions with coverage of prevalence of 13 substances, along with vaping, at three reference periods: lifetime, past year, and past month.

The online method was utilized to design a web-based questionnaire on Survey Monkey, which was created by the Research staff at DNDC; thereby offering the benefits of convenient data collection while at the same time populating the dataset. In addition, non-sampling errors were minimized by including automated skipping of questions that were not to be responded to, by an individual, if they were irrelevant to their experiences. This method proved to enhance the timeliness of data collection and the accuracy of the data.

Survey Administration

The data collection methodology used in the last survey, a web-based questionnaire administered via

telephone interviews, continued for the current survey. The sample was maintained at a statistically representative level of the population.

The data collection process was carried out by a team of 18 temporary interviewers. Two, two-hour, inperson training sessions were conducted prior to the launch of the survey, and there was one session conducted online due to inclement weather forcing a change in date. The training was conducted by staff of Profiles of Bermuda, assisted by the DNDC's Research Unit staff. This training prepared the interviewers for data collection in terms of their role and responsibility; understanding important information such as the purpose of the survey, concepts and definitions; interviewing techniques; selection of household participant; web-based platform; and how to consistently administer the survey questionnaire across individuals. They were also instructed that for participants under 18 years of age, verbal consent had to be obtained from a parent or guardian. Each interviewer adhered to a signed confidentiality agreement. The NHSDUH was launched on February 1st, 2021 and concluded on February 13th, 2021.

Due to the COVID-19 pandemic, it was not possible to conduct the survey in the offices of the DNDC, hence a data collection center had to be sought. The survey was administered off-site, at ConnecTech, adhering strictly to Government protocols. Those protocols included having one's temperature checked and leaving contact information daily, hand sanitising, and having no more than 10 interviewers in the interviewing room at any given time, to name a few.

The survey was administered using computers and telephones at the facility, as well as equipment from the DNDC and additional cell phones from Profiles of Bermuda, whose staff also provided supervision for the survey, assisted by the personnel from the DNDC.

Each interviewer was provided with a survey kit that included a list of household telephone numbers to be contacted, copies of the Kish grid, and the hyperlink to the survey for data capture.

During the data collection phase of the survey, interviewers faced minimal challenges. These challenges were mainly due to telephone numbers being out of service, duplicate telephone numbers representing different house assessment numbers, and simply establishing contact with a household. There were instances where the selected household member was unavailable, even after multiple attempts, or did not want to participate in the survey.

DATA PROCESSING

The data were collected from 1,191 adults from all parts of the Island and were statistically adjusted (weighted) to reflect all residents 16 years and older projected to be living in Bermuda in 2021, using 2016 Census figures. A few more responses than the targeted 1170 were collected to adjust for any anomalies that may have arisen in the data. Responses were captured by Survey Monkey and exported to an SPSS file for data processing.

Profiles of Bermuda conducted the initial review and cleaning of the data, before handing the file over to the DNDC's staff for further review of the accuracy and completeness. Data cleaning included, but was not limited to, replacing words with numbers for the ages of participants and age of first use as these were open-ended questions; categorizing industry of employment which was written in as an "Other" response when it in fact matched a response option, and checking for inconsistencies and anomalies, such as questions that should be answered were answered and vice versa. In addition, the responses to the open-ended questions, such as age, number of days engaged in binge drinking, number of days drunk, and number of family members who got drunk, were recoded into categories for more convenient analysis and reporting. Next, the appropriate tables and descriptive statistics were generated for inclusion in this final report. In some instances, responses from more than one question were combined to produce the required rates, for example, prevalence of licit and illicit drug use at each of the three reference points.

Imputations were not made for missing data since it would be difficult to assign responses founded on self-report. However, the only missing data were those where persons chose not to respond to a question, and these were categorized and reflected in the Results section of this report as "Not Stated". Nonetheless, no critical data such as respondent characteristic or prevalence-of-use was unreported (unless there was intentional nondisclosure of drug use).

Weighting

In an effort to ensure that the responses of the reporting group (sample), in fact, represented the target population, and given that the individual was the main unit of analysis, a weighting factor was used to adjust the sample to be representative of the actual population from which it was drawn. The purpose of this weighting is not to compensate for individuals who did not participate but rather to ensure that the proportion of the population in the sample matches the population, at least on key demographic characteristics. In this instance, the population was weighted on age and sex. In the sample, males were under-represented and females were over-represented, while the same was evident for the various age groups. Consequently, national-level estimates reported in this publication are representative of Bermuda's adult population. Appendix 1 presents the distribution of the sample on key demographic characteristics for the raw data, whereas Table III–1 shows the characteristics of the weighted proportion of adults.

DATA QUALITY

New population data from the 2020 Census was used for sampling weights; therefore, due to this methodological change the prevalence rates in the current survey should not be compared to data collected in 2013 and prior, to access trends over time unless used for illustrative purposes.

Response Rate

At the completion of data collection, 1,191 questionnaires were obtained. Partially completed questionnaires and those with incomplete demographic data were omitted. This left 1,170 useable responses. Since sampling with replacement was utilized, the response rate was 100%.

Of the 432 households contacted and a listing of the members obtained, but for which no interviews were conducted, the reasons were as follows: for 276 the selected member could not be reached; for 97 the selected person refused to participate; for 42 the selected person could not participate due to illness, being overseas, English language challenges, or a recent death in the household; and for 17 respondents, the person answering refused for the household.

Validation

To validate the interviews conducted, a sample of 10% of respondents' households were recalled. This was done proportionately to the number of questionnaires completed by interviewers and drawn from across the days the survey was conducted. Of the 120 homes recalled, 102 or 85% were reached,

with 100% verification that an interview was conducted at the reached household.

To ensure that a high level of accuracy was attained, checks were also made for logical inconsistencies. For example, a person who reported current use of alcohol should be able to respond to the question on the frequency and content of alcohol consumed. Another example is the report of age of first use, which was checked against the participant's response to the question on recency of first use.

DATA ANALYSIS

The tables and figures in the subsequent section present the percentage of the sample that reported a certain behaviour, experience, or view. They can be interpreted as the percentage of adults on the Island who engaged in a certain behaviour, had a certain experience, or held such a view. However, some experiences, behaviours, or views were sufficiently rare that only a small proportion reported them in the survey; say less than 1.6% (equivalent to fewer than 20¹ responses). In such cases, the proportions should be used as illustrative information rather than firm facts; because they do not meet the minimum degree of accuracy nor do they provide meaningful information and as such are viewed as unstable from a statistical perspective. When prevalence rates are based on only a few responses, it is almost impossible to distinguish random fluctuation from true changes in the underlying behaviour. Further, comparisons over time or between groups of respondents that are based on unstable rates can lead to spurious conclusions about differences in prevalence, which may or may not be valid. Therefore, these proportions should be interpreted with caution. As such, discussion on unstable proportions was limited in this report to avoid placing undue emphasis on them.

For the purpose of this report, the data analysis of the survey results was limited to descriptive analysis of the responses to all questions by the participants. Analyses were done for each section of the questionnaire. Frequencies of percentages were generated for all variables as well as relevant cross tabulations of certain key variables of perceived association. The results are presented for the overall population and, in some instances, by specific population characteristic; illustrated by using tables and charts accompanied by summary statements. All figures represent percentages of weighted survey respondents (that is, the number of survey respondents adjusted to represent the population). The data was analyzed using SPSS v. 23, Charts were created in Microsoft Excel and tables were prepared in Microsoft Word.

It should be noted that no inferences were made of causation and some of the bivariate associations depicted could be influenced by other variables not taken into consideration. A more comprehensive analysis would require adjustment of these factors or covariates.

Further, the analysis in this report is not all encompassing of the complete NHS dataset. Data users are encouraged to contact the DNDC, Research Unit at (441) 294–9702 or 294–9705 to request customized data tables for specific user needs.

¹ P. A. Buescher. (2008). Problems with rated based on small numbers. *Statistical Primer*, (12), 4. <u>http://www.schs.state.nc.us/schs/pdf/primer12_2.pdf</u> (accessed January 14, 2014)

III. RESULTS

DEMOGRAPHICS

The characteristics of the respondents were assessed by soliciting information on a number of key variables such as sex, age, education, among others (Table III–1). The results revealed that there were more female (52.4%) survey respondents compared to males (47.6%) and, at the same time, most persons (58.9%) identified themselves as the head of the household. The largest proportion of respondents (9.7%) was between 60 to 64 years followed by 50 to 54 years (9.2%). About three out of four respondents (or 75.8%) were younger than 65 years. The average age of all survey respondents was 50.4 years, while the median age was 51.0 years, indicating that approximately half of the survey respondents were either younger or older than this age. The majority (46.2%) of respondents were in a two-person household and classified themselves as Bermudian (85.7%).

In terms of race, slightly over half of the respondents (51.3%) identified themselves as "Black or African" while roughly a third or 33.2% said that they were "White". All other races, including Portuguese, Asian, and Mixed, accounted for the remaining 15.5% of the respondents.

Although a question on parish of residence was not asked in the survey, the sampling frame provided this information. Of all respondents, 26.8% reside in Pembroke parish, followed by 13.3% who live in Warwick, while 11.1% had a Devonshire address.

A look at the marital status of respondents revealed that most respondents were married (39.5%) followed by 36.9% who were never married.

In terms of the highest level of education completed, the majority of the participants had at least a high school leaving or high school certificate. Only 7.1% of the participants did not complete any level of formal education. Most of the respondents indicated that they finished high school (30.3%) or were holders of a Bachelor's degree (22.7%). At the same time, 36.2% of the respondents indicated that they worked 40 hours or more per week, either being employed or self-employed, while just under a quarter or 24.3% worked between one to 39 hours per week and 23.8% said they were retired. Of those who were employed or self-employed, most of them (12.3%) indicated that they worked in the financial intermediation industry, which includes banking and insurance. A combined 13.4% of the respondents were not working at the time of the survey (7.7% were not looking for work and 5.7% were looking for work).

Table III-1 DEMOGRAPHIC CHARACTERISTICS

Characteristic	% of Survey Respondents (Weighted)
Head of Household	
Yes	58.9
Nc	38.2
Not Stated	3.0
Household Size	
2	
3	
4	
5	2.3
Sex	
Male	47.6
Female	
Age (Years)	
16 – 19	4.7
20 - 24	5.8
25 - 29	5.5
30 - 34	6.3
35 – 40	8.2
40 - 44	8.5
45 - 49	8.8
50 - 54	
55 – 59	
60 - 64	
65 - 69	
70 – 74	
75 – 79	
80 - 84	
85+	3.0
Race	
Black or African	51.3
White	
Mixed	
Portuguese	
	0.2

Table III-1 cont'd DEMOGRAPHIC CHARACTERISTICS

Characteristic		% of Survey Respondents (Weighted)
Race cont'd		
	Asian	2.0
	Other	1.2
	Not Stated	0.6
Nationality		
	Bermudian	85.7
	Non-Bermudian: Permanent Resident Certificate Holder	2.3
	Non-Bermudian: Spouse of Bermudian	4.6
	Other Non-Bermudian	7.4
Parish		
	St. Georges	7.9
	Hamilton	5.9
	Smiths	7.4
	Devonshire	11.1
	Pembroke	26.8
	Paget	10.4
	Warwick	13.3
	Southampton	7.7
	Sandy's	9.1
Marital Status		
Maritai Status	Never Married	36.9
	Married	30.9
	Divorced	13.0
	Widowed	6.0
	Living Together/Cohabitation/ Common Law	2.5
	Separated	1.3
	Not Stated	0.8
		0.0
Highest Level of Education Completed		
	None	7.1
	School Leaving Certificate/High School Diploma	30.3
	Technical/Vocational Certificate (Bermuda College)	15.8
	Associate's Degree	9.5
	Bachelor's Degree	22.7

Table III-1 cont'd DEMOGRAPHIC CHARACTERISTICS

Characteristic	% of Survey Respondents (Weighted)
Highest Level of Education Completed cont'd	
Master's Degree	10.1
Doctorate Degree	0.9
Professional Designation (With or Without Prior Academic Qualification)	3.3
Not Stated	0.1
Employment Status	
Employed/Self-Employed, working 1–39 hours per week	24.3
Employed/Self-Employed, working 40 or more hours per week	36.2
Not employed, looking for work	5.7
Not employed, not looking for work (e.g., housewife, student, etc.)	7.7
Retired	23.8
Disabled, not able to work	0.8
Not Stated	1.4
Industry ² of Employment	
Agriculture, Hunting, & Fishing	1.1
Manufacturing	0.3
Electricity, Gas, Water Supply	1.3
Construction Wholesale & Retail Trade; Repair of Motor Vehicles, Motor Cycles, & Personal and Household Goods	6.3
Hotels and Restaurants	6.0 3.5
Transport, Storage, and Communication	3.5
Financial Intermediation	12.3
Real Estate, Renting, & Business Activities	3.3
Public Administration (Government) and Defence, Compulsory Social Security	5.2
Education	3.3
Health and Social Work	5.4
Other Community, Social, & Personal Service Activities	4.7
Private Households with Employed Persons	0.8
Not Stated	3.4

² Using the International Standard Industrial Classification of All Economic Activities (ISIC). Relates to only those (66%) who are working/employed.

