

***EAST KOOTENAY ADOLESCENT
DRUG USE SURVEY***

**2015
Summary Report**

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EAST KOOTENAY ADOLESCENT DRUG USE SURVEY – 2015

1. Introduction

In March 2015 East Kootenay Addiction Services Society (EKASS) conducted the seventh Adolescent Drug Use Survey. The region-wide survey, first undertaken by the Agency in 2002, includes all students in Grades 7 – 12 in the East Kootenay. The survey is conducted every two years to monitor changes in drug use patterns, attitudes and behaviours amongst East Kootenay adolescents.

2. Methodology

The 2015 East Kootenay Adolescent Drug Use Survey was designed to be completed by all Grade 7 to 12 students in the East Kootenay area of south-eastern British Columbia. The survey included a variety of questions to assess substance use patterns, substance use behaviors, attitudes around substance use, and related risk behaviors amongst the target group.

The survey region is a large rural area with a population of roughly 80,000 people and is composed of three separate school districts. Permission was obtained from School District No. 5 (Southeast Kootenay) and No. 6 (Rocky Mountain) to administer the survey in all schools, and from School District No. 8 (Kootenay Lake) to administer the survey in the Creston area. In addition, Kootenay Christian Academy, an independent Christian school in Cranbrook, also took part in the survey. For the first time three other independent schools also took part in the survey. They included the Fernie Academy, the Kimberley Independent School and the Mormon Hills School in Bountiful. In total twenty public schools, four alternate schools and four independent schools participated in the 2015 survey.

In late 2014 copies of the survey were provided to the School Boards to review prior to giving their approval. Once approval was given at the Board level, school administrators were advised of the survey and the time it was to take place. Passive consent for participation was obtained by providing school administrators with a letter explaining the intent and scope of the survey which could be sent home to parents or guardians. The letter advised parents or guardians that participation was voluntary, that the survey was confidential, and encouraged parents or guardians to contact the principal researcher if they had any concerns about their child participating.

The survey was designed to be easily administered and take approximately 20 to 25 minutes to complete. Each survey came in a separate manila envelope to ensure confidentiality. The cover page of each survey had instructions for the student on completing the survey. A similar set of instructions were provided for the teacher of each classroom. The instructions explicitly told the students not to put their names on the survey.

The 2015 survey featured some changes from the format of the previous surveys. A number of new or modified drug categories were added or replaced previous categories. In addition to tobacco products, a new category was included for 'E-cigarettes/vapes'. A category for 'Hallucinogens' was created, which included the previous category of 'LSD/Acid' but also included drugs such as mescaline, salvia and DMT to name a few. Magic mushrooms, although an hallucinogen, remained as an independent category. The category for 'Ecstasy' was expanded to include MDMA, MDA and MOEA. This was done because in recent years adolescents have reported that they consider 'Ecstasy' to be an unpredictable and 'dirty' drug, and they prefer to buy MDMA, which is touted as being pure. Although there is no current evidence to suggest any significant chemical differences between MDMA and 'Ecstasy' at the street level, the study wanted to ensure that all variations of the drug MDMA were being captured in the survey. The drug categories for 'Crystal meth/speed/amphetamines', 'Steroids' and 'Heroin' were dropped, in part because the usage rates in previous surveys have been consistently low, and in part to provide room to expand the section on the 'Prescription/OTC' category. Although 'Prescription/OTC' substance misuse is typically the fourth most frequently reported form of substance use by adolescents in local, provincial and national studies, the studies have had limited success in differentiating between the various categories of medications that might be used and how they are being procured. In the 2015 study the 'Prescription/OTC' category was subdivided into three categories: 'Downers', 'Stimulants' and

'Opiates/Pain-killers' with examples of substances that would fall under each category specified on the survey. Further, students were also asked how they had obtained the drugs. Finally, an entire page of questions looking at use of screens, including texting, social media and single and multi-player games was included to assess rates and impact of screen use on well-being and functioning.

The survey period ran from March 9 -13, 2015. Each school selected a given day within the survey period in which students would receive the survey at the same time. Students were not advised ahead of time that they would be completing a survey. In most schools the school counseling staff took on the responsibility of arranging for distribution of surveys to the classrooms. School staff was provided with an instruction sheet describing how the surveys were to be handed out and collected. All students who were at the school during the designated survey period were given a copy of the survey. Students who were not at school were not provided the survey at a later date. Students completed the surveys and placed them in the manila envelopes the surveys came in. The envelopes were then collected and returned to the EKASS office.

According to 2014-15 school enrollment data for the survey catchment area, there were 4704 registered students in the three school districts and four independent schools. This is a drop of 1.5% from the 4778 students who were surveyed in 2013. The 2013 survey, however, did not include the additional three independent schools. Subtracting the independent student numbers from the total left 4483 students, which represented a 6% drop in enrollment in the public schools from 2013.

3. Results

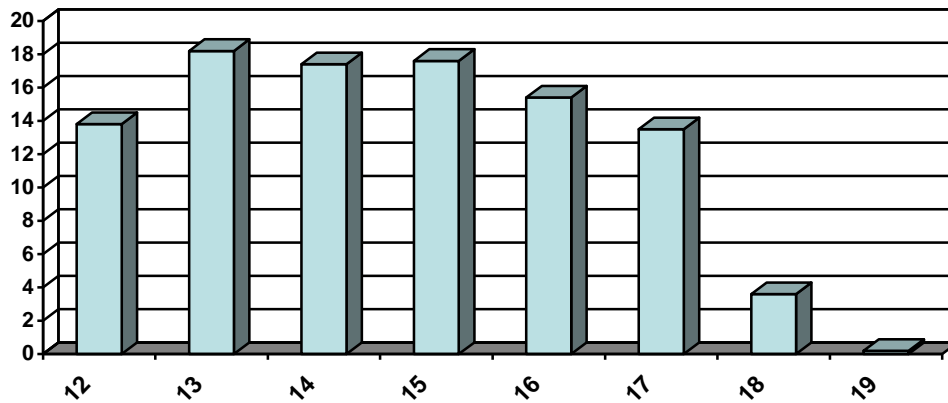
A total of 4704 surveys were distributed. 3398 completed surveys were returned, of which 40 (1.2%) were deemed to be spoiled or unreliable and were not used in the analysis. This is the lowest number of unusable surveys recorded for any survey. 3358 surveys, representing 71.4% of the registered student population, were used for the analysis.

The following tables and graphs show the basic demographic information obtained.

3.1 Age

Age	% of Respondents
12	13.8
13	18.2
14	17.4
15	17.6
16	15.4
17	13.5
18	3.6
19	0.2

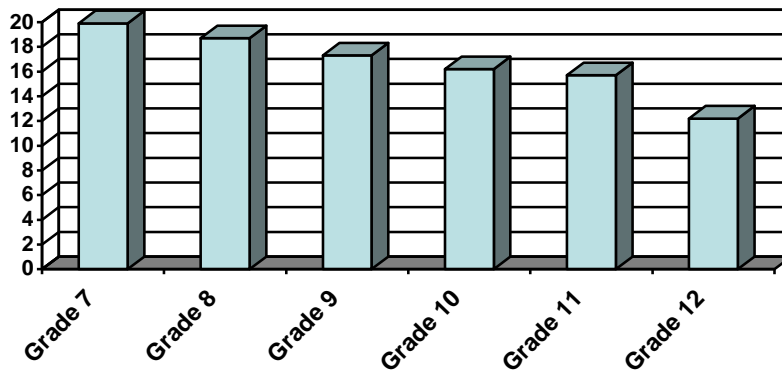
Age



3.2 Grade

Grade	% of Respondents
7	19.9
8	18.7
9	17.3
10	16.2
11	15.7
12	12.2

Grade



3.3 Gender

For the first time the survey allowed youth to select a gender category other than male or female.

Female	48.5%
Male	49.9%
Transgendered/Two-spirited	0.9%
Other	0.7%

3.4 Who Respondents Live With

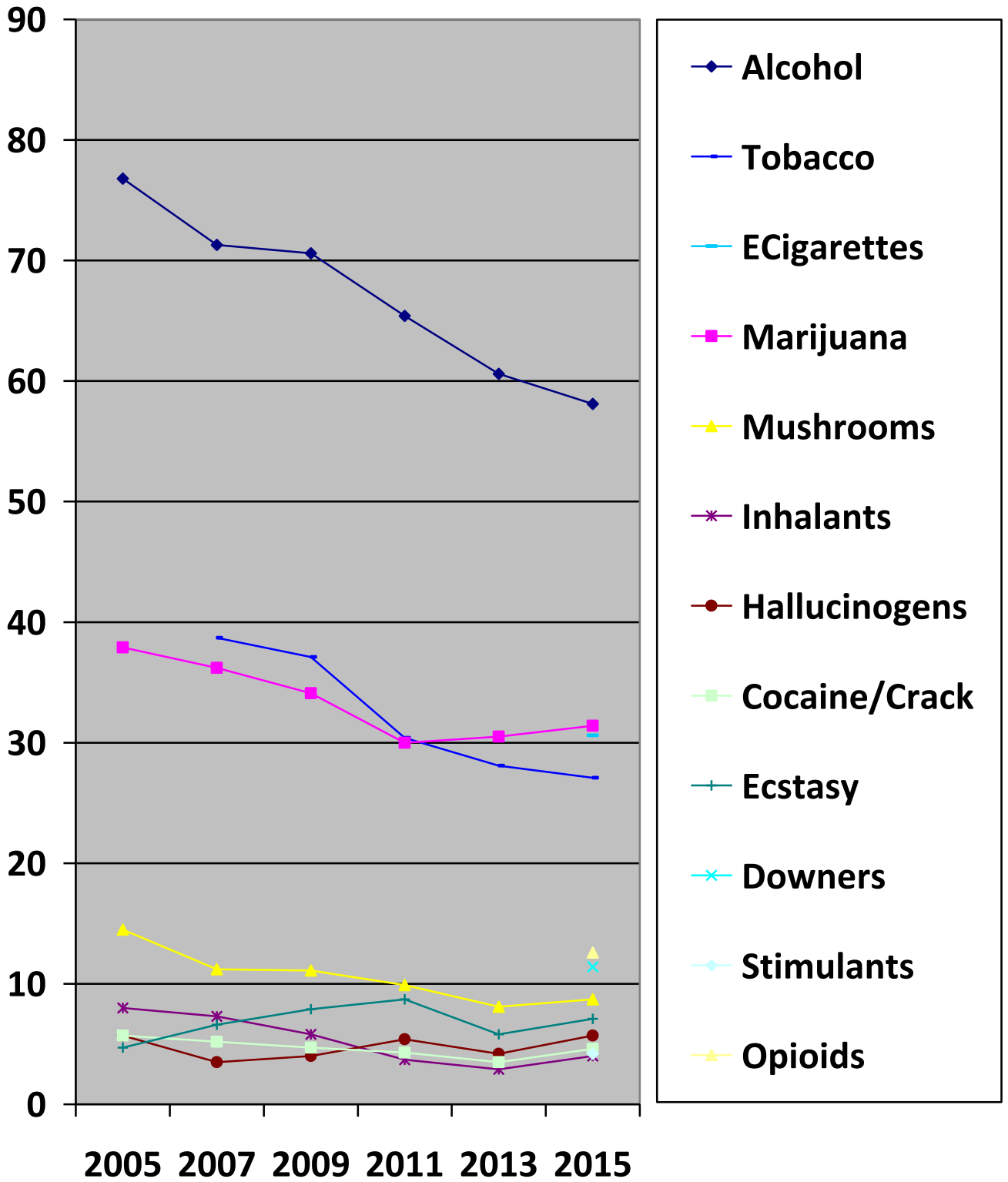
Who respondents live with	% of Respondents
Both birth parents	64.9
Single birth parent	14.5
Birth parent & step parent	16.0
Step parent	0.3
Foster parent or guardian	1.8
Grandparent or other family member	1.7
On my own, homeless, couch surfing	0.8

