



# Prevalence of substance use in lifetime, past year and past 30 days in British Columbia and other provinces of Canada from 2008 to 2012 (2)

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## 1. Objective

The previous report presented changes in the prevalence of alcohol, cannabis, pharmaceutical, pain reliever, sedatives, stimulants and cigarettes use during the period from 2008 to 2012 in British Columbia (BC) and other provinces of Canada (<http://carbc.ca/LinkClick.aspx?fileticket=6unqCw7BXHw%3d&tabid=88&mid=765>). In this report, we examine the prevalence of cocaine, ecstasy, hallucinogens, heroin and inhalants use. Breakdowns are provided by sex.

## 2. Methods

The analyses were based on the Canadian Alcohol and Drug Use Monitoring Survey (CADUMS) from 2008 to 2012. The CADUMS is an on-going survey on alcohol and other substance use among Canadians. The survey covers population aged 15 years and older in ten provinces and excludes residents of the Yukon, the Northwest Territories and Nunavut, permanent residents of institutions, people living in households without a telephone and people with cell phones only. Details on the survey can be found elsewhere [1-4].

### 2.1. Survey sampling

The CADUMS was a virtually continuous survey on alcohol and other substance use among Canadians initiated in April 2008 by the Controlled Substances and Tobacco Directorate, Health Canada.[1-3] The survey was derived from the Canadian Addiction Survey administered in 2004 and contained questions on alcohol and illicit drug use (including prescription drug misuse) and associated harms.[5] The CADUMS used random digit dialing to obtain a stratified sample across all 10 provinces with equal representation of subjects each month. It is based on a two-stage (telephone household, respondent) random sample stratified by province. The CADUMS survey covers population aged 15 years and older in ten provinces and excludes residents of the Yukon, the Northwest Territories and Nunavut, permanent residents of institutions, people living in households without a telephone and people with cell phones only. The sample size was 16,674 in 2008, 13,082 in 2009, 13,615 in 2010, 10,076 in 2011 and 11,090 in 2012. Each sample represents an estimated 25,957,435 Canadians aged 15 years and older to order to ensure an even monthly distribution of the data.



## 2.1. Prevalence of substance use

Measures of substance use can be found in Appendix A. The percent of adults aged 15+ who used cocaine, ecstasy, hallucinogens, heroin and inhalants in lifetime, past year, past 30 days was estimated. Lifetime users were defined as those who have ever used or tried cocaine or crack, ecstasy, hallucinogens, heroin or inhalants. Past year users were defined as those who have used cocaine or crack, ecstasy, hallucinogens, heroin or inhalants during the past 12 months. Past 30–day users were defined as those who have used cocaine or crack, ecstasy, hallucinogens, heroin or inhalants in the past 30 days. The prevalence of lifetime, past year and past 30–day substance use among Canadians aged 15 years and older was estimated.

Lifetime use for five types of substance was not reported in the 2008 survey and thus the prevalence was not estimated for 2008. Past 30–day use of heroin and inhalants was not reported in the 2011 and 2012 surveys and thus the prevalence of past 30–day use was not estimated for 2011 and 2012.

## 2.2. Statistical analysis

Each sample was analyzed to estimate the prevalence of substance use and 95% confidence interval (CI) in each year and the pooled sample was also analyzed to estimate the prevalence during the period from 2008 to 2012. The estimates were based on the weighted sample and the weights were recalculated and rescaled [6]. Unstable estimates have been suppressed based on a CV value of 33.33% or more. The method of comparison of two proportions *Z*–test were used to test for significant differences between BC and other provinces of Canada overall and by gender during the period from 2008 to 2012 and in each of years [7]. Multivariate logistic regression was used to examine the relationship between each of substance use and year, i.e., trend in substance use in BC and other provinces of Canada overall and by gender [8]. The Wald test was used to examine whether the prevalence of substance use changed significantly over years. Statistical analyses were completed using SAS 9.3 [9]. Statistical analyses were completed using the SAS SURVEYMEANS, SURVEYFREQ and SURVEYLOGISTIC procedures because these procedures analyze sample survey data taking into account the sample design effect [9].