RISK OF HARM

Drinking alcohol was perceived to be most harmful - even more than smoking marijuana

Perception of harm associated with ATOD used was evaluated by asking respondents their opinion on a number of risky behaviours such as sometimes or often times using a particular substance (Table III-2 and Chart III-1). The level of risk was categorised as no risk, low risk, moderate risk, high risk, or did not know the risk. It was made clear by the interviewers, to the respondents, that this was a perception question and the response they provided was in terms of how the respondent viewed each behaviour, in his/her estimation. For this round of the survey, e-cigarettes were added to the list of ATOD's where the level of risk was assessed.

Nonetheless, the three behaviours related to alcohol were ranked highest in terms of risk with "drinking alcohol beverages sometimes" being perceived by 96.9% (91.6% in 2017) of the respondents to be the highest ranked behaviour with "some level of risk" (low, moderate, or high), followed by "drinking alcoholic beverages often" (96.8%) (87.7% in 2017), and "becoming drunk" (96.6%) (83.7% in 2017). Just under one-third of the respondents (31.1%) said that "drinking alcoholic beverages sometimes" was of "low risk", while 69.3% and 77.0% % (54.5% and 64.3% in 2017) indicated that "drinking alcoholic beverages often" and "becoming drunk", respectively, were perceived as "high risk".

Just over nine in 10 of the respondents indicated that "smoking cigarette sometimes" (94.7%) (80.5% in 2017) and "smoking cigarettes often" (94.7%) (80.1% in 2017) were perceived to be harmful.

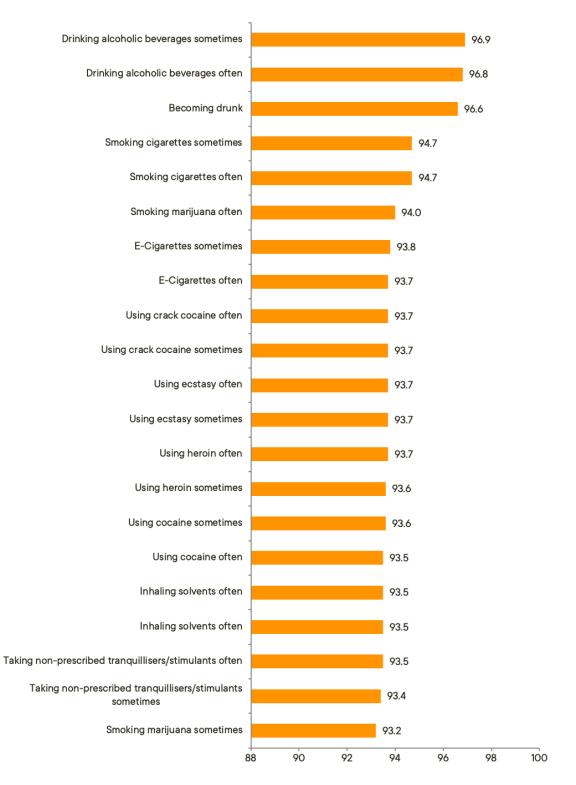
There were 94.0% (77.1% in 2017) of the respondents who reported that "smoking marijuana often" and 93.2% (76.9% in 2017) who said that "smoking marijuana sometimes", respectively, were of some level of risk.

Most of the behaviours involving the use of illicit drugs, whether sometimes or frequently, were perceived to be of "high risk" by a majority of survey respondents. For instance, 87.4% of the respondents indicated that "using crack cocaine often" was of "high risk" and 87.1% (74.6% in 2017) reported the same level of risk for "using heroin often".

Table III-2 PERCEPTION OF RISK OF HARM ASSOCIATED WITH ATOD USE (Percentage of Weighted Survey Respondents)

Risk	No Risk	Some Level of Risk	Low Risk	Moderate Risk	High Risk	Don't Know	Not Stated
Smoking cigarettes sometimes	5.4	94.7	8.9	26.6	56.8	2.3	0.1
Smoking cigarettes often	5.3	94.7	2.0	7.5	83.6	1.5	0.1
Drinking alcoholic beverages sometimes	3.2	96.9	31.1	40.9	23.8	1.0	0.1
Drinking alcoholic beverages often	3.3	96.8	3.3	22.6	69.3	1.5	0.1
Becoming drunk	3.4	96.6	3.6	13.6	77.0	2.3	0.1
Taking non-prescribed tranquillisers/stimulants sometimes	6.7	93.4	4.0	13.4	69.0	6.9	0.1
Taking non-prescribed tranquillisers/stimulants often	6.5	93.5	1.7	3.9	81.0	6.8	0.1
Inhaling solvents sometimes	6.4	93.5	4.1	9.4	73.4	6.5	0.1
Inhaling solvents often	6.4	93.5	2.5	3.4	81.5	6.0	0.1
Smoking marijuana sometimes	6.7	93.2	30.0	30.2	28.9	4.0	0.1
Smoking marijuana often	6.1	94.0	10.6	27.6	50.7	5.0	0.1
Using cocaine sometimes	6.4	93.6	2.3	7.2	80.3	3.7	0.1
Using cocaine often	6.4	93.5	1.2	1.8	86.9	3.5	0.1
Using heroin sometimes	6.4	93.6	1.3	2.5	85.8	3.9	0.1
Using heroin often	6.4	93.7	1.3	1.2	87.1	4.0	0.1
Using ecstasy sometimes	6.4	93.7	3.2	7.8	75.6	7.0	0.1
Using ecstasy often	6.3	93.7	2.0	1.9	83.1	6.6	0.1
Using crack cocaine sometimes	6.4	93.7	1.1	3.1	85.5	3.9	0.1
Using crack cocaine often	6.4	93.7	1.1	1.2	87.4	3.9	0.1
Using e-cigarettes sometimes	6.3	93.8	12.3	26.6	40.9	13.9	0.1
Using e-cigarettes often	6.2	93.7	4.4	16.6	58.8	13.8	0.1





ACCESS TO DRUGS

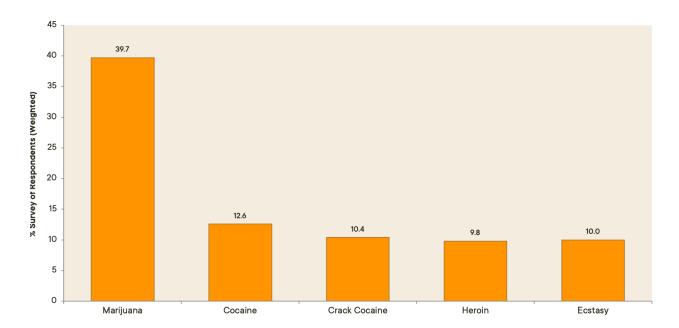
Marijuana was the easiest drug to obtain

Research has shown that perceived availability of drugs is related to drug use and that more drug users than non-users believe that drugs are readily available. While views on drug availability are consistently strongly associated with substance use and abuse, a causal connection between them cannot be established with survey data. Survey respondents' perceptions of the ease of access to illegal drugs revealed that they are of the view that marijuana is the easiest drug to obtain as reported by 39.7% of them (Table III–3 and Chart III–2). In contrast, only 9.8% viewed heroin as the easiest drug to obtain. Most of the respondents either did not know how to access the various drugs or said they could not have access to them. For instance, 34.7% of the respondents indicated that they "don't know" how easy it would be to access ecstasy and just under 20% said they "cannot access" cocaine, crack cocaine, ecstasy, or heroin.

Table III-3
PERCEPTION OF EASE OF ACCESS TO DRUGS
(Percentage of Weighted Survey Respondents)

Drugs	Cannot Access	Easy	Difficult	Don't Know	Not Stated
Marijuana	13.6	39.7	21.1	25.4	0.2
Cocaine	19.1	12.6	35.1	33.1	0.1
Crack Cocaine	19.5	10.4	35.6	34.3	0.1
Heroin	19.7	9.8	36.3	34.1	0.1
Ecstasy	19.5	10.0	35.7	34.7	0.1

Chart III-2 PERCEPTION OF 'EASY' ACCESS BY TYPE OF DRUG



PREVALENCE OF USE

This section of the report presents the ATOD use prevalence rates. The term prevalence refers to the proportion of the population who has used a drug over a particular time period. In this NHSDUH of the adult population, drug prevalence was measured by a set of questions (see Appendix 3) similar to those commonly used to assess drug consumption among general adult populations. Prevalence-of-use of 14 different substances (Table III-4), both legal and illegal, was evaluated at three standard reference points to ascertain whether a person reported ever having used a drug – even once (lifetime use), whether he/she used it in the last year or 12 months (annual use), and whether there was use in the past 30 days (current use). Lifetime prevalence is a good measure of experimentation, while past 30-days prevalence-of-use is a good measure of current use. Respondents were asked to recall their use of drugs at these three recall periods.

Consumption includes the frequency (how often a person uses) and quantity (how much a person uses) of substance use. Frequency of consumption refers to the number of days or, sometimes, occasions that an individual has consumed alcoholic beverages, smoked cigarettes, or used drugs during a specified interval (for example, week, month, and year). Quantity of consumption refers to the amount of alcohol, tobacco, or drugs ingested on a given occasion.

The overall results are shown for all questions in the prevalence section of the survey questionnaire and, in other cases, the results are presented by sex disaggregation. Other main findings of comparisons for the key population characteristics associated with differing prevalence rates, such as employment status and education, were also analyzed for the most widely used drugs of alcohol, tobacco, and marijuana.

Lifetime, Annual, and Current Prevalence

Lifetime prevalence is the proportion of survey respondents who reported ever having used the named drug at the time they were interviewed, 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.

Since last-year prevalence is the proportion of survey respondents who reported a named drug in the year prior to the survey, it is often referred to as recent use; and is also classified as lifetime prevalence. Likewise, current use is also classified as lifetime and recent prevalence. A proportion of those reporting current use may be occasional (first-time) users who happen to have used the named drug in the period leading up to the survey and, therefore, current use is not synonymous with regular use.

The appeal of a substance is determined by a number of factors, such as personal disposition, peer and affinity group norms, ethnic and sub-cultural norms, and popular culture images, among others. Monitoring lifetime prevalence-of-use provides a sense of the attractiveness of various substances over time, while substance use in the past 12 months can be indicative of intervention and prevention efforts occurring during that time as well as cultural themes and social and political events that might have influenced the behaviour. Current prevalence rates provide estimates of the level of drug use and abuse at the present time.

Just over half of the respondents were current users of at least one drug

Just over nine out of 10 survey respondents or 92.3% have indicated use of at least one drug in their lifetime (including alcohol and cigarettes) while 7.7% of survey respondents reported that they

have never used any of the drugs surveyed. In current terms, more than half (56.5%) of the survey respondents or about five out of nine indicated use of at least one drug in the past month.

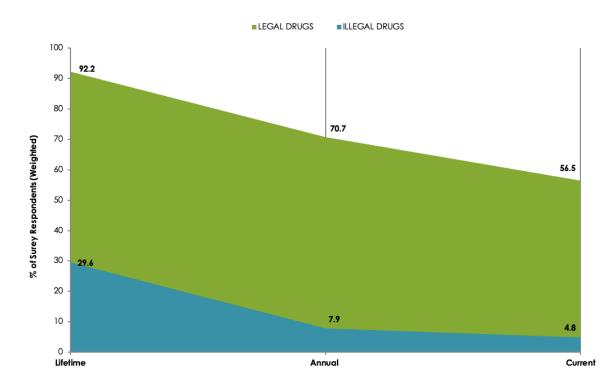
Comparing the prevalence of legal and illegal drug use, prevalence of legal drug use was higher than that of illegal drug use, as expected, (Table III–4 and Chart III–3). Lifetime prevalence-of-use of a legal substance, such as alcohol and cigarettes, stood at 92.2%, annual use at 70.7%, and current use was 56.5%. In terms of illicit drug use, slightly more than one-fourth (29.6%) of the survey respondents have used an illegal drug in their lifetime, 7.9% in the past year, and 4.8% were current users of illegal drugs.