3.5 Rates of Substance Use

The following table and graph show the percentage of students in 2015 who reported ever having used the following substances, and the percentage who reported having used within the past year and past month. The lifetime usage rates for similar substance categories from the 2005 to 2013 surveys are included for comparison.

	Ever Used 2015	Used in Past Year 2015	Used in Past Month 2015	Ever Used 2013	Ever Used 2011	Ever Used 2009	Ever Used 2007	Ever Used 2005
Alcohol	58.1	49.9	30.7	60.6	65.4	70.6	71.3	76.8
Tobacco	27.1	21.6	13.8	28.1	30.4	37.1	38.7	n/a
ECigarettes	30.6	24.3	12.8	n/a	n/a	n/a	n/a	n/a
Marijuana	31.4	25.9	15.6	30.5	30.0	34.1	36.2	37.9
Mushrooms	8.7	7.0	3.7	8.1	9.9	11.1	11.2	14.5
Inhalants	4.0	2.7	1.3	2.9	3.7	5.8	7.3	8.0
Hallucinogens	5.7	4.4	1.9	LSD 4.2	LSD 5.4	LSD 4.0	LSD 3.5	LSD 5.7
Cocaine	4.6	3.3	1.9	3.5	4.3	4.7	5.2	5.7
Ecstasy	7.1	5.6	2.6	5.8	8.7	7.9	6.6	4.7
Downers	11.4	8.0	4.0	n/a	n/a	n/a	n/a	n/a
Stimulants	4.2	2.8	1.3	n/a	n/a	n/a	n/a	n/a
Opioids	12.6	9.0	4.9	n/a	n/a	n/a	n/a	n/a

Rates of Substance Use

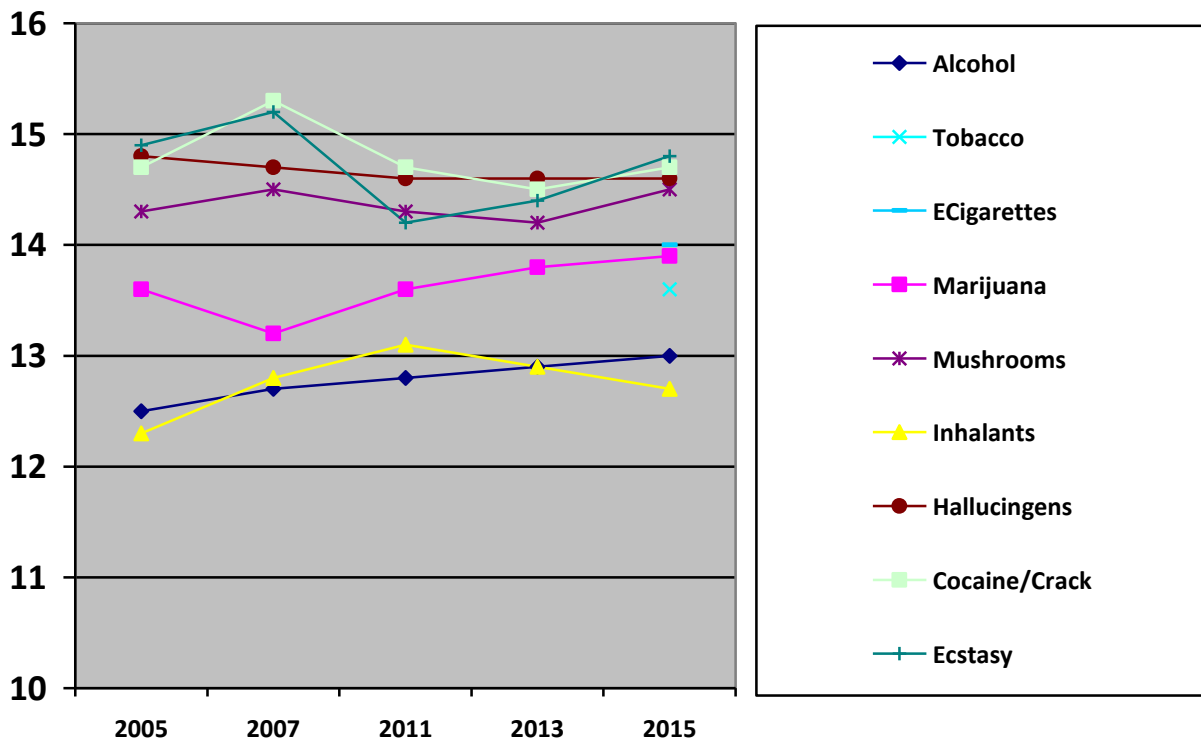


3.6 Average Age of First Use

The following table and graph show the average age of first use for selected substances from the 2005, 2007, 2011, 2013 and 2015 surveys. Age of first use data was not collected in 2009.

	2015	2013	2011	2007	2005
Alcohol	13.0	12.9	12.8	12.7	12.5
Tobacco	13.6	13.6	n/a	n/a	n/a
ECigarettes	14.0	n/a	n/a	n/a	n/a
Marijuana	13.9	13.8	13.6	13.2	13.6
Mushrooms	14.5	14.2	14.3	14.5	14.3
Inhalants	12.7	12.9	13.1	12.8	12.3
Hallucinogens	14.6	LSD	LSD	LSD	LSD
Cocaine/Crack	14.7	14.5	14.7	15.3	14.7
Ecstasy	14.8	14.4	14.2	15.2	14.9

Average Age of First Use

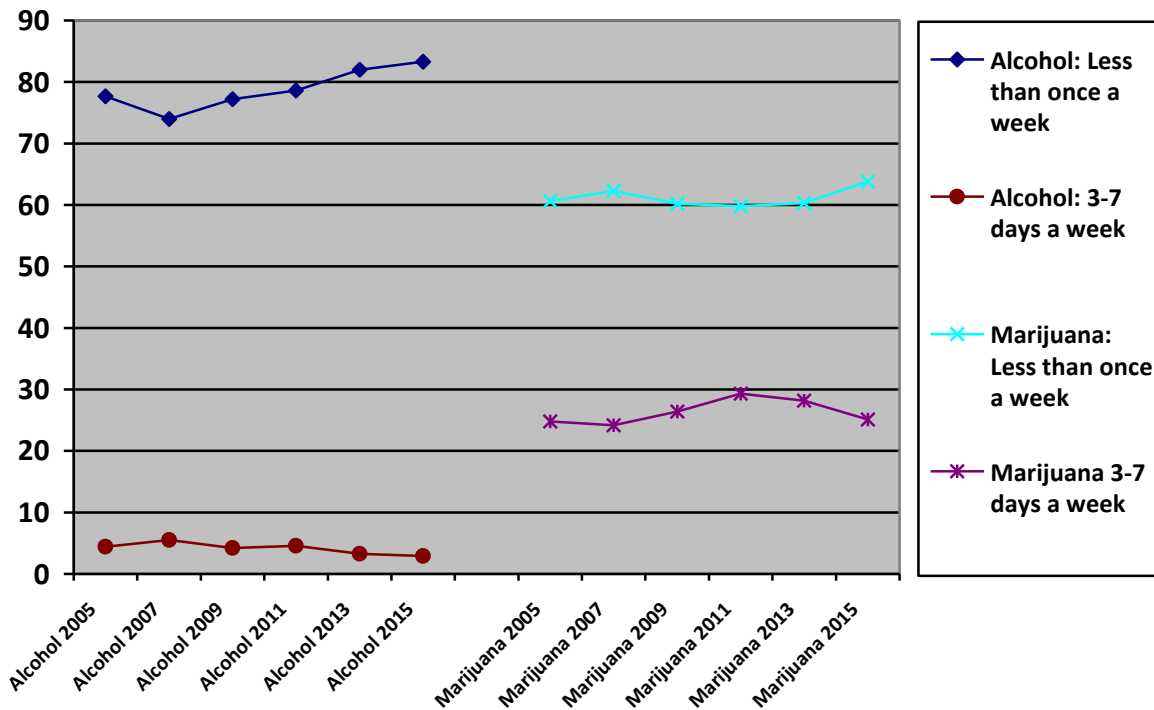


3.7 Frequency of Use

The following table shows the frequency of use of each substance. Percentages are only for respondents who reported using a given substance.

