

## **Questionnaire**

A group of experts on tobacco addiction from the first group of countries selected to undertake GYTS and staff members of WHO/TFI and UNICEF developed the 57 core questions. Additionally, one question was included and 27 of the core questions were adjusted and pre-tested before the corrected instrument was finalized and administered. The Health Promotion Resource Centre of the Ministry of Health and Social Security conducted the survey.

## **Data Collection**

Permission was obtained before its launching from the Education Officer of the Ministry of Education, Sports and Youth Affairs to conduct the survey among students of the eligible schools. Thereafter the following activities were implemented:

- Principals of the eligible schools were individually informed by telephone of the survey and its content. Logistical arrangements for the administration of the survey were made. Principals were provided with detailed information on the objectives of the survey and the administration procedures that were to be employed to ensure anonymity and confidentiality for students and schools.
- Eligible students at the selected schools were given information letters to take to their parents/guardians informing them of the GYTS and dates during which the survey would be conducted at their schools.
- In-country training for three persons was conducted prior to commencement of the survey. Procedures were designed to ensure protection of the students' privacy by allowing for anonymous and voluntary participation. The self-administered questionnaire was completed in the classroom. Students recorded their responses directly on answer sheets that could be scanned by a computer. The questionnaire contained 58 multiple-choice questions and approximately 45 minutes were allowed for completion. The Survey was conducted from May 24 - June 20, 2000.

Following their completion, all questionnaires were checked before leaving the school compounds. Completed questionnaires were then packaged and sent to CDC, Atlanta for analysis.

## **Analysis**

A weighting factor was applied to each student record to adjust for non-response and the varying probabilities of selection. The programmes SUDAAN and Epi-Info were used to compute rates and 95% confidence Intervals for the estimates. A weight was associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. The weight used for estimation was completed as follows:

$$W = W1 * W2 * f1 * f2 * f3$$

Where,

**W1** = the inverse of the probability of selecting the school

**W2** = the inverse of the probability of selecting the classroom within the school

**F1** = a school-level non-response adjustment factor calculated by school size category (small, medium, large)

**F2** = a classroom non-response adjustment factor calculated for each school

**F3** = a student-level non-response adjustment factor calculated by class

**F4** = A post stratification adjustment factor calculated by form

## Results

A total of 1626 questionnaires were completed for students from 23 schools giving a response rate of 86.4%. All 23 selected schools participated giving a response rate of 100%.

### Background Characteristics of Respondents

A total of 858 or 51.5% of the respondents was female students while 697 or 48.5% were male.

The ages of participating students ranged from 11 to 17 years. Of these 4.2% of the students were 11 years or younger and 9.4% or 138 students were 17 years old. The majority of the respondents were aged between 12 to 15 years. The 14-year-olds accounted for the largest group of students making up 23.6% of the total. Of those surveyed, 62.9% indicated they had never smoked, whereas 37.1% indicated that they had tried to experiment with cigarette smoking. Current cigarette smokers were described as those who had smoked cigarettes on one or more days during the past month from the day of the commencement of the survey. The figure seems to be significantly high, 13.7% for males and 11.4% for females. The percentage of those who were currently using any form of tobacco product within 30 days of the survey was also high, 21.6% total with 25.3% males and 16.6% females. The percentage of those who had used any form of tobacco products in the past 30 days was higher for the fourth form students.

Fifteen and one-half percent (15.5%) of the current male smokers indicated that they smoked other tobacco products. Three percent (3%) of these indicated they were frequent smokers, including 4.4% of the fourth formers.

**Table 1:** Percentage of Students Who Use Tobacco

Category	Ever Smoked Cigarettes, Even one or Two Puffs	Current User			
		Any Tobacco product	Cigarette Smokers	Other Tobacco Products	Frequent Cigarette Smoking
Value	% CI	% CI	% CI	% CI	% CI
Total	37.1 (± 3.9)	21.6 (± 3.0)	13.0 (± 2.6)	11.6 (±1.9)	2.2 (± 0.9)
<b>Sex</b>					
Male	42.7 (± 5.4)	25.3 (± 4.7)	13.7(±3.6)	15.5 (±3.3)	3.0 (±1.6)
Female	30.9(±4.9)	16.6(±3.0)	11.4 (±2.9)	7.2(±1.7)	0.8(±0.7)
<b>Form</b>					
One	25.7(±5.4)	17.8(±4.6)	9.0(±3.1)	11.3(±3.4)	1.7(±1.3)
Two	37.2(±7.6)	21.9(±5.0)	12.2(±4.1)	12.1(±3.4)	1.6(±1.7)
Three	39.9(±5.9)	21.4(±6.2)	13.6(±4.5)	9.8(±3.1)	1.5(±1.1)
Four	50.8(±9.0)	26.5(±5.9)	<b>19.8(±4.9)</b>	14.0(±5.8)	4.4(±2.5)

The percentage of students who had ever smoked a cigarette was very high, 37.1%. Male students were significantly more likely to have ever smoked, the highest incidence occurring amongst the fourth formers. Of the students who ever smoked cigarettes, 26.5% initiated smoking before age 10 while 24.3% initiated smoking between ages 10 and 11.

