

Report of the Survey of Middle and Senior School Students on Alcohol, Tobacco, Other Drugs, and Health



GOVERNMENT OF BERMUDA

Department for National Drug Control

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#### Authors:

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

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

**Telephone:** (441) 292-3049 **Fax:** (441) 295-2066

#### E-mail: dndc@gov.bm Website: www.dndc.gov.bm

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### FOREWORD

#### "One way of preventing disease is worth fifty ways of curing it." – Trevor Howard

Drug use in Bermuda remains a significant problem across all genders, race/ethnicities, and ages. Dealing with difficult emotions can cause young people to misuse alcohol or illicit drugs. Adolescent drug use is particularly damaging as such use can affect the physical and mental development of younger people and can be detrimental later in life. Knowing this, the Government of Bermuda continues to study the drug phenomenon among adolescents. Every four years since 2003, surveys were conducted among a similar cohort of young people on the Island. The National School Survey (NSS) is the longest ongoing surveillance programme of alcohol and substance use and other health-related behaviours among middle and high school students in Bermuda with the 2023 survey representing the sixth survey among this population of students. In measuring changes in substance use and levels of risk and protection over time, this survey series provides a unique contribution to substance use research, policy, and prevention for this age group.

In this report, comparisons are made with the 2019 results as we examine trends in use by sex, grade level, and socio-economic status. In each survey year, from 2003 to 2023, over 10,000 middle and high school students, ages 12 to 18, have participated in the NSS. Students within the target population who were not at school on the day of the survey were excluded from participating. Participants answered questions about their lifetime and current use of tobacco, alcohol, marijuana, and other substances. Unlike other standardised surveys, the NSS also measures the level of risk and protection experienced by this age cohort.

Although the drug market has changed over the past four years, results confirm that marijuana and alcohol continue to be the most used illicit drug among adolescents in Bermuda. Sexrelated patterns of use have also changed over the past few years in that in many instances females are using just as frequently as males. With some substances female use is higher than males. Although we are challenged to understand why this pattern of use has occurred, we now know that females require prevention interventions as much as their counterparts to reduce the harms associated with short- and long-term misuse of alcohol and illicit drugs.

These findings provide an evaluation of the effects of past substance use polices, and an indication of the current and future needs of adolescents in Bermuda. As a result, the NSS findings have important implications for public policy and potential programming.

The Department for National Drug Control team would like to take this opportunity to thank all those persons who have contributed to the success of this, the sixth National School Survey.

Joanne Dean, M.A., B.Sc., BSN, ICADC, CCS Director Department for National Drug Control April, 2024



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### NOTES, SYMBOLS, AND ABBREVIATIONS

Readers should note that all prevalence proportions presented in the accompanying tables are rounded to one decimal place. A point (.) is used to indicate decimals. Where '-' appears, it does not mean that no one has used the drug, rather it means that in this category no respondent reported use. Details and percentages in tables do not necessarily add to totals on account of rounding. The data contained in this report are themselves subject to future revision. Other symbols and abbreviations used are as follows:

| -     | A magnitude of zero or less than half the unit employed |  |
|-------|---|--|
|       | Not Applicable  |  |
| •••   | Not Available   |  |
| %     | Percent   |  |
| NS    | Not Stated  |  |
| ATOD  | Alcohol, Tobacco, and Other Drugs                       |  |
| CASA  | National Center on Addiction and Substance Abuse        |  |
| CDC   | Centers for Disease Control and Prevention              |  |
| CICAD | Inter-American Drug Abuse Control Commission            |  |
| CSAP  | Centre for Substance Abuse Prevention                   |  |
| DNDC  | Department for National Drug Control                    |  |
|       |   |  |

### EXECUTIVE SUMMARY

The Department for National Drug Control (DNDC), in collaboration with the Ministry of Education, conducted the National School Survey 2023 to assess substance use trends among middle and high school students. The survey aimed to monitor changes in substance use patterns, identify risk factors, and evaluate protective factors. Implemented across 17 educational institutions, the survey recorded an 86.2% response rate.

#### Key findings from the survey include:

- A decrease in experimentation with substances compared to 2019.
- Current substance use, particularly alcohol and marijuana, was more prevalent among older students.
- Gender differences in substance use were apparent, with males more likely to use cigarettes and illegal drugs, while alcohol and marijuana use were more prevalent among females.
- Alcohol and marijuana were predominantly obtained from friends.
- Instances of riding with intoxicated drivers and exposure to second-hand smoke were notable.
- Non-medical prescription drug use remained low.
- Perception of the harmfulness of smoking cigarettes was widespread among students.
- Many students believed drugs were present in their school environment, although personal exposure was less common.
- Parental disapproval of substance use behaviors was high, but there was room for improvement in communication about the dangers of drugs.
- Some students reported having friends who neither disapprove nor discourage marijuana use.
- The three highest proportions for protective factors were Peer Prosocial Involvment, School Opportunities for Prosocial Involvement, and Family Opportunities for Prosocial Involvement.
- The three highest proportions on the risk factor scales were Transitions and Mobility, Family History of Antisocial Behaviour and Sensation Seeking.
- Many students admitted to having "Stolen Something worth more than \$5", "Getting Suspended from School", and "Purposely damaged/destroyed property not belonging to you".

These findings underscore the importance of continued monitoring and intervention efforts to address substance use among youth, including targeted education and parental involvement initiatives.



## CHAPTER 1 Introduction

1.1 Background

1.2 Objectives

1.3 Survey Limitations

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### 1.1 Background

The National School Survey (NSS) 2023 of Middle and Seniors Schools on Alcohol, Tobacco, Other Drugs (ATODs) and Health, was a collaboration between the Department for National Drug Control and the Department of Education. The year 2023 marked the sixth round of a school-based survey among Bermuda's young people. The five previous surveys, administered in 2003, 2007, 2011, 2015, and 2019 utilised the Communities That Care programme of the Center for Substance Abuse Prevention (CSAP) in the office of the United States Government's Substance Abuse and Mental Health Services Administration (SAMHSA).

Surveys administered in 2011-2019 and the current survey are a combination of the school survey developed by the Inter-American Drug Abuse Control Commission (CICAD) and the Communities That Care Youth Survey, which was designed to help communities plan and implement successful prevention programmes and target middle and senior school students within public, private, and home schools who were between 12 to 18 years old.

The following report describes the administration and results of the survey in addition to recommendations for programme and policy formation and reform. The findings are presented in three separate sections: 1) ATOD prevalence of use, 2) risk and protective factors, and 3) outcome measures.

### 1.2 Objectives

The NSS 2023 serves several purposes. Among them is to study changes in the use of licit and illicit substances; monitor trends in the prevalence and frequency of drug use; observe new phenomenon, such as vaping and use of marijuana products; examine the prevalence and frequency of antisocial behaviours; determine changes in the level of risk associated with ATOD use, delinquency, and other problem behaviours in adolescents; and discover the levels of protective factors that help guard against those behaviours. In recent years, Bermuda has experienced changes in public opinion toward ATOD use. Much of our current upheaval in attitudes is concentrated in today's youth. As the drug market changes, so to must the ability to track and monitor new phenomenon.

The findings presented in this report are useful to the DNDC, its stakeholders, and policy makers at all levels of government to improve drug abuse prevention and intervention programmes, understand the risk and protective factors most in need of attention in the community, track new drug use phenomenon, monitor progress toward national health goals, and encourage healthy drug-free lifestyles among Bermuda's youth.

### 1.3 Survey Limitations

The National School Survey 2023 provides descriptive data on the what, who, where, and when of self-reported behaviours in four major categories. The questions of why and how cannot be answered by this survey. There are, of course, some disadvantages associated with school surveys. One of the most obvious disadvantages relates to the target population. Previous surveys of the adult Bermuda population<sup>1</sup> demonstrated that when adults are asked

<sup>&</sup>lt;sup>1</sup> Department for National Drug Control (2017). National Household Survey 2017. Government of Bermuda; Department for National Drug Control (2021). 2021 National Household Survey. Report of the National Household Survey on Drug Use and Health among the Adult Population in Bermuda. Government of Bermuda.

about their alcohol and drug use, they tend to underestimate their consumption. There are many reasons for this; one of which is social desirability or the tendency of respondents to give answers that they think are either consistent with researchers' expectations or that will make them look better in the eyes of the researchers. By contrast, young people may overestimate their drinking habits, for example, if they feel that drinking is associated with adult behaviour or is expected by their friends. The risk of receiving inaccurate responses is probably higher if the data collection setting is less formal, that is, if students think that classmates might be able to see their responses. There is strong evidence from many studies, however, that data collected through school surveys have a high level of reliability and validity. To minimise the effects of overestimation, a very large population frame was utilised. Additionally, consumption questions were asked in a variety of ways as a means of confirming previous responses. As this survey was based on self-reported data, the results should therefore be interpreted with caution. Furthermore, a determination of causal links between ATOD use and antisocial behaviours or sub-group variations in substance use were not assessed. Moreover, no comparisons were made of poly drug use.

In addition, the results can only be generalised to the population that is defined in the representative sample: public, private, and group home school students in grades M2 to S4. Students who were absent on the day of survey administration and special education classes are not represented. Also, youths who dropped out of school were not included. It is important to note, that students outside the middle and senior school system can be expected to differ from students within the educational system, in general, not only in terms of ATOD prevalence rates, but also in terms of social and economic status. Additionally, among those students absent from school and those who have dropped out of school, it is likely that a higher proportion of individuals would be taking drugs or drinking alcohol. Non-response to survey items may also present a limitation, as it could be a source of bias in the survey.

Participating schools were expected to administer the survey during the week of October 9th to 13th, 2023. In the weeks leading up to data collection, for the 2023 NSS, the Government of Bermuda's Information Technology (IT) infrastructure was severely compromised due to a cyber-attack. The attack prevented the use of all Government systems, such as emails and access to all documents saved on the network. The lack of access to the Government network required the research team to implement countermeasures to ensure the survey implementation process was not too severely impacted. These included the creation of a Gmail account to allow for email correspondence with school liaisons; increased telephone communication with the school liaisons to ensure that they were receiving email correspondence and to confirm the survey process and next steps; recreating control documents for survey sites entirely or from older documents saved on external hard drives; and working with the online vendor, SurveyMonkey, to update the user email associated with the account, to the newly created Gmail account to access the database. SurveyMonkey's high level of security meant a two-step verification was required. This process took approximately two weeks, but eventually led to gaining access one day prior to the start of the data collection phase.

# CHAPTER 2 Methodology

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### Survey Design

The 2023 round of the NSS was administered during the week of October 9th to 13th to middle and senior school students in Bermuda. The survey design is briefly described in the sections below and in Figure 2.1.

### 2.1 Population Coverage

The survey targeted 3,134 students, enrolled in 17 schools (5 public schools, one alternative school, seven private schools, and four home schools); 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 B). According to the Department of Education, these were the operational schools for the 2023/2024 academic year. The five public schools comprise of two senior schools and three middle schools. This is the fourth time that the NSS was conducted among home schools. Students' ages in the M2 to S4 grades correspond to approximately 12 to 18 years, although there were some students who reported being under 12 years old as well as over the age of 18 within these grades (see Appendix A).

The entire M2 to S4 student population was targeted for the survey since full coverage is known to eliminate sampling error and to provide data on all the students in the target population. In this way, a low margin of error was obtained, that is,  $\pm 1\%$ , and high confidence. This is the range, or confidence interval, in which the average population opinion is expected to lie.

### 2.2 Data Collection

At the beginning of the planning process, early in 2023, the Ministry of Education was informed of the opportunity to collaborate, yet again, on the NSS as was done in 2019, 2015, and 2011. School principals and administrators were formally notified during the 2023/2024 academic year, 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 17 schools that participated, one new private school indicated its interest to be part of this initiative. During this undertaking, a large number of homeschools were no longer operational. There was also one specialized private school that did not participate in the survey, due to the fact that majority of their student population did not have the cognitive ability to respond to the questions required.



Data collection for the survey was carried out from Monday, October 9th to Friday, October 13th; with all schools participating during this designated period. For the first time, an online approach via Survey Monkey was introduced to the respondents. Each school conducted the survey across all classes on the same day and at the same time to reduce contamination of responses. For the 2023 round of the NSS, there was a mixed method approach adopted; with 2,020 students (75%) opting to complete the survey online and 681 students (25%) utilizing the traditional paper and pencil method to capture the self-reported responses. The



Figure 2.1. Survey design steps.

majority of the students who utilized the paper and pencil method were those from public schools, mainly due to the lack of a fully functioning Wi-Fi infrastructure at the schools.

#### **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 paper questionnaires, building the online questionnaire, providing logistical assistance to school survey coordinators, analysing the survey results, and preparing the survey reports. In addition, there was a team of observers who had oversight at various schools and classrooms during the administration of the survey. Their main responsibility was to ensure that teachers were not involved in any way with students' responses and to provide any technical assistance on the questionnaire items should there have been any issues raised by the students. The observers gave a report of their feedback after each site visit was completed.

### 2.2.1 Questionnaire Design and Testing

#### Instrument

The questionnaire comprised of two sections (see Appendix F). Section 1 of the questionnaire was adopted from the CICAD School Survey questionnaire, which is a standardised instrument commonly used among Organisation of American States (OAS) Members and Caribbean countries for their NSSs. This part of the questionnaire contained the basic demographic questions and questions that measure reported ATOD consumption.

Section 2 of the questionnaire was adopted from the Communities That Care Youth Survey, which was developed by the CSAP of the US Department of Health and Human Services. This section contained questions measuring a variety of risk and protective factors (RPFs) by using groups of survey items or indicators, which are called scales. It should be noted that some of the risk factors are measured with more than one scale. For the purposes of this survey and for ease of understanding by the target audience, the specific terminologies of the scales were not used in grouping the questions. There were four main domains for each of the risk and protective factors: Community, Family, School, and Peer-Individual, in addition to Outcome Measures, such as depression and antisocial behaviours including fighting, getting suspended from school, and selling drugs. The domains, scales, and outcome measures are delineated in Table 2.1.

All of the questionnaire items were pre-coded with the exception of two open-ended questions relating to school and age. This was the case for the online version of the survey instrument as well, though some of the other online questions had to be recoded once the data was downloaded from the Survey Monkey platform. For example, many students inputted their race as 'black and white' in the 'Other' category when this should have been recorded in the preset 'mixed' category.

The year 2023 marked the first time a mixed methods approach was implemented to collect responses for the National School Survey. Months prior to the survey week, participating schools were required to complete a technology assessment. This assessment provided the DNDC with information about each school's capacity to carry out a web-based survey versus a paper questionnaire. Web-based surveys have a number of benefits such as automatic

storage of responses in real time, increased ease of respondents adhering to skip patterns, a decrease in respondent error and of course an overall reduction in the cost of survey processing.

The web-based platform chosen for the NSS was SurveyMonkey. SurveyMonkey was chosen for the following reasons; the DNDC's current familiarity with the platform and how it functions, its ability to collect and house the large capacity of data that was required, the ease of being able to download the large amount of data into the applications needed for analysis (i.e. Excel and SPSS), and the user friendly process used to complete the questionnaire by the students. The web-based questionnaire was built using embedded skip instructions that allowed students to move through the questionnaire in a timely manner whilst ensuring greater accuracy. Upon completion of the questionnaire, respondents were required to select the 'submit' button which signified completion of the survey as well as allowing the data to be automatically stored into the SurveyMonkey database for later retrieval.

Table 2.1Risk and Protective Factor Scales and Outcome Measures

| Domains         | Scales   |  |
|-----------------|--|--|
|                 | RISK FACTORS   | PROTECTIVE FACTORS                         |
|                 | 1. Low Neighbourhood Attachment  | 1. Opportunities for Prosocial Involvement |
| ity             | 2. Community Disorganisation   | 2. Rewards for Prosocial Involvement       |
| iu nu           | 3. Transitions and Mobility  |  |
| omr             | 4. Perceived Availability of Drugs                                       |  |
| U               | 5. Perceived Availability of Handguns                                    |  |
|                 | 6. Laws and Norms Favourable to Drug Use                                 |  |
|                 | 7. Laws and Norms Favourable to Handguns                                 |  |
|                 | 1. Family History of Antisocial Behaviour                                | 1. Attachment                              |
|                 | 2. Poor Family Management  | 2. Opportunities for Prosocial Involvement |
| nily            | 3. Family Conflict   | 3. Rewards for Prosocial Involvement       |
| Fan             | 4. Parental Attitudes Favourable Toward<br>ATOD Use                      |  |
|                 | 5. Parental Attitudes Favourable to<br>Antisocial Behaviour              |  |
| looh            | 1. Poor Academic Performance   | 1. Opportunities for Prosocial Involvement |
| Scl             | 2. Lack of Commitment to School  | 2. Rewards for Prosocial Involvement       |
|                 | 1. Rebelliousness  | 1. Rewards for Prosocial Involvement       |
|                 | 2. Gang Involvement  | 2. Interaction with Prosocial Peers        |
|                 | 3. Favourable Attitudes Toward ATOD Use                                  | 3. Belief in Moral Order                   |
| ual             | <ol> <li>Favourable Attitudes Toward Antisocial<br/>Behaviour</li> </ol> | 4. Prosocial Involvement                   |
| livid           | 5. Sensation Seeking   | 5. Religiousity                            |
| r-Inc           | 6. Peer Rewards for Antisocial Involvement                               | 6. Social Skills                           |
| Peel            | 7. Friends' Use of Drugs   |  |
|                 | 8. Friends' Delinquent Behaviour   |  |
|                 | 9. Intention to Use  |  |
|                 | 10.Early Initiation of Drug Use  |  |
|                 | 11. Low Perceived Risks of Drug Use                                      |  |
| ne<br>es        | 1. Depression  |  |
| utcor<br>leasur | 2. Treatment   |  |
| ŐΣ              | 3. Antisocial Behaviours   |  |

### 2.2.2 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 survey coordinator 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 consent form to the school. In total, 57 students (1.8% of enrollees) did not receive consent to participate in the survey according to the response forms returned to the DNDC at the completion of the survey.

#### **Pre-Administration**

Due to the mixed method approach, which was adapted for the 2023 NSS, a technology assessment was sent out, via Survey Monkey, to all participating schools to ascertain each school's Wi-Fi capabilities and access to computers. We received 14 responses from the 17 schools. In June 2023, 66 students from three schools (1 public senior, 1 public middle and 1 private) completed a pilot of the online questionnaire. This process allowed the DNDC research team to ensure that the online survey instrument's skip instructions worked correctly, the flow of the questions was understandable, and to gather any other suggested changes from the students/teachers to improve the overall questionnaire.

Enrolment numbers were obtained from each school as well as the indication as to whether the school would complete the survey online or via the paper and pencil method. The printed questionnaires were packaged in envelopes and boxes, accompanied by relevant control forms and instructions for the survey Administrators. For those schools opting for the webbased questionnaire, the control forms and instructions were emailed to the designated school liaison. The printed documents were delivered to the schools prior to each school's scheduled survey administration date.

In addition, the schools were provided with a flyer about the survey. They were asked to place it on their notice boards, send it by e-mail to the students and/or their parents to remind them of the survey, or to use any other suitable means for getting students' attention.

#### **Administration**

The survey was administered in the classroom solely under the supervision of the teacher and required approximately one class period (50 minutes) to complete. In some instances, the administration extended a little beyond the one class period. During this undertaking it was also noted, that teachers did not give many students the sufficient time required to complete the survey, which resulted in several incomplete questionnaires. Most schools administered the survey during the advisory, home room or assembly hall period. For those schools who required paper questionnaires, each school's survey coordinator received an approximate

number of questionnaires in envelopes to match the number originally requested. Those paper questionnaires were then distributed amongst the respective classroom teachers, along with the Instructions for Survey Administrators.

The teachers reviewed the instructions with their 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 parents' marital status) that may have posed difficulty and the meaning of the associated response categories. Both the teacher and the instructions on the front of the paper questionnaire and at the start of the online questionnaire, assured students that the survey was anonymous and confidential. Students were then asked to complete the questionnaire. Those who used a paper questionnaire were reminded to place the completed questionnaire in the envelope, which can be sealed to preserve confidentiality. Those filling the online version completed it by clicking the submit button at the end of the questionnaire.

Student cooperation was generally good. The general pattern of behaviour was for initial comments and levity on the topic of the survey, but then most students worked seriously on completing the questionnaire.

Staff from the DNDC and its trained representatives observed the administration of the survey in a select number of schools during the week to answer any questions that might have arisen.

The school's survey coordinator gathered all the paper questionnaires, as well as completed the control forms, for resubmission to the DNDC. A majority of the control forms were emailed back to the DNDC, as most schools opted to complete the survey online.

#### **Post Administration**

The DNDC collected the completed paper questionnaires (681) from respective schools. 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. All of the data from the paper questionnaires were inputted into a Microsoft Excel File. The data file of completed online questionnaires (2,020) were downloaded from Survey Monkey directly into an SPSS file. Due to the mixed methods approach, the data was initially cleaned in its respective files to ensure that quality of the data was maintained. It was noted that, there was a higher occurrence of errors in the Microsoft Excel file that housed the inputted data from the paper questionnaires then the SPSS file that contained the online responses. Once, the separate files were cleaned the data from the Microsoft Excel file was combined with the SPSS file and a final review was completed for questionnaire alignment purposes. The final SPSS file was then ready for the data analysis process to begin.

### 2.3 Data Quality

#### **Response Rate**

Of the target population (3,134 enrolled students), a total of 2,701 students responded to the survey, accounting for a response rate of 86.2% (see Appendix B). This represents an increase in the response rate by 2.6% from the 2019 round of the survey.

There was a large decrease (4 in 2023 vs. 11 in 2019) in the number of participating special and home schools during this undertaking. This decrease is attributed to the closure of registered home schools since the last NSS in 2019. In addition, there were non-responses due to parents who did not consent to their child's participation in the survey, students being absent or away from school on the day of the survey.

#### Validation

Approximately 10% (68) of the paper questionnaires (681) were validated to allow for any possible data entry errors to be corrected. In addition, checks were made for exaggeration, and those responses were modified when able or excluded from the data set if a change was not able to be made; for example, number of days of drug use greater than 31 days or age beyond a reasonable expected number of years. Another validation check was done to eliminate responses on patterns of drug use that were logically inconsistent; for instance, if a student reported that he or she had used a drug in the past 30 days but had never used this drug in his or her lifetime. In relation to the SPSS data file, that contained the online responses, checks were completed for questionnaire completeness and opportunities for recoding of responses. There were no checks completed for straight-lining or speeding.

#### **Missing Data**

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

### 2.4 Data Processing

Responses to the survey questions were captured directly into the online questionnaire (2,020)and onto the paper questionnaire (681) by the respondents. For the paper questionnaires, data entry was undertaken by the DNDC with trained external staff performing this function. Steps were taken to ensure confidentiality and reliability of the process and outcome. The process spanned approximately four weeks (one week for recruitment, training, and setup of the data entry screen; two 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 questionnaire was pre-coded. To guard against transcription errors, care was taken in entering the responses from the paper questionnaires onto the data capture template on the computer. Microsoft Excel was used on individual computers for data entry, which was integrated into SPSS for data processing. The captured data file was then cleaned and 68 or approximately 10% of the questionnaires were validated. For the online responses, the data was downloaded from the Survey Monkey platform into SPSS. To ensure that the data from the online responses aligned with the data from the paper questionnaires, care was taken to combine the Microsoft Excel file, which contained the paper questionnaire responses into the SPSS file that contained the online responses to make one SPSS file for analysis. Once the two files were combined, tables were run on several variables to ensure the control numbers which included student count total by grade and sex were obtained.

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.

### 2.5 Data Analysis

Analyses were done by sections: ATOD Use; Risk and Protective Factors; as well as Outcome Measures. The results of the survey are presented in two ways: (1) for each surveyed grade level and (2) for the overall surveyed population. Measurement of each of these is elaborated in the respective sections. In some instances, the results are also presented by the sex of the respondent (see Chapter 3.1) and by public and private school disaggregation (see Appendix E).

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 this student population. For the 2023 survey undertaking, there was one student for whom the grade level was not indicated and was not included in the grade level analysis. It is important to keep in mind, however, that scores averaged across the full range of grade levels included in this report can mask problems within individual grades. 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. For many items, there is typically a great deal of difference between grades or sex. For example, M2 grade level alcohol use is typically much lower than S4 grade level alcohol use. Hence, only paying attention to the overall alcohol use statistic would mask these grade differences in alcohol usage.

Frequencies of count (number) and percent were generated for all variables. Basic descriptive analyses were carried out for all variables under the ATOD section. Descriptive statistics, such as the mean, mode, and range, were also derived and used in the analysis.

For the risk and protective factor analysis, average scores (proportions) were computed for each scale used to measure the respective domain. Each of the risk and protective factor scores are measured on a scale of 0 to 100. A score of 50 is the normative average for the scales. A low score indicates the relative absence of the risk or protective factor. A high score indicates an elevated level of that risk or protective factor. Because risk factors are associated with an increased likelihood of alcohol and drug use, and other problem behaviours, lower scores on risk factors are desirable. Conversely, because protective factors are associated with a decreased likelihood of problem behaviours, a higher score on the protective factors is desirable. For ease of data interpretation and reporting, some variables required reverse coding and recoding. In regard to the risk and protective scales, new variables were created to allow for estimation of the level of protection or risk.

In addition to a complete profile of risk and protective factor levels, substance use, and other behaviour prevalence rates, analyses were also done by public versus private school comparisons on ATOD use (see Appendix E). Summary results from the two previous rounds of the survey are also included in Appendices C and D of this survey report for trend analysis. Each school's results will also be analysed and compared to the national averages in separate reports prepared for each school. Normative comparisons of this type are one of the best ways of identifying the strengths a school can build on and weaknesses that must be addressed.

In the interest of minimising the additional burden of data collection required from schools and preserving fast turnaround times for processing and reporting, overall statistics in this report are presented without grade weighting since analyses of previously collected data have shown that in schools where the grade levels are well represented the unweighted results are either the same or within a point or two of the weighted results.

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.

# **CHAPTER 3.1** RESULTS ATOD Use

| 3.1.1 Introduction and Measurement                               |
|--|
| 3.1.2 Overall Prevalence   |
| 3.1.3 Lifetime and Current Prevalence by Grade Level             |
| 3.1.4 Lifetime and Current Prevalence by Sex                     |
| 3.1.5 Consumption by Type of Drug                                |
| 3.1.6 Access to Drugs  |
| 3.1.7 Perception of Health Risk                                  |
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| 3.1.9 Reaction & Involvement of Parents/Guardians                |
| 3.1.10 Reaction of Close Friends to Marijuana Use                |
|  |

### **3.1.1 Introduction and Measurement**

In this survey, drug consumption is measured by a set of survey questions that can be found in Section 1 of the questionnaire, which are similar to questions generally used to study drug consumption by middle and senior school students, regionally and internationally. Energy drinks consumption is measured by a set of four questions. (See Appendix F).

This section presents the results of the consumption of ATODs as well as energy drinks. The findings on the use of other drugs – apart from marijuana – such as cocaine, ecstasy, crack, and a number of synthetic drugs can be used by prevention planners as an overall gauge of "hard" drug use. Also included in this section is the prevalence of use of drugs such as inhalants, tranquilizers, and stimulants. These results are presented for both lifetime and current use (last 30-days) of ATODs and energy drinks, disaggregated by sex and grade level of student, with relevant tables and charts included to illustrate the number and proportion of students who have reported use of these substances. Lifetime prevalence of use, that is, whether the student has ever used the drug, is a good measure of student experimentation. Past 30-days prevalence of use, that is, whether the student has used the drug within the last month, is a good measure of current use. Current use is obtained from filtering students who have indicated lifetime use and who then have indicated recent use; and is reported as a proportion of all survey respondents. In addition, this section also examines age of first use. Further, this section shows the results of students' perception of harm in consuming ATODs and ease of obtaining these substances.

In addition to the standard lifetime and current use prevalence of alcohol, perception of risk, ease of availability, and the use of vaping were also measured.

### 3.1.2 Overall Prevalence

Students were asked to report if they "have ever consumed any of these substances..." 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 any of the drugs surveyed. Overall, 48.4% (1,307) of all survey respondents have reported use of at least one drug in their lifetime. This includes the use of all legal and illegal drugs listed in Table 3.1.1, excluding energy drinks.

ATOD prevalence for all students, M2 through S4, is presented in Figures 3.1.2 and 3.1.3 and the overall results columns of Tables 3.1.1 and 3.1.2. As these results show, students recorded the highest lifetime prevalence-of-use



Figure 3.1.1. Drug use by survey respondents.

for energy drinks (59.5%), alcohol (42.0%), marijuana (12.6%), and inhalants (10.2%). Other lifetime prevalence ranges from a low of 0.5% for GHB to a high of 4.4% for hashish.

Students reported the highest current prevalence-of-use for energy drinks (30.9%), alcohol (11.3%), and marijuana (5.6%). Other current use prevalence ranges from a low of 0.3% for cocaine and crack to a high of 1.8% for inhalants.

### **TECHNICAL NOTES**

#### What is Prevalence?

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

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

**Last year (past 12 months) prevalence:** the proportion of survey respondents who reported using a named drug in the year prior to the survey. For this reason, last year prevalence is often referred to as recent use; and also classified as lifetime prevalence.

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



#### Chapter 3.1: Results



Figure 3.1.2. Lifetime use of ATODs and energy drinks for survey respondents.

### Chapter 3.1: Results



Figure 3.1.3. Current use of ATODs and energy drinks for survey respondents.

### Lifetime Use

#### Table 3.1.1

Lifetime Use<sup>2</sup> of ATODs and Energy Drinks by Grade Level of Survey Respondents

|                                 | Grade Level <sup>3</sup> |      |                        |      |                        |      |                        |      |                        |      |                        |      | Quant       |      |
|---------------------------------|--------------------------|------|------------------------|------|------------------------|------|------------------------|------|------------------------|------|------------------------|------|-------------|------|
| Substance                       | <b>M2</b><br>(n = 545)   |      | <b>M3</b><br>(n = 496) |      | <b>S1</b><br>(n = 490) |      | <b>S2</b><br>(n = 437) |      | <b>S3</b><br>(n = 413) |      | <b>S4</b><br>(n = 319) |      | (n = 2,701) |      |
|                                 | n                        | %    | n                      | %    | n                      | %    | n                      | %    | n                      | %    | n                      | %    | n           | %    |
| LEGAL DRUGS                     | 189                      | 34.7 | 201                    | 40.5 | 196                    | 40.0 | 214                    | 49.0 | 250                    | 60.5 | 204                    | 63.9 | 1,254       | 46.4 |
| Alcohol                         | 145                      | 26.6 | 172                    | 0.7  | 183                    | 37.3 | 203                    | 46.5 | 239                    | 57.9 | 192                    | 60.2 | 1,134       | 42.0 |
| Cigarettes                      | 12                       | 2.2  | 13                     | 2.6  | 15                     | 3.1  | 11                     | 2.5  | 20                     | 4.8  | 23                     | 7.2  | 94          | 3.5  |
| Inhalants                       | 75                       | 13.8 | 57                     | 11.5 | 43                     | 8.8  | 33                     | 7.6  | 37                     | 9.0  | 31                     | 9.7  | 276         | 10.2 |
| ILLEGAL DRUGS <sup>4</sup>      | 35                       | 6.4  | 38                     | 7.7  | 66                     | 13.5 | 75                     | 17.2 | 116                    | 28.1 | 96                     | 30.1 | 426         | 15.8 |
| Amphetamines & Methamphetamines | 3                        | 0.6  | 3                      | 0.6  | 5                      | 1.0  | 4                      | 0.9  | 4                      | 1.0  | 4                      | 1.3  | 23          | 0.9  |
| Amphetamines-type Stimulants    | 5                        | 0.9  | 2                      | 0.4  | 6                      | 1.2  | 4                      | 0.9  | 3                      | 0.7  | 10                     | 3.1  | 30          | 1.1  |
| Analgesics                      | 3                        | 0.6  | 3                      | 0.6  | 6                      | 1.2  | 7                      | 1.6  | 8                      | 1.9  | 4                      | 1.3  | 31          | 1.1  |
| Beedi                           | 3                        | 0.6  | 1                      | 0.2  | 3                      | 0.6  | 5                      | 1.1  | 4                      | 1.0  | -                      | -    | 16          | 0.6  |
| Cannabis Resin                  | 4                        | 0.7  | 4                      | 0.8  | 22                     | 4.5  | 19                     | 4.3  | 25                     | 6.1  | 30                     | 9.4  | 104         | 3.9  |
| Cocaine                         | 6                        | 1.1  | 2                      | 0.4  | 5                      | 1.0  | 4                      | 0.9  | -                      | -    | -                      | -    | 17          | 0.6  |
| Crack                           | 2                        | 0.4  | 2                      | 0.4  | 8                      | 1.6  | 4                      | 0.9  | 2                      | 0.5  | -                      | -    | 18          | 0.7  |
| Ecstasy                         | 2                        | 0.4  | 3                      | 0.6  | 6                      | 1.2  | 7                      | 1.6  | 4                      | 1.0  | 4                      | 1.3  | 26          | 1.0  |
| GHB                             | 3                        | 0.6  | 1                      | 0.2  | 4                      | 0.8  | 3                      | 0.7  | 2                      | 0.5  | -                      | -    | 13          | 0.5  |
| Grabba                          | 6                        | 1.1  | 5                      | 1.0  | 17                     | 3.5  | 10                     | 2.3  | 16                     | 3.9  | 11                     | 3.4  | 65          | 2.4  |

<sup>&</sup>lt;sup>2</sup> Students responding to "ever" consuming the substance (asked of all survey respondents).

