

# BARBADOS NATIONAL PRIMARY SCHOOL SURVEY 2020

Drug Use & Related Issues Among  
the Primary School Population



National Council on  
Substance Abuse

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## Executive Summary

The Barbados National Primary School Survey 2020 examined drug use and related issues among Class 3 and Class 4 students (typically aged 9-11 years) enrolled in public and private primary schools across Barbados. It is the third of its kind to be conducted locally, with the previous surveys being conducted in 2006 and 2009.

The survey was primarily designed to determine: the prevalence and frequency of drug use, common drug sources and locations of use, as well as the age of first use for various substances. It also assessed a number of factors associated with drug use, including perceived risk, curiosity, access to drugs, parental involvement, school experience, social media use, video gaming and bullying.

### **Methodology**

A sample of 1958 students from 50 schools (46 public, 4 private) participated in the survey. The sample was selected using a two-stage stratified cluster methodology, with schools being selected at the first stage and classes at the second. Proportional sampling was employed, and a stratified sampling frame was used at both stages. The final sampling unit was the class; and therefore, all students in the selected classes were included in the sample.

Data was collected using a self-administered questionnaire consisting of 47 closed-ended items specifically designed for use in this survey. Questionnaire administration took place in a group setting within the classrooms of participating schools. The process was facilitated by a team of specially trained interviewers who read the questions aloud to each group. Students were instructed to mark their responses on the provided questionnaires. To ensure anonymity, they were asked not to write their names or provide any identifying information on their questionnaires.

## **Findings**

The weighted demographic profile of participants showed a near equal distribution with respect to gender (males=50.7%; females=49.1%) and grade (Class 3=49.4%; Class 4=50.6%). The mean age of participants was 10 years with a standard deviation (std.) of 0.732.

### *Drug Use*

Just over half (56.2%) of all students reported the use of any drug during their lifetime. Of the substances investigated, alcohol was most popular (lifetime prevalence=51.7%) followed by energy drinks (lifetime prevalence=39.7%) and inhalants (lifetime prevalence=20.9%). Notably fewer students reported lifetime use of tobacco cigarettes (4.8%), Fanta<sup>1</sup> (4.5%) and marijuana (4.3%). The average age of first use for all of the foregoing was between 7 and 8 years.

The past year and past month prevalence rates followed a similar pattern to that for lifetime prevalence. Alcohol (past year=26.9%; past month=18%), energy drinks (past year=25.2%; past month=18.7%) and inhalants (past year=12.6%; past month=8.6%) had the highest reported rates while those for tobacco cigarettes (past year=1.7%; past month=0.7%), marijuana (past year=2%; past month=1.2%) and Fanta (past year=2.3%; past month=1.5%) were notably lower.

Friends were the preferred source for tobacco cigarettes, Fanta and marijuana while parents/guardians were the most common source for energy drinks and alcohol. The home was the most common source for inhalants. With regards to location of use, the home was most commonly cited for all six substances.

In addition to the more traditional substances, the survey also investigated lifetime use of lean<sup>2</sup> and electronic cigarettes (e-cigarettes/vaping)<sup>3</sup>. Very few students have experimented with either of these - lean (3.3%) and e-cigarettes (4.1%).

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<sup>1</sup> Fanta is wild tobacco smoked in rolled cigarettes.

<sup>2</sup> Lean also known as “Purple Drank” or “Sizzurp” is a mixture of codeine cough syrup, soda and hard candy – typically sprite and Jolly Rancher.

<sup>3</sup> Electronic cigarettes or e-cigarettes are electronic devices that produce an aerosol by heating a liquid that usually contains nicotine – the addictive substance in tobacco cigarettes – and other chemicals that create the aerosol. Users inhale the aerosol into their lungs (Centers for Disease Control and Prevention, 2020).

*Risk and Protective Factors*

Protective factors are those which reduce the likelihood that an individual will use drugs while risk factors are those that make drug use more likely. Overall, students reported higher levels of protective factors.

For instance, most reported that their parents were involved in their daily lives and supervised their activities. Likewise, most also had a positive school experience, evidenced by their belief that they can do well at school, their ability to discuss troubling issues with their teacher and the fact that they feel as though they are a part of the school, just to name a few. Many also reported being involved in various extracurricular activities.

With regards to risk factors, it is noteworthy that very few students (18.7%) reported being curious about trying drugs. However, a large proportion reported social media use and video game use. In fact, approximately four out of every 10 students (42.3%) stated that they had used social media every day in the week preceding the survey while approximately three out of every 10 students (32.8%) reported daily video game use during the same time period. When compared, females were more likely to report daily social media use (47.7% vs 39.9%) while males were more likely to report daily video game use (44% vs 21.1%).

The literature also identifies bullying as a risk factor; and just under half (49.7%) of the students indicated that another student had tried to purposely hurt them in the month leading up to the survey while just over one quarter (27.7%) admitted to purposely trying to hurt another student during the preceding month.

Perception of harm and ease of access are also influential. Smoking cigarettes (89.1%), using marijuana (80.2%) and drinking alcohol (73.4%) were considered to be harmful by a large percentage of students. Fewer students believed smoking Fanta (66.8%), inhaling common products (56.4%), vaping (49.5%) and using lean (31.1%) to be harmful. With regards to ease of access, more students believed inhalants (55.5%), alcohol (40.9%) and tobacco cigarettes (27.7%) to be easy to obtain when compared with Fanta (18.5%), marijuana (12%), e-cigarettes (11.1%) and lean (6.9%).

### *Relationship Testing*

Statistical analysis was carried out to evaluate any relationships between drug use and the foregoing risk and protective factors. The results showed that drug use was associated with perception of harm and curiosity surrounding drug use.

Ease of access was associated with the use of select substances. Students who considered marijuana, inhalants and tobacco cigarettes to be easy to obtain were twice as likely to report lifetime use of alcohol, tobacco, inhalants or marijuana. Those who considered alcohol easy to obtain were three times more likely to report lifetime use of these substances.

There was also a statistically significant association between the lifetime use of tobacco cigarettes, alcohol, inhalants, marijuana and energy drinks and: past week social media use, past week video game use, being a bully and being a victim of bullying.

With regards to demographic characteristics, student gender was associated with the use of tobacco cigarettes, marijuana, Fanta and energy drinks while grade level was associated with alcohol and marijuana use.

### *Trend Analysis*

Where possible, trend analysis was conducted; however, this was limited due to differences in data collection across the three surveys.

A comparison of the 2006, 2009 and 2020 consumption patterns for alcohol (2006=49.3%; 2009=52.9%; 2020=51.7%), marijuana (2006=2.8%; 2009=4.8%; 2020=4.3%), tobacco cigarettes (2006=5.0%; 2009=7.2%; 2020=4.8%) and inhalants (2006=27.5%; 2009=44.9%; 2020=20.9%) shows that lifetime use increased between 2006 and 2009 but then decreased in 2020. Of particular note is the marked decrease in inhalant use between 2009 and 2020. In contrast, Fanta was the only substance which showed an increase in use between 2009 and 2020 (2009=3.4%; 2020=4.5%). It should be noted that no 2006 data was available for Fanta.

Gender analysis showed that the pattern of use among males was similar to that of the wider group, whereby cigarette, alcohol, inhalant and marijuana use decreased between 2009 and 2020 while the use of Fanta increased. Females differed in that they showed an increase in the use of alcohol, marijuana and Fanta.

Between 2009 and 2020, perception of harm decreased for alcohol (2009= 75.4%; 2020=73.4%), inhalant (2009= 61.2%; 2020=56.4%) and marijuana (2009=86.5%; 2020=80.2%) use but increased for tobacco use (2009=86.2%; 2020=89.1%). Fewer students also considered alcohol (2009=50.5%; 2020= 40.9%) and marijuana (2009=16.5%; 2020=12.0%) to be easy to obtain.

### **Conclusions**

Alcohol and inhalants were the main substances used by students and were found to have relatively high prevalence rates. Cigarette, marijuana and Fanta use was minimal, suggestive mainly of experimental use. The use of e-cigarettes, though minimal, is concerning given the health risks associated with this phenomenon.

The high use of energy drinks is notable as is the reported use of alcohol and energy drink mixes. Energy drinks pose potential risks for the health of children and adolescents and may contribute to obesity while the consumption of alcohol and energy drink mixes may be a marker for the increased risk of substance use or abuse. As such, parent education and routine screenings for the consumption of energy drinks, both alone and in combination with alcohol, should be facilitated.

Very few students have experimented with lean and, due to its dangerous nature, efforts should be made to deter increased use among the school population. Harmful effects include seizures, dizziness, loss of coordination, respiratory depression, changes in heart rhythm and loss of consciousness, to name a few. These can be even more pronounced if lean is consumed with alcohol. As such, students should be provided with drug education regarding the substance. However, this should be handled with care so as not to serve as a “how to” guide for those who are unfamiliar with the substance and may be prone to experimentation.

Age of first use appears to be an important factor in the clinical trajectory of drug abuse or dependence. This is important as the age of first substance use for participants in this survey was between 7 and 8 years, which is generally classified as early onset. As such, it is recommended that prevention and management strategies address subjects before adolescence, specifically before 13 years of age.

Despite being aware of the risks associated with drug use, many students in this survey still engaged in such behaviour. Given that risk perception is an important determinant of substance use, it is important that credible, accurate and relevant information be provided regarding the associated harms.

The ease of access to various drugs has been recognized as one of the main underlying causes of substance use among school children in the Caribbean. This survey supports that theory, as perceived ease of access significantly increased the risk for substance use among participants. Furthermore, the strong association between drug use and ease of access suggests that alcohol, tobacco cigarettes and other substances may be readily available and easily accessible to many students.

### **Recommendations**

1. Drug prevention education should be increased for students of all ages at the primary school level.
2. Drug prevention education should be delivered using a national approach coordinated by the NCSA. This should include:
  - a. The development and implementation of a national policy guiding the delivery of drug prevention education at primary schools
  - b. The identification and training of facilitators (e.g. teachers, parents, personnel from NGOs, etc.)
  - c. The development and delivery of a standardized curriculum/standardized modules to ensure that all facilitators are providing the same information
  - d. Continuous monitoring and evaluation of efforts

3. Efforts should be made to ensure the delivery of the drug prevention education module within the Health and Family Life Education curriculum.
4. Drug prevention education should include information on energy drinks, Fanta, e-cigarettes (vaping) and lean.
5. Social determinants associated with drug use should be factored into drug prevention efforts. These include but are not limited to: bullying, social media use and video game use.
6. At a wider level, parents should be educated about the drugs used by young persons as well as the associated dangers, the signs and symptoms of drug use and their role in drug prevention.
7. School-based prevention efforts should be buttressed with interventions at the community level.
8. Efforts should be made to further restrict children's access to drugs.

### **Take Home Message**

Drug use at the primary school level remains minimal and is primarily experimental. Nevertheless, its occurrence is concerning, particularly the young age at which persons report initiating use, as this can serve as a warning sign for problematic use later in life.

While prevalence rates have generally decreased since the conduct of the last survey in 2009, students report limited exposure to drug prevention education from their parents, teachers and friends as well as visitors to their school. Therefore, efforts should be made to increase such initiatives as this can facilitate a further reduction in drug use among primary school students.

Consideration should be given to using a coordinated approach involving the NCSA, teachers, parents and other stakeholders e.g. NGOs, civil society organizations and the Royal Barbados Police Force. In addition to ensuring a structured approach, all involved will benefit from shared human resources and technical input. This approach can be buttressed with initiatives which target parents and the wider community as children spend a large proportion of their lives outside of the school setting and can therefore be influenced by drug use and related activities in their environs.

## Key Findings

### Parental Supervision/Involvement

- Greater than 75% of respondents had a positive response (“yes”) to all items in this section. The highest proportion was related to the item – *“Most of the time, my parents/guardian(s) know where I am after school or on weekends”* -where 94% said “yes”.
- Just about six in every ten students (57.4%) believed their parents/guardian talks with their teacher.

### School Experience

- Overall, from 70% to as high as 98% of students had a positive perception with regards to school experience.
- Almost all students (97.8%) said they believe they can do well at school, with equally high proportions across gender and grade level (98%).

### Students’ Extra-Curricular Activities

- The four most prevalent extra-curricular activities identified by students were: lessons (28.5%), sports (27.6%), Cubs/Pathfinder (11.2%), and singing (10.9%).

### Using Social Media in the Past Week

- For the most part, a notable, large proportion of students overall (28.3%) said they did not use social media in the past week. However, four in ten students (42.3%) indicated they had used social media ‘everyday’—a higher proportion of females (47.7%) compared to males (39.9%). Females were more likely to indicate use of social media for 1-2 days when compared to males (18.1% versus 13.7%).

### Playing Video Games in the Past Week

- As with use of social media, a notable, large proportion of students overall (29.8%) said they did not play video games in the past week. However, three in ten students (32.8%)

indicated they had played video games ‘everyday’—twice as many males (44%) compared to females (21.1%).

### **Bullying in the Past Month**

- Just over a quarter of the students overall (27.7%) said that they had purposely tried to hurt another student in the month leading up to the survey — a significantly higher proportion of males (31.7%) compared to females (23.7%), but about equal proportions of Class 3 students (28%) compared to Class 4 students (27.3%).
- About half of the students overall (49.7%) said that another student had purposely tried to hurt them during the preceding month.

### **Sources of Information**

- Four out of every ten students said parents never spoke to them about drugs (40.9%), while 36.7% said teachers never spoke to them, 63.6% said friends never spoke to them and 33.3% indicated that visitors to the school never spoke to them. For the most part, when information was shared, it was mostly done ‘sometimes’ and mainly by teachers (39.7%) followed by visitors to school (38.6%), parents (30.6%) and then friends (19.4%).

### **Access to Drugs**

- More than half of all students felt that it was easy to access inhalants (55%). The substance that ranked second in terms of ease of access was alcohol (40.9%) followed by cigarette (27.2%), Fanta (18.5%), marijuana (12%), e-cigarettes (11.1) and Lean (6.9%).
- Females were more likely to indicate that it was easy to obtain inhalants compared to males (57.2% versus 54.2%). Males were more likely to indicate that it was easy to access all other substances.

### **Perception of Harm**

- A notably high proportion of students believed that using marijuana was harmful (eight of every ten students overall (80.0%). Seven of every ten believed that drinking alcohol

was harmful (73.4%) while six of every ten (66.8%) believed that smoking Fanta was harmful. Smaller proportions, 56.4% for inhalants, 49.5% for e-cigarettes and 31.1% for Lean, felt that it was harmful to use these products.

### **Curiosity about Trying Drugs**

- Overall, 18.7% of students reported being curious about trying drugs, 19.6% of males, 17.6% of females.

### **Cigarettes**

- Overall lifetime prevalence of cigarette use was 4.8%. Past year prevalence was 1.7% while less than one percent (0.7%) of the students in the survey had used cigarettes during the past month.
- The average age of first use for cigarettes overall was 7.5 years, the second lowest among all substances.
- ‘Friends’ was the preferred source overall, with the other important sources being ‘on the block’, the shop, other relatives and, to a lesser extent, siblings.
- The most frequently identified locations of use were the home, a friend’s house, ‘on the block’ or other social events in rank order.

### **Alcohol**

- Overall lifetime prevalence of alcohol use was 51.7% - more than half of the students reported having tried alcohol. Past year prevalence was 26.9% while 18% of the students reported using alcohol during the past month.
- The average (mean) age of first use for alcohol overall was 7.9 years.
- The preferred source overall was parents/guardians. Other relatives were also important sources from which alcohol was obtained.
- The locations where alcohol was most often consumed were the home, social events or at some ‘other place’.

### **Inhalants**

- The overall lifetime prevalence rate for inhalants was 20.9%, with 12.6% of the students reporting use during the past year and one in every eleven students (8.9%) in the past month.
- The average (mean) age of first use of inhalants overall was 7.0 years.
- The preferred sources overall were some ‘other place’, parents/guardian, the kitchen or parent’s/guardian’s bedroom.
- The most common places where inhalants were used were the home or school.

### **Marijuana**

- The overall lifetime prevalence rate for marijuana use was 4.3% - about one in twenty-five students reported having tried marijuana. Two percent (2%) of the students reported use in the past year and just about one percent (1.2%) during the past month.
- The average (mean) age of first use for marijuana overall was 8.2 years (highest overall average among all substances).
- Friends was the preferred source overall. Other important sources were ‘on the block’, parents/guardian and siblings.
- The most common places of use were the home, a friend’s house, ‘on the block’ or some ‘other place’.

### **Fanta**

- Overall, the lifetime prevalence rate for Fanta was 4.5%. Past year prevalence was 2.3% while just about one and a half percent (1.5%) of the students had used Fanta during the past month.
- The average (mean) age of first use for Fanta overall was 7.8 years
- Friends were the preferred source overall. Other important sources were ‘on the block’, parents/guardian and other relatives.
- The most commonly identified places of use were the home, a friend’s house, ‘on the block’ or some ‘other place’.

### Energy Drinks

- Overall, the lifetime prevalence of energy drink use was 39.7% - about one in four students reported having tried energy drinks. Approximately one quarter (25.2%) of the students had used energy drinks in the past year and 18.7% during the past month.
- The average (mean) age of first use for Energy drinks overall was 7.8 years.
- The preferred sources were parents/guardian and the shop.
- The most common locations where energy drinks were consumed were the home and sporting events.

### Other Consumption Patterns

- Overall, the lifetime prevalence rate for the **mixture of alcoholic beverages and energy drinks** was 13.3% - about one in seven students reported having tried this mixture - lifetime prevalence was notably different among males (15.3%) and females (11.2%).
- For **e-cigarettes**, overall lifetime prevalence was 4.1% (three times higher among males (6.1%) when compared to females (2.1%).
- Prevalence rates for **Lean** (3.3%) and **'any other drug'** (2.3%) were notably low.
- Prevalence of 'any use' was 56.2% - more than half of all students overall had used at least one of the following substances: cigarettes, alcohol, marijuana, or inhalant products.

### Relationship between Lifetime Substance Use with Gender and Grade Level

- Prevalence among males was significantly different from that of females with regards to the use of cigarettes ( $p < 0.05$ ), marijuana ( $p < 0.01$ ), energy drinks ( $p < 0.001$ ) and Fanta ( $p < 0.001$ ).
- There were statistically significant differences for alcohol use ( $p < 0.01$ ) and marijuana use ( $p < 0.01$ ) by grade level.

### Association between Lifetime Use of Any Substance and Ease of Access

- Students who felt that marijuana was easy to obtain were two times more likely (Odds Ratio = 2.034) to report lifetime use: marijuana, inhalants, cigarettes or alcohol.

- Students who felt that inhalants were easy obtain were two times more likely (Odds Ratio =2.140) to report lifetime use of any of the four substances.
- Students who felt that cigarettes were easy to obtain were more than two times more likely (Odds Ratio =2.395) to report lifetime use of any of the four substances.
- Students who felt that alcohol was easy to obtain were three times more likely (Odds Ratio =3.288) to report lifetime use of any of the four substances.

#### **Association between Curiosity and Drug Use**

- Students who reported that they had ever been curious about trying drugs were more than one and a half times more likely (Odds Ratio =1.6) to report ‘any use’ (i.e. use of either cigarettes, alcohol, marijuana or inhalants).

#### **Relationship between Bullying and Gender and Grade Level**

- There was a statistically significant difference between the proportions of males and females (9.6 percentage points) who reported purposely trying to hurt other students,  $p < 0.001$ .
- A higher proportion of Class 3 students reported that other students had purposely tried to hurt them when compared those in Class 4 (4.4 percentage points), and this difference was approaching statistical significance,  $p = 0.056$ .

#### **Relationship between Substance Use and Bullying**

- The rate of ‘any drug’ use among those who were bullied (60.2%) was higher than that among those who had not been bullied (49.6%). This difference was statistically significant,  $p < .001$ .
- The rate of ‘any drug’ use was significantly higher among those who had purposely tried to hurt other students (71.9%) than that among those who had not (48.5%),  $p < 0.001$ .

#### **Social Media and Video Game Use with Gender and Grade Level**

- Social media use was significantly different among males and females (OR=1.29, females were 1.2 times more likely to use social media in the past week).

- A notably higher proportion of Class 3 students compared to Class 4 students reported that they had played video games in the past week and this difference (10.2 percentage points) was statistically significant (OR=1.34, Class 3 students were 1.3 times more likely to have played video games).
- There was also a statistically significant difference between the proportions of males and females (23.1 percentage points) who reported playing video games (OR=2, males were two times more likely to report playing video games in the past month).

### **Relationship between Drug Use and Social Media and Video Game Use**

- There was a statistically significant association between lifetime use of cigarettes, alcohol, inhalants, marijuana and energy drinks and the past week use of social media and video games.
- A strong association was observed between cigarette use and video games (OR=4.064), marijuana use and video games (OR=4.034), cigarette use and social media OR=4.431), marijuana use and social media (OR=2.954).

### **Substance Use with Perception of Harm**

- Students who felt there was no harm in using substances reported a higher prevalence of lifetime, past year and past month use compared to students who felt it was harmful to use the substances.

## Background

### **Country Overview**

Barbados is the most easterly island within the Commonwealth Caribbean. It measures 166 square miles and is divided into 11 parishes. The capital, Bridgetown, is situated in the most populous parish: St. Michael. Topographically, Barbados is flat with its highest peak, Mount Hillaby in St. Thomas, being 336 metres above sea level.

The country's most recent census, conducted in 2010, indicated a population of 277, 821 persons (males: 133, 018; females: 144, 803) (Barbados Statistical Service, 2013) comprised of various ethnic groups. The estimated distribution of these groups is as follows: black 92.4%; mixed 3.1%; white 2.7%; East Indian 1.3%; other 0.2%; unspecified 0.2% (Index Mundi, 2018). With regards to age, children (0 to 14 years) make up 19.7% of the population while the elderly (ages 65 and over) account for 12.9% (Barbados Statistical Service, 2013).

The residents of Barbados generally enjoy a high standard of living due to the island's continued political, social and economic stability. Since gaining independence on November 30, 1966, the country has maintained a system of parliamentary democracy. The government is headed by a Prime Minister while the Governor General serves as the head of state, representing Queen Elizabeth II. The Bicameral parliament in Barbados consists of the Senate and the House of Assembly. Elections are constitutionally due every five years and are conducted using the first-past-the-post elections system.

Historically, the sugar industry was Barbados' primary foreign exchange earner; however, tourism, light industry and the offshore financial services industry have since taken its place.

### **Education in Barbados**

Education is universally accessible and is compulsory for those between five and 16 years of age. This has contributed to the island having a literacy rate of approximately 99.7%, one of the highest in the world (International Monetary Fund, 2018).

The island's education system is largely modeled on the British system and is divided into four main levels: pre-primary (ages 3-5), primary (ages 5-11), secondary (ages 11-16) and post-secondary/tertiary (ages 16+) (Ministry of Education, Science, Technology & Innovation, 2015).