Over half (56.9%) of students who were current smokers smoked only one or two days during the month; whereas 11.5% smoked all 30 days.

**Respondents' Knowledge and Attitudes**

**Table 2:** Percentage of Total Respondents Who Knew About Tobacco and Their Attitudes Towards Tobacco Smoking

Category	Think boys who smoke have more friend		Think girls who smoke have more friend		Think smoking makes boys look more attractive		Think smoking makes girls more attractive	
		Total		Total	Total			Total
Value		% CI		% CI	% CI			% CI
<b>Total</b>		<b>33.4(±2.4)</b>		<b>17.6(±2.1)</b>	<b>12.9(±2.0)</b>			<b>8.4(±1.6)</b>
<b>Sex</b>								
Male		29.4 ±3.6		19.4 ±3.1	15.1 ±2.9			9.9 ±2.4
Female		36.6 ±3.3		15.1 ±2.9	10.0 ±2.0			6.3 ±1.8
<b>Form</b>								
One		34.2 ±5.3		20.3 ±4.5	14.3 ±4.3			10.6 ±3.4
Two		32.8 ±4.4		17.7 ±3.7	13.4 ±3.7			9.6 ±2.9
Three		32.4 ±4.3		17.0 ±4.3	11.0 ±3.2			6.6 ±2.8
Four		35.4 ±4.7		13.3 ±4.3	13.5 ±5.1			4.4 ±3.6

Knowledge of the dangers of cigarette smoking was very high. Over three-fourths (76.2%) of students stated that cigarette smoking is "definitely" harmful to one's health,

while 13% believed that cigarette smoking is "definitely" not harmful. One-third (33.4%) of the students thought that boys who smoked had more friends; 17.6% thought girls who smoked had more friends. Approximately thirteen per cent (12.9%) thought smoking makes boys look more attractive; and 8.4% thought smoking makes girls look more attractive. Almost one-third (32.4%) indicated that cigarette smoking helps people feel more comfortable at celebrations, parties, or in social gatherings.

Almost half (48.6%) of the respondents indicated that whenever they saw a man smoking, they thought that the man lacks knowledge of the effects of cigarettes on the body; 15.8% thought he lacks confidence; and 18.7% thought the man was stupid. Their attitudes towards women who smoked cigarettes were similar, 41.4% thought the woman lacked knowledge of the effects of cigarettes on the body; 20.6% thought she lacks confidence; and 22.4% thought she was stupid.

Almost three-fourths (74.8%) of the respondents thought it is definitely not safe to smoke for one or two years even if one were to quit after that period. Over one-third (34.9%) of the students thought that once someone starts smoking it is definitely difficult to quit; 25.6% thought it is definitely not difficult to quit.

### Access and Availability of Cigarettes

**Table 3:** Percentage of Current Smokers and Purchase Habits

Category	Percent current smokers who usually smoke at home	Percent current smokers who purchased cigarettes in a store	Percent Current Smokers who bought Cigarettes in a store who were not refused because of age
	% CI	% CI	% CI
Total	20.6 (±6.5)	25.2 (±7.5)	70.9 (±10.8)
<b>Sex</b>			
Male	16.1(±7.3)	33.6(±13.7)	69.1(±14.8)
Female	28.5 (±11.4)	17.9(±10.2)	74.2(±14.0)
<b>Form</b>			
One	25.4(±11.3)	27.8 (±12.3)	*
Two	22.7(±13.1)	18.3(±11.5)	*
Three	29.5(±11.9)	26.0(±10.4)	*
Four	4.9(±5.6)	33.2(±22.6)	*

\* <35 cases - unreliable estimate

Places where current smokers smoked varied: 20% stated they smoked at home; 4% stated they smoked at friend's house; 4% said they smoked at other locations; 3.8% stated they smoked at public places and parks; and 3.6% stated they smoked at social events.

One-fourth of current smokers purchase their cigarettes from a store. Within this group, 7 in 10 (70.9%) were not refused because of their age. Students from all age ranges and gender have free access to purchasing cigarettes.

In terms of accessibility, the current smokers also indicated that they smoked other tobacco products, but it was not clear what the other products were.

Other significant information surrounding the current smokers included their parent’s knowledge of their smoking habits and their parents status, other ways in which they obtain their cigarettes, the smoking status of their friends and the percentage of them who would smoke a cigarette if it is given to them.

Almost 3 in 10 students have parents who smoke (25.7%), with 19.8% of the fathers smoking. Students were asked if their closest friends smoke cigarettes, 4.1% indicated all of their friends smoked; 8.8% indicated most of their friends smoked; and 36.9% stated some of their friends smoked. Overall, 14.5% of the students indicated that if their best friends were to offer them a cigarette they would smoke it.