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

<sup>&</sup>lt;sup>4</sup> "Illegal drugs" also include "Other drugs".

#### Table 3.1.1 cont'd

Lifetime Use of ATODs and Energy Drinks by Grade Level of Survey Respondents

|                                    | Grade Level            |      |                        |      |                        |      |                        |      |                        |      |                        |      | Quant       |      |
|------------------------------------|------------------------|------|------------------------|------|------------------------|------|------------------------|------|------------------------|------|------------------------|------|-------------|------|
| Substance                          | <b>M2</b><br>(n = 545) |      | <b>M3</b><br>(n = 496) |      | <b>S1</b><br>(n = 490) |      | <b>S2</b><br>(n = 437) |      | <b>S3</b><br>(n = 413) |      | <b>S4</b><br>(n = 319) |      | (n = 2,701) |      |
|                                    | n                      | %    | n                      | %    | n                      | %    | n                      | %    | n                      | %    | n                      | %    | n           | %    |
| Hallucinogens                      | 2                      | 0.4  | 2                      | 0.4  | 7                      | 1.4  | 6                      | 1.4  | 12                     | 2.9  | 5                      | 1.6  | 34          | 1.3  |
| Hashish                            | 5                      | 0.9  | 6                      | 1.2  | 18                     | 3.7  | 21                     | 4.8  | 40                     | 9.7  | 28                     | 8.8  | 118         | 4.4  |
| Heroin                             | 5                      | 0.9  | 1                      | 0.2  | 5                      | 1.0  | 6                      | 1.4  | 6                      | 1.5  | 1                      | 0.3  | 24          | 0.9  |
| Ketamine                           | 3                      | 0.6  | 5                      | 1.0  | 6                      | 1.2  | 2                      | 0.5  | 3                      | 0.7  | -                      | -    | 19          | 0.7  |
| Marijuana                          | 11                     | 2.0  | 25                     | 5.0  | 49                     | 10.0 | 63                     | 14.4 | 101                    | 24.5 | 91                     | 28.5 | 340         | 12.6 |
| Poppers                            | 4                      | 0.7  | 4                      | 0.8  | 6                      | 1.2  | 4                      | 0.9  | -                      | -    | 2                      | 0.6  | 20          | 0.7  |
| Tranquilizers without prescription | 4                      | 0.7  | 1                      | 0.2  | 7                      | 1.4  | 4                      | 0.9  | -                      | -    | -                      | -    | 16          | 0.6  |
| Other Drugs                        | 7                      | 1.3  | 9                      | 1.8  | 12                     | 2.4  | 11                     | 2.5  | 9                      | 2.2  | 4                      | 1.3  | 52          | 1.9  |
| Energy Drinks                      | 234                    | 42.9 | 266                    | 53.6 | 303                    | 61.8 | 303                    | 69.3 | 290                    | 70.2 | 212                    | 66.5 | 1,608       | 59.5 |

### **Current Use**

#### Table 3.1.2

Current Use<sup>5</sup> of ATODs and Energy Drinks by Grade Level of Survey Respondents

| Substance <sup>6</sup>        | <b>M2</b><br>(n = 545) |      | <b>M3</b><br>(n = 496) |      | <b>S1</b><br>(n = 490) |      | <b>S2</b><br>(n = 437) |      | <b>S3</b><br>(n = 413) |      | <b>S4</b><br>(n = 319) |      | (n = 2,701) |      |
|-------------------------------|------------------------|------|------------------------|------|------------------------|------|------------------------|------|------------------------|------|------------------------|------|-------------|------|
|                               | n                      | %    | n                      | %    | n                      | %    | n                      | %    | n                      | %    | n                      | %    | n           | %    |
| LEGAL DRUGS                   | 36                     | 6.1  | 35                     | 7.0  | 61                     | 12.7 | 98                     | 35.0 | 92                     | 24.1 | 98                     | 35.0 | 422         | 15.3 |
| Alcohol                       | 13                     | 2.2  | 32                     | 6.4  | 49                     | 10.2 | 94                     | 27.9 | 87                     | 22.8 | 94                     | 27.9 | 365         | 13.2 |
| Cigarettes                    | 3                      | 0.5  | 5                      | 1.0  | 7                      | 1.5  | 13                     | 3.9  | 12                     | 3.1  | 13                     | 3.9  | 48          | 1.7  |
| Inhalants                     | 22                     | 3.7  | 3                      | 0.6  | 13                     | 2.7  | 6                      | 1.8  | 6                      | 1.6  | 6                      | 1.8  | 62          | 2.2  |
| ILLEGAL<br>DRUGS <sup>®</sup> | 5                      | 0.8  | 10                     | 2.0  | 30                     | 6.3  | 59                     | 17.5 | 70                     | 18.3 | 59                     | 17.5 | 228         | 8.2  |
| Cocaine                       | 2                      | 0.3  | -                      | -    | 1                      | 0.2  | 4                      | 1.2  | 1                      | 0.3  | -                      | -    | 8           | 0.3  |
| Crack                         | 2                      | 0.3  | -                      | -    | -                      | -    | 4                      | 1.2  | -                      | -    | 1                      | 0.3  | 7           | 0.3  |
| Ecstasy                       | 1                      | 0.2  | -                      | -    | 1                      | 0.2  | 6                      | 1.3  | 2                      | 0.5  | 9                      | 2.7  | 19          | 0.7  |
| Heroin                        | 1                      | 0.2  | -                      | -    | 1                      | 0.2  | 2                      | 0.6  | -                      | -    | 2                      | 0.6  | 6           | 0.2  |
| Marijuana                     | 4                      | 0.7  | 7                      | 1.4  | 25                     | 5.2  | 57                     | 16.9 | 67                     | 17.5 | 57                     | 16.9 | 210         | 7.6  |
| Other Drugs                   | 2                      | 0.3  | 4                      | 0.8  | 6                      | 1.3  | 7                      | 1.5  | 5                      | 1.3  | 4                      | 1.2  | 28          | 1.0  |
| Energy Drinks                 | 63                     | 10.7 | 72                     | 14.4 | 113                    | 23.6 | 72                     | 21.4 | 86                     | 22.5 | 72                     | 21.4 | 532         | 19.2 |

<sup>5</sup> Of students who responded to "ever" consuming the substance, 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>6</sup> Survey did not measure current use of cannabis resin, hashish, hallucinogens, poppers, analgesics, beady, ketamine, GHB, amphetamine-type stimulant, amphetamines and methamphetamines, and grabba.

<sup>7</sup> Percentages are computed with the current use number as a proportion of total grade level survey respondents for each substance.

<sup>8</sup> "Illegal drugs" also include "Other drugs".
# 3.1.3 Lifetime and Current Prevalence by Grade Level of Respondent

ATOD prevalence for individual grade levels is presented in Tables 3.1.1, 3.1.2, and Figure 3.1.4. Typically, prevalence-of-use of most substances increases as students advance to higher grades. However, inhalant use provides an exception to this pattern, often peaking during the late middle school or early high school years. This may be because inhalants are relatively easy for younger students to obtain. The survey results show that current alcohol use for all survey respondents ranges from a low of 3.7% among M2 students to a high of 26.0% among S4 students. Current use of marijuana ranges from a low of 0.7% among M2 students to a high of 14.4% among S4 students; while for cigarettes, current use ranges from a low of 0.2% for M3 students to a high of 1.9% for S3 students, and inhalant current use ranges from a low of 1.0% for M3 students to a high of 2.7% for S1 students.



Figure 3.1.4. Current use of selected substances by grade level of survey respondents.

# 3.1.4 Lifetime and Current Prevalence by Sex of Respondent

- The results in Table 3.1.3 show that there were more males who reported the use of cigarettes (3.8%) and illegal drugs, such as cannabis resin (4.1%), and crack (0.8%) for the lifetime use reference period. In terms of current use, there were also more male users of cigarettes (1.1%), crack (0.5%), ecstasy (0.5%), cocaine (0.4%), heroin (0.5%), and other drugs (1.5%).
- Alcohol use was more prevalent among females for both lifetime (46.0%) and current (13.5%) use reference periods.
- Marijuana prevalence was notably higher for females (14.5% versus 10.7% for males) at

the lifetime use reference period. Similarly females also recorded higher prevalence-ofuse in the current reference period (6.3% for males versus 4.7% for females).

• For lifetime prevalence, both males and females reported the same use for heroin (0.9%). Similarly, both sexes also reported the same prevalence-of-use in the current reference period for inhalants (1.8%).

| Table | 3.1.3 |
|-------|-------|
|-------|-------|

Lifetime and Current Use of ATODs and Energy Drinks by Sex of Survey Respondents

| Substance      | Lifetime Use (%)   |                     |              |                    | Current            | Use (%)             |              |                    |
|----------------|--------------------|---------------------|--------------|--------------------|--------------------|---------------------|--------------|--------------------|
|                | Male<br>(n =1,310) | Female<br>(n=1,370) | NS<br>(n=21) | Total<br>(n=2,701) | Male<br>(n =1,310) | Female<br>(n=1,370) | NS<br>(n=21) | Total<br>(n=2,701) |
| Alcohol        | 37.8               | 46.0                | 42.9         | 42.0               | 8.9                | 13.5                | 9.5          | 11.3               |
| Cannabis Resin | 4.1                | 3.6                 | -            | 3.9                |                    |                     |              |                    |
| Cigarettes     | 3.8                | 3.1                 | 4.8          | 3.5                | 1.1                | 0.7                 | 4.8          | 0.9                |
| Cocaine        | 0.6                | 0.7                 | -            | 0.6                | 0.4                | 0.2                 | -            | 0.3                |
| Crack          | 0.8                | 0.5                 | -            | 0.7                | 0.5                | 0.2                 | -            | 0.3                |
| Ecstasy        | 0.7                | 1.2                 | -            | 1.0                | 0.5                | 0.4                 | -            | 0.4                |
| Energy Drinks  | 60.5               | 59.0                | 38.1         | 59.5               | 32.9               | 29.3                | 9.5          | 30.9               |
| Hashish        | 3.9                | 4.9                 | -            | 4.4                |                    |                     |              |                    |
| Heroin         | 0.9                | 0.9                 | -            | 0.9                | 0.5                | 0.3                 | -            | 0.4                |
| Inhalants      | 10.0               | 10.6                | 4.8          | 10.2               | 1.8                | 1.8                 | -            | 1.8                |
| Marijuana      | 10.7               | 14.5                | 4.8          | 12.6               | 4.7                | 6.3                 | 9.5          | 5.6                |
| Other Drugs    | 0.8                | 0.4                 | -            | 0.6                | 1.5                | 1.2                 | -            | 1.3                |



Figure 3.1.5. Lifetime use of selected substances by sex of respondent.



Figure 3.1.6. Current use of selected substances by sex of respondent.

# 3.1.5 Consumption by Type of Drug

## Alcohol

Alcohol, including beer, wine, and hard liquor, is the drug most often used by adolescents today. Research and similar surveys in the past have shown the pervasiveness of alcohol in middle and high schools.<sup>9</sup> In comparison, the use of cigarettes, inhalants, or marijuana are less than half as prevalent as alcohol use. Given the national pattern, it is not surprising that alcohol is the most used drug among the surveyed age cohort in Bermuda. Studies have shown that consuming alcohol lowers inhibitions and impairs judgment, exposing adolescents to serious dangers. Adolescent drinking is associated with having trouble at school, including missing class and having low grades.<sup>10</sup> This body of research has also shown that children who began alcohol use before age 15 are five times more likely to abuse alcohol by age 21. Other consequences include: risky sexual behaviours, poor school performance, and increased risk of suicide and homicide. As with alcohol use in general, binge drinking tends to become more pervasive as students grow older.

## Lifetime and Current Use

- Lifetime prevalence of alcohol use ranges from a low of 26.6% for M2 to a high of 60.2% for S4 students. Overall, about two in five (42.0%) of the survey respondents have reported using alcohol in their lifetime.
- Current prevalence (previous 30-days) of alcohol use ranges from a low of 3.7% for M2 students to a high of 26.0% for S4 students. Overall, 11.3% of the survey respondents have used alcohol in the past 30 days.



Figure 3.1.7. Lifetime and current use of alcohol by grade level of survey respondents.

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<sup>&</sup>lt;sup>o</sup> L. D. Johnston, P. M. O'Malley, J. G. Bachman, & J. E. Schulenberg. (2022). Monitoring the Future national results on adolescent drug use: Overview of key findings, 2021. Ann Arbor: Institute for Social Research, The University of Michigan. http://monitoringthefuture.org/pubs/monographs/mtf-overview2011. pdf (accessed March 19, 2024).

<sup>&</sup>lt;sup>10</sup> Office of Adolescent Health. (2019). Risks of Adolescent Alcohol Use. https://www.hhs.gov/ash/oah/adolescent-development/substance-use/alcohol/ risks/index.html (accessed May 15, 2020).

## **First Use**

Of the lifetime users, 759 initiated alcohol consumption "more than a year ago" (28.1% of all survey respondents), while 69 (consumed alcohol for the first time "during the past 30 days" (2.6% of all survey respondents).

## **Recent Use**

• The majority (764) of lifetime users of alcohol, have reported recent use of alcohol (use in the past 12 months). This corresponds to about three in ten or 28.3 % of all survey respondents who can be considered as recent users.

## **Age of First Use**

 For users of alcohol, females and males mainly initiated use at 12 years old or younger (21.8%). Female students between 13 years old to 17 years old reported higher alcohol use during this reporting period than males.

# Table 3.1.4First Use of Alcohol for Survey Respondents

| First Use                                  | Number | Percent |
|--|--------|---------|
| Never                                      | 1,409  | 52.2    |
| During the past 30 days                    | 69     | 2.6     |
| More than 1 month ago, less than 1<br>year | 279    | 10.3    |
| More than a year ago                       | 759    | 28.1    |
| Not Stated                                 | 185    | 6.8     |
| Total                                      | 2,701  | 100.0   |

#### Table 3.1.5

Alcohol Use in the Past 12 Months for Survey Respondents

| Annual Use | Number of Lifetime Users | Percent<br>(n=2,701) |
|------------|--------------------------|----------------------|
| Yes        | 764                      | 28.3                 |
| No         | 334                      | 12.4                 |
| Not Stated | 36                       | 1.3                  |
| Total      | 1,134                    | 42.0                 |

# Table 3.1.6Age of First Use for Alcohol by Sex of Respondent

| A (F: 41)               | Male      | Percentage | Female    | Percentage |
|-------------------------|-----------|------------|-----------|------------|
| Age of First Use        | (n=1,310) | %          | (n=1,370) | %          |
| 12 years old or younger | 285       | 21.8%      | 298       | 21.8%      |
| 13 years old            | 66        | 5.0%       | 108       | 7.9%       |
| 14 years old            | 49        | 3.7%       | 85        | 6.2%       |
| 15 years old            | 45        | 3.4%       | 74        | 5.4%       |
| 16 years old            | 33        | 2.5%       | 56        | 4.1%       |
| 17 years old            | 8         | 0.6%       | 6         | 0.4%       |
| 18 years old or older   | 1         | 0.1%       | 3         | 0.2%       |
| Not Applicable          | 823       | 62.8%      | 740       | 54.0%      |

## **Heavy Drinking**

• On at least one day in the past month, 110 current users of alcohol have reported that they had too much to drink and got drunk (4.1% of all survey respondents). There were seven current users who reported to have been drunk for more than half the month (0.3% of all survey respondents).

## **Location of Alcohol Use**

The majority of current users of alcohol reported that they most often drink at "other social events" (107), "home" (94), or at "a friend's house" (58). This corresponds to 4.0%, 3.5%, and 2.1% of all survey respondents, respectively. Very few of these students have reported drinking alcohol on "the corner/block" (4) or at "school" (3).

## Source of Alcohol

Just over one in three (109) of the current users of alcohol have reported that they usually get it from "friends" (4.0% of all survey respondents). A significant number (74) of current users has reported "parents" as the source of their alcohol consumed (2.7% of all survey respondents). Very few current users have obtained alcohol from a "brother/ sister" (11) or from a "street vendor" (9).

#### Table 3.1.7

Number of Days Current Users of Alcohol Drank too much and got Drunk **Percent** 

| Days         | Number | (n=2,701) |
|--------------|--------|-----------|
| None         | 169    | 6.3       |
| 1 – 5 days   | 91     | 3.4       |
| 6 – 10 days  | 8      | 0.3       |
| 11 – 15 days | 4      | 0.1       |
| 16+ days     | 7      | 0.3       |
| Not Stated   | 25     | 0.9       |
| Total        | 304    | 11.3      |

#### Table 3.1.8

Location Where Current Users Most Often Drink Alcohol

| Location               | Number | (n=2,701) |
|------------------------|--------|-----------|
| At Home                | 94     | 3.5       |
| At School              | 3      | 0.1       |
| On the Corner/Block    | 4      | 0.1       |
| At Sporting Events     | 1      | 0.0       |
| At a Friend's House    | 58     | 2.1       |
| At Other Social Events | 107    | 4.0       |
| Other                  | 32     | 1.2       |
| Not Stated             | 5      | 0.2       |
| Total                  | 304    | 11.3      |

#### Table 3.1.9

Source of Alcohol for Current Users

| Source            | Number | (n=2,701) |
|-------------------|--------|-----------|
| Friend            | 109    | 4.0       |
| Parents           | 74     | 2.7       |
| Brother/Sister    | 11     | 0.4       |
| Other Relative(s) | 25     | 0.9       |
| Street Vendor     | 9      | 0.3       |
| Shop              | 36     | 1.3       |
| Other             | 33     | 1.2       |
| Not Stated        | 7      | 0.3       |
| Total             | 304    | 11.3      |

## Frequency of Use and Type of Alcoholic Beverage Consumed

- With reference to use in the past 30 days, the majority of students consumed beer, Guinness, breezers, and/or wickets "only in social events" (163) or on the "weekends" (29) (see Table 3.1.10). This corresponds to 6.0% and 1.1% of all survey respondents, respectively. Very few (7) current users of alcohol consumed these beverages daily (0.3% of all survey respondents).
- On the other hand, 162 of current users reported that they have "never" consumed wine in the past 30 days (6.0% of all survey respondents); although a considerable proportion of the students (91) who have consumed wine have done so "only in social events" (3.4% of all survey respondents).
- Likewise, a significant number of current users indicated that they have consumed hard liquor, such as rum, rum punch, vodka, and whiskey, "only in social events" (142) or have "never" had hard liquor (88). Overall, this represents 5.3% and 3.3% of all survey respondents, respectively. Only 11 current users reported daily use of hard liquor (0.4% of all students).

|                       | Type of Alcoholic Beverage           |                            |        |                            | age                               |                               |
|-----------------------|--------------------------------------|----------------------------|--------|----------------------------|-----------------------------------|-------------------------------|
| Frequency of Use      | Beer, Guinness,<br>Breezers, Wickets |                            | Wine   |                            | Hard Liquor<br>(Rum, Vodka, etc.) |                               |
|                       | Number                               | <b>Percent</b> (n = 2,701) | Number | <b>Percent</b> (n = 2,701) | Number                            | <b>Percent</b><br>(n = 2,701) |
| Daily                 | 7                                    | 0.3                        | 5      | 0.2                        | 11                                | 0.4                           |
| Weekends              | 29                                   | 1.1                        | 11     | 0.4                        | 39                                | 1.4                           |
| Some weekdays         | 12                                   | 0.4                        | 16     | 0.6                        | 16                                | 0.6                           |
| Only in social events | 163                                  | 6.0                        | 91     | 3.4                        | 142                               | 5.3                           |
| Never                 | 81                                   | 3.0                        | 162    | 6.0                        | 88                                | 3.3                           |
| Not Stated            | 12                                   | 0.4                        | 19     | 0.7                        | 8                                 | 0.3                           |
| Total                 | 304                                  | 11.3                       | 304    | 11.3                       | 304                               | 11.3                          |

#### Table 3.1.10

Frequency of Use by Type of Alcoholic Beverage for Current Users

## **Second-Hand Effects of Alcohol**

• Although many students did not know whether or not they had ever ridden in a vehicle that was driven by someone who had been drinking alcohol, there were, however, 8.2% of students who said that they were on a bike ridden by such a person; and 22.1% said the same about being in a car.

#### Table 3.1.11

Respondents' Awareness of Vehicular Driver Being Under the Influence

|               | Hav    | by someone<br> ? |        |         |  |
|---------------|--------|------------------|--------|---------|--|
| Response      | Bike   |                  | Car    |         |  |
|               | Number | Percent          | Number | Percent |  |
| Yes           | 221    | 8.2              | 598    | 22.1    |  |
| No            | 1,883  | 69.7             | 1,479  | 54.8    |  |
| l do not know | 265    | 9.8              | 378    | 14.0    |  |
| Not stated    | 332    | 12.3             | 246    | 9.1     |  |
| Total         | 2,701  | 100.0            | 2,701  | 100.0   |  |

## Tobacco

NIDA-reported research identified nicotine as the main addictive ingredient in cigarettes. Nicotine use has been found to activate reward pathways and increases dopamine (feel good hormone) levels.<sup>11</sup> However, other research indicates that smokers may continue smoking to keep high levels of dopamine in their body. Approximately, 90% of smokers start smoking by age 18. More than 6 million smokers under the age of 18 are projected to die prematurely from smoking-related reasons. Recent findings suggest that tobacco use among youths may be as a result of biological reasons experienced during this period of increased vulnerability and not merely psychosocial reasons such as peer pressure. Public health researchers claim that cigarette smoking is the leading cause of preventable deaths in the United States.<sup>12</sup> After alcohol, tobacco or cigarettes is the most commonly used drug among adolescents, but its consumption has been on the decline since the late 1970s, even though there are periods when it remained steady.

## Lifetime and Current Use

- Lifetime prevalence of cigarette use ranges from a low of 2.2% for M2 students to a high of 7.2% for S4 students. Overall, 3.5% of the survey respondents have used cigarettes in their lifetime (see Figure 3.1.8).
- Current prevalence of cigarette use ranges from a low of 0.2% for M3 students to a high of 1.9% for S3 students. Overall, 2.0% of the survey respondents have smoked cigarettes in the past 30 days.



Figure 3.1.8. Lifetime and current use of cigarettes by grade level of survey respondents.

<sup>&</sup>lt;sup>11</sup> National Institute on Drug Abuse. (2021). Is nicotine addictive?. https://nida.nih.gov/publications/research-reports/tobacco-nicotine-e-cigarettes/nicotine-addictive (accessed March 19, 2024).

<sup>&</sup>lt;sup>12</sup> L. D. Johnston, et al. (2022). p. 38.

## **First Use**

• Of the lifetime users, most (47) initiated cigarette smoking "more than a year ago" (1.7% of all survey respondents), while seven students smoked cigarettes for the first time "during the past 30 days" (0.3% of all survey respondents).

## **Recent Use**

• Fifty-three of the lifetime users of cigarettes have reported smoking cigarettes in the past 12 months. This corresponds to 2.0% of all survey respondents.

## **Age of First Use**

 For users of cigarettes, females and males mainly initiated use at 12 years old or younger (1.2% vs. 2.0%).
Female students between 13 years old to 15 years old reported higher cigarette use during this reporting period.

#### Table 3.1.12

First Use of Cigarettes for Survey Respondents

| First Use                                  | Number | Percent |
|--|--------|---------|
| Never                                      | 2,623  | 97.1    |
| During the past 30 days                    | 7      | 0.3     |
| More than 1 month ago, less than 1<br>year | 24     | 0.9     |
| More than a year ago                       | 47     | 1.7     |
| Total                                      | 2,701  | 100.0   |

#### Table 3.1.13

Cigarette Use in the Past 12 Months for Survey Respondents

| Annual Use | Number | Percent<br>(n=2,701) |
|------------|--------|----------------------|
| Yes        | 53     | 2.0                  |
| No         | 24     | 0.9                  |
| Not Stated | 17     | 0.6                  |
| Total      | 94     | 3.5                  |

#### Table 3.1.14

Age of First Use of Cigarette Use by Sex of Survey Respondent

| A (5) (1)               | Male      | Percentage | Female    | Percentage |
|-------------------------|-----------|------------|-----------|------------|
| Age of First Use        | (n=1,310) | %          | (n=1,370) | %          |
| 12 years old or younger | 26        | 2.0%       | 16        | 1.2%       |
| 13 years old            | 7         | 0.5%       | 8         | 0.6%       |
| 14 years old            | 3         | 0.2%       | 7         | 0.5%       |
| 15 years old            | 6         | 0.5%       | 10        | 0.7%       |
| 16 years old            | 5         | 0.4%       | 1         | 0.1%       |
| 17 years old            | 1         | 0.1%       | -         | -          |
| 18 years old or older   | 1         | 0.1%       | -         | -          |
| Not Applicable          | 1,261     | 96.3%      | 1,328     | 96.9%      |
| Not Stated              | 49        | 3.7%       | 42        | 3.1%       |

## Number of Cigarettes Smoked

• Nearly three in five (14) current users of cigarettes have indicated that they smoked "1 to 5" cigarettes per day in the past month (0.5% of all survey respondents). Only one student reported smoking 11 to 20 cigarettes per day in the past month, while five students smoked "more than 20" cigarettes per day.

## Location of Cigarette Smoking

• The majority of current cigarette users reported that they most often smoke "at a friend's house" (9). Overall, this represents 0.3% of all survey respondents. Six students reported smoking cigarettes at "school", while three students said they smoked "at other social events".

## **Source of Cigarettes**

• Majority of current users of cigarettes have reported that they usually get it from "friends" (11) and almost one in five said they got it from the "shop" (5). Overall, this corresponds to 0.4% and 0.2% of all survey respondents, respectively. Very few current smokers have obtained cigarettes from a "street vendor" (2), or "other relative(s)" (2).

#### Table 3.1.15

Number of Cigarettes Smoked in a Day in the Past Month by Current Smokers

| Cigarettes   | Number | (n=2,701) |
|--------------|--------|-----------|
| 1 to 5       | 14     | 0.5       |
| 6 to 10      | 3      | 0.1       |
| 11 to 20     | 1      | 0.0       |
| More than 20 | 5      | 0.2       |
| Not Stated   | 2      | 0.1       |
| Total        | 25     | 0.9       |

#### Table 3.1.16

Location Where Current Users Most Often Smoke Cigarettes

| Location               | Number | Percent<br>(n=2,701) |
|------------------------|--------|----------------------|
| At Home                | 2      | 0.1                  |
| At School              | 6      | 0.2                  |
| On the Corner/Block    | 1      | 0.0                  |
| At a Friend's House    | 9      | 0.3                  |
| At Other Social Events | 3      | 0.1                  |
| Other                  | 2      | 0.1                  |
| Not Stated             | 2      | 0.1                  |
| Total                  | 25     | 0.9                  |

#### Table 3.1.17

Source of Cigarettes for Current Users

| Source            | Number | (n=2,701) |
|-------------------|--------|-----------|
| Friend            | 11     | 0.4       |
| Parents           | 1      | 0.0       |
| Other Relative(s) | 2      | 0.1       |
| Street Vendor     | 2      | 0.1       |
| Shop              | 5      | 0.2       |
| Other             | 3      | 0.1       |
| Not Stated        | 2      | 0.1       |
| Total             | 25     | 0.9       |

Percent

## **Second-Hand Smoking**

- Just over one in 10 students (11.2% or 303) reported that someone smoked tobacco products in their home at least one day in the past week (see Table 3.1.18).
- There were 5.2% (140) of the students who reported that someone smoked every day (seven days) of the past week in their home.
- Almost one in every 20 students (6.6% or 179) reported that someone smoked tobacco products in a vehicle at least one day in the past week (see Table 3.1.18).
- There were 1.6% (44) of the students who reported that someone smoked every day (seven days) of the past week in a vehicle.

#### Table 3.1.18

Respondents' Exposure to Second-Hand Smoking in the Home and in a Vehicle

| Number of Days | How many o<br>did someone s<br>products | f past 7 days<br>moke tobacco<br>in home? | How many of past 7 days<br>did someone smoke tobacco<br>products in vehicle? |         |  |
|----------------|---|---|--|---------|--|
|                | Number                                  | Percent                                   | Number   | Percent |  |
| 0 day          | 2,227                                   | 82.5                                      | 2,359  | 87.3    |  |
| 1 day          | 53                                      | 2.0                                       | 49   | 1.8     |  |
| 2 days         | 36                                      | 1.3                                       | 30   | 1.1     |  |
| 3 days         | 33                                      | 1.2                                       | 23   | 0.9     |  |
| 4 days         | 15                                      | 0.6                                       | 17   | 0.6     |  |
| 5 days         | 12                                      | 0.4                                       | 11   | 0.4     |  |
| 6 days         | 14                                      | 0.5                                       | 5  | 0.2     |  |
| 7 days         | 140                                     | 5.2                                       | 44   | 1.6     |  |
| Not Stated     | 171                                     | 6.3                                       | 163  | 6.0     |  |
| Total          | 2,701                                   | 100.0                                     | 2,701  | 100.0   |  |

## **Other Drugs**

## Vaping

In recent years vaping, through the use of e-cigarettes, has become an international public health crisis. This fairly new epidemic, known as vaping, is the inhaling of a vapor that is created by an electronic cigarette or other vaping devices. These battery-powered smoking devices contain cartridges that are filled with liquids such as: nicotine, flavorings, and other chemicals. The liquids are heated into a vapor, which is then inhaled, creating the term vaping.<sup>13</sup> Since this is the second time that e-cigarettes and the prevalence of vaping in Bermuda are being reported, it is important that Bermuda continues to monitor the public health impact of e-cigarette vaping on adolescents. Research has shown that vaping among adolescents has increased over the past five years in the North American region as well as in England, causing concern that these trends will filter down to Bermuda with little knowledge on its correct effects.<sup>14</sup> Bermuda, as with the rest of the world, must find the optimal regulatory balance that provides smokers with reasonable access to effective products, while restricting features of such products that appeal to adolescents. This should be the priority for tobacco control and for public health more specifically.

## **Lifetime Use**

Lifetime prevalence of vaping ranges from a low of 5.5% for M2 to a high of 26.3% for S3 students. Overall, nearly one in five (16.0%) of the survey respondents have reported vaping in their lifetime.



Figure 3.1.9. Lifetime use of vaping by grade level of survey respondents.

<sup>&</sup>lt;sup>13</sup> D. Hammond, J.L. Reid, V.L. Rynard, G.T. Fong, K.M. Cummings, A. McNeill et al. (2019). Prevalence of Vaping and Smoking among Adolescents in Canada, England, and the United States: Repeat National Cross-Sectional Surveys. BMJ 2019; 365: 12219. http://bmj.com/content/365/bmj.12219 (accessed February 3, 2020).

<sup>&</sup>lt;sup>14</sup> L.P. Gordon. (2019). Vaping: What You Need to Know. KidsHealth from Nemours. http://kidshealth.org/en/parents/e cigarettes.html (accessed February 3, 2020).

## **Age of First Use**

• For vaping users, both males and females mainly initiated use at 12 years old or younger (2.4% and 1.2%, respectively). Male students between 13 years old to 18 years old or older reported higher vaping use during this reporting period than females. Table 3.1.19Age of First Use for Vaping by Sex of Survey Respondent

| A (17) (1)              | Male      | Percentage | Female    | Percentage |
|-------------------------|-----------|------------|-----------|------------|
| Age of First Use        | (n=1,310) | %          | (n=1,370) | %          |
| 12 years old or younger | 31        | 2.4%       | 23        | 1.2%       |
| 13 years old            | 20        | 1.5%       | 14        | 0.6%       |
| 14 years old            | 12        | 0.9%       | 26        | 0.5%       |
| 15 years old            | 17        | 1.3%       | 18        | 0.7%       |
| 16 years old            | 6         | 0.5%       | 18        | 0.1%       |
| 17 years old            | -         | -          | 1         | -          |
| 18 years old or older   | 1         | 0.1%       | -         | -          |
| Not Applicable          | 816       | 62.3%      | 891       | 65.0%      |
| Not Stated              | 407       | 31.1%      | 479       | 35.0%      |

## Frequency of Use and Type of Substance Vaped

• With reference to use in their lifetime, the majority (52) of students used "nicotine" in their vaping devices on one to two occasions, which represents 1.9% of all survey respondents. Fewer students (15) reported vaping "marijuana" on 40 or more occasions in their lifetime. Overall, this represents 0.6% of all survey respondents. There were 25 students who reported vaping "just flavoring" on one or two occasions, which represents 0.9% of all survey respondents.

#### Table 3.1.20

Frequency of Use by Type of Substance Vaped for Lifetime Users

|                      | Type of Substance |                        |           |                        |                |                        |
|----------------------|-------------------|------------------------|-----------|------------------------|----------------|------------------------|
| Frequency of Use     | Nicotine          |                        | Marijuana |                        | Just Flavoring |                        |
| ,,                   | Number            | Percent<br>(n = 2,701) | Number    | Percent<br>(n = 2,701) | Number         | Percent<br>(n = 2,701) |
| 0 Occasions          | 5                 | 0.2                    | 9         | 0.3                    | 33             | 1.2                    |
| 1-2 Occasions        | 5252              | 1.9                    | 13        | 0.5                    | 25             | 0.9                    |
| 3-5 Occasions        | 37                | 1.4                    | 12        | 0.4                    | 11             | 0.4                    |
| 6-9 Occasions        | 16                | 0.6                    | 9         | 0.3                    | 4              | 0.1                    |
| 10-19 Occasions      | 17                | 0.6                    | 4         | 1.5                    | 3              | 0.1                    |
| 20-39 Occasions      | 22                | 0.8                    | 5         | 0.2                    | 1              | 0.0                    |
| 40 or more Occasions | 48                | 1.8                    | 15        | 0.6                    | 2              | 0.1                    |
| Not Stated           | 236               | 8.7                    | 366       | 13.6                   | 354            | 13.1                   |
| Total                | 433               | 16.0                   | 433       | 16.0                   | 433            | 16.0                   |

## **Access to Vaping Devices**

• A significant number of male students (516 or 19.1%) reported that they would find it easy ("fairly" and "very easy") to access a vaping device. A larger number of female students (591 or 21.9%) reported the same. Similarly, more female students (234 or 8.7%) indicated that it would be difficult ("very difficult" and "fairly difficult") to access a vaping device in comparison to their male counterparts (223 or 8.3%) (see Table 3.1.21).

