



# CISDUS Brief

## Trends in Tobacco Use by Students, 1998-2010

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This brief discusses tobacco smoking among students in grades 7- to 12-grade in the Cayman Islands, and trends between 1998 and 2010. The findings are based on data from the Cayman Islands Student Drug Use Surveys (CISDUS), which were conducted in 1998, 2000, 2002, 2006 and most recently in 2010.

### Tobacco Prevalence in 2010

In 2010, current use prevalence among students surveyed was 6.9% and the annual prevalence of smoking cigarettes was 14.4% (Figure 1).

Males were more likely than females to report a higher past month and past year smoking prevalence. For example, 7.4% of males smoked in the past month compared to 6.4% of females (Figure 1).

### Key Highlights

In 2010, about 14.4% of students surveyed smoked cigarettes during the year prior to the survey and 6.9% smoked during the past month.

- Males were more likely than females to smoke cigarettes. Smoking increased with grade levels while there were no significant variations among the districts.
- Past year smoking was notably higher in 2010 (14%) compared to the rate in 2006 (7%), 2002 (7%), 2000 (6%) and 1998 (9%).
- Females showed a significant decrease in smoking over time, but males' smoking remained stable; both increased notably in 2010. Students in 9<sup>th</sup>- and 12<sup>th</sup>-grade showed a significant increase in smoking compared to 1998. Smoking among 7<sup>th</sup> and 8<sup>th</sup>-graders increased in 2006 and 2010, reverting back to the level reported in 1998.

Both past month and past year smoking rates significantly increased with grade level. Between grades 7<sup>th</sup> and 12<sup>th</sup>, past month smoking increased from 2.2% to 13.8%, while past year smoking increases from 3.2% up to 24.7%.

Despite some variation, there were no significant differences in smoking rates among the six districts.

### Trends in Past Year Smoking

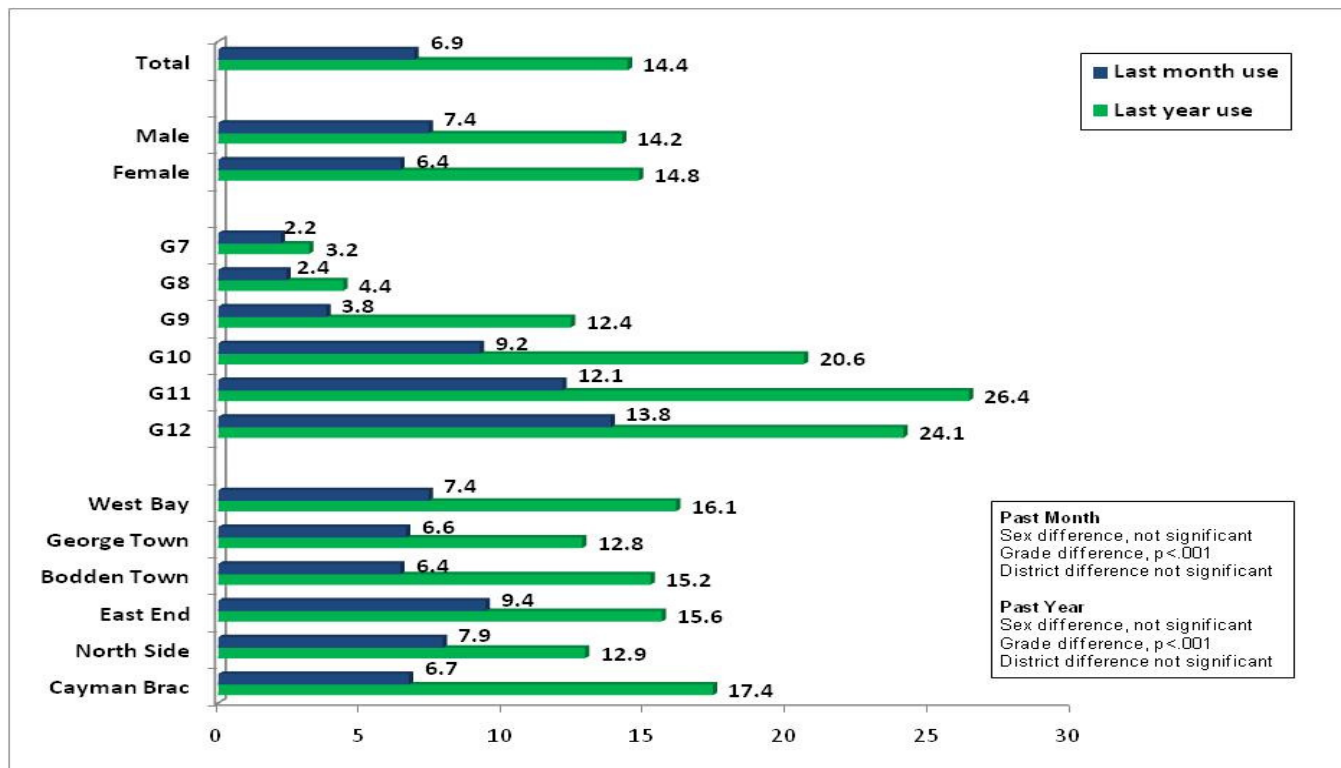
Table 1 and Figure 1 present trends in past year smoking between 1998 and 2010, for all students as well as among demographic subgroups. Overall, smoking in 2010 (14.4%) is significantly higher than that reported in the previous years: 2006 (6.8%), 2002 (6.7%), 2000 (5.9%) and in 1998 (8.5%).

Females as well as males showed a significant increase in smoking (8.6% in 1998 vs. 14.2% in 2010 for males; and 8.4% in 1998 vs. 14.8% in 2010 for females).

