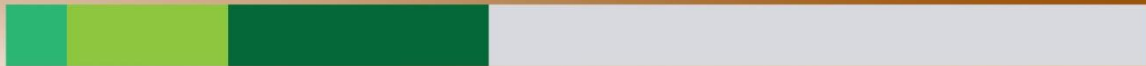
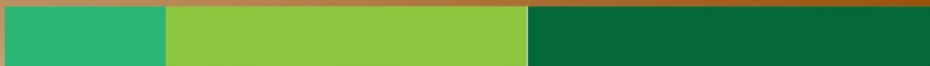




# MARIJUANA SURVEY 2020

Report of the  
Survey of Middle and Senior School Students on Marijuana



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## FOREWORD

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In the fall of 2019, the Government of Bermuda announced that a new national legal framework designed to control the production, distribution, sale, and possession of marijuana in Bermuda would be introduced. The Department for National Drug Control (DNDC) has been collecting data on school-age youth and drug use for many years, including the use of marijuana through the National School Survey of Middle and Senior School Students on Drugs and Health (NSS). The last survey was implemented in October 2019. The well-documented negative impacts of marijuana use during adolescence and local trends identified in the NSS are the impetus for this survey, specific to marijuana.

The NSS 2019 shows that marijuana is the second most commonly used substance among adolescents after alcohol. The NSS also indicates that a number of factors may affect youth prevalence-of-use rates, including perceived harm of marijuana use, pertinent norms endorsed by youth, and parenting behaviors related to youth marijuana use. Youth rates may also be influenced by specific components of marijuana policies, such as locations and numbers of marijuana dispensaries in a given locale (access and availability); regulations of dispensary operations (legal age of use and pursuant controls); and how the overall regulations, allowing the use of marijuana, are operationalised within our country.

This, the Marijuana Survey 2020, is the first of its kind in Bermuda. It examines in more depth, patterns of use by our young people, such as the quantities of marijuana consumed and their use of marijuana for medical and recreational purposes; the marijuana market, for example, where young people get marijuana and the pricing of products; the social impact of marijuana use; and marijuana use perceptions. The survey also examines our young peoples' exposure to education campaigns, public health and safety messages, and their usual source of marijuana products prior to the introduction of the marijuana legislation coming into effect in 2020. Information from this survey will serve as baseline data to compare with subsequent surveys implemented after the Regulated Cannabis Act comes into effect, allowing us to monitor trends in marijuana-related indicators.



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*July, 2020*





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## NOTES, SYMBOLS, AND ABBREVIATIONS

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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:

%	Percent
-	A magnitude of zero or less than half the unit employed
ATOD	Alcohol, Tobacco, and Other Drugs
DNDC	Department for National Drug Control
DOS	Department of Statistics
MS	Marijuana Survey
NSS	National School Survey

### Demographic Profile of Survey Respondents

A representative sample of 536 was selected from a study population of 2,723 students in grade levels M2 through S4 (12 to 18 years), attending six public and four private schools on the Island. Of the students who responded to the survey, 51.2% were male and 47.4% were female. The majority of students considered themselves as Black (52.3%) and mostly residing in Pembroke parish (14.9%).

### Marijuana Prevalence

**About one in seven students has used marijuana in his/her lifetime:** Overall, 14.5% (396) of all survey respondents have reported use of marijuana in their lifetime; whilst 5.0% (136) of all survey respondents reported being current users of marijuana.

**Marijuana use was most prevalent among older students:** Lifetime marijuana use was most prevalent among S4 students (31.8%). Among other grades, lifetime prevalence ranges from a low of 7.4% among M3 students to a high of 26.5% among S3 students.

**Males were more likely to use marijuana than females:** Marijuana use was higher for males (16.3% versus 11.4% for females) at the lifetime use reference period. Similarly, males recorded higher prevalence-of-use in the current reference period (5.9% for males versus 3.6% for females).

**Marijuana use began in middle school:** Age of initiation from marijuana use ranges from a low of 11.8 years for M3 students to a high of 15.3 years for S4 students. Overall, average age of onset is 14.2 years. Males initiated lifetime marijuana use earlier (13.8 years) than their female counterparts (14.9 years).

**First time marijuana use was more than a year ago:** Of the lifetime users, most (56.6% or 224) tried marijuana for the first time “more than a year ago”, ranging from 45.7% among S2 students to 68.9% among S4 students.

**Most students used marijuana in the past year:** The majority of lifetime users of marijuana (68.4% or 271) have reported using marijuana in the past 12 months.

**Students used marijuana only once in their lifetime:** The majority (42.4% or 168) of lifetime users have indicated using marijuana “only once”.



**Marijuana use was most frequent at a friend's house:** The majority of lifetime marijuana users reported that they most often use it "at a friend's house" (160), ranging from 17.1% among M3 student to 54.4% among S4 students.

**Friends were the main source of marijuana:** Nearly seven in 10 (or 260) of the lifetime marijuana users have reported that they usually get it from "friends", ranging from 34.3% among M3 students to 84.3% among S3 students.

**A "joint" was most popular among students:** The majority (285 or 72.0%) of the lifetime marijuana users have reported that they use marijuana in a "joint" form, ranging from 34.3% among M3 students to 84.8% among S2 students.

**Plant parts were the preferred types of marijuana used:** Just over seven in 10 (70.5% or 279) lifetime marijuana users reported that "plant parts (buds or leaf)" were the most preferred types of marijuana. This ranged from 54.4% among S4 students to 84.3% among S3 students.

**Most students did not combine marijuana with other substances:** Of the students who have used marijuana in their lifetime, the majority (71.2%) have not mixed marijuana with tobacco. Similarly, the majority (46.2%) of lifetime marijuana users have not mixed marijuana with other substances. However, nearly three in 10 (27.3%) reported that they had mixed marijuana with "alcohol".


**Belief that marijuana is in school or surrounding area and students engage in illicit behaviour, although not personally evident:** The majority of students believe that there are drugs in the area surrounding or next to their school (61.6%) or at their school (57.8%). While there is the belief that students bring, try, or deal with drugs at their school (48.0%) or outside the school (50.0%), fewer students reported personally seeing a student selling or giving drugs (40.2%) or using drugs at school or in an area surrounding the school (41.2%).

**The influence of friends' use in social settings:** Nearly four in 10 students (35.1%) reported using marijuana "sometimes" because "it is what most of your friends do when they get together".

**Students spent mostly 1 or 2 hours being "high" on a typical day:** Most (121) of the lifetime users reported that they spend between "1 or 2 hours" being "high" on a typical day, ranging from 11.8% among S1 students to 38.8% among S4 students.

## Social Impact

- Of current marijuana users, in the past 12 months, 24.0% of them admitted to driving a motor vehicle within two hours of use. Additionally, 26.0% said that they had driven a motor vehicle



within two hours of consuming marijuana and alcohol. A large proportion (42.1% or 57 students) of current marijuana users said they had been a passenger in a motor vehicle driven by someone who had been using both marijuana and alcohol in the previous two hours.

- In the past 12 months, 63 students (46.2%) admitted that the marijuana they used “was shared around with a group of friends”, followed by “from an acquaintance” (24 or 17.2%) and “from a dealer” (28 or 20.9%).

## Marijuana Perceptions

- About one-fifth of the students (20.8%) believed that marijuana has no long-term health risks, but 30.1% believed that marijuana is addictive. At the same time, about seven in 10 students (69.0% or 1,878) were not aware of the risks of using marijuana, but said they know that marijuana use can be addictive (68.4% or 1,862).
- In terms of public safety, the majority of students “strongly disagreed” (38.1%) that it is safe to drive/ride after using marijuana. A large proportion of students (42.8%) said that driving a motor vehicle after using marijuana “depends on each person, their weight, the quantity of marijuana, and method of consumption”, this was followed by the response being able to drive in “1 hour to just under 3 hours”.

## Policy

- Overall, almost one in five students believed that marijuana is legal. As low as 11.3% among S2 students to 24.1% in M2 believed marijuana is legal in Bermuda.
- Majority of students “completely agreed” (27.3%) or “agreed” (21.4%) with allowing marijuana to be used for medical and therapeutic purposes; however, almost one in four were “neutral” (22.0%) when it came to its use for religious purposes.

## Treatment and Prevention

- No current smokers of marijuana received treatment for their use; however, 1.8% of lifetime smokers and 2.6% of annual smokers said that they received treatment for another substance over the past 12 months. Of those who said they received treatment for another substance, the responses for the length of time in one treatment episode varied from 5 hours, 5 days, 2 months, to 1 year.
- Only 1.1% of the sample of respondents said they knew of a prevention programme for marijuana.



# 1. INTRODUCTION

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## Background

The Regulated Cannabis Act (pending) is a new national legal framework designed to control the production, distribution, sale, and possession of marijuana in Bermuda. The Department for National Drug Control (DNDC) has been collecting additional data to better understand how youth in Bermuda view and use marijuana. This data will be used to evaluate the impact of the proposed legislation, which is intended to be brought into law sometime in 2020, and to support the development of policy and programme initiatives, including public education and awareness activities.

The NSS 2019 estimates the current use (past 30 days) of marijuana to be 7.6% amongst school-age youth and indicates that 13% of Bermuda's youth, age 12 to 18 (or 361), have used marijuana in the past 12 months. However, the NSS was not designed to collect detailed information on marijuana use in Bermuda. Consequently, the DNDC has developed and implemented the Marijuana Survey (MS) to obtain more comprehensive information on marijuana use amongst this population.

## Purpose

The year 2020 marks the first implementation of the Marijuana Survey. It examines in more depth, patterns of use, such as the quantities of marijuana consumed and the use of marijuana for various purposes; the marijuana market, such as sources of marijuana and pricing; and issues of public safety, such as impaired driving. Other information captured, includes exposure to education campaigns and the respondents' usual source of marijuana products prior to the Regulated Cannabis Act coming into effect. Data for the 2020 Marijuana Survey was collected prior to the announcement of this Act and will be compared to subsequent rounds of the survey that will be implemented after the Act comes into effect.

## Objectives

The 2020 Marijuana Survey serves several purposes. Among them is to study changes in use of marijuana products; monitor trends in the prevalence and frequency of its use; examine the prevalence and frequency of antisocial behaviours; determine the social impact of marijuana use on youth; and assess perceptions of the risk of using marijuana for various reasons.



In recent years, Bermuda has experienced a shift in perceptions of harm toward marijuana. Much of the current shift in attitudes is also expressed by today's youth. As the marijuana drug market changes, so too must the ability to track and monitor the new phenomenon.

The findings presented in this report are useful to the DNDC, its stakeholders, and policy makers at all levels of government to: inform substance abuse prevention efforts and intervention programmes, understand the reasons youth choose to use marijuana, to track new forms of marijuana, and to monitor the effect of the Regulated Cannabis Act on the use of marijuana by the Island's young people.

## Survey Limitations

There are a few noteworthy limitations of the current survey. This survey was commissioned to further investigate marijuana use behaviours as a follow-up to the NSS 2019. As such, there were time constraints with getting schools to participate; schools felt that they were not provided with ample notification as in previous surveys. Consequently, two private schools did not inform the DNDC of their participation in the survey, thereby limiting the sample selection from a reduced enrolment list (population frame). There appeared to be a lower priority of some schools to carry out the survey because of competing urgent tasks and curriculum timelines. It is anticipated that future installations will include all private and public schools.

Generally speaking, individual surveys usually cannot provide strong evidence of cause and effect. Given that surveys collect data on public health conditions and risk factors at the same time, it is often difficult to tell which came first, the risk factor or the condition. Without this temporal association, it is very challenging to prove that the reputed risk factor actually causes the condition. A single cross-sectional survey cannot disentangle the different contributions of each of these factors to the others.

Lastly, since the 2020 Marijuana Survey is the first of its kind to be implemented in Bermuda, it is difficult to measure change in the population at this point in time. Once two or more surveys are conducted at different points in time, the Department will be better placed to measure trends in marijuana indicators.



## 2. METHODOLOGY

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### Survey Design

The Marijuana Survey 2020 was administered during the week of January 20<sup>th</sup> to 24<sup>th</sup> to a representative sample of middle and senior school students, between the ages of 12-18 years, in the public and private schools (excluding Mount Saint Agnes and Bermuda High school for Girls) in Bermuda. The survey design is briefly described in the sections below.

### Population Coverage and Participants

The survey targeted 3,111 students in two school phases: (1) middle school grade levels M2 and M3 (excluding M1) and (2) senior school grade levels S1 to S4 (see *Appendix A*). Students' ages in the M2 to S4 grades correspond to approximately 12 to 18 years, although there were some students who were 19 years old within these grades. Although the target population included all students within these grade levels across 12 schools, the study population excluded 388 students who were enrolled in two private schools (Mount Saint Agnes and Bermuda High School for Girls) that did not participate in the survey.

As such, the sampling frame for the survey consisted of 2,723 students enrolled in 10 schools (six public and four private schools). The six public schools comprise of two senior schools and four middle schools. According to the Department of Education, these were the operational schools for the 2019/2020 academic year. The study population was taken from the updated enrolment numbers that were sent to the DNDC from the respective schools prior to the start of the survey.


### Sampling Design

A representative sample of 536 was selected for the Marijuana Survey. It was determined that a sample size of 536 students would be adequate to give the desired level of accuracy and precision required. The sample will produce results at the 99% confidence level with a margin of error of  $\pm 5\%$ . The sample represents approximately 20% of the study population.

A two- stage sampling procedure was used: stratified and simple random sampling:

*Stage One:* the enrolment list of all students meeting the survey inclusion criteria was divided into the various strata (school, grade, and sex). The student ratio for each school, grade, and sex was calculated so that the sample of 536 students could be proportionally distributed





across each stratum. A stratified random sample was used to increase the precision of the data and to ensure proportional representation of students across all schools, grades, and sexes.

*Stage Two:* Simple random sampling was used to select students from each school, grade, and sex, according to the ratio matrix calculated in Stage One. Simple random sampling was used so that each student in each stratum had an equal chance of being selected.

## Data Collection

At the beginning of the planning process, late in 2019, the Department of Education was informed of the opportunity to collaborate on the first ever Marijuana Survey. School principals and administrators were formally notified of the scheduled survey, the staff and time requirements of the schools, and were asked to inform the DNDC of their school's participation and liaison. Of the 12 schools on record, only 10 indicated their interest to be part of this initiative. The two schools which did not participate are two private schools with students in all of the targeted grade levels.

Prior to the commencement of the data collection period, the number of students from each sex, grade, and school was randomly selected. The process of randomly selecting the number of students from each stratum was conducted by the Department of Statistics (DOS).

Data collection for the survey was carried out from Monday, January 20<sup>th</sup> to Friday, January 24<sup>th</sup>; with all participating schools completing the survey during this designated period. Each school conducted the survey in a designated class, under the supervision of a teacher, on the same day and at the same time to reduce contamination of responses. The paper and pencil method was utilised to capture the self-reported responses.

## Supervision and Control

The project team for the survey consisted of staff from the DNDC, who worked closely with an assigned contact person (school survey coordinator) from within each school. The DNDC was mainly responsible for planning the survey, printing the questionnaires, providing logistical assistance to school survey coordinators, analysing the survey results, and preparing the survey report. In addition, survey administrators were given written instructions on the expectations for survey administration in the event that students had any issues with responding to the survey questions. This ensured a uniform approach in the responses given to students, in the participating schools, for the same questions.



## Questionnaire Design and Testing

### *Instrument*

The survey instrument consists of seven sections that cover different aspects of students' marijuana use and perceptions. The questions were adopted from the Bermuda (DNDC's) National School Survey and other Marijuana Surveys conducted in the Caribbean region. The instrument consists of 43 questions. The actual wording of the questions and response options is included in Appendix B of this report.

The sections covered in the questionnaire are:

1. Demographics
2. Marijuana Use
3. Social Impact
4. Marijuana Perceptions
5. Policy
6. Treatment
7. Prevention


Non-sampling errors were minimised by including skip instructions, which allowed students to skip questions that were not to be responded to if they were irrelevant. This method enhanced the timeliness of data collection and the accuracy of the data.

All of the questionnaire items were pre-coded with the exception of three open-ended questions relating to school, age, and understanding of the Misuse of Drugs Amendment Act 2017 (decriminalization of 7 grams of Cannabis).

### *Pretest of the Survey Instrument*

The pretest served the purpose of testing the questionnaire with the aim of making modifications prior to the launch of the survey.

Although the questions had been previously used and proven to be valid in other jurisdictions, the DNDC decided that since this was a new initiative for Bermuda, pretesting needed to be done before the launch of the survey. In addition, some of the questions had to be tailored to the Bermuda context, which required testing for reliability and validity. Further, this initial testing checked for readability, order, timing, overall respondent well-being and reaction, understanding of instructions, skip patterns, response categories, meaning of words, and general format and layout.