#### Table 3.1.21

Difficulty Level in Accessing a Vaping Device by Sex of Respondent

|                            | Ma     | ale                    | Fen    | nale                   |
|----------------------------|--------|------------------------|--------|------------------------|
|                            | Number | Percent<br>(n = 2,701) | Number | Percent<br>(n = 2,701) |
| Probably Impossible        | 155    | 5.7                    | 196    | 7.3                    |
| Very Difficult             | 97     | 3.6                    | 78     | 2.9                    |
| Fairly Difficult           | 126    | 4.7                    | 156    | 5.8                    |
| Fairly Easy                | 276    | 10.2                   | 392    | 14.5                   |
| Very Easy                  | 240    | 8.9                    | 199    | 7.4                    |
| Can't Say, Drug Unfamiliar | 281    | 10.4                   | 251    | 9.3                    |
| Not Stated                 | 135    | 5.0                    | 98     | 3.6                    |
| Total                      | 1,310  | 48.5                   | 1,370  | 50.7                   |

#### Marijuana

While it is clear that in many countries of the world marijuana or cannabis use is not as popular as alcohol and tobacco, it is usually the first illegal drug, and is the most widely used illegal drug, used by teens around the world. The perception of the dangers of marijuana use is declining and, increasingly, young people today do not consider marijuana use as a risky behavior.<sup>15</sup> The average age of first use in many Western countries is around 14-15 years old. The average age of use among developing countries seems to be a bit older. While it is true that boys are more likely to use marijuana, alcohol, and tobacco than girls, the gap is closing in many countries. Further, street youths are more likely to use marijuana and more heavily than "mainstream" youth. A review of addiction studies show that use of cannabis in youth is related to one or more of the following: truancy, low self-esteem, delinquent behaviours (stealing, vandalism, etc.), having delinquent friends, hanging out on the streets in boredom, and other behavioural/mental health issues.<sup>16</sup>

## Lifetime and Current Use

- Lifetime prevalence of marijuana use ranges from a low of 2.0% for M2 students to a high of 28.5% for S4 students. Overall, 12.6% of the survey respondents (just over one in every 10) have used marijuana in their lifetime.
- Current prevalence of marijuana use ranges from a low of 0.7% for M2 students to a high of 14.4% for S4 students. Overall, 5.6% (almost one in every 20) of the survey respondents have used marijuana in the past 30 days.



<sup>&</sup>lt;sup>15</sup> SAMHSA. (2020). Talking with your teen about Marijuana: Keeping your Kids safe. <u>https://www.samhsa.gov/sites/default/files/TTHY-Marijuana-Broch-2020.</u> pdf (accessed March 19, 2024).

<sup>&</sup>lt;sup>16</sup> Hawes SW, Pacheco-Colón I, Ross JM, Gonzalez R. (2020). Adolescent Cannabis Use and Conduct Problems: The Mediating Influence of Callous-Unemotional Traits. Int J Ment Health Addict. 2020 Jun;18(3):613-627. doi: 10.1007/s11469-018-9958-9. Epub 2018 Jul 12. PMID: 32742245; PMCID: PMC7394462. https:// www.ncbi.nlm.nih.gov/pmc/articles/PMC7394462/ (accessed March 19, 2024).

## **First Use**

Of the lifetime users, most (223) tried marijuana for the first time "more than a year ago" (8.3% of all survey respondents), while 27 students have tried it for the first time "during the past 30 days" (1.0% of all survey respondents).

## **Recent Use**

• The majority of lifetime users of marijuana (267) have reported using marijuana in the past 12 months. This corresponds to 9.9% of all survey respondents.

## **Age of First Use**

• For lifetime users of marijuana, males mainly initiated use at 12 years old or younger (3.5%), while most females started marijuana use at 15 years old (3.3%). Female students between 13 years old to 17 years or older reported higher marijuana use during this reporting period than males.

## Table 3.1.22

First Use of Marijuana for Survey Respondents

| First Use                                  | Number | Percent |
|--|--------|---------|
| Never                                      | 2,079  | 77.0    |
| During the past 30 days                    | 27     | 1.0     |
| More than 1 month ago, less than 1<br>year | 90     | 3.3     |
| More than a year ago                       | 223    | 8.3     |
| Not Stated                                 | 282    | 10.4    |
| Total                                      | 2,701  | 100.0   |

#### Table 3.1.23

Marijuana Use in the Past 12 Months for Survey Respondents

| Annual Use | Number | <b>Percent</b> (n=2,701) |
|------------|--------|--------------------------|
| Yes        | 267    | 9.9                      |
| No         | 73     | 2.7                      |
| Total      | 340    | 12.6                     |

#### Table 3.1.24

Age of First Use for Users of Marijuana by Sex of Respondent

|                         | Male      | Percentage | Female    | Percentage |
|-------------------------|-----------|------------|-----------|------------|
| Age of First Use        | (n=1,310) | %          | (n=1,370) | %          |
| 12 years old or younger | 46        | 3.5%       | 28        | 2.0%       |
| 13 years old            | 26        | 2.0%       | 33        | 2.4%       |
| 14 years old            | 23        | 1.8%       | 43        | 3.1%       |
| 15 years old            | 31        | 2.4%       | 45        | 3.3%       |
| 16 years old            | 12        | 0.9%       | 30        | 2.2%       |
| 17 years old            | 4         | 0.3%       | 6         | 0.4%       |
| 18 years old or older   | 2         | 0.2%       | 1         | 0.1%       |
| Not Applicable          | 777       | 59.3%      | 831       | 60.7%      |
| Not Stated              | 389       | 29.7%      | 353       | 25.8%      |

## **Frequency of Use**

• The majority (101) of lifetime users have indicated using marijuana "sometimes in the past 12 months". This represents 3.7% of all survey respondents. Only 1.5% of all survey respondents reported using marijuana "only once" and 1.1% who said "daily".

## **Location of Use**

• The majority of lifetime marijuana users reported that they most often use it "at a friend's house" (85), "at home" (77), or "at other social events" (61). Overall, this represents 3.1%, 2.9%, and 2.3% of all students, respectively. Very few of these students have reported using marijuana "at school" (5) or "at sporting events" (3).

## Source of Marijuana

Slightly over half of the lifetime marijuana users have reported that they usually get it from "friends" (179), while 39 students got marijuana from a "street pusher". Overall, this corresponds to 6.6% and 1.4% of all survey respondents, respectively. Very few lifetime marijuana users have obtained the marijuana from their "parents" (3) or siblings (10). Table 3.1.25

Frequency of Marijuana Use for Lifetime Users

| Frequency of Use                | Number | Percent<br>(n=2,701) |
|---------------------------------|--------|----------------------|
| Only once                       | 41     | 1.5                  |
| Sometimes in the past 12 months | 101    | 3.7                  |
| Sometimes during the month      | 54     | 2.0                  |
| Sometimes during the week       | 45     | 1.7                  |
| Daily                           | 30     | 1.1                  |
| Not Stated                      | 69     | 2.6                  |
| Total                           | 340    | 12.6                 |

#### Table 3.1.26

Location Where Lifetime Users Most Often Use Marijuana

| Location               | Number | Percent<br>(n=2,701) |
|------------------------|--------|----------------------|
| At Home                | 77     | 2.9                  |
| At School              | 5      | 0.2                  |
| At the Corner/Block    | 20     | 0.7                  |
| At a Friend's House    | 85     | 3.1                  |
| At Other Social Events | 3      | 0.1                  |
| Other                  | 61     | 2.3                  |
| Not Stated             | 22     | 0.8                  |
| Total                  | 67     | 2.5                  |

#### Table 3.1.27

Source of Marijuana for Lifetime Users

| Source            | Number | (n=2,701) |
|-------------------|--------|-----------|
| Friend            | 179    | 6.6       |
| Parents           | 3      | 0.1       |
| Brother/Sister    | 10     | 0.4       |
| Other Relative(s) | 15     | 0.6       |
| Street Pusher     | 39     | 1.4       |
| Other             | 24     | 0.9       |
| Not Stated        | 70     | 2.6       |
| Total             | 340    | 12.6      |

## Inhalants

Inhalants are household products that are either "sniffed" through the nose or "huffed" through the mouth, for example, paint, glue, and diesel fuel. The effects are similar to getting drunk on alcohol, but some experience something like hallucinations.<sup>17</sup> They can give an almost immediate high. Children are more likely to be users than adults. Poor children, school dropouts, street children, and disengaged youths are more susceptible to inhalant use. Inhalants are often the first substance used by many children and adolescents because they are often the easiest drugs for them to obtain and not as costly as other drugs. Various studies around the world have shown that less than 10% of the general youth population has used inhalants. Inhalants are the only substance used by young people where use typically peaks in pre-adolescence and goes down through the teen years. The health consequences of inhalant use can be substantial. Reported long-term use effects include organ damage (liver, kidney, bone marrow, heart) and, in the case of gasoline sniffing, lead poisoning. Risk of injury or death is great with inhalant abuse. While continued inhalant abuse is in itself a serious concern, young inhalant abusers are at risk for getting involved in other harmful substance use.

## **Lifetime and Current Use**

- Lifetime prevalence of inhalant use ranges from a low of 7.6% for S2 students to a high of 13.8% for M2 students. Overall, 10.2% of the survey respondents have used inhalants in their lifetime (see Figure 3.1.11).
- Current prevalence of inhalant use ranges from a low of 1.0% for M3 students to a high of 2.7% for S1 students. Overall, current inhalant use is prevalent among 1.8% of all survey respondents.



Figure 3.1.11. Lifetime and current use of inhalants by grade level of survey respondents.

<sup>&</sup>lt;sup>17</sup> E. Levari, M. Stefani, R. Ferrucci, Attilio Negri, O. Corazza. (2021). The dangerous use of inhalants among teens: A case report. Volume 1, 2021, 100006. https://www.sciencedirect.com/science/article/pii/S2667118221000040 (accessed March 19, 2024).

## **First Use**

Of the lifetime users, most (174) tried inhalants for the first time "more than a year ago" (6.4% of all survey respondents), while 52 students have tried it for the first time "in the past 30 days" (1.9% of all survey respondents).

## **Recent Use**

 Most lifetime inhalant users (155) were not also recent users of this drug. This corresponds to 5.7% of all survey respondents. In contrast, 99 of the lifetime users of inhalants have reported using inhalants in the past 12 months (3.7% of all survey respondents).

## Age of First Use

• For lifetime users of inhalants, females and males mainly initiated use at 12 years old or younger (7.3% vs. 6.8%).

#### Table 3.1.28

First Use of Inhalants for Survey Respondents

| First Use                                  | Number | Percent |
|--|--------|---------|
| Never                                      | 2,169  | 80.3    |
| In the past 30 days                        | 52     | 1.9     |
| More than 1 month ago, less than 1<br>year | 34     | 1.3     |
| More than a year ago                       | 174    | 6.4     |
| Not Stated                                 | 272    | 10.1    |
| Total                                      | 2,701  | 100.0   |

#### Table 3.1.29

Inhalant Use in the Past 12 Months for Survey Respondents

| Annual Use | Number | Percent<br>(n=2,701) |
|------------|--------|----------------------|
| Yes        | 267    | 9.9                  |
| No         | 73     | 2.7                  |
| Total      | 340    | 12.6                 |

## Table 3.1.30

Age of First Use for Users of Inhalants by Sex of Respondents

| A                       | Male      | Percentage | Female    | Percentage |
|-------------------------|-----------|------------|-----------|------------|
| Age of First Use        | (n=1,310) | %          | (n=1,370) | %          |
| 12 years old or younger | 89        | 6.8%       | 100       | 7.3%       |
| 13 years old            | 10        | 0.8%       | 5         | 0.4%       |
| 14 years old            | 6         | 0.5%       | 4         | 0.3%       |
| 15 years old            | 3         | 0.2%       | 5         | 0.4%       |
| 16 years old            | 5         | 0.4%       | 5         | 0.4%       |
| 17 years old            | 1         | 0.1%       | -         | -          |
| 18 years old or older   | 1         | 0.1%       | -         | -          |
| Not Applicable          | 795       | 60.7%      | 888       | 64.8%      |
| Not Stated              | 400       | 30.5%      | 363       | 26.5%      |

## **Frequency of Use**

• The majority (32) of lifetime users who responded to this survey item have indicated using inhalants "sometimes in the past 12 months". This represents 1.2% of all survey respondents. Only 11 students or 0.4% of all survey respondents reported daily use of inhalants.

| Table 3.1.31                                 |
|--|
| Frequency of Inhalant Use for Lifetime Users |

| Frequency of Use                | Number | <b>Percent</b><br>(n=2,701) |
|---------------------------------|--------|-----------------------------|
| Only once                       | 31     | 1.1                         |
| Sometimes in the past 12 months | 32     | 1.2                         |
| Sometimes during the month      | 22     | 0.8                         |
| Sometimes during the week       | 9      | 0.3                         |
| Daily                           | 11     | 0.4                         |
| Not Stated                      | 171    | 6.3                         |
| Total                           | 276    | 10.2                        |

## **Energy Drinks**

Consumption of energy drinks (beverages with caffeine content ranging from 50 mg to 505 mg per can or bottle<sup>18</sup>) appear to be prevalent among today's youths. Popular brands, such as Red Bull, Monster, SoBe, etc., all target young consumers. Also increasing in popularity is the practice of mixing alcoholic beverages with energy drinks. Research has shown that individuals who have a high frequency of energy drink consumption are at increased risk of engaging in episodes of heavy drinking and developing alcohol dependence.<sup>19</sup> In addition, research has highlighted the dangers of combining energy drinks with alcohol.<sup>20</sup> The subsequent sections will show the prevalence and frequency of energy drink use, situations for which energy drinks are used, and the means by which energy drinks are obtained for both lifetime and current (last 30 days) use.

## Lifetime and Current Use

- Lifetime prevalence-of-use of energy drinks ranges from a low of 42.9% for M2 students to a high of 70.2% for S3 students. Overall, nearly three in five (59.5%) of the survey respondents have reported using energy drinks in their lifetime.
- Current prevalence-of-use of energy drinks ranges from a low of 21.7% for M2 students to a high of 38.9% for S4 students. Overall, about three in 10 (30.9%) of the survey respondents have used energy drinks in the past 30 days.



Figure 3.1.12. Lifetime and current use of energy drinks by grade level of survey respondents.

<sup>&</sup>lt;sup>18</sup> UK Rehab. (2024). Energy Drink Adiction. https://www.uk-rehab.com/addiction/energy-drinks/ (accessed March 19, 2024).

<sup>&</sup>lt;sup>19</sup> Center for Disease Control and Prevention (CDC). (2024). Alcohol and Caffeine. https://www.cdc.gov/alcohol/fact-sheets/caffeine-and-alcohol.htm (accessed March 19, 2024).

<sup>&</sup>lt;sup>20</sup> G. Powers., L. Berger. (2020). Alcohol mixed with energy drinks: Expectancies of use and alcohol-related negative consequences among a young adult sample. Addictive Behaviors Reports. https://www.sciencedirect.com/science/article/pii/S2352853220301073 (accessed March 19, 2024)

#### **Circumstances of Use**

Most students (964 or 60.0%) who reported that they have used energy drinks in their lifetime indicated that they used these drinks "before or after sporting activity". This corresponds to 35.7% of all survey respondents or just over one in three students. Approximately 41.0% (660) of lifetime users consumed "while drinks energy hanging out", whereas only 24.2% (389) reported that

#### Table 3.1.32

Circumstance of Use of Energy Drinks for Lifetime and Current Users

| Lifetime Users  |                   |                         | (n = 1,608)                          |
|---|-------------------|-------------------------|--------------------------------------|
| Circumstance of Use   | Yes               | No                      | Not Stated                           |
| While studying  | 389               | 987                     | 232                                  |
| Before or after sporting activity   | 964               | 568                     | 76                                   |
| While hanging out   | 660               | 788                     | 160                                  |
|   |                   |                         |                                      |
| Current Users   |                   |                         | (n = 834)                            |
| Current Users<br>Circumstance of Use  | Yes               | No                      | (n = 834)<br>Not Stated              |
| Current Users<br>Circumstance of Use<br>While studying                                      | <b>Yes</b><br>305 | <b>No</b><br>360        | (n = 834)<br>Not Stated<br>169       |
| Current Users<br>Circumstance of Use<br>While studying<br>Before or after sporting activity | Yes<br>305<br>611 | <b>No</b><br>360<br>145 | (n = 834)<br>Not Stated<br>169<br>78 |

they used energy drinks "while studying". Similar circumstances of use have been reported by current users of energy drinks where 611 or 73.3% of current users consume energy drinks "before or after sporting activity", while 452 or 54.2% use these drinks "while hanging out". Only 305 (36.6%) of current users consumed energy drinks "while studying". Overall, in terms of all survey respondents, this corresponds to 22.6% of students who reported using energy drinks "before or after sporting activity", 16.7% "while hanging out", and 11.3% "while studying".

## Prevalence of Combining Energy Drinks with Alcoholic Beverages

Table 3.1.32 shows that of those students who have consumed energy drinks in their lifetime, the majority (78.5%) have not consumed a mixture of these drinks with alcoholic beverages, whereas, just over one in every 10 (12.5%) of these students has consumed a mixture. This, therefore, means that 7.4% of all survey respondents

#### Table 3.1.33

Prevalence of Combining Energy Drinks with Alcoholic Beverages

| Encourance of Lice | Lifetime Users |         | Current Users |         |  |
|--------------------|----------------|---------|---------------|---------|--|
| Frequency of Ose   | Number         | Percent | Number        | Percent |  |
| Yes                | 201            | 12.5    | 155           | 18.6    |  |
| No                 | 1,262          | 78.5    | 607           | 72.8    |  |
| l don't know       | 111            | 6.9     | 71            | 8.5     |  |
| Not Stated         | 34             | 2.1     | 1             | 0.1     |  |
| Total              | 1,608          | 100.0   | 834           | 100.0   |  |

(201 of 2,701) have consumed a mixture of energy drinks with alcoholic beverages in their lifetime.

Similarly, of the current users, 72.8% have not consumed a mixture, while nearly one-fifth (18.6%) have reported mixing energy drinks with alcoholic beverages and consuming these mixtures. This corresponds to 5.7% of all survey respondents (155 of 2,701) who consumed a combination of energy drinks and alcoholic beverages.

# 3.1.6 Access to Drugs

- Apart from alcohol, which is legal for persons 18 years or older; marijuana seemed to be the easiest drug to obtain as indicated by 31.1% of all student respondents.
- Most students reported that heroin (27.0%) and crack (26.0%) are the drugs most "impossible to obtain".

#### Table 3.1.34

Ease of Access to Drugs by Proportion of Survey Respondents

|                      |         |           |         |       | (n = 2,701) |
|----------------------|---------|-----------|---------|-------|-------------|
| Ease of Access       | Alcohol | Marijuana | Cocaine | Crack | Heroin      |
|                      | %       | %         | %       | %     | %           |
| Easy                 | 60.9    | 31.1      | 5.1     | 4.9   | 4.0         |
| Difficult            | 12.9    | 23.5      | 25.3    | 23.1  | 19.4        |
| Impossible to Obtain | 4.9     | 11.3      | 25.4    | 26.0  | 27.0        |
| Don't Know           | 17.9    | 30.1      | 40.4    | 42.4  | 46.0        |
| Not Stated           | 3.5     | 3.6       | 3.9     | 3.6   | 3.6         |

- About one in 10 (10.4%) students reported that he/she was offered to buy or consume marijuana in the last 30 days, while 8.6% had this offer within the last year. In comparison, 13.7% of the students were offered to buy or use alcohol during the 30 days prior to the survey and 16.5% had this offer within the year.
- The majority of students reported that they have "never been offered" to buy or consume any of the drugs for which they were questioned.

#### Table 3.1.35

Last Offer to Buy or Use Drugs by Proportion of Survey Respondents

|  |         |           |         |       | (n = 2,701) |
|--|---------|-----------|---------|-------|-------------|
| Last Offer to Buy or Use                           | Alcohol | Marijuana | Cocaine | Crack | Heroin      |
|  | %       | %         | %       | %     | %           |
| During the last 30 days                            | 13.7    | 10.4      | 1.0     | 0.8   | 0.7         |
| More than a month ago, but<br>less than a year ago | 16.5    | 8.6       | 0.6     | 0.6   | 0.5         |
| More than a year ago                               | 8.9     | 4.4       | 1.1     | 0.9   | 0.7         |
| I have never been offered                          | 57.2    | 72.8      | 93.3    | 93.7  | 94.0        |
| Not Stated   | 3.7     | 3.8       | 4.0     | 4.0   | 4.1         |

- When students were asked about their curiosity to try an illicit drug, slightly more than half (53.9%) reported "No", while 28.8% or nearly three in 10 students said "Yes".
- When asked if they would try an illicit drug if given the opportunity, about three in five (59.3%) said "No", whereas only 23.7% or nearly one in four students indicated "Yes".

#### Table 3.1.36

Proportion of Survey Respondents Curious About Trying or Seizing Opportunity to Try Illicit Drugs (n = 2.701)

|         | (1 - 2,701)                                 |
|---------|---|
| Curious | Seize Opportunity                           |
| %       | %   |
| 53.9    | 59.3  |
| 13.7    | 13.4  |
| 28.8    | 23.7  |
| 3.6     | 3.6   |
|         | Curious<br>%<br>53.9<br>13.7<br>28.8<br>3.6 |

## **Other Illegal Drugs, Synthetic Drugs and Prescription Drugs**

Table 3.1.37 shows the lifetime prevalence-of-use of other illegal, synthetic, and prescription drugs by grade level of the survey respondents. Overall, prevalence remains low; however, cannabis resin (3.9%) and hashish (4.4%) recorded the highest prevalence among these substances and across higher grade levels.

#### Table 3.1.37

Lifetime Use of Other Illegal, Synthetic and Prescription Drugs by Grade Level of Survey Respondent

|   | Grade Level   |               |               |               |               |               |             |                      |  |
|---|---------------|---------------|---------------|---------------|---------------|---------------|-------------|----------------------|--|
| Substance                                 | M2<br>(n=545) | M3<br>(n=496) | S1<br>(n=490) | S2<br>(n=437) | S3<br>(n=413) | S4<br>(n=319) | NS<br>(n=1) | Overall<br>(n=2,701) |  |
|   | %             | %             | %             | %             | %             | %             | %           |                      |  |
| Other Illegal Drugs                       |               |               |               |               |               |               |             |                      |  |
| Cocaine                                   | 1.1           | 0.4           | 1.0           | 0.9           | -             | -             | -           | 0.6                  |  |
| Crack                                     | 0.4           | 0.4           | 1.6           | 0.9           | 0.5           | -             | -           | 0.7                  |  |
| Ecstasy                                   | 0.4           | 0.6           | 1.2           | 1.6           | 1.0           | 1.3           | -           | 1.0                  |  |
| Heroin                                    | 0.9           | 0.2           | 1.0           | 1.4           | 1.5           | 0.3           | -           | 0.9                  |  |
| Cannabis Resin                            | 0.7           | 0.8           | 4.5           | 4.3           | 6.1           | 9.4           | -           | 3.9                  |  |
| Hashish                                   | 0.9           | 1.2           | 3.7           | 4.8           | 9.7           | 8.8           | -           | 4.4                  |  |
| Other                                     | 0.4           | 0.4           | 0.8           | 0.9           | 0.7           | 0.3           | -           | 0.6                  |  |
|   |               |               | Synt          | hetic Drug    | S             |               |             |                      |  |
| Grabba                                    | 1.1           | 1.0           | 3.5           | 2.3           | 3.9           | 3.4           | -           | 2.4                  |  |
| Amphetamines<br>and Metham-<br>phetamines | 0.6           | 0.6           | 1.0           | 0.9           | 1.0           | 1.3           | -           | 0.9                  |  |
| GHB                                       | 0.6           | 0.2           | 0.8           | 0.7           | 0.5           | -             | -           | 0.5                  |  |
| Ketamine                                  | 0.6           | 1.0           | 1.2           | 0.5           | 0.7           | -             | -           | 0.7                  |  |
| Beedi                                     | 0.6           | 0.2           | 0.6           | 1.1           | 1.0           | -             | -           | 0.6                  |  |
| Analgesics                                | 0.6           | 0.6           | 1.2           | 1.6           | 1.9           | 1.3           | -           | 1.1                  |  |
| Poppers                                   | 0.7           | 0.8           | 1.2           | 0.9           | -             | 0.6           | -           | 0.7                  |  |
| Hallucinogens                             | 0.4           | 0.2           | 1.4           | 1.4           | 2.9           | 1.6           | -           | 1.3                  |  |
|   |               |               | Prescr        | iption Dru    | gs            |               |             |                      |  |
| Tranquilizers                             | 0.7           | 0.2           | 1.4           | 0.9           | -             | -             | -           | 0.6                  |  |
| Stimulants                                | 0.5           | 0.4           | 1.2           | 0.9           | 0.7           | 3.1           | -           | 1.1                  |  |

# 3.1.7 Perception of Health Risk

Perception of health risk is an important determinant in the decision-making process young people consider when deciding whether or not to use ATODs. Research has shown a consistent

negative correlation between perception of health risk and the level of reported ATOD use.<sup>21</sup> That is, generally, when the perceived risk of harm is high, reported frequency of use is low. Evidence also suggests that perceptions of risks and benefits associated with drug use sometimes serve as a leading indicator of future drug use patterns.<sup>22</sup> Table 3.1.37 shows the proportion of students at each grade level and overall for the survey who perceived various risks as "harmful". Harmful, in this instance, is taken to be the sum of the ratings "slightly harmful", "moderately harmful", and "very harmful". Table 3.1.38 and Figure 3.1.13 present the prevalence for all of the survey's respondents who assigned their perception of the risk level of harm to various drug use behaviour that occur either "sometimes" or "frequently". These survey items form the risk factor scale Low Perceived Risks of Drug Use.

#### Table 3.1.38

|   | Grade Level   |               |               |               |               |               | 0         |  |
|---|---------------|---------------|---------------|---------------|---------------|---------------|-----------|--|
| Health Risk                                   | M2<br>(n=545) | M3<br>(n=496) | S1<br>(n=490) | S2<br>(n=437) | S3<br>(n=413) | S4<br>(n=319) | (n=2,764) |  |
|   | %             | %             | %             | %             | %             | %             | %         |  |
| Drinking alcoholic<br>beverages<br>frequently | 86.1          | 91.5          | 90.4          | 89.7          | 88.6          | 91.5          | 89.4      |  |
| Getting Drunk                                 | 85.1          | 90.5          | 88.0          | 88.3          | 86.9          | 88.4          | 87.8      |  |
| Smoking cigarettes frequently                 | 88.4          | 94.2          | 91.6          | 92.4          | 91.8          | 94.0          | 92.0      |  |
| Smoking marijuana<br>sometimes                | 81.5          | 88.3          | 84.7          | 79.2          | 74.6          | 78.4          | 81.5      |  |
| Smoking marijuana<br>frequently               | 83.5          | 89.5          | 88.2          | 84.2          | 82.6          | 86.5          | 85.7      |  |

Percentage of Survey Respondents by Grade Level Who Reported Perception of Health Risk

- The majority of students (92.0%) perceived "smoking cigarettes frequently" to be the most harmful behaviour when compared to alcohol or marijuana use, where "smoking marijuana sometimes" is perceived to be harmful by 81.5% of the respondents.
- The rating of "*Getting drunk*" as being harmful ranges from a low of 85.1% by M2 students to a high of 90.5% by M3 students.
- The harmful risk rating of "Smoking marijuana frequently" ranges from a low of 82.6% by S3 students to a high of 89.5% for M3 students.

<sup>&</sup>lt;sup>21</sup> Cummins K, Lu Y. (2022). Adolescents' Perceptions of Substance Use Harms are Contingent on Mode of Administration and Type of Substance. Substance Abuse. National Library of Medicine. 2022 Aug 24;16:11782218221119584. doi: 10.1177/11782218221119584. PMID: 36032327; PMCID: PMC9411736. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9411736/ (accessed March 19, 2024).

<sup>&</sup>lt;sup>22</sup> L. D. Johnston, et al. (2022). p. 345.

#### Table 3.1.39

Perception of Health Risk by Proportion of Survey Respondents

|  |                |                     |                       |                 |               | (n=2,701)     |
|--|----------------|---------------------|-----------------------|-----------------|---------------|---------------|
| Health Risk  | Not<br>Harmful | Slightly<br>Harmful | Moderately<br>Harmful | Very<br>Harmful | Don't<br>Know | Not<br>Stated |
|  | %              | %                   | %                     | %               | %             | %             |
| Smoking cigarettes<br>sometimes  | 2.7            | 16.2                | 42.7                  | 32.0            | 3.5           | 3.0           |
| Smoking cigarettes<br>frequently   | 1.7            | 1.7                 | 8.8                   | 81.3            | 3.3           | 3.1           |
| Drinking alcoholic<br>beverages frequently                                     | 3.4            | 12.7                | 29.8                  | 46.9            | 3.6           | 3.6           |
| Getting drunk  | 4.0            | 15.2                | 26.4                  | 46.2            | 4.5           | 3.7           |
| Taking tranquilizers/<br>stimulants without medical<br>prescription sometimes  | 1.7            | 4.6                 | 25.1                  | 54.4            | 10.8          | 3.4           |
| Taking tranquilizers/<br>stimulants without medical<br>prescription frequently | 1.9            | 1.9                 | 6.5                   | 76.0            | 10.4          | 3.4           |
| Inhaling solvents sometimes  | 2.4            | 8.6                 | 31.8                  | 40.8            | 12.6          | 3.7           |
| Inhaling solvents frequently   | 1.8            | 2.6                 | 11.3                  | 67.4            | 12.8          | 4.1           |
| Smoking marijuana<br>sometimes   | 9.4            | 19.9                | 28.8                  | 32.8            | 5.3           | 3.8           |
| Smoking marijuana<br>frequently  | 5.3            | 9.0                 | 18.0                  | 58.8            | 5.5           | 3.4           |
| Consuming cocaine<br>sometimes   | 1.7            | 3.1                 | 18.1                  | 67.2            | 6.3           | 3.6           |
| Consuming cocaine<br>frequently  | 1.6            | 0.9                 | 3.9                   | 83.1            | 7.1           | 3.4           |
| Consuming crack<br>sometimes   | 1.7            | 2.6                 | 16.5                  | 68.4            | 7.3           | 3.4           |
| Consuming crack<br>frequently  | 1.5            | 0.8                 | 3.7                   | 82.5            | 8.3           | 3.2           |
| Consuming ecstasy<br>sometimes   | 1.9            | 2.9                 | 17.4                  | 57.2            | 17.2          | 3.4           |
| Consuming ecstasy<br>frequently  | 1.5            | 1.3                 | 6.2                   | 69.2            | 17.9          | 4.0           |
| Inhaling second-hand<br>cigarette smoke  | 5.1            | 26.7                | 26.3                  | 30.9            | 7.6           | 3.4           |
| Inhaling second-hand<br>marijuana smoke  | 9.4            | 22.1                | 22.3                  | 34.3            | 8.7           | 3.1           |

## Chapter 3.1: Results



Proportion of Survey Respondents (%)

Figure 3.1.13. Harmful rating of health risk behaviours by survey respondents.

# 3.1.8 Perception of Drug Use at School or in Surrounding Area



Figure 3.1.14. Perception of drug use at school, outside the school, or in surrounding area.

- Figure 3.1.14 shows that nearly four in 10 students (37.7%) believe that there are drugs in the area surrounding or next to their school.
- Just over one-third of the students believe that there are drugs in their school (35.1%); believe that there are students who bring, try, or deal with drugs at their

school (35.3%); and believe that some students try to buy or deal in drugs amongst themselves just outside the school or surrounding area (31.8%).

• Fewer students, just over one in 10, reported personally seeing a student selling or giving drugs (12.0%) and about one in five (21.8%) reported seeing a student using drugs at school or in an area surrounding the school.