	Less than 1/month	1-3 days a month	1-2 days a week	3-7 days a week
Alcohol	48.7	34.6	13.8	2.9
Tobacco	42.9	16.7	8.5	31.9
ECigarettes	59.0	18.7	10.0	12.4
Marijuana	42.3	21.5	11.2	25.1
Mushrooms	71.9	22.5	6.5	1.7
Inhalants	66.7	18.9	11.1	3.3
Hallucinogens	75.2	16.1	7.5	1.2
Cocaine/Crack	63.5	19.0	7.9	9.5
Ecstasy	72.6	14.9	7.0	5.5

Alcohol and Marijuana: Change in Frequency of Use Rates



3.8 Lifetime Substance Use for Selected Grades

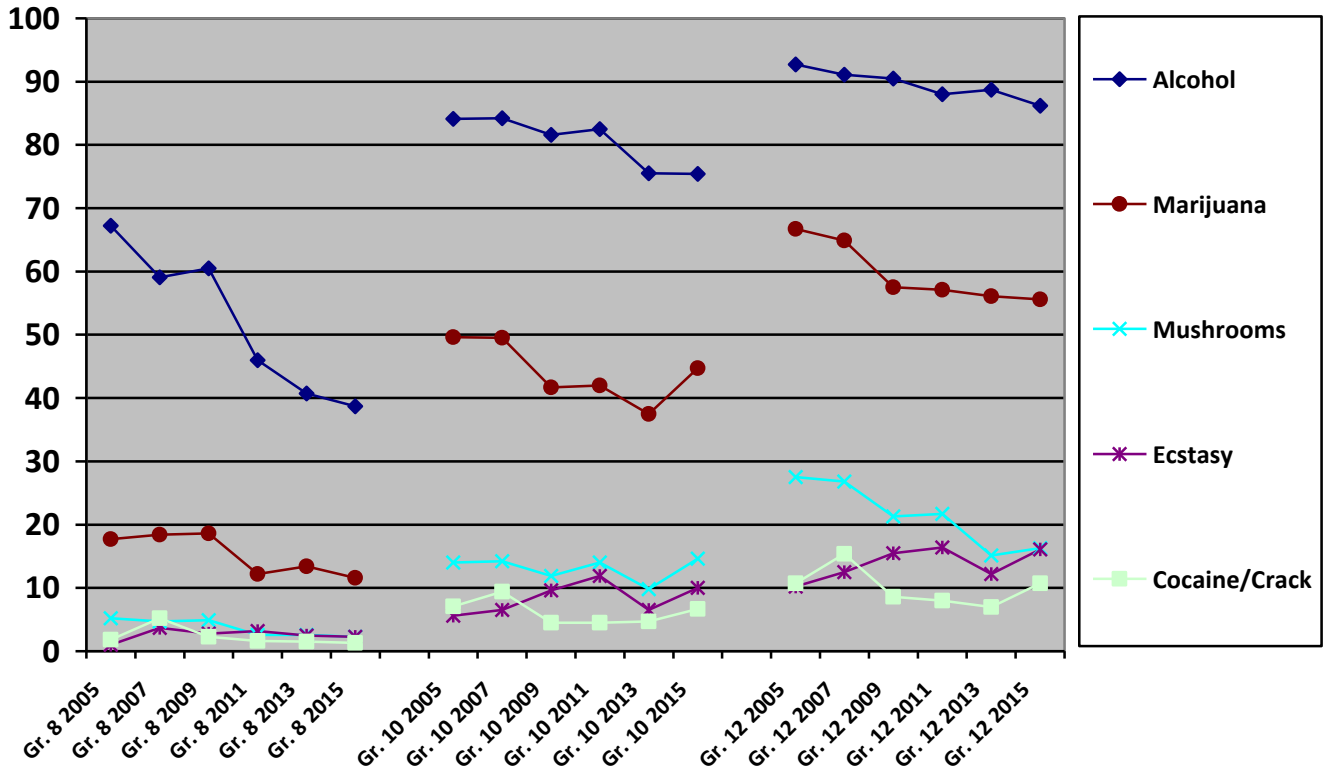
The following tables and chart show the change in lifetime use rates by selected grades for selected substances from 2005 to 2011.

	Grade 8					
	2015	2013	2011	2009	2007	2005
Alcohol	38.7	40.7	46.0	60.5	59.1	67.2
Marijuana	11.6	13.4	12.2	18.6	18.4	17.7
Mushrooms	2.3	2.6	2.6	4.9	4.7	5.2
Ecstasy	2.3	2.5	3.2	2.8	3.7	1.0
Cocaine	1.3	1.5	1.6	2.3	5.2	1.8

	Grade 10					
	2015	2013	2011	2009	2007	2005
Alcohol	75.4	75.5	82.5	81.6	84.2	84.1
Marijuana	44.7	37.5	42.0	41.7	49.5	49.6
Mushrooms	14.6	9.8	14.0	11.9	14.2	14.0
Ecstasy	10.0	6.5	11.9	9.6	6.5	5.6
Cocaine	6.7	4.7	4.5	6.0	9.4	7.1

	Grade 12					
	2015	2013	2011	2009	2007	2005
Alcohol	86.2	88.7	88.0	90.5	91.1	92.7
Marijuana	55.6	56.1	57.1	57.5	64.9	66.7
Mushrooms	16.3	15.1	21.7	21.3	26.8	27.5
Ecstasy	16.1	12.2	16.4	15.5	12.5	10.2
Cocaine	10.7	7.0	8.0	8.6	15.4	10.7

Lifetime Substance Use for Selected Grades

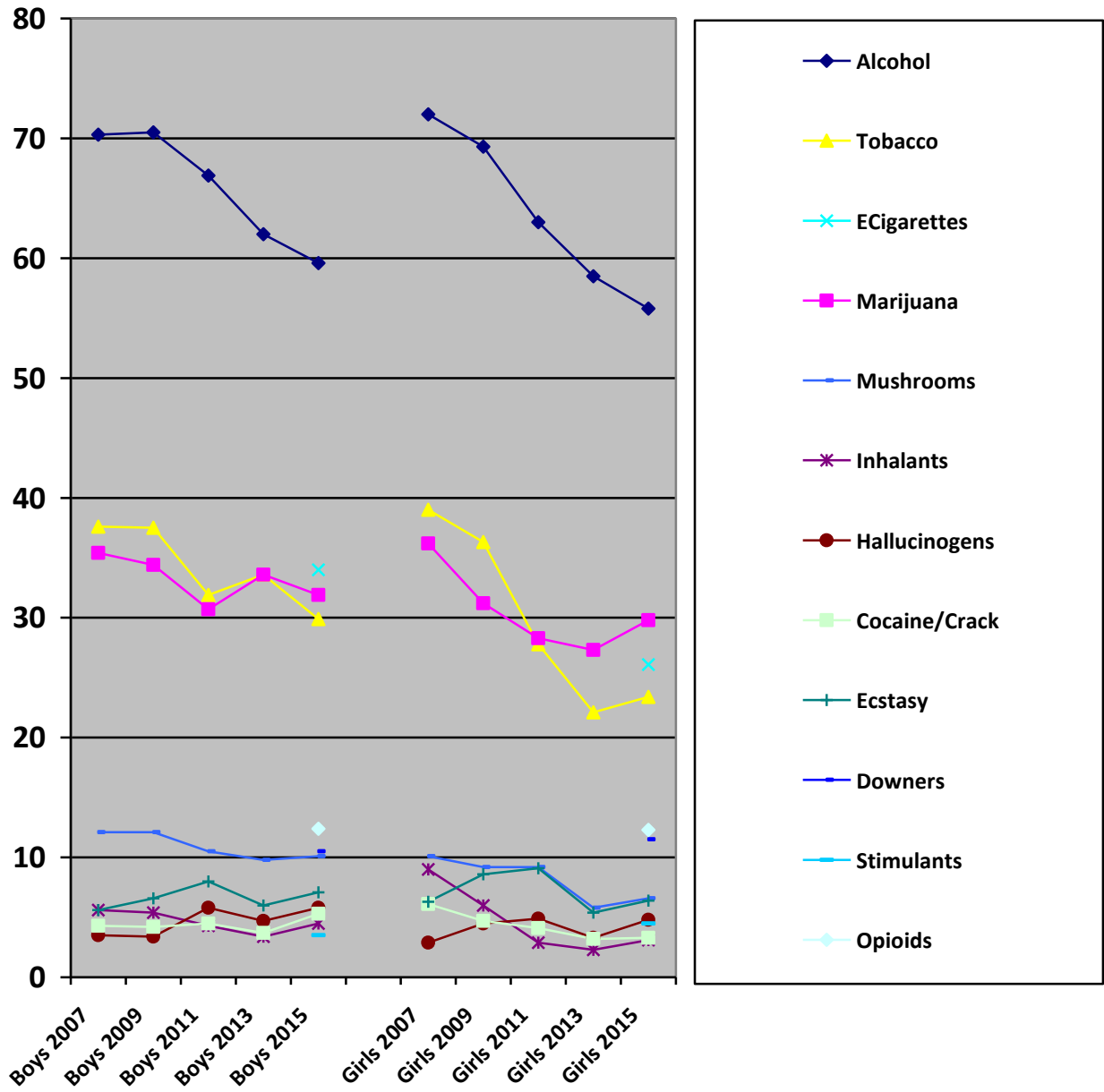


3.9 Substance Use Rates by Gender

The following table shows the lifetime substance usage rates for boys, girls and those who identified under a different gender category in 2015. The following graph shows the lifetime rates for boys and girls from 2007 to 2015.