	% of (Weighted) Survey Respondents								
Substances	L	.ifetime Use	Ð		Annual Use				•
	Male	Female	Total	Male	Female	Total	Male	Female	Total
LEGAL DRUGS	45.1	47.1	92.2	36.6	34.1	70.7	30.8	25.7	56.5
Alcohol	44.4	46.7	91.1	35.2	33.6	68.8	29.0	25.0	54.0
Cigarettes	28.3	24.0	52.3	8.3	3.6	11.9	6.7	3.0	9.7
Inhalants	0.4	0.3	0.7	-	-	-	-	-	-
ILLEGAL DRUGS	17.8	11.8	29.6	5.1	2.8	7.9	3.3	1.5	4.8
Marijuana	57.6	38.8	96.3	5.1	2.7	7.8	3.2	1.5	4.6
Hash	18.1	9.2	27.3	0.7	0.5	1.2	0.3	0.2	0.5
Cocaine	8.2	4.8	13.0	0.1	-	0.1	0.1	-	0.1
Hallucinogens	4.7	3.3	8.0	-	0.1	0.1	-	-	-
Ecstasy	3.7	3.8	7.6	-	-	-	-	-	-
Crack	3.4	1.5	4.9	-	-	-	-	-	-
Non-Prescribed Stimulants	1.2	2.5	3.8	-	-	-	-	-	-
Opium	0.3	0.9	1.2	-	-	-	-	-	-
Heroin	1.2	0.9	2.1	-	-	-	-	-	-
Non-Prescribed Tranquillisers	0.3	0.6	1.0	-	0.1	0.1	-	0.1	0.1
Other illegal drug	0.6	1.1	1.7						

Table III-4 LIFETIME, ANNUAL, AND CURRENT PREVALENCE OF ATOD USE

- means zero or unit less than 0.1; .. means not applicable as question was not asked for those reference periods.

Chart III-3 COMPARISON OF LEGAL AND ILLEGAL DRUG USE



Alcohol continues to be the substance of choice among Bermuda's adults

Table III-4 shows the lifetime, annual, and current prevalence of substance use among Bermuda's adult population. Alcohol was the drug of choice among survey respondents, used by more persons than either tobacco or illicit drugs. In terms of current use, 54.0% of the survey participants reported that they used alcohol at least once within the 30 days prior to completing the survey (Chart III-5). Within the last year, 68.8% of the respondents indicated that they used alcohol and 91.1% have used alcohol at least once in their lifetime (Chart III-4).

Experimentation with tobacco, as revealed by lifetime use, was reported by 52.3% (41.2% in 2017) of the survey participants (Chart III-4); while 11.9% (10.6% in 2017) have used it in the past year and 9.7% (8.8% in 2017) were current tobacco users (Chart III-5).

The use of inhalants was reported by only 0.7% of the survey respondents (0.2% in 2017) for the lifetime use and by an even smaller proportion (0.4%) for both annual and current use reference periods.

Marijuana remained the most commonly used illegal drug

In terms of illicit drug use, there was a significant number of persons indicating lifetime use of marijuana at 96.3% (20.2% in 2017) (Chart III–4) and 7.8% (6.3% in 2017) have used it in the past year. A small proportion of the participants (4.6%) (4.8% in 2017) reported using marijuana in the 30 days prior to the survey (Chart III–5). The most frequently reported illegal drugs used in the past 30 days were: 4.6% marijuana, 0.5% hash, 0.1% cocaine, and 0.1% non-prescribed tranquilliers.

Prevalence rates for the other drugs remain considerably lower than those for alcohol, cigarettes, and marijuana at all three reference points; ranging from 1.0% for non-prescribed tranquillisers to 27.3% for hash in the lifetime reference period; and 0.1% for cocaine and non-prescribed tranquillisers to 0.5% for hash in the current-use period. There was no reported annual or current use of a number of substances including ecstasy, crack and heroin, or other named illegal drugs (Chart III–5).

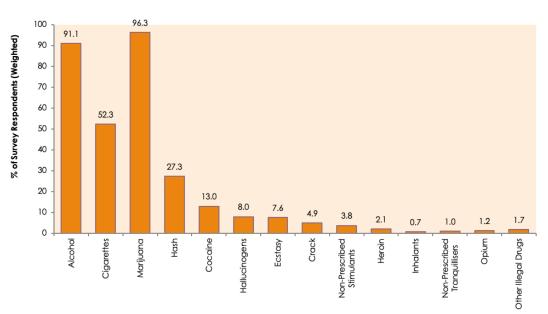
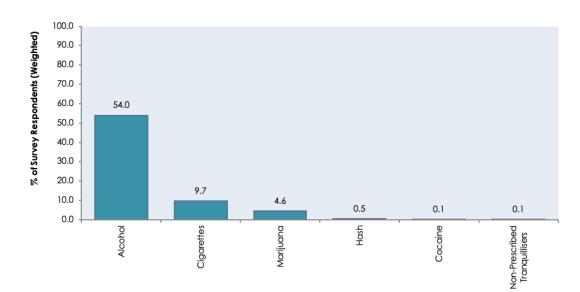


Chart III-4 LIFETIME PREVELANCE-OF-USE BY TYPE OF DRUG

Chart III-5 CURRENT PREVELANCE-OF-USE BY TYPE OF DRUG



Trends in Consumption by Sex

More females drank alcohol; more males smoked cigarettes and marijuana

Table III–4 shows substance use by the sex of the respondent at the three reference points. A larger proportion of females reported lifetime use of alcohol while males reported higher use of alcohol at the annual- and current-use periods. For instance, the 91.1% of lifetime users of alcohol consisted of 46.7% females and 44.4% males; the 68.8% annual users comprised of 33.6% females and 35.2% males, and of the 54.0% current users, 25.0% were females and 29.0% were males. The males, in contrast, reported higher prevalence for cigarettes, marijuana, cocaine, crack, and other named illegal drugs at all three reference periods. For instance, there were 57.6% male and 38.8% female lifetime users of marijuana and 3.2% male and 1.5% female current marijuana users (Charts III–6 and III–7).

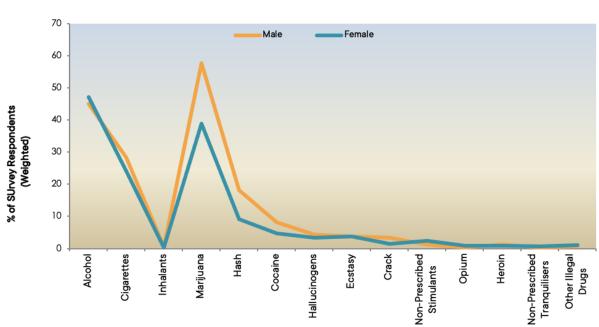
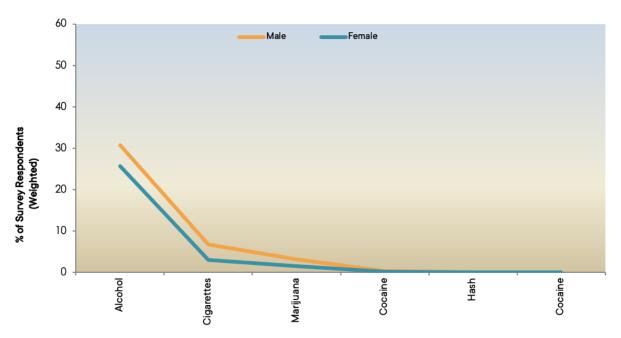


Chart III-6 LIFETIME USE OF ATODs BY SEX OF RESPONDENT

Chart III-7 CURRENT USE OF ATODs BY SEX OF RESPONDENT



Age of First Use

Delayed initiation of substance use – 17 years (16 years in 2017)

The results in Table III-5 show the average age of initiation of substance use for persons who experimented with drugs. This type of data is useful in coordinating the timing of prevention efforts to maximize programme effectiveness. A programme, for instance, may have limited impact if it is delivered after the majority of potential drug users have already initiated the behaviour. Very early intervention, on the other hand, might prove less effective if it is not delivered close to the critical initiation period.

Survey participants were asked to report the age at which they first used a number of specified substances – both legal and illegal. Some of these substances, such as alcohol, tobacco, and marijuana, are commonly considered as major gateway drugs, which usually precede the use of hard drugs, such as cocaine and opiates. The average age of onset for all survey participants ranged from as young as 17.4 years for cigarettes to as old as 31.5 years for non-prescribed tranquilliers (Chart III-8), with marijuana use beginning at 18.4 years.

Substances —	Average Age of First Use (Years)		
	Males	Females	Total
Legal Drugs			
Cigarettes	17.3	17.4	17.4
Alcohol	16.7	18.2	17.5
Inhalants	21.0	28.4	24.4
lllegal Drugs			
Non-Prescribed Tranquilisers	16.0	46.9	31.5
Marijuana	17.8	18.9	18.4
Hash	19.7	19.2	19.5
Ecstasy	23.4	19.2	21.3
Cocaine	27.7	21.6	24.7
Non-Prescribed Stimulants	30.1	20.5	25.3
Hallucinogens	21.7	19.6	20.7
Crack	28.8	21.4	25.1
Opium	24.0	17.6	20.8
Heroin	25.2	21.3	23.3

Table III-5 AVERAGE AGE OF ONSET BY SEX OF SURVEY RESPONDENT

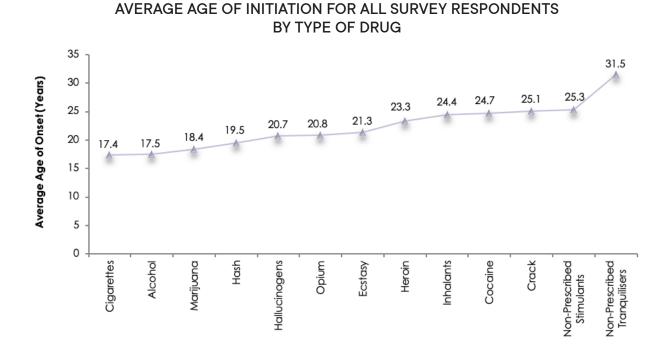
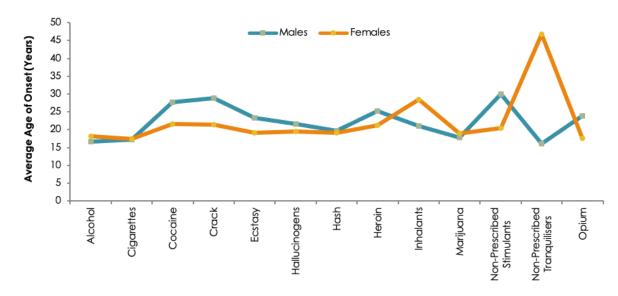


Chart III-8

In terms of the sex of the respondent, average age of onset for males was slightly earlier at 17.3 years (for cigarettes) than that of the overall population or their female counterparts, which stood at 17.4 years (also for cigarettes) [Chart III–9]. At the same time, males were more likely to be underage drinkers, since they reported first drinking alcohol at an average age of 16.7 years (with 18 years being the legal drinking age in Bermuda). Males also initiated using marijuana before females, 17.8 years versus 18.9 years. On the other hand, females indicated onset at an earlier age for hash (19.2 years vs. 19.7 years), ecstasy (19.2 years vs. 23.4 years), and hallucinogens (19.6 years vs. 21.7 years).

Chart III-9 AVERAGE AGE OF INITIATION BY SEX OF SURVEY RESPONDENT AND TYPE OF DRUG



Recency of Initiation

Substance use began more than a year ago

Recency of initiation, together with age of initiation, provides information on substance use initiation, also known as incidence or first-time use. These are important for policy-makers and researchers since measures of initiation are often leading indicators of emerging patterns of substance use. They provide valuable information that can be used in the assessment of the effectiveness of current prevention and intervention programmes and in the focusing of these efforts.

The results in Table III–6 show that most of the survey participants began their drug using behaviours more than a year prior to the survey. For example, 80.8% of persons who drank alcohol began doing so more than a year ago, 50.2% had already started smoking cigarettes, and 27.8% first used marijuana. There were a few persons who recently began use of alcohol, cigarettes, and marijuana – as recent as less than a year ago but more than a month ago and even in the past 30 days. For instance, 3.0% of the survey participants first used alcohol more than a month before the survey but within a year and 6.6% first drank alcohol in the past 30 days. In other words, there were some persons who had never used a drug in their lifetime but who began substance using behaviours (even initiating the use of an illicit drug) in the 30 days prior to the survey.

Table III-6 RECENCY OF FIRST USE BY TYPE OF DRUG (Percentage of (Weighted) Lifetime Users of Substance)

Substances	In the past 30 days	More than 1 month ago but less than 1 year ago	More than a year ago	Not Stated
Alcohol	6.6	3.0	80.8	0.7
Cigarettes	1.1	0.6	50.2	0.2
Marijuana	0.6	0.9	27.8	0.2
Cocaine	-	-	3.9	0.4
Crack	-	-	1.5	-
Heroin	-	-	0.6	0.3

Frequency of Substance Use

Alcohol Consumption

Drinking mostly happens on the weekends

Respondents were asked to indicate with what frequency they drank alcohol and the type of alcoholic beverage they drank on these occasions, which was in terms of the alcoholic content (low, medium, and high). They were provided with relevant examples by the interviewer of what each category constituted. For instance, beer was an example of a beverage with low alcohol content, Baileys for medium content, and whiskey was mentioned for high alcohol content.