This activity was conducted in the earlier part of January 2020 with students from two schools: one public senior school (CedarBridge Academy) and one private school (Bermuda Institute). These schools were selected using convenience sampling and were then contacted for the pretest. They were informed of this activity, its purpose, and that students were needed. In addition, schools were advised that participants were to be representative of the school's demographics. Students were selected by the schools' liaison to participate. The questionnaire was self-administered during a time that was convenient for the survey administrator and students in their respective school. A total of 21 students participated in the pretest, representing both sexes, the main ethnic groups, and most of the grade levels. Each student was rewarded with a gift-certificate for his or her participation.


The appropriate number of questionnaires were put into envelopes along with pencils, survey instructions for the school liaison, and a post-survey questionnaire for each student that assessed their overall opinion of the survey flow, clarity of questions, color scheme, and allowed them to make note of any word(s) of which they were unclear. The survey supplies were delivered to both of the schools by a DNDC staff member.

The findings showed that the time for completion was estimated to be approximately 20 minutes; most students understood the instructions for each section; the questions were easy to read except when the words posed difficulty; all students agreed that the text size and layout of the questions were readable; and most students understood the skip instructions and, in other instances, when explained by the Administrator students proceeded. Additionally, difficult words were identified and noted for modification in the final questionnaire. All of the afore-mentioned findings were considered in finalising the questionnaire where a number of revisions were made based on the pretest findings. These revisions included, but were not limited to, rewording sentences to make them clearer, replacing words with simpler synonyms, changing the color scheme and adding more clarity to instructions.

## **Survey Administration**

### **Consent**

Students' participation in the survey was voluntary, but subject to the consent of a parent or guardian. Permission for students to participate in the survey was obtained through a passive consent procedure (that is, a parent or guardian of each student signs and returns the consent form only if refusing to allow the child to participate; otherwise, permission is considered to be granted). This method was chosen over the active consent procedure as it was thought that the



survey participation rate would not be seriously affected in this way. A passive consent form was sent to the school's contact person to be given to each student. The form was accompanied by a letter to the parent or guardian explaining the purpose of the survey, the anonymity and confidentiality of their child's participation, that non-participation will have no effect on the child's grades, among other relevant information. Students had one week in which to return the form to the school. In total, six students did not receive consent to participate in the survey according to the response forms returned to the DNDC.

### **Pre-Administration**

Enrolment numbers were received from each school in order to obtain an accurate sample from the DOS. This also assisted in ensuring that the correct number of questionnaires were printed. The questionnaires were then packaged in individual envelopes and collated in boxes, accompanied by relevant control forms and instructions for the survey administrators. The boxes containing the materials for the survey were delivered to the schools prior to each school's scheduled survey administration date.

### **Administration**

The survey was administered in the classroom solely under the supervision of the teacher and required approximately 20 minutes to complete. Most schools administered the survey during the advisory, home room, or assembly hall period. Each school's contact person received an approximate number of questionnaires in envelopes to match the respective sample size required from that school. Each survey administrator was then given the *Instructions for Survey Administrators*.

The survey administrator reviewed the instructions with the students. The instructions informed the students that there were no right or wrong answers. The instructions also explained the skip patterns and one example of a question (on lifetime use of marijuana) that may have posed difficulty. Both the administrator and the written instructions on the front of the questionnaire assured students that the survey was anonymous and confidential. Students were then asked to complete the survey and reminded to place the completed questionnaire in the envelope, which can be sealed to preserve confidentiality.

Student cooperation was generally good. Upon completion of the survey, the school's contact person gathered all of the questionnaires as well as completed the control forms for resubmission to the DNDC.



## **Post Administration**

The completed questionnaires were uplifted by the DNDC. They were retrieved from the envelopes, counted, numbered, and batched for data entry. All discrepancies in the count and the numbers indicated by the schools were queried and reconciled.

## **Data Quality**

### **Response Rate**

Of the target sample of 536, a total of 395 students responded to the survey, accounting for a response rate of 73.7%.

### **Validation**

In order to ensure that a high level of accuracy was attained in data entry, checks were made for logical inconsistencies. For example, a person who reported that they were aware of treatment facilities in Bermuda should be able to respond to the question on what is the name of the known facility. Another example is the report of known prevention strategies in Bermuda. These students should be able to respond to the question on the names of the known prevention strategies. A tenth of the questionnaires (approximately 41) was validated by a DNDC staff member. This process was completed by randomly selecting questionnaires for verification. The DNDC staff member reviewed every response in each of the selected questionnaires and corrected any error(s), which the data entry personnel may have entered.

### **Missing Data**

Given that this was a sample survey, which required weighting by grade level for representativeness across grades, imputations were made for four students who did not report their grade level: two students from one private school and two from one public senior school. Imputations for missing grade level is often done by looking at the age that the student reported but, in this case, the four students also left a blank response for the age question. As such, the age was first imputed by inserting the average age for all of the students in the two schools, individually, then the grade level was assigned based on the age range that corresponds to students in that grade. For other instances of missing data (such as for open ended questions), imputations were not made as it would be difficult to assign responses founded on self-report. Hence, missing data was treated as “no answer” or “not stated” and forms part of the total response.



## Data Processing

Responses to the survey questions were captured directly onto the questionnaire by the respondents. Data entry was undertaken, by the DNDC, with a trained external data entry staff performing this function. Steps were taken to ensure confidentiality and reliability of the process and outcome. The process spanned approximately 5 weeks (one week to create the data entry screen; three weeks for manual data entry; and one week for data validation, cleaning, and documentation of the data entry steps and anomalies). No coding of the questionnaire was required since the questions were pre-coded. To guard against transcription errors, care was taken in entering the responses from the paper questionnaires onto the computer. Microsoft Excel was used on an individual computer for data entry, which was integrated into SPSS for data processing. The captured data file was then cleaned and approximately 10% (or 41) of the questionnaires were validated.

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

## Data Analysis

For the purpose of this report, analyses of the survey results were done for each section of the questionnaire and were limited to descriptive analysis of the responses to all questions by the participants. Frequencies of percentages were generated for all questions. The percentages can be interpreted as the proportion of students who feel a certain way about a statement or question. There are instances where a small number or proportion of students provided responses. As standard practice, questions containing less than 10 responses would not be reported as they do not provide meaningful information and are considered unstable from a statistical perspective. With the small number of responses received, for this survey, there was an exception made to the standard practice, to accommodate smaller numbers (the smallest number reported in tables is six).

Since students in grades M2 through S4 participated in this survey, this includes the full range of grade levels in the schools surveyed. As such, the overall survey results can be interpreted as representing the attitudes and behaviours of the student population as a whole. However, overall averages and totals across the full range of grade levels can mask problems within individual grades. Therefore, in trying to make comparisons to normative data, it is important to examine the data grade by grade in addition to looking at combined statistics for all grade levels.

It is important to note that the “overall” statistics in this report are presented with grade and overall weighting since the data collected was only on a sample of the student population. Weighting the data ensures that the students in the surveyed population are well represented.

The results are presented for the overall (grade-level adjusted) surveyed population and, in some instances, by a specific population characteristic, illustrated by using tables and charts accompanied by summary statements. IBM SPSS v. 23 software was used for the analysis of survey data. Charts were created in Microsoft Excel and tables and text were prepared in Microsoft Word.

## Weighting

In order to ensure that the reporting group (sample) was representative of the study population and, given that grade level was the main unit of analysis, a weighting factor was used to adjust grade enrolment and the actual number of students surveyed in each grade. The purpose of this weighting is not to compensate for missing grades, but rather to ensure that the proportion of each grade in the reporting group matches the proportions of enrolled students in those grades surveyed. Ideally, the percentage of students in each grade of the reporting group should match the school’s enrolment to get a true representation of the population. This weighting factor was applied to both the individual grade level and overall statistics.

In order to adjust for any inconsistencies between the reporting group and enrolment grade-level distributions that are shown in Table 1, the results presented in this report are weighted by grade enrolment to reflect the population distribution of grades within the school. For each grade, the grade weight was derived by calculating the number of students enrolled in each grade, divided by the total number of responses obtained for each grade.

Table 1.1

*Weight adjustments*

Grade Level	Study Population (A)	Sample Selected (B)	Responses Collected (C)	Response Rate (%) (C÷B)	Weights (A÷C)
<b>M2</b>	526	104	79	76.0	6.658
<b>M3</b>	475	93	82	88.2	5.792
<b>S1</b>	516	102	81	79.4	6.370
<b>S2</b>	439	86	62	72.1	7.080
<b>S3</b>	434	85	49	57.6	8.857
<b>S4</b>	333	66	42	63.6	7.928
<b>Total</b>	<b>2,723</b>	<b>536</b>	<b>395</b>	<b>73.7</b>	<b>6.893</b>

## 3. RESULTS

This section of the report provides the survey findings by the following sub-sections: demographics, marijuana use, social impact, marijuana perceptions, policy, treatment, and prevention. In some instances, the M2 grade level is not included in the results below due to the absence of data, from students in this cohort, for the topics in question.

### 3.1 Demographics

#### PARTICIPANTS' AVERAGE AGE WAS 14.4 YEARS

A total of 2,723 students (grade level adjusted) responded to the survey. Survey respondents were majority male (51.2%) compared to 47.5% females (see *Table 3.1.1*). Most students were in M2 (19.3%) with the remaining students ranging from S1 (18.9%), M3 (17.4%), S2 (16.1%), S3 (15.9%), and S4 (12.2%). The mean age of participants was 14.4 years with the youngest survey participant being age 12 and oldest age 19. When it came to race, the majority of the students indicated that they considered themselves as "Black" (52.2%) followed by "White" (22.6%). More specifically, 49.3% (702) of boys were "Black" males and 50.7% (721) were "Black" females, while 60.6% (368) indicated being of "White" race and a male, compared to 52.8% (216) who indicated being of "Mixed" race and female. The top three parishes of residence for student participants were: Pembroke (14.9%), Warwick (14.3%), and Sandy's (12.4%).

Table 3.1.1  
*Demographic Characteristics of Survey Participants (Grade Level Adjusted)*

CHARACTERISTICS		GRADE LEVEL										OVERALL			
		M2		M3		S1		S2		S3				S4	
		n	%	n	%	n	%	n	%	n	%			n	%
<b>TOTAL</b>		<b>526</b>	<b>19.3</b>	<b>475</b>	<b>17.4</b>	<b>516</b>	<b>18.9</b>	<b>439</b>	<b>16.1</b>	<b>434</b>	<b>15.9</b>	<b>333</b>	<b>12.2</b>	<b>2,723</b>	<b>100.0</b>
<b>Sex</b>															
	Male	286	54.4	249	52.4	261	50.6	234	53.3	221	50.9	143	42.9	1,394	51.2
	Female	240	45.6	226	47.5	248	48.1	184	41.9	204	47.0	190	57.1	1,292	47.5
	Not Stated	-	-	-	-	7	1.4	21	4.8	9	2.1	-	-	36	1.3
<b>Age (Years)</b>															
	12	439	83.5	6	1.3	-	-	-	-	-	-	-	-	445	16.4
	13	40	7.6	417	87.8	19	3.7	-	-	-	-	8	2.4	484	17.8
	14	13	2.5	23	4.8	395	76.6	7	1.6	-	-	16	4.8	454	16.7
	15	-	-	-	-	57	11.0	382	87.0	27	6.2	8	2.4	474	17.4
	16	-	-	-	-	13	2.5	35	8.0	292	67.3	-	-	340	12.5
	17	-	-	-	-	6	1.2	-	-	53	12.2	246	73.9	305	11.2
	18	-	-	-	-	-	-	-	-	-	-	40	12.0	40	1.5
	19	-	-	-	-	-	-	-	-	-	-	8	2.4	8	0.3
	Not Stated	34	6.5	29	6.1	26	5.0	15	3.4	62	14.3	7	2.1	172	6.3



Table 3.1.1 continued

Demographic Characteristics of Survey Participants (Grade Level Adjusted)

CHARACTERISTICS	GRADE LEVEL										OVERALL			
	M2		M3		S1		S2		S3		S4		N	%
	n	%	n	%	n	%	n	%	n	%	n	%		
<b>TOTAL</b>	<b>526</b>	<b>19.3</b>	<b>475</b>	<b>17.4</b>	<b>516</b>	<b>18.9</b>	<b>439</b>	<b>16.1</b>	<b>434</b>	<b>15.9</b>	<b>333</b>	<b>12.2</b>	<b>2,723</b>	<b>100.0</b>
<b>Race</b>														
Black	286	54.4	232	48.8	242	46.9	255	58.1	257	59.2	151	45.3	1,422	52.2
White	127	24.1	122	25.7	108	21.0	99	22.6	89	20.5	71	21.3	616	22.6
Portuguese	27	5.1	41	8.6	38	7.4	14	3.2	9	2.1	24	7.2	152	5.6
Asian	-	-	17	3.6	6	1.2	-	-	18	4.1	24	7.2	65	2.4
Mixed	87	16.5	58	12.2	89	17.2	50	11.4	62	14.3	63	18.9	409	15.0
Other	-	-	-	-	6	1.2	-	-	-	-	-	-	6	0.2
Not Stated	-	-	5	1.1	27	5.2	21	4.8	-	-	-	-	53	1.9
<b>Parish</b>														
Devonshire	53	10.1	70	14.7	38	7.4	35	8.0	44	10.1	24	7.2	264	9.7
Hamilton	40	7.6	46	9.7	96	18.6	57	13.0	27	6.2	8	2.4	273	10.0
Paget	67	12.7	23	4.8	32	6.2	14	3.2	27	6.2	32	0.3	194	7.1
Pembroke	80	15.2	64	13.5	70	13.6	42	9.6	71	16.4	79	23.7	406	14.9
St. George's	33	6.3	12	2.5	25	4.8	64	14.6	35	8.1	16	4.8	185	6.8
Sandys	87	16.5	64	13.5	45	8.7	14	3.2	80	18.4	48	14.4	336	12.4
Southampton	67	12.7	52	10.9	64	12.4	35	8.0	27	6.2	32	9.6	276	10.1
Warwick	73	13.9	75	15.8	70	13.6	85	19.4	62	14.3	24	7.2	389	14.3
Smith's	7	1.3	64	13.5	70	13.6	57	13.0	62	14.3	56	16.8	315	11.6
Not Stated	19	3.6	5	1.1	6	1.2	36	8.2	-	-	14	4.2	83	3.1

## 3.2 Marijuana Prevalence

### Overall Prevalence

#### ABOUT ONE IN SEVEN STUDENTS HAS USED MARIJUANA IN HIS/HER LIFETIME

Students were asked to report if they “have ever consumed marijuana...” and “when was the first time you have tried...”. Their negative responses (“no” or “never”) to these questions provide the number and proportion of students who reported that they have never used marijuana. Overall, 14.5% (396) of all survey respondents have reported use of marijuana in their lifetime (see Figure 3.2.1).

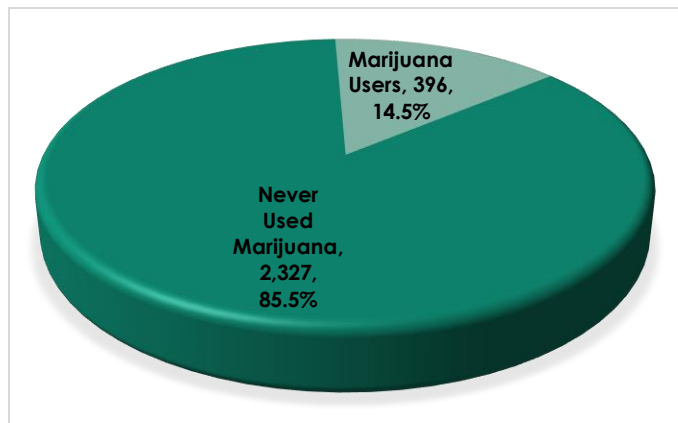


Figure 3.2.1 Marijuana Use by Survey Respondents (Grade Level Adjusted)



## Lifetime and Current Prevalence by Grade Level of Respondent

### MARIJUANA USE WAS MOST PREVALANT AMONG OLDER STUDENTS

When comparing the two main reference periods, overall, just over one in seven (14.5%) of the survey respondents have reported lifetime use of marijuana; whilst 5.0% have reported current use (previous 30-days) (see Figure 3.2.2).

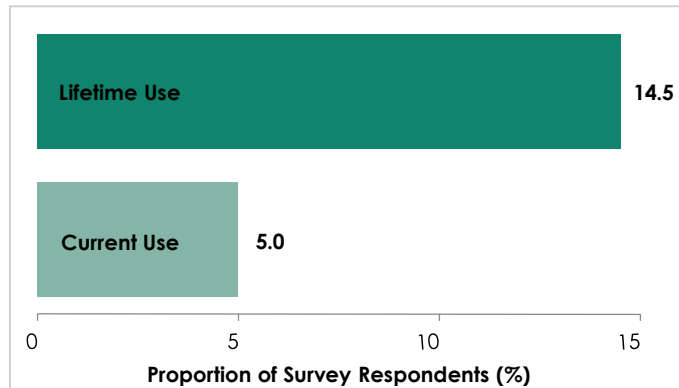


Figure 3.2.2 Lifetime and Current Use of Marijuana Use by Survey Respondents (Grade Level Adjusted)

Marijuana prevalence for individual grade levels is presented in Table 3.2.1. Typically, prevalence-of-use of marijuana increases as students advance to higher

grades. The survey results, in fact, show that students recorded the highest lifetime prevalence-of-use for marijuana (31.8%) among the S4 grade level. Other lifetime prevalence ranges from a low of 7.4% among M3 students to a high of 26.5% among S3 students. Current prevalence-of-use for marijuana was highest among S3 students (10.1%). Other current use prevalence ranges from a low of 1.3% among M3 students to a high of 9.6% among S4 students.