## 3. Results

### 3.1 Cocaine use

Table 1A, 1B and 1C present the percentages of those using cocaine in lifetime, past year and past 30 days, with breakdowns by gender in BC and other and provinces from 2008 to 2012. The percent of adults that used cocaine in lifetime was 10.51% in BC and 6.33% in other provinces during the whole period from 2009 to 2012. The prevalence in lifetime was significantly higher in BC than in other provinces of Canada (95% CI<sub>(diff)</sub> of the rate difference: 3.39 to 4.97%,  $P < 0.001$ ). As can be seen in Table 1A, the prevalence for males and females was also significantly higher in BC than that in other provinces (both  $P < 0.001$ ). In BC, the percent of adults that used cocaine in the past year was 1.19% (2008 to 2012), which was not significantly different from 1.12% in other provinces of



Canada (95% CI<sub>(diff)</sub> of the rate difference: -0.05 to 0.19%,  $P > 0.05$ ). There was also no statistical difference between BC and other provinces by sex. The prevalence of cocaine in lifetime and past year remained unchanged over years in both BC and other provinces.

The prevalence of past 30-day cocaine use in BC (0.51%) was not significantly different than that (0.45%) in other provinces (95% CI<sub>(diff)</sub> of the rate difference: -0.10 to 0.22%,  $P > 0.05$ ). The prevalence of past 30-day cocaine use remained unchanged over years in both BC and other provinces.

### 3.2 Ecstasy use

Table 2A, 2B and 3C present the prevalence of ecstasy use in BC and other provinces from 2008 to 2012. The prevalence of ecstasy use in lifetime was significantly higher in BC than that in other provinces during the period 2009–2012 overall and by gender (Table 2A). The rates for both BC and other provinces did not change significantly over years overall and by gender (Table 2A).

The past year prevalence of ecstasy use overall, and by gender in BC in 2008–2012 was not significantly different than that in other provinces (Table 2B). The prevalence tended to decrease significantly among males in BC (Wald test:  $P < 0.05$ ) and among females in other provinces (Wald test:  $P < 0.05$ ).

No significant difference in the prevalence of ecstasy use in the past 30 days in 2008–2012 was found among males and females combined, and males in both BC and other provinces (Table 2C).

### 3.3. Hallucinogen use

Table 3A presents the prevalence of hallucinogen use in lifetime in BC and other provinces from 2009 to 2012. The prevalence for males and females combined was 17.03% in BC in 2009–2012 which was significantly higher than that (10.88%) in other provinces (95% CI<sub>(diff)</sub> of the rate difference: 5.18 to 7.12%,  $Z$ -test:  $P < 0.001$ ). As can be seen in Table 3A, the prevalence for both males and females was significantly higher in BC than that in other provinces. However, the rates did not change significantly over years.

Table 3B presents the prevalence of hallucinogen use in past year in BC and other provinces from 2008 to 2012. The prevalence in past year was significantly higher among males and females combined (95% CI of the rate difference: 0.02 to 0.54%,  $Z$ -test:  $P < 0.05$ ), and females only (95% CI of the rate difference: 0.21 to 0.85%,  $Z$ -test:  $P < 0.01$ ) in BC than that in other provinces in 2008–2012. While the prevalence tended to decrease significantly in other provinces (Wald test:  $P < 0.01$ ), it remained unchanged over years from 2008 to 2012 in men and women in BC (Wald test:  $P > 0.05$ ).

Table 3C presents the prevalence of hallucinogen use in past 30 days in BC and other provinces from 2008 to 2012. No significant difference in the prevalence was found among males and females combined and males in both BC and other provinces in 2008–2012.



### 3.4. Heroin use

The prevalence of heroin use in past year was very lower in both BC and other provinces and the estimates are unstable ( $CV > 33.33\%$ ) by years and have been suppressed. Table 4A presents the prevalence of heroin use in past year in BC in 2008–2012. The prevalence of heroin use was 0.14% for males and females combined and 0.20% for males in 2008–2012.

### 3.5. Inhalant use

There was also very low prevalence of inhalant use in past year in both BC and other province and all estimates are unstable ( $CV > 33.33\%$ ) and no estimates are presented in this report.