The Government provides free pre-primary, primary, secondary and tertiary education to all citizens. As such, education is predominantly offered by public institutions at all levels (Ministry of Education, Science, Technology & Innovation, 2015). Nevertheless, there are several private pre-primary, primary and secondary schools on island.

As of January 2019, there were: 12 public and 10 private nursery schools, 68 public and 23 private primary schools, 21 public and 10 private secondary schools and 4 tertiary institutions registered with the Ministry of Education, Technological and Vocational Training in Barbados (Ministry of Education, Technological and Vocational Training, personal communication, June 24, 2019).

### **The Local Drug Situation**

Due to its location, Barbados is one of many trans-shipment points for drugs en route from South America to Europe, West Africa, the Virgin Islands, Puerto Rico and the United States (Overseas Security Advisory Council, 2014). While the island is not a major drug producing country, there is some small-scale cultivation of marijuana.

Reports from the Barbados Drug Information Network (BARDIN) show that marijuana, alcohol and cocaine (crack and powdered) are the three main drugs which characterize the local drug situation. However, data from treatment centres as well as drug seizure data from the Royal Barbados Police Force suggest that this traditional profile is slowly diversifying to include substances such as ecstasy, crystal meth, amphetamines and opioids (National Council on Substance Abuse, 2020). Anecdotal reports also suggest the use of synthetic marijuana and lean (a combination of codeine cough syrup, sprite and jolly rancher candy) as well as vaping among the local population.

### **The National Council on Substance Abuse**

The National Council on Substance Abuse (NCSA), established in 1995 under the aegis of the Ministry of Home Affairs, is the agency responsible for drug demand reduction activities across the island. The Council conducts a wide range of drug prevention programmes and interventions at the community, primary and secondary school levels, targeting persons from youth to adulthood.

In addition to its general programming, the NCSA also conducts research on various topics within the substance abuse field. The findings of such studies highlight current trends and issues as well as serve as a useful guide for programme and policy development. As such, it is imperative that research be regularly conducted to ensure the availability of up-to-date findings.

In this regard, the NCSA conducted the Barbados National Primary School Survey 2020. It is the third of its kind to be conducted locally. Like those conducted in 2006 and 2007, the 2020 survey examined drug use and related issues among the primary school population.

## Introduction

International research has shown that drug use during early adolescence is predictive of substance abuse disorders in adulthood and is associated with risky sexual behaviours, early pregnancy, low educational attainment and involvement in crime, just to name a few (Atherton, Conger, Ferrer & Robins, 2016). Therefore, preventing the early onset of drug use is critical. Current and reliable research is needed to inform an evidence-based approach and information regarding drug use among the younger population is typically gathered through school drug surveys.

### **School Surveys**

School drug surveys are designed to evaluate drug use and related issues among students and are administered within the school environment. They are popular as they allow many young persons to be surveyed in a single session, thereby making them an efficient and cost-effective means of collecting data (United Nations Office on Drugs & Crime, 2003). When conducted at regular intervals, these surveys also allow for the monitoring of changes in drug consumption patterns. As such, many well-known school surveys are designed to be carried out every 2 (e.g. Inter-American Drug Use Data System School Surveys; Ontario Student Drug Use and Health Survey) to 4 years (e.g. European School Survey Project on Alcohol and Other Drugs).

### **Drug Use among the Primary School Population**

To date, the National Council on Substance Abuse (NCSA) has conducted five school surveys in Barbados: three at the secondary school level (2002, 2006, 2013) and two at the primary school level (2006, 2009). These surveys have shown alcohol, marijuana, inhalants and tobacco to be the substances most commonly used by local school children (National Council on Substance Abuse [NCSA], 2006; 2010; 2015). Of these, alcohol is the most popular (NCSA, 2006; 2010; 2015).

While the use of illicit drugs, including marijuana (lifetime prevalence rate: 2006= 2.8%; 2009= 4.8%), has been found to be very low among primary school students in Barbados, approximately half have experimented with alcohol (lifetime prevalence rate: 2006=49.3%;

2009=52.9%) (NCSA 2006; NCSA, 2010). With regards to tobacco, 7.2% of those taking part in the 2009 primary school survey indicated that they had used tobacco cigarettes at least once in their lifetime, up from 5.1% in 2006 (NCSA, 2006; NCSA, 2010). The 2009 survey also revealed an increase in the use of inhalants among the primary school population, with just under half (44.9%) of the students reporting experimentation with such substances, up from 27.5% in 2006 (NCSA, 2006; NCSA, 2010).

A similar primary school survey was conducted in Bermuda in 2012. In addition to the substances investigated in Barbados, this survey also examined the use of energy drinks. The prevalence rates for drug use were as follows: energy drinks (52.3%), alcohol (25.2%), inhalants (15.3%), marijuana (3.4%) and tobacco (3.1%) (Department for National Drug Control, 2013). Except for energy drinks, this pattern is generally consistent with that previously found in Barbados. However, it is noteworthy that Bermuda's prevalence rates were lower than those of Barbados, particularly those for alcohol and inhalants which were markedly lower.

It should be noted that the Barbados and Bermuda surveys were the only surveys specifically targeting the population of interest (students between the ages of 9 and 11) that could be found for the purposes of this literature review. A search of various journal databases suggested that most school surveys across the world are conducted with secondary school and high school students, starting at age 12. As such, the findings from the Barbados and Bermuda school surveys will be supplemented, where appropriate, with the results from secondary school and high school surveys.

### **Age of First Use**

The 2006 Barbados Primary School Survey revealed that approximately half of the students who reported using marijuana (43.8%), alcohol (54.0%) or tobacco (45.8%), first did so between the ages of 9 and 11 (NCSA, 2006). Inhalants, on the other hand, tended to have a lower age of first use with 43.1% of students reporting that they had first used such substances between the ages of 6 and 8 (NCSA, 2006). Due to differences in reporting style, similar statistics were not available for the 2009 Barbados Primary School Survey.

The 2012 Bermuda Primary School study reported somewhat lower ages of first use. The average age of first use for alcohol was 7.8 years, tobacco was 7.7 years and inhalants was 7.6 years (Department for National Drug Control, 2013). The average age of first use was marginally higher for energy drinks (8.2 years) and marijuana (8.3 years) (Department for National Drug Control, 2013).

Surveys targeting secondary school and high school students have discovered higher ages of first use than those found in the aforementioned primary school surveys. While the ages differ according to drug and the age of the survey respondent, such studies have shown them to be between 11 (Inter-American Drug Abuse Control Commission, 2016) and 15 years (Boak, Elton-Marshall, Mann & Hamilton, 2020; Miech, Johnston, O'Malley, Bachman, Schulenberg & Patrick, 2019). This trend suggests that the reported age of first use tends to increase as the age of the survey respondent increases. This may be due in part to the fact that older students have a longer age span over which they can report initiation (Miech et al, 2019).

### **Drug Sources and Locations of Use**

While drug sources and locations of use typically vary depending on the substance in question, school surveys have shown that common sources include: parents/guardians, siblings and other relatives, friends, shops, and street vendors just to name a few (Boak et al., 2020; NCSA, 2010; Department for National Drug Control, 2013). Likewise, they have shown that common locations for drug use include: the home, friends' houses, the block, and social events (NCSA, 2010; Department for National Drug Control, 2013).

In Barbados, the family (parents, siblings, other family members) is the most common source for alcohol (NCSA, 2010). This coincides with the findings from the 2012 Bermuda Primary School Survey and the 2019 Ontario Student Drug and Health Survey, both of which also found the family to be the most common source for this substance (Boak et al., 2020; Department for National Drug Control, 2013). It is also consistent with the fact that the home was cited as the most common location for alcohol consumption among the Barbadian primary school population (NCSA, 2010).

Friends have been found to be the most common source for tobacco and marijuana among students of various ages and in multiple countries while the home has been identified as the most common location of use in Barbados (Boak et al., 2020; Department for National Drug Control, 2013; NCSA, 2010). Similarly, the home has also been identified as the most common source of, and location of use for, inhalants (Department for National Drug Control, 2013; NCSA, 2010).

With regards to energy drinks, the Bermuda Primary School Survey found that most students purchased these beverages themselves and consumed them at home (Department for National Drug Control, 2013).

### **Factors Associated with Drug Use**

Research has uncovered various factors associated with drug use among adolescents. Studies have shown that those who report a willingness to try drugs and/or have thoughts about trying drugs are more likely to use and/or abuse such substances (Atherton et al, 2016). Likewise, those who report easy access to drugs and lower levels of perceived harm surrounding drug use are also more likely to engage in substance use (Atherton et al, 2016; Lipari, 2013).

With regards to the family, the quality of the parent-child relationship and parenting practices are important (Kliewer & Murrell, 2007). Level of parental supervision is particularly influential, as failure to monitor adolescents' behaviour increases the opportunity for drug use (Durand et al, 2013; Kliewer & Murrell, 2007).

School experience is another factor which is often associated with drug use. Researchers have shown that a connection to school can decrease the likelihood of drug use among adolescents (Resnick et al, 1997). Conversely, disengagement from school is a risk factor, as disengaged youths may seek affiliation with deviant peers who may introduce them to drug use (Kliewer & Murrell, 2007). The student-teacher relationship is also influential, as students who report having positive relationships with their teachers tend to report lower levels of drug use (Kliewer & Murrell, 2007; National Advisory Committee on Drugs, 2010).

In addition to the foregoing, there are also several other social factors associated with drug use, one of which is social media use. Research has shown that adolescents who use social media are more likely to report drug use than those who do not; and the risk is even higher for those who have viewed pictures of children or teens getting drunk, using drugs or getting high on Facebook and other social networking platforms (Centre for Addiction & Substance Use, 2012; Costello & Ramo, 2017). This points to the highly influential nature of social media.

Like social media, video gaming has also been proposed as a digital factor related to drug use. However, the findings have been inconsistent. Some studies have identified a relationship between gaming and drug use while others have uncovered no such link (Armstrong, Bush & Jones, 2010; McClure & Mears, 1986; Walther, Morgenstern, & Hanewinkel, 2012; Wenzel, Bakken, Johansson, Götestam, & Øren, 2009). Interestingly, another set of researchers found a U-shaped relationship, suggesting that light-gaming (1 to 5 hours per week) may be a protective factor while excessive gaming (at least 30 hours per week) may increase the risk for substance use (Turel & Bechara, 2019).

Lastly, bullying has been consistently associated with substance use. The evidence suggests that bullies engage in drug use at higher rates than students who do not bully their peers (Durand et al, 2013; Radliff, Wheaton, Robinson & Morris, 2012). Similarly, higher rates of drug use have been found among bullies as compared to victims of bullying (Liang, Flisher, & Lombard, 2007).

## Methodology

### **Rationale for the Current Study**

While research has been conducted on drug use and related issues at the primary and secondary school levels in Barbados, much of what exists is outdated - particularly with respect to primary school children. This is of concern given the dynamic nature of the drug situation and the frequent introduction of new drugs. Similarly, the previous surveys did not examine factors such as social media use, video gaming and bullying. As such, the current survey satisfies the need for current and more expansive data on the primary school population, which, in turn, can be used to develop policies and programmes aimed at preventing drug use among this group.

### **Research Objectives**

1. To determine the prevalence of drug use among primary school students.
2. To determine the age at which drugs (legal and illegal) are first used by primary school students.
3. To determine students' perceptions regarding:
  - a. access to drugs
  - b. the level of harm associated with drug use
4. To identify the main sources and locations of use for primary school students.
5. To assess the following among primary school students:
  - a. The level of parental involvement
  - b. School experience
  - c. The level of participation in extra-curricular activities
  - d. The level of curiosity surrounding experimentation with drugs
  - e. The prevalence of bullying
  - f. The prevalence and frequency of social media use
  - g. The prevalence and frequency of video/internet gaming
6. To determine if there is a relationship between drug use at the primary school level and:
  - a. Gender
  - b. Grade level
  - c. Bullying
  - d. Social media use
  - e. Video/internet gaming

- f. Curiosity surrounding experimentation with drugs
- g. Access to drugs
- h. Perception of harm associated with drug use
- i. Parental involvement
- j. School experience
- k. Participation in extra-curricular activities

7. To examine trends in drug use over time.

### **Survey Implementation**

As was previously mentioned, this survey is the third in a series of periodic surveys classified as The National Primary School Survey conducted by the NCSA. The current survey was implemented with a similar methodology to that used in 2006 and 2009 but entailed minor changes to the questionnaire to make it more up-to-date with the current social issues and substances being used.

### **Sample Domains**

The ultimate sampling unit (USU), for operational reasons, was the class. All students from the selected classes needed to be included in the sample and therefore, the methodology for this survey required the use of two-stage probability sampling. This involved selecting schools with a probability proportional to the number of classes in the first stage and Class 3 and Class 4 students from each selected school in the second stage. In both stages, systematic selection from a stratified sampling frame was used.

The sample domains are defined as the analytical subgroups for which equally reliable estimates were required. The agreed sampling domains for this survey were:

1. The principal town (St Michael, representativeness for the country's capital or metropolitan area
2. Other parishes
3. Private schools

## **Target Population**

The target population for this survey was *all students enrolled in Classes 3 and 4 in Barbados*. According to the most up-to-date enrolment provided, approximately 4518 students were eligible for selection for this survey.

## **Sample Design**

The design for this survey was a two-stage stratified cluster probability sample. The sample was selected in stages to maximize its efficiency. The stratification of the sample ensured an adequate spread within the sampling domains and across the eleven (11) parishes. The clustering of survey elements in this sample design allowed for a reduction in administrative, travel and other data collection costs. The three stages of this sample design were:

- Stage 1: Selection of parishes
- Stage 2: Selection of schools
- Stage 3: Selection of students (respondents)

## **Stratification**

The sample was explicitly stratified by the three domains specified earlier, namely the principal parish, other parishes and private schools. Within each domain, the sample was implicitly stratified by parish.

*Clustering* - all parishes were selected to give the widest representation across the island. During the next stage of sampling, clusters of schools were randomly selected within each parish. Within each school, classes (3 and 4) were selected systematically to be representative of that parish. This allowed for better management of interviewer workload, the sample size and survey costs.

## Sample Frame

The sampling frame was based on the data and enrolment materials for 2017/18. It was organized based on the list of schools and the distribution of students by grades and gender in each school in Barbados.

## Sample Size

The sample size per stratum (Class 3 and Class 4) was determined based on the following key assumptions:

1. The desired level of confidence for key estimates is 95%. This was represented by the value of the corresponding two-tailed z-statistic (1.96).
2. The proportion of students who are aware of drugs and related drug issues was conservatively assumed to be at least 50% of the target population.
3. The anticipated response rate for this survey was 97% (response to enough questions to make each survey usable). This is an acceptable assumption based on current trends in response rates in school surveys in the region.
4. Based on previous surveys, 100% of classes were expected to have at least one eligible respondent.
5. The desired margin of error of the estimates was 5%.

### EQUATION 1: SAMPLE SIZE FORMULA

$$n = \frac{Z^2 * (p) * (1-p)}{I * r * e^2}$$

$$(1.96)^2 * .5 * .5 / (0.05)^2 * .97 = 396$$

Given that there were three strata (St. Michael, Other parishes and private schools), the total sample size was therefore:  $396 \times 3 = 1188$  for each class to give total expected sample of  $(1188 \times 2) = 2376$

## Sample Allocation

Table 1: Sample Frame and Expected Class Sample

	Total number of students surveyed versus total number in all classes				Expected number of students to be surveyed (class sample)		
	Class 3 surveyed	All Class 3	Class 4 surveyed	All Class 4	Class 3	Class 4	Total
Blackman & Gollop Primary	26	76	26	87	26	25	51
Christ Church Girls	19	65	24	85	26	21	47
Gordon Walters Primary	26	38	25	40	26	25	51
Milton Lynch Primary	19	39	19	44	22	19	41
St. Christopher Primary	17	36	24	47	21	21	42
St. Lawrence Primary	9	9	16	16	14	17	31
A. DaCosta Edwards Primary	20	20	19	19	18	19	37
Cuthbert Moore Primary	17	32	21	39	17	21	38
St. George Primary	26	57	25	55	26	25	51
St. Luke Primary	10	10	10	10	8	14	22
Gordon Greenidge Primary	19	22	19	28	24	19	43
St. James Primary	16	17	19	19	19	16	35
West Terrance Primary	25	106	29	98	28	29	57
Mount Tabor Primary	16	16	18	25	13	16	29
St. Margaret's Primary	12	12	17	17	14	16	30
St. Bernard Primary	12	19	20	20	12	20	32
St. Elizabeth Primary	9	9	12	12	17	12	29
Selah Primary	14	14	16	16	13	16	29
St. Lucy Primary	17	17	12	12	16	12	28
Bay Primary	15	58	23	63	24	22	46
Belmont Primary	15	21	20	35	17	18	35
Charles F. Broome Mem Primary	23	100	25	100	24	25	49
Deacons Primary	21	34	22	51	23	22	45
Eagle Hall Primary	21	34	17	33	22	18	40
Eden Lodge Primary	23	76	27	80	23	27	50
George Lamming Primary	19	81	20	66	20	20	40
Grazettes Primary	4	29	12	32	23	23	46
Grantley Prescod Memorial	21	46	27	51	21	27	48
Hindsbury Primary	25	72	27	56	25	27	52
Lawrence T. Gay Primary	23	86	20	69	23	22	45
Luther Thorne Memorial	23	84	19	90	20	23	43

St. Ambrose Primary	19	22	13	14	20	14	34
St. Giles Primary	16	63	14	79	22	22	44
St. Mary Primary	15	34	18	35	17	23	40
St. Matthew Primary	8	8	17	17	16	22	38
St. Paul Primary	32	64	32	66	29	34	63
St. Stephen Primary	13	112	20	107	28	20	48
Westbury Primary	15	45	20	47	15	19	34
Wilkie Cumberbatch Primary	28	92	22	81	21	24	45
Roland Edwards Primary	23	40	21	29	23	21	44
Hilda Skeene Primary	27	65	21	56	27	20	47
St. Mark's Primary	15	15	22	22	14	18	32
St. Martin Mangrove Primary	14	29	19	36	14	19	33
Hillaby/Turners Hall Primary	33	47	24	50	28	22	50
Sharon Primary	23	66	18	63	23	18	41
Welches Primary	24	28	23	18	23	24	47
Expected Totals from Public Schools	867	2065	934	2135	945	957	1,902
St. Gabriel's	23	47	25	49	23	25	48
St. Angela's	21	46	20	41	23	20	43
Trinity Primary	16	30	16	30	16	16	32
Seventh Day Adventist	22	42	14	33	20	17	37
Expected Totals from Private Schools	82	165	75	153	82	78	160
Grand Totals	949	2230	1009	2288	1027	1035	2,062

### **Survey Administration**

To achieve the above-mentioned objectives, a quantitative survey was conducted among a sample of 1958 Class 3 and Class 4 students drawn from 50 public and private primary schools across the 11 parishes.

The research instrument used was a self-administered questionnaire which consisted of closed-ended questions. Overall, the questionnaire comprised 47 questions (203 variables) and was structured according to the following sections:

1. Demographics
2. Parental supervision/involvement
3. School environment
4. Other social determinants
5. Sources of information
6. Access to drugs
7. Perception of harm

8. Reasons for drug use
9. Curiosity
10. Prevalence of drug use

Given the young age of the participants, simple language was used and the Ministry of Education, Technological and Vocational Training was consulted to ensure the appropriateness of all items. The Ministry of Health and Wellness also provided feedback on the content of the questionnaire.

The draft questionnaire was piloted among 41 students (Class 3: 21; Class 4: 20) at the Wesley Hall Junior School and adjustments were made in accordance with the feedback from this process. Based on the pilot test, it was determined that the instrument would take approximately 45 minutes to 1 hour to complete.

The official survey process was facilitated by trained interviewers contracted by the NCSA. Questionnaire administration took place within a group setting in the classrooms at participating schools. The questionnaire was read aloud to each group and students were instructed to mark their responses on the provided instruments. To protect the anonymity of participants, they were asked not to write their names or any identifying information on the questionnaires.

It should be noted that teachers were asked to leave the room prior to the start of the data collection process in an effort to promote honesty in students' responses. Participants were encouraged to direct questions to members of the data collection team should they require clarification on any item; and those with literacy problems were identified and assisted, where possible, by the interviewers.

Completed questionnaires were returned to the interviewers who placed them in envelopes which were then sealed and transported to the NCSA for data entry and storage.

## **Data Analysis**

Data entry was conducted at the NCSA, where packages were unpacked, counted, numbered, and batched for data entry in Microsoft Excel. Following data entry, the data was verified and cleaned in preparation for analysis. Once this process was completed, the data was then exported to the Statistical Package for Social Sciences (SPSS) for analysis.

Descriptive analysis was carried out to determine the distribution of variables. Bivariate analysis was performed to explore the relationship between two variables, i.e. whether there were differences between the variables and the significance of these differences (chi-square test) or whether there was an association and the strength of that association (Odds Ratios). We report a difference as statistically significant if the probability is at the 0.05 level or lower.

## **Weighting the Sample**

The 2020 survey was weighted during analysis to provide for computation of population estimates. Using survey weights enables one to make correct inferences about the finite population that is represented by the survey.

Sampling weights (probability weights) are needed to correct for imperfections in the sample that might lead to bias and other departures between the sample and the reference population. Such imperfections include the selection of units with unequal probabilities, non-coverage of the population, and non-response. In other words, the purposes of weighting are:

1. To compensate for unequal probabilities of selection.
2. To compensate for (unit) non-response.
3. To adjust the weighted sample distribution for key variables of interest (for example, age, and sex) to make it conform to a known population distribution.