Table 3.2.1

Lifetime Use<sup>1</sup> and Current Use<sup>2</sup> of Marijuana by Grade Level of Survey Respondents (Grade Level Adjusted)

REFERENCE PERIOD	GRADE LEVEL <sup>3</sup>										OVERALL	
	M3 (n = 475)		S1 (n = 516)		S2 (n = 439)		S3 (n = 434)		S4 (n = 333)		(N = 2,723)	
	n	%	n	%	n	%	n	%	n	%	N	%
Lifetime Use	35	7.4	51	9.9	92	21.0	115	26.5	103	31.8	396	14.5
Current Use	6	1.3	19	3.7	35	8.0	44	10.1	32	9.6	136	5.0

<sup>1</sup> Students responding to “ever” consuming marijuana (asked of all survey respondents).

<sup>2</sup> Of students who responded to “ever” consuming marijuana, and reported use in the past 12 months, who then have consumed it in the “past 30 days” (asked only of all lifetime and recent users but reported as a proportion of all survey respondents).

<sup>3</sup> Percentages are computed with the number as a proportion of the grade level total.

## Lifetime and Current Prevalence by Sex of Respondent

### MALES WERE MORE LIKELY TO USE MARIJUANA THAN FEMALES

The results in Table 3.2.2 show that marijuana prevalence was higher for males (16.3% versus 11.4% for females) at the lifetime use reference period. Similarly, males recorded higher prevalence-of-use in the current reference period (5.9% for males versus 3.6% for females).

Table 3.2.2  
Lifetime and Current Use of Marijuana by Sex of Survey Respondents (Grade Level Adjusted)

REFERENCE PERIOD	SEX (%)		
	Male (n = 1,394)	Female (n = 1,292)	Total (N = 2,723)
Lifetime Use	16.3	11.4	13.7
Current Use	5.9	3.6	4.7

## Age of Onset

### MARIJUANA USE BEGAN IN MIDDLE SCHOOL

Marijuana is generally considered to be one of the major gateway drugs, usually preceding the use of hard drugs.<sup>4</sup> The average age of onset is based only on the ages of first use of students who reported ever engaging in the behaviour, that is, lifetime users.

### Average Age of Onset by Grade Level and Sex of Survey Respondent

Figure 3.2.3 presents the average age of onset (in years) that students reported marijuana use within each grade level. Average age of initiation for marijuana use ranges from a low of 11.8 years for M3 students to a high of 15.3 years for S4 students, with an overall average age of onset being 14.2 years.



Figure 3.2.3 Average Age of Onset for all Lifetime Users by Survey Respondents (Grade Level Adjusted)

The majority of the lifetime users of marijuana showed that males (13.8 years) initiated use earlier than their female (14.9 years) counterparts.

<sup>4</sup> National Center on Addiction and Substance Abuse. (1994). National Study Shows “Gateway” Drugs Lead to Cocaine Use. In R. J. Hackett (Ed.), *Columbia University Record*, 20(4). Columbia University, NY: Office of Public Information. [http://www.columbia.edu/cu/record/archives/vol20/vol20\\_iss10/record2010.24.html](http://www.columbia.edu/cu/record/archives/vol20/vol20_iss10/record2010.24.html) (accessed January 25, 2012).

## First Use

### FIRST TIME MARIJUANA USE WAS MORE THAN A YEAR AGO

Surveyed youths were asked to report when they have used or tried marijuana for the first time (see Table 3.2.3). Of the lifetime users, most (224 or 56.6%) tried marijuana for the first time “more than a year ago”, with use ranging from 45.7% among S2 students to 68.9% among S4 students. On the other hand, there were 105 (26.5%) lifetime marijuana users who have tried it for the first time “more than 1 month ago, less than 1 year”, with use ranging from 7.8% among S4 students to 38.3% among S3 students. There were 17 students who reported lifetime use of marijuana, but did not state when they first used it.

Table 3.2.3

First Use of Marijuana by Grade Level of Survey Respondents (Grade Level Adjusted)

FIRST USE	GRADE LEVEL										OVERALL <sup>5</sup>	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	N	%	n	%	n	%	n	%
During the past 30 days	6	17.1	6	11.8	21	22.8	9	7.8	8	7.8	50	12.6
More than 1 month ago, less than 1 year	12	34.2	13	25.5	28	30.4	44	38.3	8	7.8	105	26.5
More than a year ago	17	48.5	32	62.7	42	45.7	62	53.9	71	68.9	224	56.6

Note: This table references those students who reported lifetime marijuana use.

## Recent Use

### MOST STUDENTS USED MARIJUANA IN THE PAST YEAR

The majority of lifetime users of marijuana (271) have reported using marijuana in the past 12 months (see Table 3.2.4). This corresponds to 68.4% of all lifetime marijuana users. Annual use ranged from 54.4% among S4 students to 77.4% among S3 students.

Table 3.2.4

Marijuana Use in the Past 12 Months by Grade Level of Survey Respondents (Grade Level Adjusted)

ANNUAL USE	GRADE LEVEL										OVERALL <sup>6</sup>	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	n	%	n	%	n	%	n	%
Yes	23	65.7	32	62.7	71	77.2	89	77.4	56	54.4	271	68.4
No	6	17.1	19	37.3	21	22.8	27	23.5	32	31.1	105	26.5

Note: This table references those students who reported lifetime marijuana use.

<sup>5</sup> There were 17 lifetime users who did not respond to this question.

<sup>6</sup> There were 20 lifetime users who did not respond to this question.

## Frequency of Use

### STUDENTS USED MARIJUANA ONLY ONCE IN THEIR LIFETIME

The majority (168) of lifetime users have indicated using marijuana “only once” (see Table 3.2.5). This represents 42.4% of all lifetime marijuana users, with use ranging from 37.3% among S1 student to 65.7% among M3 students. There were 26.8% of all lifetime users who reported using marijuana “sometimes in the past 12 months”, with most (38.3%) being among S3 students, and 8.1% who said “daily”, with most (15.5%) being from the S4 grade level.

Table 3.2.5

Frequency of Marijuana Use for Lifetime Users by Grade Level (Grade Level Adjusted)

FREQUENCY OF USE	GRADE LEVEL										OVERALL <sup>7</sup>	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	N	%	n	%	n	%	n	%
Only once	23	65.7	19	37.3	42	45.7	44	38.3	40	38.8	168	42.4
Sometimes in the past 12 months	12	34.3	6	11.8	28	30.4	44	38.3	16	15.5	106	26.8
Sometimes during the month	-	-	19	37.3	7	7.6	18	15.7	8	7.8	52	13.1
Sometimes during the week	-	-	6	11.8	-	-	-	-	8	7.8	14	3.5
Daily	-	-	-	-	7	7.6	9	7.8	16	15.5	32	8.1

## Location of Use

### MARIJUANA USE WAS MOST FREQUENT AT A FRIEND'S HOUSE

The majority of lifetime marijuana users reported that they most often use it “at a friend's house” (160), ranging from 17.1% among M3 student to 54.4% among S4 students (see Table 3.2.6). Students also reported use “at home” (89), with the majority among M3 students (34.3%), or “at the corner/block” (43), with the majority in the S1 grade level (25.5%). Overall, this represents 40.4%, 22.5%, and 10.9% of all lifetime users, respectively. Very few of these students have reported using marijuana “at other social events” (38) or “at school” (21).

<sup>7</sup> There were 24 lifetime users who did not respond to this question.

Table 3.2.6

Location Where Lifetime Users Most Often Use Marijuana by Grade Level (Grade Level Adjusted)

LOCATION	GRADE LEVEL										OVERALL <sup>8</sup>	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	n	%	n	%	n	%	n	%
At Home	12	34.3	13	25.5	21	22.8	27	23.5	16	15.3	89	22.5
At School	6	17.1	-	-	7	7.6	-	-	8	7.8	21	5.3
At the Corner/Block	-	-	13	25.5	21	22.8	9	7.8	-	-	43	10.9
At a Friend's House	6	17.1	19	37.3	35	38.0	44	38.3	56	54.4	160	40.4
At Other Social Events	6	17.1	6	11.8	-	-	18	15.7	8	7.8	38	9.6
Other	6	17.1	-	-	-	-	9	7.8	8	7.8	23	5.8

Note: There were no responses for the location response category of "At Sporting Events".

## Source of Marijuana

### FRIENDS WERE THE MAIN SOURCE OF MARIJUANA

Nearly seven in 10 of the lifetime marijuana users have reported that they usually get it from "friends" (260), ranging from 34.3% among M3 students to 84.3% among S3 students, while 45 students got marijuana from a "street pusher" (see Table 3.2.7). Overall, this corresponds to 65.7% and 11.4% of all lifetime marijuana users, respectively. Very few lifetime marijuana users have obtained the marijuana from their "parents" or "siblings" (13), which occurred mostly among the senior school students (S1 to S4).

Table 3.2.7

Source of Marijuana for Lifetime Users by Grade Level (Grade Level Adjusted)

SOURCE	GRADE LEVEL										OVERALL <sup>9</sup>	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	n	%	n	%	n	%	n	%
Friend	12	34.3	32	68.6	71	77.2	97	84.3	48	46.6	260	65.7
Parents	-	-	13	25.5	-	-	-	-	-	-	13	3.3
Brother/Sister	6	17.1	-	-	7	7.6	-	-	-	-	13	3.3
Street Pusher	-	-	6	11.8	14	15.2	9	7.8	16	15.5	45	11.4
Other	6	17.1	-	-	-	-	-	-	-	-	6	1.5

Note: There were no responses for the source response category of "Other Relative (s)"

<sup>8</sup> There were 22 lifetime users who did not respond to this question.

<sup>9</sup> There were 59 lifetime users who did not respond to this question.

## Form of Marijuana Used

### A “JOINT” WAS MOST POPULAR AMONG STUDENTS

The majority of the lifetime marijuana users have reported that they use marijuana in a “joint” form (285), ranging from 34.3% among M3 students to 84.8% among S2 students (see Table 3.2.8). This is closely followed by use in the “edible” form (152), with the majority of students being among the M3 grade level (48.6%). Overall, this corresponds to 72.0% and 38.4% of all survey respondents, respectively. Fewer lifetime marijuana users have reported using marijuana in a “vaping” (92 or 23.2%) or “concentrate” form (91 or 23.0%).

Table 3.2.8

Form of Marijuana Used for Lifetime Users by Grade Level (Grade Level Adjusted)

FORM OF MARIJUANA	GRADE LEVEL										OVERALL	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	n	%	n	%	n	%	n	%
Drinks (tea, juice etc.)	-	-	-	-	14	15.2	27	23.5	8	7.8	49	12.4
Edibles (pastries, candy/sweets, etc.)	17	48.6	6	11.8	28	30.4	53	46.1	48	46.6	152	38.4
Concentrates (oils, shatter, budder wax, etc.)	6	17.1	13	25.5	14	15.2	18	15.7	40	38.8	91	23.0
Joints	12	34.3	19	37.3	78	84.8	97	84.3	79	76.7	285	72.0
Handheld pipes	-	-	-	-	7	7.6	9	7.8	16	15.5	32	8.1
Water pipe or bong	-	-	6	11.8	14	15.2	18	15.7	32	31.1	70	17.7
Pills	-	-	-	-	7	7.6	-	-	8	7.8	15	3.8
Vaping	12	34.3	19	37.3	28	30.4	9	7.8	24	23.3	92	23.2
Dab smoking	-	-	13	25.5	14	15.2	9	7.8	8	7.8	44	11.1
Topical (cream, ointment, etc.)	-	-	6	11.8	-	-	9	7.8	-	-	15	3.8
None of these forms	-	-	-	-	14	15.2	-	-	8	7.8	22	5.6

Note: There were no responses for “Tincture” and “Other” forms of marijuana.

## Type of Marijuana Used

### PLANT PARTS WERE THE PREFERRED TYPES OF MARIJUANA USED

In terms of the type of marijuana (see Table 3.2.9), the majority of lifetime users (279) reported using “plant parts (buds or leaf)”. This ranged from 54.4% among S4 students to 84.3% among S3 students. Overall, this corresponds to 70.5% of all lifetime marijuana users. Fewer lifetime marijuana users have reported using other types of marijuana, such as “hashish” (28) and “edibles” (14).

Table 3.2.9

Type of Marijuana Used for Lifetime Users by Grade Level of Survey Respondents (Grade Level Adjusted)

TYPE OF MARIJUANA	GRADE LEVEL										OVERALL <sup>10</sup>	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	n	%	n	%	n	%	n	%
Plant Parts (buds or leaf)	23	65.7	32	62.7	71	77.2	97	84.3	56	54.4	279	70.5
Hashish	-	-	6	11.8	14	15.2	-	-	8	7.8	28	5.1
Wax	-	-	-	-	7	7.6	-	-	-	-	7	1.8
Edibles (brownies, etc.)	6	17.1	-	-	-	-	-	-	8	7.8	14	3.5
Topical (cream, ointment, etc.)	-	-	6	11.8	-	-	-	-	-	-	6	1.5

Note: There were no responses for "Oil, Shatter, Tinctures, and Tea or Liquid" type of marijuana.

## Prevalence of Combining Marijuana with Tobacco

### MOST STUDENTS DID NOT COMBINE MARIJUANA WITH TOBACCO

Table 3.2.10 shows that of those students who have used marijuana in their lifetime, the majority (71.2%) have not mixed marijuana with tobacco; whereas, only 5.8% of these students have mixed marijuana and tobacco "occasionally" and 4.0% reported mixing marijuana with tobacco "frequently".

Table 3.2.10

Prevalence of Combining Marijuana with Tobacco for Lifetime Users by Grade Level (Grade Level Adjusted)

FREQUENCY OF USE	GRADE LEVEL										OVERALL <sup>11</sup>	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	n	%	n	%	n	%	n	%
Never	35	100.0	38	74.5	64	69.6	89	77.4	56	54.4	282	71.2
Very Rarely	-	-	-	-	14	15.2	9	7.8	8	7.8	31	7.8
Rarely	-	-	6	11.8	7	7.6	-	-	-	-	13	3.3
Occasionally	-	-	6	11.8	-	-	9	7.8	8	7.8	23	5.8
Frequently	-	-	-	-	7	7.6	9	7.8	-	-	16	4.0

Note: There were no responses for the "Very Frequently" and "Always" response categories.

<sup>10</sup> There were 62 lifetime users who did not respond to this question.

<sup>11</sup> There were 31 lifetime users who did not respond to this question.



## Prevalence of Combining Marijuana with Other Substances

### MOST STUDENTS DID NOT COMBINE MARIJUANA WITH OTHER SUBSTANCES

Table 3.2.11 shows that of those students who have used marijuana in their lifetime, the majority (46.2%) have not mixed marijuana with other substances; whereas, nearly three in 10 (27.3%) reported that they have mixed marijuana with “alcohol”. Fewer lifetime users have mixed marijuana with “pain killers/sedatives” (7.1%). Combining substances was reported to occur more frequently among the senior level students (S1 to S4).

Table 3.2.11

Prevalence of Combining Marijuana with Other Substances by Grade Level for Lifetime Users (Grade Level Adjusted)

SUBSTANCE	GRADE LEVEL										OVERALL <sup>12</sup>	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	n	%	n	%	n	%	n	%
Tobacco/Cigarettes	-	-	13	25.5	21	22.8	-	-	8	7.8	42	10.6
Alcohol	-	-	13	25.5	28	30.4	35	30.4	32	31.1	108	27.3
Painkillers/Analgesics	-	-	6	1.5	14	15.2	-	-	8	7.8	28	7.1
Sedatives/Tranquillisers	-	-	-	-	7	7.6	-	-	-	-	7	1.8
Hallucinogens	-	-	6	1.5	-	-	-	-	-	-	6	1.5
Amphetamines	-	-	-	-	7	7.6	-	-	-	-	7	1.8
No other substance	29	82.9	25	49.0	35	38.0	62	53.9	32	31.1	183	46.2

Note: There were no responses for the “Ecstasy”, “Cocaine/Crack Cocaine”, and “Other “categories.

## Average Amount of Marijuana Used

On average, of those students who have used marijuana in their lifetime, the majority (32.1%) of them reported using an average of 0.4 grams of marijuana per day.

<sup>12</sup> There were 15 lifetime users who did not respond to this question.