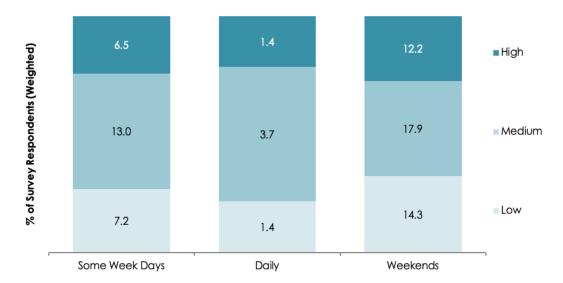
The frequency of alcohol use among respondents who were current users of alcohol ranged from use on weekends to everyday use (Table III–7 and Chart III–10). In the 30 days prior to the survey, most of the current users of alcohol reported that they drank on the weekends, whether it was alcohol of low (14.3% of the respondents), medium (17.9% of the respondents), or high (12.2% of the respondents) content. Fewer respondents indicated that they drank daily, with most of the daily users drinking alcohol of medium content (3.7% of the respondents). An equal proportion of respondents, 1.4%, were daily drinkers of high-content alcoholic beverages or drank beverages with low alcohol content. At the same time, there were 13.0% (9.4% in 2017) of the survey participants who indicated that they drank medium-content alcohol on some week days, while 7.2% and 6.5% (5.7% and 3.4% in 2017) drank low- and high-content alcoholic beverages, respectively.

The results also showed that differences exist between the two sexes when it came to the type of drinks consumed (Table III-7). Males mainly drank beverages with low alcoholic content despite when they drank them, as well as beverages with high alcoholic content, especially on weekends. In contrast, females mainly drank beverages of medium alcohol content, despite when they drank them.

Table III-7				
FREQUENCY OF ALCOHOL CONSUMPTION BY TYPE OF ALCOHOLIC BEVERAGE AND				
SEX OF SURVEY RESPONDENT				
(Percentage of Weighted Survey Respondents)				

				ALCO	HOL CONT	ENT			
Frequency of Use		Low			Medium			High	
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Some Week Days	6.1	1.1	7.2	5.7	7.3	13.0	5.0	1.5	6.5
Daily	1.3	0.1	1.4	2.1	1.6	3.7	1.3	0.1	1.4
Weekends	9.8	4.5	14.3	8.0	9.9	17.9	7.8	4.3	12.2
Not Applicable	11.8	19.4	31.2	13.2	6.2	19.5	14.9	19.1	34.0
Total Current Users	29.0	25.0	54.0	29.0	25.0	54.0	29.0	25.0	54.0

Chart III-10 FREQUENCY OF ALCOHOL CONSUMPTION BY TYPE OF ALCOHOLIC BEVERAGE



Binge Drinking

More males reported binge drinking on one to five occasions

The survey interviewers informed the participants that binge drinking is the consumption of five or more standard alcoholic drinks in one sitting (successively drinking each beverage). The reference period for this question was the occurrence of this behaviour in the 30 days prior to the survey. Participants were also informed of what a standard alcoholic drink constitutes, for example, a canned beer, a glass of wine, a shot of rum, etc. Heavy drinking is frequently associated with damage to property, sexual assault, fighting, drunk driving, poor performance, and health risk behaviours.

Nearly four in 10 respondents (38.7%) indicated they had not engaged in binge drinking (Table III–8). However, 13.2% of the participants indicated that they had binge drinking episodes about "1 – 5" times in the past month, while 1.1% said they binge drank "6–10" times in the past 30 days. In the latter case, this means approximately 30 to 50 drinks in one month solely from bingeing.

The results suggest that, overall, males were more likely to binge drink than females irrespective of the number of times in the past month. For instance, males (7.8%) accounted for a greater proportion of the participants who indicated binge drinking on one to five occasions in the past month compared to their female counterparts (5.4%).

Number of Times in Past 30 Days	% of Survey Respondents (Weighted)			
	Males	Females	Total	
0	19.6	19.1	38.7	
1 – 5	7.8	5.4	13.2	
6 – 10	0.8	0.3	1.1	
11 – 15	0.2	0.2	0.5	
16 – 20	0.3	-	0.3	
21 – 25	0.1	0.1	0.2	
26 - 30	0.2	-	0.2	

Table III–8 NUMBER OF BINGE DRINKING EPISODES IN PAST 30 DAYS (Current Users of Alcohol)

Problem Drinking

Persons reported having memory lapses because of alcohol use

Current users of alcohol were also subsequently asked other questions related to their drinking. Table III–9 presents the findings to these questions. Most of the survey respondents never had trouble with a partner, lost friends or partners, experienced memory lapses on account of alcohol, or were bothered about being criticized for drinking. Nonetheless, there was a small proportion who encountered these outcomes because of their alcohol use. For instance, 14.0% (7.9% in 2017) of the respondents indicated they had memory lapses upon waking up in the morning after drinking alcohol. However, 13.5% (12.1% in 2017) of the participants reported that they felt like decreasing the amount of alcohol they drink. At the same time, 3.8% of them said that they drank more than they wanted to without noticing and 0.7% said they had to drink alcohol in the morning. A notable result is that almost three in 10 or 29.6% of the survey respondents indicated that they friends or family members who get drunk.

Table III-9 PROBLEM DRINKING (Current Users of Alcohol)

	% of Survey Respondents (Weighted)		
	Yes	No	Not Stated/ Not Applicable
Had trouble with partner because alcohol	3.5	49.8	0.7
Lost friends of partners because of alcohol	4.5	48.9	0.6
Felt like decreasing the amount of alcohol drunk	13.5	39.3	1.2
Drank more than wanted without noticing	3.8	49.8	0.4
Had to drink alcohol in the morning	0.7	53.0	0.3
Experienced not remembering after waking up in the morning	14.0	39.2	0.7
Bothered about being criticized for drinking	2.1	35.7	16.1
Have friends or family members who get drunk	29.6	23.6	0.8

One in 10 persons were drunk on at least one day in the past month

Current alcohol users were also asked to report the number of days in the month prior to the survey that they drank too much and got drunk. The results to this question (Table III–10) showed that most of the respondents (45.7%) (29.5% in 2017) did not get drunk on their drinking occasions. However, 7.5% of the participants indicated that they got drunk at least on one day because they had too much to drink. These survey participants were drunk on one to fifteen days over the past month.

Table III–10 NUMBER OF DAYS DRUNK IN PAST MONTH (Current Users of Alcohol)

Number of Days	% of Survey Respondents (Weighted)
O Day	45.7
1 Day	3.7
2 Days	2.3
3 Days	1.0
4 Days	0.1
5 Days	0.2
12 Days	0.1
15 Days	0.1

Higher tendency for persons to drink alcohol if they have friends or family members who get drunk

In addition to the survey participants being asked whether they had friends or family members who get drunk, they were also asked the number of them who, in fact, got drunk. About one-fifth or 19.8% of the respondents reported that they have about one to five friends or family members who get drunk, while 3.5% indicated that they have six to 10 such persons. The respondents indicated as many as over 21 friends or family members who get drunk.

Table III-11 NUMBER OF FRIENDS OR FAMILY MEMBERS WHO GET DRUNK (Current Users of Alcohol)

Number of Friends/Family Members	% of Survey Respondents (Weighted)
1 – 5	19.8
6 – 10	3.5
11 – 15	1.0
16 – 20	1.3
21+	1.4
None	17.1

Drink Driving

Drink driving was experienced mainly by passengers of a car

Alcohol consumption, in even small amounts, can have negative impacts on everyone that uses the road, not just the drivers. Passengers of vehicles along with other persons, such as pedestrians and other motorcyclists, too often fall victim to road accidents caused by a driver who gets behind the wheel of a vehicle while under the influence of alcohol.

With this being the first time that drink driving was assessed in the NHSDUH, participants were asked about whether they had been a passenger of a car or bike operated by someone who had been drinking. Most (27.0%) of the respondents indicated that they had been a passenger of a car driven by someone who had be drinking alcohol, whilst only less than 1 in 10 persons or 9.2% reported that they had ridden on bike that was operated by someone who had consumed alcohol (Table III-12). For those persons who responded being a passenger of a car driven by someone who was under the influence of alcohol, the majority of them were males (14.8% vs females 12.1%) between the ages of 40 to 44 years. Similarly, for those passengers of a bike where the rider had been drinking alcohol, males accounted for 5.5% in comparison to their female counterparts (3.7%) and were also between the ages of 40 to 44 years.

Table III-12 PERCENTAGE OF DRINK DRIVING (Weighted Respondents)

	Yes	No	Don't Know
Ridden in a car by someone who had been drinking	27.0	26.3	0.7
Ridden on a bike by someone who had been drinking	9.2	44.5	0.3

Tobacco Consumption

Some persons smoked more than 100 cigarettes in one month

Current smokers of cigarettes were asked to report on the quantity smoked, which ranged from one cigarette to more than five packs. A significant proportion of the 9.6% (8.8% in 2017) of current smokers indicated that they smoked more than five packs of cigarettes in the month prior to the survey [Table III–13]. This means that they smoked about 100 cigarettes in one month.

Table III-13 QUANTITY OF CIGARETTES CONSUMED (Current Users of Cigarettes)

Quantity of Cigarettes	% of Survey Respondents (Weighted)
1 to 5	0.6
6 to 10	0.9
11 to 20 (Half to One Pack)	1.5
2 to 3 Packs	2.2
4 to 5 Packs	0.7
More than 5 Packs	3.9
Total Current Users	9.6

Secondhand Smoking

Secondhand smoking existed in both homes and workplaces

In an effort to assess the public health dangers associated with smoking, participants were asked about smoking in their homes and workplaces (for those who were currently employed). There were 5.7% of the respondents who indicated that someone smoked in his/her home and 4.2% reported the same for smoking in a closed area at the workplace (Table III–14).

Table III–14 PERCENTAGE OF SECONDHAND SMOKING (Weighted Respondents)

	Yes	No	Not Stated/ Not Applicable
Someone smoked in home	5.7	93.9	0.3
Someone smoked in a closed area in workplace	4.2	80.9	14.8

Vaping

Vaping occurred more than one year ago

In recent years vaping, through the use of e-cigarettes, has become an international crisis. This fairly new epidemic, known as vaping, is the inhaling of a vapor which is created by an electronic cigarette or other vaping devices. This being the first time that e-cigarettes and the prevalence of vaping in Bermuda is being reported in the 2021 NHSDUH, it is important that Bermuda continues to monitor the public health impact of e-cigarette vaping amongst the general adult public.

The age of onset for vaping ranged from 14 years to 66 years, with the mean age of onset being recorded as 30.6 years old. Males mainly vaped in their lifetime (51.5%) when compared to their female counterparts (48.5%).

In an effort to assess the public health dangers associated with vaping, participants were asked about the frequency of vaping along with the type of substance that was used. There were 0.2% of the respondents who indicated that they vaped nicotine as well as marijuana between 3 to 5 times in the last 30 days. In terms of the highest frequency of vaping, 0.1% of respondents indicated the use of just flavoring in their e-cigarettes between 20 to 29 times in the last 30 days (Table III-15). Respondents were also asked about when was their first occurrence of vaping. Of those respondents who had reported vaping in their lifetime, the majority (4.5%) had done so more than one year ago (Table III-16).

Frequency	Type of Substance (% of Weighted Respondents)			
	Nicotine	Marijuana	Just Flavoring	
0 times	1.0	1.4	1.3	
3 to 5 times	0.2	0.2	-	
6 to 9 times	0.1	-	-	
10 to 19 times	0.1	-	-	
20 to 29 times	0.1	-	0.1	
All 30 days	0.3	-	-	
Total	1.8	1.6	1.4	

Table III–15 FREQUENCY OF VAPING AND THE TYPE OF SUBSTANCE VAPED (Current Users of Vaping Substance)

Table III–16 FREQUENCY OF VAPING USE FOR CURRENT USERS (Weighted Respondents)

Frequency of Use	Number	% of Weighted Respondents (n=53,842)
In the past 30 days	119	0.2
More than 1 month ago but less than 1 year ago	320	0.6
More than 1 year ago	2,422	4.5
Total	2,861	5.3

Illicit Drug Consumption

Instances of daily use of illicit drugs

The frequency of illicit drug use was asked of respondents who indicated that they used an illegal drug in the year prior to the survey (recent users). Marijuana use ranged from only once in the year (0.4% of the respondents) to daily (1.8% of the respondents) [Table III–17]. There were others who indicated they used marijuana sometimes during the week (1.8%), sometimes during the month (1.5%), and sometimes in the past 12 months (2.4%) (1.6% in 2017). Additionally, 0.1% of the respondents indicated that they used cocaine sometime during the week with no one reporting use of crack or heroin for this reference period.