	Boys	Girls	Transgendered/ Two-spirited	Other
Alcohol	59.6	55.8	93.1	75.0
Tobacco	29.9	23.4	58.6	41.7
ECigarettes	34.0	26.1	69.0	41.7
Marijuana	31.9	29.8	69.0	62.5
Mushrooms	10.1	6.6	34.5	25.0
Inhalants	4.5	3.1	20.7	16.7
Hallucinogens	5.8	4.8	31.0	25.0
Cocaine/Crack	5.3	3.3	27.6	12.5
Ecstasy	7.1	6.4	31.0	20.8
Downers	10.5	11.5	37.9	25.0
Stimulants	3.5	4.5	24.1	8.3
Opioids	12.4	12.3	34.5	20.8

Substance Use Rates for Boys and Girls

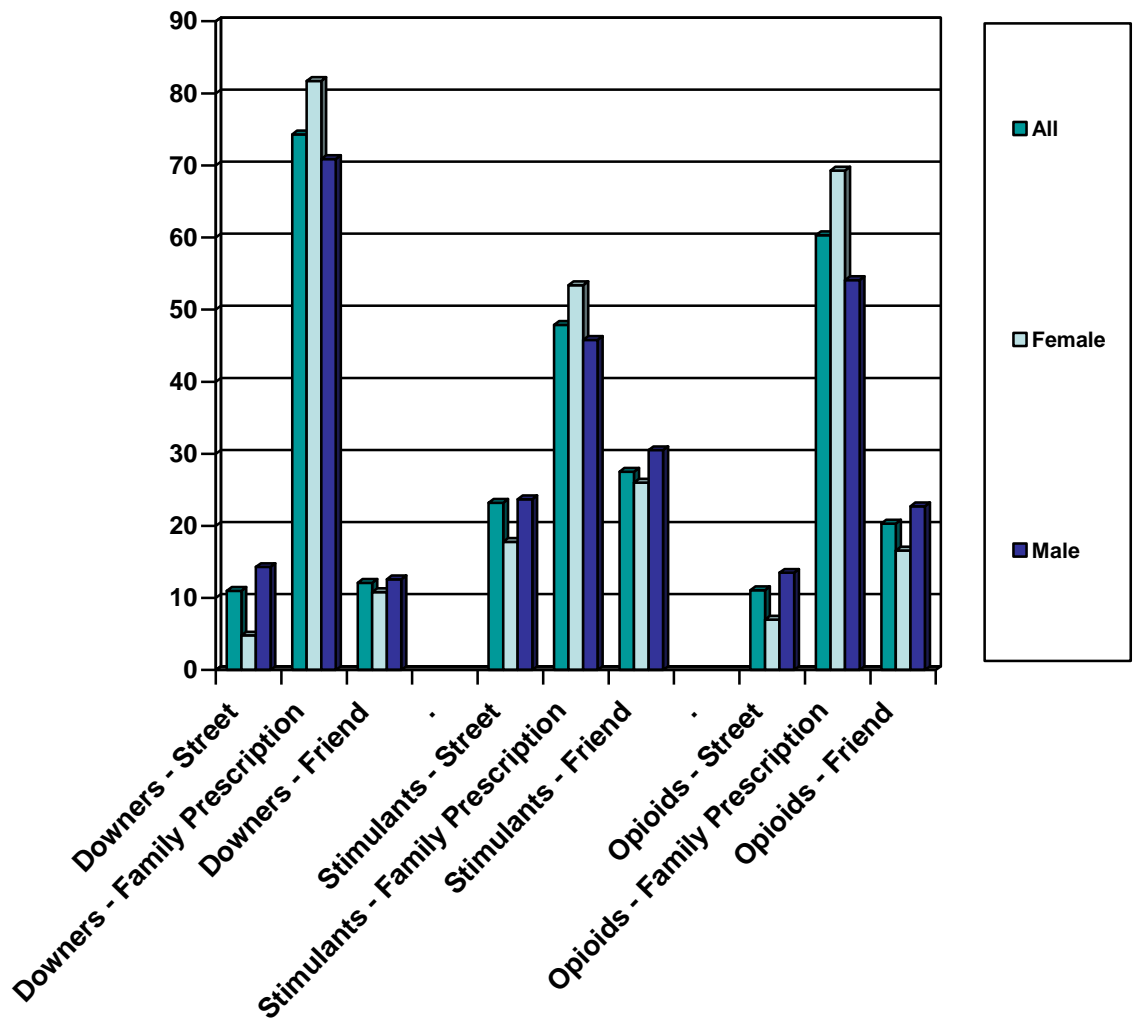


3.10 Access to Pharmaceuticals

The following table and graph show where youth got access to pharmaceuticals for non-pharmaceutical use.

	Downers			Stimulants			Opioids		
	All	Girls	Boys	All	Girls	Boys	All	Girls	Boys
Street	11.0	4.8	14.3	23.2	17.8	23.7	11.1	7.0	13.5
Family Prescription/ Pharmacy	74.3	81.7	70.9	47.9	53.4	45.8	60.3	69.3	54.1
Friend	12.0	10.8	12.6	27.5	26.0	30.5	20.3	16.6	22.7

Access to Pharmaceuticals

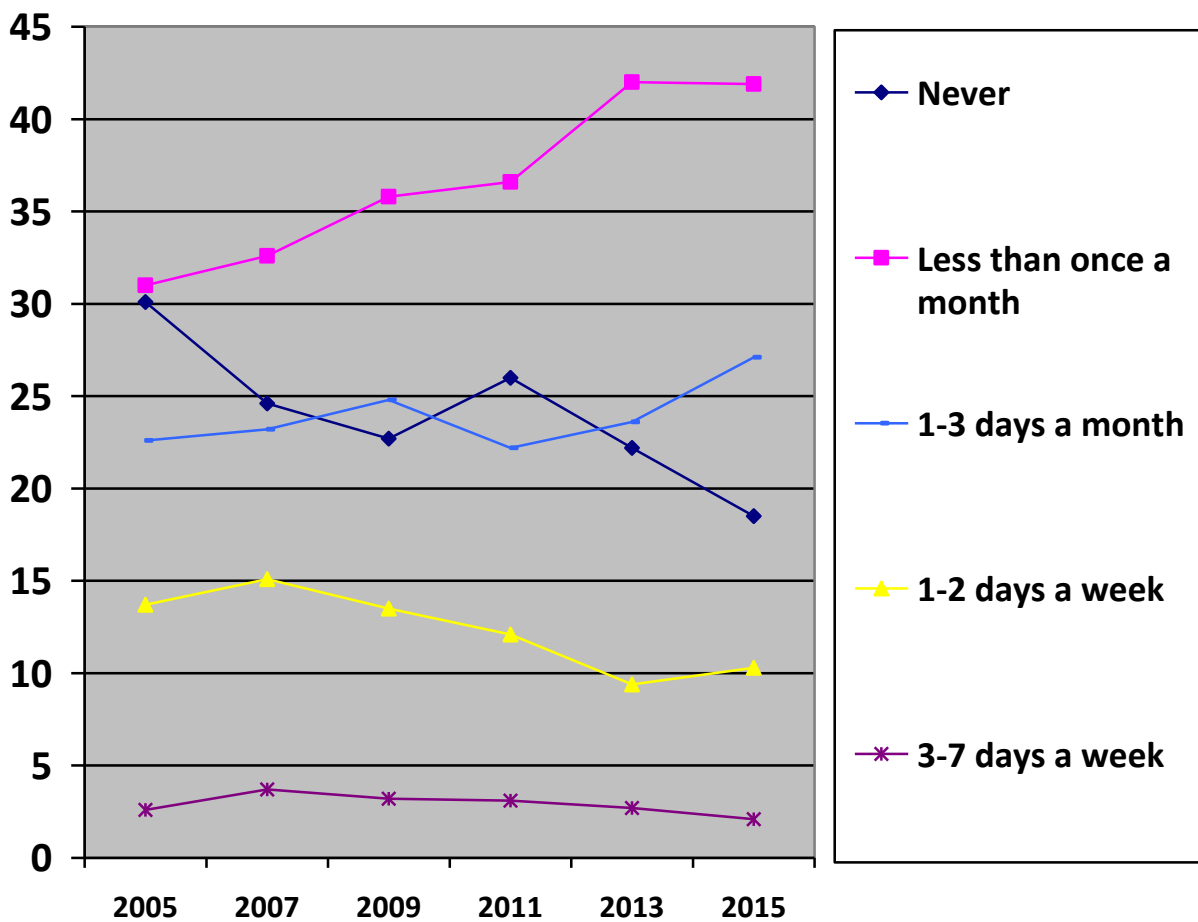


3.11 Binge Drinking

The following table and graph shows the frequency of binge drinking for the 2005 through 2015 surveys. Heavy episodic alcohol use, or binge drinking, is defined as having 5 or more drinks during one drinking episode.

	2015	2013	2011	2009	2007	2005
Never	18.5	22.2	26.0	22.7	24.6	30.1
Less than once a month	41.9	42.0	36.6	35.8	32.6	31.0
1-3 days a month	27.1	23.6	22.2	24.8	23.2	22.6
1-2 days a week	10.3	9.4	12.1	13.5	15.1	13.7
3-7 days a week	2.1	2.7	3.1	3.2	3.7	2.6