## References

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**Appendix A. Questions about substance use in the 2008–2012 CADUMS**

Substance	Lifetime use	Past year use	Past 30 days use
Cocaine	Have you ever used or tried cocaine or crack?  (2009, 2010, 2011, 2012)	Have you used or tried cocaine or crack during the past 12 months? (Freebase, powder, snow) (2008, 2009, 2010, 2011, 2012)	Have you used it in the past 30 days? (cocaine or crack)  (2008, 2009, 2010, 2011, 2012)
Ecstasy	Have you ever used or tried Ecstasy? (MDMA, E, XTC, Adam, X)  (2009, 2010, 2011, 2012)	Have you used or tried Ecstasy during the past 12 months? (MDMA, E, XTC, Adam, X) (2008, 2009, 2010, 2011, 2012)	Have you used it in the past 30 days? (Ecstasy – MDMA)  (2008, 2009, 2010, 2011, 2012)
Hallucinogens	Have you ever used or tried hallucinogens such as PCO, LSD(acid), salvia(Divinorum) or magic mushrooms, but this does not include salvia? INCLUDE (Mescaline, mesc, mess, angel dust, peyote, psilocybin) DON NOT INCLUDE (Epival, Salvia) (2009, 2010, 2011, 2012)	Have you used or tried hallucinogens such as PCO, LSD(acid), salvia(Divinorum) or magic mushrooms during the past 12 months? INCLUDE (Mescaline, mesc, mess, angel dust, peyote, psilocybin) DON NOT INCLUDE (Epival) (2008, 2009, 2010, 2011, 2012)	Have you used it in the past 30 days? (PCP, LSD(acid), salvia or magic mushrooms)  (2008, 2009, 2010, 2011, 2012)
Heroin	Have you ever used or tried heroin? (H, horse, junk, smack)  (2009, 2010, 2011, 2012)	Have you used or tried heroin during the past 12 months? (H, horse, junk, smack) (2008, 2009, 2010, 2011, 2012)	
Inhalants	Have you ever used or tried inhalants?  (2009, 2010, 2011, 2012)	Have you used or tried inhalant during the past 12 months? (2008, 2009, 2010, 2011, 2012)	
Caffeine			
Steroids			



**Cocaine use in lifetime**

Table 1A. Prevalence (%) of cocaine use in lifetime overall and by gender in British Columbia and other provinces of Canada, 2009–2012							
Gender	Year						Wald Test for Trend Δ
	2009–2012 ‡	2008	2009	2010	2011	2012	
<b>Total</b>							
BC	10.51 [9.58–11.45]		10.87 [9.76–11.98]	11.71 [9.35–14.08]	9.11 [7.04–11.19]	9.90 [8.32–11.49]	P=0.2758 (–)
Other provinces	6.33 [5.84–6.82]		6.24 [5.31–7.17]	6.33 [5.43–7.24]	5.85 [4.90–6.80]	6.86 [5.75–7.97]	P=0.2503 (+)
Rate difference †	<b>4.18</b> <b>[3.39–4.97]</b>		<b>4.63</b> <b>[3.10–6.16]</b>	<b>5.38</b> <b>[3.83–6.93]</b>	<b>3.26</b> <b>[1.64–4.88]</b>	<b>3.04</b> <b>[1.44–4.64]</b>	
Z–test, P–value	<b>***</b>		<b>***</b>	<b>***</b>	<b>***</b>	<b>***</b>	
<b>Male</b>							
BC	13.08 [11.54–14.62]		13.63 [11.78–15.48]	14.60 [10.70–18.51]	11.26 [7.83–14.69]	12.22 [9.65–14.79]	P=0.3699 (–)
Other provinces	8.52 [7.67–9.36]		7.42 [5.93–8.92]	9.04 [7.40–10.67]	8.06 [6.42–9.70]	9.58 [7.61–11.56]	P=0.0533 (+)
Rate difference	<b>4.56</b> <b>[3.31–5.81]</b>		<b>6.21</b> <b>[3.79–8.63]</b>	<b>5.56</b> <b>[3.10–8.02]</b>	<b>3.20</b> <b>[0.63–5.77]</b>	<b>2.64</b> <b>[0.10–5.18]</b>	
Z–test, P–value	<b>***</b>		<b>***</b>	<b>***</b>	*	*	
<b>Female</b>							
BC	8.10 [7.01–9.18]		8.28 [7.02–9.53]	8.99 [6.26–11.73]	<b>7.09</b> <b>[4.68–9.51]</b>	7.72 [5.81–9.62]	P=0.5345 (–)
Other provinces	4.27 [3.76–4.77]		5.13 [4.00–6.25]	3.79 [2.98–4.60]	3.77 [2.77–4.77]	4.29 [3.22–5.36]	P=0.4504 (–)
Rate difference	<b>3.83</b> <b>[2.86–4.80]</b>		<b>3.15</b> <b>[1.25–5.95]</b>	<b>5.20</b> <b>[3.30–7.10]</b>	<b>3.32</b> <b>[1.32–9.51]</b>	<b>3.43</b> <b>[1.45–5.41]</b>	
Z–test, P–value	<b>***</b>		<b>***</b>	<b>***</b>	**	<b>***</b>	

Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2009–2012 and weighted. []: 95% confidence interval of the prevalence. † Rate difference [P<sub>(BC)</sub>–P<sub>(OTHER)</sub>] and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys. Δ Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. ■ Estimate has moderate sampling variability and should be interpreted with caution (CV range: 16.6–33.3). Z–test, P–value: \*P<0.05 \*\*P<0.01 \*\*\*P<0.001.



**Cocaine use in past year**

Table 1B. Prevalence (%) of cocaine use in past year overall and by gender in British Columbia and other provinces of Canada, 2008–2012							
Gender	Year						Wald Test for Trend $\Delta$
	2008–2012 ‡	2008	2009	2010	2011	2012	
<b>Total</b>							
BC	1.19 [0.94–1.45]	1.66 [1.18–2.14]	1.24 [0.79–1.70]	0.69 [0.28–1.10]		1.37 [0.52–2.22]	P=0.3744 (–)
Other provinces	1.12 [0.91–1.33]	1.60 [1.08–2.12]	1.19 [0.64–1.74]	0.68 [0.47–0.89]	0.89 [0.43–1.35]	1.06 [0.55–1.57]	P=0.0943 (–)
Rate difference †	0.07 [–0.05–0.19]	0.06 [–0.51–0.63]	0.05 [–0.51–0.61]	0.01 [–0.40–0.42]		0.31 [–0.32–0.94]	
Z–test, P–value	ns	ns	ns	ns		ns	
<b>Male</b>							
BC	1.62 [1.21–2.04]	2.23 [1.42–3.03]	1.73 [0.94–2.53]			1.87 [0.63–3.12]	P=0.4396 (–)
Other provinces	1.59 [1.22–1.96]	2.35 [1.45–3.25]	1.45 [0.52–2.39]	0.98 [0.61–1.36]	1.49 [0.61–2.37]	1.45 [0.57–2.33]	P=0.2454 (–)
Rate difference	0.03 [–0.17–0.23]	–0.12 [–1.07–0.83]	0.28 [–0.66–1.20]			0.42 [–0.63–1.47]	
Z–test, P–value	ns	ns	ns			ns	
<b>Female</b>							
BC	0.78 [0.48–1.09]	1.13 [0.57–1.68]	0.78 [0.32–1.25]				P=0.6410 (–)
Other provinces	0.68 [0.46–0.90]	0.90 [0.35–1.45]	0.94 [0.33–1.54]	0.40 [0.21–0.60]			P=0.2002 (–)
Rate difference	0.10 [–0.03–0.23]	0.23 [–0.42–0.88]	–0.16 [–0.79–0.66]				
Z–test, P–value	ns	ns	ns				

Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2008–2012 and weighted. [ ]: 95% confidence interval of the prevalence. † Rate difference  $[P_{(BC)} - P_{(OTHER)}]$  and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys.  $\Delta$  Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. □ Estimate has moderate sampling variability and should be interpreted with caution (CV range: 16.6–33.3). ■ Estimate was unstable and has been suppressed (CV range: 33.3+). Z–test, P–value: ns P>0.05.