Table III–17 FREQUENCY OF ILLICIT SUBSTANCE USE BY TYPE OF DRUG (Annual Users of Substance)

Fragmanay	% of Survey Respondents (Weighted)				
Frequency	Marijuana	Cocaine			
Daily	1.8	-			
Sometimes during the week	1.8	0.1			
Sometimes during the month	1.5	-			
Sometimes in the past 12 months	2.4	-			
Only Once	0.4	-			
Total Annual Users	7.8	0.1			

- means zero or unit less than 0.1. There was no annual use of heroin or crack.

Drugged Driving

For this round of the survey, questions were asked to ascertain the level for which persons were operating or getting on/into a vehicle by someone who is impaired due to the intoxicating effects of recent drug use, in particular marijuana. This activity, referred to as drugged driving, which similar to drink driving, puts the driver, passenger, and others who share the road at a serious risk. Research has shown the negative effects of marijuana use on drivers can include; increased lane weaving, poor reaction time, and altered attention to the road. The mixing of alcohol and marijuana is also known to make drivers more impaired, causing even more lane weaving and heightening the chances of being involved in an accident.³

For the most part, respondents did not operate a vehicle while impaired by marijuana and/or alcohol or were a passenger of a vehicle by someone who was impaired. It is still concerning, though, that there is a small percentage of respondents who put themselves and others who use the road in harm's way due to their use of marijuana while driving a car or riding a bike. Nonetheless, 2.2% of participants reported that in the past 12 months, they had driven a car within two hours of using marijuana, while 1.9% indicated that they had done so while riding a bike. There were 1.9% of participants who also noted that they had, in fact, operated a motor vehicle within two hours of using marijuana and alcohol. Respondents went on to report that a small proportion (2.3%) had been a passenger of a car driven by someone who had used marijuana in the previous two hours.

Table III-18 DRUGGED DRIVING (Percentage of Weighted Survey Respondents)

	Yes	No	Don't know
Past 12 months, driven a car within two hours of using marijuana	2.2	5.6	0.2
Past 12 months, ridden a bike within two hours of using marijuana	1.9	5.8	0.2
Past 12 months, driven a car within two hours of using marijuana and alcohol	1.9	5.7	0.2
Past 12 months, been a passenger in a car driven by someone who had used marijuana in the previous two hours	2.3	5.1	0.5

Race and Drug Use

Significant current use of alcohol by all races

Table III-19 shows that prevalence-of-use rates differed based on the respondents self-reported indication of their race. Respondents who indicated "mixed" race demonstrated the highest proportion of use for alcohol and marijuana when compared to other races. There was significant current use of alcohol amongst the race groups with Whites accounting for 69.0% of current use of alcohol, Mixed race accounting for 59.7% and Blacks 44.2% of current use of alcohol use. When it came to cigarettes, respondents of Mixed race were more likely to have smoked in the past 30 days (16.8%) when compared to other racial groups. Blacks demonstrated the highest current use of marijuana at 6.8%.

³ National Institute on Drug Abuse (NIDA). (2019). Drugged Driving. <u>https://www.drugabuse.gov/publications/drugfacts/drugged-driving</u> (accessed April 1, 2021)

Table III–19 LIFETIME, ANNUAL, AND CURRENT USE OF SELECTED SUBSTANCES BY RACE (Percentage of Weighted Survey Respondents)

				RACE			
	Black	White	Portuguese	Mixed	Asian	Not Stated	Other
Lifetime Use							
Cigarettes	46.7	60.7	49.4	59.5	38.2	43.8	57.8
Alcohol	89.0	95.8	87.7	96.3	58.0	77.9	93.6
Marijuana	29.9	28.9	22.3	42.2	-	22.1	28.9
Annual Use							
Cigarettes	12.8	9.8	7.6	17.6	25.0	43.8	9.8
Alcohol	61.2	82.5	72.7	71.7	46.1	7.5	56.6
Marijuana	10.3	5.5	1.6	8.6	-	-	-
Current Use							
Cigarettes	10.6	7.4	7.6	16.8	12.9	-	-
Alcohol	44.2	69.0	58.0	59.7	41.0	-	55.6
Marijuana	6.8	3.4	-	-	-	-	-

Marital Status and Drug Use

People living together drank the most

The results in Table III–20 are prevalence rates for cigarettes, alcohol, and marijuana by the marital status of the survey respondent. Irrespective of the reference period, persons who were living together or cohabitating represented the largest proportion of respondents who drank alcohol. For instance, 98.1% of lifetime users of alcohol were living together compared to 89.2% who were never married. In contrast, persons who were separated represented the largest proportion of lifetime and current users of marijuana at 73.7% and 11.1%, respectively. Persons who were widowed represented smaller proportions of cigarettes, alcohol, and marijuana use in all three reference periods under consideration.

Table III-20 LIFETIME, ANNUAL, AND CURRENT USE OF SELECTED SUBSTANCES BY MARITAL STATUS

	MARITAL STATUS								
	Never Married	Living Together	Married	Divorced	Separated	Widowed	Not Stated		
Lifetime Use									
Cigarettes	44.1	71.0	57.0	60.7	65.7	46.0	23.1		
Alcohol	89.2	98.1	92.3	96.6	92.5	82.0	63.4		
Marijuana	31.5	61.4	25.2	36.7	73.7	6.2	8.9		
Annual Use									
Cigarettes	17.2	11.8	8.9	10.5	6.6	5.8	-		
Alcohol	70.7	91.4	73.3	62.0	64.4	38.0	42.6		
Marijuana	12.6	25.1	3.5	7.2	11.1	-	-		
Current Use									
Cigarettes	13.8	9.3	6.5	10.1	6.6	5.8	-		
Alcohol	55.1	86.3	59.5	42.4	60.7	22.9	34.7		
Marijuana	8.6	10.2	1.1	4.7	11.1	-	-		

(Percentage of Weighted Survey Respondents)

Education Level and Drug Use

Current drug use was most prevalent among participants who finished only a secondary-level education

Table III–21 reveals that mainly persons who have a professional designation reported highest prevalence-of-use for alcohol, in all three reference periods, compared to respondents who completed other education levels. For instance, 97.6% of the respondents indicated lifetime use of alcohol, 87.5% in the past year, and 74.3% in the past 30 days. Similarly, 94.9% of holders of a Bachelor's degree had used alcohol in their lifetime, 78.1% in the past year, and 64.8% in the past 30 days, whereas, respondents who have an Associate's degree indicated the highest lifetime (62.2%) and current (13.1%) use of cigarettes. Marijuana use was highest in persons with an Associate's degree (40.4%) in the lifetime use reference period. In contrast, persons with a or Doctorate degree (22.8%) reported highest marijuana use in the annual use reference period and marijuana use was highest in the current use reference period among holders of a High School diploma (7.7%)

Table III–21 LIFETIME, ANNUAL, AND CURRENT USE OF SELECTED SUBSTANCES BY HIGHEST LEVEL OF EDUCATION COMPLETED (Percentage of Weighted Survey Respondents)

		HIGHEST LEVEL OF EDUCATION COMPLETED									
	None	High School Diploma	Technical/ Vocational Certificate	Associates Degree	Bachelor's Degree	Master's Degree	Doctorate Degree	Professional Designation	Not Stated		
Lifetime Use											
Cigarettes	51.9	55.4	48.2	62.2	50.2	45.9	46.1	53.8	-		
Alcohol	73.5	90.2	86.8	95.7	94.9	97.3	93.1	97.6	74.0		
Marijuana	15.8	31.9	23.5	40.4	32.5	27.6	22.8	17.3	-		
Annual Use											
Cigarettes	13.3	16.9	8.7	13.8	9.6	6.9	12.4	6.7	-		
Alcohol	29.2	65.5	63.7	77.6	78.1	79.8	69.7	87.5	74.0		
Marijuana	6.3	11.3	5.8	14.2	5.5	2.2	22.8	4.6	-		
Current Use											
Cigarettes	9.6	13.1	7.9	13.1	7.8	3.9	12.4	6.7	-		
Alcohol	21.7	51.1	46.7	59.4	64.8	60.1	56.5	74.3	74.0		
Marijuana	3.6	7.7	5.8	7.2	1.5	1.0	-	-	-		

Employment Status and Drug Use

High rates of alcohol use by the employed/self-employed

When substance use is looked at in terms of employment status, Table III-22 shows that employed and self-employed persons reported highest lifetime, annual, and current prevalence for alcohol. More specifically, participants who indicated that they work 40 or more hours per week reported the highest prevalence, even more than those who worked for between one to 39 hours per week. When it came to current use, those employed, but working 1–39 hours, were more likely to use marijuana (64.0%) compared to those who were employed and working longer hours (40+) who reported higher use of alcohol (65.1%). Respondents who were disabled (22.4%) as well as others who were not employed, but looking for work (22.3%), reported the highest prevalence of cigarettes in the current use reference period.

Table III-22 LIFETIME, ANNUAL, AND CURRENT USE OF SELECTED SUBSTANCES BY EMPLOYMENT STATUS (Percentage of Weighted Survey Respondents)

	EMPLOYMENT STATUS								
			EMPLOTMEN						
	Employed/ Self-Employed 1-39 hrs.	Employed/ Self-Employed 40+ hrs.	Not Employed & Looking	Not Employed & Not Looking	Retired	Disabled	Not Stated		
Lifetime Use									
Cigarettes	52.0	52.7	56.0	31.0	60.4	58.4	7.0		
Alcohol	92.9	94.6	90.5	81.3	88.5	74.7	75.6		
Marijuana	32.3	32.9	41.4	24.3	20.3	42.0	9.9		
Annual Use									
Cigarettes	13.1	14.0	27.9	7.6	5.7	22.3	7.0		
Alcohol	70.4	79.5	78.5	62.8	51.4	37.4	75.6		
Marijuana	11.0	6.5	22.0	6.6	3.0	11.5	9.9		
Current Use									
Cigarettes	9.7	12.3	22.3	3.6	4.6	22.3	-		
Alcohol	53.1	65.1	54.0	48.4	39.3	27.9	75.6		
Marijuana	64.0	3.4	15.0	5.1	1.2	11.5	9.9		

Illicit Drug Use

A significant proportion of persons have friends or family members who take illegal drug(s)

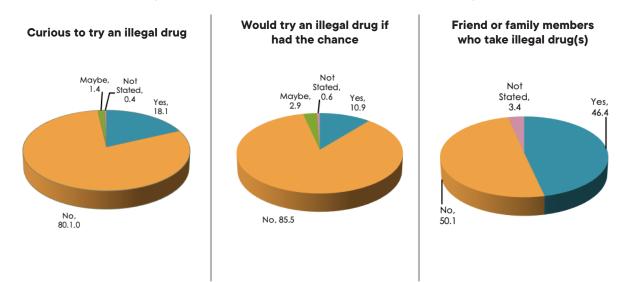
Respondents were asked if they were curious to try an illicit drug and if presented with the opportunity, whether not they will try it. While 80.1% of the respondents indicated they were not curious to try an illegal drug, about one in five respondents or 18.1% said that they were curious (Table III–23 and Chart III–11). However, overwhelmingly, 85.5% of the participants indicated they would not try an illegal drug if they had the chance, while 10.9% said they would try it. Further, respondents were asked if they have friends of family members who take illegal drug(s). Almost half of the respondents (46.4%) said they do have friends or family members who use illegal drug(s), while slightly over half (50.1%) said they did not have such persons.

Table III-23 ILLICIT DRUG USE (Percentage of Weighted Survey Respondents)

	Yes	No	Maybe	Not Stated
Curious to try an illegal drug	18.1	80.1	1.4	0.4
If had the chance, would try an illegal drug	10.9	85.5	2.9	0.6
Have friends or family members who take illegal drug(s)	46.4	50.1		3.4

.. not applicable

Chart III-11 RESPONSES TO ILLICIT DRUG USE QUESTIONS (Percentage of Weighted Survey Respondents)



Substance Consumption and Expenditure

Alcohol

Alcohol consumption in excessive amounts is proven to be harmful to one's overall health (that is, mental, physical, social and emotional). During this survey undertaking, the majority of the respondents (14.8%) reported that they consume between one to 10 ounces of alcohol in a typical week (Table III-24). Males (1.9%) indicated that they consume mostly 25 ounces of alcohol in a typical week, whereas females (3.3%) indicated a much lower level of alcohol consumption, at mostly five ounces for that same time period. Participants between the ages of 55 to 59 (5.3%) reported the highest alcohol consumption, for any amount, when compared to the other respondents.

Quantity (ounces)	% of Survey Respondents (Weighted)
1–10	14.8
11-21	7.1
22-32	7.6
33-43	4.0
44-54	2.9
55-65	2.1
66-76	1.7
77-87	1.0
88-98	0.8
99–110	0.5
111–121	0.3
122-132	0.7
133-143	0.2
144+	1.6

Table III-24 QUANTITY OF ALCOHOL USED

In reference to alcohol expenditure, most respondents (11.1%) reported spending between \$11 to \$21 in a typical week (Table III–25). When it came to gender comparisons, males (3.9%) reported that they mostly spend \$50 on alcohol, whilst their female (3.9%) counterparts indicated only sending \$20 in a typical week. Respondents between the ages of 40 to 44 (5.5%) were recorded as spending the most, for any amount, on the purchase of alcohol.