Binge Drinking

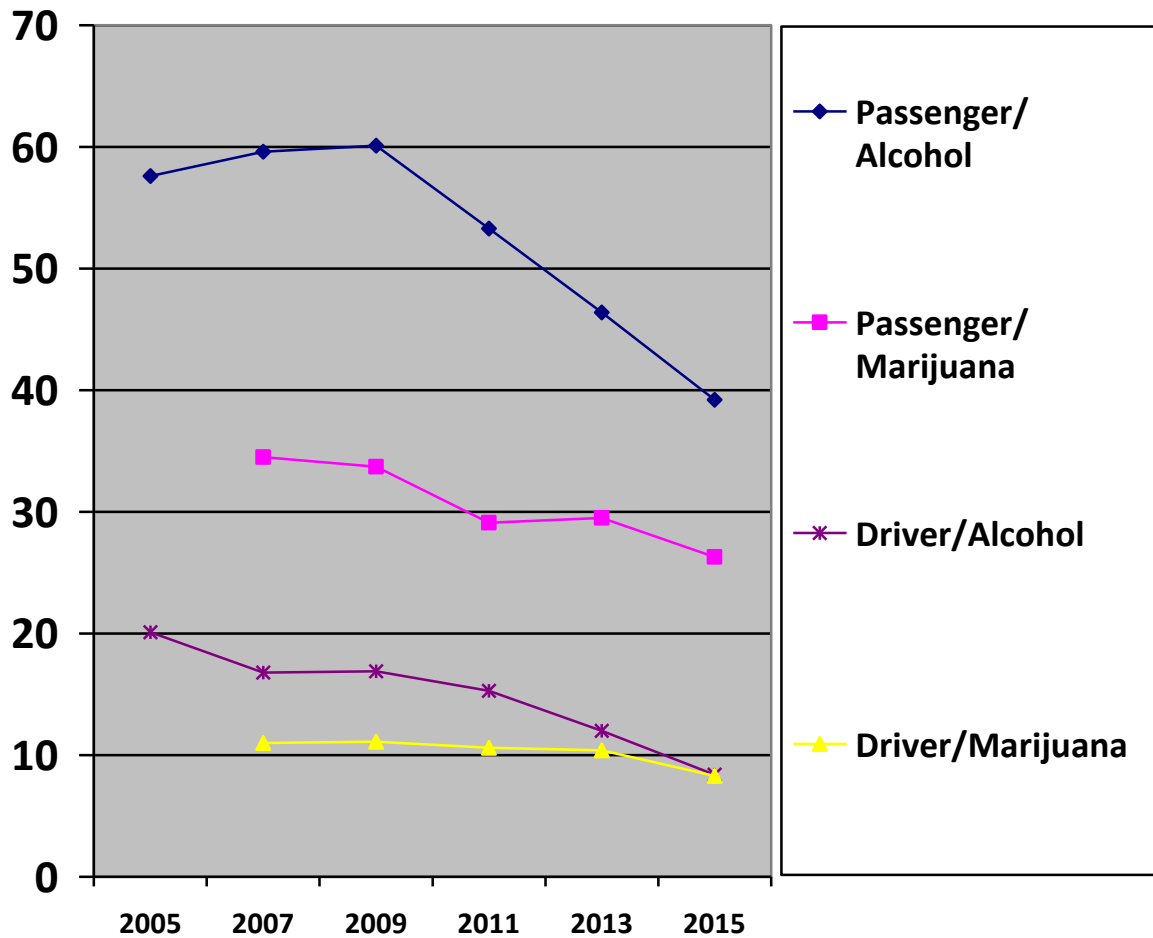


3.12 Substance Use and Driving

The following table and graph show the percentage of youth who report having been a passenger in a vehicle with a driver who was under the influence of alcohol or marijuana, and the percentage who reported having operated a vehicle after using alcohol or marijuana.

	Passenger with Driver using Alcohol	Passenger with Driver using Marijuana	Driver using Alcohol	Driver using Marijuana
2015	39.2	26.3	8.4	8.3
2013	46.4	29.5	12.0	10.4
2011	53.3	29.1	15.3	10.6
2009	60.1	33.7	16.9	11.1
2007	59.6	34.5	16.8	11.0
2005	57.6	n/a	20.1	n/a

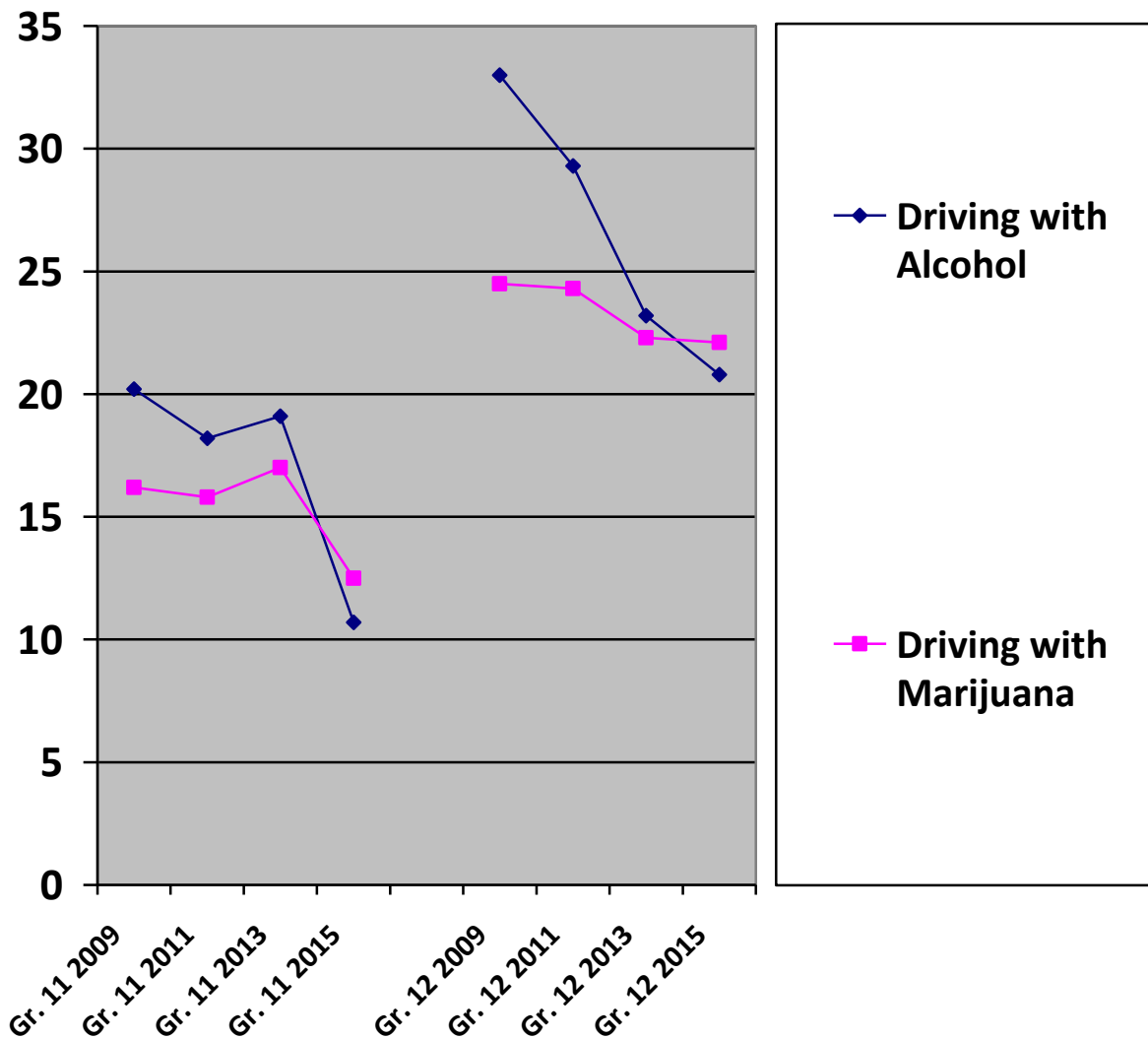
Substance Use and Driving



The following table and graph shows the percentage of Grade 11 and 12 students who report driving after using alcohol or marijuana.

	Grade 11		Grade 12	
	Driving-Alcohol	Driving-Marijuana	Driving-Alcohol	Driving-Marijuana
2015	10.7	12.5	20.8	22.1
2013	19.1	17.0	23.2	22.3
2011	18.2	15.8	29.3	24.3
2009	20.2	16.2	33.0	24.5

Impaired Driving - Grades 11 and 12

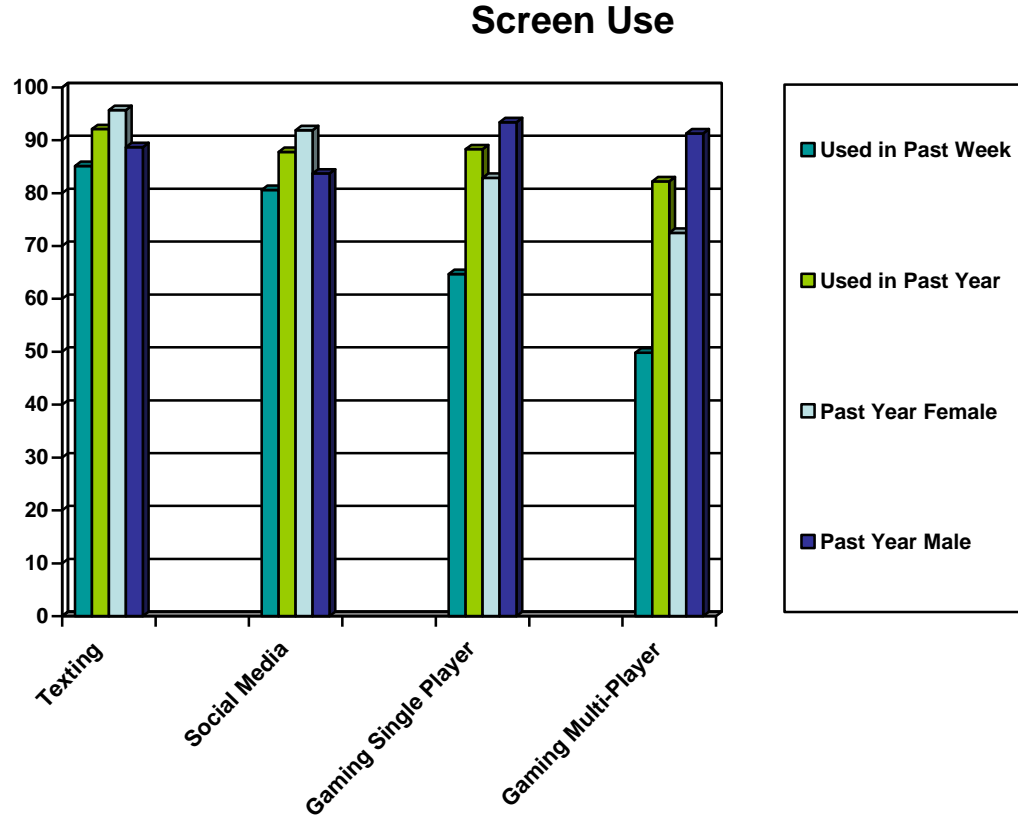


3.13 Screen Use: Texting, Social Media, Gaming

The following table shows the percentage of youth who used different screen technologies in the past year, month, week and current day, as well as use in the past year by gender.