Sampling weights are the inverse of the likelihood of being sampled. For example, IF ((School = 1 & Class = 3)) weight=1/(26/76). Weight = 2.92 for Class 3 students in Blackman and Gollop Primary (each Class 3 student had a weight of 2.92)

Table 2: Distribution of Respondents by School

	Un-Weighted			Weighted		
	Class 3	Class 4	Total	Class 3	Class 4	Total
A Dacosta Edwards Primary	20	19	39	20	19	39
Bay Primary	15	23	38	58	63	121
Belmont Primary	15	20	35	21	35	56
Blackman and Gollop Primary	26	26	52	76	87	163
Charles F Broome Memorial Primary	23	25	48	100	100	200
Christ Church Girls	19	24	43	65	85	150
Cuthbert Moore Primary	17	21	38	32	39	71
Deacon Primary	21	22	43	34	51	85
Eagle Hall Primary	21	17	38	34	33	67
Eden Lodge Primary	23	27	50	76	80	156
George Lamming Primary	19	20	39	81	66	147
Gordon Greenidge Primary	19	19	38	22	28	50
Gordon Walters Primary	26	25	51	38	40	78
Grantley Prescod Mem Primary	21	27	48	46	-----51	97
Grazettes Primary	4	12	16	29	32	61
Hilda Skeene Primary	27	21	48	65	56	121
Hillaby Turner Hall Primary	33	24	57	47	50	97
Hindsbury Primary	25	27	52	72	56	128
Lawrence T Gay Primary	23	20	43	86	69	155
Luther Thomas Mem Primary	23	19	42	84	90	174
Milton Lynch Primary	19	19	38	39	44	83
Mount Tabor Primary	16	18	34	16	25	41
Roland Edwards Primary	23	21	44	40	29	69
Selah Primary	14	16	30	14	16	30
Seventh Day Adventist Primary	22	14	36	42	33	75
Sharon Primary	23	18	41	66	63	129
St Ambrose Primary	19	13	32	22	14	36
St Angelas School	21	20	41	46	41	87
St Bernard Primary	12	20	32	19	20	39
St Christopher Primary	17	24	41	36	47	83
St Elizabeth Primary	9	12	21	9	6	15
St Gabriel's Primary	23	25	48	47	49	96
St George Primary	26	25	51	57	55	112

St Giles Primary	16	14	30	63	79	142
St James Primary	16	19	35	17	19	36
St Lawrence Primary	9	16	25	9	16	25
St Lucy Primary	17	12	29	17	12	29
St Luke Primary	10	10	20	10	10	20
St Margaret's Primary	12	17	29	12	17	29
St Marks Primary	15	22	37	15	22	37
St Martin Mangrove Primary	14	19	33	29	36	65
St Mary Primary	15	18	33	34	35	69
St Matthew Primary	8	17	25	8	17	25
St Paul Primary	32	32	64	64	66	130
St Stephen Primary	13	20	33	112	107	219
Trinity Primary	16	16	32	30	30	60
Welches Primary	24	23	47	28	18	46
West Terrace Primary	25	29	54	106	98	204
Westbury Primary	15	20	35	45	47	92
Wilkie Cumberbatch Primary	28	22	50	92	85	177
<b>TOTAL</b>	949	1009	1958	2230	2286	4516

### Substance Use Measures and Definitions

The report primarily emphasizes the prevalence of substance use, i.e. the percentage of students who report using a given drug at some point in their lifetime, during the 12 months before the survey (past year) or more specifically during the 30 days prior to the survey (past month). It is important to note that prevalence does not imply regular, frequent or problematic use, but it is an important first-order epidemiological indicator of the size of the population that has at minimum tried a substance. Throughout this report certain terms have been used to describe the prevalence of substance use.

#### *Definitions of Substance Use Variables:*

**Prevalence:** The term prevalence refers to the proportion of a population who has used a drug over a particular time period. In this survey of primary 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), past year (used a drug in the last twelve months), and past 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.
  
- *Past Year or Annual (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, past year prevalence is often referred to as recent use.
  
- *Past Month or Current (past 30 days) prevalence*: the proportion of survey respondents who reported using a named drug in the 30-day period prior to the survey. Past month prevalence is often referred to as current use. 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.

### **Limitations**

The results presented in the upcoming section should be considered against the backdrop of several limitations. Firstly, the veracity of participants' responses may have been affected by the topic under study. More specifically, students may have falsified their responses in order to present themselves in a more favourable light. In accordance with the social desirability bias, this can include over-reporting positive behaviours and under-reporting negative ones. However, it is hoped that the anonymity and confidentiality afforded by the classroom setting, and the use of interviewers as opposed to teaching staff, helped to counteract any impact which the social desirability bias may have had on the results.

Similarly, the reliance on self-reported data may have led to the over- or under-estimation of drug use and the other behaviours/issues under study due to students' inability to accurately recall past events.

The young age of participants and the literacy level of some may have hindered their ability to accurately interpret and respond to the items on the questionnaire. This has been a limitation in all three surveys to date, hence the decision to once again have the questionnaire read aloud to students within the classroom/group setting. In conjunction, students were encouraged to seek clarification from the data collection team when needed.

The consent process affected participation at a number of schools. While the survey primarily relied on principals acting *in loco parentis* and providing the necessary permission for students to participate, a small number of schools required parental consent. This requirement reduced the participation rate at some of these schools. Of particular concern, is the possibility that those not allowed to participate may have differed from those who completed the questionnaire thereby leading to a bias in the estimates. This is also a possible limitation in the context of students who were absent on the day of questionnaire administration at their school.

#### *Objectives Not Met*

It should be noted that due to limitations with the structure of the questionnaire, the survey was unable to assess the relationship between: (1) drug use and parental involvement and (2) drug use and school experience. The variables "parental involvement" and "school experience" were assessed through a collection of individual items; however, it was determined at the time of data analysis that the use of scale measures would have been better suited for the intended analysis. Similarly, it was not possible to evaluate the relationship between drug use and student "participation in extracurricular activities". This was due to consistent errors in the way students answered the corresponding item which in turn reduced the reliability of the data for this variable. It should be noted that the foregoing issues will be rectified in future editions of the survey.

## Results

### Section A – Demographics

Table 3 below, shows the distribution of un-weighted respondents by parishes as well as the frequency of weighted respondents. Samples were taken from schools within all parishes. Schools in St. Michael and Christ Church represented the highest proportion of respondents (58.8% and 12.9%, weighted, respectively).

*Table 3: Distribution by parishes (weighted and unweighted)*

Parish	Un-weighted		Weighted	
	Freq.	Percent	Freq.	Percent
Christ Church	250	12.8	582	12.9
St. Andrew	39	2.0	39	0.9
St. George	109	5.6	203	4.5
St. John	63	3.2	70	1.6
St. Joseph	53	2.7	54	1.2
St. Phillip	118	6.0	223	4.9
St. Thomas	145	7.4	272	6.0
St. James	127	6.5	290	6.4
St. Peter	44	2.2	69	1.5
St. Lucy	59	3.0	59	1.3
St. Michael	951	48.6	2655	58.8
Total	1958	100.0	4516	100.0

### Response Rates (Table 4)

For the most part, response rates were high. Greater than 92% of expected students in all categories answered the questionnaire for the 2020 survey (See Table 4 and Figure 1). The overall response rate was 95% with the highest sub-group being 98.1% for private school students.

Table 4: Response Rates for 2020 Survey

Overall	Class 3	Class 4	Public	Private
1958/2062	949/1027	1006/1035	1801/1902	157/160
94.9%	92.4%	97.5%	94.7%	98.1%

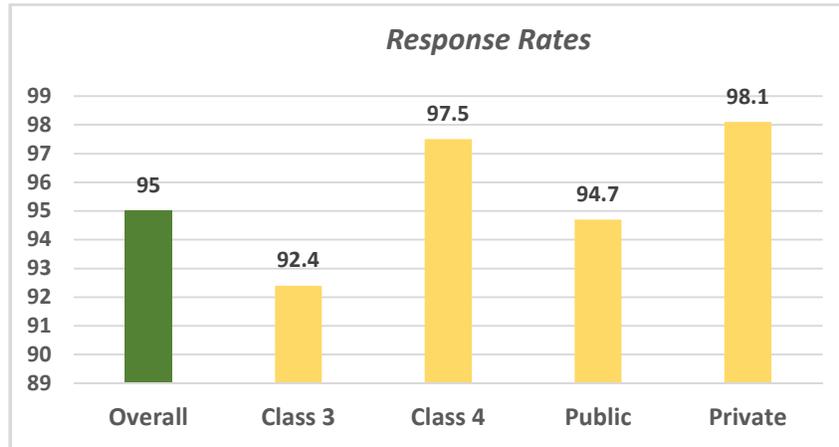


Figure 1: Response Rates for Overall, Grade Level and Type of School

### Distribution of Respondents by Gender, Grade Level and Age Group (Table 5)

Overall, while the differences were small, there were slightly more male respondents (50.7%) compared to female respondents (49.1%). A small number of students did not indicate their gender (four students). There was a similar pattern of responses in relation to the grade levels – Class 3 (49.4%) compared to Class 4 (50.6%).

With respect to age, students ranged from 8 to 12 years. The mean age was 10 years with a standard deviation (std.) of 0.732. Eight ages were missing overall. Ages were grouped for further analysis because of the small number of students who were 8 and 12 years old (14 and 16 respectively). Those under 10 years accounted for 23.6% of the distribution, those 10 years accounted for 49.1%, and those 11 to 12 years accounted for 26.7% of the distribution.

**Table 5: Distribution of Respondents by Gender, Grade Level and Age Group**

		Un-weighted		Weighted	
		Freq.	Percent	Freq	Percent
Gender	Male	993	50.7	2288	50.7
	Female	961	49.1	2216	49.1
Grade level	Class 3	949	48.5	2230	49.4
	Class 4	1009	51.5	2286	50.6
Age Group	Under 10 years	479	24.5	1065	23.6
	10 years	946	48.3	2220	49.1
	11-12 years	525	26.8	1207	26.7

**Cross-Tabulation – Age and Grade Level by Gender (Table 6)**

There were slightly more males in Class 3 (52.5%) compared to females (47.1%). However, there were slightly more females in Class 4 (51%) compared to males (48.9%). A higher proportion of males were in the age groups 8-9 years and 10 years (52.4% and 50.8% respectively). There was a marginally higher proportion of females in the 11-12 age category.

**Table 6: Cross-tabulation – Age and Grade Level by Gender**

		Un-weighted (freq./%)		Weighted (freq./%)	
		Male	Female	Male	Female
Grade level	Class 3	514 (54.2)	432 (45.5)	1170 (52.5)	1050 (47.1)
	Class 4	479 (47.5)	529 (52.4)	1118 (48.9)	1166 (51.0)
Age Group	8-9 years	254 (53.0)	225 (47.0)	559 (52.4)	507 (47.6)
	10 years	485 (51.3)	461 (48.7)	1127 (50.8)	1092 (49.2)
	11-12 years	250 (47.6)	275 (52.4)	591 (48.9)	617 (51.1)

**Section B - Parental Supervision/Involvement**

**Students Perception of Parental Supervision or Involvement Overall and by Gender (Table 7)**

Students were asked to respond to seven questions related to parental supervision or involvement (See Appendix 3 – Questionnaire). The response options were ‘yes’ or ‘no’ (questions 4a through 4f) and ‘yes, ‘no’ and ‘don’t know’ for question 4g.

The following tables show the population estimates for the students’ responses to the questions presented as: a) the overall proportion, and b) cross-tabulations by gender and grade level.

Greater than 75% of respondents had a positive response (“yes”) to all items in this section. The highest proportion was related to the item – **“Most of the time, my parents/guardian(s) know where I am after school or on weekends”** -where 94.4% said “yes” with a slightly higher proportion among females (92.4% versus 96.7%). A higher proportion of females responded positively to all questions except in the case of – **“Most of the time, my parents/guardian(s) check my homework”** – where there was a higher proportion of males saying “yes”, (81.7% versus 79.1%).

**Table 7: Perception of Parental Involvement or Supervision – Overall and by Gender**

	Respondents who said “yes”		
	Overall	Male	Female
My parents/guardian(s) come to meetings at the school with my teacher.	86.3	85.7	87.5
My parents/guardian(s) know what programs I watch on television/electronic devices (e.g. iPads, tablets, cell phones, etc.).	75.5	74.8	76.3
<u>Most of the time</u> , my parents/guardian(s) know where I am after school or on weekends.	94.4	92.4	96.7
<u>Most of the time</u> , I am supervised by my parents/guardian(s) or another adult after school or on weekends.	83.0	77.1	89.2
My parents/guardian(s) know <u>most</u> of my friends	76.2	70.7	81.9
<u>Most of the time</u> , my parents/guardian(s) check my homework.	80.4	81.7	79.1

**Perception of Parental Involvement with Teacher (Table 8 and Table 9)**

Just about six in every ten students (57.4%) believed that their parents/guardians talk with their teacher (higher proportion of students in Class 4 (64.2%) and slightly more females (58.4%). A notable, high proportion (34.2%) said they did not know and 8.4% said “no” they believed their parents did not talk with their teacher.

*Table 8: Perception of Parental Involvement – Overall, Gender and Grade Level*

My parents/guardian(s) talk with my teacher (e.g. on WhatsApp, before and after school, at meetings, etc.)					
	Overall	Class 3	Class 4	Male	Female
Yes	57.4	50.3	64.2	56.2	58.4
No	8.4	9.6	7.2	9.2	7.7
Don't Know	34.2	40.1	28.5	34.7	33.9

With respect to grade level, an equally high proportion of respondents (75-94%) gave a positive response (“yes”) to all items in this section. Class 3 students were more likely to indicate that their parents know most of their friends and check their homework most of the time.

*Table 9: Perception of Parental Supervision/Involvement- Overall and Grade Level*

	Respondents who said “yes”		
	Overall	Class 3	Class 4
My parents/guardian(s) come to meetings at the school with my teacher.	86.3	83.1	89.4
My parents/guardian(s) know what programs I watch on television/electronic devices (e.g. iPads, tablets, cell phones, etc.).	75.5	74.6	76.3
<u>Most of the time</u> , my parents/guardian(s) know where I am after school or on weekends.	94.4	94.3	94.5
<u>Most of the time</u> , I am supervised by my parents/guardian(s) or another adult after school or on weekends.	83.0	82.0	84.0
My parents/guardian(s) know <u>most</u> of my friends	76.2	78.0	74.4
<u>Most of the time</u> , my parents/guardian(s) check my homework.	80.4	84.7	76.3

**Section C – School Experience**

Students were asked to respond to varying aspects of their school experience with the response options of “yes” or “no”. From Table 10, it can be seen that eight of every ten students (82.3%) believe they can talk to their teacher if something is worrying them - more females (84.1%) than males (80.6%); and more Class 3 students (85.6) than Class 4 students (79.2%).

Seven of ten students (70%) like going to school – 72.7% females versus 67.5% males; and about the same proportion within grades (69.5% Class 3 and 70.4% Class 4). About eight of every ten students (79.6%) said they ‘feel a part of this school’ – slightly more females compared to males (80.7% versus 78.5%) and slightly more Class 3 (80.8%) compared to Class 4 (78.4%) students. Almost all students (97.8%) said they believe they can do well at school, with equally high proportions across gender and grade level (98%). Overall, between 70% and approximately 98% of students had a positive perception with regards to school experience.

**Table 10: Perception of School Experience – Overall, Grade Level and Gender**

	Respondents who said “yes”				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
I can talk to my teacher if something is worrying me	82.3	80.6	84.1	85.6	79.2
I like going to school.	70.0	67.5	72.7	69.5	70.4
I feel a part of this school.	79.6	78.5	80.7	80.8	78.4
I believe I can do well at school.	97.8	97.6	97.9	97.6	98.0

**Section D – Other Social Determinants - Students’ Activities**

Students were asked to indicate which extra-curricular activities they participated in at or after school. A list of typical activities was provided and students were asked to select as many as applied. The results are presented in the multiple response frequency table (Table 11) as well as multiple response cross-tabulations by gender and grade level (Table 12).

The frequency tables show the number of times students selected the indicated activity. For example, from the unweighted responses, 437 students indicated taking part in “Cubs/Brownies/Pathfinders” and 343 students in “music”. The four most prevalent activities chosen by students were: lessons (28.5%), sports (27.6%), Cubs/Brownies/Pathfinders (11.1%), and singing (10.9%).

Smaller proportions of students indicated participating in music (8.7%), dancing (6.9%), karate (3.7%) and the 4H Club (2.6%). Other activities specified by students were: acting, art, cooking, basketball, chess, drama, debates, drawing, netball, swimming, volleyball, Red Cross, sign language, steel pan, K-Kids, jewelry, ISCF, hockey, drumming, boxing, football.

*Table 11: Distribution of Responses - Activities in School or After School*

Activities	Un-weighted		Weighted	
	N	Percent	N	Percent
Cubs/Brownies/Pathfinders	437	11.1	1016	11.2
4H club	102	2.6	236	2.6
Karate	148	3.7	392	4.3
Music	343	8.7	793	8.7
Dancing	273	6.9	640	7.0
Singing	432	10.9	992	10.9
Sports	1089	27.6	2449	26.9
Lessons	1124	28.5	2590	28.4
Total	2948	100	9109	100.0

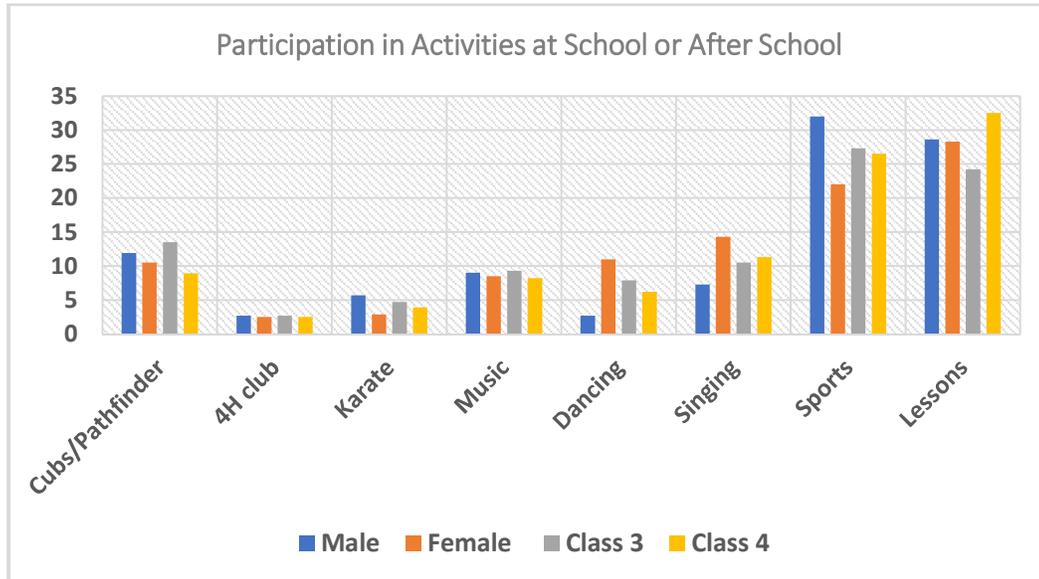
**Cross-Tabulation of Responses for Sex and Grade Level (Table 12)**

In the cross-table, the proportion of students indicating the specific activity is broken down by gender and grade level. The Table, for example, shows that there was about an equal proportion

of male and female students who participated in “Cubs/ Brownies/Pathfinders”, but a notably higher proportion of students in Class 3 (13.5%) compared to Class 4 (8.9%).

**Table 12: Distribution of Activities in School/After School - Gender and Grade Level**

	Gender		Grade level	
	Male	Female	Class 3	Class 4
Cubs/Brownies/Pathfinders	11.9	10.5	13.5	8.9
4H club	2.7	2.5	2.7	2.5
Karate	5.7	2.9	4.7	3.9
Music	9.0	8.5	9.3	8.2
Dancing	2.7	11.0	7.9	6.2
Singing	7.3	14.3	10.5	11.3
Sports	32.0	22.0	27.3	26.5
Lessons	28.6	28.3	24.2	32.5



**Figure 2: Participation in Activities at School or After School**

**Social Media and Video Games (Table 13 and Table 14)**

Students were asked to state the frequency with which they used social media websites or apps such as Instagram, Snapchat, Facebook, WhatsApp etc. during the week leading up to the survey. They were also asked to indicate how often they played video games during the same time period. The options given were: 1-2 days, 3-4 days, 5-6 days, every day and no use of social media/video games during the past week.

*Use of Social Media in the Past Week (Table 13)*

For the most part, a notably large proportion of students overall (28.3%) said they did not use social media in the past week. However, four in ten students (42.3%) indicated they had used social media ‘everyday’—a higher proportion of females (47.7%) compared to males (39.9%). Females were more likely to indicate use of social media for 1-2 days when compared to males (18.1% versus 13.7%).

Class 3 students were more likely indicate no use in the past week and use ‘everyday’ while Class 4 students were more likely indicate use for 1-2 days and 3-4 days.

**Table 13: Students’ Use of Social Media in the Past Week**

<b><i>How many days during the <u>past week</u> did you use social media websites or apps, such as Instagram, Snapchat, Facebook, WhatsApp, TikTok?</i></b>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
1 or 2 days	15.9	13.7	18.1	14.3	17.5
3 or 4 days	8.5	8.2	8.8	7.6	9.3
5 or 6 days	5.1	5.1	5.1	4.9	5.3
Everyday	42.3	39.9	47.7	43.4	41.2
Did not use social media	28.3	33.1	23.3	29.9	26.7

*Playing Video Games in the Past Week (Table 14)*

As with social media use, a notably large proportion of students overall (29.8%) said they did not play video games in the past week. However, three in ten students (32.8%) indicated they had played video games ‘everyday’—twice as many males (44%) compared to females (21.1%). Females were more likely to indicate playing video games for 1-2 days when compared to males (22.3% versus 19.3%).

**Table 14: Students’ Who Played Video Games in the Past Week**

	<i>How many days during the <u>past week</u> did you play video games?</i>				
	Percent responses				
	Overall	Gender		Grade Level	
Male		Female	Class 3	Class 4	
1 or 2 days	20.8	19.3	22.3	18.4	23.0
3 or 4 days	9.4	10.4	8.5	10.4	8.5
5 or 6 days	7.2	7.8	6.7	8.5	6.0
Everyday	32.8	44.0	21.1	36.6	29.0
Did not play video games	29.8	18.5	41.4	26.1	33.4

Class 4 students were more likely indicate they had not played video games in the past week (33.4% versus 26.1%). Class 3 students were more likely to report playing every day compared to Class 4 students (36.6% versus 29%). A slightly higher proportion of Class 4 students indicated playing for 1-2 days.

**Bullying in the Past Month (Table 15)**

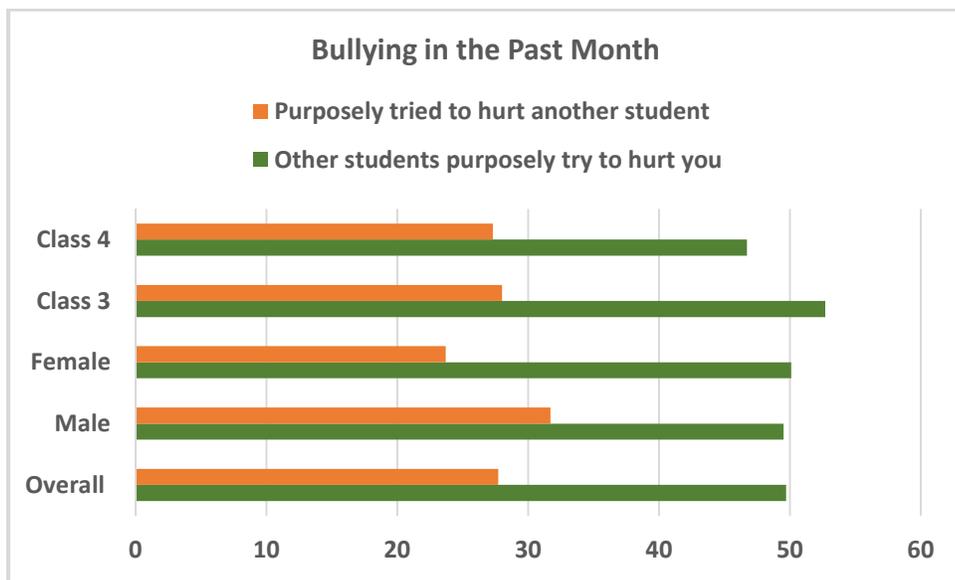
Students were asked if any other student had purposely tried to hurt them or if they had purposely tried to hurt any other student during the preceding month. Options were “yes” or “no”.