Table III-25 ALCOHOL EXPENDITURE

Dollar Amount	% of Survey Respondents (Weighted)
\$1-\$10	6.6
\$11-\$21	11.1
\$22-\$32	8.4
\$33-\$43	3.1
\$44-\$54	5.6
\$60+	7.1

Marijuana

The use of marijuana is known to have a wide range of health effects on the body and the brain. The amount of marijuana used by 1.0% of the respondents, in the 2021 NHSDUH, was reported as mostly 0.5 grams in a typical week, with males (0.5%) using mainly 2.0 grams and females (0.5%) 0.5 grams for that same time period (Table III–26). Participants between the ages of 40 to 44 were recorded as using the highest amount (ounces), for any quantity, of marijuana in a typical week.

Quantity (grams)	% of Survey Respondents (Weighted)
0.5	1.0
1.0	0.3
1.5	0.1
2.0	0.8
2.5	0.1
3.5	0.6
5.0	0.1
6.0	0.2
7.0	0.5
7.5	0.2
10.0	0.1
23.0	0.1
35.0	0.1

Table III-26 QUANTITY OF MARIJUANA USED

In relation to marijuana expenditure, the majority of the respondents (1.0%) reported spending between \$101 and \$150 in a typical week (Table III–27), with males indicating that they mainly spend the same amount for the time period in question. Females, on the other hand, spend less on marijuana, reporting expenditure of between \$11 and \$25 in a typical week. A much younger cohort, 20 to 24 year olds, (0.8%) was recorded as spending the most on marijuana in a typical week.

Table III-27 MARIJUANA EXPENDITURE

Dollar Amount (\$)	% of Survey Respondents (Weighted)
Nothing, got it for free or traded something for it	0.6
Between \$1 and \$10	0.1
Between \$11 and \$25	0.8
Between \$26 and \$50	0.7
Between \$51 and \$100	0.9
Between \$101 and \$150	1.0
Between \$151 and \$250	0.4
Between \$751 and \$1,000	0.1
Not Stated	0.3

Other Drugs

The quantity and expenditure was very small, if any, on other illicit drugs such as; cocaine, heroin, and hash. For cocaine, a small proportion (0.1%) of respondents reported using roughly \$10 worth, with 0.3% indicating that in a typical week they spend \$10 on cocaine. In relation to hash, 0.3% of respondents indicated using 1 gram in a typical week, whilst spending \$10 (0.1%) on the purchase of hash for that same time period. There was no reported quantity or expenditure reported for heroin during this survey round.

DRUG MARKET

Marijuana is the drug most likely to be offered for purchase or use

With the exception of marijuana, for the most part, respondents were never offered illicit drugs to buy or use during the past year. When it came to marijuana, however, 3.3% of the respondents said they were offered to buy or use it during the week of the survey; 3.9% said they were offered to buy or use marijuana during this month; 4.4% said more than a month ago but less than a year ago; while 23.1% indicated it was more than a year ago that they were offered to buy or use this drug. As indicated in Table III–24, small proportions of illicit drugs were reportedly offered for purchase or use in the past year.

Drugs	Never	During this week	During this month	More than a month ago	Less than a year ago	More than a year ago	Don't know	Not Stated
Marijuana	57.9	3.3	3.9	4.4	4.4	23.1	1.3	1.6
Cocaine	89.9	-	0.1	0.6	0.7	6.2	1.0	1.4
Heroin	95.2	-	-	0.3	-	2.5	0.8	1.1
Ecstasy	92.2	-	0.2	0.2	0.1	4.9	1.0	1.4
Crack Cocaine	94.8	-	-	0.3	0.1	2.7	0.8	1.1

Table III–28 LAST OFFER TO BUY OR USE DRUGS (Percentage of Weighted Survey Respondents)

HEALTH

People have struggled with mental health, but some are in recovery

When respondents were asked if they have ever had a problem with their own drug and alcohol use (Table II–29), 6.5% of them admitted they had and 6.6% considered themselves to be in recovery or recovered from their problem with drugs or alcohol. One in nine or 11.2% said they had a problem with their mental health in their lifetime and considered themselves to be in recovery or recovered from their mental health problems. In the past 12 months, 4.8% admitted they have seen a health professional, such as a general practitioner or psychologist, because of an alcohol or drug use, emotional, or behavioural problems.

Table III–29 ALCOHOL AND DRUG USE RELATED HEALTH ISSUES (Percentage of Weighted Survey Respondents)

	Yes	No
Ever had a problem with your own drug or alcohol use	6.5	86.6
In recovery or recovered from drugs or alcohol use	6.6	73.6
Ever had a problem with your own mental health	11.2	87.4
In recovery or recovered from your own mental health problem	11.2	70.5
Seen a health professional because of any alcohol use, drug use, emotional problems, or behavioural problems	4.8	91.2

IV. DISCUSSION

Drug use in Bermuda now encompasses a wider range of substances than in the past. Since the last household survey (2017), there has been a significant increase in the number of people who have used legal and illegal substances at least once in their lifetime especially that of marijuana, which is the most commonly used illegal drug. The prevalence-of-use of marijuana is about 40 times that of other substances in the current report. While the use of heroin and other drugs remains relatively low in the household population. Use of most drugs is generally higher among males, and this difference is often accentuated for more intensive or regular patterns of use. There is some good news, however, in that the age of first use of most substances has increased since 2017.

When it comes to legal substance use, specifically, both cigarette and alcohol use have increased over the past four years. Drink driving, in particular, remains a serious public health concern in our community. In the current survey, about one in three respondents or 36.2% admitted they had either driven in a car or rode on a bike with someone who had been drinking alcohol. Further findings in this survey reflect that the prevalence of people having family or friends who take illegal drugs is almost half of the population. Evidenced by this very survey, there is a pressing call to action required to address mental health and substance use in Bermuda as a number of respondents admitted having mental health issues, although some have recovered.

A number of research studies in Bermuda has now demonstrated what some may know anecdotally, that marijuana is the most prevalent illegal drug. It is now also the illegal substance most often named by new entrants to drug treatment services as one of their drugs of choice. New forms of marijuana have been developed in recent years and the EMCDDA (European Monitoring Centre for Drugs and Drug Addiction) reports that for both resin and herb, the potency has increased over the past decade. The creation of regulated cannabis in Bermuda will no doubt be a driver of innovation, with the development of new cannabis products, such as edibles, e-liquids, and concentrates. Some of these are now appearing on global drug markets, where they represent a new challenge for detection and drug control under the current legal framework. The use of illicit drugs is a contributor to the burden of disease globally. Chronic problems include dependence and drug related infectious disease, while there is a range of acute harms. Although the health problems associated with marijuana use are clearly lower, the high prevalence-of-use of this drug may have future implications for public health.

The drug market in Bermuda is resilient and reflects developments taking place globally. The health and social problems presented by established and newer illicit drugs create a changing policy context for the shaping and implementation of effective responses, especially messages that promote substance abuse recovery, demonstrated in the current survey by 6.6% of respondents who are in recovery or have recovered from drugs or alcohol use.

The global pandemic, now in its second year, may have resulted in respondents increasing their substance use as a way of coping with stress, including financial pressures, or emotions related to COVID-19. The ongoing stress and uncertainty of COVID-19 has additionally led to increased demand for mental health services. Shifts in drug availability may also be to blame for increased illicit drug use. As stress levels increase, people may have fewer ways to manage it, although resilience-promoting activities, like physical activity and social interactions, which are recommended, may not be safe to engage in or easy to access. This can lead some people to start using drugs, use them more often, or in greater amounts.

The Department for National Drug Control remains steadfast in its resolve to reduce the harms associated with substance misuse in Bermuda. There is still much to be done. This, however, requires a total community effort. The short-term approach, which is to control the supply of drugs, and the long-term demand reduction approach through awareness and community education are two ends of a continuum, which are often placed in opposition to each other. In reality, both are essential parts of a comprehensive view of preventing drug misuse.

This research is designed to evaluate the current drug situation in Bermuda and provides a snapshot based on the latest data available. All estimates are in some ways incomplete, but an incomplete estimate used well is better than none at all. The information obtained from this self-reported household survey provides partial insight into current substance use and misuse in Bermuda. The methodology applied has good construct validity, nevertheless, the results should be interpreted with caution as underreporting of prevalence of illicit substances is assumed and the findings can be viewed as conservative.

APPENDICES

APPENDIX 1: UNWEIGHTED SAMPLE

BASIC DEMOGRAPHIC CHARACTERISTICS OF SAMPLE RESPONDENTS

			(n = 1,170)
Characteristic		Number of Survey Respondents	% of Survey Respondents
Head of Household			
	Yes	715	61.1
	No	423	36.2
	Not Stated	32	2.7
Sex			
	Male	386	33.0
	Female	784	67.0
Age (Years)			
	16 – 19	58	5.0
	20 - 24	45	3.8
	25 - 29	43	3.7
	30 - 34	62	5.3
	35 – 40	63	5.4
	40 - 44	58	5.0
	45 - 49	62	5.3
	50 - 54	85	7.3
	55 – 59	106	9.1
	60 - 64	131	11.2
	65 - 69	127	10.9
	70 – 74	112	9.6
	75 – 79	91	7.8
	80 - 84	73	6.2
-	85+	54	4.6
Race		(10)	50.4
	Black or African	613	52.4
	White	400	34.2
	Mixed	67	5.7
	Portuguese	51	4.4
	Asian	18	1.5
	Other	13	1.1
	Not Stated	8	0.7

BASIC DEMOGRAPHIC CHARACTERISTICS OF SAMPLE RESPONDENTS cont'd

			(n = 1,170)
Characteristic		Number of Survey Respondents	% of Survey Respondents
Parish			
	St. Georges	87	7.4
	Hamilton	71	6.1
	Smiths	91	7.8
	Devonshire	137	11.7
	Pembroke	286	24.4
	Paget	130	11.1
	Warwick	152	13.0
	Southampton	95	8.1
	Sandys	117	10.0
	Not Stated	4	0.3

APPENDIX 2: HISTORICAL COMPARISON OF PREVALENCE

		20	D131		2017 ²				
Substances	Lifetime	Annual	Current	Average Age of Onset	Lifetime	Annual	Current	Average Age of Onset	
Alcohol	86.7	67.1	54.8	16.1	79.4	59.8	50.2	17.8	
Тоbacco	47.7	14.4	11.7	17.3	41.2	10.6	8.8	16.9	
Inhalants	0.8	0.1	0.1	18.2	0.2	-	-	26.6	
Marijuana	22.6	5.2	3.7	17.9	20.2	6.3	4.8	18.2	
Hash	6.3	1.2	0.5	18.8	4.4	0.2	-	19.2	
Cocaine	3.2	-	0.1	22.7	2.0	0.5	0.4	21.5	
Hallucinogens	2.1	0.1	0.2	19.3	1.0	0.1	0.1	21.5	
Ecstasy	1.4	0.2	-	25.0	0.9	0.1	-	24.0	
Crack	1.3	0.3	0.1	27.9	0.8	0.2	0.2	21.5	
Stimulants	0.8	-	-	18.3	0.6	-	-	24.4	
Opium	0.7	-	-	21.0	0.1	-	-	23.2	
Heroin	0.5	-	-	23.2	0.4	-	-	25.0	
Tranquilisers	0.2	-	-	43.7	0.1	-	-	30.1	
Morphine	0.1	-	-	22.0				18.0	
Other illegal drug					0.7				

Notes:

- zero or no reported use; .. not asked/not reported/not applicable

Sources:

¹2013 NHS Dataset (DNDC) ²2017 NHS Dataset (DNDC)

APPENDIX 3: SELECTED COUNTRY COMPARISON OF PREVALENCE

Lifetime Prevalence

Countries	Year	Cohort	Alcohol	Tobacco	Inhalants	Marijuana	Cocaine	Crack	Heroin
Barbados	2006	18+	78.9	33.5	1.4	16.2	0.8	0.2	
Uruguay	2014	15-65							
Canada	2017	15+	90.3	25.7		46.6	10.4		0.7
Netherlands	2018	15-64				28.6	6.5		
UK.	2018	15-64				29.0	10.1		
USA	2019	18+	85.6	65.8	9.1	49.2	16.5	3.7	2.3

Notes:

... not asked/not reported/not available

`England and Wales

For the USA, tobacco includes cigarettes, smokeless tobacco, cigars, pipe tobacco.