**Cocaine use in past 30 days**

Gender	Year						Wald Test for Trend $\Delta$
	2008–2012 ‡	2008	2009	2010	2011	2012	
<b>Total</b>							
BC	0.51 [0.34–0.69]	0.53 [0.23–0.82]	0.46 [0.18–0.74]				P=0.3689 (+)
Other provinces	0.45 [0.31–0.59]	0.41 [0.14–0.67]		0.25 [0.10–0.40]	0.37 [0.14–0.60]		P=0.7219 (+)
Rate difference †	0.06 [-0.10–0.22]	0.12 [-0.03–0.27]					
Z-test, P-value	ns						
<b>Male</b>							
BC	0.71 [0.41–1.02]						
Other provinces	0.69 [0.42–0.96]						
Rate difference	0.02 [-0.25–0.29]						
Z-test, P-value	ns						
<b>Female</b>							
BC	0.33 [0.14–0.51]						
Other provinces	0.23 [0.11–0.34]						
Rate difference	0.10 [-0.08–0.28]						
Z-test, P-value	ns						

Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2008–2012 and weighted. []: 95% confidence interval of the prevalence. † Rate difference [ $P_{(BC)} - P_{(OTHER)}$ ] and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys.  $\Delta$  Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. □ Estimate has moderate sampling variability and should be interpreted with caution (CV range: 16.6–33.3). ■ Estimate was unstable and has been suppressed (CV range: 33.3+). Z-test, P-value: ns P>0.05.



**Ecstasy use in lifetime**

**Table 2A. Prevalence (%) of ecstasy use in lifetime overall and by gender in British Columbia and other provinces of Canada, 2009–2012**

Gender	Year					Wald Test for Trend Δ
	2009–2012 ‡	2009	2010	2011	2012	
<b>Total</b>						
BC	5.93 [5.13–6.72]	6.11 [5.13–7.09]	6.03 [4.31–7.75]	5.15 [3.14–7.15]	6.29 [4.69–7.88]	P=0.9810 (+)
Other provinces	3.68 [3.29–4.08]	3.58 [2.78–4.39]	3.55 [2.96–4.13]	3.54 [2.73–4.36]	4.10 [3.16–5.05]	P=0.2376 (+)
Rate difference †	<b>2.25</b> [1.64–2.86]	<b>2.53</b> [1.35–3.71]	<b>2.48</b> [1.33–3.63]	<b>1.61</b> [0.36–2.86]	<b>2.19</b> [0.89–3.49]	
Z-test, P-value	***	***	***	*	**	
<b>Male</b>						
BC	6.97 [5.72–8.22]	7.51 [5.93–9.09]	7.35 [4.45–10.25]	5.39 [2.52–8.26]	7.30 [4.81–9.80]	P=0.7179 (-)
Other provinces	4.56 [3.91–5.21]	3.96 [2.69–5.24]	4.36 [3.40–5.32]	4.71 [3.35–6.07]	5.37 [3.72–7.03]	P=0.0686 (+)
Rate difference	<b>2.41</b> [1.47–3.35]	<b>3.55</b> [1.69–5.41]	<b>2.99</b> [1.18–4.80]	0.68 [-1.17–2.53]	1.93 [-0.07–3.93]	
Z-test, P-value	***	***	**	ns	ns	
<b>Female</b>						
BC	4.94 [3.96–5.93]	4.79 [3.62–5.97]	4.79 [2.87–6.71]	4.91 [2.10–7.72]	5.32 [3.29–7.35]	P=0.6540 (+)
Other provinces	2.86 [2.41–3.30]	3.22 [2.22–4.23]	2.78 [2.08–3.47]	2.45 [1.54–3.36]	2.90 [1.95–3.85]	P=0.6283 (-)
Rate difference	<b>2.08</b> [1.30–2.86]	<b>1.57</b> [0.10–3.04]	<b>2.01</b> [0.57–3.45]	<b>2.46</b> [0.78–4.14]	<b>2.42</b> [0.76–4.08]	
Z-test, P-value	***	***	**	**	**	

Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2009–2012 and weighted. []: 95% confidence interval of the prevalence. † Rate difference [P<sub>(BC)</sub>–P<sub>(OTHER)</sub>] and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys. Δ Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. ■ Estimate has moderate sampling variability and should be interpreted with caution (CV range: 16.6–33.3). Z-test, P-value: ns P>0.05 \*P<0.05 \*\*P<0.01 \*\*\*P<0.001.