Approximately half of the students overall (49.7%) said that another student had purposely tried to hurt them—equal proportions of males and females but a slightly higher proportion of Class 3 students (52.7%) compared to Class 4 students (46.7%).

Just over a quarter of the students overall (27.7%) said that they had purposely tried to hurt another student—significantly higher proportion of males (31.7%) compared to females (23.7%), but about equal proportions of Class 3 students (28%) compared to Class 4 students (27.3%).

*Table 15: Bullying in the Past Month by Gender and Grade Level*

	Respondents who said “yes”				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
Did any other students purposely try to hurt you by shoving, hitting, kicking or teasing you in the past month?	49.7	49.5	50.1	52.7	46.7
Did you purposely try to hurt any other student(s) by hitting, shoving, kicking or teasing them in the past month?	27.7	31.7	23.7	28.0	27.3



*Figure 3: Bullying in the Past Month*

### Section E – Sources of Information

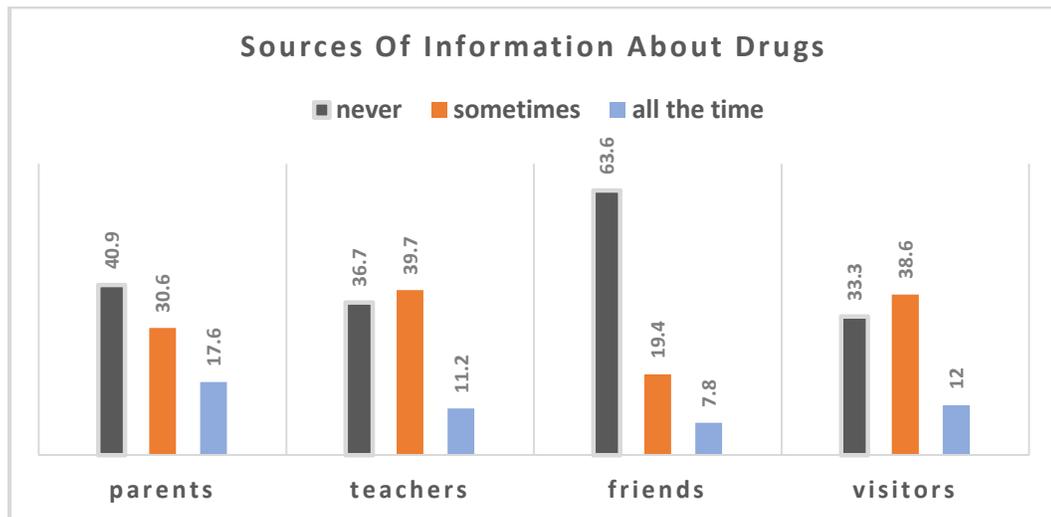
Students were asked to state the frequency with which persons spoke to them about drugs. These included parents, teachers, friends and visitors to the school. The options were: never, sometimes, all the time and can't remember.

**Table 16: Sources of Information about Drugs - Overall**

	Percent Responses (Overall)			
	Frequency of Persons who Speak about Drugs			
	Never	Sometimes	All the time	Can't remember
Parent	40.9	30.6	17.6	10.9
Teachers	36.7	39.7	11.2	12.3
Friends	63.6	19.4	7.8	9.2
Visitors to school	33.3	38.6	12.0	16.0

From Table 16, it can be seen that four out of every ten students said that their parents never spoke to them about drugs (40.9%), while 36.7% said teachers never spoke to them, 63.6% said friends never spoke to them and 33.3% indicated that visitors to the school never spoke to them. For the most part, when information was shared, it was mostly done ‘sometimes’ and mainly by teachers (39.7%) followed by visitors to the school (38.6%), parents (30.6%) and then friends (19.4%).

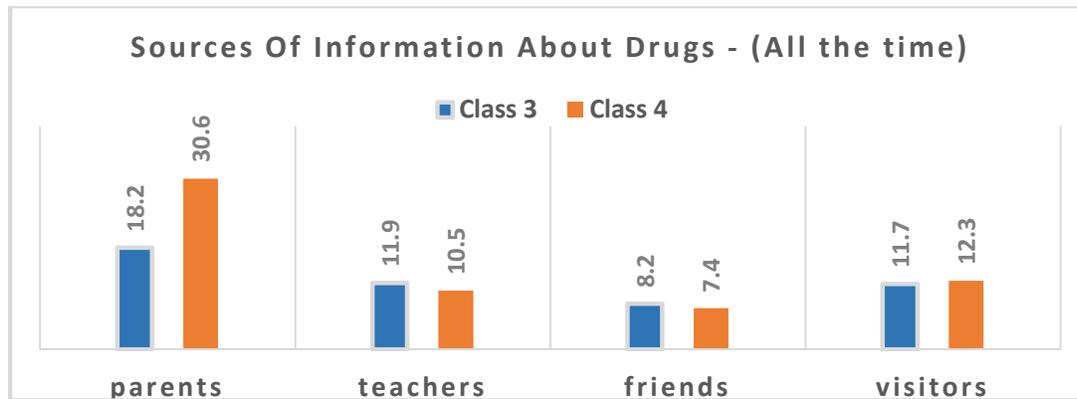
Parents were more likely to speak to their child “all the time” (17.6%) compared to teachers (11.2%), friends (7.8%) and visitors to the school (12%).



**Figure 4: Sources Of Information About Drugs**

**Sources of Information about Drugs – By Grade Level (Table 17)**

A similar pattern to the overall responses was observed for the two grade levels. Parents were more likely to speak to their child “all the time” followed by teachers, visitors to the school and then friends.



*Figure 5: Sources of Information About Drugs - (All the time)*

*Table 17: Sources of Information about Drugs – By Grade Level*

Grade Level	Percent Responses (Grade Level)			
	Frequency of Persons who Speak about Drugs			
	Never	Sometimes	All the time	Can't remember
Class 3				
Parent	43.2	27.9	18.2	10.7
Teachers	41.9	32.7	11.9	13.5
Friends	62.6	18.8	8.2	10.4
Visitors to school	37.5	35.6	11.7	15.2
Class 4				
Parent	38.7	33.2	17.1	11.0
Teachers	31.7	46.6	10.5	11.2
Friends	64.6	20.0	7.4	8.0
Visitors to school	29.3	41.5	12.3	16.9

## Section F – Access to Drugs

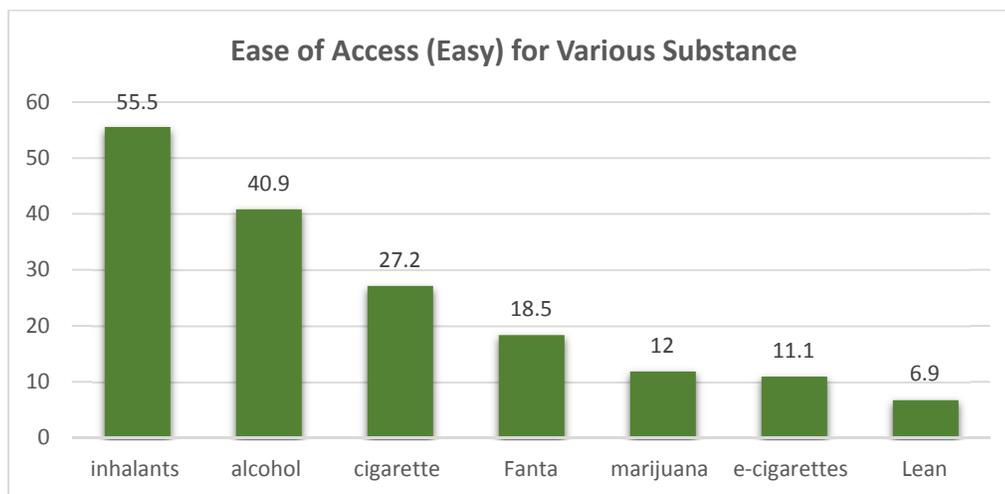
### Perception of Ease of Access to Substances (Table 18)

Students were asked to indicate how easy it is to obtain various substances such as marijuana, inhalants, cigarettes, alcohol, Lean and vape mods/e-cigarettes. Options given were easy, difficult, impossible and don't know.

*Table 18: Students' Perception of Ease of Access to Substances*

	Percent Responses (Overall)			
	Ease of Access			
	Easy	Difficult	Impossible	Don't know
Marijuana	12.0	7.5	15.5	65.0
Inhalants	55.5	8.2	6.5	29.8
Cigarettes	27.2	8.0	20.3	44.5
Alcohol	40.9	10.1	15.4	33.5
Fanta	18.5	7.1	18.7	55.7
Lean	6.9	4.5	6.1	82.5
Vape mods/ e-cigarettes	11.1	8.9	14.8	65.3

More than half of all students felt that it was easy to access inhalants (55.5%). Alcohol (40.9%) was considered the second most easily accessible substance followed by cigarettes (27.2%), Fanta (18.5%), marijuana (12%), e-cigarettes (11.1) and Lean (6.9%).



*Figure 6: Ease of Access (Easy) for Various Substance*

**Perception of Ease of Access – Gender and Grade Level (Tables 19 and 20)**

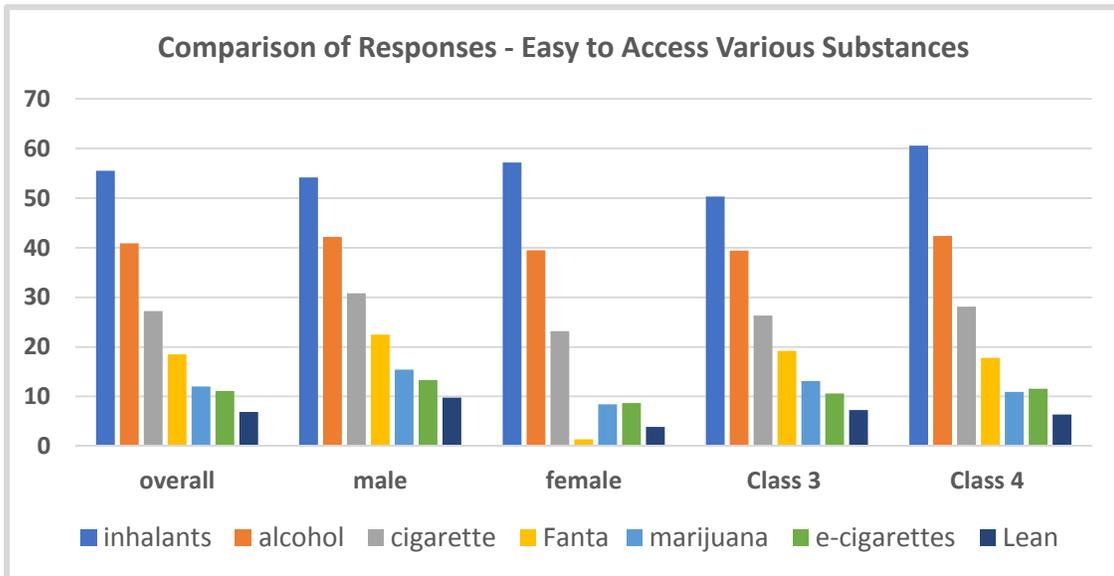
From Table 19, it can be seen that females were more likely to indicate that it was easy to obtain inhalants compared to males (57.2% versus 54.2%). Males were more likely to indicate that it was easy to access all other substances. With respect to grade level, Class 3 students were more likely to indicate that it was easy to obtain marijuana, Lean and Fanta compared to Class 4 students. Class 4 students were however more likely to indicate that it was easy to obtain inhalants, alcohol, cigarettes and e-cigarettes.

*Table 19: Students’ Perception of Ease of Access to Substances - Gender*

	Percent Responses (Gender)			
	Ease of Access			
	Easy	Difficult	Impossible	Don’t know
Male				
Marijuana	15.4	7.9	15.1	61.6
Inhalants	54.2	8.7	6.9	30.1
Cigarettes	30.8	8.7	20.5	39.9
Alcohol	42.2	11.5	14.6	31.8
Fanta	22.5	8.5	19.9	49.0
Lean	9.8	6.5	7.7	75.9
Vape/e-cigarettes	13.3	11.2	15.2	60.3
Female				
Marijuana	8.4	7.1	16.1	68.4
Inhalants	57.2	7.5	6.2	29.3
Cigarettes	23.2	7.2	20.2	49.4
Alcohol	39.5	8.7	16.3	35.5
Fanta	14.4	5.6	17.6	62.4
Lean	3.9	2.6	4.4	89.2
Vape/e-cigarettes	8.7	6.6	14.4	70.3

**Table 20: Students' Perception of Ease of Access to Substances - Grade Level**

	Percent Responses (Grade Level)			
	Ease of Access			
	Easy	Difficult	Impossible	Don't know
<b>Class 3</b>				
Marijuana	13.1	6.5	14.7	65.7
Inhalants	50.3	8.2	6.1	35.4
Cigarettes	26.3	8.5	18.0	47.1
Alcohol	39.4	10.8	14.8	35.0
Fanta	19.2	8.0	16.2	56.3
Lean	7.3	3.8	4.1	84.7
Vape/e-cigarettes	10.6	10.1	12.5	66.8
<b>Class 4</b>				
Marijuana	10.9	8.5	16.3	64.3
Inhalants	60.6	8.2	6.8	24.4
Cigarettes	28.1	7.5	22.5	42.0
Alcohol	42.4	.4	16.0	32.1
Fanta	17.8	5.9	21.1	55.2
Lean	6.4	5.2	7.9	80.4
Vape/e-cigarettes	11.6	7.7	17.0	63.7



**Figure 7: Comparison of Responses - Easy to Access – Overall, Gender and Grade Level**

## Section G: Perception of Harm

Students were asked to indicate whether they believed that it was harmful to use the following substances: cigarettes, alcohol, inhalants (common household products), marijuana, Fanta, Lean, and vaping products. The options were yes, no and don't know.

Perception of harm associated with using the various substances ranged from a low of 31.1% for using Lean to a high of 89.1% for smoking cigarettes (Table 21). A notably high proportion of students believed that using marijuana was harmful - eight of every ten students overall (80.2%). Seven of every ten believed that drinking alcohol was harmful (73.4%) while six of every ten (66.8%) believed that smoking Fanta was harmful. Smaller proportions, 56.4% for inhalants, 49.5% for e-cigarettes and 31.1% for Lean, felt that it was harmful to use these products. However, it must be noted that many of the students did not know the harm associated with using Lean (63%) or vaping (41.9%). Equally important to note is the fact that 15.9% of students overall believed there was no harm in inhaling common household products, while 11.1% believed there was no harm associated with drinking alcohol.

*Table 21: Students' Perception of Harm for Using Various Substances*

	Overall Perception of Harm		
	Yes	No	DK
Smoking cigarettes	89.1	3.8	7.2
Drinking alcohol	73.4	11.1	15.5
Inhaling common products	56.4	15.9	27.6
Using marijuana	80.2	5.1	14.7
Smoking Fanta	66.8	6.8	26.3
Using Lean	31.1	5.9	63.0
Vaping	49.5	8.5	41.9

DK= don't know

When cross-tabulated by gender and grade level (Tables 22 and 23), the same patterns of responses were noted for the most part. Higher proportions of males as well as females, and Class 3 and Class 4 students felt that it was harmful to smoke cigarettes, drink alcohol and use marijuana.

**Table 22: Students' Perception of Harm for Using Various Substances**

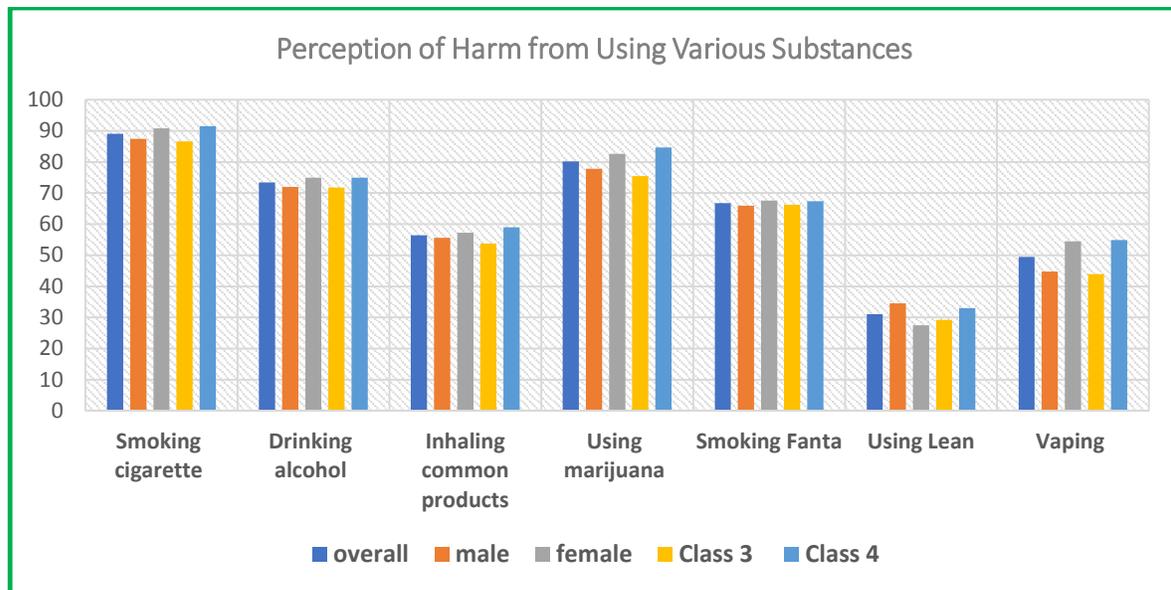
	Percent Responses (Gender)					
	Male			Female		
	Yes	No	DK	Yes	No	DK
Smoking cigarettes	87.4	4.8	7.7	90.8	2.7	6.6
Drinking alcohol	72.0	13.7	14.4	74.9	8.5	16.6
Inhaling common products	55.6	16.5	27.9	57.3	15.4	27.3
Using marijuana	77.8	7.2	14.8	82.6	3.0	14.4
Smoking Fanta	65.9	9.2	24.9	67.6	4.3	28.2
Using Lean	34.5	7.8	57.7	27.5	3.8	68.7
Vaping	44.8	12.2	43.1	54.5	4.7	49.4

DK= don't know

**Table 23: Students' Perception of Harm for Using Various Substances**

	Percent Responses (Grade Level)					
	Class 3			Class 4		
	Yes	No	DK	Yes	No	DK
Smoking cigarettes	86.6	4.2	9.2	91.5	3.3	5.2
Drinking alcohol	71.8	12.0	16.2	74.9	10.3	14.8
Inhaling common products	53.8	16.4	29.7	59.0	15.4	25.6
Using marijuana	75.5	5.7	18.8	84.7	4.6	10.6
Smoking Fanta	66.2	7.2	26.6	67.4	6.3	26.3
Using Lean	29.2	6.4	64.4	33.0	5.4	61.7
Vaping	44.0	8.5	47.5	54.9	8.6	36.5

DK= don't know



**Figure 8: Perception of Harm from Using Various Substances**

## Section H – Reason for Drug Use

Students were asked to agree or disagree (yes/no/don't know) with various statements regarding the reasons why persons use drugs, (Tables 24, 25 and 26). For the statement – 'using drugs make you look cool', only 5.6% of students agreed while about 80% said 'no' and about 15% did not know if this was the case. Similar small proportions (5-6%) of males and females as well as Class 3 and Class 4 students responded 'yes' to this statement.

About one in five students (21.7%) agreed that 'people use drugs because their parents use drugs'. This was the case for about the same proportion of males and females (23% versus 20.4%). Responses by grade level were not dis-similar (21.8% for Class 3 and 21.7% for Class 4).

Almost three in ten students (28.2%) agreed that 'People use drugs because other persons in their family use drugs'. This was the case for about the same proportion of males and females (28.9% versus 27.4%). Responses by grade level were not dis-similar (28% for Class 3 and 28.4% for Class 4).

About half of all students (50.9%) agreed that 'People use drugs because their friends use drugs'. This was the case for about the same proportion of males and females (50.5% versus 51.4%). However, analysis by grade level revealed that the percentage of Class 4 students (54.6%) in agreement with the statement was higher than that for Class 3 students (47%).

**Table 24: Students' Perception of the Reason for Using Drugs**

	Overall		
	Reason for drug use		
	Yes	No	DK
Using drugs makes you look cool	5.6	79.5	14.9
People use drugs because their parents use drugs.	21.7	29.0	49.3
People use drugs because other persons in their family use drugs.	28.2	2.3	49.5
People use drugs because their friends use drugs	50.9	16.1	33.0
People use drugs to feel less stressed.	53.0	14.9	32.1
People use drugs to relax.	44.3	20.0	35.7
People want to use alcoholic drinks when they see them advertised.	37.1	16.1	46.8
People want to smoke marijuana when they see other people smoking marijuana.	38.0	15.9	46.1

DK= don't know

A little more than half of the students (53%) agreed that 'People use drugs to feel less stressed'. This was the same pattern of response for about the same proportion of males and females (50.5% versus 55.7%). Responses by grade level were very dis-similar, four in ten students from Class 3 (44.6%) and six in ten from Class 4 (61.2%) agreed with this statement.

About four in ten students (44.3%) agreed that 'People use drugs to relax'. This was the same pattern of response for about the same proportion of males and females (42.3% versus 46.5%). Responses by grade level were very dis-similar, 36.9% of Class 3 students and more than half (51.6%) from Class 4 agreed with this statement.

A little more than one-third of all students (37.1%) agreed that 'People want to use alcoholic drinks when they see them advertised'. This was the case for about the same proportion of males and females (38% versus 36%). Responses by grade level were not dis-similar (37.4% for Class 3 and 36.8% for Class 4).

A little less than four in ten students (38%) agreed that 'People want to smoke marijuana when they see other people smoking marijuana'. This was the case for about the same proportion of males and

females (39.2% versus 36.5%). Responses by grade level were not dis-similar (37.3% for Class 3 and 38.7% for Class 4).