Smoking among 7<sup>th</sup> graders increased between 2002 and 2010, but the 2010 rate resembles that reported in 2006. Grade 9 and 11 students showed a significant decrease in smoking between 1998 and 2006, but in 2010 a notable increase was reported. Smoking among 8<sup>th</sup> – graders remained stable, but smoking amongst 12<sup>th</sup> – graders increased remarkably in 2010. It is important to note that, other than 7<sup>th</sup>-graders, no subgroup showed a significant change in smoking between 2002 and 2006; except in 2010 when all subgroups increased smoking.

Among districts, all showed significant decreases in 2006 compared to 1998; but in 2010 the rates increased significantly.

**Figure 1: Past Month and Past Year Smoking By Sex, Grade and District, 2010 CISDUS**



Source: CISDUS2010, National Drug Council

**Table 1: Trends in Past Year Smoking (%), by Sex, Grade and District, 1998-2010**

Year	1998	2000	2002	2006	2010	
N	(1919)	(2152)	(2180)	(2451)	(2612)	
<b>Overall Total</b>	8.5	5.9	6.7	6.8	14.4	
<b>Gender</b>	Male	8.6	6.7	7.3	7.9	14.2
	Female	8.4	5.2	6.1	5.7	14.8
<b>Grade</b>	Grade 7	2.3	0.5	0.5	3.3	3.2
	Grade 8	4	2.7	1.2	2.4	4.4
	Grade 9	8.3	2	5.9	3.4	12.4
	Grade 10	10.1	7.9	9	8	20.6
	Grade 11	17.7	9.6	13.1	10.7	26.4
	Grade 12	11.4	14.9	14	15.2	24.4
<b>District</b>	West Bay	10.6	5.8	5.6	6.7	16.1
	George Town	8.4	6.1	7.6	6.3	12.8
	Bodden Town	5.7	5.2	7.5	8.2	15.2
	East End	4.3	2.6	2.6	4.2	15.6
	North Side	10.8	9.1	6.7	4.9	12.9
	Cayman Brac	11.8	5	5	6.6	17.4

Source: CISDUS2010, National Drug Council

## Perception of Availability

In 2010, 34.5% of all students surveyed reported that it is “easy” or “very easy” to obtain cigarettes. This increases linearly with grade, from 10.5% of 7<sup>th</sup> graders to 52.1% of 12<sup>th</sup> graders.

## Perception of Risk

In 2010, 46.4% of students reported that they believe smoking one or more packs of cigarettes a day posed great risk. However, about 9% of students felt there was no risk involved with this behaviour.

## Age of First Use

The 2010 CISDUS showed that, among those reporting ever smoking cigarettes (n=743), the average age of first use was 12 years. About 32.8% of smokers reported an “early onset” of use; that is, they smoked their first “whole” cigarette between age 6 and 11 years.

## Comparisons with Other Student Surveys

Table 2 compares rates of past year smoking among students in grades 8, 10 and 12 in the Cayman Islands, Ontario Canada, and Barbados. Past year smoking among the Cayman Islands students in grades 10 and 12 was notably higher compared to their counterparts in the Barbados and Canada.

**Table 2: Past Year Smoking (%) for Grades 8, 10, and 12: Comparing the CISDUS2010, OSDUS2009, and the Barbados – SIDUC2006 Survey Findings:**

	CISDUS	OSDUS	SIDUC
Grade 8	4.4	3.8	6.3
Grade 10	20.6	14.8	8.7
Grade 12	24.1	19.8	7.6

Notes: OSDUS is the *Ontario Student Drug Use Survey*, which was conducted in Ontario Canada; **SIDUC** is the *Inter-American System of Uniform Drug-Use Data*, which was conducted in Barbados in 2006.

## **Methods**

The CISDUS employs a census (i.e., a 100% sample) of students enrolled in grades 7 to 12. In 2010, 9 middle and high schools and Eagle House participated in the survey. For 1998, 2000, 2002 and 2006 all twelve middle and high schools in the Cayman Islands participated in the survey. Student participation rates were 88% in 2010; 84% in 2006, 88% in 2002, 94% in 2000 and 86.0% in 1998. The demographic composition of the sample did not significantly change between 1998 and 2010.

Because of the survey's complete sample (i.e., a census) there is no sampling error attached to an estimate (although estimates still have error based on non-sampling error, such as misreporting). Thus, no confidence intervals are required. Regarding the survey results, readers should bear in mind the following points:

- Since there is still the element of chance findings, the element of non-sampling errors, we cannot treat all absolute differences in percentages as meaningful and important.
- Small percentages are more unreliable than larger percentages.

## **Terminology**

- **Past Month Smoking** is defined as smoking less than one whole tobacco cigarette or more per day during the past 4 weeks.
- **Past Year Smoking** is defined as smoking less than one whole tobacco cigarette or more per day during the past 12 months.
- **Daily Smoking** is defined as usually smoking one or more cigarettes per day, during the past month.
- **Early Age of Onset** is defined as first smoking a cigarette between the ages of 6 and 11.
- **Significant Difference** refers to a difference between percentages that is not likely due to chance. For example, a difference found at the  $p < .05$  level of statistical significance is one that is less than 5% likely to occur by chance alone. In this report, any difference is considered statistically significant if the probability is at the .05 level or lower.

## **Source**

CISDUS 2010 - Cayman Islands: National Drug Council.

To obtain the CISDUS questionnaire or other CISDUS Reports, please visit our web site: [www.ndc.ky](http://www.ndc.ky)