**Ecstasy use in past year**

Gender	Year						Wald Test for Trend $\Delta$
	2008–2012 ‡	2008	2009	2010	2011	2012	
<b>Total</b>							
BC	1.08 [0.83–1.34]	1.63 [1.10–2.15]	1.32 [0.82–1.82]	0.81 [0.38–1.23]			P=0.0582 (-)
Other provinces	0.89 [0.71–1.07]	1.36 [0.90–1.81]	0.85 [0.41–1.30]	0.72 [0.52–0.92]	0.74 [0.40–1.08]		P=0.0077 (-)
Rate difference †	0.19 [-0.04–0.42]	0.19 [-0.29–0.83]	0.47 [-0.09–1.03]	0.09 [-0.35–0.53]			
Z-test, P-value	ns	ns	ns	ns			
<b>Male</b>							
BC	1.26 [0.91–1.60]	2.08 [1.25–2.90]	1.56 [0.78–2.35]				<b>P=0.0285 (-)</b>
Other provinces	1.12 [0.83–1.42]	1.67 [0.94–2.40]	1.07 [0.30–1.83]	0.89 [0.56–1.22]	1.01 [0.47–1.55]		P=0.0818 (-)
Rate difference	0.14 [-0.22–0.50]	0.14 [-0.50–1.32]	0.49 [-0.39–1.37]				
Z-test, P-value	ns	ns	ns				
<b>Female</b>							
BC	0.92 [0.55–1.29]	1.21 [0.55–1.86]	1.09 [0.46–1.73]				P=0.4367 (-)
Other provinces	0.67 [0.47–0.88]	1.06 [0.50–1.62]		0.57 [0.33–0.80]			P=0.0289 (-)
Rate difference	0.25 [-0.05–0.55]	0.25 [-0.53–0.83]					
Z-test, P-value	ns	ns					

Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2008–2012 and weighted. []: 95% confidence interval of the prevalence. † Rate difference [P<sub>(BC)</sub>–P<sub>(OTHER)</sub>] and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys.  $\Delta$  Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. ■ Estimate has moderate sampling variability and should be interpreted with caution (CV range: 16.6–33.3). ■ Estimate was unstable and has been suppressed (CV range: 33.3+). Z-test, P-value: ns P>0.05.



**Ecstasy use in past 30 days**

**Table 2C. Prevalence (%) of ecstasy use in past 30 days overall and by gender in British Columbia and other provinces of Canada, 2008–2012**

Gender	Year						Wald Test for Trend $\Delta$
	2008–2012 ‡	2008	2009	2010	2011	2012	
<b>Total</b>							
BC	0.33 [0.17–0.48]		0.48 [0.17–0.79]				
Other provinces	0.27 [0.18–0.37]	0.31 [0.11–0.51]		0.28 [0.14–0.42]			
Rate difference †	0.06 [–0.07–0.19]						
Z–test, P–value	ns						
<b>Male</b>							
BC	0.36 [0.16–0.57]						
Other provinces	0.42 [0.25–0.59]			0.41 [0.16–0.66]			
Rate difference	–0.06 [–0.26–0.14]						
Z–test, P–value							
<b>Female</b>							
BC							
Other provinces	0.14 [–0.05–0.23]						
Rate difference							
Z–test, P–value							

Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2008–2012 and weighted. []: 95% confidence interval of the prevalence. † Rate difference  $[P_{(BC)} - P_{(OTHER)}]$  and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys.  $\Delta$  Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. ■ Estimate has moderate sampling variability and should be interpreted with caution (CV range: 16.6–33.3). ■ Estimate was unstable and has been suppressed (CV range: 33.3+). Z–test, P–value: ns  $P > 0.05$ .