	Used in Past Year	Used in Past Month	Used in Past Week	Used Today		Used in Past Year Female	Used in Past Year Male	Used in Past Year Transgendered /Two-spirited	Used in Past Year Other Gender
Texting	92.1	88.9	85.1	71.6		95.7	88.7	89.7	95.8
Social Media	87.8	84.2	80.6	67.1		91.9	83.7	100	87.5
Gaming – Single Player	88.3	78.2	64.7	36.7		82.9	93.4	89.7	95.8
Gaming – Multi-Player	82.2	66.1	49.8	25.8		72.5	91.3	86.2	91.7

The following graph shows the percentage of youth who used different screen technologies in the past year and week, as well as by female and male for the past year.

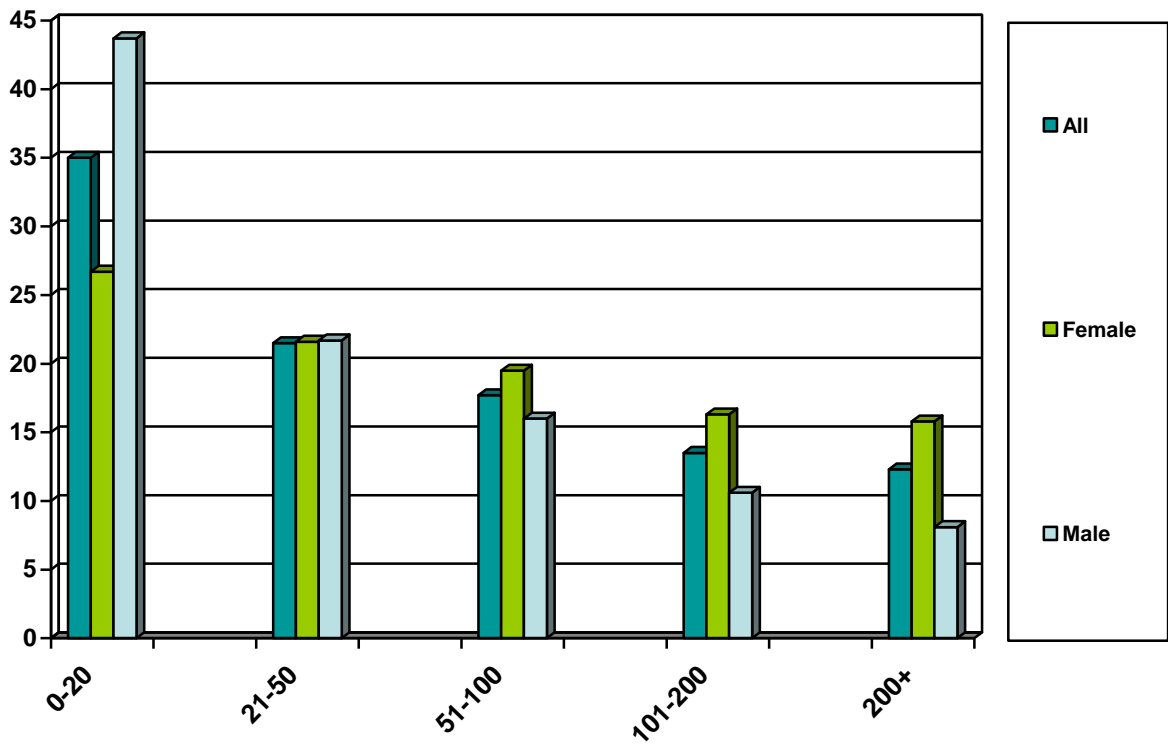


The following table and graph shows the number of texts sent per day by percentage of youth.

Number of Texts per Day

	0-20	21-50	51-100	101-200	200+
All	35.0	21.5	17.7	13.5	12.3
Female	26.7	21.6	19.5	16.3	15.8
Male	43.7	21.7	16.0	10.6	8.1

Texts per Day

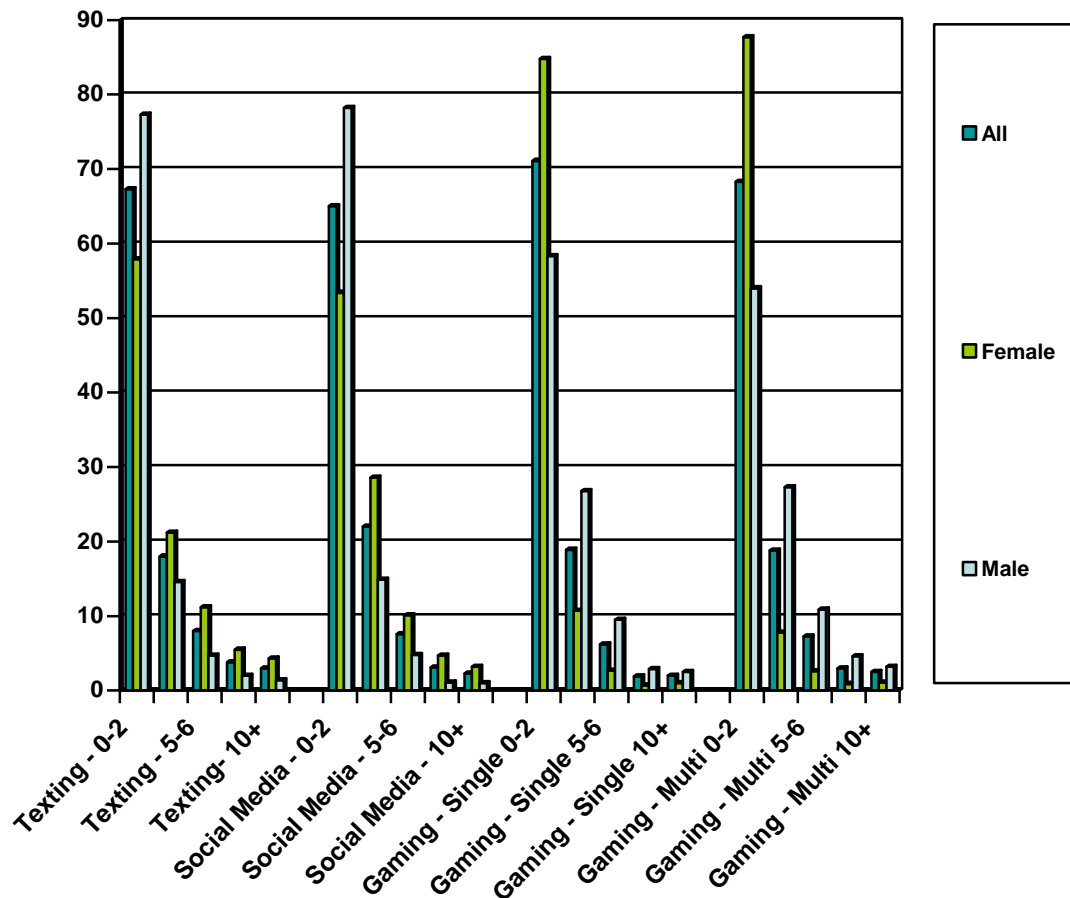


The following table and graph shows number of hours spent per day on different screen technologies by the percentage of youth who reported using them.

Hours Using per Day

	Texting			Social Media			Gaming Single Player			Gaming Multi-Player		
	All	Female	Male	All	Female	Male	All	Female	Male	All	Female	Male
0-2 hrs	67.3	57.9	77.3	65.0	53.4	78.2	71.1	84.8	58.3	68.3	87.7	54.0
3-4 hrs	18.0	21.2	14.6	22.0	28.6	14.9	18.9	10.7	26.8	18.8	7.8	27.3
5-6 hrs	8.0	11.2	4.7	7.6	10.1	4.8	6.2	2.7	9.5	7.3	2.6	10.9
7-10 hrs	3.8	5.5	2.0	3.1	4.7	1.1	1.9	0.7	2.9	3.0	.9	4.6
10+ hrs	3.0	4.3	1.4	2.3	3.2	1.0	2.0	1.0	2.5	2.5	1.1	3.2

Hours Using per Day

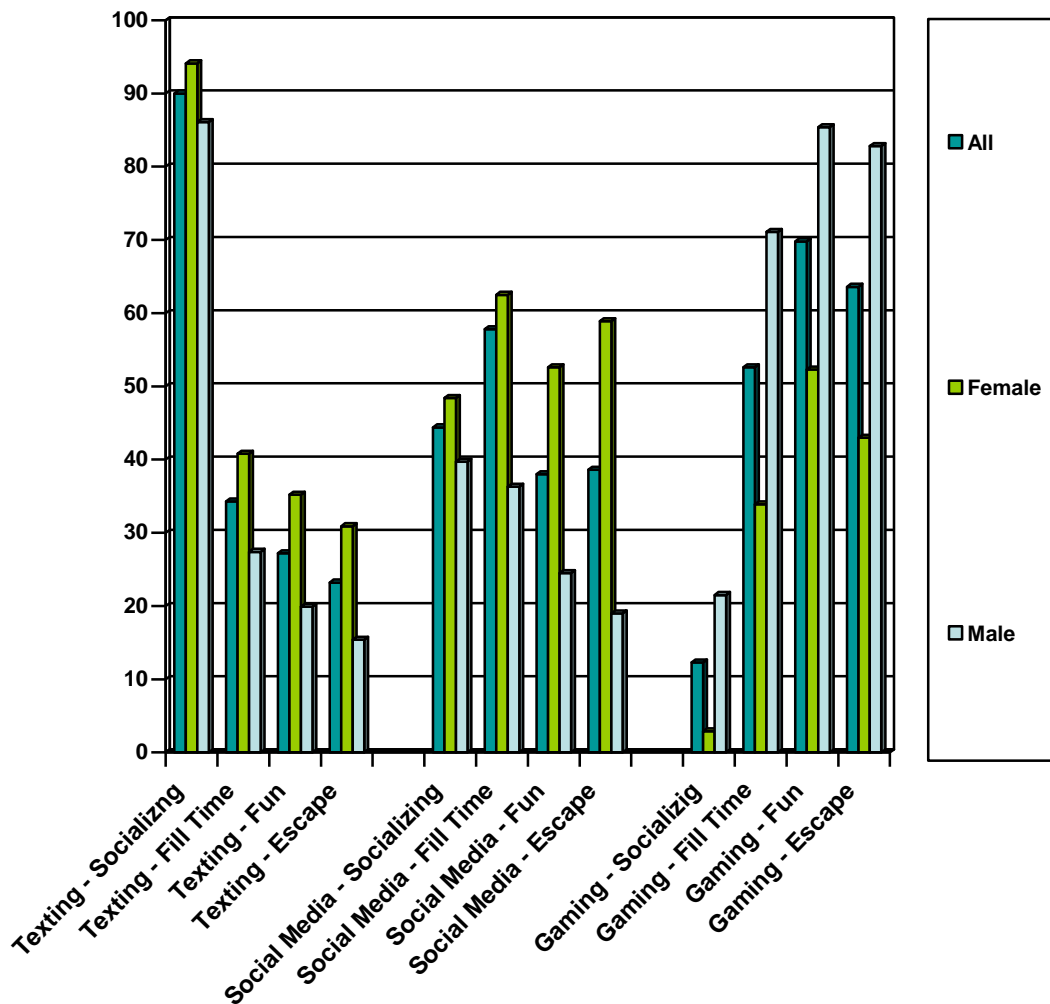


The following table and graph shows the percentage of youth reporting various reasons for using different screen technologies.