Current Prevalence

Countries	Year	Cohort	Alcohol	Tobacco	Inhalants	Marijuana	Cocaine	Crack	Heroin
Barbados	2006	18+	36.2	9.1	0.6	6.1	-	-	
Uruguay	2014	15-65	52.0	29.5	0.1^	9.3^	1.6^		
Canada	2017	15+	78.2^	15.1		14.8	2.5		
Netherlands	2018	15-64							
UK.	2018	15-64							
USA	2019 18+		54.9	22.8	0.2	11.9	0.8	0.1	0.2

Notes:

- means zero or unit less than 0.1.

... not asked/not reported/not available

^ past-year prevalence-of-use (current use was not available/reported)

`England and Wales

For the USA, tobacco includes cigarettes, smokeless tobacco, cigars, pipe tobacco.

Sources:

Barbados and Uruguay: OAS-CICAD 2019 Report on Drug Use in the Americas, 2019. (<u>Report on Drug Use in the Americas 2019</u>. <u>pdf (oas.org)</u>)

Canada: Canadian Tobacco Alcohol and Drugs Survey (CTADS) 2017: detailed tables (Canadian Tobacco, Alcohol and Drugs (CTADS) Survey: 2017 detailed tables - Canada.ca)

USA: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health (NSDUH), 2020. Results from the 2019

National Survey on Drug Use and Health: Detailed Tables (Report on Drug Use in the Americas 2019.pdf (oas.org))

United Kingdom & Netherlands: European Drug Report. Trends and Development 2020. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA); EMCDDA. United Kingdom Country Overview. (European Drug Report (europa.eu))

APPENDIX 4: KISH GRID

KISH GRID

DATE:

ASSESSMENT #:

TELEPHONE #:

INSTRUCTIONS

STEP 1:

STEP 2:

- In the table below, enter the first name of the household members who live in Bermuda for six months or more, starting with the eldest.
- 2) In the Order Number column, number sequentially the individuals who are **16 years or older**.
- 1) Use this grid below to determine which household member will be interviewed.
- 2) Circle the household member and ask if he/she is available to complete the survey.

E.g. the ordered list ends at **4** then the person who was numbered **3** would be selected for the interview.

First Name	Age	Order Number
	1	1

Household Size	1	2	3	4	5	6	7	8	9	10	
Person to be Interviewed	1	2	3	4	5	6	7	8	9	10	

Т

NOTES:

	Partial Questionnaire (completed up to page 11)		
Did	you complete the household listing or the whole qu	estio	nnaire?
	Household Listing Only		Household Listing and Questionnaire
	Questionnaire		
To l	be filled in only if the questionnaire is complete:		
	INTERVIEWER'S NAME:		
	COMPLETION DATE:		_//

APPENDIX 5: SURVEY QUESTIONNAIRE

CONTROL QUESTIONS

Interviewer, please enter the information in response to the following two questions before proceeding with the interview.

* 1. HOUSEHOLD ASSESSMENT NUMBER



* 2. INTERVIEWER'S NAME

DEMOGRAPHICS

Interviewer, please enter the information in response to the following two questions before proceeding with the interview.

* 3. Are you the head of household?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 4. Are you male or female?

 \bigcirc Male \bigcirc Female \bigcirc Not Stated

* 5. What is your age?



* 6. What is your race?

 \bigcirc Black or African

○ White

○ Portuguese

 \bigcirc Asian

O Mixed (Black & White, Black & Other, White & Other)

 \bigcirc Not Stated

Other (Please specify)

* 7. What is your current status? Are you...

\bigcirc Bermudian

O Non-Bermudian: Permanent Resident Certificate Holder

 \bigcirc Non-Bermudian: Spouse of a Bermudian

○ Other Non-Bermudian

(Please specify)

* 8. What is your marital status?

- O Never Married
- Living Together/Cohabitation/Common Law
- \bigcirc Married
- \bigcirc Divorced
- \bigcirc Separated
- \bigcirc Widowed
- \bigcirc Not Stated

* 9. What is the highest level of education you have completed?

- \bigcirc None
- O School Leaving Certificate/High School Diploma
- O Technical/Vocational Certificate (Bermuda College)
- \bigcirc Associate's Degree
- \bigcirc Bachelor's Degree
- \bigcirc Master's Degree
- \bigcirc Doctorate Degree
- O Professional Designation (With or Without Any Prior Academic Qualification)
- $\bigcirc\,\mathsf{Not}\,\mathsf{Stated}$
- Other (Please specify)

EMPLOYMENT & STATUS

* 10. Which of the following categories best describes your employment status?

- Employed/Self-Employed, working 1–39 hours per week
- O Employed/Self-Employed, working 40 or more hours per week
- \bigcirc Not employed, looking for work
- O Not employed, NOT looking for work (e.g. housewife, student, other)
- $\bigcirc \operatorname{Retired}$

 \bigcirc Disabled, not able to work

 \bigcirc Not Stated

* 11. What is your current occupation?

* 12. What is the principal industry of your organisation?

- O Agriculture, Hunting, & Fishing
- Manufacturing
- Electricity, Gas, & Water Supply
- \bigcirc Construction
- O Wholesale and Retail Trade; Repair of Motor Vehicles, Motor Cycles, & Personal and Household Goods
- \bigcirc Hotels and Restaurants
- Transport, Storage, & Communication
- \bigcirc Financial Intermediation
- Real Estate, Renting, & Business Activities
- O Public Administration (Government) and Defence; Compulsory Social Security
- \bigcirc Education
- \bigcirc Health and Social Work
- O Other Community, Social, & Personal Service Activities
- O Private Households with Employed Persons
- \bigcirc Not Stated

Other (please specify)

RISK OF HARM

* 13. In your opinion, what is your risk level of (...). Is (...) of no risk, low risk, moderate risk, high risk, or you don't know the risk?

	No Risk	Low Risk	Moderate Risk	High Risk	l Don't Know the Risk	Not Stated
Smoking cigarettes sometimes	0	0	0	0	0	0
Smoking cigarettes often	0	0	0	0	0	0
Drinking alcoholic beverages sometimes	0	0	0	0	0	0
Drinking alcoholic beverages often	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Becoming drunk	0	\bigcirc	0	0	\bigcirc	\bigcirc
Taking unprescribed tranquillisers/stimulants sometimes	0	\bigcirc	0	0	\bigcirc	\bigcirc
Inhaling solvents sometimes	0	0	0	0	0	0
Smoking marijuana sometimes	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Smoking marijuana often	0	0	0	0	\bigcirc	\bigcirc
Using cocaine sometimes	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Using cocaine often	0	0	0	0	\bigcirc	\bigcirc
Using heroin sometimes	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Using heroin often	0	0	0	0	\bigcirc	\bigcirc
Taking ecstasy sometimes	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Taking ecstasy often	0	0	0	0	\bigcirc	\bigcirc
Using crack cocaine sometimes	0	\bigcirc	\bigcirc	0	0	\bigcirc
Using crack cocaine often	0	0	0	0	0	\bigcirc
Using Ecigarettes sometimes	0	0	\bigcirc	0	0	\bigcirc
Using E-cigarettes often	0	0	0	0	0	\bigcirc

ACCESS

* 14. How easy would it be for you to have access to (...)?

Could not have access to it, easy to access, difficult to access, don't know?

	Could not have access	Easy	Difficult	Don't Know	Not Stated
Marijuana	0	0	0	0	0
Alcohol	0	0	0	0	0
Cocaine	0	0	0	0	0
Crack Cocaine	0	0	\bigcirc	0	0
Ecstasy	0	0	0	0	0
Heroin	0	0	0	0	0

PREVALENCE-OF-USE: CIGARETTES

* 15. Are you male or female?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

16. At what age did you start smoking cigarettes?



* 17. When was the first time you smoked cigarettes?

 \bigcirc In the past 30 days

 \bigcirc More than 1 month ago but less than 1 year ago

 \bigcirc More than a year ago

 \bigcirc Not Stated

* 18. Have you smoked cigarettes in the past 12 months?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 19. Have you smoked cigarettes in the past 30 days?

○ Yes ○ No ○ Not Stated

* 20. About how many cigarettes do you smoke in a typical month?

 \bigcirc 1 to 5 \bigcirc 6 to 10 \bigcirc 11 to 20 (Half - 1 Pack) \bigcirc 2 - 3 Packs \bigcirc 4 - 5 Packs \bigcirc More than 5 Packs

 \bigcirc Not Stated

* 21. During the past 30 days, did someone smoke in your home?

 \bigcirc Yes

 \bigcirc No

 \bigcirc Not Stated

* 22. During the past 30 days, did someone smoke in a closed area in your workplace (in the building, in a work area, or specific office)?

 \bigcirc Yes

 \bigcirc No

 \bigcirc Not Stated

* 23. Have you ever drank alcoholic beverages?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

24. At what age did you start drinking alcoholic beverages?

* 25. When was the first time you drank alcoholic beverages?

- \bigcirc In the past 30 days
- \bigcirc More than 1 month ago but less than 1 year ago
- \bigcirc More than a year ago
- \bigcirc Not Stated

* 26. Have you drank alcoholic beverages in the past 12 months?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 27. Have you drank alcoholic beverages in the past 30 days?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 28. During the past 30 days, how many times did you have five or more standard alcoholic drinks in a single drinking occasion? (e.g., 5 cans of beer, 5 shots of spirits, 5 glasses of wine).

* 29. In the past 30 days, what type(s) of alcoholic beverage did you drink, and with what frequency?

	Some Week Days	Daily	Weekends	Not Stated
Low alcohol content such as beer, Guinness, or Smirnoff Ice	0	0	0	0
Medium alcohol content such as wine, Bailey's, or Malibu	0	\bigcirc	0	\bigcirc
High alcohol content such as whiskey, rum, or gin	0	0	0	0

30. In the past month, how many days have you drank too much and got drunk?

* 31. Have you had trouble with your partner because of alcohol?

- \bigcirc Yes \bigcirc No \bigcirc Not Stated
- * 32. Have you lost friends or partners because of alcohol?
- \bigcirc Yes \bigcirc No \bigcirc Not Stated
- * 33. Have you felt like decreasing the amount of alcohol you drink?
- \bigcirc Yes \bigcirc No \bigcirc Not Stated
- * 34. Do you drink more than you want, without noticing?
- \bigcirc Yes \bigcirc No \bigcirc Not Stated
- * 35. Did you have to drink alcohol in the morning?
- \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 36. When you wake up in the morning after having drunk the night before, have you ever experienced not remembering part of what happened?

○ Yes ○ No ○ Not Stated

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* 37. Does it bother you that you are criticised for the way you drink?

\bigcirc Yes \bigcirc No \bigcirc Not Applicable \bigcirc	\bigcirc Not Stated
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* 38. Do you have friends or family members who get drunk?

○ Yes ○ No ○ Not Stated

39. Have you ridden in a car driven by someone who had been drinking alcohol?

○ Yes ○ No ○ Not Stated

40. Have you ridden on a bike by someone who had been drinking alcohol?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

41. How many of your friends or family members get drunk?

ALCOHOL EXPENDITURE

* 42. What is the quantity of alcohol you drink in a typical week?

* 43. How much money do you spend on the alcohol you drink in a typical week?

PREVALENCE-OF-USE: INHALANTS

* 44. Have you ever used inhalants?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

45. At what age did you start using inhalants?

* 46. Have you used inhalants in the past 12 months?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 47. Have you used inhalants in the past 30 days?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

PREVALENCE-OF-USE: ILLEGAL DRUGS

* 48. Have you ever been curious to try an illegal drug?

○ Yes ○ No ○ Maybe ○ Not Stated

* 49. If you had the chance, would you try and illegal drug?

○ Yes ○ No ○ Maybe ○ Not Stated

* 50. Do you have friends or family members who take illegal drugs such as marijuana or cocaine?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 51. Have you ever used an illegal drug such as marijuana, cocaine, crack, heroin, or drugs without a medical prescription like morphine, tranquilisers, and stimulants?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

PREVALENCE-OF-USE: MARIJUANA

* 52. Have you ever smoked marijuana?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

53. At what age did you start smoking marijuana?



* 54. When was the first time you smoked marijuana?

 \bigcirc In the past 30 days

 \bigcirc More than 1 month ago but less than 1 year ago

 \bigcirc More than a year ago

 \bigcirc Not Stated

* 55. Have you smoked marijuana in the past 12 months?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 56. How often do you use marijuana?

ODaily

 \bigcirc Sometimes during the week

 \bigcirc Sometimes during the month

 \bigcirc Sometimes in the past 12 months

 \bigcirc Only once

 \bigcirc Not Stated

* 57. Have you smoked marijuana in the past 30 days?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

58. In the past 12 months, have you driven a car within two hours of using marijuana?

○ Yes

 \bigcirc No

59. In the past 12 months, have you ridden a bike within two hours of using marijuana?

 \bigcirc Yes

 \bigcirc No

60. In the past 12 months, have you driven a motor vehicle within two hours of using marijuana and alcohol?

 \bigcirc Yes

 \bigcirc No

61. In the past 12 months, have you been a passenger in a car driven by someone who had been using marijuana in the previous two hours?