**Table 25: Students' Perception of the Reason for Using Drugs by Gender**

	Percent Responses (Gender)					
	Male			Female		
	Yes	No	DK	Yes	No	DK
Using drugs makes you look cool	6.4	79.2	14.4	4.8	79.6	15.5
People use drugs because their parents use drugs.	23.0	30.2	46.8	20.4	27.8	51.9
People use drugs because other persons in their family use drugs.	28.9	24.2	46.9	27.4	20.2	52.3
People use drugs because their friends use drugs	50.5	17.4	32.1	51.4	14.6	34.1
People use drugs to feel less stressed.	50.5	19.4	30.2	55.7	10.2	34.1
People use drugs to relax.	42.3	23.4	34.3	46.5	16.5	37.1
People want to use alcoholic drinks when they see them advertised.	38.0	16.2	45.8	36.0	15.8	48.2
People want to smoke marijuana when they see other people smoking marijuana.	39.2	16.9	43.9	36.5	15.0	48.6

DK= don't know

**Table 26: Students' Perception of the Reason for Using Drugs by Grade**

	Percent Responses (Grade Level)					
	Class 3			Class 4		
	Yes	No	DK	Yes	No	DK
Using drugs makes you look cool	6.2	79.0	14.8	5.1	80.0	15.0
People use drugs because their parents use drugs.	21.8	30.6	47.7	21.7	27.4	50.9
People use drugs because other persons in their family use drugs.	28.0	23.3	48.7	28.4	21.2	50.3
People use drugs because their friends use drugs	47.0	19.6	33.5	54.6	12.8	32.6
People use drugs to feel less stressed.	44.6	19.2	36.2	61.2	10.7	28.1
People use drugs to relax.	36.9	24.7	38.4	51.6	15.4	33.0
People want to use alcoholic drinks when they see them advertised.	37.4	17.6	45.0	36.8	14.6	48.6
People want to smoke marijuana when they see other people smoking marijuana.	37.3	17.8	44.9	38.7	14.4	47.3

DK= don't know

## Section I – Curiosity about trying Drugs

Students were asked if they were ever curious about trying drugs. Overall, 18.7% said yes -19.6% of males, 17.6% of females, 18.5% of Class 3 students and 18.8% of Class 4 students (Figure 9).

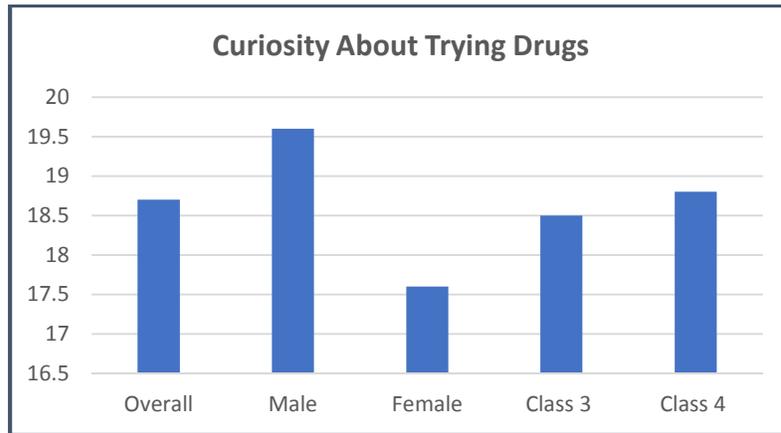


Figure 9: Curiosity About Trying Drugs - Overall, Gender and Grade Level

## Section J – Prevalence of Drug Use

This section presents consumption patterns, age of first use, drug sources, and locations of use for tobacco/cigarettes, alcohol, inhalants, marijuana, Fanta, energy drinks, other drugs (e-cigarettes/vaping products and Lean). The tables in this section present the percentage of students reporting use of cigarettes, inhalants, alcohol, marijuana and other substances for lifetime, past year and past month.

### Tobacco – Cigarettes (Table 27)

#### *Lifetime*

Overall lifetime prevalence of cigarettes was 4.8% - one in twenty students reported having tried cigarettes. The average lifetime prevalence of cigarette smoking was notably different among males (6.6%) compared to females (3.1%). Prevalence by grade level was not dis-similar - a slightly higher proportion among Class 3 (5.2%) compared to Class 4 (4.5%). Prevalence was slightly higher in the lower age cohort, i.e. those 8-9 years old (5.7%), and decreased to 4.5% among those 10 years old and 5.2% among those 11-12 years old.

### *Past Year*

On average, 1.7% of the students in the survey had used cigarettes during the past year. The average rate for males (2.7%) was about four times that of females (0.6%). Past year prevalence was also higher among Class 3 students (2.1%) compared to Class 4 students (1.2%). Comparison of prevalence rates by age grouping showed marginal differences, with somewhat higher proportions among students 11-12 years (5.2%) and those 8-9 years (5%) compared to those 10 years old (4.5%).

### *Past Month*

On average, less than one percent (0.7%) of the students in the survey had used cigarettes during the past month. The average rate for males was 1.3%. There was negligible use among females (0.1%). Though past month prevalence was also higher among Class 3 students (0.9%) compared to Class 4 students (0.5%), these are negligible proportions. Comparison of prevalence by age grouping also showed negligible use among the age groups (0.3-1%), with higher proportions among the youngest cohort.

**Table 27: Consumption Patterns by Gender, Grade Level and Age Group**

		Prevalence		
		Lifetime	Past Year	Past Month
Overall		4.8	1.7	0.7
Gender	Male	6.6	2.7	1.3
	Female	3.1	0.6	0.1
Grade level	Class 3	5.2	2.1	0.9
	Class 4	4.5	1.2	0.5
Age Group	8-9 years	5.7	5.0	1.0
	10 years	4.5	4.5	0.5
	11-12 years	5.2	5.2	0.3

### *Age of First Use for Cigarettes*

The average (mean) age of first use for cigarettes overall was 7.5 years (the second lowest average among all substances (see Table 60, Appendix 1). Age of first use for males (7.7 years) was a little later than that for females (7.3 years) – females were more likely to report an earlier age of first use for cigarettes. Overall, 65.6% of students who had used cigarettes had use this substance before

age 8 - 62% of males versus 73% of females and 74.2% of Class 3 versus 55.7% of Class 4 students.

*Usual Source of Cigarettes (Table 28)*

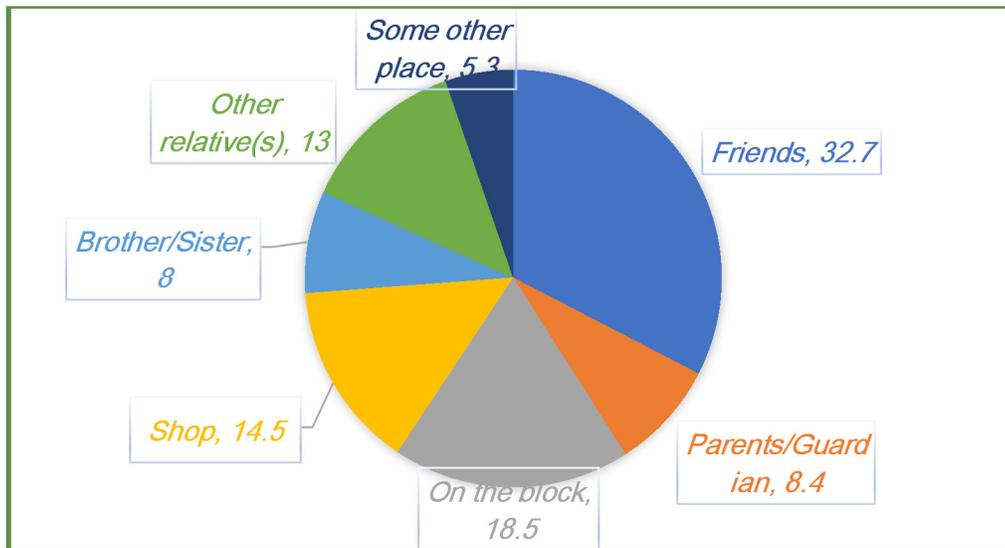
Friends (32.7%) was the main source of cigarettes followed by ‘on the block’ (18.5%), the shop (14.5%), other relatives (13%), parents/guardian (8.4%), and siblings (8%). Males were more likely to obtain cigarettes from friends (34.2%), ‘on the block’ (21.1%) and from the shop (17.8%). However, females were more likely to obtain cigarettes from friends (27%), other relatives (20.3%), siblings (14.9%) and ‘on the block’ (13.5%).

A higher proportion of Class 3 students (34.8%) indicated receiving cigarettes from their friends. The next most prevalent responses were: the shop (15.6%), ‘on the block’ (12.6%) and other relatives (11.9%). For Class 4 students, the most prevalent responses were: friends (28.9%), ‘on the block’ (27.8%), other relatives (14.4%), and the shop (12.2%).

***Friends were the preferred source overall. The other important sources were ‘on the block’, the shop, other relatives and, to a lesser extent, siblings.***

*Table 28: Students Usual Sources of Cigarettes*

<b><i>From whom/where do you usually get cigarettes?</i></b>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
Friends	32.7	34.2	27.0	34.8	28.9
Parents/Guardian	8.4	7.2	10.8	8.1	8.9
On the block	18.5	21.1	13.5	12.6	27.8
Shop	14.5	17.8	8.1	15.6	12.2
Brother/Sister	8.0	4.6	14.9	9.6	5.6
Other relative(s)	13.0	9.9	20.3	11.9	14.4
Some other place	5.3	5.3	5.4	7.4	2.2



**Figure 10: Students Usual Sources of Cigarettes**

*Where Cigarettes Most Often Smoked (Table 29)*

For students who smoked cigarettes, the main location of use was the home (35.2%). Fewer students smoked at a friend’s house (27.5%), or ‘on the block’ (15.5%). A higher proportion of females reported smoking cigarettes at home (females: 41.3%; males: 33.1%) or at social events (females: 23.8%; males: 0.8%). Males, however, were more likely to smoke ‘on the block’ (males: 21.5%; females: 3.2%) or at a friend’s house (males: 29.2%; females: 22.2%). Males were the only set of students that reported smoking at school or at sporting events.

Tabulation by grade level showed that Class 3 students were more likely to use cigarettes most often at home (36.4%), ‘on the block’ (17.2%), at a friend’s house (21.2%) or at some ‘other place’ (11.1%). Class 4 students showed about the same pattern: more likely to use cigarettes most often at home (34%) at a friend’s house (34%), on the block (13.8%) or at other social events (9.6%).

***The places most often indicated for cigarette use were: the home, a friend’s house, ‘on the block’ and other social events.***

*Table 29: Place Where Students Usually Smoke Cigarettes*

<i>Where do you most often smoke cigarettes?</i>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
At home	35.2	33.1	41.3	36.4	34.0
At school	3.1	4.6	0.0	3.0	3.2
On the block	15.5	21.5	3.2	17.2	13.8
At a friend's house	27.5	29.2	22.2	21.2	34.0
At sporting events	2.1	3.1	0.0	4.0	0.0
At other social events	8.3	0.8	23.8	7.1	9.6
Some other place	8.3	7.7	9.5	11.1	5.3

**Alcohol – Like beer, rum, wine, gin, vodka) (Table 30)**

*Lifetime*

Overall lifetime prevalence of alcohol use was 51.7% - more than half of the students overall reported having tried alcohol. Female students (52.7%) reported a slightly higher lifetime prevalence of alcohol use than male students (50.6%).

Prevalence by grade level was notably different, a higher proportion of Class 4 (54.4%) students compared to Class 3 (48.8%) reported lifetime use. Prevalence was slightly lower in the younger age cohort, those 8-9 years old (49.3%), and increased as age increased – 50.4% among those 10 years old and 56.3% among those 11-12 years old.

*Past Year*

On average, 26.9% of the students in the survey had used alcohol during the past year. The average rate for males (28%) was about 2.2 percentage points higher than that of females (25.8%). Past year prevalence was also higher among Class 4 (30.9%) compared to Class 3 (22.8%) students. A comparison of prevalence rates by age grouping showed a higher proportion among students 11-12 years (32.1%) which decreased as age cohort decreased – those 10 years old (25.7%) and those 8-9 years (23.5%).

*Past Month*

On average, 18% of the students in the survey reported using alcohol during the past month. The average rate for males was 17.7% compared to 18.2% among females. Past month prevalence was notably higher among Class 4 students (20.8%) compared to Class 3 students (15.1%). A

comparison of prevalence rates by age grouping also showed a higher proportion among students 11-12 years (20.9%) which decreased to 16.8% among those 10 years old and then showed a slight increase to 17.2% for those 8-9 years.

**Table 30: Consumption Patterns by Gender, Grade Level and Age Group**

		Lifetime	Past Year	Past Month
Overall		51.7	26.9	18.0
Gender	Male	50.6	28.0	17.7
	Female	52.7	25.8	18.2
Grade level	Class 3	48.8	22.8	15.1
	Class 4	54.4	30.9	20.8
Age Group	8-9 years	49.3	23.5	17.2
	10 years	50.4	25.7	16.8
	11-12 years	56.3	32.1	20.9

#### *Age of First Use of Alcohol*

The average (mean) age of first use of alcohol overall was 7.9 years. Age of first use for males (7.9 years) was the same as that for females (7.9 years). Overall, 55% of students who had used alcohol had done so before age 8 – 55.2% of both males and females and 64.9% of Class 3 compared to 46.7% of Class 4 students.

#### *Usual Sources of Alcohol (Table 31)*

Parents (68.9%) were the main source of alcohol for students who reported lifetime alcohol use followed by other relatives (13%). All other sources accounted for less than four percent each. Males as well as females were more likely to report their parents/guardian as their main source of alcohol (63.1% males and 74.5% females). The next source of note for both males and females was other relatives (14.1% and 12% respectively).

A higher proportion of Class 3 students (70.8%) compared to 67.2% of Class 4 students indicated obtaining alcohol from their parents/guardian. The next source of note for both Class 3 and Class 4 students was also other relatives (10.9% and 15% respectively), noting that a higher proportion of Class 4 students indicated other relatives.

*The preferred source overall was students’ parents/ guardian. Other relatives were also an important source.*

*Table 31: Students Usual Sources of Alcohol*

<i>From whom/where do you usually get alcohol?</i>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
Friends	3.3	4.2	2.4	3.0	3.4
Parents/Guardian	68.9	63.1	74.5	70.8	67.2
Brother/Sister	3.8	3.4	4.2	3.4	4.1
Other relative(s)	13.0	14.1	12.0	10.9	15.0
On the block	2.3	4.4	0.4	3.1	1.6
Shop	2.5	3.8	1.3	3.0	2.0
Took from home without permission	2.4	2.5	2.2	2.2	2.5
Some other place	3.8	4.5	3.1	3.4	4.1

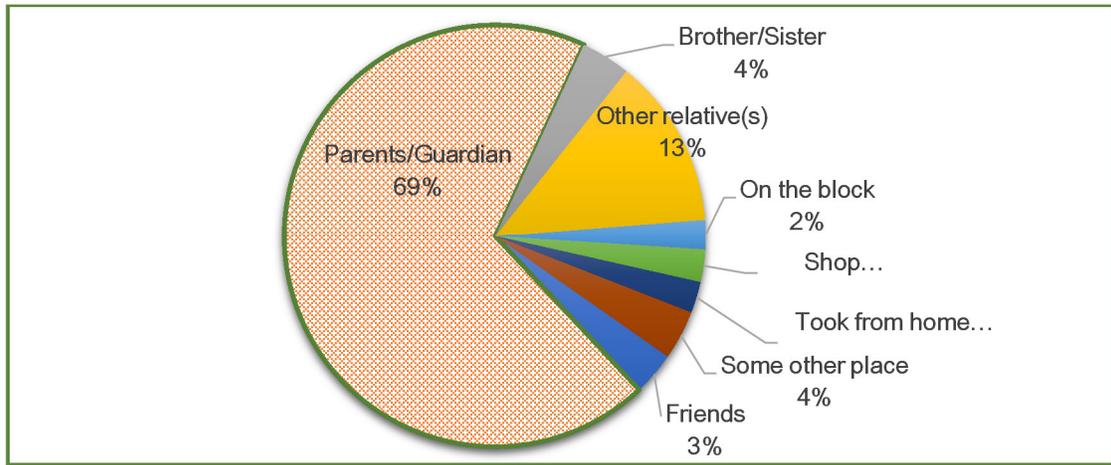
*Where Alcohol Most Often Used (Table 32)*

Of the students who reported lifetime alcohol use, the main location for use was the home (76.5%) – 75.1% males and 78.2% of females. The next locations of note were some ‘other place’ (8.8%) and social events (6.9%). Use at the other locations noted in the Table were negligible, ranging from 0.7-3.4%.

Apart from the home, other locations for males were ‘on the block’ (6.3%), social events (6.9%) and ‘other places’ (6.3%). The only other notable locations indicated by females besides the home were social events (7%) and ‘other places’ (10.9%). As with males, use at the other locations noted in the Table were negligible, ranging from 0.1-2.2%.

Tabulation by grade level showed the same pattern observed for tabulation by gender – the main locations where alcohol was used included the home, social events or at some ‘other place’. This was the case for both Class 3 and Class 4 students.

*The preferred locations most often indicated for alcohol consumption were the home, social events or some ‘other place’.*



**Figure 11: Students Usual Sources of Alcohol**

**Table 32: Place Where Students Most Often Drink Alcohol**

<i>Where do you most often drink alcohol?</i>	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
At home	76.5	75.1	78.2	76.3	76.7
At school	0.9	0.9	1.0	1.5	0.4
On the block	3.4	6.3	0.7	4.7	2.3
At a friend's house	2.8	3.2	2.2	2.2	3.3
At sporting events	0.7	1.3	0.1	0.2	1.1
At other social events	6.9	6.9	7.0	7.5	8.5
Some other place	8.8	6.3	10.9	7.7	9.8

**Inhalants (Table 33)**

**(Purposely inhaling household cleaning products such as, glue, paint, gas, hair spray, nail polish remover, markers)**

*Lifetime*

Overall lifetime prevalence of inhalants was 20.9% - one in five students reported having tried a household product that was inhalable. The average lifetime prevalence of inhalants was marginally higher among females (21.1%) compared to males (20.6%). Prevalence by grade level was not that dis-similar, a slightly higher proportion among Class 3 (22.2%) compared to Class 4 (19.5%) students. Prevalence was slightly higher in the lower age cohort, those 8-9 years old (23.3%), and

decreased as age increased – to 21% among those 10 years old and 18.2% among those 11-12 years old.

*Past Year*

On average, 12.6% of the students in the survey had tried inhalants during the past year. The average rate for males (12.1%) was slightly lower than that for females (13.1%). Past year prevalence was also higher among Class 3 (12.1%) compared to Class 4 (13.2%) students. Comparison of prevalence by age grouping showed similar proportions among students 11-12 years (12.4%), those 10 years (12.6%) and those 8-9 years old (12.6%).

*Past Month*

On average, one in every eleven students (8.6%) in the survey had tried inhalants in the past month. The average rate for males was (7.6%), however the prevalence among females was about 2 percentage points higher (9.5%). Past month prevalence was approximately the same among Class 3 (8.9%) and Class 4 students (8.4%). Comparison of prevalence by age grouping showed a higher proportion in the lower age cohort, those 8-9 years old (10.1%), which decreased as age increased – to 8.4% among those 10 years old and 7.4% among those 11-12 years old.

**Table 33: Consumption Patterns by Gender, Grade Level and Age Group**

		Lifetime	Past Year	Past Month
Overall		20.9	12.6	8.6
Gender	Male	20.6	12.1	7.6
	Female	21.1	13.1	9.5
Grade level	Class 3	22.2	12.1	8.9
	Class 4	19.5	13.2	8.4
Age Group	8-9 years	23.3	12.6	10.1
	10 years	21.0	12.6	8.4
	11-12 years	18.2	12.4	7.4

### *Age of First Use of Inhalants*

The average (mean) age of first use of inhalants overall was 7.0 years. Age of first use for males (7.1 years) was a little later than that for females (6.9 years) – females were more likely to report an earlier age of first use for inhalants. Overall, 64.3% of students who had tried inhalants had done so before age 8 – 67.1% of males versus 61.2% of females and 66.6% of Class 3 versus 61.7% of Class 4 students.

### *Usual Sources of Inhalants (Table 34)*

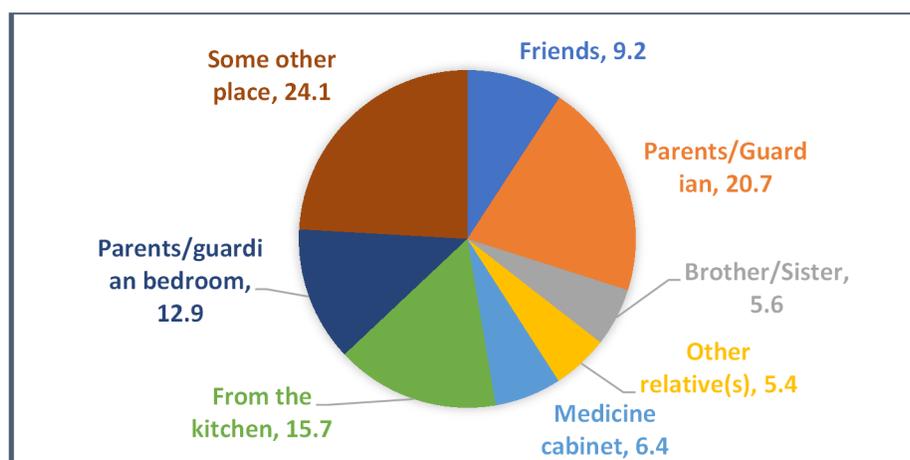
The main source of inhalants for students who reported lifetime inhalants use was ‘other places’ (24.1%) followed by parents/guardian (20.7%). Other likely sources of note were ‘from the kitchen’ (15.7%) and ‘from parents’/guardian’s bedroom’ (12.9%). Males were more likely to obtain inhalants from their parents/guardian (22.5%), some ‘other place’ (18.4%), the kitchen (16.8%), and from friends (13.1%) or their parents’/guardian’s bedroom (12.6%). Like males, females were more likely to obtain inhalants from their parents/guardian (19%), some ‘other place’ (29.1%), the kitchen (14.8%), and from their parents’/guardian’s bedroom (13.1%).

A higher proportion of Class 3 students (24.9%) indicated that they obtained inhalants from their parents/guardian, some ‘other place’ (22.3%), the kitchen (14.3%), their parents’/guardian’s bedroom (14.1%) or from friends (8.8%). The rank order for Class 4 students was somewhat different. A higher proportion of Class 4 students (25.9%) indicated that they obtained inhalants from some ‘other place’, followed by the kitchen (17.1%), their parents/guardian (16.4%), their parent’s/guardian’s bedroom (11.6%) or from friends (9.6%).