Reasons for Using

	Texting			Social Media			Gaming		
	All	Female	Male	All	Female	Male	All	Female	Male
To Socialize	90.0	94.1	86.1	44.4	48.4	39.7	12.3	2.9	21.5
To Fill Time	34.3	40.8	27.4	57.8	62.5	36.3	52.6	33.9	71.1
To Relax	27.2	35.2	19.9	38.0	52.6	24.5	69.8	52.3	85.4
To Escape	23.2	30.9	15.4	38.6	58.9	19.0	63.6	43.0	82.8

Reasons For Using

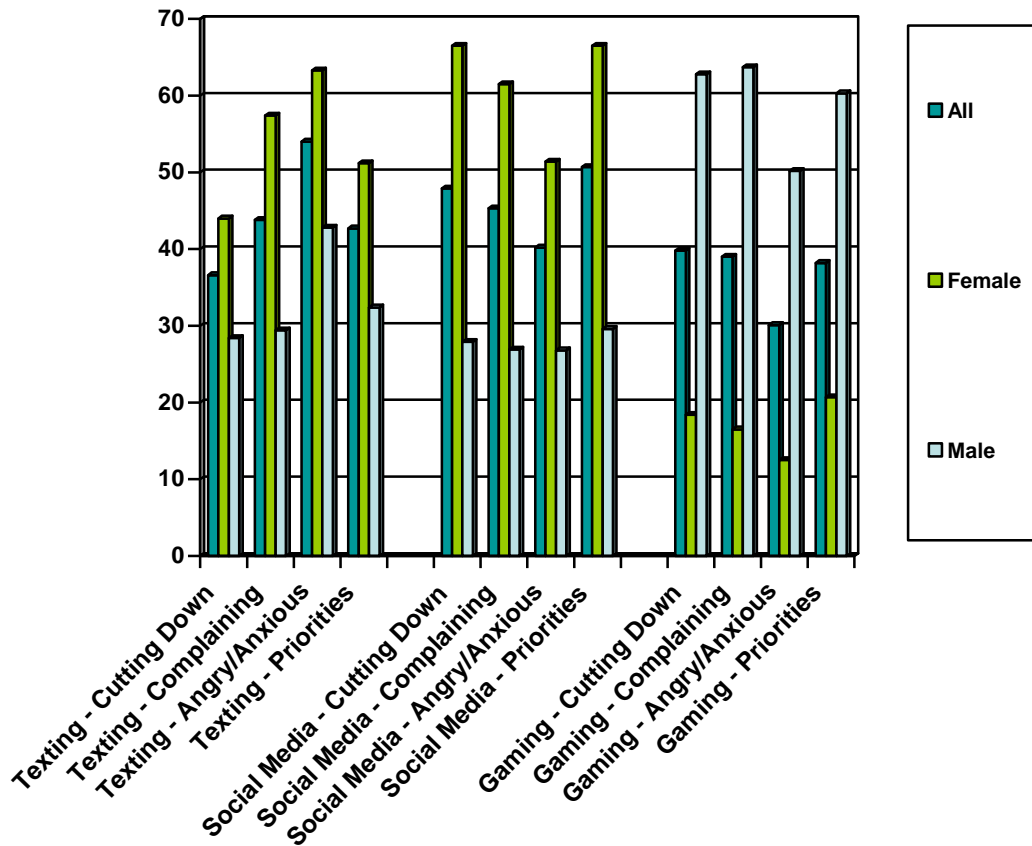


The following table and graph shows the percentage of youth reporting problems experienced as a result of using different screen technologies.

Problems Experienced From Using

	Texting			Social Media			Gaming		
	All	Female	Male	All	Female	Male	All	Female	Male
Trying to Cut Down	36.6	44.0	28.4	47.9	66.5	27.9	39.8	18.4	62.8
Others Complaining	43.8	57.4	29.4	45.3	61.5	26.9	39.0	16.5	63.7
Angry/Anxious When Not Using	54.0	63.3	42.8	40.2	51.4	26.8	30.1	12.5	50.2
Use Getting In Way of Priorities	42.7	51.2	32.4	50.7	66.5	29.6	38.2	20.7	60.3

Problems Experienced From Using



4. Discussion

The 2015 Adolescent Drug Survey was another successful population census of substance use behavior amongst East Kootenay youth.

As with previous surveys, the 2015 Survey added new questions to get information on emerging substance use and behaviour trends. Four areas that were a subject of new questions included:

- 1) In identifying 'Gender', in addition to 'Male' and 'Female' youth were also given the option of selecting 'Transgendered/Two-spirited' or 'Other'. Although the percentage of youth who selected these categories was small, 0.9% and 0.7% respectively, in many cases their response patterns were quite different from youth who selected 'Male' or 'Female'.
- 2) Questions about the usage, age of first use and frequency of use of ECigarettes or Vapes.
- 3) A restructuring of the previous drug category 'Prescription/Over-the-Counter' into three categories 'Downers', 'Stimulants' and 'Opioids' to help better determine the specific classes of pharmaceuticals that youth are using. Questions looked at usage as well as where youth obtained the pharmaceuticals.
- 4) A series of questions exploring youths' use of screen technologies including texting, social media and single and multi-player video games. Questions asked about usage, hours spent per day on technologies, reasons for using various technologies and problems experienced as a result of using various technologies.

Lifetime rates of use for most substances continue to decline:

The table and graph on Pages 8 and 9 shows the lifetime rates of use for substances. Alcohol use continues a steady decline from a high of 76.8% of youth reporting have used alcohol in 2005 to 58.1% of youth in 2015.

Marijuana use rates appear to have stabilized or increased slightly. From a high of 37.9% in 2005 lifetime rates hit a low of 30.0% in 2011. In 2013 the rate was 30.5% and inched up to 31.4% in 2015.

Lifetime rates of tobacco and magic mushroom use continued to decline. ECigarettes have been available in Canada for relatively few years, yet the survey data found that a higher percentage of East Kootenay youth had tried ECigarettes (30.6%) than had tried tobacco (27.1%).

Ecstasy use increased from 5.8% in 2013 to 7.1% in 2015, still down from a high of 8.7% in 2011. This increase may be in part a result of expanding the definition of Ecstasy to include MDMA. In recent years youth have reported shifting away from 'Ecstasy' which they recognize as a 'dirty' or 'adulterated' drug, to MDMA, which they believe to be purer. Although technically they are the same drug, we included MDMA in the definition of Ecstasy to ensure that we were capturing youth who viewed them as different.

In previous surveys the substance category of 'Prescription/Over-the-Counter' substance use had dropped from 11.0% in 2005 to 7.1% in 2013. These rates were consistently lower than the rates reported by the McCreary Adolescent Health Survey. The 2013 McCreary report for the East Kootenay, for example, recorded 11% of youth reporting prescription substance use, while the 2008 survey recorded 17%. By breaking the catch-all category into three subcategories the

2015 EKASS survey revealed some interesting differences. The inappropriate use of 'Downers', which included Ativan, Valium, Cough Syrup, GHB, Nitrous Oxide, was 11.4%. The inappropriate use of 'Stimulants', which included Dexedrine, Ritalin, Amyl Nitrate, Diet Pills and NoDoz, was 4.2%, while the inappropriate use of Opioids, including Morphine, Methadone, T3's, Oxycontin, Fentanyl, Greenies, and Percocets, was at 12.6%. The chart and graph on Page 16 shows that family prescriptions or pharmacy purchase was by the far the most common way for youth to access pharmaceuticals from any of the categories. Obtaining substances off the street or from a friend were far less common.

Age of First Use:

The age which youth first start using substances is important, as research has shown that the longer youth wait to start substances the lower their risk of developing problematic substance use.

The age of first use of alcohol has been steadily increasing, going from 12.5 years of age in 2005 to 13.0 years of age in 2015. The age of first use of marijuana has also increased from a low in 2007 of 13.2 years of age to 13.9 years of age in 2015.

While the age of first use of tobacco is 13.6 years, the age of first use of ECigarettes is 14.0 years.

Frequency of Use:

Frequency of use examines how often youth report using substances. With the exception of marijuana and tobacco products, over 80% of youth who report using any other substance use less than once a week, with between 48% to 75% using less than once a month. 31.9% of youth who use tobacco report using tobacco 3-7 days a week, and 25.1% of youth who use marijuana report using 3-7 days a week. Interestingly, youth who report using ECigarettes do not use as regularly, with 59% using less than once a month, and only 12.4% using 3-7 days a week.

The percentage of youth who report using alcohol less than once a week has steadily climbed from a low of 74% in 2007 to a high of 83.3% in 2015. The percentage of youth reporting binge drinking 3-7 days a week has dropped from a high in 2007 of 5.5% to a low in 2015 of 2.9%. The percentage of youth who report using marijuana less than once a week has slowly climbed from a low of 60.6% in 2005 to 63.8% in 2015. The percentage of youth who report using marijuana 3-7 days a week has dropped from a high in 2011 of 29.3% to a 25.1% in 2015.