### Hallucinogen use in lifetime

Gender	Year						Wald Test for Trend $\Delta$
	2010–2012 ‡	2008	2009	2010	2011	2012	
<b>Total</b>							
BC	17.03 [15.85–18.22]		16.31 [14.96–17.65]	18.75 [15.89–21.61]	15.30 [12.50–18.11]	17.36 [15.21–19.50]	P=0.6950 (+)
Other provinces	10.88 [10.28–11.49]		11.11 [9.88–12.34]	10.89 [9.76–12.02]	9.69 [8.58–10.80]	11.70 [10.37–13.03]	P=0.3978 (+)
Rate difference †	<b>6.15</b> <b>[5.18–7.12]</b>		<b>5.20</b> <b>[3.36–7.04]</b>	<b>7.86</b> <b>[5.97–9.75]</b>	<b>5.61</b> <b>[3.85–7.64]</b>	<b>5.66</b> <b>[3.63–7.69]</b>	
Z-test, P-value	<b>***</b>		<b>***</b>	<b>***</b>	<b>***</b>	<b>***</b>	
<b>Male</b>							
BC	20.61 [18.71–22.50]		19.59 [17.42–21.76]	23.08 [18.49–27.67]	18.17 [13.84–22.51]	20.99 [17.42–24.55]	P=0.8193 (+)
Other provinces	14.52 [13.48–15.55]		14.26 [12.21–16.31]	14.82 [12.87–16.78]	12.92 [11.04–14.80]	15.88 [13.57–18.20]	P=0.2321 (+)
Rate difference	<b>6.09</b> <b>[4.58–7.60]</b>		<b>5.33</b> <b>[2.49–8.17]</b>	<b>8.26</b> <b>[5.32–11.20]</b>	<b>5.25</b> <b>[2.11–8.39]</b>	<b>5.11</b> <b>[1.96–8.26]</b>	
Z-test, P-value	<b>***</b>		<b>***</b>	<b>***</b>	<b>***</b>	<b>**</b>	
<b>Female</b>							
BC	13.67 [12.23–15.10]		13.22 [11.60–14.83]	14.68 [11.22–18.14]	12.60 [8.98–16.23]	13.92 [11.52–16.33]	P=0.7283 (+)
Other provinces	7.47 [6.82–8.11]		8.15 [6.76–9.55]	7.19 [6.03–8.35]	6.65 [5.43–7.87]	7.74 [6.41–9.08]	P=0.8618 (–)
Rate difference	<b>6.20</b> <b>[4.97–7.43]</b>		<b>5.07</b> <b>[2.74–7.40]</b>	<b>7.49</b> <b>[5.12–9.86]</b>	<b>5.95</b> <b>[3.36–8.54]</b>	<b>6.18</b> <b>[3.61–8.75]</b>	
Z-test, P-value	<b>***</b>		<b>***</b>	<b>***</b>	<b>***</b>	<b>***</b>	
Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2008–2012 and weighted. []: 95% confidence interval of the prevalence. † Rate difference [ $P_{(BC)} - P_{(OTHER)}$ ] and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys. $\Delta$ Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. Z-test, P-value: ns $P > 0.05$ * $P < 0.05$ ** $P < 0.01$ *** $P < 0.001$ .							