# 3.1.9 Reaction & Involvement of Parents/Guardians

- When students were asked about their parents'/guardians' reaction if they were to get caught coming home tipsy or drunk, the majority (48.3%) of them reported that their parents/guardians will be "extremely upset". An additional 16.5% and 12.8% indicated that their parents/guardians will be "very upset" or "somewhat upset", respectively.
- Similarly, 60.3% of the students said that their parents/guardians will be "extremely upset" if they found out they were smoking marijuana; with an additional 12.6% and 7.1%, whose parents/guardians will be "very upset" or "somewhat upset".
- There were roughly four percent of the respondents who indicated that their parents/ guardians will not be upset in either situation; with approximately six to seven percent who had no idea of their parents'/guardians' reaction.

| Responses       | Catches y<br>home tips | ou coming<br>y or drunk | Find out you are smoking marijuana |       |  |  |
|-----------------|------------------------|-------------------------|------------------------------------|-------|--|--|
|                 | n                      | %                       | n                                  | %     |  |  |
| Extremely upset | 1,304                  | 48.3                    | 1,629                              | 60.3  |  |  |
| Very Upset      | 446                    | 16.5                    | 340                                | 12.6  |  |  |
| Somewhat upset  | 346                    | 12.8                    | 191                                | 7.1   |  |  |
| Not upset       | 132                    | 4.9                     | 95                                 | 3.5   |  |  |
| No idea         | 187                    | 6.9                     | 159                                | 5.9   |  |  |
| Not applicable  | 24                     | 0.9                     | 25                                 | 0.9   |  |  |
| Not Stated      | 262                    | 9.7                     | 262                                | 9.7   |  |  |
| Total           | 2,701                  | 100.0                   | 2,701                              | 100.0 |  |  |

#### Table 3.1.40

Perception of Parents'/Guardians' Reaction to Respondent's Behaviours by Proportion of Survey Respondents

When students were asked if they have ever had any serious conversations with any of their parents/guardians about the dangers of drug use, just under three in five or 57.3% have reported that they have in fact had this conversation. In contrast, slightly over three in 10 of the respondents (31.8%) have never had a serious conversation with their parents/ guardians regarding the dangers of drugs use.

## Chapter 3.1: Results



**Figure 3.1.15.** Proportion of respondents who have had a serious conversation about the dangers of drugs with parents/guardians.

# 3.1.10 Reaction of Close Friends to Marijuana Use

- While roughly four in 10 students indicated that "all" (40.7%) or "some" (35.1%) of their friends will try to convince them to stop if they knew that they were smoking marijuana, there was nearly one in seven students (14.2%) who reported that "none" of their friends will try to convince them to stop.
- Likewise, 14.0% of the students, or nearly one in seven, said that "none" of their friends would disapprove if they knew they were smoking marijuana. On the other hand, about two in five students indicated that "all" (42.7%) or "some" (33.2%) of their friends would, in fact, disapprove.

| Responses  | If they knew you<br>marijuana, how<br>would try to convi | were smoking<br>many of them<br>ince you to stop? | If they knew you were smoking<br>marijuana, how many of them<br>would disapprove? |       |  |
|------------|--|---|---|-------|--|
|            | n  | %   | n   | %     |  |
| All        | 1,099  | 40.7  | 1,153   | 42.7  |  |
| Some       | 947  | 35.1  | 896   | 33.2  |  |
| None       | 384 14.2   |   | 378   | 14.0  |  |
| Not Stated | 271 10.0   |   | 274   | 10.1  |  |
| Total      | 2,701  | 100.0   | 2,701   | 100.0 |  |

#### Table 3.1.41

Close Friends' Reaction to Marijuana Use by Proportion of Survey Respondents

# **CHAPTER 3.2** RESULTS Risk and Protective Factors

3

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# **3.2.1 Overall Results**

Overall risk and protective factor scale scores are presented in Figures 3.2.1 and 3.2.2. These results provide a general description of the prevention needs of M2 through S4 students as a whole.

As Figure 3.2.1 shows, overall percentile scores across the 13 protective factor scales range from a low of 27 to a high of 89, with an average score of 67 (2019: low of 50 to a high of 86, average score of 69). The three lowest proportions were for the following protective factor scales: *Religiousity* (27), *Belief in Moral Order* (46), and *Interaction with Prosocial Peers* (52). All three of the lowest protective factors fall below the normative average of 67. While policies that target any protective factor could potentially be an important resource for students, focusing prevention planning in these areas could be especially beneficial. Students reported the three highest overall proportions for the following protective factor scales: *Peer Prosocial Involvement* (89), *School Opportunities for Prosocial Involvement* (86), and *Family Opportunities for Prosocial Involvement* (86). The three highest protective factors are above the normative score of 67. The higher scores reported by students in these areas represent strengths on which prevention programmes can build on.



# **Comparisons Across Protective Factors**

Figure 3.2.1. Overall protective factor scale scores.

As Figure 3.2.2 shows, overall scores across the 24 risk factor scales range from a low of 2 to a high of 88, with an average score of 21 (2019: low of 2 to a high of 58, average score of 24). The three highest risk factor scales are: *Transitions and Mobility* (88), *Family History of Antisocial Behaviour* (65), and *Sensation Seeking* (60). These risk factors fall above the normative score of 25. Once again, while policies that target any risk factor could potentially be an important resource for students, directing prevention programming in these areas is likely to be especially beneficial. The lowest risk factor scales are *Gang Involvement* (2), *Perceived Availability of Handguns* (4), and *Parental Attitudes Favorable towards Antisocial Behaviour* (6). These risk factors fall below the normative score of 25. The lower scores reported by students in these areas represent strengths on which to build.



## **Comparisons Across Risk Factors**

Figure 3.2.2. Overall risk factor scale scores.

## 3.2.2 Grade Level Results

While overall scores provide a general picture of the risk and protective factor profile, they can mask problems within individual grades. Tables 3.2.1 and 3.2.2, as well as a series of graphs on the subsequent pages, present individual-grade data for risk and protective factor scale scores. This detailed information provides prevention planners with a snapshot; revealing the risk and protective factor scales that are of greatest concern by grade level. It allows those prevention planners to focus on the most appropriate points in youth development for preventive intervention action – and to target their prevention efforts as precisely as possible.

Younger students tend to report different factors than older students as being the most elevated or suppressed, as seen in Tables 3.2.1 and 3.2.2. For example, when it came to the three highest protection scales, M2 students reported highest levels for: School Opportunities for Prosocial Involvement (91), Family Attachment (90), and Family Rewards for Prosocial Involvement (87). On the other hand, S4 students reported highest levels for: Peer Prosocial Involvement (87), Family Rewards for Prosocial Involvement (82), and School Opportunities for Prosocial Involvement (82).

On the other hand, although in varying proportions, M2 students and S4 students demonstrated the same highest three areas of risk: Transitions and Mobility, Family History of Antisocial Behaviour, and Sensation Seeking.

Table 3.2.1

Protective Factor Scale Proportions<sup>1</sup> Reported by Survey Respondents, by Grade Level

|                      |   | M2 | M3 | <b>S1</b> | <b>S2</b> | <b>S</b> 3 | <b>S4</b> |
|----------------------|---|----|----|-----------|-----------|------------|-----------|
|                      |   | %  | %  | %         | %         | %          | %         |
| , it                 | Community Rewards for Prosocial Involvement       | 68 | 66 | 69        | 67        | 63         | 60        |
| Commun<br>Domair     | Community Opportunities for Prosocial Involvement | 67 | 68 | 65        | 66        | 71         | 68        |
| 2.<                  | Family Attachment                                 | 90 | 83 | 81        | 79        | 76         | 72        |
| amil                 | Family Opportunities for Prosocial Involvement    | 86 | 83 | 81        | 78        | 79         | 78        |
| щĞ                   | Family Rewards for Prosocial Involvement          | 87 | 92 | 87        | 86        | 85         | 82        |
|                      | School Opportunities for Prosocial Involvement    | 91 | 88 | 84        | 85        | 84         | 82        |
| Schoo<br>Do-<br>mair | School Rewards for Prosocial Involvement          | 84 | 83 | 77        | 83        | 77         | 76        |
| 2                    | Peer-Individual Rewards for Prosocial Involvement | 62 | 51 | 55        | 52        | 51         | 55        |
| d<br>mai             | Interaction with Prosocial Peers                  | 51 | 49 | 54        | 49        | 53         | 57        |
| Peer an<br>idual Do  | Belief in the Moral Order                         | 36 | 41 | 48        | 50        | 54         | 49        |
|                      | Peer Prosocial Involvement                        | 85 | 92 | 90        | 91        | 90         | 87        |
| ndiv                 | Religiousity                                      | 30 | 32 | 31        | 29        | 21         | 20        |
|                      | Social Skills                                     | 67 | 64 | 62        | 57        | 58         | 53        |
|                      | Average   | 70 | 69 | 68        | 67        | 66         | 65        |

Note: <sup>1</sup> Some scores are low because of the small number of responses to the survey items comprising the particular scale.
#### Table 3.2.2

Risk Factor Scale Scores<sup>1</sup> Reported by Survey Respondents, by Grade Level

|              |   | M2 | M3 | S1 | S2 | <b>S</b> 3 | S4 |
|--------------|---|----|----|----|----|------------|----|
|              |   | %  | %  | %  | %  | %          | %  |
|              | Low Neighbourhood Attachment                              | 15 | 17 | 17 | 19 | 19         | 19 |
| nain         | Community Disorganisation                                 | 6  | 7  | 9  | 6  | 7          | 6  |
| Don          | Transitions and Mobility                                  | 85 | 86 | 89 | 88 | 93         | 88 |
| nity         | Perceived Availability of Drugs                           | 12 | 16 | 25 | 30 | 43         | 54 |
| nmu          | Perceived Availability of Handguns                        | 3  | 4  | 3  | 5  | 4          | 4  |
| Ŝ            | Laws and Norms Favourable to Drug Use                     | 9  | 13 | 16 | 27 | 34         | 42 |
|              | Laws and Norms Favourable to Handguns                     | 21 | 25 | 33 | 35 | 41         | 42 |
| c            | Family History of Antisocial Behaviour                    | 58 | 57 | 68 | 66 | 70         | 69 |
| mai          | Poor Family Management                                    | 3  | 2  | 9  | 6  | 6          | 13 |
| y Do         | Family Conflict   | 33 | 31 | 31 | 32 | 39         | 28 |
| amil         | Parental Attitudes Favourable toward ATOD Use             | 3  | 2  | 5  | 7  | 12         | 14 |
|              | Parental Attitudes Favourable toward Antisocial Behaviour | 7  | 5  | 6  | 7  | 8          | 8  |
| lool<br>nain | Poor Academic Performance Lack of Commitment to School    |    | 15 | 7  | 4  | 5          | 2  |
| Sch          |   |    | 13 | 16 | 14 | 22         | 13 |
|              | Rebelliousness  | 14 | 18 | 20 | 21 | 23         | 17 |
| ج            | Gang Involvement  | 1  | 2  | 1  | 2  | 2          | 1  |
| mai          | Favourable Attitudes toward ATOD Use                      | 3  | 4  | 4  | 17 | 29         | 36 |
| al Do        | Favourable Attitudes toward Antisocial Behaviour          | 5  | 5  | 9  | 6  | 10         | 6  |
| vidua        | Sensation Seeking   | 61 | 62 | 59 | 55 | 62         | 63 |
| Indiv        | Peer Rewards for Antisocial Behaviour                     | 24 | 33 | 33 | 38 | 48         | 50 |
| and          | Friends' Use of Drugs                                     | 18 | 32 | 45 | 55 | 71         | 73 |
| eer          | Friends Delinquent Behaviour                              | 28 | 44 | 49 | 43 | 50         | 49 |
|              | Low Perceived Risks of Drug Use                           | 3  | 3  | 7  | 7  | 12         | 13 |
|              | Intention to Use  | 4  | 6  | 9  | 12 | 15         | 17 |
|              | Average   | 19 | 21 | 24 | 25 | 30         | 30 |

Note: <sup>1</sup> Some scores are low because of the small number of responses to the survey items comprising the particular scale.

### **3.2.3 Protective Factors**

Protective factors are characteristics that are known to decrease the likelihood that a student will engage in problem behaviours. They encompass family, social, psychological, and behavioural characteristics that can provide a buffer for young people and mitigate the effects of risk factors, while promoting positive youth development. These factors fall into three categories – individual characteristics, bonding, healthy beliefs and clear standards. For example, bonding to parents reduces the risk of an adolescent engaging in problem behaviours. To develop these healthy positive behaviours, young people must be immersed in environments that consistently communicate healthy beliefs and clear standards for behaviour; that foster the development of strong bonds to members of their family, school, and community; and that recognise the individual characteristics of each young person (Social Development Strategy).

Below, each protective factor scale is described and the results are presented. Higher scores on the protective factor scales are preferred as they indicate greater levels of protection.

#### **Community Rewards for Prosocial Involvement**

Students who feel recognised and rewarded by members of their community are less likely to engage in negative behaviours, because that recognition helps increase a student's self-esteem and the feeling of being bonded to that community. This protective factor is measured using the *Community Rewards for Prosocial Involvement* scale.

The protective factor *Community Rewards* for Prosocial Involvement is measured by a single scale using three survey items:

- ✓ There are people in my neighbourhood, or the area around where I live, who are proud of me when I do something well.
- ✓ There are people in my neighbourhood, or the area where I live, who encourage me to do my best.
- ✓ My neighbours notice when I am doing a good job and let me know about it.
- Overall, students received a percentile score of 66 on the Community Rewards for Prosocial Involvement scale (score of 65 in 2019).
- Across grade levels, percentile scores for Community Rewards for Prosocial Involvement range from a low of 60 among S4 students to a high of 69 among S1 students.



Figure 3.2.3. Community Rewards for prosocial involvement scale by grade level and overall.

#### **Community Opportunities for Prosocial Involvement**

When students have the opportunity to make meaningful contributions to their communities they are less likely to get involved in risky behaviours. By having the opportunity to make a contribution, students feel as if they are an integral part of their community.

The protective factor Community Opportunities for Prosocial Involvement is measured by a single scale using five survey items:

- ✓ There are a lot of adults in my neighbourhood I could talk to about something important.
- ✓ Which of the following activities for people your age are available in your community:
  - Sports teams
  - Boys and girls clubs
  - Community clubs
  - Community service
- Overall, students received a percentile score of 67 on the Community Opportunities for Prosocial Involvement scale; an increase from 2019, where the score was 50.
- Across grade levels, percentile scores for Community Opportunities for Prosocial Involvement range from a low of 65 among S1 students to a high of 71 among S3 students.



Figure 3.2.4. Community opportunities for prosocial involvement scale by grade level and overall.

#### **Family Attachment**

One of the most effective ways to reduce the risk of problem behaviours among young people is to help strengthen their bonds with family members who embody healthy beliefs and clear standards. Children who are bonded to family members who have healthy beliefs are less likely to do things that threaten that bond, such as using drugs, committing crimes, or dropping out of school. Positive bonding can act as a buffer against risk factors. If children are attached to their parents and want to please them, they will be less likely to threaten that connection by doing things that meet strong disapproval from their parents.

The protective factor *Family Attachment* is measured by a single scale using four survey items:

- ✓ Do you feel very close to your mother?
- ✓ Do you share your thoughts and feelings with your mother?
- ✓ Do you feel very close to your father?
- ✓ Do you share your thoughts and feelings with your father?

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- Overall, students received a percentile score of 81 on the Family Attachment scale (score of 72 in 2019).
- Across grade levels, percentile scores for Family Attachment range from a low of 72 among S4 students to a high of 90 among M2 students.



Figure 3.2.5. Family attachment scale by grade level and overall.

#### **Family Opportunities for Prosocial Involvement**

When students have the opportunity to make meaningful contributions to their families, they are less likely to get involved in risky behaviours. By having the opportunity to make a contribution, students feel as if they are an integral part of their families. These strong bonds allow students to adopt the family norms, which can protect students from risk. For instance, children whose parents have high expectations for their school success and achievement are less likely to drop out of school.

The protective factor Family Opportunities for Prosocial Involvement is measured by a single scale using three survey items:

- ✓ If I had a personal problem, I could ask my mom or dad for help.
- ✓ My parents give me lots of chances to do fun things with them.
- ✓ My parents ask me what I think before most family decisions
- Overall, students received a percentile score of 81 on the Family Opportunities for Prosocial Involvement scale (score of 72 in 2019).

affecting me are made.

 Across grade levels, percentile scores for Family Opportunities for Prosocial Involvement range from a low of 78 among S2 and S4 students to a high of 86 among M2 students.



Figure 3.2.6. Family opportunities for prosocial involvement scale by grade level and overall.

#### **Family Rewards for Prosocial Involvement**

When family members reward their children for positive participation in activities, it helps children feel motivated to contribute and stay involved with the family, thus reducing their risk for problem behaviours. When families promote clear standards for behaviour, and when young people consequently develop strong bonds of attachment and commitment to their families, young people's behaviour becomes consistent with those standards.

The protective factor Family Rewards for Prosocial Involvement is measured by a single scale using four survey items:

- ✓ My parents notice when I am doing a good job and let me know about it.
- ✓ How often do your parents tell you they're proud of you for something you've done?
- ✓ Do you enjoy spending time with your mother?
- ✓ Do you enjoy spending time with your father?
- Overall, students received a percentile score of 87 on the Family Rewards for Prosocial Involvement scale (score of 86 in 2019).
- Across grade levels, percentile scores for Family Rewards for Prosocial Involvement range from a low of 82 among S4 to a high of 92 among M3 students.



Figure 3.2.7. Family rewards for prosocial involvement scale by grade level and overall.

#### **School Opportunities for Prosocial Involvement**

Giving students opportunities to participate in important activities at school helps to reduce the likelihood that they will become involved in problem behaviours. Students who feel they have opportunities to be involved are more likely to contribute to school activity. This bond can protect a student from engaging in behaviours that violate socially accepted standards.

The protective factor School Opportunities for Prosocial Involvement is measured by a single scale using five survey items:

- ✓ In my school, students have lots of chances to help decide things like class activities and rules.
- ✓ Teachers ask me to work on classroom projects.
- ✓ There are a lot of chances for student in my school to get involved in sports, clubs, and other school activities outside of class.
- ✓ There are lots of chances for students in my school to talk with a teacher one-on-one.
- ✓ I have lots of chances to be part of class discussions or activities.

- Overall, students received a percentile score of 86 on the School Opportunities for Prosocial Involvement scale (76 in 2019).
- Across grade levels, percentile scores for School Opportunities for Prosocial Involvement range from a low of 82 among S4 students to a high of 91 among M2 students.



Figure 3.2.8. School opportunities for prosocial involvement scale by grade level and overall.

#### **School Rewards for Prosocial Involvement**

Making students feel appreciated and rewarded for their involvement at school helps reduce the likelihood of their involvement in drug use and other problem behaviours. This is because students who feel appreciated for their activity at school bond to their school.

The protective factor School Rewards for Prosocial Involvement is measured by a single scale using four survey items:

- ✓ My teacher(s) notices when I am doing a good job and lets me know about it.
- ✓ I feel safe at my school.
- ✓ The school lets my parents know when I have done something well.
- ✓ My teachers praise me when I work hard in school.
- Overall, students received a percentile score of 80 on the School Rewards for Prosocial Involvement scale (score of 71 in 2019).
- Across grade levels, percentile scores for School Rewards for Prosocial Involvement range from a low of 77 among S1 and S3 students to a high of 84 among M2 students.



Figure 3.2.9. School rewards for prosocial involvement scale by grade level and overall.

#### **Peer-Individual Rewards for Prosocial Involvement**

Often peer acceptance of certain behaviours leads to increased social status amongst young people. Being rewarded by peers for involvement in antisocial behaviours may increase the likelihood of involvement in drug use and other problem behaviours.

The protective factor Peer-Individual Rewards for Prosocial Involvement is measured by a single scale using four survey items:

- ✓ What are the chances that you would be seen as cool if you worked hard at school?
- ✓ What are the chances that you would be seen as cool if you defended someone who was being verbally abused at school?
- ✓ What are the chances that you would be seen as cool if you regularly volunteered to do community service?
- ✓ What are the chances that you would be seen as cool if you made a commitment to stay drug-free?
- Overall, students received a percentile score of 54 on the Peer-Individual Rewards for Prosocial Involvement scale versus a score of 74 in 2019.
- Across grade levels, percentile scores for Peer-Individual Rewards for Prosocial Involvement range from a low of 51 among M3 and S3 students to a high of 62 among M2 students.



Figure 3.2.10. Peer-individual rewards for prosocial involvement scale by grade level and overall.

#### **Interaction with Prosocial Peers**

Students who feel they have opportunities to be involved are more likely to contribute to school activity. These students are likely to avoid negative behaviours and delay use of alcohol and drugs. This bond can protect a student from engaging in behaviours that violate socially accepted standards.

The protective factor *Interaction with Prosocial Peers* is measured by a single scale using five survey items:

In the past year (12 months), how many of your four (4) best friends have ....

- ✓ Participated in clubs, organisations, or activities at school?
- ✓ Made a commitment to stay drug-free?
- ✓ Liked school?
- ✓ Regularly attended religious services?
- ✓ Tried to do well in school?

- Overall, students received a percentile score of 52 on the Interaction with Prosocial Peers scale versus a score of 76 in 2019.
- Across grade levels, percentile scores for Interaction with Prosocial Peers range from a low of 49 among M3 and S2 students to a high of 57 among S4 students.



**Figure 3.2.11.** Interaction with Prosocial Peers rewards for prosocial involvement scale by grade level and overall.

#### **Belief in the Moral Order**

When people feel bonded to society, they are more motivated to follow society's standards and expectations. It is important for families, schools, and communities to have clearly stated policies on drug use. Young people who have developed a positive belief system are less likely to become involved in problem behaviours. For example, young people who believe that drug use is socially unacceptable or harmful are likely to be protected against peer influences to use drugs.

The protective factor *Belief in the Moral Order* is measured by a single scale using four survey items:

- ✓ It is important to be honest with your parents, even if they become upset or you get punished.
- ✓ I think sometimes it is okay to cheat at school.
- ✓ I think it's okay to take something without asking if you can get away with it.
- It is all right to beat up people if they start the fight.
- Overall, students received a percentile score of 46 on the Belief in the Moral Order scale (score of 64 in 2019).
- Across grade levels, percentile scores for Belief in the Moral Order range from a low of 36 among M2 students to a high of 54 among S3 students.



Figure 3.2.12. Belief in Moral Order scale by grade level and overall.

#### **Peer-Individual Prosocial Involvement**

Students who feel recognised and rewarded by peers are less likely to engage in negative behaviours, because that acceptance helps increase a student's self-esteem and the feeling of being bonded with their peers. This protective factor is measured using the Peer Prosocial Involvement scale.

The protective factor Peer Prosocial Involvement is measured by a single scale using three survey items:

How many times in the past year (12 months), have you....

- ✓ Participated in clubs, organisations, or activities at school?
- ✓ Done extra work on your own for school?
- ✓ Volunteered to do community service?
- Overall, students received a percentile score of 89 for Peer Prosocial Involvement versus a score of 74 in 2019.
- Across grade levels, percentile scores for Peer Prosocial Involvement range from a low of 85 among M2 students to a high of 92 among M3 students.



Figure 3.2.13. Peer prosocial involvement scale by grade level and overall.

#### Religiosity

Religious institutions can help students develop firm prosocial beliefs. Students who have high levels of religious connection are less vulnerable to becoming involved in antisocial behaviours, because they have already adopted a social norm against those activities.

The protective factor *Religiousity* is measured by a single scale using one survey item:

✓ How often do you attend religious services?



Figure 3.2.14. Religiousity scale by grade level and overall.

- Overall, students received a percentile score of 28 on the *Religiousity* scale versus a score of 51 in 2019, indicating that students are less religious compared with students in 2019.
- Across grade levels, percentile scores for *Religiousity* range from a low of 20 among S4 students to a high of 32 among M3 students.

#### **Social Skills**

Students who have developed a high level of social skills are more likely to do well interacting with others, and will find these interactions rewarding. If they are skilled at avoiding trouble, they are less likely to engage in problem behaviours, such as drug use.

The protective factor Social Skills is measured by presenting students with four different scenarios and giving them four possible responses to each scenario. The following four scenarios were included on the survey:

- ✓ You are looking at CD's in the music store with a friend. You look up and see her slip a CD under her coat. She smiles and says, "Which one do you want? Go ahead, take it while nobody's around". There is no one in sight, no employees or other customers. What would you do now?
- ✓ It is 8:00 on a weeknight and you are about to go over to a friend's house when your mother asks you where you are going. You say, "Oh, just going to go hang out with some friends." She says, "No, you'll just get into trouble if you go out. Stay home tonight" What would you do?
- ✓ You are visiting another part of town, and you don't know any of the people your age there. You are walking down the street, and some teenager you don't know is walking toward you. He is about your size, and as he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you do or say?"
- ✓ You are at a party at someone's house, and one of your friends offers you a drink containing alcohol. What would you say or do?
- Overall, students received a percentile score of 61 on the Social Skills scale compared to a score of 74 in 2019.
- Across grade levels, percentile scores for Social Skills range from a low of 53 among S4 students to a high of 67 among M2 students.



Figure 3.2.15. Social skills scale by grade level and overall.

#### 3.2.6 Risk Factors

Risk factors are characteristics in the community, family, school, peer, and individual's environments that are known to increase the likelihood of a student engaging in one or more problem behaviours (substance abuse, depression and anxiety, delinquency, teen pregnancy, school dropout, or violence). For example, a risk factor in the community environment is the existence of laws and norms favourable to drug use, which can affect the likelihood that a young person will try alcohol, tobacco, or other drugs. In those communities where there is acceptance or tolerance of drug use, students are more likely to engage in alcohol, tobacco, and other drug use.

On the following pages, each of the risk factor scales, measured in the Community, Family, School, Peer-Individual domains, is described and the results are reported. In contrast to the protective factor scales, lower scores on the risk factors scales are preferred as they indicate lower levels of risk.

#### Low Neighbourhood Attachment

Higher rates of drug usage, delinquency, and violence occur in communities or neighbourhoods where people feel little attachment to the community. This situation is not specific to low-income neighbourhoods. It also can be found in affluent neighbourhoods. Perhaps the most significant issue affecting community attachment is whether residents feel they can make a difference in each other's lives. If the key players in a neighbourhood – such as merchants, teachers, clergy, police, and human and social services personnel – live outside the neighbourhood, residents' sense of commitment will be lower. This low sense of commitment may be reflected in lower rates of parental involvement in schools.

The Low Neighbourhood Attachment scale was developed to measure a component of the risk factor Low Neighbourhood Attachment and Community Disorganisation. This scale is measured by three survey items:

- ✓ I'd like to get out of my neighbourhood.
- ✓ If I had to move, I would miss the neighbourhood I now live in.
- ✓ I like my neighbourhood.
- Overall, students received a percentile score of 17 on the Low Neighbourhood Attachment scale (score of 11 in 2019). In other words, 17% of students did not have an attachment to their current neighborhood.



Figure 3.2.16. Low neighbourhood attachment scale by grade level and overall.

• Across grade levels, percentile scores for Low Neighbourhood Attachment range from a low of 15 among M2 students to a high of 19 among S2-S4 students.

#### **Community Disorganisation**

The Community Disorganisation scale pertains to students' perceptions of their communities' appearance and other external attributes.

The Community Disorganisation scale was developed to measure a component of the risk factor Low Neighbourhood Attachment and Community Disorganisation. This scale is measured by five survey items that describe the neighbourhood in which the student resides. These items include:

- ✓ I feel safe in my neighbourhood.
- ✓ Neighbourhood has crime and/or drug selling.
- ✓ Neighbourhood has lots of empty or abandoned buildings.
- Neighbourhood has lots of graffiti.
- ✓ Neighbourhood has fighting.
- Overall, students received a percentile score of 7 on the *Community Disorganisation* scale (score of 13 in 2019).
- Across grade levels, percentile scores for *Community Disorganisation* range from a low of 6 among M2, S2, and S4 students to a high of 9 among S1 students.



Figure 3.2.17. Community disorganisation scale by grade level and overall.

#### **Transitions and Mobility**

Even normal school transitions are associated with an increase in problem behaviours. When children move from elementary school to middle school or from middle school to high school, significant increases in the rates of drug use, school dropout, and antisocial behaviour may occur. This is thought to occur because by making a transition to new environments, students no longer have the bonds they had in their old environments. Consequently, students may be less likely to become attached to their new environments and develop the bonds that help protect them from involvement in problem behaviours.

The risk factor Transitions and Mobility is measured by a single scale using four survey items:

- ✓ Have you changed homes in the past year?
- ✓ Have you changed schools in the past year?

- ✓ How many times have you changed homes since kindergarten?
- ✓ How many times have you changed schools since kindergarten?
- Overall, students received a percentile score of 88 on the *Transitions and Mobility* scale (58 in 2019).
- Across grade levels, percentile scores for *Transitions and Mobility* range from a low of 85 among M2 students to a high of 93 among S3 students.



Figure 3.2.18. Transitions and mobility scale by grade level and overall.

#### **Perceived Availability of Drugs**

The perceived availability of alcohol, tobacco, and other drugs in a community is directly related to the incidence of delinquent behaviour. For example, in schools where children believe that drugs are more available, a higher rate of drug use occurs.

The risk factor scale *Perceived Availability of Drugs* was developed to measure a component of the risk factor Availability of Drugs. This scale is measured by four survey items:

- ✓ If you wanted to get some cigarettes, how easy would it be for you to get some?
- ✓ If you wanted to get some beer, wine, or hard liquor, how easy would it be for you to get some?
- ✓ If you wanted to get some marijuana, how easy would it be for you to get some?
- ✓ If you wanted to get a drug like cocaine, LSD, or amphetamines, how easy would it be for you to get some?

Elevation of this risk factor scale score may indicate the need to make alcohol, tobacco, and other drugs more difficult for students to acquire. For instance, a number of policy changes have been shown to



Figure 3.2.19. Perceived availability of drugs scale by grade level and overall.

reduce the availability of alcohol and cigarettes. Minimum-age requirements, taxation, and responsible beverage service have all been shown to affect the perception of availability of alcohol.

- Overall, students received a percentile score of 30 on the Perceived Availability of Drugs scale versus a score of 29 in 2019.
- Across grade levels, percentile scores for *Perceived Availability of Drugs* range from a low of 12 among M2 students to a high of 54 among S4 students.

#### **Perceived Availability of Handguns**

While a few studies report no association between firearm availability and violence, more studies do show a relationship. Given the lethality of firearms, the greater likelihood of conflict escalating into homicide when guns are present, and the strong association between the availability of guns and homicide rates, the availability of handguns is included in this survey.

The Perceived Availability of Handguns scale was developed to measure a component of the risk factor Availability of Handguns. This scale is measured using one survey item:

- If you wanted to get a handgun, how easy would it be for you to get one?
- Overall, students received a percentile score of 4 on the Perceived Availability of Handguns scale with the same score recorded in 2019.
- Across grade levels, percentile scores for Perceived Availability of Handguns range from a low of 3 among M2 and S1 students to a high of 5 among S2 students.





#### Laws and Norms Favourable to Drug Use

Students' perceptions of the rules and regulations concerning alcohol, tobacco, and other drug use that exist in their neighbourhoods are also associated with problem behaviours in adolescence. Community norms – the attitudes and policies a community holds in relation to drug use and other antisocial behaviours – are communicated in a variety of ways: through laws and written policies, through informal social practices, and through the expectations parents and other members of the community have of young people. When laws and community standards are favourable toward drug use, violence and/or other crime, or even when they are just unclear, young people are more likely to engage in negative behaviours.<sup>23</sup>

<sup>&</sup>lt;sup>23</sup> Steele, D. W., Becker, S. J., Danko, K. J., Balk, E. M., Adam, G. P., Saldanha, I. J., & Trikalinos, T. A. (2020). Brief behavioral interventions for substance use in adolescents: a meta-analysis. Pediatrics, 146(4).

An example of conflicting messages about drug use can be found in the acceptance of alcohol use as a social activity within the community. The visual promotion of alcohol and spirits at sporting events are in contrast to the "stopping use before it starts" messages that schools, parents, and prevention specialist may be promoting. These conflicting and ambiguous messages are problematic in that they do not have the positive impact on preventing alcohol and other drug use as compared to the impact of a clear community-level anti-drug message.

The Laws and Norms Favourable to Drug Use scale was developed to measure a component of the risk factor Community Laws and Norms Favourable toward Drug Use, Firearms, and Crime. This scale is measured by five survey items:

- ✓ If a kid drank some beer, wine, or hard liquor in your neighbourhood, or the area around where you live, would he or she be caught by the police?
- ✓ If a kid smoked marijuana in your neighbourhood, or the area around where you live, would he or she be caught by the police?
- ✓ How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to smoke marijuana?
- ✓ How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to drink alcohol?
- ✓ How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to smoke cigarettes?
- Overall, students received a percentile score of 22 on the Laws and Norms Favourable to Drug Use scale (score of 20 in 2019).
- Across grade levels, percentile scores for *Laws and Norms Favourable to Drug Use* range from a low of 9 among M1 students to a high of 42 among S4 students.



Figure 3.2.21. Laws and norms favourable to drug use scale by grade level and overall.

#### Laws and Norms Favourable to Handguns

As with drug use, students' perceptions of the laws regarding illegal use of firearms may be related to violence. That is, when students perceive laws to be strict and consistently enforced, they may be less likely to carry guns and to engage in gun violence.

The Laws and Norms Favourable to Handguns scale was developed to measure a component of the risk factor Community Laws and Norms Favourable toward Drug Use, Firearms and Crime. This scale is measured using one survey item:

✓ If a kid illegally carried a handgun in your neighbourhood, or the area you live, would he or she be caught by the police?" Chapter 3.2: Risk and Protective Factors

- Overall, students received a percentile score of 32 on the Laws and Norms Favourable to Handguns scale versus a score of 36 in 2019.
- Across grade levels, percentile scores for Laws and Norms Favourable to Handguns range from a low of 21 among M2 to a high of 42 among S4 students.



Figure 3.2.22. Laws and norms favourable to handguns scale by grade level and overall.

#### Family History of Antisocial Behaviour

If children are raised in a family where a history of addiction to alcohol or other drugs exists, the risk of having alcohol or other drug problems themselves increases. If children are born or raised in a family where criminal activity is present, their risk for delinquency increases. Similarly, children who are born to teenage mothers are more likely to become teen parents, and children of dropouts are more likely to drop out of school themselves. Children whose parents engage in violent behaviour inside or outside the home are at greater risk for exhibiting violent behaviour themselves. Students' perceptions of their families' behaviour and standards regarding drug use and other antisocial behaviours are measured by the survey.