⊖ Yes

 \bigcirc No

62. In the past 12 months, have you been a passenger on a bike ridden by someone who had been using marijuana in the previous two hours?

 \bigcirc Yes

 \bigcirc No

63. Has marijuana use ever led to health, social, legal or financial problems?

 \bigcirc Yes, but not in the past 12 months

 \bigcirc Yes, in the past 12 months

 \bigcirc No

MARIJUANA EXPENDITURE

* 64. What is the quantity of marijuana you use in a typical week?

* 65. How much money do you spend on the marijuana you use in a typical week?
Nothing, got it free or traded something for it
Between \$1 and \$10
Between \$11 and \$25
Between \$26 and \$50
Between \$51 and \$100
Between \$101 and \$150
Between \$151 and \$250
Between \$251 and \$500
Between \$251 and \$500
Between \$501 and \$750
Between \$1,001 and \$1,250
Over \$1,250
Other (Please specify)

66. What types of marijuana do you use regularly?

Plant parts (buds or leaf)

Oil

🗌 Hashish

Shatter

Wax

Tinctures

Tea or liquid

Edibles (e.g. brownies)

Topical (e.g. cream, ointment, etc.)

Other (please specify)

67. Have you ever used marijuana in any of the following forms? (Choose ALL that apply)

Drinks (tea, juice, etc.)

Edibles (pastries, candy/sweets, cooked/uncooked meals)

Concentrates (oils, shatter, budder wax, etc.)

Joints

Handheld pipe

☐ Water pipe or bong

🗌 Pills

🗌 Vaping

Dab smoking

Tincture

Topical (e.g. cream, ointment, etc.)

I have never used marijuana in any of these forms

Other (please specify)

68. When you use marijuana, how often do you use marijuana mixed with tobacco?

○ Very Frequently

 \bigcirc Occasionally

○ Rarely

 \bigcirc Very Rarely

 \bigcirc Never

PREVALENCE-OF-USE: VAPING

69. Have you ever vaped?

⊖ Yes

 \bigcirc No

70. At what age did you start vaping?

71. When was the first time you vaped?

 \bigcirc In the past 30 days

 \bigcirc More than 1 month ago but less than 1 year ago

 \bigcirc More than 1 year ago

72. Have you vaped in the past 12 months?

 \bigcirc Yes

 \bigcirc No

73. Have you vaped in the past 30 days?

 \bigcirc Yes

 \bigcirc No

74. During the past 30 days, on how many times did you use an electronic vapor product?

 \bigcirc 0 times

 \bigcirc 1 or 2 times

 \bigcirc 3 to 5 times

 \bigcirc 6 to 9 times

 \bigcirc 10 to 19 times

 \bigcirc 20 to 29 times

 \bigcirc All 30 days

75. The last time you vaped, what was in the mist or vapor you inhaled?

 \bigcirc Nicotine

 \bigcirc Marijuana

 \bigcirc Just flavoring

 \bigcirc Other (Please specify)

PREVALENCE-OF-USE: COCAINE

* 76. Have you ever used cocaine?

○ Yes ○ No ○ Not Stated

77. At what age did you start using cocaine?



* 78. When was the first time you tried cocaine?

- \bigcirc In the past 30 days
- \bigcirc More than 1 month ago but less than 1 year ago
- \bigcirc More than a year ago
- \bigcirc Not Stated

* 79. Have you used cocaine in the past 12 months?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 80. How often do you use cocaine?

ODaily

- \bigcirc Sometimes during the week
- \bigcirc Sometimes during the month
- \bigcirc Sometimes in the past 12 months
- \bigcirc Only once
- \bigcirc Not Stated

* 81. Have you used cocaine in the past 30 days?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

COCAINE EXPENDITURE

* 82. What is the quantity of cocaine you use in a typical week?

* 83. How much money do you spend on the cocaine you use in a typical week

PREVALENCE-OF-USE: CRACK

*	84.	Have	you	ever	used	crack?

⊖Yes ⊖No	○ Not Stated
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85. At what age did you start using crack?

* 86. When was the first time you tried crack?

- \bigcirc In the past 30 days
- \bigcirc More than 1 month ago but less than 1 year ago
- \bigcirc More than a year ago
- \bigcirc Not Stated

* 87. Have you used crack in the past 12 months?

- \bigcirc Yes \bigcirc No \bigcirc Not Stated
- * 88. How often do you use crack?
- ODaily
- \bigcirc Sometimes during the week
- \bigcirc Sometimes during the month
- \bigcirc Sometimes in the past 12 months
- \bigcirc Only once
- \bigcirc Not Stated
- * 89. Have you used crack in the past 30 days?
- \bigcirc Yes \bigcirc No \bigcirc Not Stated

CRACK EXPENDITURE

* 90. What is the quantity of crack you use in a typical week?

* 91. How much money do you spend on the crack you use in a typical week?

PREVALENCE-OF-USE: HEROIN

* 92. Have you ever used heroin?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

93. At what age did you start using heroin?



* 94. When was the first time you tried heroin?

- \bigcirc In the past 30 days
- \bigcirc More than 1 month ago but less than 1 year ago
- \bigcirc More than a year ago
- \bigcirc Not Stated

* 95. Have you used heroin in the past 12 months?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

* 96. How often do you use heroin?

ODaily

- \bigcirc Sometimes during the week
- \bigcirc Sometimes during the month
- \bigcirc Sometimes in the past 12 months
- \bigcirc Only once

 \bigcirc Not Stated

* 97. Have you used heroin in the past 30 days?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

HEROIN EXPENDITURE

* 98. What is the quantity of heroin you use in a typical week?

* 99. How much money do you spend on the heroin you use in a typical week?

PREVALENCE-OF-USE: TRANQUILLISERS WITHOUT MEDICAL PRESCRIPTION						
* 100. Have you ever used tranquillisers without a medical prescription?						
\bigcirc Yes \bigcirc No \bigcirc Not Stated						
101. At what age did you start using tranquillisers without a medical prescription?						
* 102. Have you used tranquillisers without a medical prescription in the past 12 months?						
\bigcirc Yes \bigcirc No \bigcirc Not Stated						
* 103. Have you used tranquillisers without a medical prescription in the past 30 days?						
○ Yes ○ No ○ Not Stated						
TRANQUILLISERS WITHOUT MEDICAL PRESCRIPTION EXPENDITURE						
* 104. What is the quantity of tranquillisers without medical prescription you use in a typical week?						
* 105. How much money do you spend on the tranquillisers without a medical prescription you use in a typical week?						
PREVALENCE-OF-USE: STIMULANTS WITHOUT MEDICAL PRESCRIPTION						
* 106. Have you ever used stimulants without a medical prescription?						
\bigcirc Yes \bigcirc No \bigcirc Not Stated						
107. At what age did you start using stimulants without a medical prescription?						
* 108. Have you used stimulants without a medical prescription in the past 12 months?						
\bigcirc Yes \bigcirc No \bigcirc Not Stated						
* 109. Have you used stimulants without a medical prescription in the past 30 days?						
\bigcirc Yes \bigcirc No \bigcirc Not Stated						

STIMULANTS WITHOUT MEDICAL PRESCRIPTION EXPENDITURE

* 110. What is the quantity of stimulants without medical prescription you use in a typical week?

* 111. How much money do you spend on the stimulants without a medical prescription you use in a typical week?

PREVALENCE-OF-USE: OPIUM

* 112. Have you ever used opium?

○ Yes ○ No ○ Not Stated

113. At what age did you start using opium?



* 114. Have you used opium in the past 12 months?

○ Yes ○ No ○ Not Stated

* 115. Have you used opium in the past 30 days?

○Yes ○No ○Not Stated

OPIUM EXPENDITURE

* 116. What is the quantity of opium you use in a typical week?

* 117. How much money do you spend on the opium you use in a typical week?

PREVALENCE-OF-USE: HALLUCINOGENS

* 118. Have you ever used hallucinogens?

○ Yes ○ No ○ Not Stated

119. At what age did you start using hallucinogens?

* 120. Have you used hallucinogens in the past 12 months?

○ Yes ○ No ○ Not Stated

* 121. Have you used hallucinogens in the past 30 days?

○ Yes ○ No ○ Not Stated

HALLUCINOGENS EXPENDITURE

* 122. What is the quantity of hallucinogens you use in a typical week?

* 123. How much money do you spend on the hallucinogens you use in a typical week?

PREVALENCE-OF-USE: HASH

* 124. Have you ever used hash?

\bigcirc Yes	\bigcirc No	\bigcirc Not Stated

125. At what age did you start using hash?

* 126. Have you used hash in the past 12 months?

○ Yes ○ No ○ Not Stated

* 127. Have you used hash in the past 30 days?

○ Yes ○ No ○ Not Stated

HASH EXPENDITURE

* 128. What is the quantity of hash you use in a typical week?

* 129. How much money do you spend on the hash you use in a typical week?

PREVALENCE-OF-USE: ECSTASY

* 130. Have you ever used ecstasy?

○ Yes ○ No ○ Not Stated

131. At what age did you start using ecstasy?



* 132. Have you used ecstasy in the past 12 months?

○ Yes ○ No ○ Not Stated

* 133. Have you used ecstasy in the past 30 days?

○ Yes ○ No ○ Not Stated

ECSTASY EXPENDITURE

* 134. What is the quantity of ecstasy you use in a typical week?

* 135. How much money do you spend on the ecstasy you use in a typical week?

PREVALENCE-OF-USE: OTHER ILLEGAL DRUGS

* 136. Have you ever used any other illegal drugs?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

OTHER ILLEGAL DRUGS EXPENDITURE

* 137. What is the quantity of other illegal you use in a typical week?

* 138. How much money do you spend on the other illegal drugs you use in a typical week?

PREVALENCE-OF-USE: PRESCRIPTION CANNABINOIDS

* 139. Have you ever used prescription cannabinoids (such as marinol, cesamet, sativex)?

 \bigcirc Yes \bigcirc No \bigcirc Not Stated

DRUG MARKET

	Never	During this week	During this month	More than a month ago	Less than a year ago	Don't Know	Not Stated
Marijuana	0	0	0	0	0	0	\bigcirc
Cocaine	\bigcirc	0	0	0	0	0	\bigcirc
Heroin	0	0	0	0	0	0	0
Ecstasy	\bigcirc	0	0	0	0	0	0
Crack Cocaine	0	0	0	0	0	0	0

* 140. When was the last time you were offered any of these drugs, either to buy or to use?

HEALTH

141. Do you think you ever had a problem with your own drug and alcohol use?

 \bigcirc Yes

 \bigcirc No

142. At this time do you consider yourself to be in recovery or recovered from your own problem with drugs or alcohol use?

 \bigcirc Yes

 \bigcirc No

143. Do you think you ever had a problem with your own mental health?

○ Yes

 \bigcirc No

144. At this time do you consider yourself to be in recovery or recovered from your own mental health problems?

 \bigcirc Yes

 \bigcirc No

145. In the past 12 months, have you seen a health professional (e.g. General Practitioner or Psychologist) because of any alcohol use, drug use, emotional problems or behavioral problems?

 \bigcirc Yes

 \bigcirc No

REFERENCES

- Buescher, P. A. (2008). Problems with rated based on small numbers. *Statistical Primer*, (12), 4. Retrieved January 14, 2014, from http://www.schs.state.nc.us/schs/pdf/primer12_2.pdf
- Department for National Drug Control. (2014). 2013 National Household Survey. Report of the National Household Survey on Drug Use and Health among the Adult Population in Bermuda. Government of Bermuda.
- Department for National Drug Control. (2017). 2017 National Household Survey. Report of the National Household Survey on Drug Use and Health among the Adult Population in Bermuda. Government of Bermuda.
- Department for National Drug Control. (2020). Annual Report of the Bermuda Drug Information Network 2020. Government of Bermuda.
- European Monitoring Centre for Drugs and Drug Addiction. (2019). *European Drug Report 2019: Trends and Developments*. Luxembourg: Publications Office of the European Union.
- Harrison, L. D. (1997). The validity of self-reported drug use in survey research: an overview and critique of research methods. NIDA Research Monograph, 167, 17–36.
- National Institute on Drug Abuse (NIDA). (2019). *Drugged Driving*. Retrieved April 1, 2021, from <u>http://</u> www.drugabuse.gov/publications/drugfacts/drugged-driving
- Pan American Health Organization (PAHO). (2018). *Drinking and Driving*. Retrieved April 1, 2021, from <u>https://www.paho.org</u>
- Substance Abuse and Mental Health Services Administration. (2020). Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health (HHS Publication No. PEP20-07-01-001, NSDUH Series H-55). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved April 1, 2021 from https://www.samhsa.gov/data/
- United Nations Office on Drugs and Crime. (2020). *World Drug Report 2020*. United Nations publication, Sales No. E.20.XI.6.