## Perception of Marijuana Use at School or in the Surrounding Area

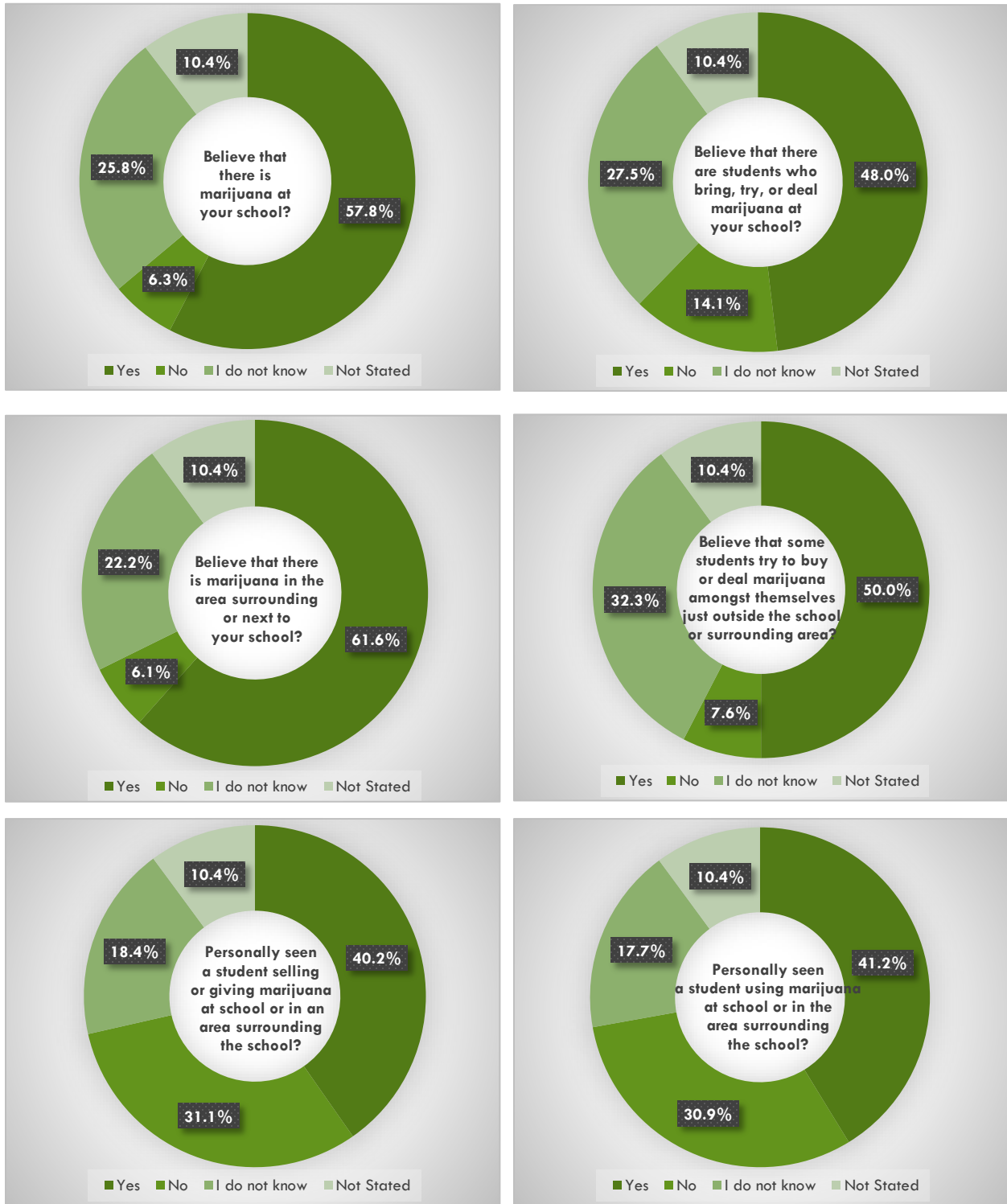


Figure 3.2.4 Perception of marijuana use at school, outside the school, or in surrounding area (Grade Level Adjusted)



Figure 3.2.4 shows that just over six in 10 students (61.6%) believe that there is marijuana in the area surrounding or next to their school. More than half of the students believe that there is marijuana at their school (57.8%), while just under half believe that there are students who bring, try, or deal marijuana at their school (48.0%); and half who believe some students try to buy or deal marijuana amongst themselves just outside the school or surrounding area (50.0%). Fewer students, about one in four, reported personally seeing a student selling or giving marijuana (40.2%) and 41.2% reported seeing a student using marijuana at school or in an area surrounding the school.

## Reason for Marijuana Use

### THE INFLUENCE OF FRIENDS' USE IN SOCIAL SETTINGS

Lifetime marijuana users have reported that they use marijuana for a variety of reasons. Table 3.2.12 shows that most lifetime users “never/almost never” use marijuana for the stated reasons. Nearly four in 10 students (35.1%) reported using marijuana “sometimes” because “it is what most of your friends do when they get together”.

Table 3.2.12

Reason for Marijuana Use of Lifetime Users by Grade Level (Grade Level Adjusted)

REASON	FREQUENCY (n = 396)											
	Never/ Almost Never		Sometimes		Often		Always/ Almost Always		Don't Know		Not Stated	
	n	%	n	%	n	%	n	%	n	%	n	%
As a way to celebrate	121	30.5	81	20.5	32	8.1	30	7.6	84	21.2	49	12.4
Most friends do when get together	57	14.4	139	35.1	31	7.8	60	15.2	68	17.2	41	10.4
To be sociable	182	46.0	59	14.9	8	2.0	21	5.3	68	17.2	58	14.6
It is customary on special occasions	142	35.9	64	16.2	17	4.3	7	1.8	94	23.7	73	18.4
Makes a gathering more enjoyable	120	30.3	81	20.5	35	8.8	49	12.4	62	15.7	49	12.4
To relax	81	20.5	84	21.2	36	9.1	93	23.5	47	11.9	55	13.9
To forget worries	139	35.1	65	16.4	9	2.3	85	21.5	52	13.1	46	11.6
More self-confident or sure of self	199	50.3	36	9.1	9	2.3	29	7.3	68	17.2	55	13.9
Helps depressed or nervous feelings	153	38.6	44	11.1	32	8.1	53	13.4	60	15.2	55	13.9
To cheer up when in a bad mood	144	36.4	59	14.9	30	7.6	46	11.6	61	15.4	55	13.9
Like the feeling	84	21.2	77	19.4	53	13.4	80	20.2	47	11.9	55	13.9
It's exciting	130	32.8	46	11.6	40	10.1	57	14.4	62	15.7	62	15.7
To get high	94	23.7	73	18.4	34	8.6	71	17.9	62	15.7	62	15.7
It is fun	100	25.3	65	16.4	40	10.1	74	18.7	62	15.7	55	13.9
It makes you feel good	123	31.1	36	9.1	46	11.6	80	20.2	55	13.9	55	13.9

## Time Spent Being “High” on a Typical Day

### STUDENTS SPENT MOSTLY 1 OR 2 HOURS BEING “HIGH” ON A TYPICAL DAY

Most of the lifetime users (121) reported that they spend between “1 or 2 hours” being “high” on a typical day; ranging from 11.8% among S1 students to 38.8% among S4 students (see Table 3.2.13). There were 25.3% (or 100) who indicated that they spend “less than 1 hour” being “high” on a typical day. Fewer students (63) reported being “high” for “3 or 4 hours” on a typical day, which corresponds to 15.9% of all lifetime marijuana users.

Table 3.2.13

*Time Spent Being “High” on a Typical Day for Lifetime Users by Grade Level (Grade Level Adjusted)*

HOURS	GRADE LEVEL										OVERALL <sup>13</sup>	
	M3 (n = 35)		S1 (n = 51)		S2 (n = 92)		S3 (n = 115)		S4 (n = 103)		(n = 396)	
	n	%	n	%	n	%	n	%	n	%	n	%
Less than 1	12	34.2	25	49.0	21	22.8	18	15.7	24	23.3	100	25.3
1 or 2	12	34.2	6	11.8	28	30.4	35	30.4	40	38.8	121	30.6
3 or 4	6	17.1	-	-	14	15.2	35	30.4	8	7.8	63	15.9
5 or 6	-	-	6	11.8	7	7.6	9	7.8	-	-	22	5.6
7 or more	-	-	-	-	7	7.6	-	-	-	-	7	1.8

## 3.3 Social Impact


A series of questions were asked of respondents<sup>14</sup> to gauge the impact of marijuana use behaviours on their everyday life. Items were included on topics such as: effect of marijuana use on health, social, legal or financial problems; driving while intoxicated with marijuana; source of marijuana, purchase price, choice of source, time of use; and family/friends influence on use.

### Healthy and Safety

Looking at safety and public health, in the past 12 months, there were a number of current marijuana users (24.0%) who admitted to driving a motor vehicle within two hours of using marijuana. Additionally, 26.0% said that they had driven a motor vehicle within two hours of consuming marijuana and alcohol. A large proportion (42.1% or 57) of current users of marijuana said that they had been a passenger in a motor vehicle driven by someone who had been using both marijuana and alcohol in the previous two hours. There were 22.9% of current users who also

<sup>13</sup> There were 83 lifetime users who did not respond to this question.

<sup>14</sup> Low numbers in responses meant that grade level results could not be reported. In some cases, there were less than 10 responses.



said that they used marijuana in situations that could be physically hazardous, such as driving/riding.

## **Marijuana Market**

In the past 12 months, 63 students (46.2%) who currently used marijuana admitted that the marijuana they used “was shared around with a group of friends”, followed by “from an acquaintance” (24 or 17.2%) and “from a dealer” (28 or 20.9%). In terms of the money used to purchase marijuana, 32.9% or 45 students admitted spending “nothing” on marijuana as they “got it free or traded something for it”. This was followed by paying “between \$26-\$50” (16 or 11.7%) and spending “between \$11 and \$25” (15 or 11.0%). When selecting the three most important factors in deciding on a source from which to buy marijuana, “quality and safety” came first (114 or 83.8%), then “location” (63 or 46.3%), followed by “accessible when I want” (63 or 46.3%), and lastly the “lowest price” (29 or 21.3%).

## **Marijuana Use Behaviours**

When current marijuana users were asked about the frequency of smoking marijuana before midday, most of them admitted that they “never” (62 or 45.6%) smoked marijuana before midday, followed by “very often” (25 or 18.2%), “fairly often” (15 or 11.0%), “sometimes” (12 or 8.9%), and “rarely” (7 or 5.2%). When asked if they had memory/concentration problems when smoking marijuana, 53 or 38.8% said “rarely”, 47 or 34.5% said “never”, 8 or 5.8% said “sometimes”, 7 or 5.2% said “very often”, and 7 or 5.2% said fairly often. Almost two in five current users (39.7%) admitted that friends/family “never” told them to reduce their marijuana use. This was followed by being told “rarely” (31.6%) and “fairly often” (18.2%). When asked about trying to reduce or stop marijuana use without succeeding, 64 students or 46.9% said “never”, 27 or 19.9% said “rarely”, 15 or 11.0% said “sometimes”, 9 or 6.5% said “very often”, and 7 or 5.2% said “fairly often”.

There were a small number of current marijuana users who admitted that they failed to do what was normally expected because of marijuana use; seven students said “yes” (5.2%), but not in the past 12 months and six students (4.2%) said “yes, in the past 12 months”. Lastly, current users were asked if they had a friend/relative or anyone else who expressed concern about their marijuana use; seven of them (5.2%) said “yes, but not in the past 12 months” and 15 (10.7%) said “yes, in the past 12 months”. Concerning trying to control, cut down, or stop using marijuana but NOT able, 16 (11.7%) current users said “yes, but not in the past 12 months” and 14 (10.1%) said “yes, in the past 12 months”.

## 3.4 Marijuana Perceptions

### Overall Perception

Students were asked about their level of agreement on four marijuana related statements. Overall, a large number of students (20.8%) believed that marijuana has no long-term health risks (see Figure 3.4.1); however, 30.1% “agreed” that marijuana is addictive (see Figure 3.4.2). The majority of students strongly “disagreed” (38.1%) that it is safe to drive/ride after using marijuana (see Figure 3.4.3). Lastly, when it came to marijuana overdose, 33.1% said they agreed that one cannot overdose on marijuana (see Figure 3.4.4).

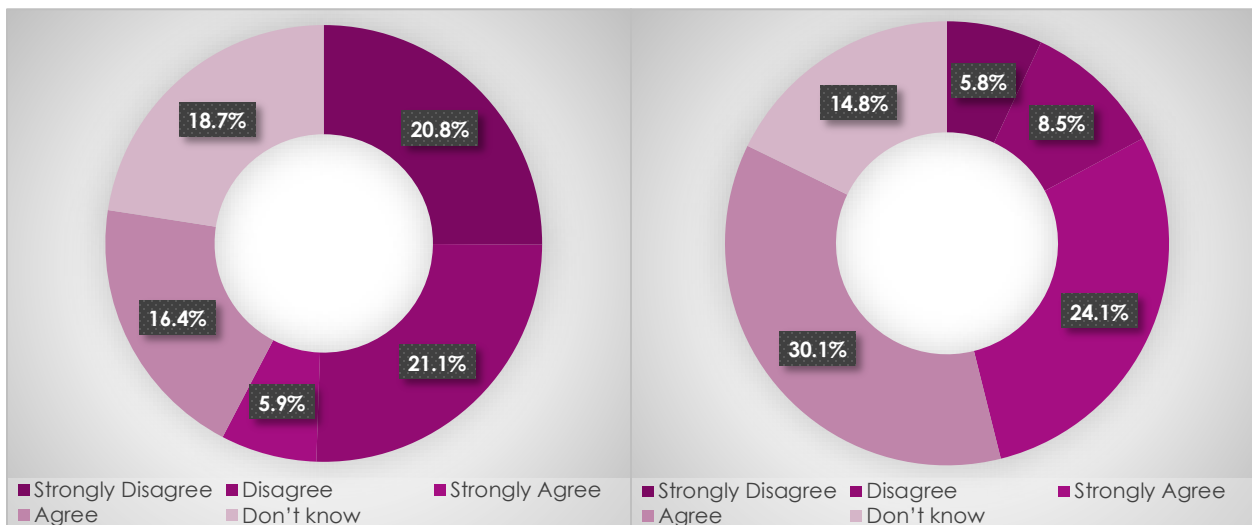


Figure 3.4.1 Overall Perception of "Marijuana has no long-term health risks".

Figure 3.4.2 Overall Perception of "Marijuana is addictive".

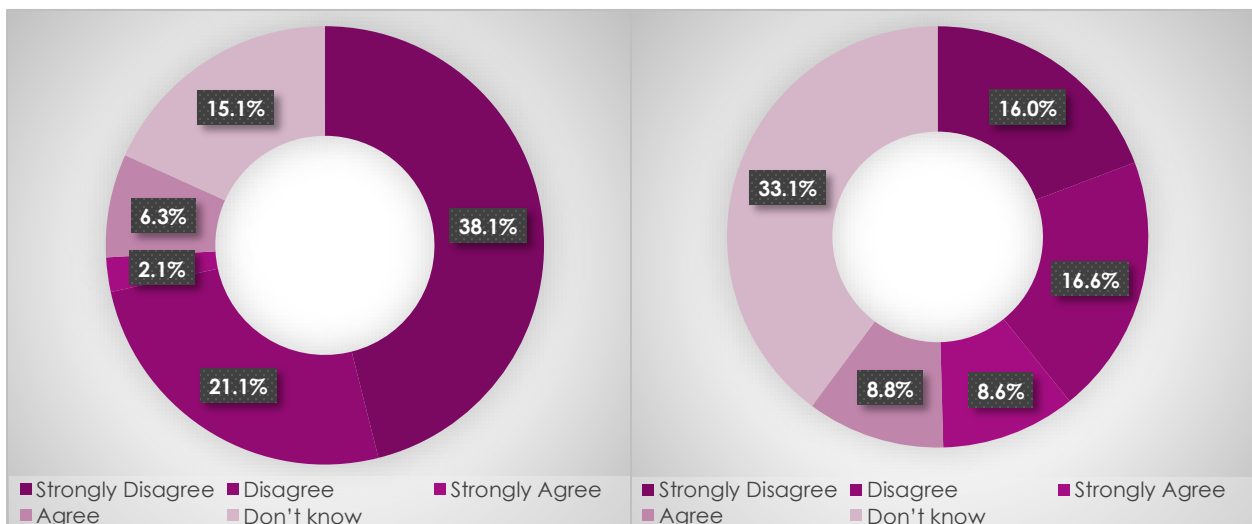


Figure 3.4.3 Overall Perception of "Safe to drive/ride after using marijuana".

Figure 3.4.4 Overall Perception of "Can't overdose on marijuana".

## Grade Level Perception

While students in lower grades, such as M2 and M3, “strongly disagree” and “disagree” that marijuana has no long-term health risks, their counterparts in S1, S2, and S4, were of a different view; they more often “agreed” with “there are no accompanying long-term health risks involved with marijuana use” (see Figure 3.4.5). Figure 3.4.6 shows that despite respondents’ grade level, most of them perceived marijuana to be addictive (“strongly agree” and “agree”). On the other hand, most respondents, regardless of their grade level, “strongly disagree” that it is safe to drive/ride after using marijuana (see Figure 3.4.7). The general consensus among respondents in the various grade level is that they “don’t know” whether or not one can overdose on marijuana (see Figure 3.4.8).