The Family History of Antisocial Behaviour scale was developed to measure a component of the risk factor Family History of Problem Behaviour. This scale is measured by 10 survey items:

- ✓ Has anyone in your family ever had a severe alcohol or drug problem?
- ✓ Have any of your brother(s) or sister(s) ever drunk beer, wine, or hard liquor?
- ✓ Have any of your brother(s) or sister(s) ever smoked marijuana?
- ✓ Have any of your brother(s) or sister(s) ever smoked cigarettes?
- ✓ Have any of your brother(s) or sister(s) ever taken a handgun to school?
- ✓ Have any of your brother(s) or sister(s) ever been suspended or expelled from school?
- ✓ About how many adults have you known personally who in the past year have used marijuana, crack, cocaine, or other drugs?
- ✓ About how many adults have you known personally who in the past year have sold or dealt drugs?
- ✓ About how many adults have you known personally who in the past year have done other things that could get them in trouble with the police, like stealing, selling stolen goods, mugging or assaulting others, etc.?
- ✓ About how many adults have you known personally who in the past year have gotten drunk or high?

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- Overall, students received a percentile score of 64 on the *Family History of Antisocial Behaviour* scale compared to a score of 29 in 2019.
- Across grade levels, percentile scores for Family History of Antisocial Behaviour range from a low of 57 among M3 students to a high of 70 among S4 students.



Figure 3.2.23 Family history of antisocial behaviour scale by grade level and overall.

#### **Poor Family Management**

The risk factor scale *Poor Family Management* measures two components of family life: "poor family supervision", which is defined as parents failing to supervise and monitor their children, and "poor family discipline", which is defined as parents failing to communicate clear expectations for behaviour and giving excessively severe, harsh or inconsistent punishment. Children who experience poor family supervision and poor family discipline are at higher risk of developing problems with drug use, delinquency, violence, and school dropout.

The risk factor scale *Poor Family Management* was developed to measure a component of the risk factor *Family Management Problems*. This scale is measured by the following eight survey items:

- ✓ The rules in my family are very clear.
- ✓ My parents ask if I have gotten my homework done.
- ✓ When I am not home, one of my parents know where I am and who I am with.
- ✓ Would your parents know if you did not come home on time?
- ✓ My family has clear rules about alcohol and drug use.
- ✓ If you drank some beer, wine, or other hard liquor without your parents' permission, would you be caught by your parents?
- ✓ If you carried a handgun without your parents' permission, would you be caught by your parents'?
- ✓ If you skipped school without your parents' permission, would you be caught by your parents?



Figure 3.2.24. Poor family management scale by grade level and overall.

- Overall, students received a percentile score of 6 on the Poor Family Management scale compared to 7 in 2019.
- Across grade levels, percentile scores for *Poor Family Management* range from a low of 2 among M3 students to a high of 13 among S4 students.

#### **Family Conflict**

Bonding between family members, especially between children and their parents or guardians, is a key component in the development of positive social norms. High levels of family conflict interfere with the development of these bonds, and increase the likelihood that young people will engage in illegal drug use and other forms of delinquent behaviour.

The risk factor Family Conflict is measured by a single scale using three survey items:

- We argue about the same things in my family over and over.
- People in my family have serious arguments.
- People in my family often insult or yell at each other.
- Overall, students received a percentile score of 32 on the *Family Conflict* scale (31 in 2019).
- Across grade levels, percentile scores for v range from a low of 31 among M3 and S1 students to a high of 39 among S3 students.



#### Parental Attitudes Favourable toward ATOD Use

Students' perceptions of their parents' opinions about alcohol, tobacco, and other drug use are an important risk factor. In families where parents use illegal drugs, are heavy users of alcohol, or are tolerant of use by their children, children are more likely to become drug users in adolescence.

The Parental Attitudes Favourable toward ATOD Use scale was developed to measure a component of the risk factor Favourable Parental Attitudes and Involvement in Problem Behaviour. This scale is measured by three survey items:

- ✓ How wrong do your parents feel it would be for you to drink beer, wine or hard liquor regularly?
- ✓ How wrong do your parents feel it would be for you to smoke cigarettes?
- ✓ How wrong do your parents feel it would be for you to smoke marijuana?

- Overall, students received a percentile score of 6 on the *Parental Attitudes Favourable* toward ATOD Use scale compared to 5 in 2019.
- Across grade levels, percentile scores for Parental Attitudes Favourable toward ATOD Use range from a low of 2 among M3 students to a high of 14 among S4 students.





#### **Parental Attitudes Favourable to Antisocial Behaviour**

Students' perceptions of their parents' opinions about antisocial behaviour are also an important risk factor. Parental attitudes and behaviour regarding crime and violence influence the attitudes and behaviour of children. If parents approve of, or excuse, their children for breaking the law, then the children are more likely to develop problems with juvenile delinquency.

The Parental Attitudes Favourable to Antisocial Behaviour scale was developed to measure a component of the risk factor Favourable Parental Attitudes and Involvement in Problem Behaviour. This scale is measured by three survey items:

- ✓ How wrong do your parents feel it would be for you to steal anything worth more than \$5.00?
- ✓ How wrong do your parents feel it would be for you to draw graffiti, write things, or draw pictures on buildings or other property?
- How wrong do your parents feel it would be for you to pick a fight with someone?
- Overall, students received a percentile score of 7 on the Parental Attitudes Favourable to Antisocial Behaviour scale (score of 6 in 2019).
- Across grade levels, percentile scores for Parental Attitudes Favourable to Antisocial Behaviour range from a low of 5 among M3 students to a high of 8 among S3 and S4 students.



Figure 3.2.27. Parental attitudes favourable to antisocial behaviour scale by grade level and overall.

#### **Poor Academic Performance**

Beginning in the late elementary grades, poor academic performance increases the risk of drug use, delinquency, violence, and school dropout. Children fail for many reasons, but it appears that the experience of failure increases the risk of these problem behaviours.

The Poor Academic Performance scale was developed to measure a component of the risk factor Academic Failure Beginning in Late Elementary School. This scale is measured by two survey items:

- ✓ Putting them all together, what were your grades like last year?
- ✓ Are your school grades better than the grades of most students in your class?

To assess poor academic performance, grades were ranked according to pass/fail and then combined with the second item to determine a score. Elevated findings for this risk factor scale suggest that not only do students believe that they have lower grades than they might expect to get, but also that they perceive that compared to their peers, they have belowaverage grades.

- Overall, students received a percentile score of 10 on the *Poor Academic Performance* scale, which was the same in 2019.
- Across grade levels, percentile scores for *Poor Academic Performance* range from a low of 2 among S4 students to a high of 16 among M2 students.



Figure 3.2.28. Poor academic performance scale by grade level and overall.

#### Lack of Commitment to School

Lack of Commitment to School assesses a student's general feelings about his or her schooling. Elevated findings for this risk factor scale can suggest that students feel less attached to, or connected with, their classes and school environment. Lack of commitment to school means the child has ceased to see the role of student as a positive one. Young people who have lost this commitment to school are at higher risk for a variety of problem behaviours.

The risk factor Lack of Commitment to School is measured by a single scale using seven survey items:

- ✓ During the LAST FOUR WEEKS, how many whole days have you missed because you skipped or cut?
- ✓ How often do you feel that the school work you are assigned is meaningful and important?
- ✓ How interesting are most of your courses to you?
- ✓ How important do you think things you are learning in school are going to be for you later life?

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- ✓ Now thinking back over the past year in school, how often did you enjoy being in school?
- ✓ Now thinking back over the past year in school, how did often did you hate being in school?
- ✓ Now thinking back over the past year in school, how often do you try to do your best work in school?
- Overall, students received a percentile score of 15 on the Lack of Commitment to School scale versus a score of 9 in 2019.
- Across grade levels, percentile scores for Lack of Commitment to School range from a low of 13 among M3 and S4 students to a high of 22 among S3 students.



Figure 3.2.29. Lack of commitment to school scale by grade level and overall.

#### **Rebelliousness**

The survey also determines the number of young people who feel they are not part of society, who feel they are not bound by rules, and who do not believe in trying to be successful or responsible. These students are at higher risk of drug use, delinquency, and school dropout.

The risk factor *Rebelliousness* is measured by a single scale using the following three survey items:

- ✓ I like to see how much I can get away with.
- I ignore the rules that get in my way.
- ✓ I do the opposite of what people tell me, just to get them mad.
- Overall, students received a percentile score of 19 on the *Rebelliousness* scale. A score of 15 was obtained on this scale in 2019.
- Across grade levels, percentile scores for *Rebelliousness* range from a low of 14 among M2 students to a high of 23 among S3 students.



Figure 3.2.30. Rebelliousness scale by grade level and overall.

#### **Gang Involvement**

Gangs have long been associated with crime, violence, and other antisocial behaviours. Evidence suggests that gangs can contribute to antisocial behaviour beyond simple association with delinquent peers. The risk factor *Gang Involvement* is measured by a single scale using four survey items:

- ✓ Have you ever belonged to a gang?
- ✓ If you have ever belonged to a gang, did the gang have a name?
- ✓ Think of your four best friends (the friends you feel closest to), in the past (12 months), how many of your best friends have been members of a gang?
- ✓ How old were you when you first belonged to a gang?
- Overall, students received a percentile score of 1 on the *Gang Involvement* scale versus a score of 2 in 2019. This would indicate fewer students engaging in gang activity.
- Across grade levels, percentile scores for *Gang Involvement* range from a low of 1 among M2, S1, and S4 students to a high of 2 among the remaining grade levels.
- Of respondents indicating gang involvement, 1.0% or 26 students admitted belonging to a gang **by age 10 years or younger** compared to 0.9% or 24 students in 2019 (see Table 3.2.3).



Figure 3.2.31. Gang involvement scale by grade level and overall.

| Age           | M2 |     | M3 |     | S1 |     | S2 |     | <b>S</b> 3 |     | S4 |     | Overall |     |
|---------------|----|-----|----|-----|----|-----|----|-----|------------|-----|----|-----|---------|-----|
| (Years)       | n  | %   | Ν  | %   | n  | %   | n  | %   | n          | %   | n  | %   | n       | %   |
| 10 or younger | 5  | 0.9 | 5  | 1.0 | 3  | 0.6 | 7  | 1.6 | 4          | 1.0 | 2  | 0.6 | 26      | 1.0 |
| 11            | 1  | 0.2 | 1  | 0.2 | 1  | 0.2 | -  | -   | 1          | 0.2 | -  | -   | 4       | 0.1 |
| 12            | 1  | 0.2 | 3  | 0.6 | 3  | 0.6 | 3  | 0.7 | 2          | 0.5 | 3  | 0.9 | 15      | 0.6 |
| 13            | -  | -   | 1  | 0.2 | 1  | 0.2 | 1  | 0.2 | 1          | 0.2 | 2  | 0.6 | 6       | 0.2 |
| 14            | -  | -   | 1  | 0.2 | -  | -   | 2  | 0.5 | 1          | 0.2 | -  | -   | 4       | 0.1 |
| 15            | -  | -   | -  | -   | 1  | 0.2 | 1  | 0.2 | -          | -   | 1  | 0.3 | 3       | 0.1 |
| 16            | -  | -   | -  | -   | 1  | 0.2 | 1  | 0.2 | -          | -   | -  | -   | 2       | 0.1 |
| 17 or older   | -  | -   | -  | -   | 1  | 0.2 | 2  | 0.5 | 2          | 0.5 | -  | -   | 5       | 0.2 |
| Total         | 7  | 1.3 | 11 | 2.2 | 12 | 2.2 | 17 | 3.9 | 11         | 2.6 | 8  | 2.4 | 65      | 2.4 |

#### Table 3.2.3

Age of First Belonging to a Gang by Grade Level and Overall

#### Favourable Attitudes toward ATOD Use

During the elementary school years, children usually express anti-drug attitudes and have difficulty imagining why people use drugs. However, in middle school, as others they know begin to participate in such activities, their attitudes often shift toward greater acceptance of these behaviours. This acceptance places them at higher risk. The risk factor scale Favourable Attitudes toward ATOD Use assesses risk by asking young people how wrong they think it is for someone their age to use drugs.

The Favourable Attitudes toward ATOD Use scale was developed to measure a component of the risk factor Favourable Attitudes toward Problem Behaviour. This scale is measured by four survey items:

How wrong do you think it is for someone your age to:

- ✓ Drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly?
- ✓ Smoke cigarettes?
- ✓ Smoke marijuana?
- Use LSD, cocaine, amphetamines or another illegal drug?
- Overall, students received a percentile score of 15 on the *Favourable Attitudes toward ATOD Use* scale (score of 12 in 2019).
- Across grade levels, percentile scores for Favourable Attitudes toward ATOD Use range from a low of 3 among M2 students to a high of 36 among S4 students.



Figure 3.2.32. Favourable attitudes toward ATOD use scale by grade level and overall.

#### **Favourable Attitudes toward Antisocial Behaviour**

During the primary school years, children usually express anticrime and prosocial attitudes and have difficulty imagining why people commit crimes or drop out of school. However, in middle school, as others they know begin to participate in such activities, their attitudes often shift toward greater acceptance of these behaviours. This acceptance places them at higher risk for antisocial behaviours.

The Favourable Attitudes toward Antisocial Behaviour scale was developed to measure a component of the risk factor Favourable Attitudes toward Problem Behaviour. This scale is measured by five survey items:

- ✓ How wrong do you think it is for someone your age to take a handgun to school?
- ✓ How wrong do you think it is for someone your age to steal anything worth more than \$5.00?
- ✓ How wrong do you think it is for someone your age to attack someone with the idea

of seriously hurting them?

- ✓ How wrong do you think it is for someone your age to pick a fight with someone?
- ✓ How wrong do you think it is for someone your age to stay away from school all day when their parents think they
- Overall, students received a percentile score of 7 on the Favourable Attitudes toward Antisocial Behaviour scale compared to 4 in 2019.

are at school?

 Across grade levels, percentile scores for Favourable Attitudes toward Antisocial Behaviour range from a low of 5 among M2 and M3 students to a high of 10 among S3 students.



Figure 3.2.33. Favourable attitudes toward antisocial behaviour scale by grade level and overall.

#### **Sensation Seeking**

Individual characteristics that may have a biological or physiological basis are sometimes referred to as "constitutional factors". Sensation Seeking is among those constitutional factors that appear to increase the likelihood of a young person using drugs, engaging in delinquent behaviour and/or committing violent acts.

Sensation Seeking is assessed by asking how often students participate in behaviours to experience thrills or a particular feeling or emotion.

The Sensation Seeking scale was developed to measure a component of the risk factor Constitutional Factors. This scale is measured by three survey items:

- ✓ How many times have you done what feels good no matter what?
- ✓ How many times have you done something dangerous because someone dared you to do it?
- ✓ How many times have you done crazy things even if they are a little dangerous?
- Overall, students received a percentile score of 60 on the *Sensation Seeking* scale (58 in 2019).
- Across grade levels, percentile scores for *Sensation Seeking* range from a low of 55 among S2 students to a high of 63 among S4 students.





#### **Peer Rewards for Antisocial Behaviour**

Students' perceptions of their peer groups' social norms are also an important predictor of involvement in problem behaviour. When students feel that they get positive feedback from their peers for using alcohol, tobacco, or other drugs, or getting involved in delinquent behaviours, they are more likely to engage in these behaviours. When young people believe that their peer groups are involved in antisocial behaviours, they are more likely to become involved in antisocial behaviours themselves.

The Peer Rewards for Antisocial Behaviour scale was developed to measure a component of the risk factor Friends Who Engage in the Problem Behaviour. This scale is measured by four survey items:

- ✓ What are the chances you would be seen as cool if you smoked cigarettes?
- ✓ What are the chances you would be seen as cool if you began drinking alcoholic beverages regularly?
- What are the chances you would be seen as cool if you smoked marijuana?
- ✓ What are the chances you would be seen as cool if you carried a handgun?
- Overall, students received a percentile score of 37 on the *Peer Rewards for Antisocial Behaviour* scale versus a score of 38 in 2019.
- Across grade levels, percentile scores for Peer Rewards for Antisocial Behaviour range from a low of 24 among M2 students to a high of 50 among S4 students.



Figure 3.2.35. Peer rewards for antisocial behaviour scale by grade level and overall.

#### Friends' Use of Drugs

Young people who associate with peers who engage in substance use are much more likely to engage in it themselves. This is one of the most consistent predictors identified by research. Even when young people come from well-managed families and do not experience other risk factors, spending time with peers who use drugs greatly increases a youth's risk of becoming involved in such behaviour.

The Friends' Use of Drugs scale was developed to measure a component of the risk factor Friends Who Engage in the Problem Behaviour. This scale is measured by four survey items:

- ✓ In the past year, how many of your four best friends have smoked cigarettes?
- ✓ In the past year, how many of your four best friends have tried beer, wine, or hard liquor?

- ✓ In the past year, how many of your four best friends have used marijuana?
- ✓ In the past year, how many of your four best friends have used LSD, cocaine, amphetamines, or other illegal drugs?
- Overall, students received a percentile score of 47 on the *Friends' Use of Drugs* scale compared to a score of 36 in 2019. This would suggest that more students felt that their friends were using drugs.
- Across grade levels, percentile scores for Friends' Use of Drugs range from a low of 18 among M2 students to a high of 73 among S4 students.



Figure 3.2.36. Friends' use of drugs scale by grade level and overall.

#### Friends' Delinquent Behaviour

Young people who associate with peers who engage in delinquent behaviour are much more likely to engage in delinquent behaviour themselves. This is one of the most consistent predictors identified by research. Even when young people come from well-managed families and do not experience other risk factors, spending time with peers who engage in delinquent behaviour greatly increases the risk of their becoming involved in delinquent behaviour.

The Friends' Delinquent Behaviour scale was developed to measure a component of the risk factor Friends Who Engage in the Problem Behaviour. This scale is measured by six survey items:

In the past year, how many of your four best friends have:

- ✓ Been suspended from school?
- ✓ Carried a handgun?
- ✓ Sold illegal drugs?
- Stolen or tried to steal a motor vehicle?
- ✓ Been arrested?
- ✓ Dropped out of school?

Elevated scores can indicate that students are interacting with more antisocial peers than average. Low scores can suggest that students' delinquent behaviour is not strongly influenced by their peers.



Figure 3.2.37. Friends' delinquent behaviour scale by grade level and overall.

- Overall, students received a percentile score of 44 on the Friends' Delinquent Behaviour scale compared to the score of 12 observed in 2019.
- Across grade levels, percentile scores for *Friends' Delinquent Behaviour* range from a low of 28 among M2 students to a high of 50 among S3 students.

#### Low Perceived Risks of Drug Use

The perception of harm from drug use is related to both experimentation and regular use. The less harm that an adolescent perceives as the result of drug use, the more likely it is that he or she will use drugs.

The Low Perceived Risks of Drug Use scale was developed to measure a component of the risk factor Favourable Attitudes toward Problem Behaviour. This scale is measured by four survey items:

How harmful is each of the following to your health?

- ✓ Smoking cigarettes frequently.
- ✓ Drinking alcoholic beverages frequently.
- ✓ Smoking marijuana sometimes.
- ✓ Smoking marijuana frequently.

An elevated score can indicate that students are not aware of, or do not comprehend, the possible harm resulting from drug use.

- Overall, students received a percentile score of 7 on the Low Perceived Risks of Drug Use scale versus a score of 33 in 2019. This indicates that fewer students believe that drug use is a risky behaviour compared to 2019.
- Across grade levels, percentile scores for Low Perceived Risks of Drug Use range from a low of 3 among M2 and M3 students to a high of 13 among S4 students.



Figure 3.2.38. Low perceived risks of drug use scale by grade level and overall.

#### **Intention to Use**

The intended use of alcohol and drugs later in life was assessed by asking students their intent to participate in certain behaviours when they become adults. This information may be helpful in stopping substance use behaviour before it starts. Prevention specialists are encouraged to review grade level results which may be predictive of future substance use behaviours.

The risk factor scale Intention to Use is measured by three survey items:

- ✓ When I am an adult I will smoke cigarettes.
- ✓ When I am an adult I will drink beer, wine, or liquor.
- ✓ When I am an adult I will smoke marijuana.
- Overall, students received a percentile score of 10 on the *Intention to Use* scale compared to a score of 9 in 2019.
- Across grade levels, percentile scores for Intention to Use range from a low of 4 among M2 students to a high of 17 among S4 students.



Figure 3.2.39. Intention to use scale by grade level and overall.

## **CHAPTER 3.3** RESULTS Outcome Measures

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#### 3.3.1 Introduction

The following section reports the results of three additional topics of interest two from the Communities That Cares Survey, that of Depression and Other Antisocial Behaviours. Four survey items comprise the Depression scale:

- ✓ Sometimes I think that life is not worth it.
- ✓ At times I think I am no good at all.
- $\checkmark$  All in all, I am inclined to think that I am a failure.
- ✓ In the past year have you felt depressed or sad MOST days, even if you felt OK sometimes?

Other Antisocial Behaviours were assessed by the following 11 statements, which were preceded by "How many times in the year (the last 12 months) have you...":

- ✓ Been suspended from school?
- ✓ Carried a Handgun.
- ✓ Sold Illegal Drugs.
- ✓ Stolen or Tried to Steal a Motor Vehicle.
- ✓ Being Arrested.
- ✓ Attacked Someone with the Idea of Seriously Hurting Them.
- ✓ Been Drunk or High at School.
- ✓ Taken a Handgun to School.
- ✓ Stolen Something Worth More than \$5.
- ✓ Purposely Damaged or Destroyed Property that did not Belong to You.
- ✓ Taken Something from a Store Without Paying for It.

#### 3.3.2 Measurement

As with alcohol, tobacco, and other drug use, as well as risk and protective factors, prevalence tables and graphs are presented to illustrate the percentage of students who reported depression and other antisocial behaviours over the past 12 months. Instead of reporting on each item in the Depression section, responses to all four questions were summed to create a single score measuring Depression. The score is then presented by grade level and overall for all survey respondents.

The outcome measure Other Antisocial Behaviours assesses students on various delinquent behaviours they might engage in. For Other Antisocial Behaviours, a score was not created. Instead, each statement is reported by percentile for each grade level and overall for all survey respondents.

#### 3.3.3 Depression

The Depression scale was designed to measure how students think about life. Research indicates that young people with undiagnosed or behavioural problems often use drugs and alcohol as a way to relieve their frustrations. A depressed teen may self-medicate with drugs or alcohol to escape the sense of hopelessness.<sup>24</sup>

<sup>&</sup>lt;sup>24</sup> Hunt, G. E., Malhi, G. S., Lai, H. M. X., & Cleary, M. (2020). Prevalence of comorbid substance use in major depressive disorder in community and clinical settings, 1990–2019: Systematic review and meta-analysis. Journal of affective disorders, 266, 288-304.

- Overall, students received a percentile score of 37 on the Depression scale in the current survey as well as in 2019.
- Across grade levels, percentile scores for Depression range from a low of 35 among S1 and S3 students to a high of 41 among M2 students.



Figure 3.3.1. Depression scale by grade level and overall.

#### 3.3.4 Treatment

The *Treatment* scale was designed to measure the number of students who have received treatment for alcohol and/or drug related problems and those who have seen a health professional for emotional and/or behavioural problems. Research indicates that young people who get into treatment early enough can mitigate a long-term relationship with drugs and those whose seek out assistance for an undiagnosed or behavioural issue may be less likely to use drugs and alcohol as a way to relieve their frustrations. A depressed adolescent may self-medicate with drugs or alcohol to escape the sense of hopelessness.

- Overall, students received a percentile score of 27 on the *Treatment* scale compared to 18 in 2019.
- Across grade levels, percentile scores for *Treatment* range from a low of 22 among S1 students to a high of 46 among M2 students.



Figure 3.3.2. Treatment scale by grade level and overall.

#### 3.3.5 Other Antisocial Behaviours

#### **Overall Results**

Other antisocial behaviour prevalence rates for the combined sample of M2 through S4 students are presented in Figure 3.3.3 and in the overall results column of Table 3.3.1. Overall, majority of the antisocial behaviours decreased from 2019 levels. Across all grades, "Stolen Something Worth More than \$5" was reported at 7.6% (10.4% in 2019) making it the most prevalent of the 11 behaviours. In the current survey, the three most prevalent antisocial behaviors are "Stolen Something Worth More than \$5" (7.6%), "Suspended from School" (6.9%), and "Purposely Damaged or Destroyed Property That Did not Belong to You" (6.4%).



Figure 3.3.3. Overall Prevalence of Antisocial Behaviours.

#### **Grade Level Results**

Other antisocial behaviour prevalence rates within individual grades are presented in Figure 3.3.3 and Table 3.3.1. In many communities, these behaviours reveal a complex pattern of changes across grades. Typically, reports of "Being Drunk or High at School" and "Selling Drugs" follow the ATOD model, with prevalence rates increasing through the upper grade levels. Prevention planners should review the other antisocial behaviour profiles within individual grades, with special attention toward behaviours that show a marked deviation from these patterns.





Figure 3.3.4. Prevalence of Other Antisocial Behaviours.

#### Table 3.3.1

|  | M2 |     | M3 |     | S1 |      | S2 |     | S3 |     | S4 |     | Overall |     |
|--|----|-----|----|-----|----|------|----|-----|----|-----|----|-----|---------|-----|
| Antisocial Benaviours  | n  | %   | n  | %   | n  | %    | n  | %   | n  | %   | n  | %   | n       | %   |
| Getting Suspended from<br>School   | 33 | 6.1 | 22 | 4.4 | 52 | 11.0 | 28 | 6.4 | 28 | 6.8 | 23 | 7.2 | 186     | 6.9 |
| Carrying a Handgun   | 4  | 0.7 | 3  | 0.6 | 9  | 1.8  | 15 | 3.4 | 5  | 1.2 | 11 | 3.4 | 47      | 1.7 |
| Sold Illegal Drugs   | 5  | 0.9 | 2  | 0.4 | 11 | 2.2  | 15 | 3.4 | 12 | 2.9 | 15 | 4.7 | 60      | 2.2 |
| Attempting to Steal a<br>Motor Vehicle                                   | 5  | 0.9 | 1  | 0.2 | 12 | 2.4  | 15 | 3.4 | 4  | 1.0 | 14 | 4.4 | 51      | 1.9 |
| Being Arrested   | 14 | 2.6 | 18 | 3.6 | 18 | 3.7  | 13 | 3.0 | 12 | 2.9 | 15 | 4.7 | 90      | 3.3 |
| Attacked Someone with<br>Intent to Seriously Harm                        | 25 | 4.6 | 17 | 3.4 | 36 | 7.3  | 20 | 4.6 | 23 | 5.6 | 12 | 3.8 | 133     | 4.9 |
| Being Drunk or High at<br>School   | 2  | 0.4 | 3  | 0.6 | 23 | 4.7  | 17 | 3.9 | 14 | 3.4 | 26 | 8.2 | 85      | 3.1 |
| Taking a Handgun to<br>School  | 8  | 1.5 | 23 | 4.6 | 17 | 3.5  | 23 | 5.3 | 14 | 3.4 | 14 | 4.4 | 99      | 3.7 |
| Stolen Something Worth<br>More Than \$5                                  | 30 | 5.5 | 40 | 8.1 | 46 | 9.4  | 34 | 7.8 | 27 | 6.5 | 29 | 9.1 | 206     | 7.6 |
| Purposely Damaged or<br>Destroyed Property That<br>Did not Belong to You | 32 | 5.9 | 25 | 5.0 | 41 | 8.4  | 31 | 7.1 | 25 | 6.1 | 19 | 6.0 | 173     | 6.4 |
| Taken Something from<br>a Store Without Paying<br>for It                 | 24 | 4.4 | 13 | 2.6 | 31 | 6.3  | 27 | 6.2 | 18 | 4.4 | 22 | 6.9 | 135     | 5.0 |
| Average  | 17 | 3.1 | 15 | 3.0 | 27 | 5.5  | 22 | 5.0 | 17 | 4.1 | 18 | 5.6 | 115     | 4.3 |

## CHAPTER 4 SUMMARY

Summary of Trends

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#### 4.1 Summary of Trends

The evolving landscape of adolescent substance use in Bermuda reveals a fascinating picture. Over time, there has been a decrease in the overall proportion of adolescents using any substance, though alcohol and marijuana remain prevalent in the past 30 days. Notably, there has been a shift in the mix of drugs used, particularly with the emergence of synthetic marijuana concentrates. While some drug classes have seen declines, others have shown increases or remained stable. Gender differences in alcohol and marijuana use, favoring females, highlight shifting trends with implications for intervention strategies.

Recent years have witnessed fluctuations in adolescent drug use, including a decline in vaping of nicotine and marijuana, which had surged in prevalence in 2019. The persistence of these declines among affected cohorts in the future, and whether such trends vary across substances, holds significant implications for drug theory and policy. Interestingly, the levels of protection and risk have shown little change since the last survey, indicating both stability and areas of concern.

These findings underscore the dynamic nature of adolescent substance use, emphasizing the ongoing need for vigilant monitoring and targeted intervention to address emerging trends effectively.

# APPENDICES

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## **APPENDIX A**

Demographic Trends: 2007, 2011, 2015, 2019, and 2023

|                              |       | Number | of Respond | ents  |                 | Percentage of Respondents |       |       |       |       |  |
|------------------------------|-------|--------|------------|-------|-----------------|---------------------------|-------|-------|-------|-------|--|
|                              | 2007  | 2011   | 2015       | 2019  | 2023            | 2007                      | 2011  | 2015  | 2019  | 2023  |  |
| TOTAL                        | 2,977 | 3,182  | 3,017      | 2,764 | 2,701           | 100.0                     | 100.0 | 100.0 | 100.0 | 100.0 |  |
| Sex                          |       |        |            |       |                 |                           |       |       |       |       |  |
| Male                         | 1,356 | 1,463  | 1,384      | 1,292 | 1,310           | 45.2                      | 46.0  | 45.9  | 46.7  | 48.5  |  |
| Female                       | 1,613 | 1,685  | 1,592      | 1,414 | 1,370           | 53.8                      | 53.0  | 52.8  | 51.2  | 50.7  |  |
| Not Stated                   | 28    | 34     | 41         | 58    | 21              | 0.9                       | 1.1   | 1.4   | 2.1   | 0.8   |  |
| Grade                        |       |        |            |       |                 |                           |       |       |       |       |  |
| M2                           | 586   | 597    | 490        | 590   | 545             | 19.6                      | 18.8  | 16.2  | 21.3  | 20.2  |  |
| M3                           | 598   | 553    | 547        | 499   | 496             | 20.0                      | 17.4  | 18.1  | 18.1  | 18.4  |  |
| S1                           | 600   | 578    | 584        | 479   | 490             | 20.0                      | 18.2  | 19.4  | 17.3  | 18.1  |  |
| S2                           | 490   | 566    | 511        | 469   | 437             | 16.3                      | 17.8  | 16.9  | 17.0  | 16.2  |  |
| S3                           | 386   | 465    | 457        | 382   | 413             | 12.9                      | 14.6  | 15.1  | 13.8  | 15.3  |  |
| S4                           | 309   | 383    | 427        | 337   | 319             | 10.3                      | 12.0  | 14.0  | 12.2  | 11.8  |  |
| Not Stated                   | 28    | 40     | 1          | 8     | 1               | 0.9                       | 1.3   | 0.0   | 0.3   | 0.0   |  |
| Age <sup>1</sup>             |       |        |            |       |                 |                           |       |       |       |       |  |
| 10-11                        |       | 107    | 88         | 115   |                 |                           | 3.3   | 2.9   | 4.2   |       |  |
| 12                           |       | 527    | 460        | 517   | 618             |                           | 16.6  | 15.2  | 18.7  | 22.9  |  |
| 13                           |       | 517    | 516        | 483   | 487             |                           | 16.2  | 17.1  | 17.5  | 18.0  |  |
| 14                           |       | 537    | 477        | 408   | 474             |                           | 16.9  | 15.8  | 14.8  | 17.5  |  |
| 15                           |       | 511    | 476        | 411   | 433             |                           | 16.1  | 15.8  | 14.9  | 16.0  |  |
| 16                           |       | 461    | 440        | 369   | 427             |                           | 14.5  | 14.6  | 13.4  | 15.8  |  |
| 17                           |       | 305    | 342        | 270   | 240             |                           | 9.6   | 11.3  | 9.8   | 8.9   |  |
| 18                           |       | 32     | 34         | 21    | 21 <sup>2</sup> |                           | 1.0   | 1.1   | 0.8   | 0.8   |  |
| 19                           |       | 6      | 4          | 1     |                 |                           | 0.2   | 0.1   | 0.0   |       |  |
| Not Stated                   |       | 179    | 180        | 168   | 1               |                           | 5.6   | 6.0   | 6.1   | 0.0   |  |
| Race                         |       |        |            |       |                 |                           |       |       |       |       |  |
| Black                        | 1,884 | 1,994  | 1,596      | 1,347 | 1,216           | 62.9                      | 62.7  | 52.9  | 48.7  | 45.0  |  |
| White                        | 448   | 511    | 583        | 619   | 779             | 14.9                      | 16.1  | 19.3  | 22.4  | 28.8  |  |
| Portuguese                   | 188   | 164    | 171        | 172   | 58³             | 6.3                       | 5.2   | 5.7   | 6.2   | 2.1   |  |
| Asian or Pacific<br>Islander | 41    | 48     | 48         | 34    | 111             | 1.4                       | 1.5   | 1.6   | 1.2   | 4.1   |  |
| Mixed                        | 175   | 323    | 539        | 519   | 511             | 2.8                       | 10.2  | 17.9  | 18.8  | 18.9  |  |
| Other                        | 233   | 118    | 64         | 48    | 20              | 7.8                       | 3.7   | 2.1   | 1.7   | 0.7   |  |
| Not Stated                   | 28    | 24     | 16         | 25    | 6               | 0.9                       | 0.8   | 0.5   | 0.9   | 0.2   |  |
| Language <sup>4</sup>        |       |        |            |       |                 |                           |       |       |       |       |  |
| English                      | 2,813 | 3,052  |            |       |                 | 94.5                      | 95.9  |       |       |       |  |
| Portuguese                   | 61    | 46     |            |       |                 | 2.0                       | 1.4   |       |       |       |  |
| Another Language             | 61    | 46     |            |       |                 | 2.0                       | 1.4   |       |       |       |  |
| Not Stated                   | 44    | 38     |            |       |                 | 1.5                       | 1.2   |       |       |       |  |

 Notes:

 <sup>1</sup> In 2007, data was not analysed by age of respondent.