**Hallucinogen use in past year**

Table 3B. Prevalence (%) of hallucinogen use in past year overall and by gender in British Columbia and other provinces of Canada, 2009–2012							
Gender	Year						Wald Test for Trend Δ
	2009–2012 ‡	2008	2009	2010	2011	2012	
<b>Total</b>							
BC	1.38 [1.10–1.67]	2.03 [1.45–2.60]	1.25 [0.79–1.72]	1.22 [0.65–1.79]			P=0.1921 (-)
Other provinces	1.10 [0.90–1.30]	2.16 [1.54–2.78]	0.67 [0.30–1.03]	0.81 [0.55–1.06]	0.59 [0.29–0.89]	0.86 [0.47–1.24]	P<0.0001 (-)
Rate difference †	<b>0.28</b> [0.02–0.54]	-0.13 [-0.77–0.51]	<b>0.58</b> [0.04–1.12]	0.41 [-0.11–0.94]			
Z-test, P-value	*	ns	*	ns			
<b>Male</b>							
BC	1.68 [1.23–2.13]	2.40 [1.48–3.31]	1.44 [0.75–2.13]	1.42 [0.49–2.35]			P=0.6005 (-)
Other provinces	1.66 [1.30–2.03]	3.40 [2.27–4.54]		1.25 [0.78–1.73]	0.93 [0.36–1.50]	1.44 [0.69–2.19]	P=0.0053 (-)
Rate difference	0.02 [-0.40–0.44]	-1.00 [-2.01–0.01]		0.17 [-0.67–1.01]			
Z-test, P-value	ns	ns		ns			
<b>Female</b>							
BC	1.11 [0.74–1.47]	1.68 [0.96–2.40]	1.08 [0.45–1.71]	1.03 [0.35–1.71]			P=0.1421 (-)
Other provinces	0.58 [0.39–0.76]	0.99 [0.45–1.52]		0.38 [0.19–0.57]			P=0.0008 (-)
Rate difference	<b>0.53</b> [0.21–0.85]	0.69 [-0.09–1.47]		0.65 [-0.02–1.32]			
Z-test, P-value	**	ns		ns			

Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2008–2012 and weighted. []: 95% confidence interval of the prevalence. † Rate difference [P<sub>(BC)</sub>–P<sub>(OTHER)</sub>] and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys. Δ Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. □ Estimate has moderate sampling variability and should be interpreted with caution (CV range: 16.6–33.3). ■ Estimate was unstable and has been suppressed (CV range: 33.3+). Z-test, P-value: ns P>0.05 \*P<0.05 \*\*P<0.01.



### Hallucinogen use in past 30 days

Gender	Year						Wald Test for Trend $\Delta$
	2010–2012 ‡	2008	2009	2010	2011	2012	
Total							
BC	0.25 [0.15–0.36]	0.51 [0.22–0.80]					
Other provinces	0.33 [0.20–0.46]	0.74 [0.32–1.16]		0.14 [0.05–0.22]			
Rate difference †	–0.08 [–0.20–0.04]	–0.23 [–0.56–0.10]					
Z–test, P–value	ns	ns					
Male							
BC	0.36 [0.18–0.54]						
Other provinces	0.52 [0.29–0.76]	1.16 [0.41–1.91]					
Rate difference	–0.16 [–0.41–0.04]						
Z–test, P–value	ns						
Female							
BC							
Other provinces							
Rate difference							
Z–test, P–value							

Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2008–2012 and weighted. []: 95% confidence interval of the prevalence. † Rate difference  $[P_{(BC)} - P_{(OTHER)}]$  and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys.  $\Delta$  Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. ■ Estimate has moderate sampling variability and should be interpreted with caution (CV range: 16.6–33.3). ■ Estimate was unstable and has been suppressed (CV range: 33.3+). Z–test, P–value: ns  $P > 0.05$ .



**Heroin use in past year**

Gender	Year					Wald Test for Trend $\Delta$	
	2010–2012 ‡	2008	2009	2010	2011		2012
<b>Total</b>							
BC	0.14 [0.07–0.21]						
Other provinces							
Rate difference †							
Z-test, P-value							
<b>Male</b>							
BC	0.20 [0.07–0.33]						
Other provinces							
Rate difference							
Z-test, P-value							
<b>Female</b>							
BC							
Other provinces							
Rate difference							
Z-test, P-value							

Note: Estimates were based on the Canadian Alcohol and Drug Use Monitoring Survey, 2008–2012 and weighted. []: 95% confidence interval of the prevalence. † Rate difference [ $P_{(BC)} - P_{(OTHER)}$ ] and its 95% CI (CIs contains 0: no significant difference, <0: significantly lower, >0: significant higher). ‡ Estimates were based on the pooled five surveys.  $\Delta$  Wald test for trend in multivariate logistic models adjusted for covariates including age, sex, marital status, education and income, (+)–increase in trend and (–)–decrease in trend. □ Estimate has moderate sampling variability and should be interpreted with caution (CV range: 16.6–33.3). ■ Estimate was unstable and has been suppressed (CV range: 33.3+).