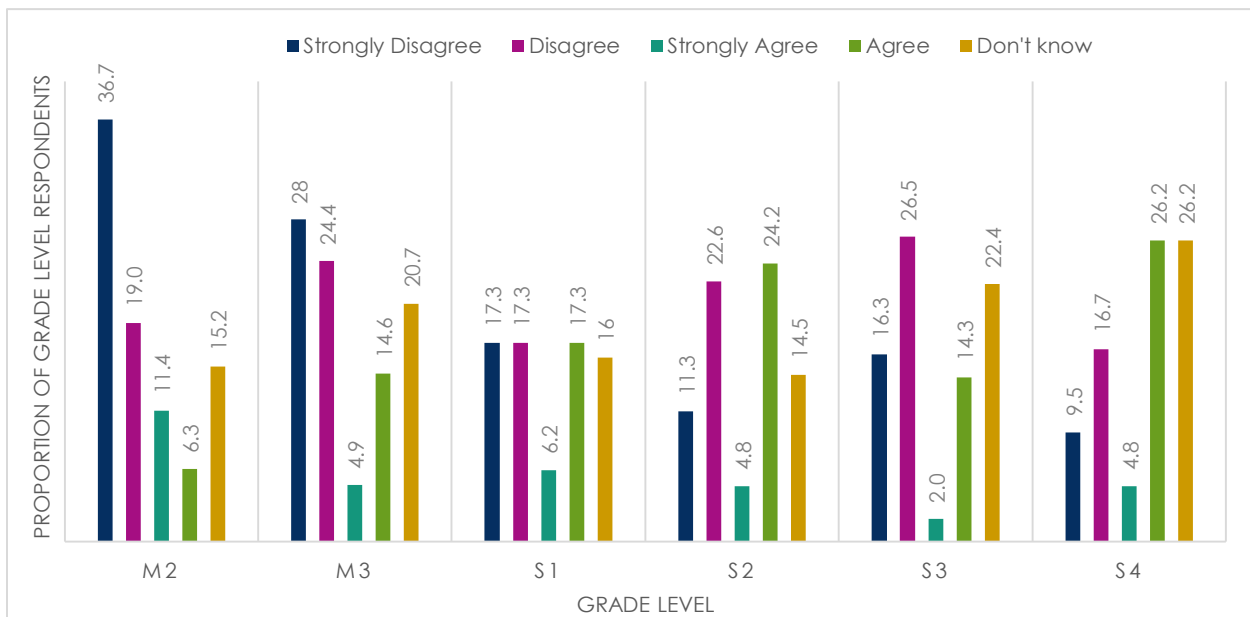


Figure 3.4.5 Perception of “Marijuana has no long-term health risks” by (weighted) grade level.

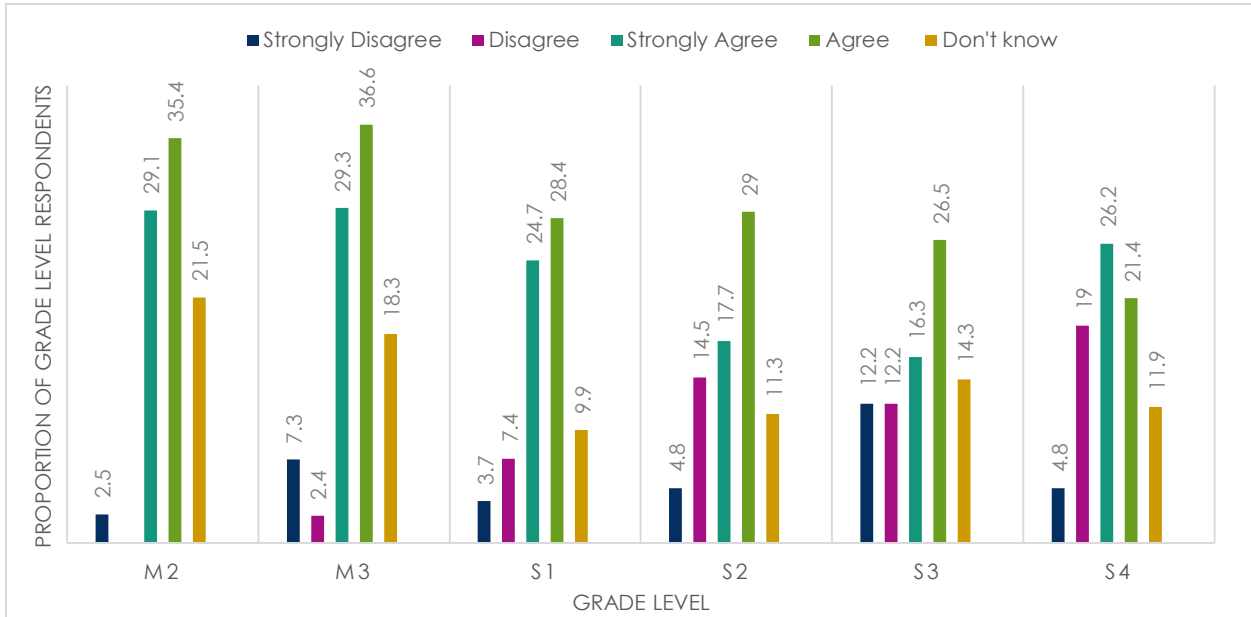


Figure 3.4.6 Perception of "Marijuana is addictive" by (weighted) grade level.

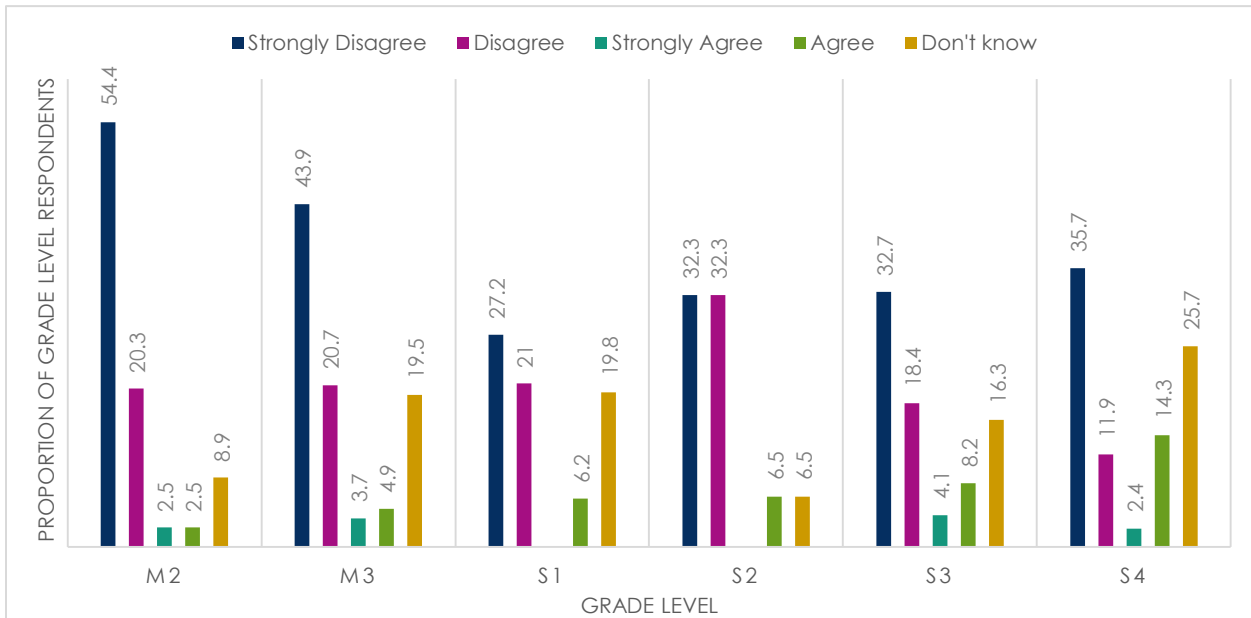


Figure 3.4.7 Perception of "Safe to drive/ride after using marijuana" by (weighted) grade level.



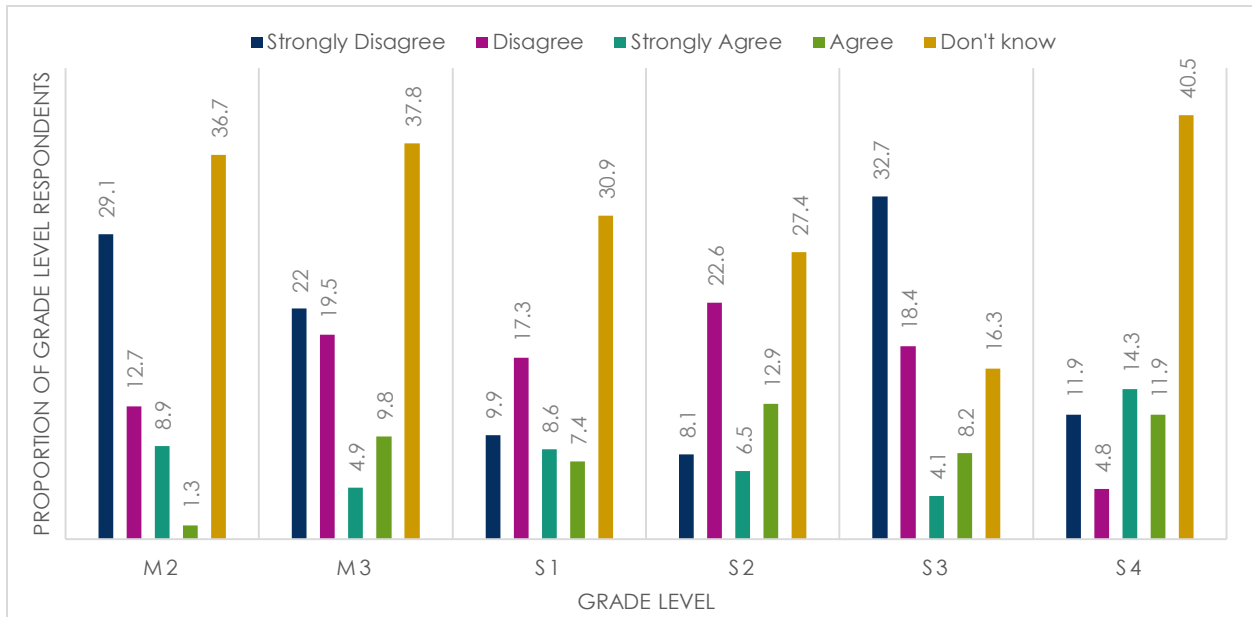


Figure 3.4.8 Perception of "Can't overdose on marijuana" by (weighted) grade level.

### Risks of Marijuana Use

When respondents were asked if they are aware of the risks of marijuana use, a large proportion (69.0% or 1,878) were not aware of the risks of using marijuana, but said that they know marijuana use can be addictive (68.4% or 1,862). Respondents in lower grade levels, namely M2 and M3, were more likely to respond "yes" compared with students in S1 to S4 (see Figure 3.4.9).

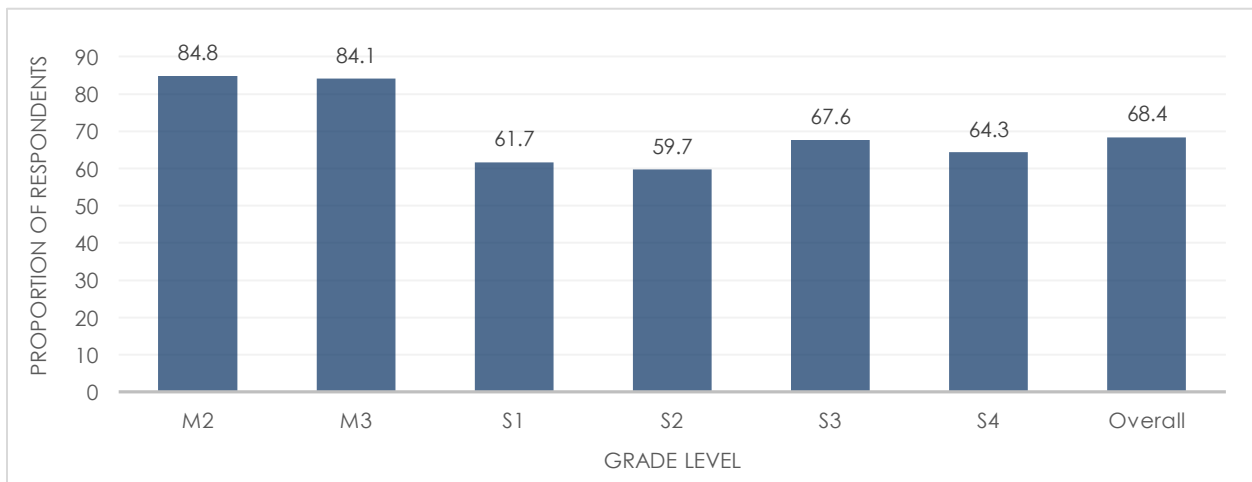


Figure 3.4.9 "Yes" responses to the knowledge of "Can marijuana be addictive?" by (weighted) grade level and overall.



Looking at the issue of public safety (see Table 3.4.1), a large proportion of students (42.8%) said that it is safe driving a motor vehicle after using marijuana “depending on each persons,, weight, quantity, and method of consumption”. This was followed by being able to drive in “1 hour to just under 3 hours” after using marijuana.

	n	%
Immediately	44	1.6
30 mins to just under 1 hour	99	3.6
1 hour to just under 3 hours	207	7.6
3 hours to just under 5 hours	158	5.8
5 hours to just under 7 hours	123	4.5
7 hours to 8 hours	61	2.2
More than 8 hours	194	7.1
Depends on person's, weight, quantity, & consumption method	1,165	42.8
Other	62	2.3

Interestingly, when students were asked: “If marijuana was legal to use, would you?” over half (55.7%) said they would not use it, even if it was legal, followed by 16.3% who would “Try it” (see Figure 3.4.10). The majority of students also felt that “a caution or warning” (23.7%) should be given to anyone found in possession of small quantity of marijuana for personal use, followed by “no action” (18.1%) (see Figure 3.4.11).

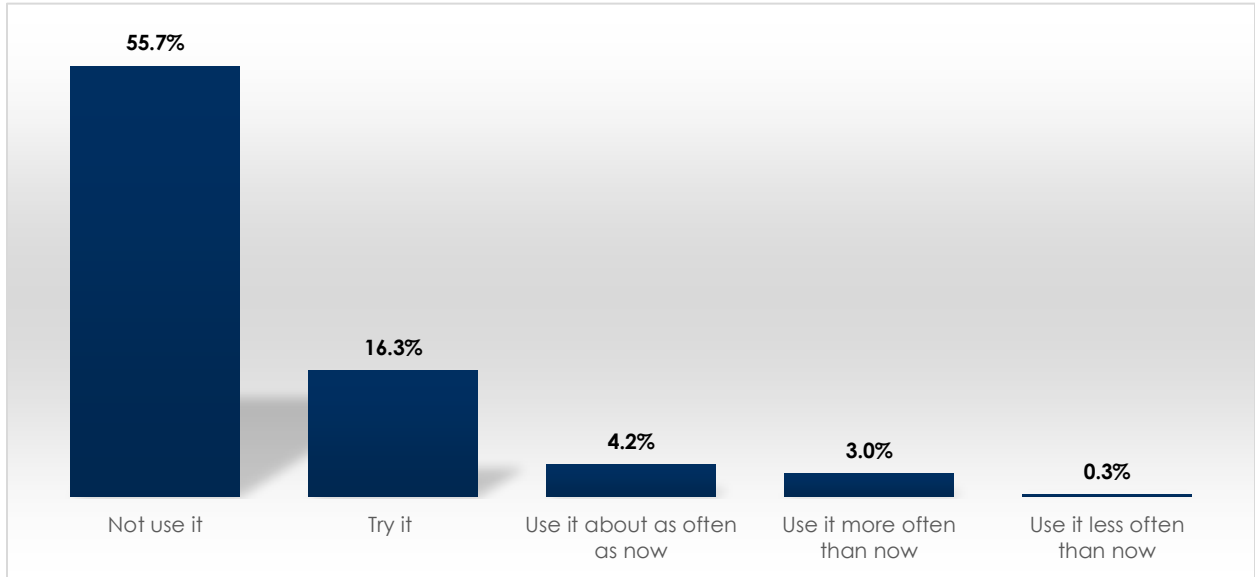


Figure 3.4.10 Responses to “If marijuana was legal to use, would you?”