 <sup>2</sup> In 2023, the age category '19' was collapsed into '18 years old and older'.

 <sup>3</sup> In 2023, the race category 'Portuguese' was collapsed and renamed 'Hispanic/Latino'.

 <sup>4</sup> In 2015 and 2019 the language demographic characteristic was not asked as part of the questionnaire (.. means not applicable).

### **Appendices**

### **APPENDIX B**

## Enrolment and Respondents by School and Grade

| Calcada                            |     |     | Eni | rolment |            |            |       |     |     |     | Respondent | ts         |     |                           |
|------------------------------------|-----|-----|-----|---------|------------|------------|-------|-----|-----|-----|------------|------------|-----|---------------------------|
| Schools                            | M2  | M3  | S1  | S2      | <b>S</b> 3 | <b>S</b> 4 | Total | M2  | M3  | S1  | S2         | <b>S</b> 3 | S4  | Total                     |
| Public Schools                     | 255 | 239 | 249 | 306     | 282        | 223        | 1,560 | 195 | 181 | 221 | 218        | 196        | 141 | 1,152                     |
|                                    |     |     |     |         |            |            |       |     |     |     |            |            |     |                           |
| Middle Schools Total               | 255 | 239 | -   | -       | -          | -          | 494   | 195 | 181 | -   | -          | -          | -   | 379                       |
| 1. Dellwood Middle School          | 70  | 85  | -   | -       | -          | -          | 155   | 54  | 61  | -   | -          | -          | -   | 115                       |
| 2. Sandys Secondary Middle School  | 82  | 63  | -   | -       | -          | -          | 145   | 65  | 45  | -   | -          | -          | -   | 111                       |
| 3. Whitney Institute Middle School | 103 | 91  | -   | -       | -          | -          | 194   | 76  | 75  | -   | -          | -          | -   | 153                       |
|                                    |     |     |     |         |            |            |       |     |     |     |            |            |     |                           |
| Senior Schools Total               | -   | -   | 249 | 306     | 282        | 223        | 1,060 | -   | -   | 221 | 218        | 196        | 141 | 780                       |
| 4. The Berkley Institute           | -   | -   | 155 | 145     | 147        | 131        | 578   | -   | -   | 129 | 106        | 106        | 96  | 438 <sup>1</sup>          |
| 5. Cedarbridge Academy             | -   | -   | 94  | 161     | 135        | 92         | 428   | -   | -   | 92  | 112        | 90         | 45  | 342 <sup>2</sup>          |
|                                    |     |     |     |         |            |            |       |     |     |     |            |            |     |                           |
| Alternative School<br>Total        | 2   | 1   | 2   | -       | 1          | -          | 6     | 2   | 2   | 1   | 2          | 1          | -   | <b>8</b> <sup>3</sup>     |
| Success Academy II                 | 2   | 1   | 2   | -       | 1          | -          | 6     | 2   | 1   | 1   | 2          | 1          | -   | 8                         |
|                                    |     |     |     |         |            |            |       |     |     |     |            |            |     |                           |
| Private Schools Tota               | 329 | 321 | 276 | 216     | 221        | 175        | 1,537 | 339 | 308 | 262 | 215        | 210        | 171 | 1,505                     |
| 6. Bermuda High School for Girls   | 47  | 54  | 42  | 27      | 35         | 19         | 224   | 39  | 44  | 33  | 22         | 27         | 14  | 179                       |
| 7. Bermuda Institute               | 27  | 42  | 33  | 23      | 17         | 21         | 163   | 26  | 43  | 28  | 20         | 22         | 18  | 157                       |
| 8. Mount Saint Agnes Academy       | 35  | 40  | 48  | 31      | 48         | 27         | 229   | 47  | 37  | 39  | 33         | 42         | 27  | 225                       |
| 9. Saltus Grammar School           | 63  | 62  | 54  | 45      | 40         | 45         | 309   | 69  | 60  | 51  | 45         | 46         | 45  | 316                       |
| 10. Somersfield Academy            | 75  | 41  | 24  | 24      | 16         | 13         | 192   | 75  | 42  | 24  | 23         | 16         | 13  | 193                       |
| 11. Warwick Academy                | 75  | 75  | 72  | 65      | 61         | 49         | 397   | 77  | 78  | 82  | 71         | 53         | 53  | 414                       |
| 12. Chatmore International School  | 7   | 7   | 3   | 1       | 4          | 1          | 23    | 6   | 4   | 5   | 1          | 4          | 1   | 21                        |
|                                    |     |     |     |         |            |            |       |     |     |     |            |            |     |                           |
| Home Schools⁴ Total                |     |     | 37  |         |            |            |       |     |     | 2   | 27         |            |     |                           |
| TOTAL                              |     |     |     |         |            | N =        | 3,134 |     |     |     |            |            | N = | <b>2,701</b> <sup>5</sup> |

#### Notes:

<sup>1</sup>There was one student who selected M3 in error.

<sup>2</sup>There were three students who selected M3 in error.

<sup>3</sup>There were three students who selected NG in error. <sup>4</sup>Enrolment and respondents for the 4 Home Schools were grouped because of the low count for each grade level. <sup>5</sup>There were two students who selected "Other (please specify)" and did not specify a school or grade level.



**APPENDIX C** Trend Analysis of ATOD Use: 2015 and 2019

#### Lifetime Use of ATODs and Energy Drink by Grade Level of Survey Respondents (Percentage)

|   |      | Grade Level/Year |      |      |      |      |      |      |      |      |      |      | Overall |       |
|---|------|------------------|------|------|------|------|------|------|------|------|------|------|---------|-------|
| ATODs <sup>1</sup>                            | M    | 12               | M    | 13   | S    | 51   | S    | 2    | S    | 3    | S    | 4    | ŰVé     | erali |
|   | 2015 | 2019             | 2015 | 2019 | 2015 | 2019 | 2015 | 2019 | 2015 | 2019 | 2015 | 2019 | 2015    | 2019  |
| Alcohol                                       | 48.8 | 22.0             | 58.5 | 34.9 | 55.1 | 48.0 | 49.9 | 56.9 | 48.8 | 58.6 | 53.4 | 65.0 | 52.6    | 45.2  |
| Cannabis Resin                                | 1.4  | 0.3              | 1.1  | 0.2  | 4.3  | 2.5  | 5.5  | 7.5  | 9.4  | 10.7 | 11.9 | 8.9  | 5.3     | 4.4   |
| Cigarettes                                    | 5.5  | 1.4              | 5.9  | 3.0  | 8.2  | 3.3  | 15.7 | 5.5  | 15.5 | 10.2 | 24.1 | 12.2 | 12.0    | 5.2   |
| Cocaine                                       | 0.8  | 0.5              | 0.5  | -    | 2.1  | 0.4  | 2.3  | 1.7  | 1.5  | 1.8  | 4.4  | 2.1  | 1.9     | 1.0   |
| Crack   | 1.8  | 0.5              | 0.7  | -    | 1.5  | 0.2  | 1.6  | 1.9  | 1.1  | 1.0  | 2.8  | 0.9  | 1.6     | 0.7   |
| Ecstasy                                       | 1.0  | 0.7              | 0.5  | 0.2  | 1.5  | 0.63 | 2.2  | 3.4  | 1.8  | 2.1  | 4.0  | 5.3  | 1.8     | 1.8   |
| Hallucinogens                                 |      | 0.2              |      | -    |      | 0.4  |      | 3.4  |      | 1.6  |      | 1.8  |         | 1.1   |
| Hashish                                       | 0.8  | 0.2              | 0.7  | -    | 1.5  | 1.0  | 2.5  | 7.2  | 6.1  | 7.9  | 8.7  | 7.1  | 3.1     | 3.4   |
| Heroin  | 1.2  | 0.2              | 0.4  | 0.2  | 1.5  | 0.6  | 0.6  | 1.7  | 0.9  | 1.3  | 0.0  | 1.2  | 1.2     | 0.8   |
| Inhalants                                     | 16.7 | 10.8             | 17.6 | 10.4 | 19.3 | 12.7 | 14.1 | 11.3 | 10.5 | 8.6  | 10.8 | 5.6  | 15.1    | 10.2  |
| Marijuana                                     | 5.3  | 2.2              | 8.4  | 4.4  | 19.0 | 14.8 | 32.9 | 25.6 | 44.9 | 38.0 | 54.6 | 40.1 | 26.2    | 18.3  |
| Any Illicit Drug<br>(Other than<br>Marijuana) | 4.3  | 3.3              | 3.5  | 3.8  | 5.7  | 8.9  | 7.2  | 23.8 | 5.9  | 20.6 | 6.8  | 17.9 | 5.5     | 12.0  |
| Energy Drinks                                 | 39.2 | 37.3             | 56.1 | 41.3 | 65.2 | 57.8 | 66.9 | 59.3 | 70.7 | 61.8 | 69.8 | 63.5 | 61.1    | 51.8  |

|  | Grade Level |      |      |      |      |      |      |      |      |      |      | •    |      |       |
|--|-------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| ATODs <sup>2,3</sup>                       | м           | 12   | M    | 13   | S    | 51   | s    | 2    | s    | 3    | S    | 4    | Öve  | erall |
|  | 2015        | 2019 | 2015 | 2019 | 2015 | 2019 | 2015 | 2019 | 2015 | 2019 | 2015 | 2019 | 2015 | 2019  |
| Alcohol                                    | 18.0        | 2.2  | 23.2 | 6.4  | 19.0 | 10.2 | 13.1 | 27.9 | 16.2 | 22.8 | 18.0 | 27.9 | 18.0 | 13.2  |
| Binge Drinking                             | 6.5         | -    | 10.4 | -    | 7.5  | -    | 4.7  | -    | 6.8  | -    | 5.6  | -    | 7.0  | -     |
| Cigarettes                                 | 1.2         | 0.5  | 1.1  | 1.0  | 1.4  | 1.5  | 3.7  | 3.9  | 3.9  | 3.1  | 8.7  | 3.9  | 3.1  | 1.7   |
| Cocaine                                    | 0.2         | 0.3  | 0.2  | -    | 0.3  | 0.2  | 0.6  | 1.2  | 0.7  | 0.3  | 1.6  | -    | 0.6  | 0.3   |
| Crack                                      | 0.4         | 0.3  | 0.2  | -    | 0.3  | -    | 0.2  | 1.2  | 0.7  | -    | 1.2  | 0.3  | 0.5  | 0.3   |
| Ecstasy                                    | -           | 0.2  | -    | -    | 0.7  | 0.2  | 0.2  | 1.3  | 0.2  | 0.5  | 1.6  | 2.7  | 0.4  | 0.7   |
| Heroin                                     | 0.2         | 0.2  | 0.2  | -    | 0.3  | 0.2  | 0.2  | 0.6  | 0.7  | -    | 0.7  | 0.6  | 0.4  | 0.2   |
| Inhalants                                  | 2.9         | 3.7  | 2.6  | 0.6  | 4.5  | 2.7  | 3.3  | 1.8  | 1.5  | 1.6  | 3.0  | 1.8  | 3.0  | 2.2   |
| Marijuana                                  | 0.4         | 0.7  | 1.6  | 1.4  | 6.3  | 5.2  | 13.3 | 16.9 | 18.2 | 17.5 | 29.5 | 16.9 | 10.8 | 7.6   |
| Any Illicit Drug<br>(Other than Marijuana) | 1.0         | -    | 0.5  | -    | 1.7  | -    | 1.6  | -    | 2.0  | -    | 2.1  | -    | 1.5  | -     |
| Energy Drinks                              | 13.3        | 10.7 | 20.3 | 14.4 | 22.9 | 23.6 | 24.5 | 21.4 | 18.8 | 22.5 | 24.1 | 21.4 | 20.7 | 19.2  |

#### Current Use of ATODs and Energy Drinks by Grade Level of Survey Respondents (Percentage)<sup>1</sup>

<sup>1</sup> Percentages are computed with the current use number as a proportion of total grade level survey respondents for each substance.
 <sup>2</sup> Of students who responded to "ever" consuming the substance, 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). There were thirty-five students for whom the grade level was not reported; hence responses were not included in the table above.
 <sup>3</sup> Survey did not measure current use of cannabis resin and hashish.

## **APPENDIX D**

Risk and Protective Results: 2015 and 2019

#### Protective Factor Scales by Grade Level of Survey Respondents

| Domain       | Scale       | M2          | M3            |          | S1          | <b>S2</b> | <b>S</b> 3 | S4 | All |
|--------------|-------------|-------------|---------------|----------|-------------|-----------|------------|----|-----|
| _            | Communit    | y Rewards   | for Prosoci   | al Invol | vement      |           |            |    |     |
| omair        | 2015        | 79          | 73            |          | 68          | 64        | 65         | 66 | 69  |
| ty De        | 2019        | 65          | 62            |          | 63          | 66        | 61         | 58 | 63  |
| anni         | Communit    | y Opportu   | nities for Pr | osocial  | l Involveme | ent       |            |    |     |
| Com          | 2015        | 62          | 63            |          | 63          | 66        | 59         | 67 | 63  |
| Ŭ            | 2019        | 44          | 50            |          | 50          | 49        | 53         | 57 | 51  |
|              | Family Atta | achment     |               |          |             |           |            |    |     |
|              | 2015        | 89          | 83            |          | 78          | 76        | 76         | 75 | 80  |
| ۶            | 2019        | 79          | 77            |          | 72          | 63        | 70         | 71 | 72  |
| omaii        | Family Opp  | portunities | for Prosoci   | al Invo  | lvement     |           |            |    |     |
| ly De        | 2015        | 84          | 82            |          | 79          | 70        | 75         | 76 | 78  |
| Fami         | 2019        | 80          | 74            |          | 75          | 67        | 68         | 69 | 72  |
|              | Family Rew  | vards for P | rosocial Inv  | olveme   | nt          |           |            |    |     |
|              | 2015        | 94          | 91            |          | 83          | 82        | 81         | 82 | 86  |
|              | 2019        | 86          | 85            |          | 88          | 83        | 87         | 86 | 86  |
|              | School Op   | portunities | for Prosoc    | ial Invo | lvement     |           |            |    |     |
| nain         | 2015        | 89          | 85            |          | 83          | 82        | 81         | 85 | 84  |
| Don          | 2019        | 77          | 75            |          | 80          | 74        | 75         | 76 | 76  |
| looh         | School Rev  | vards for P | rosocial Inv  | olveme   | ent         |           |            |    |     |
| Sc           | 2015        | 87          | 84            |          | 80          | 79        | 79         | 82 | 82  |
|              | 2019        | 69          | 72            |          | 73          | 68        | 71         | 71 | 71  |
|              | Reward for  | Prosocial   | Involvemen    | t        |             |           |            |    |     |
| lual         | 2015        | 86          | 87            | 87       | 86          | 8         | 39         | 87 | 87  |
| nain         | 2019        | 71          | 72            | 78       | 70          | 7         | 79         | 76 | 74  |
| er In<br>Doi | Interaction | with Pros   | ocial Peers   |          |             |           |            |    |     |
| Ъе           | 2015        | 90          | 89            | 91       | 90          | (         | 93         | 91 | 91  |
|              | 2019        | 69          | 72            | 79       | 75          | 7         | 79         | 80 | 76  |

| Domain | Scale         | M2        | M3 | S1 | <b>S2</b> | <b>S</b> 3 | S4 | All |
|--------|---------------|-----------|----|----|-----------|------------|----|-----|
|        | Prosocial Inv | volvement |    |    |           |            |    |     |
|        | 2015          | 85        | 88 | 90 | 91        | 90         | 93 | 90  |
|        | 2019          | 65        | 70 | 78 | 75        | 79         | 80 | 75  |
| ain    | Religiousity  |           |    |    |           |            |    |     |
| Dom    | 2015          | 45        | 44 | 41 | 33        | 35         | 33 | 39  |
| dual   | 2019          | 48        | 47 | 59 | 51        | 54         | 49 | 51  |
| pivibr | Social Skills |           |    |    |           |            |    |     |
| ser Ir | 2015          | 92        | 90 | 84 | 82        | 82         | 80 | 85  |
| ď      | 2019          | 70        | 72 | 80 | 73        | 75         | 73 | 74  |
|        | Belief in Mo  | ral Order |    |    |           |            |    |     |
|        | 2015          | 32        | 34 | 37 | 41        | 44         | 41 | 38  |
|        | 2019          | 69        | 42 | 76 | 68        | 65         | 66 | 64  |

### Protective Factor Scales by Grade Level of Survey Respondents cont'd

| Domain | Scale         | M2             | M3           | S1    | S2 | <b>S</b> 3 | <b>S4</b> | All |
|--------|---------------|----------------|--------------|-------|----|------------|-----------|-----|
|        | Low Neighbo   | ourhood Att    | achment      |       |    |            |           |     |
|        | 2015          | 18             | 18           | 22    | 21 | 17         | 18        | 19  |
|        | 2019          | 9              | 10           | 12    | 11 | 11         | 11        | 11  |
|        | Community     | Disorganisa    | tion         |       |    |            |           |     |
|        | 2015          | 6              | 8            | 11    | 12 | 9          | 11        | 10  |
|        | 2019          | 8              | 11           | 13    | 12 | 16         | 16        | 13  |
|        | Transitions a | and Mobility   |              |       |    |            |           |     |
|        | 2015          | 49             | 55           | 66    | 55 | 62         | 59        | 58  |
| nain   | 2019          | 61             | 63           | 43    | 62 | 61         | 61        | 59  |
| Dor    | Laws and No   | orms Favoura   | able to Drug | Use   |    |            |           |     |
| unity  | 2015          | 18             | 23           | 29    | 34 | 36         | 37        | 30  |
| u u u  | 2019          | 21             | 25           | 20    | 19 | 19         | 18        | 20  |
| ŭ      | Laws and No   | orms Favoura   | able to Hand | lguns |    |            |           |     |
|        | 2015          | 24             | 30           | 41    | 47 | 55         | 53        | 42  |
|        | 2019          | 20             | 28           | 33    | 42 | 46         | 49        | 36  |
|        | Perceived A   | vailability of | Drug         |       |    |            |           |     |
|        | 2015          | 10             | 17           | 31    | 44 | 56         | 66        | 37  |
|        | 2019          | 11             | 16           | 24    | 33 | 42         | 50        | 29  |
|        | Perceived A   | vailability of | Handguns     |       |    |            |           |     |
|        | 2015          | 3              | 3            | 5     | 7  | 13         | 12        | 43  |
|        | 2019          | 2              | 3            | 4     | 3  | 7          | 6         | 4   |

#### Risk Factor Scales by Grade Level of Survey Respondents

| Domain | Scale         | M2           | M3            | S1           | <b>S2</b> | <b>S</b> 3 | <b>S4</b> | All |
|--------|---------------|--------------|---------------|--------------|-----------|------------|-----------|-----|
|        | Poor Family   | Managemen    | nt            |              |           |            |           |     |
|        | 2015          | 4            | 5             | 8            | 10        | 9          | 12        | 8   |
|        | 2019          | 3            | 4             | 6            | 10        | 6          | 11        | 7   |
|        | Family Confl  | ict          |               |              |           |            |           |     |
|        | 2015          | 29           | 30            | 42           | 41        | 44         | 37        | 37  |
| 5      | 2019          | 26           | 32            | 33           | 32        | 35         | 31        | 32  |
| omai   | Family Histo  | ry of Antiso | cial Behaviou | ır           |           |            |           |     |
|        | 2015          | 21           | 27            | 38           | 44        | 54         | 58        | 40  |
| Fami   | 2019          | 18           | 21            | 27           | 33        | 41         | 37        | 30  |
|        | Parental Atti | tudes Favou  | rable towar   | d ATOD Use   | 9         |            |           |     |
|        | 2015          | 2            | 2             | 4            | 8         | 11         | 14        | 7   |
|        | 2019          | 1            | 2             | 3            | 6         | 6          | 11        | 5   |
|        | Parental Atti | tudes Favou  | rable towar   | d Antisocial | Behaviour |            |           |     |
|        | 2015          | 6            | 6             | 9            | 9         | 10         | 9         | 8   |
|        | 2019          | 3            | 5             | 6            | 8         | 7          | 8         | 6   |
|        | Poor Acader   | nic Perform  | ance          |              |           |            |           |     |
| ain    | 2015          | 8            | 7             | 9            | 9         | 6          | 7         | 8   |
| Dom    | 2019          | 7            | 6             | 12           | 13        | 12         | 12        | 10  |
| lood   | Lack of Com   | mitment to   | School        |              |           |            |           |     |
| Scl    | 2015          | 5            | 7             | 10           | 10        | 13         | 11        | 9   |
|        | 2019          | 15           | 15            | 14           | 22        | 27         | 14        | 18  |

#### Risk Factor Scales by Grade Level of Survey Respondents cont'd

| Domain   | Scale            | M2            | M3           | S1           | S2 | <b>S</b> 3 | S4 | All |
|----------|------------------|---------------|--------------|--------------|----|------------|----|-----|
|          | Rebelliousne     | ess           |              |              |    |            |    |     |
|          | 2015             | 15            | 14           | 24           | 25 | 25         | 30 | 22  |
|          | 2019             | 13            | 15           | 19           | 16 | 16         | 15 | 16  |
|          | Friend's Deli    | nquent Beh    | aviour       |              |    |            |    |     |
|          | 2015             | 9             | 12           | 18           | 22 | 26         | 25 | 19  |
|          | 2019             | 5             | 8            | 11           | 15 | 17         | 16 | 12  |
|          | Friends' Use     | of Drugs      |              |              |    |            |    |     |
|          | 2015             | 12            | 24           | 44           | 61 | 76         | 80 | 50  |
|          | 2019             | 6             | 19           | 28           | 47 | 57         | 62 | 37  |
|          | Peer Reward      | ls for Antiso | cial Behavio | ur           |    |            |    |     |
|          | 2015             | 25            | 35           | 46           | 56 | 63         | 59 | 47  |
|          | 2019             | 15            | 27           | 41           | 46 | 51         | 49 | 38  |
| nain     | Favourable A     | Attitudes tov | vard Antisoc | ial Behaviou | ur |            |    |     |
| Don      | 2015             | 3             | 4            | 7            | 8  | 8          | 6  | 6   |
| dual     | 2019             | 2             | 2            | 6            | 6  | 4          | 5  | 4   |
| ndivi    | Favourable A     | Attitudes tov | vard ATOD    | Use          |    |            |    |     |
| eer      | 2015             | 3             | 4            | 11           | 21 | 28         | 37 | 17  |
| <u>د</u> | 2019             | 2             | 3            | 10           | 14 | 18         | 27 | 12  |
|          | Low Perceive     | ed Risks of [ | Drug Use     |              |    |            |    |     |
|          | 2015             | 2             | 4            | 9            | 14 | 16         | 21 | 11  |
|          | 2019             | 8             | 8            | 28           | 30 | 54         | 57 | 31  |
|          | Early Initiation | on of Drug l  | Jse          |              |    |            |    |     |
|          | 2015             | 30            | 17           | 19           | 21 | 17         | 12 | 19  |
|          | 2019             | 7             | 11           | 8            | 5  | 6          | 9  | 8   |
|          | Sensation Se     | eking         |              |              |    |            |    |     |
|          | 2015             | 57            | 65           | 67           | 71 | 74         | 80 | 69  |
|          | 2019             | 46            | 50           | 61           | 62 | 63         | 63 | 58  |
|          | Intention to     | Use           |              |              |    |            |    |     |
|          | 2015             | 3             | 4            | 10           | 13 | 18         | 22 | 12  |
|          | 2019             | 2             | 3            | 6            | 12 | 16         | 15 | 9   |

#### Risk Factor Scales by Grade Level of Survey Respondents cont'd

## **APPENDIX E**

Public vs. Private School Comparisons on Substance Use

Lifetime Use of Selected Substances by <u>Public School</u> Students as a Proportion of Overall Grade Level Survey Respondents

| <b>6</b> 1 <i>1</i> |                 |                 | Grade           | Level           |                 |                 | Overall     |
|---------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|
| Substance           | M2<br>(n = 545) | M3<br>(n = 496) | S1<br>(n = 490) | S2<br>(n = 437) | S3<br>(n = 413) | S4<br>(n = 319) | (n = 2,701) |
| Alaahal             | 41              | 37              | 3774            | 77              | 98              | 72              | 399         |
| Alcohol             | (7.5%)          | (7.5%)          | (15.1%)         | (17.6%)         | (23.7%)         | (22.6%)         | (14.8%)     |
| Cigarette           | 9               | 8               | 6               | 6               | 4               | 8               | 76          |
| Cigarette           | (1.7%)          | (1.6%)          | (1.2%)          | (1.4%)          | (1.0%)          | (2.5%)          | (1.5%)      |
| Enorgy Drinka       | 81              | 81              | 135             | 139             | 119             | 83              | 638         |
| Lifergy Drinks      | (14.9%)         | (16.3%)         | (27.6%)         | (31.8%)         | (28.8%)         | (26.0%)         | (23.6%)     |
| Inhalants           | 35              | 21              | 17              | 14              | 16              | 24              | 127         |
| Innaiants           | (6.4%)          | (4.2%)          | (3.5%)          | (3.2%)          | (3.9%)          | (7.5%)          | (4.7%)      |
| Marijuana           | 9               | 12              | 31              | 45              | 54              | 42              | 193         |
|                     | (1.7%)          | (2.4%)          | (6.3%)          | (10.3%)         | (13.1%)         | (13.2%)         | (7.1%)      |

Current Use of Selected Substances by <u>Public School</u> Students as a Proportion of Overall Grade Level Survey Respondents

|                |                 |                 | Grade           | Level           |                 |                 | Overall     |
|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|
| Substance      | M2<br>(n = 545) | M3<br>(n = 496) | S1<br>(n = 490) | S2<br>(n = 437) | S3<br>(n = 413) | S4<br>(n = 319) | (n = 2,701) |
| Alaahal        | 9               | 6               | 13              | 13              | 24              | 28              | 93          |
| Alcohol        | (1.7%)          | (1.2%)          | (2.7%)          | (3.0%)          | (5.8%)          | (8.8%)          | (3.4%)      |
| Cigarotto      | 2               | -               | 2               | 1               | 1               | 1               | 7           |
| Cigarette      | (0.4%)          | -               | (0.4%)          | (0.2%)          | (0.2%)          | (0.3%)          | (0.3%)      |
| Energy Drinks  | 29              | 28              | 61              | 55              | 53              | 42              | 268         |
| Lifergy Drinks | (5.3%)          | (5.6%)          | (12.4%)         | (12.6%)         | (12.8%)         | (13.2%)         | (9.9%)      |
| Inhalants      | 5               | 1               | 3               | 4               | 2               | 6               | 21          |
| innaiants      | (0.9%)          | (0.2%)          | (0.6%)          | (0.9%)          | (0.5%)          | (1.9%)          | (0.8%)      |
| Marijuana      | 3               | 4               | 10              | 20              | 27              | 20              | 84          |
| inalijualia    | (1.7%)          | (2.4%)          | (6.3%)          | (10.3%)         | (13.1%)         | (13.2%)         | (3.1%)      |

|               |                 |                 | Overall         |                 |                 |                 |             |
|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|
| Substance     | M2<br>(n = 545) | M3<br>(n = 496) | S1<br>(n = 490) | S2<br>(n = 437) | S3<br>(n = 413) | S4<br>(n = 319) | (n = 2,701) |
| Alaahal       | 103             | 132             | 106             | 125             | 137             | 118             | 721         |
| Alconol       | (9.7%)          | (18.2%)         | (22.8%)         | (28.8%)         | (27.0%)         | (32.3%)         | (21.9%)     |
| Circulto      | 2               | 4               | 7               | 4               | 16              | 15              | 48          |
| Cigarette     | (0.4%)          | (0.8%)          | (1.4%)          | (0.9%)          | (3.9%)          | (4.7%)          | (1.8%)      |
|               | 150             | 181             | 166             | 162             | 165             | 126             | 950         |
| Energy Drinks | (27.5%)         | (36.5%)         | (33.9%)         | (37.1%)         | (40.0%)         | (39.5%)         | (35.2%)     |
| Laberta etc.  | 40              | 36              | 24              | 19              | 19              | 7               | 145         |
| Innalants     | (7.3%)          | (7.3%)          | (4.9%)          | (4.3%)          | (4.6%)          | (2.2%)          | (5.4%)      |
| NA            | 2               | 12              | 16              | 17              | 46              | 49              | 142         |
| Marijuana     | (0.4%)          | (2.4%)          | (3.3%)          | (3.9%)          | (11.1%)         | (15.4%)         | (5.3%)      |

Lifetime Use of Selected Substances by <u>Private School</u> Students as a Proportion of Overall Grade Level Survey Respondents

Current Use of Selected Substances by <u>Private School</u> Students as a Proportion of Overall Grade Level Survey Respondents

|               |                 | Overall         |                 |                 |                 |                 |             |
|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|
| Substance     | M2<br>(n = 545) | M3<br>(n = 496) | S1<br>(n = 490) | S2<br>(n = 437) | S3<br>(n = 413) | S4<br>(n = 319) | (n = 2,701) |
|               | 11              | 26              | 20              | 37              | 55              | 53              | 202         |
| Alconol       | (2.0%)          | (5.2%)          | (4.1%)          | (8.5%)          | (13.3%)         | (16.6%)         | (7.5%)      |
| 0             | 1               | 1               | 3               | -               | 7               | 2               | 14          |
| Cigarette     | (0.2%)          | (0.2%)          | (0.6%)          | -               | (1.7%)          | (0.6%)          | (0.5%)      |
|               | 87              | 95              | 87              | 102             | 103             | 81              | 555         |
| Energy Drinks | (16.0%)         | (19.2%)         | (17.8%)         | (23.3%)         | (24.9%)         | (25.4%)         | (20.5%)     |
|               | 6               | 4               | 9               | 1               | 5               | -               | 25          |
| Inhalants     | (1.1%)          | (0.8%)          | (1.8%)          | (0.2%)          | (1.2%)          | -               | (0.9%)      |
| N4            | 1               | 3               | 7               | 3               | 21              | 26              | 61          |
| iviarijuana   | (0.2%)          | (0.6%)          | (1.4%)          | (0.7%)          | (5.1%)          | (8.2%)          | (2.3%)      |



APPENDIX F Questionnaire

# SURVEY of MIDDLE AND SENIOR SCHOOL STUDENTS

ON ALCOHOL, TOBACCO, OTHER DRUGS, AND HEALTH

#### Good day!

The Department for National Drug Control (DNDC) is carrying out a school survey on the topic of public health. The objective is to obtain information to address, in the best way possible, the problems related to public health in Bermuda. 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 <u>DO NOT</u> write your name on this survey form. Thus, we ask you to respond very honestly.