Substance Use Rates by Grade:

The table and graph on Pages 12 and 13 shows the substance use rates in Grade 8, 10 and 12 from 2005 to 2015. As would be expected, the lifetime usage rates are lowest in Grade 8 and increase through to Grade 12. Consistent with the overall decrease in lifetime usage rates since 2005, the data shows the lifetime usage rates at each grade level decreasing since 2005. The Grade 10's in 2015 reversed the trend however by showing slightly higher rates of substance use compared to the 2013 data.

Gender differences in substance use:

The tables and graphs on Pages 14 and 15 show differences in lifetime substance use rates between boys and girls. In 2007 the rates of substance use were essentially equal for boys and girls with more girls reporting lifetime use of alcohol, marijuana, prescription medications, inhalants, cocaine and amphetamines than boys. Although both boys and girls have shown a decrease in lifetime use rates since 2005, girls have shown a greater decrease in use of all substances. The 2015 survey found that lifetime usage rates for girls was now lower for all substances compared to boys, with the exception of downers and stimulants where the girls were slightly higher.

Youth who identified as 'Transgendered/Two-spirited' or 'Other' on the Gender question consistently reported much higher lifetime rates of substance use than youth who identified as 'Male' or 'Female'. With many substances the rate of lifetime use was 3-5 times higher than for males or females. This is not necessarily surprising. The difficulty of making sense of one's gender in a culture which largely only recognizes two options undoubtedly creates increased stress, anxiety and social conflict for youth. The increased use of substances as a way of coping with stresses and feelings, or as a way of belonging to a sub-group, is a natural consequence. Other research, for example, has found that youth who identify their sexual orientation as other than heterosexual also tend to have higher rates of substance use as well as higher rates of other psychosocial concerns.

Binge Drinking:

Binge drinking is defined as having 5 or more standard drinks during one drinking occasion. Binge alcohol use is a concern because of the increased risk of injury and death when youth are intoxicated. Research suggests that patterns of regular binge drinking in adolescence greatly increase the risk of problem alcohol use in adulthood. A recent report from the Organization for Economic Cooperation and Development found that binge drinking among youth is on the rise in Western developed countries. The table and graph on Page 17 demonstrates the change in binge drinking behavior in the East Kootenay since 2005.

There has been a steady decrease in the percentage of youth who say they never binge drink, from a high of 30.1% in 2005 to a low of 18.5% in 2015. To slightly offset this there has been a steady increase in the percentage of youth who say they binge drink once a month or less, going from 31.0% in 2005 to 41.9% in 2015. Since 2005 there has also been an increase in the number of youth who report binge drinking 1-3 days a month, going from 22.6% in 2005 to 27.1% in 2015. The number of youth who report regular binge drinking of once a week or more has dropped from a high of 18.8% in 2007 to 12.4% in 2015.

Substance Use and Driving:

The percentage of students who reported having been a passenger with an alcohol impaired driver has dropped significantly from a high of 60.1% in 2009 to 39.2% in 2015. Similarly, the percentage of students who have been a passenger with a marijuana impaired driver dropped from a high in 2007 of 34.5% to a low in 2015 of 26.3%.

The percentage of Grade 12 students who reported driving after drinking has dropped significantly from a high of 33% in 2009 to 20.8% in 2015. The percentage of Grade 11 students who reported driving after drinking has dropped from a high of 20.2% in 2009 to 10.7% in 2015. The percentage of Grade 12 students who report driving after marijuana use has

shown less of a decrease dropping from a high of 24.5 % in 2009 to 22.1% in 2015. In Grade 11 the percentage of youth reporting driving after using marijuana has dropped from 16.2% in 2009 to 12.5% in 2015. Of note is that for the first time the percentage of youth in both grades who report driving after using marijuana is higher than the percentage reporting driving after using alcohol.

Screen Use:

For the first time the EKASS Survey explored youths' use of screen technologies, including texting, social media and gaming. The rapid explosion in the popularity and capability of screen technologies, from cell phones to tablets and laptops, has changed the way young people communicate, socialize and recreate, often to the frustration and confusion of their parents. The often hyperbolic commentary by the media on topics such as 'Internet Addiction' or 'Gaming Addiction' only adds to the concern.

The Survey asked youth to provide information on their use of texting, social media such as Facebook, Twitter or Instagram, and single and multi-player gaming. The chart and graph on Page 20 shows that an overwhelming majority of youth use all the technologies regularly. Further, the graph shows that there are distinct gender trends, with a greater percentage of girls using texting and social media, while a greater percentage of boys report using gaming.

These gender differences held up in hours per day using the technologies. The chart and graph on Page 21 shows the number of texts sent per day and the chart and graph on Page 22 shows the number of hours per day spent on the different technologies. In terms of the number of texts sent per day, 32.1% of girls reported sending over 100 texts compared to 18.7% of boys. Twenty-one percent of girls reported spending 5 or more hours texting per day compared to 8.1% of boys. Similarly, 18% of girls reported spending 5 or more hours on social media per day compared to 6.9% of boys. Conversely, 14.4% of boys reported spending 5 or more hours on single player games compared to 4.2% of girls, and 18.7% of boys spent 5 or more hours on multi-player games compared to 4.6% of girls. In all categories, however, a majority of youth reported spending less than 2 hours per day on any one of the technologies.

Gender differences were also evident in the reasons for using the technologies. Girls were far more likely than boys to use texting and social media to socialize, to fill time or deal with boredom, to relax and have fun, or to escape from reality. Boys, on the other hand were far more likely to use single or multi-player gaming to meet these needs. Over 80% of boys said that they used gaming to relax or to escape reality.

Finally, the chart and graph on Page 24 looks at the reported problems experienced by youth as a result of using the technologies. The gender differences remained stable. Girls were more likely to report problems such as trying to cut down, parents or school complaining about use, feeling angry or anxious when not using, and use getting in the way of other priorities, from their use of texting or social media, whereas boys were more likely to report these problems in association with gaming. Over 50% of girls reported feeling angry or anxious when not using texting or social media, just as 50% of boys reported the same in relation to gaming. Over 60% of boys reported that gaming had interfered with priorities, caused complaining from parents or others, or prompted them to try and cut down. For girls, over 60% reported the same problems associated with social media.

5. Conclusions and Future Directions

The 2015 East Kootenay Adolescent Drug Use Survey demonstrates that adolescent substance use in the East Kootenay continues to decline or has stabilized after a period of decline.

- 1) Although the percentage of youth who identify their gender as being other than male or female is very small, the survey did find that these youth have much higher rates of substance use than other youth. The survey also found that these youth used screen technologies in ways somewhat different from either boys or girls. This suggests that an awareness of the potential difficulties experienced by Trans* youth is important, both in terms of education programming as well as in treatment programming.
- 2) Following on the recommendation of the 2013 Survey the definition of 'Ecstasy' was expanded to include MDMA. The result was a slight increase in the number of youth reporting having used ecstasy. It is unclear whether this is an actual increase in users or whether the survey is now also capturing those youth who had previously used MDMA and did not consider it synonymous with 'ecstasy'.
- 3) ECigarette use is slightly more common than tobacco use amongst East Kootenay youth, however the Frequency of Use data suggests that at this stage ECigarettes are more likely to be used infrequently whereas tobacco products are more likely to be used regularly.
- 4) By breaking 'Prescription/Over-the-Counter' drugs into three different categories, the Survey found that there is a considerable difference in the rates of use between the three categories. The fact that most youth report obtaining the pharmaceuticals from home prescriptions or the pharmacy suggests that there needs to be more education on the proper use of pharmaceuticals and the safe storage of such drugs.
- 5) The levels of binge drinking remain stubbornly high. Although there is a slight decrease in the percentage of youth who are regular binge drinkers, there has been a more significant decrease in the percentage of youth who never binge drink. It may be time to look at education modules that teach youth about the risks of binge drinking and more importantly teach those youth who do drink how to use alcohol in a lower risk way.
- 6) The percentage of youth who report being a passenger with an impaired driver, and the percentage of youth who report driving after using alcohol or marijuana, have dropped significantly since 2007. This is a very encouraging trend. The fact that for the first time a greater percentage of youth report driving after using marijuana than driving after using alcohol suggests that youth may not fully recognize that marijuana does have a negative impact on coordination, depth and time perception, and reaction time. Many youth report that when they drive under the influence of marijuana they tend to be more careful and drive more slowly, as compared to when they drive after drinking. Even if this were true the message which needs to be consistently given is that in either case their driving abilities are worse off when compared to being sober. Further, youth need to realize that they face the same legal consequences for driving under the influence of marijuana as they do for driving under the influence of alcohol.
- 7) The use of screen technologies is ubiquitous with East Kootenay youth. Nearly all youth use nearly all forms of the technologies surveyed on a regular basis. There were clear gender differences in the reported levels of use of different technologies, the reasons for using, and the problems experienced. When looking at any behaviour it is important to look at both the benefits and harms derived from the behaviour in order to determine whether the behaviour is problematic. The behaviour must also be considered in terms of its impact on other areas of functioning in a person's life. With this in mind the 2015 Survey does not necessarily indicate that any of these technologies are problematic in themselves. A majority of youth, however, report that they have experienced problems

from using different technologies. The survey did not examine what impact these problems had on youths' overall functioning. Nonetheless, nearly 8% of youth reported using some form of screen technology seven or more hours per day. It is hard to imagine that this level of use does not have an impact on school or work performance, as well as on face-to-face social interaction. The many parents who have contacted EKASS with concerns about their child's excessive screen use and the accompanying social isolation bear this out. Any behaviour done in an excessive way has the potential to create harms. At the same time, however, it must be recognized that screen technologies and the Internet have created a style of social interaction and engagement that, although confusing and foreign to many of an older generation, nevertheless represent a real and meaningful form of socialization for younger people. Worldwide humanity is involved in an unregulated mass social experiment the outcome of which is far from certain. As research continues into the impact of screen technologies on individuals and cultures new information will emerge about the risks and benefits, as well as guidelines around healthy and unhealthy behaviour associated with the technologies.

6. Acknowledgements and Contact Information

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