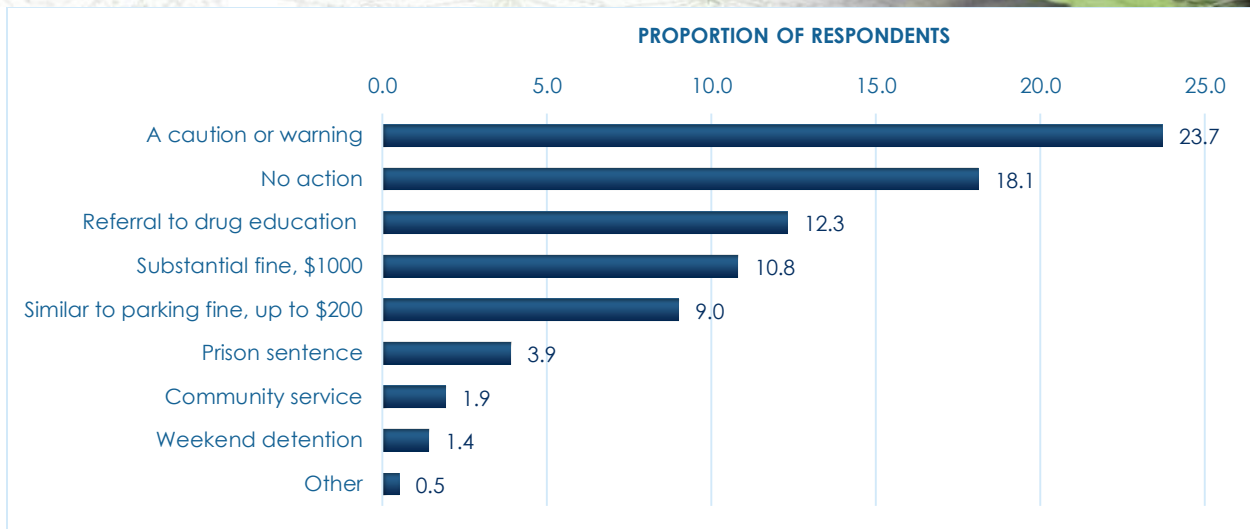


Figure 3.4.11 Responses to “Single action that best describes what should happen to anyone found in possession of a small quantity of marijuana for personal use.”

## 3.5 Policy

### Beliefs in the Legality of Marijuana in Bermuda

When Students were asked if they believed that marijuana is legal in Bermuda (see Figure 3.5.1). Almost one-fifth (18.9%) of the students believed that it is legal. In terms of grade level, as low as 11.3% among S2 students to 24.1% in M2 believed marijuana is legal in Bermuda.

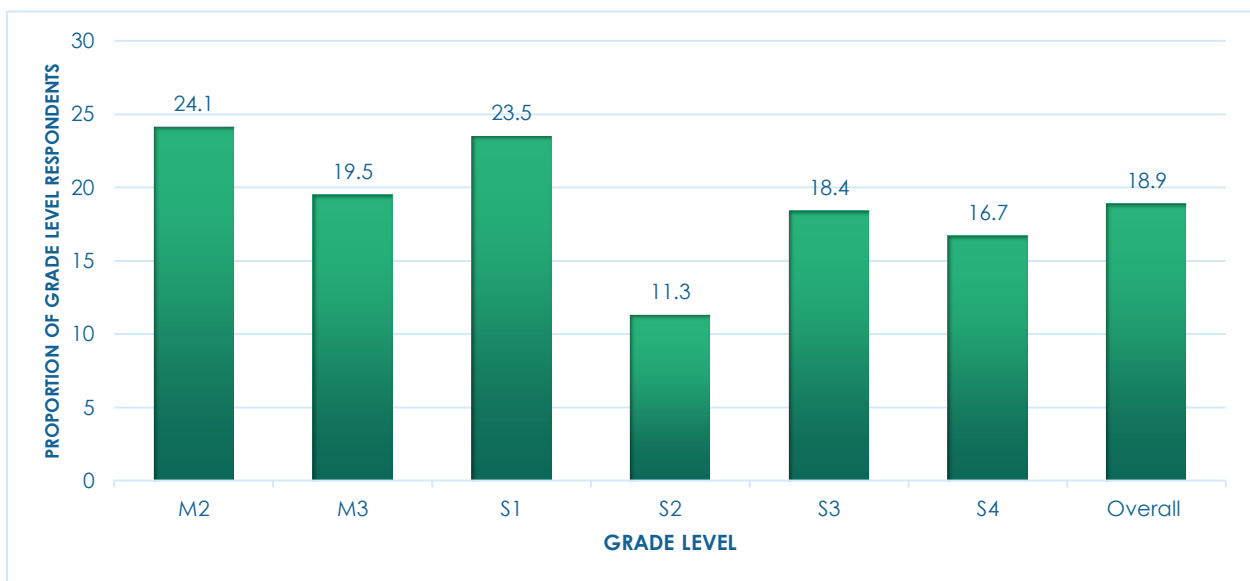


Figure 3.5.1 Responses to “Is marijuana legal in Bermuda?” by (weighted) grade level.



## Perceptions of the Government's Act to Decriminalize 7 Grams of Marijuana

There were a number of students who said that they “don’t know” about the Decriminalization Act. However, there were others who understood that possessing no more than this specific amount of marijuana, 7 grams, is not considered a criminal offence, in that they would not be fined, arrested, charged, prosecuted, or go to prison. The verbatim responses of other students’ understanding of this Act are as follows:

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### M2 STUDENTS

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- *I don't think they can take it away permanently, but they can ban it.*
- *It is for the food of the person to get it taken away from the person using it.*
- *It is illegal to use marijuana in Bermuda.*
- *It is legal only in medical reasons, it's not meant for fun.*
- *It's a way to regulate marijuana safely and protect its users.*

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### M3 STUDENTS

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- *Extremely shallow.*
- *I don't know what this question means.*
- *I think it is good to drop the amount so there is less marijuana activity.*
- *It is illegal, but sometimes used for health to stimulate pain.*
- *The government does it because it is not legal.*

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### S1 STUDENTS

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- *A warning and it will be put on your record.*
- *I don't really know about this, but hopefully 7 grams of marijuana is enough for one person because it might endanger others.*
- *I have not heard of this act.*
- *In the process, but not decriminalized yet.*
- *It is legal to have marijuana if you have under 10 ounces.*
- *They are trying to legalize it/make it legal.*



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## S2 STUDENTS

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- Gives a fine to people in possession.
- If you are caught with it 3 times, then you are persecuted. This method has worked in many European countries, like Portugal whose drug overdose statistics have plummeted after the act was enacted.
- It prevents harm from others.
- It's illegal and possible jail time.
- They should let people be and do whatever they want

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## S3 STUDENTS

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- It is ok to have weed in certain amounts.
- None, I know there is talk of medicinal marijuana and that it should be legalized.
- Reduces criminal charges for small offenses.
- Sensible
- You go to jail for a period of time.

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## S4 STUDENTS

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- If you are found in possession, your house may be searched.
- If you have 7 grams or less you get locked up.
- It is illegal.
- It's BS.
- It's so people are able to travel overseas without getting caught with small amounts of it.
- They should not be allowed or it's not legal for people to have 7 grams of marijuana.
- You can have a small quantity, but you are not allowed to smoke in public.



## Opinions on Marijuana Policy

Respondents were asked to provide their opinion on a number of policy issues, such as allowing marijuana for medical and therapeutic purposes, religious use, and limited amounts for personal reasons? The majority of students “completely agreed” (27.3%) or “agreed” (21.4%) with allowing marijuana to be used for medical and therapeutic purposes; however, almost one-quarter was “neutral” (22.0%) when it came to its use for religious purposes (see *Figure 3.5.2*). On the other hand, in terms of marijuana for personal use, a greater proportion (28.3%) “disagreed” with individual households growing marijuana in limited amounts, while 20.8% “disagreed” with growing marijuana for personal use.

The survey also asked respondents about their opinion on: allowing persons who are addicted to marijuana and other substances, who commit crimes such as theft, to be put into a court supervised drug treatment program instead of prison; allowing tourists to use marijuana for medical or therapeutic purposes, with a permit; and allowing marijuana to be grown in limited amounts, by individual households and for scientific purposes. Almost one-fifth of the respondents (17.3%) “completely agreed”, coupled with about one-quarter (23.3%) who “agreed”, that persons who commit crimes, and are addicted to marijuana and other drugs, should be put into a court supervised drug treatment programmes, instead of prison (see *Figure 3.5.3*). There were 16.9% and 20.4% who “completely agreed” and “agreed”, respectively, that tourists should be allowed to use medical marijuana for therapeutic purposes, with a permit (see *Figure 3.5.4*). Further, 43.1% “completely agreed” and “agreed” that marijuana should be allowed to be grown for scientific purposes (see *Figure 3.5.5*). In contrast, slightly less than half of the respondents (46.5%) “completely disagreed” and “disagreed” that individual households should be allowed to grow it in limited amounts.

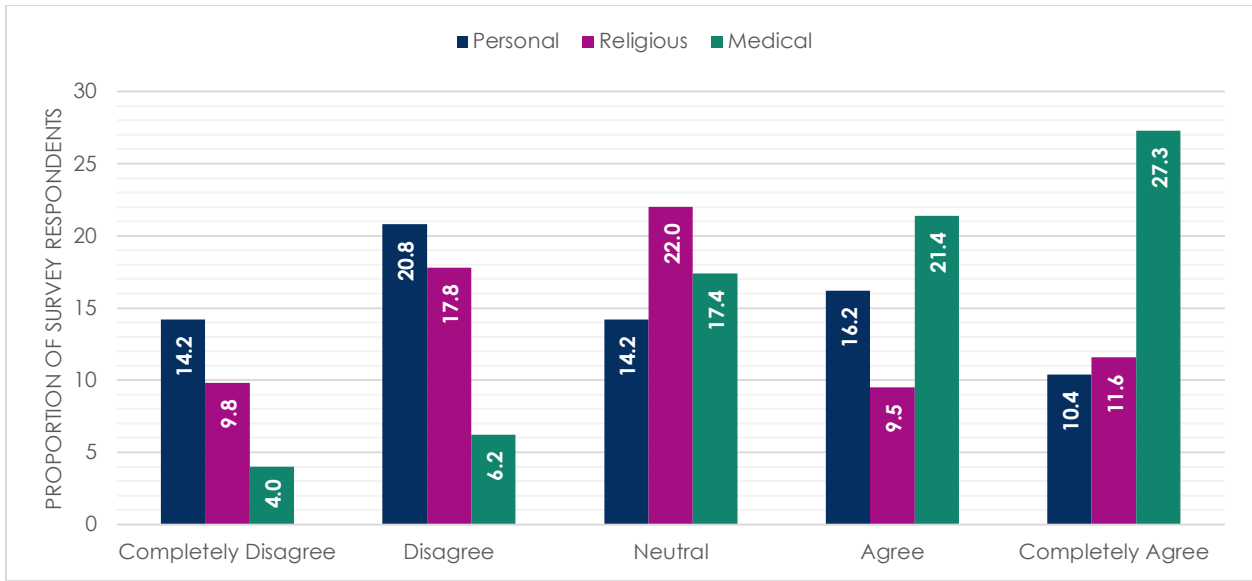


Figure 3.5.2 Comparison of (weighted) respondents' opinion on marijuana for medical, religious, and personal purposes.

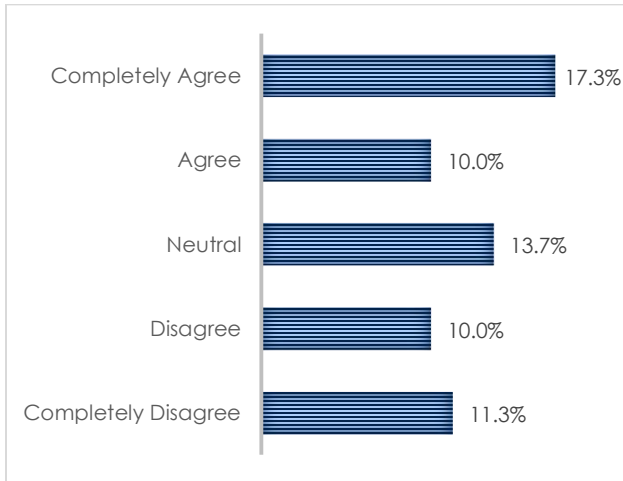


Figure 3.5.3 Respondents' opinion on whether to allow persons who are addicted and commit crimes to be put into court-supervised treatment, instead of prison.

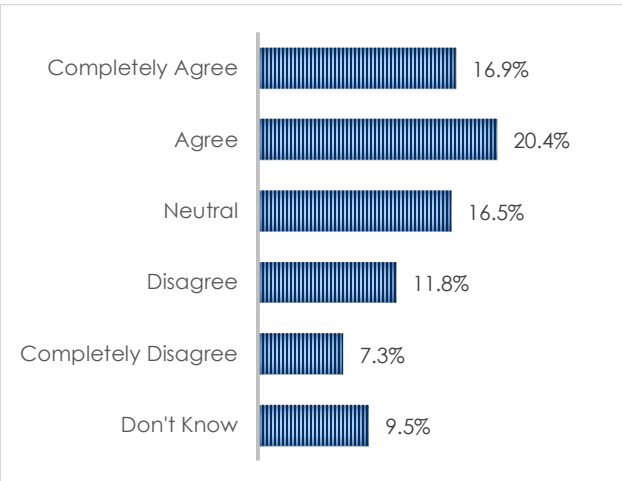


Figure 3.5.4 Respondents' opinion on whether tourists should be allowed to use marijuana for medical purposes, with a permit.

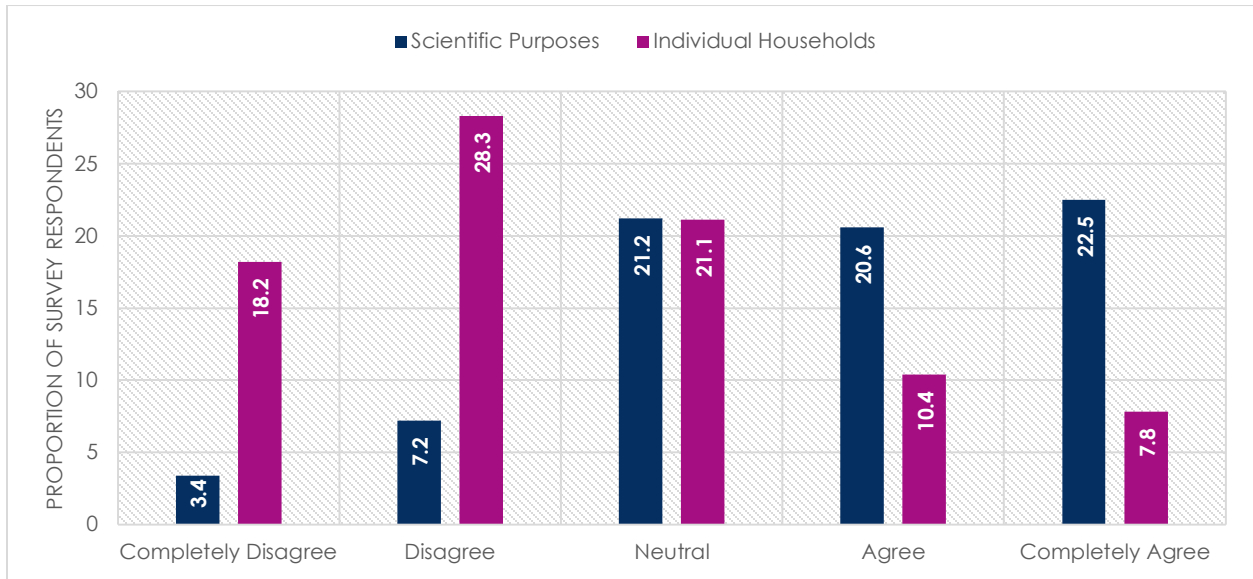


Figure 3.5.5 Comparison of (weighted) respondents' opinion on marijuana to be grown in limited amounts, by individual households and for scientific purposes.

## 3.6 Treatment and Prevention

### Treatment for Marijuana Use

No smokers of marijuana over the three time periods (lifetime, annual or current) received treatment for marijuana use over their lifetime. Over the past 12 months, of all lifetime marijuana smokers, 1.8% said they received treatment for another substance. This was also true for 2.6% of students who reported using marijuana in the past year (12 months). Of those who said they received treatment for other substances, the range of responses for the length of time spent on their last treatment episode was from 5 hours, 5 days, 2 months, to 1 year.

### Knowledge of Available Prevention Programmes

Only 1.1% of the sample of respondents said that they knew of a prevention programme for marijuana. A large proportion (87.9%) reported “no” or that they “don't know” of such a programme being offered in their neighborhood, community, or school.





## 4. DISCUSSION

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Bermuda is on course to become one of many jurisdictions to regulate marijuana for both personal use and commercial sales. Drug policy reform, an objective of the current government, is also intended to protect young Bermudians by keeping marijuana out of the hands of children and youth. While protecting the health and safety of youth is a socially desirable and important public health goal, the government's vague phrasing of this objective leaves open multiple possibilities for policy strategies and implications. Indeed, over the past three years, residents have had much exposure, through the media, to arguments that marijuana regulation will protect youth by reducing their: access to the drug, early-onset use, contact with illicit markets, and interaction with the criminal justice system. Based on research evidence from this and the NSS 2019<sup>15</sup> reports about marijuana use among youth in Bermuda, key harm reduction elements should be included in the pending legislation to decrease the potential harms for youth.