***The preferred sources overall were from some ‘other place’, parents/guardian, the kitchen or parent’s/guardian’s bedroom.***

**Table 34: Students Usual Sources of Inhalants**

<b>From whom/where do you usually get inhalants?</b>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
Friends	9.2	13.1	5.7	8.8	9.6
Parents/Guardian	20.7	22.5	19.0	24.9	16.4
Brother/Sister	5.6	5.3	6.1	3.5	7.7
Other relative(s)	5.4	3.7	7.0	5.7	5.0
Medicine cabinet	6.4	7.6	5.3	6.2	6.6
From the kitchen	15.7	16.8	14.8	14.3	17.1
Parents/guardian bedroom	12.9	12.6	13.1	14.1	11.6
Some other place	24.1	18.4	29.1	22.3	25.9



**Figure 12: Students Usual Sources of Inhalants**

*Places Where Students Most Often Use Inhalants (Table 35)*

Of the students who tried inhalants, the main location for use was the home (68.6%) - six of every ten students had tried it at home. This was followed by some ‘other place’ (9.8%) and at school (9.2%). Fewer students tried inhalants at social events (9.8%), or on the block (4%). A higher proportion of females (71.1%) compared to males (66%) tried inhalants at home or at school (10% females versus 8.4% males) or at some ‘other place’ (12.4% females versus 7% males).

For grade level, about the same proportion of Class 3 students (68.5%) compared to Class 4 students (68.9%) tried inhalants at home. However about twice as many Class 4 students tried inhalants at school (12% versus 6.5%).

***The places most often indicated for using inhalants were the home, some ‘other place’ or at school.***

***Table 35: Places Where Students Most Often Use Inhalants***

<b><i>Where do you most often use inhalants?</i></b>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
At home	68.6	66.0	71.1	68.5	68.9
At school	9.2	8.4	10.0	6.5	12.0
On the block	4.0	6.3	1.8	5.4	2.5
At a friend’s house	3.8	4.0	3.6	2.5	5.1
At sporting events	1.9	3.5	0.4	2.0	1.6
At other social events	3.7	4.9	0.7	3.2	2.1
Some other place	9.8	7.0	12.4	11.9	7.8

**Marijuana – Weed, joint, hash, spliff (Table 36)**

*Lifetime*

Overall lifetime prevalence of marijuana use was 4.3% - about one in twenty-five students reported having tried marijuana. The average lifetime prevalence of marijuana use was notably different among males (5.7%) and females (2.9%). Prevalence by grade level was also dis-similar - a slightly higher proportion among Class 3 (5.3%) compared to Class 4 (3.3%) students. Prevalence was notably higher in the younger age cohort, those 8-9 years old (6%), and decreased to 3.7% among those 10 years old and 3.9% among those 11-12 years old.

*Past Year*

On average, 2% of the students in the survey had used marijuana during the past year. The average rate for males (3.1%) was about three times that of females (0.9%). Past year prevalence was also

higher among Class 3 (2.5%) compared to Class 4 (1.4%) students. Comparison of prevalence by age grouping showed higher proportions among students 8-9 years (3.4%) and those 10 years (2%) compared to those 11-12 years old (0.8%).

*Table 36: Consumption Patterns by Gender, Grade Level and Age Group*

		Lifetime	Past Year	Past Month
Overall		4.3	2.0	1.2
Gender	Male	5.7	3.1	1.6
	Female	2.9	0.9	0.7
Grade level	Class 3	5.3	2.5	1.5
	Class 4	3.3	1.4	0.8
Age Group	8-9 years	6.0	3.4	2.2
	10 years	3.7	2.0	1.0
	11-12 years	3.9	0.8	0.6

*Past Month*

On average, just about one percent (1.2%) of the students in the survey had used marijuana during the past month. The average rate for males was 1.6% and for females 0.7%. The past month prevalence was also higher among Class 3 students (1.5%) compared to Class 4 students (0.8%), and mirrored the prevalence noted among males and females. Comparison of prevalence rates by age grouping showed higher proportions among the youngest cohort which decreased as age increased (2.2%, 1%, 0.6%).

*Age of First Use of Marijuana*

The average (mean) age of first use for marijuana overall was 8.2 years (highest overall average among all substances, see Table 60, Appendix 1). Age of first use for males (8.4 years) was a little later than that for females (7.9 years) – females were more likely to report an earlier age of first use for marijuana. Overall, 42.2% of students who had used marijuana had used this substance before age 8 – 40.8% of males versus 45.5% of females and 56% of Class 3 versus 21.4% of Class 4 students.

*Usual Sources of Marijuana (Table 37)*

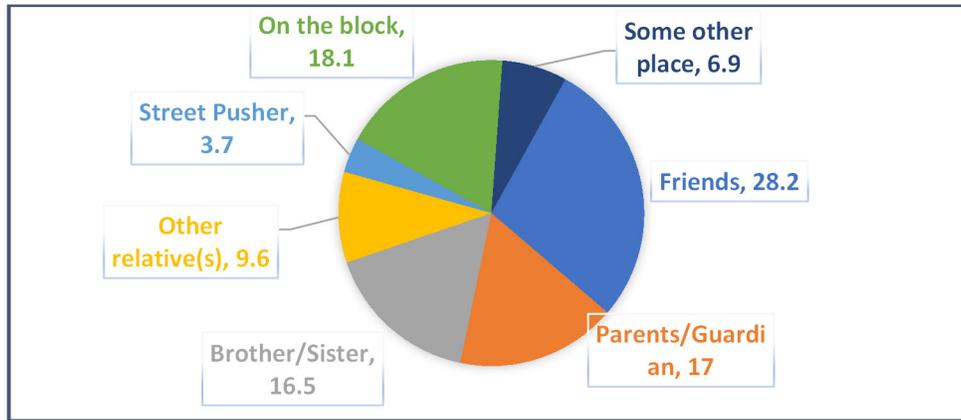
Friends (28.2%) were the main source of marijuana for those students who reported lifetime marijuana use followed by ‘on the block’ (18.1%), parents/guardian (17%) and siblings (16.5%). All other sources accounted for less than 10% each. Males were more likely to report their main sources as friends (36.5%) followed by parents/guardian (21.7%), and ‘on the block’ (15.7%) while for females they were siblings (28.8%), ‘on the block’ (21.9%) and friends (15.1%).

A higher proportion of Class 3 students (35.3%) indicated receiving marijuana from their friends. The next most prevalent responses were parents/guardian (15.16%) and siblings or ‘on the block’ (12.6% in each instance). For Class 4 students, the most prevalent responses were ‘on the block’ (28.6%), parents/guardian (18.6%) and friends (15.7%).

***The preferred source overall was friends. Other important sources were: ‘on the block’, parents/guardian and siblings.***

***Table 37: Students Usual Sources of Marijuana***

<b><i>From whom/where do you usually get marijuana?</i></b>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
Friends	28.2	36.5	15.1	35.3	15.7
Parents/Guardian	17.0	21.7	9.6	15.1	18.6
Brother/Sister	16.5	8.7	28.8	12.6	2.9
Other relative(s)	9.6	9.6	9.6	11.8	7.1
Street Pusher	3.7	3.5	4.1	4.2	2.9
On the block	18.1	15.7	21.9	12.6	28.6
Some other place	6.9	4.3	11.0	8.4	4.3



**Figure 13: Students Usual Sources of Marijuana**

*Where Marijuana is Most Often Used (Table 38)*

Of the students who used marijuana, the main location for use was the home (41.8%). Fewer students used marijuana at a friend’s house (13.3%), or ‘on the block’ (27.9%). A higher proportion of females (43.8%) compared to males (40.6%) used marijuana at home or ‘on the block,’ (29.7% females versus 26.7% males). Males, however, were more likely than females to use marijuana at school (4% males compared with 1.6% females) or at a friend’s house (13.9% males compared with 12.5% females). Males were the only set of students that reported using marijuana at other social events or at sporting events.

Tabulation by grade level showed that Class 3 students were more likely to use marijuana most often at home (41.8%), at a friend’s house (12.7%), ‘on the block’ (25.5%) or at some ‘other place’ (12.2%). Class 4 showed a similar pattern: they were more likely to most often use marijuana at home (42.6%), at a friend’s house (17.6%) and ‘on the block’ (30.9%).

***The places most often indicated for marijuana use were the home, a friend’s house, ‘on the block’ or some ‘other place’.***

*Table 38: Place Where Students Most Often Use Marijuana*

<i>Where do you most often use marijuana?</i>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
At home	41.8	40.6	43.8	41.8	42.6
At school	3.0	4.0	1.6	4.1	1.5
On the block	27.9	26.7	29.7	25.5	30.9
At a friend's house	13.3	13.9	12.5	12.7	17.6
At sporting events	0.6	1.0	0.0	1.0	.0
At other social events	4.8	7.9	0.0	5.1	4.4
Some other place	8.5	5.9	12.5	12.2	2.9

**Fanta – Wild tobacco, smoked like tobacco cigarettes (Table 39)**

*Lifetime*

Overall lifetime prevalence of Fanta was 4.5% - about one in twenty students reported having tried Fanta. The average lifetime prevalence of Fanta use was notably different among males (6.5%) and females (2.4%). Prevalence by grade level was the same – 4.5% of Class 3 and Class 4 students. Prevalence was slightly higher in the lower age cohort, those 8-9 years old (5.1%), and decreased to 4.5% among those 10 years old and even further to 3.9% among those 11-12 years old.

*Past Year*

On average, 2.3% of the students in the survey had used Fanta during the past year. The average rate for males (4%) was about eight times that of females (0.5%). Past year prevalence was also higher among Class 3 (3.1%) compared to Class 4 (1.5%) students. Comparison of prevalence by age grouping showed higher proportions among students 8-9 years (3.3%) and those 10 years (2.2%) compared to those 11-12 years old (1.3%).

**Table 39: Consumption Patterns by Gender, Grade Level and Age Group**

		Lifetime	Past Year	Past Month
Overall		4.5	2.3	1.5
Gender	Male	6.5	4.0	2.6
	Female	2.4	0.5	0.1
Grade level	Class 3	4.5	3.1	2.0
	Class 4	4.5	1.5	0.9
Age Group	8-9 years	5.1	3.3	2.2
	10 years	4.5	2.2	1.3
	11-12 years	3.9	1.3	0.6

### *Past Month*

On average, one and a half percent (1.5%) of the students in the survey had used Fanta during the past month. The average rate for males was 2.6% while that for females was negligible (0.1%). The past month prevalence was also higher among Class 3 students (2%) when compared to Class 4 students (0.9%). Comparison of prevalence by age grouping showed low proportions among all age cohorts (2.2%, 1.3% and 0.6%) which decreased as age increased.

### *Age of First Use of Fanta*

The average (mean) age of first use of Fanta overall was 7.8 years. Age of first use for males (8 years) was a little later than for females (7.3 years) – females were more likely to report an earlier age of first use for Fanta. Overall, 60.3% of students who had used Fanta had use this substance before age 8– 52.4% of males versus 77.3% of females and 68% of Class 3 versus 52.5% of Class 4 students.

### *Usual Sources of Fanta (Table 40)*

The main sources of Fanta for those students who reported lifetime Fanta use were friends (35.8), ‘on the block’ (16.9%) or other relatives (16.9%), followed by parents/guardian (10.9%) and siblings (8%). All other sources accounted for less than seven percent each. Males were more

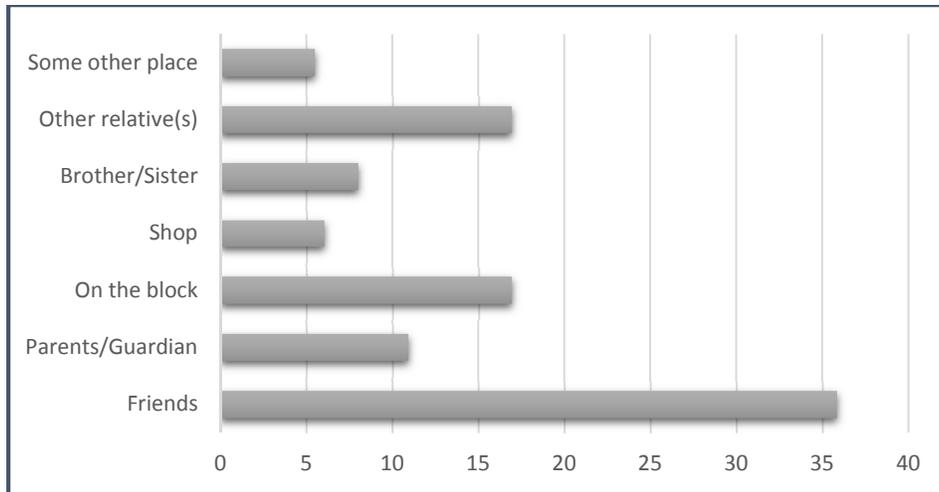
likely to report their main sources as friends (45.8%) followed by ‘on the block’ (19.4%) while for females they were other relatives (38.6%), and some ‘other place’ (15.8%).

A higher proportion of Class 4 students (40%) indicated receiving Fanta from their friends. The next most prevalent sources were other relatives (18%), parents/guardian (12%), siblings (6%) and ‘on the block’ (12%). For Class 3 students, the most prevalent responses were friends (31%), ‘on the block’ (23%) and other relatives (16%).

***The preferred source overall was friends. The other important sources were ‘on the block’, parents/guardian and other relatives.***

**Table 40: Students Usual Sources of Fanta**

<b><i>From whom/where do you usually get Fanta?</i></b>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
Friends	35.8	45.8	10.5	31.0	40.0
Parents/Guardian	10.9	10.4	12.3	10.0	12.0
On the block	16.9	19.4	10.5	23.0	11.0
Shop	6.0	6.3	5.3	3.0	9.0
Brother/Sister	8.0	8.3	7.0	10.0	6.0
Other relative(s)	16.9	8.3	38.6	16.0	18.0
Some other place	5.5	1.4	15.8	7.0	4.0



**Figure 14: Students Usual Sources of Fanta**

*Where Fanta is Most Often Smoked (Table 41)*

Of the students who used Fanta, the main location for use was the home (40.6%). Fewer students used Fanta at a friend’s house (21.2%), or ‘on the block’ (22.4%). A higher proportion of females (64.4%) compared to males (32%) used Fanta at home or at school (6.7% females versus 4% males). Males, however, were more likely to use Fanta ‘on the block’ (males: 28.8%; females: 4.4%) or at a friend’s house (males: 23.2%; females: 15.6%). Males were the only set of students that reported smoking Fanta at some ‘other place’ or at sporting events.

Tabulation by grade level showed that Class 3 students were more likely to use Fanta most often at home (46.7%) or ‘on the block’ (31.7%). Class 4 students showed about the same pattern: they were more likely to most often use Fanta at home (34.5%), at a friend’s house (32.2%) and ‘on the block’ (13.8%).

***The places most often indicated for Fanta use were the home, a friend’s house, ‘on the block’ or some ‘other place’.***

**Table 41: Places Where Students Most Often Used Fanta**

<b>Where do you most often smoke Fanta?</b>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
At home	40.6	32.0	64.4	46.7	34.5
At school	4.7	4.0	6.7	2.4	5.7
On the block	22.4	28.8	4.4	31.7	13.8
At a friend's house	21.2	23.2	15.6	9.8	32.2
At sporting events	0.6	0.8	0.0	1.2	0.0
At other social events	7.6	7.2	8.9	4.9	10.3
Some other place	2.9	4.0	0.0	2.4	2.4

**Energy Drinks – Such as Monster, Red Bull, Kick (Table 42)**

*Lifetime*

Overall lifetime prevalence of Energy drinks was 39.7% - about one in four students reported having tried Energy drinks. The average lifetime prevalence of Energy drinks use was notably different among males (45.3%) and females (35.4%). Prevalence by grade level was also dissimilar - Class 3 (37.7%) compared to Class 4 (41.6%). Prevalence was slightly higher in the older age cohort, those 11-12 years old (42%), and decreased to 40.6% among those 10 years old and even further to 35.1% among those 8-9 years old.

*Past Year*

On average, 25.2% or a quarter of the students in the survey had used Energy drinks during the past year. The average rate for males (29.1%) was higher than that for females (21.1%). Past year prevalence was also higher among Class 4 (27.5%) students when compared to Class 3 (22.7%) students. Comparison of the data by age grouping showed higher prevalence rates among students in the older age cohort, those 11-12 years old (28.7%), which decreased to 25.1% among those 10 years old and even further to 21.1% among those 8-9 years old.

**Table 42: Consumption Patterns by Gender, Grade Level and Age Group**

		Lifetime	Past Year	Past Month
Overall		39.7	25.2	18.7
Gender	Male	45.3	29.1	22.3
	Female	35.4	21.1	15.0
Grade level	Class 3	37.7	22.7	18.6
	Class 4	41.6	27.5	18.8
Age Group	8-9 years	35.1	21.1	18.0
	10 years	40.6	25.1	19.3
	11-12 years	42.0	28.7	18.1

*Past Month*

On average, 18.7% of the students in the survey had used Energy drinks during the past month. The average rate for males was 22.3% and for females 15%. The past month prevalence was about the same among Class 3 (18.6%) and Class 4 students (18.8%). Comparison of prevalence by age grouping also showed somewhat similar proportions among the age cohorts (18%, 19.3% and 18.1%, youngest to oldest cohort).

*Age of First Use of Energy Drinks*

The average (mean) age of first use of Energy drinks overall was 7.8 years. Age of first use for males (7.7 years) was a little earlier than that for females (7.9 years). Overall, 55.6% of students had used this substance before age 8 – 56.4% of males versus 54.7% of females and 66% of Class 3 versus 46.4% of Class 4 students.

*Usual Sources of Energy Drinks (Table 43)*

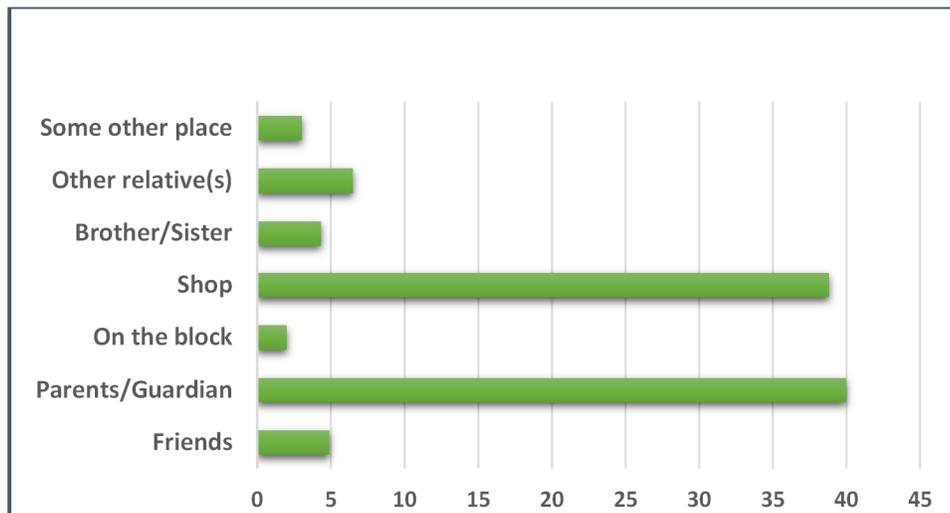
The main sources of Energy drinks for those students who reported lifetime Energy drink use were parents/guardian (40%) and the shop (38.8%). All other sources accounted for less than seven

percent each. These were the two main sources reported by both males and females as well as Class 3 and Class 4 students.

*The preferred sources overall were from parents/guardian or from the shop.*

**Table 43: Students Usual Sources of Energy Drinks**

<i>From whom/where do you usually get energy drinks?</i>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
Friends	4.9	6.0	3.6	5.9	4.0
Parents/Guardian	40.0	36.5	45.2	43.6	37.8
On the block	2.0	2.9	0.8	2.0	1.2
Shop	38.8	42.3	34.5	37.3	39.9
Brother/Sister	4.3	4.0	4.7	2.4	5.9
Other relative(s)	6.5	5.2	8.2	4.8	8.2
Some other place	3.0	2.9	3.1	3.1	2.9



**Figure 15: Students Usual Sources of Energy Drinks**

*Where Energy Drinks Most Often Consumed (Table 44)*

Of the students who used Energy drinks, the two main locations for use were the home (64.5%) or at sporting events (10.2%). These were the two most notable locations for males (59% and 12.8% respectively). For females they were the home (71.7%) and some ‘other place’ (8.3%).

**Table 44: Places Where Students Most Often Use Energy Drinks**

<b>Where do you most often use energy drinks?</b>					
	Percent responses				
	Overall	Gender		Grade Level	
		Male	Female	Class 3	Class 4
At home	64.5	59.0	71.7	65.0	64.7
At school	3.8	4.5	3.0	3.8	3.8
On the block	3.8	5.0	2.4	3.8	3.8
At a friend's house	3.2	4.0	2.2	4.0	3.1
At sporting events	10.2	12.8	7.2	11.9	10.2
At other social events	5.6	5.4	5.8	3.3	5.5
Some other place	8.9	9.5	8.3	8.1	8.9

With respect to grade level, Class 3 students most often used Energy drinks at home (65%) or ‘at sporting events’ (11.9%). This was also the case for Class 4 students - at home (64.7%) or ‘at sporting events’ (10.2%).

*The most common locations where Energy drinks were used were the home or sporting events.*

**Other Substance Use**

*Lifetime Prevalence of Other Substance Use (Table 45)*

Overall the lifetime prevalence rate for consuming a **mixture of alcoholic beverages and energy drinks** was 13.3% - about one in seven students reported having tried this mixture. Lifetime prevalence was notably different among males (15.3%) and females (11.2%). Prevalence by grade level was not very dis-similar - Class 3 (13.8%) compared to Class 4 (12.8%).

For **e-cigarettes**, overall lifetime prevalence was 4.1% - three times higher among males (6.1%) than females (2.1%) and 4.9% among Class 3 students compared to Class 4 students (3.4%).

The prevalence of **Lean** (3.3%) and **any other drug** (2.3%) were notably low.

**Table 45: Lifetime Prevalence of Other Substances**

Have you ever had .....	Overall	Class 3	Class 4	Male	Female
Mixture of alcoholic beverage and energy drink	13.3	13.8	12.8	15.3	11.2
E-cigarette	4.1	4.9	3.4	6.1	2.1
Lean (sizzurp, purple drank)	3.3	3.9	2.8	5.0	1.5
Any other drug	2.3	2.3	2.3	3.0	1.4

**‘Any Substance Use’**

*Consumption Patterns of ‘Any Substance Use’ – Test of Independence (Table 46)*

A variable was computed called, ‘any substance use’. ‘Any substance use’ is defined as lifetime use of either cigarettes, alcohol, marijuana, or inhalant products. Prevalence of ‘any use’ was 56.2% - more than half of all students overall had used at least one of the following substances (cigarette, alcohol, marijuana, or inhalant products). This was notably higher among females (56.9%) when compared to males (53.8%), however, this difference was not statistically significant,  $p > 0.05$ . Class 4 students (58.1%) compared to Class 3 students (54.2%) were significantly more likely to report ‘any use’,  $p < 0.05$ . There was no significant linear relationship between age grouping and ‘any drug’ use,  $p > 0.05$ .