#### **SECTION I**

#### INSTRUCTIONS

- 1. This is not a test. There is no right or wrong answer.
- Answer <u>ALL</u> questions, UNLESS you are instructed to skip to another set of questions because you answered "No" or "Never" 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.

| 1. School             | 2. What grade are you in? |  |  |  |
|-----------------------|---------------------------|--|--|--|
|                       | 🗆 1) M2 🛛 3) S1 🗌 5) S3   |  |  |  |
|                       | 🗆 2) M3 🛛 4) S2 🗌 6) S4   |  |  |  |
|                       |                           |  |  |  |
| 3. Sex                | 4. Age                    |  |  |  |
| □ 1. Male □ 2. Female | years old                 |  |  |  |



| □       1. Black         □       2. White         □       3. Portuguese         □       4. Asian or Pacific Islander         □       5. Mixed         □       6. Other (specify)         □       6. Other (specify)         □       8. Warwick         □       9. Smith's         7. What is your parents' marital status?       (In relation to each other.)         □       1. Never Married         □       1. Father         □       2. Divorced         □       3. Stepfather         □       1. Isover Married         □       1. Father         □       2. Divorced         □       3. Stepfather         □       4. I don't know         □       5. Married         □       5. Friend         □       0. Other (specify)  | 5. What do you consider yourself to be?   | <ol> <li>In which parish do you most often reside?<br/>(Tick only one(1) response)</li> </ol>   |
|---|---|---|
| 7. What is your parents' marital status?<br>(In relation to each other.)       8. With whom do you live?<br>(You may tick as many options as needed.)         1. Never Married       1. Father         2. Divorced       2. Brother/Sister         3. Widow(er)       3. Stepfather         4. I don't know       4. Girlfriend/Boyfriend         5. Married       5. Friend         6. Separated       6. Other (specify)         7. Living together/Common law       8. Stepmother         8. Other (specify)       9. Wife/Husband         10. Other relative       11. Alone         9. If you are working (paid work) as well as studying, how many hours do you work per week?       10. How likely is it that you will complete high school?         11. Do not work       2. Work approximately hours per week       3. Don't know         11. How likely is it that you will go to University?       12. How many school years have you had to repeat during the course of your studies?         11. Very likely       4. Likely       1. None         2. One       3. Two or more | <ul> <li>I. Black</li> <li>2. White</li> <li>3. Portuguese</li> <li>4. Asian or Pacific Islander</li> <li>5. Mixed</li> <li>6. Other (specify)</li> </ul>   | <ul> <li>1. Devonshire</li> <li>2. Hamilton</li> <li>3. Paget</li> <li>4. Pembroke</li> <li>5. St. George's</li> <li>6. Sandys</li> <li>7. Southampton</li> <li>8. Warwick</li> <li>9. Smith's</li> </ul>   |
| 1. Never Married       1. Father         2. Divorced       2. Brother/Sister         3. Widow(er)       3. Stepfather         4. I don't know       4. Girlfriend/Boyfriend         5. Married       5. Friend         6. Separated       6. Other (specify)         7. Living together/Common law       7. Mother         8. Other (specify)       9. Wife/Husband         10. Other relative       11. Alone         9. If you are working (paid work) as well as studying, how many hours do you work per week?       10. How likely is it that you will complete high school?         11. Do not work       2. Not very likely       5. Impossible         2. Work approximately hours per week       12. How many school years have you had to repeat during the course of your studies?         1. Very likely       4. Likely         2. Not very likely       5. Impossible         3. Don't know       1. None         2. One       3. Two or more   | 7. What is your parents' marital status?<br>(In relation to each other.)  | 8. With whom do you live?<br>(You may tick as many options as needed.)  |
| 9. If you are working (paid work) as well as studying, how many hours do you work per week?       10. How likely is it that you will complete high school?         1. Do not work       1. Very likely       4. Likely         2. Work approximately hours per week       3. Don't know       5. Impossible         1. Very likely       4. Likely       12. How many school years have you had to repeat during the course of your studies?         1. Very likely       4. Likely       12. How many school years have you had to repeat during the course of your studies?         1. Very likely       5. Impossible       1. None         3. Don't know       3. Two or more   | <ul> <li>1. Never Married</li> <li>2. Divorced</li> <li>3. Widow(er)</li> <li>4. I don't know</li> <li>5. Married</li> <li>6. Separated</li> <li>7. Living together/Common law</li> <li>8. Other (specify)</li> </ul> | <ul> <li>1. Father</li> <li>2. Brother/Sister</li> <li>3. Stepfather</li> <li>4. Girlfriend/Boyfriend</li> <li>5. Friend</li> <li>6. Other (specify)</li> <li>7. Mother</li> <li>8. Stepmother</li> <li>9. Wife/Husband</li> <li>10. Other relative</li> <li>11. Alone</li> </ul> |
| Image: Week.       Image: 1. Very likely       Image: 4. Likely         Image: 1. Do not work       Image: 2. Not very likely       Image: 2. Not very likely       Image: 2. Not very likely         Image: 2. Work approximately hours per week       Image: 2. Not very likely       Image: 2. Not very likely       Image: 2. Not very likely         Image: 1. Very likely       Image: 4. Likely       Image: 2. Not very likely       Image: 2. Not very likely       Image: 2. Not very likely         Image: 1. Very likely       Image: 4. Likely       Image: 2. Not very likely       Image: 2. Not very likely       Image: 2. Not very likely         Image: 2. Not very likely       Image: 3. Impossible       Image: 2. Not very likely       Image: 2. One         Image: 3. Don't know       Image: 3. Two or more       Image: 3. Two or more   | 9. If you are working (paid work) as well as studying, how many hours do you work   | 10. How likely is it that you will complete high school?  |
| 11. How likely is it that you will go to University?       12. How many school years have you had to repeat during the course of your studies?         1. Very likely       4. Likely         2. Not very likely       5. Impossible         3. Don't know       2. One         3. Two or more       3. Two or more   | □ 1. Do not work<br>□ 2. Work approximately hours per week  | □       1. Very likely       □       4. Likely         □       2. Not very likely       □       5. Impossible         □       3. Don't know       □   |
|   | <b>11. How likely is it that you will go to University?</b> 1. Very likely       4. Likely         2. Not very likely       5. Impossible         3. Don't know   | <ul> <li>12. How many school years have you had to repeat during the course of your studies?</li> <li>1. None</li> <li>2. One</li> <li>3. Two or more</li> </ul>  |

# **13.** Have you ever had behavioural or discipline problems during your school years? (e.g., detentions and suspensions, being sent to the Principal, corporal punishment)

□ 1. Never □ 2. Few times □ 3. Frequently

#### 14. In your opinion, how harmful is EACH of the following to your health? Check the appropriate response for EACH. 1. 2. 3. 4. 5. Slightly harmful Moderately Very Don't Not harmful harmful harmful know 1. Smoking cigarettes sometimes 2. Smoking cigarettes frequently 3. Drinking alcoholic beverages frequently

| 4.  | Getting drunk   |  |  |  |
|-----|---|--|--|--|
| 5.  | Taking tranquilizers/stimulants without medical prescription sometimes  |  |  |  |
| 6.  | Taking tranquilizers/stimulants without medical prescription frequently |  |  |  |
| 7.  | Inhaling solvents sometimes   |  |  |  |
| 8.  | Inhaling solvents frequently  |  |  |  |
| 9.  | Smoking marijuana sometimes   |  |  |  |
| 10. | Smoking marijuana frequently  |  |  |  |
| 11. | Consuming cocaine sometimes   |  |  |  |
| 12. | Consuming cocaine frequently  |  |  |  |
| 13. | Consuming crack sometimes   |  |  |  |
| 14. | Consuming crack frequently  |  |  |  |
| 15. | Consuming ecstasy sometimes   |  |  |  |
| 16. | Consuming ecstasy frequently  |  |  |  |
| 17. | Inhaling second hand cigarette smoke                                    |  |  |  |
| 18. | Inhaling second hand marijuana smoke                                    |  |  |  |

| 15. How easy would it be to get the following drugs?<br>Check the appropriate response for <u>EACH</u> . | 1.<br>Easy | 2.<br>Difficult | 3.<br>Impossible<br>to get | 4.<br>Don't<br>know |
|--|------------|-----------------|----------------------------|---------------------|
| 1. Alcohol   |            |                 |                            |                     |
| 2. Marijuana   |            |                 |                            |                     |
| 3. Cocaine   |            |                 |                            |                     |
| 4. Crack   |            |                 |                            |                     |
| 5. Heroin  |            |                 |                            |                     |

| <ul> <li>16. When was the last time that you were offered any of these drugs, either to buy or to consume?<br/>Check the appropriate response for <u>EACH</u>.</li> </ul> | 1.<br>During the<br>last 30 days | 2.<br>More than a<br>month ago,<br>but less than<br>a year ago | 3.<br>More than a<br>year ago | 4.<br>I have never<br>been offered |
|---|----------------------------------|--|-------------------------------|------------------------------------|
| 1. Alcohol  |                                  |  |                               |                                    |
| 2. Marijuana  |                                  |  |                               |                                    |
| 3. Cocaine  |                                  |  |                               |                                    |
| 4. Crack  |                                  |  |                               |                                    |
| 5. Heroin   |                                  |  |                               |                                    |

| 17. Have you ever been curious about trying an illicit drug?  | 18. If you had the opportunity, would you try an illicit drug?   |
|---|--|
| □ 1. No   | □ 1. No  |
| □ 2. Not sure   | □ 2. Not Sure  |
| □ 3. Yes  | □ 3. Yes   |
|   |  |
| <b>19. Have you <u>ever</u> smoked cigarettes?</b><br>(You must check a response.)  | 20. How old were you when you smoked for the first time?   |
| □ 1. Yes □ 2. No (skip to #27)  | years old  |
| 21. When was the <u>first time</u> you smoked cigarettes?<br>(You must check a response.)   | 22. Have you smoked cigarettes in the <u>past 12</u><br><u>months</u> ? (You must check a response.)   |
| □ 1. Never (skip to #27)  | □ 1. Yes □ 2. No (skip to #27)   |
| □ 2. During the past 30 days  |  |
| □ 3. More than 1 month ago, less than 1 year ago  |  |
| ☐ 4. More than a year ago   |  |
| 23. Have you smoked cigarettes in the <u>past 30 days</u> ?<br>(You must check a response.)   | 24. Approximately, how many cigarettes have you smoked a day in the past month?  |
| □ 1. Yes □ 2. No (skip to #27)  | □ 1) 1 to 5 □ 3) 11 to 20  |
|   | □ 2) 6 to 10 □ 4) More than 20   |
| <b>25. Where do you most often smoke cigarettes?</b> (Tick only <u>one(1)</u> response.)  | 26. From whom/where do you usually get ciga-<br>rettes? (Tick only <u>one(1)</u> response.)  |
| <ul> <li>1. At home</li> <li>2. At school</li> <li>3. On the corner/block</li> <li>4. At a friend's house</li> <li>5. At sporting events</li> <li>6. At other social event</li> <li>7. Other (specify)</li> </ul> | <ul> <li>1. Friends</li> <li>2. Parents</li> <li>3. Brother/Sister</li> <li>4. Other relative(s)</li> <li>5. Street vendor</li> <li>6. Shop</li> <li>7. Other (specify)</li> </ul> |
| 27. During the <u>past 7 days</u> , on how many days did<br>someone smoke tobacco products in your<br>home while you were there?  | 28. During the <u>past 7 days</u> , on how many days did<br>you ride in a vehicle where someone was smok-<br>ing a tobacco product?  |
| □ 1) 0 days □ 4) 3 days □ 7) 6 days   | 🗆 1) 0 days 🛛 4) 3 days 🔲 7) 6 days  |
| □ 2) 1 days □ 5) 4 days □ 8) 7 days   | 🗆 2) 1 days 🛛 5) 4 days 🛛 8) 7 days  |
|   |  |

| 29 | P. Thinking about the first time you brought<br>cigarettes, did you buy? (Tick <u>all</u> that apply) |
|----|---|
|    | □ Never purchased cigarettes  |
|    | □ Whole pack to share with friend's   |
|    | □ Whole packs for use on your own   |
|    | $\Box$ Loose or single cigarettes from shops  |
|    | □ Loose or single cigarettes from friends   |
|    | □ Single cigarettes for adults who smoke  |

| <ul> <li>30. To "vape" is to use a device such as a vape-pen, an e-cigarette, and e-hookah, or e-vaporizer to inhale a mist or vapor into the lungs.</li> <li>Have you ever vaped? (You must check a response.)</li> <li>1. Yes</li> <li>2. No (skip to #33)</li> </ul>  | <ul> <li>31. The last time you vaped what was in the mist or vapor you inhaled? (You must check a response.)</li> <li>1. Nicotine</li> <li>2. Marijuana or hash oil</li> <li>3. Just flavoring</li> <li>4. Other</li> <li>5. Don 't Know</li> </ul>  |
|--|--|
| <ul> <li>32. During the past 30 days, on how many days did you use an electronic vapor product? (You must check a response.)</li> <li>1) 0 days</li> <li>2) 1 or 2 days</li> <li>3) 3 to 5 days</li> <li>4) 6 to 9 days</li> <li>5) 10 to 19 days</li> <li>6) 20 to 29 days</li> <li>7) All 30 days</li> </ul> | <ul> <li>33. How difficult would it be for you to get a vaping device used to inhale a mist or vapor into the lungs (like an e-pen or e-cigarette)? (You must check a response.)</li> <li>1. Probably Impossible</li> <li>2. Very Difficult</li> <li>3. Fairly Difficult</li> <li>4. Fairly Easy</li> <li>5. Very Easy</li> <li>6. Can't Say, Drug Unfamiliar (skip to #37)</li> </ul> |

| 34. On how many occasions<br>(if any) have you vaped<br>NICOTINE | 1)<br>0<br>Occasions | 2)<br>1-2<br>Occasions | 3)<br>3-5<br>Occasions | 4)<br>6-9<br>Occasions | 5)<br>10-19<br>Occasions | 6)<br>20-39<br>Occasions | 7)<br>40 or<br>More |
|--|----------------------|------------------------|------------------------|------------------------|--------------------------|--------------------------|---------------------|
| Check the appropriate response for <u>EACH</u> .                 |                      |                        |                        |                        |                          |                          |                     |
| 1. In your lifetime?   |                      |                        |                        |                        |                          |                          |                     |
| 2. During the last 12 months?                                    |                      |                        |                        |                        |                          |                          |                     |

| 3. During the last 30 days? |  |  |  |  |
|-----------------------------|--|--|--|--|
| 4. Crack                    |  |  |  |  |
| 5. Heroin                   |  |  |  |  |

| 35. On how many occasions<br>(if any) have you vaped<br>MARIJUANA | 1)<br>0<br>Occasions | 2)<br>1-2<br>Occasions | 3)<br>3-5<br>Occasions | 4)<br>6-9<br>Occasions | 5)<br>10-19<br>Occasions | 6)<br>20-39<br>Occasions | 7)<br>40 or<br>More |
|---|----------------------|------------------------|------------------------|------------------------|--------------------------|--------------------------|---------------------|
| Check the appropriate response for <u>EACH</u> .                  |                      |                        |                        |                        |                          |                          |                     |
| 1. In your lifetime?  |                      |                        |                        |                        |                          |                          |                     |
| 2. During the last 12 months?                                     |                      |                        |                        |                        |                          |                          |                     |
| 3. During the last 30 days?                                       |                      |                        |                        |                        |                          |                          |                     |
| 4. Crack  |                      |                        |                        |                        |                          |                          |                     |
| 5. Heroin   |                      |                        |                        |                        |                          |                          |                     |

| <ul> <li>36. On how many occasions<br/>(if any) have you vaped<br/>just FLAVORING</li> <li>Check the appropriate<br/>response for <u>EACH</u>.</li> </ul> | 1)<br>O<br>Occasions | 2)<br>1-2<br>Occasions | 3)<br>3-5<br>Occasions | 4)<br>6-9<br>Occasions | 5)<br>10-19<br>Occasions | 6)<br>20-39<br>Occasions | 7)<br>40 or<br>More |
|---|----------------------|------------------------|------------------------|------------------------|--------------------------|--------------------------|---------------------|
| 1. In your lifetime?  |                      |                        |                        |                        |                          |                          |                     |
| 2. During the last 12 months?   |                      |                        |                        |                        |                          |                          |                     |
| 3. During the last 30 days?   |                      |                        |                        |                        |                          |                          |                     |
| 4. Crack  |                      |                        |                        |                        |                          |                          |                     |
| 5. Heroin   |                      |                        |                        |                        |                          |                          |                     |

| 37. Have you <u>ever</u> consumed alcohol-<br>ic beverages? (You must check a                                      | 38. How old were you when you consumed an alcoholic beverage for the first time?                |
|--|---|
| $\square 1 Yes \square 2 No (skin to$  | years old   |
| #46)   |   |
| <b>39. When was the <u>first time</u> you con-<br/>sumed an alcoholic beverage?</b> (You<br>must check a response) | 40. Have you consumed alcoholic beverages in the past 12 months?<br>(You must check a response) |
| □ 1. Never (skip to #46)   |   |
| □ 2. During the past 30 days   |   |
| □ 3. More than 1 month ago, less than 1<br>year ago  |   |
| ☐ 4. More than a year ago  |   |

| check a resp   | i <b>sumed alcoholi</b><br>past 30 days? (Y<br>onse.)                          | <b>c bever-</b><br>′ou must | 42. How many days <u>in the past month</u> have you had too much to drink and got drunk? |                     |                                   |   |                                   |                 |
|--|--|-----------------------------|--|---------------------|-----------------------------------|---|-----------------------------------|-----------------|
|  |  | += #44)                     |  |                     |                                   | days                                    |                                   |                 |
|  |  | 10 #40)                     |  |                     |                                   |   |                                   |                 |
| 43. Where do you<br>hol? (Tick on  | u most often drii<br>Iy <u>one(1)</u> respon                                   | nk alco-<br>se.)            | 44. From v<br>respon   | whom/wher<br>nse.)  | re do you usuall                  | ly get alcoh                            | ol? (Tick or                      | ly <u>one(1</u> |
| 🗆 1. At home   | 🗆 6. At  | other                       | 🛛 1. Frien   | ds                  | 5. Street                         | vendor                                  |                                   |                 |
| social events  |  |                             | 🗆 2. Pare  | nts                 | 🛛 6. Shop                         |   |                                   |                 |
| 2. At school   | 🗆 7. Ot  | ther                        | 🛛 3. Brot  | her/Sister          | 🛛 7. Other                        | (specify)                               |                                   |                 |
| (specity)  |  |                             | □ 4. Othe  | er relative(s       |                                   |   |                                   |                 |
| □ 3. On the corr   | ner/block  |                             |  |                     |                                   |   |                                   |                 |
| 45. In the <u>past 30</u><br>appropriate r   | <u>) days</u> , what type<br>esponse for <u>EA(</u>                            | → of alcoh<br><u>CH</u> .   | olic beveraş   | ge did you o        | consume, and v                    | with what fr                            | requency? C                       | heck tł         |
|  |  |                             |  | 1                   |                                   |   |                                   |                 |
|  |  |                             |  | Daily               | 2.<br>Weekends                    | 3.<br>Some<br>week<br>days              | 4.<br>Only in<br>social<br>events | 5.<br>Neve      |
| 1. Beer, Guinness  | , Breezes, Wicke   | ts                          |  | Daily               | 2.<br>Weekends                    | 3.<br>Some<br>week<br>days              | 4.<br>Only in<br>social<br>events | 5.<br>Neve      |
| 1. Beer, Guinness<br>2. Wine   | , Breezes, Wicke   | :ts                         |  | Daily               | 2.<br>Weekends                    | 3.<br>Some<br>week<br>days              | 4.<br>Only in<br>social<br>events | 5.<br>Neve      |
| 1. Beer, Guinness<br>2. Wine<br>3. Hard liquor (ru<br>liqueurs)  | , Breezes, Wicke<br>m, rum punch, v  | vodka, wh                   | iisky,   | Daily               | 2.<br>Weekends                    | 3.<br>Some<br>week<br>days              | 4.<br>Only in<br>social<br>events | 5.<br>Neve      |
| <ol> <li>Beer, Guinness</li> <li>Wine</li> <li>Hard liquor (ru<br/>liqueurs)</li> <li>Have you eve</li> </ol>                            | , Breezes, Wicke<br>m, rum punch, y<br>r ridden in a veh                       | vodka, wh                   | nisky,<br>n by somec   | Daily               | 2.<br>Weekends                    | 3.<br>Some<br>week<br>days<br>galcohol? | 4.<br>Only in<br>social<br>events | 5.<br>Neve      |
| <ol> <li>Beer, Guinness</li> <li>Wine</li> <li>Hard liquor (ru<br/>liqueurs)</li> <li>Have you eve<br/>Bike 1. Y</li> </ol>              | , Breezes, Wicke<br>m, rum punch,<br>r ridden in a veh<br>es 2. No             | vodka, wh                   | iisky,<br>in by somec<br>lo not know   | Daily<br>Daily      | 2.<br>Weekends<br>d been drinking | 3.<br>Some<br>week<br>days              | 4.<br>Only in<br>social<br>events | 5.<br>Neve      |
| <ol> <li>Beer, Guinness</li> <li>Wine</li> <li>Hard liquor (ru<br/>liqueurs)</li> <li>Have you eve<br/>Bike 1. Y<br/>Car 1. Y</li> </ol> | , Breezes, Wicke<br>m, rum punch,<br>r ridden in a veh<br>es 2. No<br>es 2. No | vodka, wh<br>iicle drive    | iisky,<br>In by somec<br>Io not know   | Daily<br>one who ha | 2.<br>Weekends                    | 3.<br>Some<br>week<br>days              | 4.<br>Only in<br>social<br>events | 5.<br>Neve      |

| 47a | h. Have you <u>ever</u> consumed any of these substance<br>Check the appropriate response for <u>EACH</u> . | 47b. How old were you<br>when you <u>first</u> tried? |     |           |
|-----|---|---|-----|-----------|
|     |   | NO  | YES |           |
| 1.  | Inhalants (e.g. glue, diesel fuel, other solvents)  |   |     |           |
|     |   | _   |     | years old |
| 2.  | Marijuana   |   |     | <b></b>   |
|     |   |   |     | years old |
| 3.  | Cannabis resin  |   |     | <b>→</b>  |
|     |   |   |     | years old |

| 4.  | Cocaine   |  |          | vears old      |
|-----|---|--|----------|----------------|
| 5.  | Crack   |  | <b>→</b> | years old      |
| 6.  | Heroin  |  |          | ,<br>years old |
| 7.  | Hashish   |  |          | years old      |
| 8.  | Amphetamines and Methamphetamines<br>(e.g. Speed) |  |          |                |
| 9.  | GHB (e.g. Blue Nitro)                             |  |          | years old      |
| 10. | Ketamine (e.g. Special K)                         |  |          | years old      |
| 11. | Grabba (tobacco leaf)                             |  | <b>→</b> | years old      |
| 12. | Beedi   |  |          | years old      |
| 13. | E-cigarettes (hookah pens/ hookah sticks)         |  |          | years old      |
| 14. | Tranquilizers (e.g. valium) without prescription  |  |          | years old      |
| 15. | Amphetamine-type stimulant (e.g. Ritalin)         |  |          | years old      |
| 16. | Analgesics (e.g. Codeine)                         |  |          | years old      |
| 17. | Poppers (nitrites) (e.g. Rush)                    |  |          | years old      |
| 18. | Hallucinogens (e.g. LSD)                          |  | <b></b>  | years old      |
| 19. | MDMA (e.g. Ecstasy)                               |  |          | years old      |
| 20. | Other drugs (specify):<br>years old               |  | ►        | years old      |

| <b>48a. When was the <u>first time</u> you tried inhalants</b> (e.g., glue, diesel fuel, other solvents)? (You must check a response.) | 48b. Have you consumed inhalants in the past 12 months? (You must check a                   |
|--|---|
| ☐ 1. Never (skip to #49a)  |   |
| □ 2. In the past 30 days   | $\square 2 \text{ Ne (alignets # 40c)}$   |
| □ 3. More than 1 month ago, but less than 1 year ago   | $\Box$ 2. No (skip to #49a)   |
| ☐ 4. More 1 year ago   |   |
|  |   |
| 48c. With what frequency have you consumed inhalants?  | 48d. Have you consumed inhalants in the<br>past 30 days?                                    |
| □ 1. Only once   | $\square 1. Yes$  |
| □ 2. Sometimes in the past 12 months   | $\square 2 N_0$   |
| □ 3. Sometimes during the month  |   |
| $\Box$ 4. Sometimes during the week  |   |
| ☐ 5. Daily   |   |
|  |   |
| <b>49a. When was the <u>first time</u> you tried marijuana?</b> (You must check a response.)   | <b>49b. Have you consumed marijuana in the</b><br><u>past 12 months</u> ? (You must check a |
| □ 1. Never (skip to #50a)  | response.)  |
| □ 2. In the past 30 days   |   |
| □ 3. More than 1 month ago, but less than 1 year ago   | ☐ 2. No (skip to #50a)  |
| ☐ 4. More 1 year ago   |   |
| 49c. With what frequency have you used marijuana?  | 49d. Have you consumed marijuana in the   |
| ☐ 1. Only once   | past 30 days?   |
| $\Box$ 2. Sometimes in the past 12 months  | □ 1. Yes  |
| ☐ 3. Sometimes during the month  | □ 2. No   |
| ☐ 4. Sometimes during the week   |   |
| □ 5. Daily   |   |
| 49e. Where do you most often use marijuana?  |   |
|  | 49f. From whom/where do you usually get   |
| " 1. At home " 5. At sporting events   | " 1 Existent  |
| <sup>"</sup> 2. At school <sup>"</sup> 6. At other social events   |   |
| "3 On the corner/block "7 Other (specify)  | 2. Parents  |
| " A At a friend's hours  | " 3. Brother/Sister   |
| 4. At a menu s nouse   | <sup></sup> 4. Other relative(s)  |
|  | <sup>"</sup> 5. Street pusher   |
|  |   |

| 49g.<br>forn | Have you ever used marijuana in any of the following us? (Choose <u>all that apply</u> ) |
|--------------|--|
|              | □ 1.Drinks (tea, juice etc.)   |
|              | 2. Edibles (pastries, candy/sweets, cooked/uncooked meals)                               |
|              | □ 3. Concentrates (oils, shatter, budder wax etc.)                                       |
|              | □ 4. Other (specify)   |
|              | $\Box$ 5. I have never used marijuana in any of these forms                              |
|              |  |

| <ul> <li>50a. When was the first time you tried cocaine?<br/>(You must check a response.)</li> <li>1. Never (skip to #51a)</li> <li>2. In the past 30 days</li> <li>3. More than 1 month ago, but less than 1 year ago</li> <li>4. More than 1 year ago</li> </ul> | <ul> <li>50b. Have you consumed cocaine in the past 12 months? (You must check a response.)</li> <li>1. Yes</li> <li>2. No (skip to #51a)</li> </ul> |
|--|--|
| <ul> <li>50c. With what frequency have you used cocaine?</li> <li>1. Only once</li> <li>2. Sometimes in the past 12 months</li> <li>3. Sometimes during the month</li> <li>4. Sometimes during the week</li> <li>5. Daily</li> </ul>                               | <ul> <li>50d. Have you consumed cocaine in the past 30 days?</li> <li>□ 1. Yes</li> <li>□ 2. No</li> </ul>   |

| <ul> <li>51a. When was the <u>first time</u> you tried crack?<br/>(You must check a response.)</li> <li>1. Never (skip to #52a)</li> <li>2. In the past 30 days</li> <li>3. More than 1 month ago, but less than 1 year ago</li> <li>4. More than 1 year ago</li> </ul> | <ul> <li>51b. Have you consumed crack in the past <u>12 months</u>? (You must check a response.)</li> <li>□ 1. Yes</li> <li>□ 2. No (skip to #52a)</li> </ul> |
|---|---|
| 51c. With what frequency have you used crack?   | 51d. Have you consumed crack in the <u>past</u><br>30 days?   |
| □ 1. Only once  |   |
| $\Box$ 2. Sometimes in the past 12 months   |   |
| $\Box$ 3. Sometimes during the month  |   |
| $\Box$ 4. Sometimes during the week   |   |
| □ 5. Daily  |   |

| <ul> <li>52a. When was the first time you tried heroin?<br/>(You must check a response.)</li> <li>1. Never (skip to #53a)</li> <li>2. In the past 30 days</li> <li>3. More than 1 month ago, but less than 1 year ago</li> <li>4. More than 1 year ago</li> </ul> | <ul> <li>52b. Have you consumed heroin in the past 12 months? (You must check a response.)</li> <li>□ 1. Yes</li> <li>□ 2. No (skip to #53a)</li> </ul> |
|---|---|
| 52c. With what frequency have you used heroin?  | 52d. Have you consumed heroin in the <u>past</u><br><u>30 days</u> ?  |
| $\Box$ 2. Sometimes in the past 12 months   | □ 1. Yes<br>□ 2. No   |
| $\Box$ 3. Sometimes during the month $\Box$ 4. Sometimes during the week  |   |
| □ 4. Sometimes during the week  |   |

| 53a. When was the <u>first time</u> you tried ecstasy?<br>(You must check a response.) | 53b. Have you consumed ecstasy in the <u>past</u><br><u>30 days</u> ? |
|--|---|
| □ 1. Never (skip to #54a)  | □ 1. Yes  |
| □ 2. In the past 30 days   | □ 2. No   |
| □ 3. More than 1 month ago, but less than 1 year ago                                   |   |
| ☐ 4. More than 1 year ago  |   |
|  |   |

| 54a. When was the <u>first tin</u><br>adderall, pseudoephe<br>tion? (You must check | ne you tried stimulants (e.g., ritalin,<br>drine) without medical prescrip-<br>a response) | 54b. Have you co<br>medical pre<br><u>days</u> ? (You r | nsumed stimulants without<br>scription in the <u>past 30</u><br>nust check a response.) |
|---|--|---|---|
| □ 1. I have never cons  | sumed stimulants without medical   | 🗆 1. Yes  |   |
| prescription (skip  | o to #55a)   | 🗆 2. No   |   |
| □ 2. In the past 30 da  | ays  |   |   |
| □ 3. More than 1 mor  | nth ago, but less than 1 year ago  |   |   |
| 4. More than 1 year   | ago  |   |   |
|   |  |   |   |

| <b>55a. When w</b> a<br>(e.g., va<br>(You mu | as the <u>first time</u> you consumed tranquilizers<br>lium, xanax) without medical prescription?<br>st check a response.) | 55b. H | Have you consumed tranquilizers with-<br>out medical prescription in the <u>past 30</u><br><u>days</u> ? (You must check a response.) |
|--|--|--------|---|
| □ 1. Ne                                      | ver (skip to #56a)   |        | 🗆 1. Yes  |
| □ 2. In                                      | the past 30 days   |        | 🗆 2. No   |
| □ 3. Mo                                      | ore than 1 month ago, but less than 1 year ago   |        |   |
| □ 4. Mo                                      | ore than 1 year ago  |        |   |
|  |  |        |   |

| 56a. When was the <u>first time</u> you tried other drugs?<br>(You must check a response.) | 56b. Have you consumed other drugs in the past 30 days? |
|--|---|
| □ 1. I have never tried other drugs (skip to #57a)   | □ 1. Yes  |
| □ 2. In the past 30 days   | □ 2. No   |
| □ 3. More than 1 month ago, but less than 1 year ago                                       |   |
| ☐ 4. More than 1 year ago  |   |

| 7a. Have you <u>ever</u> had energy drinks (Mor<br>Bull, etc.)? | nster, Red       | 57b. Have you consumed energy drinks in the <u>pa</u><br><u>30 days</u> ? |
|---|------------------|---|
| □ 1. Yes  |                  | □ 1. Yes  |
| □ 2. No (skip to #58)   |                  | □ 2. No   |
| □ 3. I do not know  |                  |   |
| 57c. When do you drink energy drinks? (Pla                      | ease tick Yes or | n No for <u>each</u> of the following.)                                   |
| While studying  | 🗆 1. Yes         | s 🗆 2. No   |
| Before or after sporting activities                             | 🗆 1. Yes         | s 🛛 2. No   |
| While hanging out   | 🗆 1. Yes         | s 🛛 2. No   |
| Other (specify)   |                  |   |
| 57d. Have you <u>ever</u> consumed a mixture of<br>Bull?)?      | an alcoholic b   | beverage and an energy drink (e.g., Whiskey and R                         |
| □ 1. Yes  |                  |   |
| □ 2. No   |                  |   |
| □ 3. I do not know  |                  |   |
|   |                  |   |

| <ul> <li>58. How do you think your parent(s)/<br/>guardian would react in <u>each</u> of<br/>the following?</li> <li>Check the appropriate response<br/>for <u>EACH</u>.</li> </ul> | 1.<br>Extremely<br>Upset | 2.<br>Very<br>Upset | 3.<br>Somewhat<br>Upset | 4.<br>Not<br>Upset | 5.<br>I have no<br>idea how<br>they would<br>react | 4.<br>Not applicable<br>(I have no living<br>parent(s)/guardian<br>or I have never<br>seen them.) |
|---|--------------------------|---------------------|-------------------------|--------------------|--|---|
| <ol> <li>If your parent(s)/guardian<br/>catches you coming home tipsy<br/>or drunk.</li> </ol>  |                          |                     |                         |                    |  |   |
| <ol> <li>If your parent(s)/guardian finds<br/>out you are smoking marijuana.</li> </ol>   |                          |                     |                         |                    |  |   |

| 59. Have you ever had any serious<br>conversations with any of your<br>parents/guardian(s) about the<br>dangers of drug use? |  |  |  |
|--|--|--|--|
| □ 1. Yes   |  |  |  |
| □ 2. No  |  |  |  |
|  |  |  |  |

| Check the appropriate response for <u>EACH</u> statement below.  | 1.<br>Yes | 2.<br>No | 3.<br>I do not<br>know |
|--|-----------|----------|------------------------|
| 60a. In general, do you believe that there are drugs (alcohol, marijuana, cigarettes, etc.) at your school?                        |           |          |                        |
| 60b. In general, do you believe that there are students who bring, try, or deal with drugs at your school?                         |           |          |                        |
| 61a. Do you believe that there are drugs in the area surrounding or next to your school?   |           |          |                        |
| 61b. Do you believe that some students try to buy or deal in drugs amongst themselves just outside the school or surrounding area? |           |          |                        |
| 62. Have you personally ever seen a student selling or giving drugs at school or in the area surrounding the school?               |           |          |                        |
| 63. Have you personally ever seen a student using drugs at school or in the area surrounding the school?                           |           |          |                        |

| <ul> <li>64a. If your close friends knew you were smoking marijuana, how many of them would try to convince you to stop?</li> <li>1. All</li> <li>2. Some</li> <li>3. None</li> </ul> | <ul> <li>64b. If your close friends knew you were smoking marijuana, how many of them would disapprove?</li> <li>1. All</li> <li>2. Some</li> <li>3. None</li> </ul> |
|---|--|
|   |  |

| 65a. If you tried alcohol once in your lifetime, would you say so in this questionnaire? | 65b. If you tried marijuana once in your lifetime,<br>would you say so in this questionnaire? |
|--|---|
| □ 1. Yes, I have just said so  | □ 1. Yes, I have just said so   |
| □ 3. Probably yes  | □ 3. Probably yes   |
| ☐ 4. Probably no   | ☐ 4. Probably no  |
| $\Box$ 5. I would definitely not say so  | $\Box$ 5. I would definitely not say so   |
|  |   |

## **END OF SECTION**

#### **SECTION II**

This section of the survey asks your opinion on a number of things in your life, including your friends, family, neighbourhood, and community. You are reminded that your answers to these questions are **confidential**.