Despite a long history of prohibition of marijuana in Bermuda, its use was reported by 7.6% of the targeted student population in the NSS 2019 (p. 42) and 5.0% in the current survey. Average age of marijuana use initiation is a useful marker of early-life usage, but findings from the two most recent surveys varied slightly. While the NSS 2019 (p. 30) reported the average age of first use as 13 years, this survey reported a mean initiation age of 14 years. This survey reveals that the main profile of current marijuana users are older male students who started using marijuana in middle school, prefer a joint to other forms of marijuana, and spend 1 to 2 hours being high on a typical day.

In short, even before regulated marijuana, a number of youth have at least tried marijuana and consider the drug readily available, typically starting in adolescence; this calls into question how much 'protection' children need from marijuana exposure and the effectiveness of efforts in promoting this aim. The proposed Regulated Marijuana Act sets a minimum age of 21 years for possession, purchase, and sale; however, this pre-regulation survey shows that adolescents under age 21 are accessing and using marijuana. It would appear the minimum legal age requirement holds little promise for eliminating or curtailing underage marijuana use.

As was evident in the NSS 2019 (p. 39), a number of students in this survey admitted to vaping marijuana ( $n=92$  or 3.3%) (NSS:  $n=69$  or 2.5%) and also said that it is very easy to access a vaping device. Further both the NSS and MS asked questions about operating a motor vehicle or

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<sup>15</sup> Department for National Drug Control. (2020). *National School Survey 2019. Survey of Middle and Senior School Students on Alcohol, Tobacco, Other Drugs, and Health*. Government of Bermuda.



being a passenger in a vehicle operated by someone under the influence of marijuana as well as marijuana and alcohol. In this survey, between 43 students said they had either operated a motor vehicle themselves and 110 students were a passenger in a vehicle operated by someone under the influence. This is indeed very worrisome.

Another area worth mentioning, is the impact of a friend's opinion on students' use of marijuana. In the current survey, 33% of the student respondents said that their friends would not try to convince them to stop using marijuana; however, only 1.4% of students said that a friend/relative asked them to reduce the amount of marijuana they use. In both the NSS and MS, young people admitted to getting marijuana from friends and using it at a friend's house or other social event.

The health-focused rationale for recommending prevention or delayed initiation of marijuana use among youth is founded on a large and growing body of evidence<sup>16</sup> that suggests the earlier the onset of use, the greater the risk of harm to the developing brain and other adverse outcomes in later years. The available evidence<sup>17</sup> also indicates that marijuana potency (often expressed as a percentage of tetrahydrocannabinol, the main psychoactive element of the drug) and mode of administration deserve attention as elements that can increase health-related risks. Research<sup>18</sup> shows that newer marijuana products and concentrates (edibles, oils) might, therefore, pose reasonable concerns for their potential effects on young consumers, though how much these products appeal to youth is unclear at this point. The Regulated Cannabis Act (pending) does not currently set potency limits or restrictions on the sale of high-potency products to young adults and the future of edibles is to be determined once the legislation is in force.

Formative research on teens in the community during 2019<sup>19</sup> confirms data collected from the NSS 2019 and MS 2020. Specifically, during focus groups, teens admitted that they have very little knowledge about the dangers and risks of marijuana use from a medical perspective. Moreover, while Bermudian youth report having used marijuana, a small minority admitted recent frequent use in the past 30 days and many indicated that they do not intend to start using this drug.

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<sup>16</sup> C.N. Grant, R.E. Bélanger, R.E. (2017). Cannabis and Canada's children and youth. *Paediatrics Child Health*, 22, 98–102.

<sup>17</sup> C.E. Blevins, D.D. Walker, R.S. Stephens, K.E. Banes, & R.A. Roffman. (2018). Changing social norms: The impact of normative feedback included in motivational enhancement therapy on cannabis outcomes among heavy-using adolescents. *Addictive Behaviour*. 76, 270–274.

<sup>18</sup> J.T. Borodovsky, D.C. Lee, B.S. Crosier, J.L. Gabrielli, J.D. Sargent, & A.J. Budney. (2017). U.S. cannabis legalization and use of vaping and edible products among youth. *Drug Alcohol Dependency*, 177, 299–306.

<sup>19</sup>Rescue Agency (2019). *Bermuda Teen Marijuana Formative Research*. Research Summary and Strategic Recommendations, p.2.



There are numerous outstanding questions related to the potential health and social impacts that marijuana regulation will have on youth, not to mention the general population as well, and outcomes may not be empirically clear for years to come. From a harm reduction perspective, reducing access to marijuana and educating youth and families on the dangers associated with early and prolonged use of marijuana from adolescence, is fundamental to reducing the negative outcomes associated with marijuana use amongst Bermuda's young people.

Efforts in the future, to evaluate the public health impact of changes in marijuana policies on adolescents' use of marijuana, will need to determine whether liberalising drug reform has increased marijuana use patterns among this cohort. The potential implications of reforms to marijuana laws on concurrent and simultaneous use of marijuana, tobacco, and alcohol, during adolescence, will also require monitoring.



## REFERENCES

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- Blevins, C.E., Walker, D.D., Stephens, R.S., Banes, K.E., & Roffman, R.A. (2018). Changing social norms: The impact of normative feedback included in motivational enhancement therapy on cannabis outcomes among heavy-using adolescents. *Addictive Behaviour*, 76, 270–274. <https://doi.org/10.1016/j.addbeh.2017.08.030>
- Borodovsky, J.T., Lee, D.C., Crosier, B.S., Gabrielli, J.L., Sargent, J.D., & Budney, A.J. (2017). U.S. cannabis legalization and use of vaping and edible products among youth. *Drug Alcohol Dependency*, 177, 299–306. <https://doi.org/10.1016/j.drugalcdep.2017.02.017>
- Department for National Drug Control. (2020). *National School Survey 2019. Survey of Middle and Senior School Students on Alcohol, Tobacco, Other Drugs, and Health*. Government of Bermuda.
- Fleming, C.B., Guttmannova, K., Cambron, C., Rhew, I.C., & Oesterle, S. (2016). Examination of the divergence in trends for adolescent marijuana use and marijuana-specific risk factors in Washington State. *Journal of Adolescent Health*, 59, 269–275. <https://doi.org/10.1007/s11121-018-0933-2>
- Government of Canada. (2016). *Toward the legalization, regulation and restriction of access to marijuana: Discussion paper*. Ottawa: Government of Canada. [http://publications.gc.ca/collections/collection\\_2016/jus/J11-2016-1-eng.pdf](http://publications.gc.ca/collections/collection_2016/jus/J11-2016-1-eng.pdf)
- Grant, C.N., & Bélanger, R.E. (2017). Cannabis and Canada's children and youth. *Paediatrics Child Health*, 22, 98–102. [https://www.researchgate.net/publication/310818915\\_Cannabis\\_and\\_Canada's\\_children\\_and\\_youth](https://www.researchgate.net/publication/310818915_Cannabis_and_Canada's_children_and_youth)
- Jackson, K.M., Janssen, T., & Gabrielli, J. (2018). Media/Marketing Influences on Adolescent and Young Adult Substance Abuse. *Current Addiction Reports*, 5, 146–157. <https://doi.org/10.1007/s40429-018-0199-6>
- McGinty, E.E., Samples, H., Bandara, S.N., Saloner, B., Bachhuber, M.A., & Barry, C.L. (2016). The emerging public discourse on state legalization of marijuana for recreational use in the US: Analysis of news media coverage, 2010–2014. *Preventive Medicine*, 90, 114–120. <https://www.sciencedirect.com/science/article/pii/S0091743516301657?via%3Dihub>
- Meier, P.S. (2011). Alcohol marketing research: The need for a new agenda. *Addiction*, 106(3), 466–71. <https://doi.org/10.1111/j.1360-0443.2010.03160.x>
- National Center on Addiction and Substance Abuse. (1994). National Study Shows “Gateway” Drugs Lead to Cocaine Use. In R. J. Hackett (Ed.), *Columbia University Record*, 20(4). Columbia University, NY: Office of Public Information. [http://www.columbia.edu/cu/record/archives/vol20/vol20\\_iss10/record2010.24.html](http://www.columbia.edu/cu/record/archives/vol20/vol20_iss10/record2010.24.html)
- Rescue Agency (2019). *Bermuda Teen Marijuana Formative Research*. Research Summary and Strategic Recommendations, p.2.

## APPENDIX A

### Population<sup>1</sup> and Sample by School and Grade

SCHOOLS	POPULATION (ENROLMENT)							SAMPLE						
	M2	M3	S1	S2	S3	S4	Total	M2	M3	S1	S2	S3	S4	Total
<b>PUBLIC SCHOOLS</b>	<b>320</b>	<b>272</b>	<b>335</b>	<b>304</b>	<b>297</b>	<b>219</b>	<b>1,747</b>	<b>63</b>	<b>53</b>	<b>65</b>	<b>60</b>	<b>58</b>	<b>43</b>	<b>342</b>
<b>MIDDLE SCHOOLS TOTAL</b>	<b>320</b>	<b>272</b>	-	-	-	-	<b>592</b>	<b>63</b>	<b>53</b>	-	-	-	-	<b>116</b>
1. Clearwater Middle School	47	32	-	-	-	-	79	9	6	-	-	-	-	15
2. Dellwood Middle School	103	85	-	-	-	-	188	20	17	-	-	-	-	37
3. Sandys Secondary Middle School	85	83	-	-	-	-	168	17	16	-	-	-	-	33
4. Whitney Institute Middle School	85	72	-	-	-	-	157	17	14	-	-	-	-	31
<b>SENIOR SCHOOLS TOTAL</b>	-	-	<b>335</b>	<b>304</b>	<b>297</b>	<b>219</b>	<b>1,155</b>	-	-	<b>65</b>	<b>60</b>	<b>58</b>	<b>43</b>	<b>226</b>
5. The Berkley Institute	-	-	175	157	164	118	614	-	-	34	31	32	23	120
6. Cedarbridge Academy	-	-	160	147	133	101	541	-	-	31	29	26	20	106
<b>PRIVATE SCHOOLS TOTAL</b>	<b>206</b>	<b>203</b>	<b>181</b>	<b>135</b>	<b>137</b>	<b>114</b>	<b>976</b>	<b>41</b>	<b>40</b>	<b>35</b>	<b>26</b>	<b>28</b>	<b>22</b>	<b>192</b>
7. Bermuda Institute	29	30	20	11	20	12	122	6	6	4	2	4	2	24
8. Saltus Grammar School	58	64	67	56	49	47	341	11	13	13	11	10	9	67
9. Somersfield Academy <sup>2</sup>	44	31	22	11	13	-	121	9	6	4	2	3	-	24
10. Warwick Academy	75	78	72	57	55	55	392	15	15	14	11	11	11	77
<b>TOTAL</b>							<b>N = 2,723</b>							<b>n = 536<sup>3</sup></b>

Notes:

<sup>1</sup> Does not include enrolment for the two private schools that did not participate in the survey.

<sup>2</sup> Somersfield Academy does not have students enrolled in grades S4.

<sup>3</sup> The total does not add up due to rounding.

## APPENDIX B

### Respondents (Unweighted and Weighted) by School and Grade

SCHOOLS	RESPONDENTS (UNWEIGHTED)							RESPONDENTS (WEIGHTED)						
	M2	M3	S1	S2	S3	S4	Total	M2	M3	S1	S2	S3	S4	Total
<b>PUBLIC SCHOOLS</b>	<b>44</b>	<b>43</b>	<b>40</b>	<b>37</b>	<b>29</b>	<b>20</b>	<b>213</b>	<b>293</b>	<b>248</b>	<b>255</b>	<b>262</b>	<b>257</b>	<b>158</b>	<b>1,473</b>
<b>MIDDLE SCHOOLS TOTAL</b>	<b>44</b>	<b>43</b>	-	-	-	-	<b>87</b>	<b>293</b>	<b>248</b>	-	-	-	-	<b>541</b>
11. Clearwater Middle School	2	-	-	-	-	-	2	13	-	-	-	-	-	13
12. Dellwood Middle School	19	17	-	-	-	-	36	127	98	-	-	-	-	225
13. Sandys Secondary Middle School	15	13	-	-	-	-	28	100	75	-	-	-	-	175
14. Whitney Institute Middle School	8	13	-	-	-	-	21	53	75	-	-	-	-	128
<b>SENIOR SCHOOLS TOTAL</b>	-	-	<b>40</b>	<b>37</b>	<b>29</b>	<b>20</b>	<b>126</b>	-	-	<b>255</b>	<b>262</b>	<b>257</b>	<b>158</b>	<b>932</b>
15. The Berkley Institute	-	-	18	14	14	12	58	-	-	115	99	124	95	433
16. Cedarbridge Academy	-	-	22	23	15	8	68	-	-	140	163	133	63	499
<b>PRIVATE SCHOOLS TOTAL</b>	<b>35</b>	<b>39</b>	<b>41</b>	<b>25</b>	<b>20</b>	<b>22</b>	<b>182</b>	<b>233</b>	<b>227</b>	<b>261</b>	<b>177</b>	<b>177</b>	<b>174</b>	<b>1,249</b>
17. Bermuda Institute	5	6	4	2	4	2	23	33	35	25	14	35	16	158
18. Saltus Grammar School	12	11	7	12	6	8	56	80	64	45	85	53	63	390
19. Somersfield Academy <sup>1</sup>	6	7	5	2	1	-	21	40	41	32	14	9	-	136
20. Warwick Academy	12	15	25	9	9	12	82	80	87	159	64	80	95	565
<b>TOTAL</b>							<b>n = 395</b>							<b>n = 2,723<sup>2</sup></b>

Notes:

<sup>1</sup> Somersfield Academy does not have students enrolled in grades S4.

<sup>2</sup> The total does not add up due to the control total used in the report due to the weights that were applied.

## APPENDIX C: Questionnaire

The Department for National Drug Control (DNDC) is carrying out a school survey on the topic of marijuana. The objective is to obtain information to address, in the best way possible, the problems related to marijuana use in Bermuda amongst adolescents. Your cooperation in this survey would be of great value to this effect. Your answers are **absolutely confidential and are completely anonymous**. This means that no one will know your answers. To help us keep your answers in confidence, please **DO NOT** write your name on this survey form. Thus, we ask you to respond very honestly.

### SECTION I: DEMOGRAPHICS

#### INSTRUCTIONS

1. This is not a test. There is no right or wrong answer.
2. Answer **ALL** questions, UNLESS you are instructed to **skip** to another set of questions because you answered "No" to a given question. (You must select a response to these questions before skipping). If you don't find an answer that fits exactly, use one that comes closest.
3. **Check** the appropriate response.