**Table 46: Patterns of ‘Any Substance Use’ – Test of Independence**

		Any substance Use		Statistics
		Yes	No	Chi-square (p value)
Overall		56.2	43.7	
Gender	Male	53.8	46.2	$X^2 = 1.119$ , $p > 0.05$
	Female	56.9	43.1	
Grade level	Class 3	54.2	45.8	$X^2 = 7.076$ , $p < 0.01$
	Class 4	58.1	41.9	
Age Group	8-9 years	55.1	44.9	$X^2 = 6.964$ , $p > 0.05$
	10 years	54.9	45.1	
	11-12 years	59.4	40.6	



*Figure 16: Any Substance Use- Overall, Gender, Grade Level and Age Group*

### **Test of Independence between Various Categorical Variables (chi-square test) and Measures of Association (Odds Ratios)<sup>4</sup>**

*Test of Independence - Relationship between Lifetime Substance Use with Gender and Grade Level (Table 47)*

From Table 47 below, and by chi-square tests, prevalence among males was significantly different from females for the use of cigarettes ( $p < 0.05$ ), marijuana ( $p < 0.01$ ), energy drinks ( $p < 0.001$ ) and Fanta ( $p < 0.001$ ). There was no significant difference between males and females with respect to alcohol and inhalant use,  $p > 0.05$ . Likewise, there were no significant differences between the Class 3 and Class 4 prevalence rates for cigarette, inhalant, energy drink and Fanta use. However, there were statistically significant differences for alcohol use ( $p < 0.01$ ) and marijuana use ( $p < 0.01$ ) by grade level.

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<sup>4</sup> The **Chi Square** statistic is commonly used for testing relationships between categorical variables. The **Odds Ratio** can also be used to determine whether a particular exposure is a risk factor for a particular outcome, and to compare the magnitude of various risk factors for that outcome.

**Table 47: Relationship between Lifetime Use with Gender and Grade Level**

Substances	Grade Level		Gender	
	Class 3	Class 4	Male	Female
Cigarettes	5.2	4.5	6.6	3.1
	p>0.05		$\chi^2 = 16.59, p<0.01$	
Alcohol	48.8	54.4	50.6	52.7
	$\chi^2 = 9.48, p<0.01$		p>0.05	
Inhalants	22.2	19.5	20.6	21.1
	p>0.05		p>0.05	
Marijuana	5.3	3.3	5.7	2.9
	$\chi^2 = 7.28, p<0.01$		$\chi^2 = 11.47, p<0.01$	
Energy Drinks	37.7	41.6	45.3	35.4
	p>0.05		$\chi^2 = 19.86, p<0.001$	
Fanta	4.5	4.5	6.5	2.4
	p>0.05		$\chi^2 = 22.15, p<0.001$	

Association between drug use [lifetime use of any substance (yes/no) and ease of access to cigarette, alcohol, inhalants and marijuana (easy/difficult)]. (Table 48)

**Table 48: Association Between Drug Use and Ease of Access**

	Percent Use of any substance	Odds Ratio	Confidence Intervals
<b>Marijuana</b>			
Easy	69.4	2.034	1.518-2.727
Difficult	52.7		
<b>Inhalants</b>			
Easy	63.0	2.140	1.784-2.567
Difficult	44.3		
<b>Cigarette</b>			
Easy	69.9	2.395	1.932-2.968
Difficult	49.2		
<b>Alcohol</b>			
Easy	71.4	3.288	2.712-3.968
Difficult	43.1		



Students who felt that marijuana was easy to get were two times more likely (Odds Ratio =2.034) to report lifetime use of any of the four substances – 69.4% use among those who felt it was easy to obtain versus 52.7% among those who felt it was difficult to obtain.



Students who felt that inhalants were easy to get were two times more likely (Odds Ratio =2.140) to report lifetime use of any of the four substances – 63% use among those who felt it was easy to obtain versus 44.3% among those who felt it was difficult to obtain.



Students who felt that cigarettes were easy to get were more than two times more likely (Odds Ratio =2.395) to report lifetime use of any of the four substances – 69.9% use among those who felt they were easy to obtain versus 49.2% among those who felt they were difficult to obtain.



Students who felt that alcohol was easy to get were three times more likely (Odds Ratio =3.288) to report lifetime use of any of the four substances – 71.4% use among those who felt it was easy to obtain versus 43.1% among those who felt it was difficult to obtain.

*Association between Curiosity and Drug Use (Table 49)*

Students who reported that they had been curious about try drugs were more than one and a half times more likely (Odds Ratio =1.6) to report ‘any use’ (use of either cigarette, alcohol, marijuana or inhalants)—some 79.6% of students who were curious compared to 49.3% of those who were not curious about using drugs.

**Table 49: Ever Being Curious About Trying Drugs**

Ever being curious	Any substance use		Odds Ratio (95% CI)
	Yes	No	
Yes	273 (79.6)	70 (20.4)	1.615 (1.500-1.739)
No	756 (49.3)	778 (50.7)	

*Test of Independence - Relationship between Bullying with Gender and Grade Level (Table 50)*

A higher proportion of Class 3 students reported that other student(s) had purposely tried to hurt them when compared to Class 4 students. This difference was approaching statistical significance,  $p=0.056$ . There was no statistically significant difference between the proportions reported for males and females,  $p>0.05$ .

About the same proportion of Class 3 and Class 4 students reported that they had purposely tried to hurt other students and this difference (0.7 percentage points) was not statistically significant,  $p>0.05$ . However, there was a statistically significant difference in the proportion of males and females (9.6 percentage points) that had purposely tried to hurt other students,  $p<0.001$ .

**Table 50: Bullying – Relationship with Grade Level and Gender**

Item -Bullying (in past month)	Grade Level		Gender	
	Class 3	Class 4	Male	Female
Students purposely try to hurt you	49.9	45.5	47.8	47.6
	$\chi^2 = 3.66, p=0.056$		$p>0.05$	
Purposely tried to hurt other students	27.0	26.7	31.6	22.0
	$p>0.05$		$\chi^2 = 22.71, p<0.001$	

*Test of Independence - Relationship between Bullying and Drug Use (Any Substance Use) (Table 51)*

**Table 51: Bullying – Relationship with Any Drug Use**

	Any substance Use		Statistics
	No	Yes	Chi-square (p value)
Someone tried to hurt you			
Yes	39.8	60.2	$X^2 = 22.02, p<0.001$
No	50.4	49.6	
Tried to hurt someone			
Yes	28.1	71.9	$X^2 = 83.84, p<0.001$
No	51.5	48.5	

The rate of any drug use among students who reported that someone had tried to hurt them (60.2%) was significantly different from those who were not being bullied (49.6%),  $p<0.001$ . Likewise, the

rate of any drug use among students who reported that they had tried to hurt someone (71.9%) was significantly different from those who said they had not tried to bully someone (48.5%),  $p < 0.001$ .

*Association between Social Media and Video Game Use with Gender and Grade Level (Table 52)*

A higher proportion of Class 4 students reported social media use in the past week when compared to Class 3 students. This difference (2 percentage points) was not statistically significant. In contrast, females were significantly different from males with respect to the use of social media (OR=1.29, females were 1.2 times more likely to use social media in the past week).

A notably higher proportion of Class 3 students compared to Class 4 students reported that they had played video games in the past week and this difference (10.2 percentage points) was statistically significant (OR=1.34, Class 3 students were 1.3 times more likely to have played video games).

There was also a statistically significant difference in the proportion of males and females (24.1 percentage points) that played video games (OR=2, males were two times more likely to report playing video games in the past week).

**Table 52: Social media and Video Game – Association with Gender and Grade Level**

Past week	Grade Level		Gender	
	Class 3	Class 4	Male	Female
Use social media	71.0	73.0	67.2	76.9
	OR=1.051 (0.952-1.159)		OR=1.294 (1.156-1.449)	
Play video game	76.7	66.5	83.3	59.2
	OR= 1.314 (1.172-1.474)		OR= 2.0 (1.745-2.292)	

*Association between Lifetime Use and Use of Social Media and Video Games (Table 53)*

From Table 53, there was a statistically significant association between lifetime use of cigarettes, alcohol, inhalants, marijuana and energy drinks and the past week use of social media and video games. A strong association was observed between cigarette use and video games (OR=4.064),

marijuana use and video games (OR=4.034), cigarette use and social media OR=4.431), marijuana use and social media (OR=2.954).

**Table 53: Social media and Video Game – Association with Lifetime Prevalence**

	Video games		Odds Ratio (95%CI)
	Yes	No	
Cigarette	6.6	1.6	4.064 (2.063-8.003)
Alcohol	51.9	44.9	1.157 (1.0411-1.286)
Inhalants	22.3	16.0	1.395 (1.124-1.730)
Marijuana	5.8	1.4	4.034 (1.963-8.287)
Energy Drinks	44.8	31.3	1.432 (1.248-1.624)
	Social Media		Odds Ratio (95%CI)
	Yes	No	
Cigarette	6.6	1.5	4.431 (2.166-9.065)
Alcohol	53.2	41.6	1.281 (1.144-1.866)
Inhalants	22.7	15.1	1.507 (1.204-1.866)
Marijuana	5.5	1.9	2.954 (1.539-5.668)
Energy Drinks	44.8	31.1	1.443 (1.255-1.659)

*Lifetime, Past Year and Past Month Substance Use with Perception of Harm from Using Various Substances.* (Table 54)

- Students who felt there was no harm in smoking cigarettes reported a higher prevalence of lifetime and past year use compared to students who felt it was harmful to smoke cigarettes.
- Students who felt there was no harm in using alcohol reported a much higher prevalence of lifetime, past year and past month use compared to students who felt it was harmful to use alcohol. Of note, there was also relatively high prevalence reported by those students who did not know the harm associated with using alcohol.

**Table 54: Substance Use and Perception of Harm**

Substances	Cigarette prevalence for students who responded to - Is smoking cigarettes harmful		
Cigarettes	Yes	No	DK
Lifetime	4.3	16.4	5.0
Past year	1.6	5.0	0.3
Past month	0.7	0.6	0.0

Alcohol prevalence for students who responded to - Is drinking alcohol harmful			
Alcohol	Yes	No	DK
Lifetime	48.7	77.9	47.5
Past year	25.0	47.2	22.1
Past month	16.8	32.2	13.3
Is inhaling common products harmful			
Inhalants	Yes	No	DK
Lifetime	21.4	26.5	16.6
Past year	13.2	18.1	8.1
Past month	9.2	12.9	5.1
Is using marijuana harmful			
Marijuana	Yes	No	DK
Lifetime	3.1	24.8	3.4
Past year	1.3	15.7	1.1
Past month	0.5	13.5	7.8

- The same pattern was observed for inhalant use as for alcohol use - students who felt there was no harm in using inhalants reported a much higher prevalence of lifetime, past year and past month use.
- Likewise, students who felt there was no harm in using marijuana also reported a much higher prevalence of lifetime, past year and past month use.

For the most part, students who felt there was no harm in using these substances reported a higher prevalence of lifetime, past year and past month use when compared to students who felt it was harmful to use the substances.

### **Trends (Movement) in Various Variables between 2006 and 2020**

Where comparisons were possible, the movement in observed responses were compared between the studies done in 2006, 2009 and 2020.

#### *Consumption Pattern Overall (Table 55)*

Cigarette prevalence in 2020 was 2.4 percentage points (pp) lower than in 2009 and overall lower than that reported in the previous two studies. Alcohol prevalence was lower than that reported in 2009, so too was inhalant use. Of note is the fact that the prevalence of inhalants was less than half

of that reported in 2009 (24pp lower). Though marijuana prevalence was lower than in 2009, it was only marginally lower. Fanta was the only substance that showed a higher prevalence in 2020 (1.1 pp).

**Table 55: Comparison of substances Use Prevalence – 2006, 2009 and 2020**

	Lifetime Use		
	2006	2009	2020
Cigarettes	5.0	7.2	4.8
Alcohol	49.3	52.9	51.7
Inhalants	27.5	44.9	20.9
Marijuana	2.8	4.8	4.3
Fanta	-	3.4	4.5

*Consumption Pattern – Males versus Females (Table 56)*

Males reported lower lifetime prevalence in 2020 for all substances (cigarette, alcohol, inhalants, and marijuana) except for Fanta. Fanta prevalence in 2020 was 1.7pp higher than in 2009.

Females, on the other hand, reported lower prevalence rates for only cigarettes and inhalants when compared to 2009. The prevalence rates for alcohol (4.3 pp), marijuana (0.2 pp) and fanta (0.3 pp) were marginally higher in 2020 for females.

**Table 56: Comparison of Lifetime Prevalence – Male versus Female (2009 and 2020)**

	2009		2020	
	Male	Female	Male	Female
Cigarettes	10.5	3.8	6.6	3.1
Alcohol	59.7	48.4	50.6	52.7
Inhalants	43.7	48.3	20.6	21.1
Marijuana	7.0	2.7	5.7	2.9
Fanta	4.9	2.1	6.6	2.4

*Accessibility - Ease of Access to Various Substances (Table 57)*

A notably lower proportion of students in 2020 felt that marijuana was easy to access (4.5 percentage points lower). However, while 39% felt it was either difficult or impossible to access in 2009, only 23% felt that way in 2020. The perception that it was easy to access alcohol was about

10 percentage points lower in 2020 while the proportion of students believing it to be either difficult or impossible to access increased by 3.7 percentage points.

**Table 57: Perception of Ease of Access various substances - 2009 and 2020**

	Marijuana		Alcohol	
	Year		Year	
	2009	2020	2009	2020
Easy	16.5	12.0	50.5	40.9
Difficult	20.4	7.5	10.7	10.1
Impossible	18.7	15.5	11.1	15.4
Don't know	40.6	65.0	23.5	33.5

*Reasons for Drug Use (Table 58)*

A slightly higher proportion of students in 2020, compared to 2009, agreed that ‘using drugs makes you feel cool’ (2.2 percentage points higher); considerably less (8.8 percentage points less) students in 2020 said that ‘People use drugs because their parents use drugs.’ There was a 4.8 percentage points decrease in 2020 for those who said ‘People use drugs because other persons in their family use drugs.’ Just about the same proportion of students in 2020 said ‘People use drugs because their friends use drugs.’ However, considerably more students in 2020 (25.5 percentage points more) said people want to use alcoholic drinks when they see them advertised.

**Table 58: Comparison of Responses – Reasons for Drug Use (2009 and 2020)**

	Percent agreeing with statement	
	2020	2009
Using drugs makes you look cool	5.6	3.4
People use drugs because their parents use drugs.	21.7	30.5
People use drugs because other persons in their family use drugs.	28.2	33.0
People use drugs because their friends use drugs	50.9	49.1
People want to use alcoholic drinks when they see them advertised	37.1	11.6

*Perception of Harm for Using Various Substances (Table 59)*

Notably fewer students in 2020 (compared to 2009) believed drinking alcohol (2 pp), inhaling common products (4.8 pp) or using marijuana (6.3 pp) to be harmful. In contrast, there was an increase (2.9 pp) in the proportion of students that considered smoking cigarettes to be harmful.

***Table 59: Students' Perception of Harm for Using Various Substances***

	Responses of Yes (harmful)	
	2020	2009
Smoking cigarettes	89.1	86.2
Drinking alcohol	73.4	75.4
Inhaling common products	56.4	61.2
Using marijuana	80.2	86.5

## Discussion

### Consumption Pattern – Prevalence of Substance Use

Alcohol and inhalants were the main substances used in this survey cycle. Their prevalence is relatively high but there is minimal variability among males and females. The lifetime prevalence for cigarettes was relatively low (4.8%), like marijuana (4.3%) but decreased considerably for past month use (0.7%). The evidence suggests that cigarette use is mainly for the purposes of experimentation, given that current use rates are very low. The comparison of Fanta and marijuana use is interesting — past year marijuana prevalence (2%) was quite similar to past year Fanta prevalence (2.3%) and past month prevalence for both substances was relatively the same.

It is important to pay attention to the fact that 4% of students have reported the use of e-cigarettes in this survey. E-cigarettes produce an aerosol by heating a liquid that usually contains nicotine—the addictive drug in regular cigarettes, cigars, and other tobacco products—flavourings, and other chemicals that help to make the aerosol (Centers for Disease Control and Prevention, 2020). Users inhale this aerosol into their lungs and bystanders can also breathe in this aerosol when the user exhales into the air (Centers for Disease Control and Prevention, 2020). It is difficult for consumers to know what e-cigarette products contain. For example, some e-cigarettes marketed as containing zero percent nicotine have been found to contain nicotine<sup>5</sup>. E-cigarette aerosol can contain chemicals that are harmful to the lungs and youth e-cigarette use is associated with the use of other tobacco products, including cigarettes.

Very few students have experimented with lean (3.3%). Popularized by the Rap music industry, this combination of codeine cough syrup, soda (typically sprite) and hard candy (typically Jolly Rancher) produces feelings of relaxation, euphoria and drowsiness (Santos-Longhurst, 2019; Villines, 2020). Other less desirable effects include, but are not limited to: hallucinations, loss of coordination, nausea and vomiting, dizziness, seizures, respiratory depression, changes in heart

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<sup>5</sup> US Department of Health and Human Services. [E-cigarette use among youth and young adults: a report of the Surgeon General \[PDF-8.47 MB\]](#). Atlanta, GA: US Department of Health and Human Services, CDC; 2016.

rhythm and a loss of consciousness (Santos-Longhurst, 2019; Villines, 2020). These effects are even more pronounced if alcohol is added to the mixture (Santos-Longhurst, 2019). Given the dangerous nature of lean, efforts should be made to deter the increased use of this drug among the school population. To this end, primary school students should receive some drug education surrounding lean. However, this should be handled with care so as not to serve as a “how to” guide for those who are unfamiliar with this substance and may be prone to experimentation.

### **Energy Drink Phenomenon**

Lifetime use of energy drinks was high (40%) as was past month or current use (18.7%). Also interesting is the reported use of alcohol/energy drink mixtures (Overall lifetime prevalence for **mixtures of alcoholic beverages and energy drinks** was 13.3%). High amounts of caffeine, often coupled with other natural stimulants that enhance caffeine’s effects, are the main ingredients of energy drinks. Increased mental concentration as well as physical performance is purported by beverages marketed as energy drinks. Despite this, energy drinks are a source of excess sugar that can increase obesity risk but unfortunately this is not well documented. These sports drinks and caffeinated energy drinks (CED) are commonly consumed by youth. Both sports drinks and CEDs pose potential risks for the health of children and adolescents and may contribute to obesity.

Sports drinks are generally unnecessary for children engaged in routine or play-based physical activity while CEDs may affect children and adolescents more than adults because they weigh less and thus experience greater exposure to stimulant ingredients per kilogram of body weight. As such, efforts should be made to educate the youth and their families on the differences between sport drinks and CEDs. Additionally, screening for the consumption of CEDs, especially when mixed with alcohol, should be done routinely<sup>6</sup>. The combination of CEDs and alcohol is of particular importance as it may be a marker for the higher risk of substance use or abuse and for other health-compromising behaviours.

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<sup>6</sup> “Adolescent Consumption of Sports and Energy Drinks: Linkages to Higher Physical Activity, Unhealthy Beverage Patterns, Cigarette Smoking, and Screen Media Use,” by Nicole Larson, PhD, MPH, RDN; Jessica DeWolfe, MPH; Mary Story, PhD, RD; Dianne Neumark-Sztainer, PhD, MPH, RD (DOI: <http://dx.doi.org/10.1016/j.jneb.2014.02.008>), Journal of Nutrition Education and Behavior, Volume 46/Issue 3 (May/June 2014), published by Elsevier.

## **Age of First Use and Early Onset of Substance Use**

Age of first use (initial experimentation) appears to be an important factor in the clinical trajectory of drug abuse or dependence for specific substances. Thus, experimentation among subjects in their teens is associated with greater long-term vulnerability, for specific drugs. Therefore, prevention and management strategies should address subjects before their adolescence, specifically before 13 years of age<sup>7</sup>.

The precocious onset of substance use in children signals vulnerability for the development of other problems (conduct disorder, attention disorders and affective disorders, among others) and behaviours that pose risks to the individual child and others. These other problems have a complex interaction with substance use and can precede, co-occur, or follow substance initiation. Intervening in these other problems and behaviours constitutes a crucial prevention or early intervention strategy for substance-related problems, just as proactive intervention into early substance use serves the same functions for these other problems. Although this cohort of students surveyed were under 13 years old, it is important to recognize the early use of these substances indicated in the survey. Age of first use was primarily around 7-8 years old which is already classified as early onset.

Substance abuse programmes can play an important role in lowering the short- and long-term risks to individuals, families and communities by postponing substance use initiation as long as possible, and by recognizing developmental windows of vulnerability and opportunity in the transitions from early drug experimentation to chronic drug dependence.

## **Perception of Harm**

Historically, an individual's perception of the risks associated with substance use has been an important determinant of whether he or she engages in substance use<sup>8</sup>. For example, youths who

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<sup>7</sup> White, W., Godley, M. & Dennis, M. (2003) Early onset of substance abuse: Implications for student assistance programs. *Student Assistance Journal*, 16(1), 22-25.

<sup>8</sup> Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2012). *Monitoring the Future national survey results on drug use, 1975-2011: Volume I, Secondary school students*. Ann Arbor: Institute for Social Research, The University of Michigan. Retrieved from [http://monitoringthefuture.org/pubs/monographs/mtf-vol1\\_2011.pdf](http://monitoringthefuture.org/pubs/monographs/mtf-vol1_2011.pdf)

perceive high risk of harm are less likely to use drugs than youths who perceive low risk of harm. Thus, providing young adults with credible, accurate, and relevant information about the harm associated with substance use is a key component in prevention programming.

Many students in this survey are aware of the risks associated with substance use. As shown in Table 21, a notable, high proportion of students reported that it was harmful to smoke cigarettes (89%), drink alcohol (73%) and use marijuana (80%). However, fewer students perceived that it was harmful to inhale common household products (56%) or use e-cigarettes (50%).

The results presented in this report indicate that many students are aware of the risks of substance use; however, a large percentage still did not believe that it would be harmful to use these substances. For example, perception of no risk of harm related to the use of the substances indicated ranged from a low of 4% for smoking cigarettes to a high of 16% for using inhalants. It is important to note that students who perceive no risk were as likely to be current users. The results (Table 53) show that for students who said there was no risk of harm from smoking cigarettes, 5% had used in the past year and as many were current smokers as those who believe it was harmful. In the case of alcohol, twice as many students who believed there was no harm reported current use compared to those who said it was harmful. The same pattern was noted for marijuana and inhalant use. Additionally, the differences in the perception of harm among boys and girls was not dis-similar. For this cohort of students, there is like understanding of the risk of harm.