#### INSTRUCTIONS

- 1. This is not a test. There is no right or wrong answers.
- 2. Provide a response to <u>ALL</u> questions. If you don't find an answer that fits exactly, use one that comes closest.
- 3. Some of the questions have the following format:

Please check the box for the word that best describes how you feel.

EXAMPLE: Pepperoni pizza is one of my favourite foods.

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

Mark the Big "NO!" if you think the statement is <u>definitely not true</u> for you.

Mark the little "No" if you think the statement is <u>mostly not true</u> for you.

Mark the little "Yes" if you think the statement is mostly true for you.

Mark the Big "YES!" if you think the statement is <u>definitely true for you</u>.

These questions ask about your neighbourhood and community where you live.

1. I'd like to get out of my neighbourhood. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

2. If I had to move, I would miss the neighbourhood I now live in. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

3. I like my neighbourhood. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

4. How much does <u>each</u> of the following statements describe your neighbourhood?

|   | 1.<br>NO! | 2.<br><b>No</b> | 3.<br><b>Yes</b> | 4.<br>YES! |
|---|-----------|-----------------|------------------|------------|
| 1. I feel safe in my<br>neighbourhood   |           |                 |                  |            |
| 2. Crime and/or drug selling            |           |                 |                  |            |
| 3. Fights                               |           |                 |                  |            |
| 4. Lots of empty or abandoned buildings |           |                 |                  |            |
| 5. Lots of graffiti                     |           |                 |                  |            |

5. How many times have you changed homes since kindergarten/P-1? Pick one:

 $\Box$  1) Never $\Box$  4) 5 - 6 times $\Box$  2) 1 - 2 times $\Box$  5) 7 or more times $\Box$  3) 3 - 4 times

6. Have you changed homes in the past year (the last 12 months)? Pick one:

□ 1. No □ 2. Yes

7. Have you changed schools (including changing from elementary to middle and middle to high school) in the past year (the last 12 months)? Pick one:

□ 1. No □ 2. Yes

8. How many times have you changed schools (including changing from elementary to middle and middle to high school) since kindergarten? Pick one:

 $\Box$  1) Never  $\Box$  4) 5 – 6 times

 $\square$  2) 1 – 2 times  $\square$  5) 7 or more times

□ 3) 3 – 4 times

9. If you wanted to get some cigarettes, how easy would it be for you to get some? Pick one:

□ 1. Very hard □ 3. Sort of easy

□ 2. Sort of hard □ 4. Very easy

10. If you wanted to get some beer, wine, or hard liquor (for example, vodka, whiskey, or gin), how easy would it be for you to get some? Pick one:

□ 1. Very hard □ 3. Sort of easy

□ 2. Sort of hard □ 4. Very easy

11. If you wanted to get some marijuana, how easy would it be for you to get some? Pick one:

 $\Box$  1. Very hard  $\Box$  3. Sort of easy

 $\Box$  2. Sort of hard  $\Box$  4. Very easy

12. If you wanted to get a drug like, cocaine, LSD, or amphetamines, how easy would it be for you to get some? Pick one:

| □ 1. Very hard    | □ 3. Sort of easy |
|-------------------|-------------------|
| □ 2. Sort of hard | 4. Very easy      |

13. If you wanted to get a handgun, how easy would it be for you to get one? Pick one:

| □ 1. Very hard | □ 3. Sort of easy |
|----------------|-------------------|
|----------------|-------------------|

□ 2. Sort of hard □ 4. Very easy

14. If a kid drank some beer, wine, or hard liquor (for example vodka, whiskey, or gin) in your neighbourhood, or the area around where you live, would he or she be caught by the police? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

15. If a kid smoked marijuana in your neighbourhood, or the area around where you live, would he or she be caught by the police? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

16. If a kid illegally carried a handgun in your neighbourhood, or the area around where you live, would he or she be caught by the police? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

- 17. How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to smoke marijuana? Pick one:
  - □ 1. Very wrong □ 3. A little bit wrong
  - □ 2. Wrong □ 4. Not wrong at all
- 18. How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to drink alcohol? Pick one:
  - □ 1. Very wrong □ 3. A little bit wrong

□ 2. Wrong □ 4. Not wrong at all

- 19. How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to smoke cigarettes? Pick one:
  - □ 1. Very wrong □ 3. A little bit wrong

□ 2. Wrong □ 4. Not wrong at all

20. There are a lot of adults in my neighbourhood I could talk to about something important. Pick one:

|  | LI 1. NO! | □ 2. No | LI 3. Yes | ロ 4. YES |
|--|-----------|---------|-----------|----------|
|--|-----------|---------|-----------|----------|

21. Which of the following activities for people your age are available in your community?

| Activities  | 1.<br>Yes | 2.<br>No |
|---|-----------|----------|
| 1. Sports teams   |           |          |
| 2.Boys and girls clubs (e.g.,<br>Pathfinders, Girl Guides, Boy<br>Scouts, Sea Cadets) |           |          |
| 3.Community clubs (e.g., Majorettes,<br>Dancerettes, Twirlers)                        |           |          |
| 4.Community service (e.g., Candy striping, Volunteer work)                            |           |          |

22. There are people in my neighbourhood, or the area around where I live, who are proud of me when I do something well. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

23. There are people in my neighbourhood, or the area around where I live, who encourage me to do my best. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

24. My neighbours notice when I am doing a good job and let me know about it. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

#### These questions ask about your family.

1. Has anyone in your family ever had a severe alcohol or drug problem? Pick one:

□ 1. No □ 2. Yes

2. Have any of your brother(s) or sister(s) ever drunk beer, wine, or hard liquor (for example vodka, whiskey, or gin)? Pick one:

□ 1. No □ 2. Yes □ 3. I don't have any brother(s) or sister(s)

3. Have any of your brother(s) or sister(s) ever smoked marijuana? Pick one:

□ 1. No □ 2. Yes □ 3. I don't have any brother(s) or sister(s)

4. Have any of your brother(s) or sister(s) ever smoked cigarettes? Pick one:

□ 1. No □ 2. Yes □ 3. I don't have any brother(s) or sister(s) 5. Have any of your brothers or sisters brother(s) or sister(s) ever taken a handgun to school? Pick one:

□ 1. No □ 2. Yes □ 3. I don't have any brother(s) or sister(s)

6. Have any of your brother(s) or sister(s) ever been suspended or expelled from school? Pick one:

□ 1. No □ 2. Yes

□ 3. I don't have any brother(s) or sister(s)

- 7. About how many adults have you known personally who in the past year have used marijuana, crack, cocaine, or other drugs? Pick one:
  - □ 1) None
     □ 4) 3 or 4 adults

     □ 2) 1 adult
     □ 5) 5 or more adults

□ 3) 2 adults

- About how many adults have you known personally who in the past year have sold or dealt drugs? Pick one:
  - □ 1) None □ 4) 3 or 4 adults
  - □ 2) 1 adult □ 5) 5 or more adults
  - □ 3) 2 adults
- 9. About how many adults have you known personally who in the past year have done other things that could get them in trouble with the police, like stealing, selling stolen goods, mugging or assaulting others, etc.? Pick one:
  - □ 1) None □ 4) 3 or 4 adults
  - □ 2) 1 adult □ 5) 5 or more adults

□ 3) 2 adults

- About how many adults have you known personally who in the past year have gotten drunk or high? Pick one:
  - □ 1) None □ 4) 3 or 4 adults
  - □ 2) 1 adult

□ 5) 5 or more adults

- □ 3) 2 adults
- 11. The rules in my family are very clear. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

12. My parents ask if I have gotten my homework done. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

13. When I am not at home, one of my parents know where I am and who I am with. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

14. Would your parents know if you did not come home on time? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

15. My family has clear rules about alcohol and drug use. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

16. If you drank some beer, wine, or other hard liquor (for example vodka, whiskey, or gin) without your parents' permission, would you be caught by your parents? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

17. If you carried a handgun without your parents' permission, would you be caught by your parents? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

18. If you skipped school without your parents' permission, would you be caught by your parents? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

19. We argue about the same things in my family over and over. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

20. People in my family have serious arguments. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

21. People in my family often insult or yell at each other. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

22. How wrong do your parents feel it would be for <u>you</u> to...

|  | 1.<br>Very<br>Wrong | 2.<br>Wrong | 3.<br>A<br>little<br>bit<br>wrong | 4.<br>Not<br>wrong<br>at all |
|--|---------------------|-------------|-----------------------------------|------------------------------|
| <ol> <li>drink beer, wine<br/>or hard liquor (for<br/>example, vodka,<br/>whiskey or gin)<br/>regularly (at least<br/>once or twice a<br/>month)?</li> </ol> |                     |             |                                   |                              |
| 2. smoke cigarettes?   |                     |             |                                   |                              |
| 3. smoke marijuana?  |                     |             |                                   |                              |
| 4. steal anything worth more than \$5.00?  |                     |             |                                   |                              |

| 5. draw graffiti, write<br>things, or draw<br>pictures on buildings<br>or other property<br>(without the owner's<br>permission)? |  |  |
|--|--|--|
| 6. pick a fight with someone?  |  |  |

23. Do you feel very close to your mother? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

24. Do you share your thoughts and feelings with your mother? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

25. Do you feel very close to your father? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

26. Do you share your thoughts and feelings with your father? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

27. If I had a personal problem, I could ask my mom or dad for help. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

28. My parents give me lots of chances to do fun things with them. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

29. My parents ask me what I think before most family decisions affecting me are made. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

30. My parents notice when I am doing a good job and let me know about it. Pick one:

□ 1. Never or Almost Never □ 3. Often

- □ 2. Sometimes □ 4. All the time
- 31. How often do your parents tell you they're proud of you for something you've done? Pick one:
  - □ 1. Never or Almost Never □ 3. Often
  - $\Box$  2. Sometimes  $\Box$  4. All the time
- 32. Do you enjoy spending time with your mother? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

33. Do you enjoy spending time with your father? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

# This section asks questions about your experiences at school.

- Putting them all together, what were your <u>grades</u> like <u>last year</u>? (E.g., Mostly Bs, Mostly Fs)
- 2. Are your school grades better than the grades of most students in your class? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

- During the LAST FOUR WEEKS, how many whole days have you missed because you skipped or cut? Pick one:
  - □ 1) None
     □ 5) 4 to 5

     □ 2) 1
     □ 6) 6 to 10

     □ 3) 2
     □ 7) 11 or more

     □ 4) 3
     □
- 4. How often do you feel that the school work you are assigned is meaningful and important? Pick one:
  - $\Box$  1. Almost always
  - 2. Often
  - □ 3. Sometimes
  - 4. Seldom
  - 5. Never
- 5. How interesting are most of your courses to you? Pick one:

□ 1. Very interesting and stimulating

- □ 2. Quite interesting
- □ 3. Fairly interesting
- □ 4. Slightly dull
- 🛛 5. Very dull
- 6. How important do you think things you are learning in school are going to be for your later life? Pick one:
  - □ 1. Very important
  - 2. Quite important
  - □ 3. Fairly important
  - 4. Slightly important
  - □ 5. Not at all important

| 7.  | Now thinking back over the pa<br>often did you enjoy being in so    | st year in school, how<br>chool? Pick one: | 18.                    | My teachers<br>Pick one:    | s praise m               | e when I wor                    | k hard in school.   |
|-----|---|--|------------------------|-----------------------------|--------------------------|---------------------------------|---------------------|
|     | □ 1. Almost always  | 🛛 4. Seldom                                |                        | □ 1. NO!                    | 🗆 2. No                  | o □ 3. Yes                      | □ 4. YES!           |
|     | 🗆 2. Often  | □ 5. Never                                 |                        | This costi                  | an acke                  | westions                        | houtvour            |
|     | □ 3. Sometimes  |  | f                      | eelings and                 | d experie                | ences in ot                     | her parts of        |
| 8.  | Now thinking back over the pa<br>often did you hate being in sch    | st year in school, how<br>nool? Pick one:  |                        | your lif                    | e and al                 | oout your f                     | riends.             |
|     | □ 1. Almost always  | 🛛 4. Seldom                                | 1.                     | I like to see               | how much                 | I can get awa                   | ay with. Pick one:  |
|     | 🗆 2. Often  | □ 5. Never                                 |                        | □ 1. Very fa                | lse                      | □ 3. Somew                      | hat true            |
|     | □ 3. Sometimes  |  |                        | ∐ 2. Somev                  | vhat false               | ∐ 4. Very tr                    | ue                  |
| 9.  | Now thinking back over the pa                                       | st year in school, how                     | 2.                     | l ignore rule               | s that get               | in my way. Pi                   | ck one:             |
|     | often do you try to do your bes<br>one:                             | st work in school? Pick                    |                        | □ 1. Very fa                | lse                      | □ 3. Somew                      | hat true            |
|     | □ 1. Almost always  | □ 4. Seldom                                |                        | 🗆 2. Somev                  | vhat false               | ☐ 4. Very tr                    | ue                  |
|     | □ 2. Often  | 5. Never                                   | 3.                     | I do the opp<br>them mad. F | oosite of w<br>Pick one: | hat people te                   | ell me, just to get |
|     | □ 3. Sometimes  |  |                        | ∏ 1 Verv fa                 | lse                      |                                 | hat true            |
| 10. | In my school, students have lo                                      | ots of chances to help                     |                        | □ 2. Somev                  | vhat false               | 4. Very tr                      | ue                  |
|     |   | es and rules. Pick one:                    | 4.                     | Have you ev                 | er belong                | ed to a gang?                   | Pick one:           |
| 44  |   | Yes LI 4. YES!                             |                        | □ 1. Yes                    | 🗆 2. No                  |                                 |                     |
| 11. | leachers ask me to work on cla<br>one:                              | assroom projects. Pick                     | 5.                     | lf you have                 | ever belo                | nged to a ga                    | ng, did the gang    |
|     | □ 1. NO! □ 2. No □ 3.   | Yes 4. YES!                                | have a name? Pick one: |                             |                          |                                 |                     |
| 12. | There are a lot of chances for                                      | students in my school                      |                        | □ 1. Yes                    |                          |                                 |                     |
|     | to get involved in sports, clu<br>activities outside of class. Pick | bs, and other school one:                  |                        | □ 2. No                     |                          |                                 |                     |
|     | □ 1. NO! □ 2. No □ 3.   | Yes 4. YES!                                |                        | □ 3. I never                | have belo                | onged to a ga                   | ng                  |
| 13. | There are lots of chances for s                                     | students in my school                      | 6.                     | closest to),                | in the pa                | st friends (the<br>st (12 month | s), how many of     |
|     | to talk with a teacher one-on-o                                     | one. Pick one:                             |                        | your best fr<br>Pick one:   | riends hav               | e been merr                     | bers of a gang?     |
|     | □ 1. NO! □ 2. No □ 3.   | Yes 4. YES!                                |                        | 🗆 1) None                   |                          |                                 |                     |
| 14. | I have lots of chances to be pa<br>or activities. Pick one:         | rt of class discussions                    |                        | □ 2) 1                      |                          |                                 |                     |
|     |   |  |                        | □ 3) 2                      |                          |                                 |                     |
| 15  | My teacher(s) notices when I  | am doing a good job                        |                        | <b>4</b> ) 3                |                          |                                 |                     |
| 10. | and lets me know about it. Pic                                      | k one:                                     |                        | □ 5) 4                      |                          |                                 |                     |
|     | □ 1. NO! □ 2. No □ 3.   | Yes 4. YES!                                | 7.                     | How old we gang? Pick c     | ere you w<br>one:        | hen you firs                    | t belonged to a     |
| 16. | I feel safe at my school. Pick o                                    | ne:  |                        | □ 1) Never                  | have                     |                                 | 6) 14               |
|     | □ 1. NO! □ 2. No □ 3.   | Yes 4. YES!                                |                        | □ 2) 10 or y                | ounger/                  |                                 | 7) 15               |
| 17. | The school lets my parents kn                                       | now when I have done                       |                        | □ 3) 11                     | -                        |                                 | 8) 16               |
|     |   |  |                        | □ 4) 12                     |                          |                                 | 9) 17 or older      |
|     | ⊔ 1. NO! ⊔ 2. No ⊔ 3.   | Yes 🛛 4. YES!                              |                        | □ 5) 13                     |                          |                                 |                     |
|     |   |  |                        |                             |                          |                                 |                     |

8. How wrong do you think it is for someone your age to...

|   | 1.<br>Very<br>Wrong | 2.<br>Wrong | 3.<br>A little<br>bit<br>wrong | 4.<br>Not<br>wrong<br>at all |
|---|---------------------|-------------|--------------------------------|------------------------------|
| <ol> <li>drink beer, wine or<br/>hard liquor (e.g.,<br/>vodka, whiskey or<br/>gin) regularly, that<br/>is, at least once or<br/>twice a month?</li> </ol> |                     |             |                                |                              |
| 2. smoke cigarettes?  |                     |             |                                |                              |
| 3. smoke marijuana?   |                     |             |                                |                              |
| 4. use LSD, cocaine,<br>amphetamines<br>or another illegal<br>drug?   |                     |             |                                |                              |
| 5. take a handgun to school?  |                     |             |                                |                              |
| 6. steal anything<br>worth more than<br>\$5.00?   |                     |             |                                |                              |
| 7. attack someone<br>with the idea of<br>seriously hurting<br>them?   |                     |             |                                |                              |
| 8. pick a fight with someone?   |                     |             |                                |                              |
| 9. stay away from<br>school all day<br>when their parents<br>think they are at<br>school?   |                     |             |                                |                              |

- 9. How many times have you done what feels good no matter what. Pick one:
  - 1. Never
  - $\Box$  2. I've done it, but not in the past year
  - $\Box$  3. Less than once a month
  - ☐ 4. About once a month
  - 5. 2 or 3 times a month
  - ☐ 6. Once a week or more

- 10. How many times have you done something dangerous because someone dared you to do it? Pick one:
  - 1. Never
  - $\Box$  2. I've done it, but not in the past year
  - $\Box$  3. Less than once a month
  - ☐ 4. About once a month
  - □ 5. 2 or 3 times a month
  - 6. Once a week or more
- 11. How many times have you done crazy things even if they are a little dangerous? Pick one:
  - 1. Never
  - $\Box$  2. I've done it, but not in the past year
  - $\Box$  3. Less than once a month
  - ☐ 4. About once a month
  - □ 5. 2 or 3 times a month
  - 6. Once a week or more
- 12. What are the chances you would be seen as cool if you smoked cigarettes? Pick one:
  - □ 1. None or very little chance
  - $\Box$  2. Little chance
  - □ 3. Some chance
  - □ 4. Pretty good chance
  - □ 5. Very good chance
- 13. What are the chances you would be seen as cool if you began drinking alcoholic beverages regularly, that is, at least once or twice a month? Pick one:
  - □ 1. None or very little chance
  - $\Box$  2. Little chance
  - □ 3. Some chance
  - □ 4. Pretty good chance
  - □ 5. Very good chance
- 14. What are the chances you would be seen as cool if you smoked marijuana? Pick one:
  - $\Box$  1. None or very little chance
  - $\Box$  2. Little chance
  - □ 3. Some chance

□ 4. Pretty good chance

□ 5. Very good chance

- 15. What are the chances you would be seen as cool if you carried a handgun (other than for hunting or sport)? Pick one:
  - □ 1. None or very little chance
  - 2. Little chance
  - $\Box$  3. Some chance
  - □ 4. Pretty good chance
  - $\Box$  5. Very good chance
- 16. What are the chances that you would be seen as cool if you worked hard at school?
  - □ 1. None or very little chance
  - 2. Little chance
  - □ 3. Some chance
  - □ 4. Pretty good chance
  - □ 5. Very good chance
- 17. What are the chances that you would be seen as cool if you defended someone who was being verbally abused at school?
  - □ 1. None or very little chance
  - 2. Little chance
  - □ 3. Some chance
  - □ 4. Pretty good chance
  - $\Box$  5. Very good chance
- 18. What are the chances that you would be seen as cool if you regularly volunteered to do community service?
  - □ 1. None or very little chance
  - 2. Little chance
  - $\Box$  3. Some chance
  - □ 4. Pretty good chance
  - $\Box$  5. Very good chance
- 19. What are the chances that you would be seen as cool if you made a commitment to stay drug-free?
  - $\Box$  1. None or very little chance
  - 2. Little chance

- □ 3. Some chance
- 4. Pretty good chance
- $\Box$  5. Very good chance
- 20. Think of your four best friends (the friends you feel closest to), in the past (12 months), how many of your best friends have....

|   | None | 1 | 2 | 3 | 4 |
|---|------|---|---|---|---|
| 1. smoked cigarettes?   |      |   |   |   |   |
| <ol> <li>tried beer, wine,<br/>or hard liquor (for<br/>example, vodka,<br/>whiskey, or gin) when<br/>their parents didn't<br/>know about it?</li> </ol> |      |   |   |   |   |
| 3. used marijuana?  |      |   |   |   |   |
| <ol> <li>used LSD, cocaine,<br/>amphetamines, or<br/>other illegal drugs?</li> </ol>  |      |   |   |   |   |
| 5. been suspended from school?  |      |   |   |   |   |
| 6. carried a handgun?   |      |   |   |   |   |
| 7. sold illegal drugs?  |      |   |   |   |   |
| 8. stolen or tried to steal a motor vehicle such as a motorcycle or a car?  |      |   |   |   |   |
| 9. been arrested?   |      |   |   |   |   |
| 10. dropped out of school?  |      |   |   |   |   |
| <ol> <li>participated in clubs,<br/>organizations, or<br/>activities at school?</li> </ol>  |      |   |   |   |   |
| 12. made a commitment to stay drug-free   |      |   |   |   |   |
| 13. liked school?   |      |   |   |   |   |
| 14. regularly attended religious services?  |      |   |   |   |   |
| 15. tried to do well in school?   |      |   |   |   |   |

21. Sometimes we don't know what we will do as adults, but we may have an idea. Please indicate how true these statements may be for you.

|   | 1.<br>NO! | 2.<br>No | 3.<br>Yes | 4.<br>YES! |
|---|-----------|----------|-----------|------------|
| 1. When I am adult I will smoke cigarettes                  |           |          |           |            |
| 2. When I am an adult I will<br>drink beer, wine, or liquor |           |          |           |            |
| 3. When I am an adult I will smoke marijuana                |           |          |           |            |

22. It is important to be honest with your parents, even if they become upset or you get punished. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

23. I think sometimes it is okay to cheat at school. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

24. I think it is okay to take something without asking if you can get away with it. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

25. It is all right to beat up people if they start the fight. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

- 26. How many times in the past year (12 months), have you participated in clubs, organizations, or activities at school?
  - 1) Never
  - □ 2) 1 or 2 times
  - □ 3) 3 to 5 times
  - □ 4) 6 to 9 times
  - □ 5) 10 to 19 times
  - □ 6) 20 to 29 times
  - □ 7) 30 to 39 times
  - □ 8) 40+ times
- 27. How many times in the past year (12 months), have you done extra work on your own for school?

1) Never

- □ 2) 1 or 2 times
- $\Box$  3) 3 to 5 times
- □ 4) 6 to 9 times

- □ 5) 10 to 19 times
- □ 6) 20 to 29 times
- □ 7) 30 to 39 times
- □ 8) 40+ times
- 28. How many times in the past year (12 months), have you volunteered to do community service?
  - 1) Never
  - 2) 1 or 2 times
  - □ 3) 3 to 5 times
  - □ 4) 6 to 9 times
  - □ 5) 10 to 19 times
  - □ 6) 20 to 29 times
  - □ 7) 30 to 39 times
  - □ 8) 40+ times
- 29. How often do you attend religious services or activities? Pick one:
  - 1) Never
  - 2) Rarely
  - $\Box$  3) 1 2 times a month
  - $\Box$  4) About once a week or more
- 30. In the past 12 months, have you seen a health professional (e.g. General Practitioner, Psychologist, and School Counsellor) because of any alcohol use, drug use, emotional problems or behavioral problems?

□ 1. Yes, I have seen a health professional for alcohol and/or drug related problems

□ 2. Yes, I have seen a health professional for emotional and/or behavioral problems

 $\square$  3. No, I have not seen a health professional for these reasons

#### These questions ask about how you would act in certain situations. They also ask your opinion about certain things.

- You are looking at CD's in the music store with a friend. You look up and see her slip a CD under her coat. She smiles and says, "Which one do you want? Go ahead; take it while nobody's around". There is no one in sight, no employees or other customers. What would you do now? Pick one:
  - □ 1. Ignore her
  - □ 2. Grab a CD and leave the store
  - □ 3. Tell her to put the CD back
  - □ 4. Act like it is a joke, and ask her to put the CD back
- 2. It is 8:00 on a weeknight and you are about to go over to a friend's house when your mother asks you where you are going. You say, "Oh, just going to go hang out with some friends." She says, "No, you'll just get into trouble if you go out. Stay home tonight" What would you do? Pick one:
  - $\Box$  1. Leave the house anyway
  - 2. Explain what you are going to do with yourfriends, tell her when you will get home, and ask if you can go out
  - □ 3. Not say anything and start watching TV
  - **4**. Get into an argument with her
- 3. You are visiting another part of the Island, and you do not know any of the people your age there. You are walking down the street, and some teenager you do not know is walking toward you. He is about your size, and as he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you say or do? Pick one:
  - □ 1. Push the person back
  - □ 2. Say "Excuse me"; and keep walking
  - □ 3. Say "Watch where you're going"; and keep walking
  - $\Box$  4. Swear at the person and walk away
- 4. You are at a party at someone's house, and one of your friends offers you a drink containing alcohol. What would you say or do? Pick one:
  - 1. Drink it
  - 2. Tell your friend "No thanks, I don't drink" and suggest that you and your friend go and do something else
  - □ 3. Just say, "No thanks" and walk away

□ 4. Make up a good excuse, tell your friend you had something else to do, and leave



1. Sometimes I think that life is not worth it. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

2. At times I think I am no good at all. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

3. All in all, I am inclined to think that I am a failure. Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

 In the past year have you felt depressed or sad MOST days, even if you felt OK sometimes? Pick one:

□ 1. NO! □ 2. No □ 3. Yes □ 4. YES!

5. How many times in the year (the last 12 months) have you...

|   | 1)<br>Never | 2)<br>1 to 2<br>Times | 3)<br>3 to 5<br>Times | 4)<br>6 to 9<br>Times | 5)<br>10 to 19<br>Times | 6)<br>20 to 29<br>Times | 7)<br>30 to 39<br>Times | 8)<br>40+<br>Times |
|---|-------------|-----------------------|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------|--------------------|
| 1. been suspended from school?  |             |                       |                       |                       |                         |                         |                         |                    |
| 2. carried a handgun (other than for hunting or sport)?   |             |                       |                       |                       |                         |                         |                         |                    |
| 3. sold illegal drugs?  |             |                       |                       |                       |                         |                         |                         |                    |
| 4. stolen or tried to steal a motor<br>vehicle such as a car or a mo-<br>torcycle?                                |             |                       |                       |                       |                         |                         |                         |                    |
| 5. been arrested?   |             |                       |                       |                       |                         |                         |                         |                    |
| 6. attacked someone with the idea of seriously hurting them?  |             |                       |                       |                       |                         |                         |                         |                    |
| 7. been drunk or high at school?  |             |                       |                       |                       |                         |                         |                         |                    |
| 8. taken a handgun to school?   |             |                       |                       |                       |                         |                         |                         |                    |
| 9. stolen something worth more than \$5?  |             |                       |                       |                       |                         |                         |                         |                    |
| 10. purposely damaged or de-<br>stroyed property that did not<br>belong to you (not counting<br>family property)? |             |                       |                       |                       |                         |                         |                         |                    |
| 11.taken something from a store without paying for it?  |             |                       |                       |                       |                         |                         |                         |                    |

# THANK YOU FOR YOUR PARTICIPATION END OF SURVEY

# REFERENCES

- Canadian Institute for Substance Use Research. (2018). Cannabis Use and Youth: A parent's guide. <u>https://www.heretohelp.bc.ca/workbook/cannabis-use-and-youth-a-</u> <u>parents-guide</u> (accessed April 21, 2020)
- Center for Disease Control and Prevention (CDC). (2024). Alcohol and Caffeine. <u>https://</u> <u>www.cdc.gov/alcohol/fact-sheets/caffeine-and-alcohol.htm</u> (accessed March 19, 2024).
- Cummins K, Lu Y. (2022). Adolescents' Perceptions of Substance Use Harms are Contingent on Mode of Administration and Type of Substance. Substance Abuse. National Library of Medicine. 2022 Aug 24;16:11782218221119584. doi: 10.1177/11782218221119584. PMID: 36032327; PMCID: PMC9411736. <u>https://www. ncbi.nlm.nih.gov/pmc/articles/PMC9411736/</u> (accessed March 19, 2024).
- Department for National Drug Control (2017). National household survey 2017. Government of Bermuda.
- Department for National Drug Control (2021). 2021 National Household Survey. Report of the National Household Survey on Drug Use and Health among the Adult Population in Bermuda. Government of Bermuda.
- E. Levari, M. Stefani, R. Ferrucci, Attilio Negri, O. Corazza. (2021). The dangerous use of inhalants among teens: A case report. Volume 1, 2021, 100006. <u>https://www. sciencedirect.com/science/article/pii/S2667118221000040</u> (accessed March 19, 2024).
- G. Powers., L. Berger. (2020). Alcohol mixed with energy drinks: Expectancies of use and alcohol-related negative consequences among a young adult sample. Addictive Behaviors Reports. <u>https://www.sciencedirect.com/science/article/pii/</u> <u>\$2352853220301073</u> (accessed March 19, 2024)
- Gordon, L. P. (2019). Vaping: What You Need To Know. KidsHealth from Nemours. Retrieved February 3, 2020, from http://kidshealth.org/en/parents/e cigarettes.html
- Hammond, D., Reid, J. L., Raynard, V. L., Fong, G. T., Cummings, K. M., McNeill, A., Hitchman, S., Thrasher, J.F., Goniewicz, M.L., Bansal-Travers, M., O'Connor, R., Levy, D., Borland, R., White, C.M. (2019). Prevalence of Vaping and Smoking among Adolescents in Canada, England, and the United States: Repeat National Cross Sectional Surveys. BMJ 2019; 365:12219. Retrieved February 3, 2020, from <u>http://bmj.com/ content/365/bmj.12219</u>
- Hawes S.W., Pacheco-Colón I, Ross J.M., Gonzalez R. (2020). Adolescent Cannabis Use and Conduct Problems: The Mediating Influence of Callous-Unemotional Traits. Int J Ment Health Addict. 2020 Jun;18(3):613-627. doi: 10.1007/s11469-018-9958-9. Epub 2018 Jul 12. PMID: 32742245; PMCID: PMC7394462. Retrieved March 19, 2024, from <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7394462/</u>

Jamaican Patwah. (2020). Definitions of "Grabba". Retrieved from <u>https://jamaicanpat-</u> wah.com/term/Grabba/1372#.XsvkILpFzN9

- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2022). Monitoring the future national results on adolescent drug use: Overview of key findings, 2011. Ann Arbor: Institute for Social Research, The University of Michigan. Retrieved March 19, 2024, from <u>https://deepblue.lib.umich.edu/bitstream/handle/2027.42/171751/mtf-overview2021.pdf</u>
- Leonard, J. (2020). Is Amyl Nitrate Safe? Retrieved from <u>https://www.medicalnewstoday.</u> <u>com/articles/324000</u>
- Lohmann C. Raychelle. (2019). Lethally High: Teenagers and Synthetic Drugs. Retrieved from <u>https://www.rehabs.com/pro-talk/lethally-high-teenagers-and-synthet-</u> <u>ic-drugs/</u>
- Miech R., Patrick M. E., O'Malley P.M., Johnston, L.D. (2017). What are kids vaping? Results from a national survey of US adolescents. *Tobacco Control*, 26(3), pp. 86-391.
- Ministry of National Security (2018). Report of the Trauma Indicator Checklist. Government of Bermuda.
- National Institute on Drug Abuse. (2021). *Is nicotine addictive?*. Retrieved March 19, 2024, from <u>https://nida.nih.gov/publications/research-reports/tobacco-nicotine-e-ciga-rettes/nicotine-addictive</u>
- Office of Adolescent Health. (2019). *Risks of Adolescent Alcohol Use*. Retrieved from <u>https://www.hhs.gov/ash/oah/adolescent-development/substance-use/alcohol/</u> <u>risks/index.html</u>
- SAMHSA. (2020). Talking with your teen about Marijuana: Keeping your Kids safe. Retrieved March 19, 2024, <u>https://www.samhsa.gov/sites/default/files/TTHY-Marijua-</u><u>na-Broch-2020.pdf</u>
- Steele, D. W., Becker, S. J., Danko, K. J., Balk, E. M., Adam, G. P., Saldanha, I. J., & Trikalinos, T. A. (2020). Brief behavioral interventions for substance use in adolescents: a meta-analysis. *Pediatrics*, 146(4).
- Wikipedia. (2020). Beedi. Retrieved from <u>https://en.wikipedia.org/wiki/Beedi</u>
- UK Rehab. (2024). Energy Drink Adiction. <u>https://www.uk-rehab.com/addiction/ener-gy-drinks/</u> (accessed March 19, 2024).