<p><b>1. School</b></p> <p>.....</p>	<p><b>2. What grade are you in?</b></p> <p> <input type="checkbox"/> 1. M2    <input type="checkbox"/> 2. M3    <input type="checkbox"/> 3. S1  <input type="checkbox"/> 4. S2    <input type="checkbox"/> 5. S3    <input type="checkbox"/> 6. S4         </p>
<p><b>3. Sex</b></p> <p> <input type="checkbox"/> 1. Male    <input type="checkbox"/> 2. Female         </p>	<p><b>4. Age</b></p> <p style="text-align: right;"> <input style="width: 40px; height: 20px;" type="text"/> years old         </p>
<p><b>5. What do you consider yourself to be?</b></p> <p> <input type="checkbox"/> 1. Black  <input type="checkbox"/> 2. White  <input type="checkbox"/> 3. Portuguese  <input type="checkbox"/> 4. Asian or Pacific Islander  <input type="checkbox"/> 5. Mixed  <input type="checkbox"/> 6. Other (specify) .....         </p>	<p><b>6. In which parish do you <u>most often</u> reside? (Tick only <u>one(1)</u> response)</b></p> <p> <input type="checkbox"/> 1. Devonshire  <input type="checkbox"/> 2. Hamilton  <input type="checkbox"/> 3. Paget  <input type="checkbox"/> 4. Pembroke  <input type="checkbox"/> 5. St. George's  <input type="checkbox"/> 6. Sandys  <input type="checkbox"/> 7. Southampton  <input type="checkbox"/> 8. Warwick  <input type="checkbox"/> 9. Smith's         </p>
<p><b>7. What is your parents' marital status? (In relation to each other.)</b></p> <p> <input type="checkbox"/> 1. Never Married    <input type="checkbox"/> 2. Married  <input type="checkbox"/> 3. Divorced    <input type="checkbox"/> 4. Separated  <input type="checkbox"/> 5. Widow(er)    <input type="checkbox"/> 6. Living together/Common law  <input type="checkbox"/> 7. I don't know    <input type="checkbox"/> 8. Other (specify) .....  <p style="text-align: center;">.....</p> </p>	<p><b>8. With whom do you live? (You may tick as many options as necessary.)</b></p> <p> <input type="checkbox"/> 1. Father    <input type="checkbox"/> 2. Mother  <input type="checkbox"/> 3. Brother/Sister    <input type="checkbox"/> 4. Stepmother  <input type="checkbox"/> 5. Stepfather    <input type="checkbox"/> 6. Wife/Husband  <input type="checkbox"/> 7. Girlfriend/Boyfriend    <input type="checkbox"/> 8. Other relative  <input type="checkbox"/> 9. Friend    <input type="checkbox"/> 10. Alone  <input type="checkbox"/> 11. Other (specify).....         </p>

## SECTION II: MARIJUANA USE

<p><b>1. In your lifetime, have you ever used or tried marijuana?</b></p> <p><input type="checkbox"/> 1. Yes  <input type="checkbox"/> 2. No, if No <b>go to Section IV, page 7.</b></p>	<p><b>2. How old were you when you first tried marijuana?</b></p> <p><input type="text"/> years old</p>
<p><b>3. When was the <u>first time</u> you tried marijuana? (You must check a response.)</b></p> <p><input type="checkbox"/> 1. Never  <input type="checkbox"/> 2. In the past 30 days  <input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago  <input type="checkbox"/> 4. More 1 year ago</p>	<p><b>4. Have you consumed marijuana in the <u>past 12 months</u>? (You must check a response.)</b></p> <p><input type="checkbox"/> 1. Yes  <input type="checkbox"/> 2. No</p>
<p><b>5. With what frequency have you used marijuana?</b></p> <p><input type="checkbox"/> 1. Only once  <input type="checkbox"/> 2. Sometimes in the past 12 months  <input type="checkbox"/> 3. Sometimes during the month  <input type="checkbox"/> 4. Sometimes during the week  <input type="checkbox"/> 5. Daily</p>	<p><b>6. Have you consumed marijuana in the <u>past 30 days</u>?</b></p> <p><input type="checkbox"/> 1. Yes  <input type="checkbox"/> 2. No</p>
<p><b>7. Where do you most often use marijuana?</b></p> <p><input type="checkbox"/> 1. At home  <input type="checkbox"/> 2. At school  <input type="checkbox"/> 3. On the corner/block  <input type="checkbox"/> 4. At a friend's house  <input type="checkbox"/> 5. At sporting events  <input type="checkbox"/> 6. At other social events  <input type="checkbox"/> 7. Other (specify) .....</p>	

<p><b>8. In the past 12 months, how often did you use marijuana before or at the following places?</b></p> <p><b>Check the appropriate response for <u>EACH</u>.</b></p>	1. Have not done this in the past twelve months	2. Monthly	3. Weekly	4. Daily or almost daily	5. Don't Know
1. At home					
2. At school					
3. On the corner/block					
4. At a friend's house					
5. At sporting events					
6. At other social events					
7. Other _____					





<p><b>9. From whom/where do you usually get marijuana?</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> 1. Friends</li><li><input type="checkbox"/> 2. Parents</li><li><input type="checkbox"/> 3. Brother/Sister</li><li><input type="checkbox"/> 4. Other relative(s)</li><li><input type="checkbox"/> 5. Street pusher</li><li><input type="checkbox"/> 6. Other (specify) .....</li></ul>	<p><b>10. Have you ever used marijuana in any of the following forms? (Choose <u>all</u> that apply)</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> 1. Drinks (tea, juice etc.)</li><li><input type="checkbox"/> 2. Edibles (pastries, candy/sweets, cooked/uncooked meals)</li><li><input type="checkbox"/> 3. Concentrates (oils, shatter, budder wax etc.)</li><li><input type="checkbox"/> 4. Joints</li><li><input type="checkbox"/> 5. Handheld pipes</li><li><input type="checkbox"/> 6. Water pipe or bong</li><li><input type="checkbox"/> 7. Pills</li><li><input type="checkbox"/> 8. Vaping</li><li><input type="checkbox"/> 9. Dab smoking</li><li><input type="checkbox"/> 10. Tincture</li><li><input type="checkbox"/> 11. Topical (cream, ointment, etc.)</li><li><input type="checkbox"/> 12. Other (specify) .....</li><li><input type="checkbox"/> 13. I have never used marijuana in any of these forms</li></ul>
<p><b>11. What types of marijuana do you use regularly?</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> 1. Plant parts (buds or leaf)</li><li><input type="checkbox"/> 2. Oil</li><li><input type="checkbox"/> 3. Hashish</li><li><input type="checkbox"/> 4. Shatter</li><li><input type="checkbox"/> 5. Wax</li><li><input type="checkbox"/> 6. Tinctures</li><li><input type="checkbox"/> 7. Tea or Liquid</li><li><input type="checkbox"/> 8. Edibles (e.g. brownies)</li><li><input type="checkbox"/> 9. Topical (cream, ointment, etc.)</li></ul>	<p><b>12. When you use marijuana, how often do you use marijuana mixed with tobacco?</b></p> <ul style="list-style-type: none"><li><input type="checkbox"/> 1. Never</li><li><input type="checkbox"/> 2. Very rarely</li><li><input type="checkbox"/> 3. Rarely</li><li><input type="checkbox"/> 4. Occasionally</li><li><input type="checkbox"/> 5. Frequently</li><li><input type="checkbox"/> 6. Very Frequently</li><li><input type="checkbox"/> 7. Always</li></ul>
<p><b>13. On an <u>average day</u> when you use marijuana, how much, in grams, do you use?</b> (Note: the average weight of an average joint= 0.4 grams; an eighth= 3.5 grams; a quarter= 7 grams; 1oz= 28 grams)</p> <p>.....</p>	



<b>14. How many times, if ever, have you smoked or used marijuana: Check the appropriate response for <u>EACH</u>.</b>	1. Once or twice	2. 3-5 times	3. 6-9 times	4. 10-19 times	5. 20-39 times	6. 40 or more times	7. None	8. Don't Know
1. In the last week?								
2. In the last four weeks?								
3. In the last year?								
4. In your lifetime?								

<b>15. Check the appropriate response for <u>EACH</u> statement below.</b>	1. Yes	2. No	3. I do not know
1. In general, do you believe that there is marijuana at your school?			
2. In general, do you believe that there are students who bring, try, or deal marijuana at your school?			
3. Do you believe that there is marijuana in the area surrounding or next to your school?			
4. Do you believe that some students try to buy or deal marijuana amongst themselves just outside the school or surrounding area?			
5. Have you personally ever seen a student selling or giving marijuana at school or in the area surrounding the school?			
6. Have you personally ever seen a student using marijuana at school or in the area surrounding the school?			



<b>16. What are the main reasons why you use marijuana?</b> <b>Check the appropriate response for EACH.</b>	1. Never/ Almost Never	2. Sometimes	3. Often	4. Always/ Almost Always	5. Don't Know
1. As a way to celebrate?					
2. It is what most of your friends do when you get together?					
3. To be sociable					
4. It is customary on special occasions					
5. It makes a social gathering more enjoyable?					
6. To relax?					
7. To forget your worries?					
8. You feel more self-confident or sure of yourself?					
9. It helps when you feel depressed or nervous?					
10. To cheer up when you are in a bad mood?					
11. You like the feeling?					
12. It's exciting?					
13. To get high?					
14. It is fun?					
15. It makes you feel good?					

**17. In the last year, did you use any other substance on the same occasion that you smoked or used marijuana? (Check all that apply)**

- 1. Tobacco/cigarettes
- 2. Alcohol
- 3. Painkillers/analgesics
- 4. Sedatives/ tranquilisers/ sleeping tablets
- 5. Hallucinogens (e.g. LSD)
- 6. Amphetamines (e.g. speed, meth, ice)
- 7. Ecstasy (e.g. MDMA, pills)
- 8. Cocaine/Crack Cocaine
- 9. Other.....
- 10. I did not use any other substance on the same occasion

**18. How many hours were you "high" on a typical day when you have been using marijuana?**

- 1. Less than 1
- 2. 1 or 2
- 3. 3 or 4
- 4. 5 or 6
- 5. 7 or more

**SECTION III: SOCIAL IMPACT**

<p><b>1. Has your marijuana use ever led to health, social, legal or financial problems?</b></p> <p><input type="checkbox"/> 1. Yes, but not in the past 12 months</p> <p><input type="checkbox"/> 2. Yes, in the past 12 months</p> <p><input type="checkbox"/> 3. No</p>	<p><b>2. In the past 12 months, have you driven a motor vehicle within two hours of using marijuana?</b></p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>
<p><b>3. In the past 12 months, have you driven a motor vehicle within two hours of using marijuana and alcohol?</b></p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>	<p><b>4. In the past 12 months, have you been a passenger in a motor vehicle driven by someone who had been using both marijuana and alcohol in the previous two hours?</b></p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>
<p><b>5. How often do you use marijuana in situations that could be physically hazardous, such as driving/ riding?</b></p> <p><input type="checkbox"/> 1. Never</p> <p><input type="checkbox"/> 2. Less than monthly</p> <p><input type="checkbox"/> 3. Monthly</p> <p><input type="checkbox"/> 4. Weekly</p> <p><input type="checkbox"/> 5. Daily or almost daily</p>	<p><b>6. In the past 12 months, where did you get the marijuana you used?</b></p> <p><input type="checkbox"/> 1. I grow my own</p> <p><input type="checkbox"/> 2. Someone grows it for me</p> <p><input type="checkbox"/> 3. It was shared around a group of friends</p> <p><input type="checkbox"/> 4. From an acquaintance</p> <p><input type="checkbox"/> 5. From a family member or friend</p> <p><input type="checkbox"/> 6. From a dealer</p> <p><input type="checkbox"/> 7. Other (specify) .....</p>
<p><b>7. How much did you spend on marijuana in the past 12 months? (Include purchase of seeds and plants)</b></p> <p><input type="checkbox"/> 1. Nothing, got it free or traded something for it</p> <p><input type="checkbox"/> 2. Between \$1 and \$10</p> <p><input type="checkbox"/> 3. Between \$11 and \$25</p> <p><input type="checkbox"/> 4. Between \$26 and \$50</p> <p><input type="checkbox"/> 5. Between \$51 and \$100</p> <p><input type="checkbox"/> 6. Between \$101 and \$150</p> <p><input type="checkbox"/> 7. Between \$151 and \$250</p> <p><input type="checkbox"/> 8. Between \$251 and \$500</p> <p><input type="checkbox"/> 9. Between \$501 and \$750</p> <p><input type="checkbox"/> 10. Between \$751 and \$1,000</p> <p><input type="checkbox"/> 11. Between \$1,001 and \$1,250</p> <p><input type="checkbox"/> 12. Over \$1,250</p> <p><input type="checkbox"/> 13. Other (specify) .....</p>	<p><b>8. What are the 3 most important factors to you when selecting a source to buy marijuana? (Select up to 3 factors)</b></p> <p><input type="checkbox"/> 1. Lowest price</p> <p><input type="checkbox"/> 2. Quality and safety</p> <p><input type="checkbox"/> 3. Location</p> <p><input type="checkbox"/> 4. Accessible when I want</p> <p><input type="checkbox"/> 5. Anonymity or discretion</p> <p><input type="checkbox"/> 6. Other (specify) .....</p>



<b>9. Thinking of your own marijuana use, please answer the following questions... Over the past 12 months?</b>  <b>Check the appropriate response for EACH.</b>	1. Rarely	2. Sometimes	3. Fairly Often	4. Very Often	5. Never
1. Have you smoked marijuana before midday?					
2. Have you smoked marijuana when you were alone?					
3. Have you had memory/ concentration problems when you smoked marijuana?					
4. Have friends or members of your family told you that you ought to reduce your marijuana use?					
5. Have you tried to reduce or stop your marijuana use without succeeding?					
6. Have you had problems because of your marijuana (argument, fight, accident, bad result at school)?					

<b>10. Thinking of your own marijuana use, please answer the following questions?</b>  <b>Check the appropriate response for EACH.</b>	1. Yes, but not in past 12 months	2. Yes, in past 12 months	3. No	4. Don't Know
1. Have you ever failed to do what was normally expected to of you because of your use of marijuana?				
2. Has a friend, relative, or anyone else ever expressed concern about your use of marijuana?				
3. Have you ever tried to control, cut down or stop using marijuana, but discovered that you were not able to do so?				

## SECTION IV: MARIJUANA PERCEPTIONS

1. Do you strongly disagree, disagree, agree, or strongly agree that...	1. Strongly Disagree	2. Disagree	3. Strongly Agree	4. Agree	5. Don't Know
<b>Check the appropriate response for EACH.</b>					
1. Marijuana has no long-term health risks					
2. Marijuana is addictive					
3. It is safe to drive/ride after using marijuana					
4. You can't overdose on marijuana					

<p><b>2. Are you aware of the risks of marijuana use?</b></p> <p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No</p>	<p><b>3. As far as you know, when is it safe for someone to drive a motor vehicle after using marijuana?</b></p> <p><input type="checkbox"/> 1. Immediately <input type="checkbox"/> 2. 30 minutes to just under 1 hour <input type="checkbox"/> 3. 1 hour to just under 3 hours <input type="checkbox"/> 4. 3 hours to just under 5 hours <input type="checkbox"/> 5. 5 hours to just under 7 hours <input type="checkbox"/> 6. 7 hours to 8 hours <input type="checkbox"/> 7. More than 8 hours <input type="checkbox"/> 8. Depends on each person, weight, quantity and method of consumption <input type="checkbox"/> 9. Other (specify) .....</p>
<p><b>4. As far as you know, can marijuana use be addictive?</b></p> <p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No</p>	<p><b>5. If marijuana was legal to use, would you...? (Mark one response)</b></p> <p><input type="checkbox"/> 1. Not use it, even if it were legal an available <input type="checkbox"/> 2. Try it <input type="checkbox"/> 3. Use it about as often as you do now <input type="checkbox"/> 4. Use it more often than you do now <input type="checkbox"/> 5. Use it less often than you do now</p>



**6. What single action best describes what you think should happen to anyone found in possession of a small quantity of marijuana for personal use?**

**Mark one response.**

- 1. No action
- 2. A caution or warning only
- 3. Referral to drug education programme
- 4. Something similar to a parking fine, up to \$200
- 5. A substantial fine, around \$1,000
- 6. A community service order
- 7. Weekend detention
- 8. A prison sentence
- 9. Other (specify) .....

**SECTION V: POLICY**

**1. Do you think marijuana is legal in Bermuda?**

- 1. Yes
- 2. No

**2. What is your understanding of the Government's Act to Decriminalize 7 grams of marijuana?  
(Open ended)**

.....

.....

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.....

.....

.....



<b>3. What is your opinion on the following measures, in relation to marijuana:</b> <b>Check the appropriate response for EACH.</b>	1. Completely Agree	2. Agree	3. Neutral	4. Disagree	5. Completely Disagree	6. Don't Know
1. Allow marijuana to be used for medical and therapeutic purposes?						
2. Allow marijuana to be used for religious purposes?						
3. Allow marijuana to be grown in limited amounts, by individual households?						
4. Allow possession of marijuana in limited amounts, for personal use?						
5. Allow persons who are addicted to marijuana and other substances, who commit crimes such as theft, to be put into a court supervised drug treatment program instead of prison?						
6. Allow tourists to use for medical or therapeutic purposes, with a permit?						
7. Allow marijuana to be grown for scientific purposes?						

**SECTION VI: TREATMENT**

<p><b>1. Have you ever in your lifetime received treatment for marijuana use?</b></p> <p><input type="checkbox"/> 1. Yes  <input type="checkbox"/> 2. No</p>	<p><b>2. Over the past 12 months, have you received treatment for any other substance?</b></p> <p><input type="checkbox"/> 1. Yes  <input type="checkbox"/> 2. If yes, what was the substance?  <input type="checkbox"/> 3. No, if No <b>skip</b> to <b>Question 5</b>.</p>
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<b>3. With respect to the last time you were being treated for marijuana...:</b> <b>Check the appropriate response for EACH.</b>	1. Yes	2. No	3. Don't Know
1. Were you admitted in a rehabilitation center or a therapeutic community?			
2. Were you going to an outpatient health or rehabilitation center?			
3. Were you going to the office of a private practitioner?			
4. Were you going to a self-help group?			
5. Another situation, specify: _____			

<b>4. How long did you spend on your last treatment episode for marijuana?</b>  _____ Hours _____ Days _____ Months _____ Years	<b>5. How often in the past 6 months have you devoted a great deal of your time to getting, using, or recovering from marijuana?</b>  <input type="checkbox"/> 1. Never <input type="checkbox"/> 2. Less than monthly <input type="checkbox"/> 3. Monthly <input type="checkbox"/> 4. Weekly <input type="checkbox"/> 5. Daily or almost daily
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## SECTION VII: PREVENTION

<b>1. Do you know of any prevention program, for marijuana, being offered in your neighborhood, community or school?</b>  <input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. If yes, which program _____ <input type="checkbox"/> 3. No <input type="checkbox"/> 4. Don't know of any
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GOVERNMENT OF BERMUDA  
Ministry of Legal Affairs

**Department for National Drug Control**