### **Perceived Availability of Substances**

Ease of access to substances has been shown to have a direct and significant relationship with substance use for school-aged children. Given the magnitude of substance use behaviours and the perceived ease of access to alcohol, tobacco, and illicit drugs among middle and high school students, researchers have begun to explore sources of access and other factors that may impact ease of access to substances among students in order to better inform prevention and intervention efforts<sup>9</sup>.

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<sup>9</sup> Jacob C. Warren, K. Bryant Smalley, and K. Nikki Barefoot Perceived Ease of Access to Alcohol, Tobacco, and Other Substances in Rural and Urban US Students.

In terms of sources of access, research consistently demonstrates that the most reported source by which adolescents perceive that they could gain access to substances is through friends and/or social networks. In this survey the main sources identified by students for obtaining drugs were friends (33% for cigarettes, 28% for marijuana), parents - with or without permission as was the case with alcohol (69%) – and siblings/family members.

Other factors that have been shown to increase adolescents' perceived ease of access include: the adolescent's age (i.e., perceived ease of access increases with age); the prevalence of use (i.e., more widely used substances are perceived to be easier to access); the physical availability of substances in one's community; and the social availability of substances (i.e., the perceptions of substance use norms, prevalence of use, and support for use amongst one's peers, parents, school, and community).

Aspects of these factors were explored in this survey and findings were similar. For example, in the case of cigarettes: 27% of students perceived it was easy to obtain; males' and females' perception of availability was notably dis-similar (31% and 23% respectively); the usual source for obtaining cigarettes was from a friend or on the block, and they would most often smoke at home or at a friend's house.

### **Perceived Ease of Access to Alcohol, Cigarettes, and Other Substances**

Given the strong association between drug use [lifetime use of any substance (yes/no) and ease of access to cigarettes, alcohol, inhalants and marijuana (easy/difficult) as shown in Table 48, it appears that cigarettes, alcohol, and other drugs may be readily available and easily accessible to many students. In fact, the ease of access to cigarettes, alcohol, and certain illicit drugs has been recognized as one of the main underlying causes of the current substance use epidemic among students surveyed in the Caribbean, with adolescents' perceptions of the ease of access to alcohol, cigarettes, and drugs being shown to significantly increase their risk for use as reported in this survey.

### **Comparison of Findings to those from Other School Surveys**

A comparison of this survey's findings to those from other school surveys shows that the pattern of drug use among primary school students in Barbados is largely similar to that of older students and those in other countries.

As in other studies (e.g. Boak, Elton-Marshall, Mann & Hamilton, 2020; Inter-American Drug Abuse Control Commission, 2016; Miech et al, 2019; NCSA, 2010, 2015), alcohol was identified as the most commonly used substance. Similarly, the age of first use for various substances, though lower than that in the island's two previous surveys (NCSA, 2006; 2010), coincided with that identified in the 2012 Bermudan Primary School Survey (Department for National Drug Control, 2013).

With respect to drug sources, this survey confirmed earlier findings which indicated that alcohol is most often obtained from parents and other family members (e.g. Boak et al., 2020; Department for National Drug Control, 2013; Miech et al, 2019; NCSA, 2010) while substances such as tobacco and marijuana are obtained from friends (e.g. Boak et al., 2020; Department for National Drug Control, 2013; NCSA, 2010). Likewise, the home was shown as a primary location for drug use, as was the case in other surveys (e.g. Department for National Drug Control, 2013; NCSA, 2010).

Much like previous studies, this survey also showed an association between drug use and well established risk factors, for example: curiosity, ease of access and perceived harm (e.g. Atherton et al, 2016; Lipari, 2013); social media use (e.g. Centre for Addiction & Substance Use, 2012; Costello & Ramo, 2017) and video game use (Armstrong, Bush & Jones, 2010; Walther, Morgenstern, & Hanewinkel, 2012; Wenzel, Bakken, Johansson, Götestam, & Øren, 2009).

### **Main Conclusions**

Alcohol and inhalants were the main substances used by students and were found to have high prevalence rates. Cigarette, marijuana and Fanta use was minimal, suggestive of experimental use. The use of e-cigarettes, though minimal, is concerning given the health risks associated with this phenomenon.

The high use of energy drinks is notable as is the reported use of alcohol and energy drink mixes. Energy drinks pose potential risks for the health of children and adolescents and may contribute to obesity while the consumption of alcohol and energy drink mixes may be a marker for the increased risk of substance use or abuse. As such, parent education and routine screenings for the consumption of energy drinks, both alone and in combination with alcohol, should be facilitated.

Age of first use appears to be an important factor in the clinical trajectory of drug abuse or dependence. This is important as the age of first substance use for participants in this survey was between 7 and 8 years, which is classified as early onset. As such, it is recommended that prevention and management strategies address subjects before adolescence, specifically before 13 years of age.

Despite being aware of the risks associated with drug use, many students in this survey still engaged in such behaviour. Given that risk perception is an important determinant of substance use, it is important that credible, accurate and relevant information be provided regarding the associated in harms.

The ease of access to various drugs has been recognized as one of the main underlying causes of substance use among school children in the Caribbean. This survey supports that theory, as perceived ease of access significantly increased the risk for substance use among participants. Furthermore, the strong association between drug use and ease of access suggests that alcohol, tobacco cigarettes and other substances may be readily available and easily accessible to many students.

## **Recommendations**

The following recommendations are proposed against the backdrop of this survey's findings:

1. Drug prevention education should be increased for students of all ages at the primary school level.

2. Drug prevention education should be delivered using a national approach coordinated by the NCSA. This should include:
  - a. The development and implementation of a national policy guiding the delivery of drug prevention education at primary schools
  - b. The identification and training of facilitators (e.g. teachers, parents, personnel from NGOs, etc.)
  - c. The development and delivery of a standardized curriculum/standardized modules to ensure that all facilitators are providing the same information
  - d. Continuous monitoring and evaluation of efforts
3. Efforts should be made to ensure the delivery of the drug prevention education module within the Health and Family Life Education curriculum.
4. Drug prevention education should include information on energy drinks, fanta, e-cigarettes (vaping) and lean.
5. Social determinants associated with drug use should be factored into drug prevention efforts. These include but are not limited to: bullying, social media use and video game use.
6. At a wider level, parents should be educated about the drugs used by young persons as well as the associated dangers, the signs and symptoms of drug use and their role in drug prevention.
7. School-based prevention efforts should be buttressed with interventions at the community level.
8. Efforts should be made to further restrict children's access to drugs.

### **Directions for Future Research**

While the Primary School Survey Series has provided some insight into the risk and protective factors associated with drug use during childhood, there remains limited empirical evidence at the regional and international level. As such, additional research specifically designed to investigate this topic would serve as a useful guide for the development of policies and programmes targeting pre-adolescents. Similarly, the cursory findings surrounding the use of Lean and e-cigarettes by students, suggest the need to further investigate the use of these substances at both the primary and secondary school levels.

### **Take Home Message**

Drug use at the primary school level remains minimal and is primarily experimental. Nevertheless, its occurrence is concerning, particularly the young age at which persons report initiating use, as this can serve as a warning sign for problematic use later in life.

While prevalence rates have generally decreased since the conduct of the last survey in 2009, students report limited exposure to drug prevention education from their parents, teachers and friends as well as visitors to their school. Therefore, efforts should be made to increase such initiatives as this can facilitate a further reduction in drug use among primary school students. Consideration should be given to using a coordinated approach involving the NCSA, teachers, parents and other stakeholders e.g. NGOs, civil society organizations and the Royal Barbados Police Force. In addition to ensuring a structured approach, all involved will benefit from shared human resources and technical input. This approach can be buttressed with initiatives which target parents and the wider community as children spend a large proportion of their lives outside of the school setting and can therefore be influenced by drug use and related activities in their environs.

## Appendix 1 – Age of First Use

*Table 60: Comparison of Mean Age of First Substance Use*

Sex		Cigarette	Alcohol	Inhalant	Marijuana	Fanta	Energy Drinks
Male	Mean	7.744	7.931	7.11	8.427	8.09	7.74
	N	130	1075	438	115	133	932
	Std. Deviation	1.7691	1.9405	2.225	1.7743	1.614	2.235
Female	Mean	7.257	7.943	6.98	7.906	7.36	7.98
	N	61	1086	447	51	52	753
	Std. Deviation	1.8631	1.8307	2.582	1.9742	1.228	1.909
Total	Mean	7.588	7.937	7.04	8.267	7.88	7.85
	N	191	2161	884	166	185	1685
	Std. Deviation	1.8093	1.8857	2.412	1.8479	1.546	2.099

## Appendix 2 – 2020 Consumption Patterns

### Consumption Patterns –2020 Prevalence Data – Overall, Gender, Grade Level and Age Grouping

*Table 61: Consumption Patterns –2020 Prevalence Data*

	Cigarette	Alcohol	Inhalant	Marijuana	Fanta	Energy Drinks
Lifetime	4.8	51.7	20.9	4.3	4.5	39.7
Past Year	1.7	26.9	12.6	2.0	2.3	25.2
Past Month	0.7	18.0	8.6	1.2	1.5	18.7
Lifetime male	6.6	50.6	20.6	5.7	6.5	45.3
Past Year male	2.7	28.0	12.1	3.1	4.0	29.1
Past month male	1.3	17.7	7.6	1.6	2.6	22.3
Lifetime female	3.1	52.7	21.1	2.9	2.4	35.4
Past year female	0.6	25.8	13.1	0.9	0.5	21.1
Past month female	0.1	18.2	9.5	0.7	0.1	15.0
Lifetime Class 3	5.2	48.8	22.2	5.3	4.5	37.7
Past Year Class 3	2.1	22.8	12.1	2.5	3.1	22.7
Past month Class 3	0.9	15.1	8.9	1.5	2.0	18.6
Lifetime Class 4	4.5	54.4	19.5	3.3	4.5	41.6
Past Year Class 4	1.2	30.9	13.2	1.4	1.5	27.5
Past month Class 4	0.5	20.8	8.4	0.8	0.9	18.8
Lifetime 8-9 years	5.7	49.3	23.3	6.0	5.1	35.1
Past Year 8-9 years	5.0	23.5	12.6	3.4	3.3	21.1
Past month 8-9 years	1.0	17.2	10.1	2.2	2.2	18.0
Lifetime 10 years	4.5	50.4	21.0	3.7	4.5	40.6
Past Year 10 years	4.5	25.7	12.6	2.0	2.2	25.1
Past month 10 years	0.5	16.8	8.4	1.0	1.3	19.3
Lifetime 11-12 years	5.2	56.3	18.2	3.9	3.9	42.0
Past Year 11-12 years	5.2	32.1	12.4	0.8	1.3	28.7
Past month 11-12 years	0.3	20.9	7.4	0.6	0.6	18.1

QUESTIONNAIRE NUMBER:



2020 NATIONAL PRIMARY SCHOOL SURVEY

**INSTRUCTIONS:**

Please read each of the following questions carefully. Answer each question by ticking (✓) the box next to your chosen answer or by filling in the blank spaces where provided.

**SECTION A**

**1.** I am in:

Class

**2.** I am a:

Male

Female

**3.** I am:

Years old

**SECTION B**

4a) My parents/guardian(s) come to meetings at the school with my teacher.

Yes       No

4b) My parents/guardian(s) know what programs I watch on television/electronic devices (e.g. iPads, tablets, cell phones, etc.).

Yes       No

4c) Most of the time, my parents/guardian(s) know where I am after school or on weekends.

Yes       No

4d) Most of the time, I am supervised by my parents/guardian(s) or another adult after school or on weekends.

Yes       No

4e) My parents/guardian(s) know most of my friends.

Yes       No

4f) Most of the time, my parents/guardian(s) check my homework.

Yes       No

4g) My parents/guardian(s) talk with my teacher (e.g. on Whatsapp, before and after school, at meetings, etc.)

Yes       No       I Don't know

## SECTION C

5. I can talk to my teacher if something is worrying me.

Yes       No

6. I like going to school.

Yes       No

7. I feel a part of this school.

Yes       No

8. I believe I can do well at school.

Yes       No

## SECTION D

9) Which of the following activities do you take part in at school or after school?  
(Tick **ALL** that apply).

Cubs/Brownies/Pathfinders

4H Club

Karate

Music

Dancing

Singing/Choir

Sports

Lessons

Other (Please say) \_\_\_\_\_

None of the above

10) How many days during the past week did you use social media websites or apps, such as Instagram, Snapchat, Facebook, Whatsapp, TikTok?

- 1 or 2 days
- 3 or 4 days
- 5 or 6 days
- Everyday
- I did not use social media during the past week

11) How many days during the past week did you play video games?

- 1 or 2 days
- 3 or 4 days
- 5 or 6 days
- Everyday
- I did not play video games during the past week

12a) Did any other students purposely try to hurt you by shoving, hitting, kicking or teasing you in the past month?

- Yes       No

12b) Did you purposely try to hurt any other student(s) by hitting, shoving, kicking or teasing them in the past month?

- Yes       No

**SECTION E**

13. How often do the following persons speak to you about drugs?

Tick (✓) the box next to each group of persons that gives your best answer. Tick (✓) only **ONE** box for each group.

<b>Parents</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Never	Sometimes	All the time	Can't remember
<b>Teachers</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Never	Sometimes	All the time	Can't remember
<b>Friends</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Never	Sometimes	All the time	Can't remember
<b>Visitors to the school</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Never	Sometimes	All the time	Can't remember

**SECTION F**

14a) How easy is it to get marijuana (weed, joint, hash, spliff)?

Easy     Difficult     Impossible     Don't know

14b) How easy is it to get inhalants (e.g. glue, paint, gas)?

Easy     Difficult     Impossible     Don't know

14c) How easy it to get cigarettes?

Easy     Difficult     Impossible     Don't know

14d) How easy is it to get alcohol (e.g. beer, wine, rum, gin, whisky, vodka)?

Easy     Difficult     Impossible     Don't know

14e) How easy is it to get fanta?

Easy     Difficult     Impossible     Don't know

14f) How easy is it to get lean (purple drank, sizzurp)?

Easy     Difficult     Impossible     Don't know

14g) How easy is it to get vape mods/vape pens/vaporizers/e-cigarettes/e-liquid?

Easy     Difficult     Impossible     Don't know

## SECTION G

15a) Is smoking cigarettes harmful?

Yes     No     Don't know

15b) Is drinking alcohol (e.g. beer, wine, rum, gin, whisky, vodka) harmful?

Yes     No     Don't know

15c) Is inhaling common products such as glue, paint, deodorant, nail polish remover, cleaning products, gas or markers harmful?

Yes     No     Don't know

15d) Is using marijuana harmful?

Yes     No     Don't know

15e) Is smoking fanta harmful?

Yes     No     Don't know

15f) Is using lean (also known as purple drank, sizzurp) harmful?

Yes     No     Don't know

15g) Is vaping harmful?

Yes     No     Don't know

## SECTION H

16. Carefully read each statement below. Please **TICK (✓)** the box that best describes how you feel about EACH statement. .

\*Drugs refers to alcohol, marijuana or cocaine (dope)

\* Alcohol refers to beer, rum, Guinness, wine, gin, whisky, brandy, etc.

a) Using drugs makes you look cool.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Don't Know <input type="checkbox"/>
b) People use drugs because their parents use drugs.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Don't Know <input type="checkbox"/>
c) People use drugs because other persons in their family use drugs.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Don't Know <input type="checkbox"/>
d) People use drugs because their friends use drugs.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Don't Know <input type="checkbox"/>
e) People use drugs to feel less stressed.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Don't Know <input type="checkbox"/>
f) People use drugs to relax.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Don't Know <input type="checkbox"/>
g) People want to use alcoholic drinks such as beer, rum and wine when they see them advertised.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Don't Know <input type="checkbox"/>
h) People want to smoke marijuana when they see other people smoking marijuana.	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Don't Know <input type="checkbox"/>

## SECTION I

17. Have you ever been curious about trying drugs?

Yes       No

**SECTION J**

**TOBACCO CIGARETTES**

---

18a) Have you ever smoked cigarettes? (Even a puff)

- Yes       No

18b) About how old were you when you first smoked a cigarette? If you have never smoked cigarettes, please place an "X" in the box provided.

years old

18c) Have you smoked cigarettes in the past 12 months?

- Yes       No       I have never smoked cigarettes

18d) Have you smoked cigarettes in the past month?

- Yes       No       I have never smoked cigarettes

18e) From whom/where do you usually get cigarettes? (Tick only ONE answer)

- Friends       Parents/Guardian       On the block  
 Shop       Brother/Sister       Other relative(s)  
 Other place (please say) \_\_\_\_\_  
 I have never smoked cigarettes

18f) Where do you most often smoke cigarettes? (Tick only ONE answer)

- At home       At school       On the block       At a friend's house  
 At sporting events       At other social events (parties/fairs)  
 Other place (please say) \_\_\_\_\_  
 I have never smoked cigarettes

**ALCOHOL (like beer, rum, wine, gin, vodka)**

---

19a) Did you ever drink alcoholic beverages (even a sip)? These DO NOT include wine given at church.

- Yes       No

19b) About how old were you when you tried alcohol for the first time? If you have never used alcohol, please place an "X" in the box provided.

years old

19c) Did you drink alcoholic beverages in the past 12 months?

- Yes       No       I have never used alcohol

19d) Did you drink alcoholic beverages in the past month?

- Yes       No       I have never used alcohol

19e) From whom/where do you usually get alcohol? (Tick only ONE answer)

- Friends       Parents/Guardian       Brother/Sister       Other relatives  
 On the block       Shop       Took it from home without permission  
 Other place (please say) \_\_\_\_\_  
 I have never used alcohol

19f) Where do you most often drink alcohol? (Tick only ONE answer)

- At home       At school       On the block       At a friend's house  
 At sporting events       At other social events (parties/fairs)  
 Other place (please say) \_\_\_\_\_  
 I have never used alcohol

**INHALANTS (household cleaning products, glue, paint, gas, hair spray, nail polish remover, markers)**

---

20a) Have you ever purposely inhaled products such as glue, paint, deodorant, hair spray, nail polish remover, cleaning products, or other similar products to get high?

- Yes       No

20b) About how old were you when you tried inhalants for the first time? If you have never used inhalants, please place an "X" in the box provided.

years old

20c) Have you purposely inhaled products such as glue, paint, deodorant, hair spray, nail polish remover, cleaning products, or other similar products to get high in the past 12 months?

- Yes       No       I have never used inhalants

20d) Have you purposely inhaled products such as glue, paint, deodorant, hair spray, nail polish remover, cleaning products, or other similar products to get high in the past month?

- Yes       No       I have never used inhalants

20e) From whom/where do you usually get inhalants? (Tick only ONE answer)

- Friends       Parents/Guardian       Brother/Sister  
 Other relatives       Medicine cabinet       From the kitchen  
 Parents'/Guardian's bedroom  
 Other place (please say) \_\_\_\_\_  
 I have never used inhalants

20f) Where do you most often use inhalants? (Tick only ONE answer)

- At home       At school       On the block       At a friend's house  
 At sporting events       At other social events (parties/fairs)  
 Other place (please say) \_\_\_\_\_  
 I have never used inhalants

## MARIJUANA (weed, joint, hash, spliff)

---

21a) Have you ever used marijuana? (Even a puff, or a bite or sip of food/drink which contains marijuana)

Yes       No

21b) About how old were you when you used marijuana for the first time? If you have never used marijuana, please place an "X" in the box provided.

years old

21c) Have you used marijuana in the past 12 months?

Yes       No       I have never used marijuana

21d) Have you used marijuana in the past month?

Yes       No       I have never used marijuana

21e) From whom/where do you usually get marijuana? (Tick only ONE answer)

Friends       Parents/Guardian       Brother/Sister  
 Other relatives       Street Pusher       On the block  
 Other place (please say) \_\_\_\_\_  
 I have never used marijuana

21f) Where do you most often use marijuana? (Tick only ONE answer)

At home       At school       On the block       At a friend's house  
 At sporting events       At other social events (parties/fairs)  
 Other place (please say) \_\_\_\_\_  
 I have never used marijuana

## FANTA (Wild tobacco, smoked like cigarettes)

---

22a) Have you ever smoked fanta? (Even a puff)

- Yes       No

22b) About how old were you when you first smoked fanta? If you have never smoked fanta, please place an "X" in the box provided.

years old

22c) Have you smoked fanta in the past 12 months?

- Yes       No       I have never smoked fanta

22d) Have you smoked fanta in the past month?

- Yes       No       I have never smoked fanta

22e) From whom/where do you usually get fanta? (Tick only ONE answer)

- Friends       Parents/Guardian       On the block  
 Shop       Brother/Sister       Other relative(s)  
 Other place (please say) \_\_\_\_\_  
 I have never smoked fanta

22f) Where do you most often smoke fanta? (Tick only ONE answer)

- At home       At school       On the block       At a friend's house  
 At sporting events       At other social events (parties/fairs)  
 Other place (please say) \_\_\_\_\_  
 I have never smoked fanta

## ENERGY DRINKS (e.g. Monster, Kick, Turbo, Boom, Red Bull)

---

23a) Have you ever had energy drinks? (Energy drinks DO NOT include Gatorade or Powerade.)

- Yes       No

23b) About how old were you when you tried energy drinks for the first time? If you have never used energy drinks, please place an "X" in the box provided.

years old

23c) Did you drink energy drinks in the past 12 months?

- Yes       No       I have never used energy drinks

23d) Did you drink energy drinks in the past month?

- Yes       No       I have never used energy drinks

23e) From whom/where do you usually get energy drinks?

- Friends       Parents/Guardian       On the block  
 Shop       Brother/Sister       Other relative(s)  
 Other place (please say) \_\_\_\_\_  
 I have never used energy drinks

23f) Where do you most often drink energy drinks? (Tick only ONE answer)

- At home       At school       On the block       At a friend's house  
 At sporting events       At other social events (parties/fairs)  
 Other place (please say) \_\_\_\_\_  
 I have never used energy drinks

23g) Have you ever had a mixture of an alcoholic beverage and an energy drink?  
(For example, Vodka and Red Bull)

Yes     No     I have never used energy drinks and/or alcohol

## **OTHER DRUGS**

---

24a) Have you ever used an e-cigarette, also known as a vape pen (used for vaping)?

Yes     No     I do not know what an e-cigarette/vape pen is

24b) Have you ever used lean, also known as sizzurp or purple drank?

Yes     No     I do not know what lean is

24c) Have you ever used any other drug(s)? (Other than cigarettes, alcohol, inhalants, marijuana, fanta, e-cigarettes/vape pens or lean. Do not include medicines from home, the doctor, or pharmacy.)

Yes (Please say which drug \_\_\_\_\_)

No

*End of Survey*

*Thank You*

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