### Environmental Tobacco Smoke

**Table 4:** Percentage of Respondents Exposed To Environmental Tobacco Smoke

Category	Exposed to smoke from others in their homes		Exposed to smoke from others in public places		Percent who think that smoking should be banned from public places		Definitely think smoke from others is harmful to them	
	Never Smokers	Current Smokers	Never Smokers	Current Smokers	Total		Total	
	% CI	% CI	% CI	% CI	% CI	% CI	% CI	
Total	22.0 ±3.3	48.4 ±9.2	51.6 ±3.7	79.2 ±5.3	73.1 ±2.9		71.1 ±3.1	
<b>Sex</b>								
Male	21.9 ±4.9	48.1 ±11.9	51.8 ±5.4	84.6 ±8.0	66.5 ±4.2		66.5 ±4.8	
Female	21.8 ±4.3	48.1 ±11.9	51.0 ±4.7	71.1 ±9.9	80.1 ±3.4		77.8 ±3.3	
<b>Form</b>								
One	23.4 ±5.4	36.2 ±14.8	49.4 ±6.7	62.7 ±12.7	73.0 ±7.2		69.2 ±7.9	
Two	23.5 ±6.4	52.0 ±19.0	52.8 ±5.8	86.9 ±10.0	71.9 ±6.2		69.8 ±5.9	
Three	20.1 ±6.4	63.5 ±15.8	53.6 ±7.1	80.9 ±19.1	75.7 ±4.2		72.4 ±6.4	
Four	19.4 ±8.4	34.2 ±11.1	48.7 ±11.3	81.3 ±10.6	71.1 ±10.7		77.5 ±6.4	

There is a significantly high exposure by both never-smokers and cigarette smokers. A total of 22% of the respondents who were never-smokers were exposed to environmental tobacco smoke. Almost fifty percent (48.4) of the current smokers were exposed.

Over fifty percent (51.6%) of the never-smokers and 79.2% of the current smokers were exposed to environmental tobacco smoke in public places.

Students were asked several questions on tobacco exposure. The following percentages indicate their responses to these questions:

Almost eleven percent (10.7%) of the respondents had been exposed to environmental tobacco smoke at home for two days. Almost ten percent (9.2%) of them were exposed for 7 days; 22.7% of the respondents were exposed to environmental tobacco smoke 1 to 2 days in places other than their homes; 10.4% were exposed for 3 to 4 days; and 18.4% were exposed for 7 days.

The difference in exposure varied between males and females, form levels and ages. More females were exposed to environmental tobacco smoke than males. Students in forms one and two and those who were 14 years were the ones mostly affected.

When asked whether smoke from other people was considered harmful to them, 76% of never-smokers and 13% of those who smoked indicated it definitely was. Over seventy percent (71.7%) of male never-smokers and 16.6% male current smokers thought environmental tobacco smoke was harmful. Over eighty percent (82.9%) of female never-smokers and 9.1% of female current smokers thought it was harmful. Amazingly, the percentage of male current smokers who thought smoking from others was harmful was higher than the female current smokers, 16.6% and 9.1%, respectfully.

Never-smoker students of the higher forms also thought environmental tobacco smoke were harmful compared with never-smokers of the first and second forms.

More than 73% of the respondents were in favour of banning cigarette smoking from public places. 66.5% males and 80.1% females were in favour compared to 33.5% males and 19.9% female who were not in favour of banning cigarettes.

## Cessation

Table 5: Percentage of Respondents Who Desire To Stop Smoking

Category	Current Smokers	
	Percent desire to stop	Percent tried to stop this year
	% CI	% CI
Total	54.8 ±11.8	52.4 ±10.0
<b>Sex</b>		
Male	49.1 ±17.0	50.4 ±13.7
Female	66.4 ±17.0	58.6 ±16.4
<b>Form</b>		
One	*	*
Two	*	47.0 ±20.9
Three	*	*
Four	*	*

\* <35 cases - unreliable estimate

When asked whether they thought they would be able to stop smoking if they wanted to, 14.46% indicated they had already stopped and another 14.49% said yes. They believe they would be able to stop if they wanted to do so.

Over six percent (6.36%) indicated that they have received help or advice from a program or professional to stop smoking. Twelve percent (12.13%) indicated they received help and advice from their friends to stop smoking.

Of those who ever smoked, 18.6% were not smoking at the time the survey was conducted. Of those who were currently smoking, 8.3% of them wanted to stop during the time of the survey and 6.6% did not want to stop smoking.

Over nine percent (9.42%) of those who ever smoked were able to stay away from smoking for two years. Three percent (3.16%) had stopped for less than 3 months before the time the survey was conducted. Those who stopped smoking stated several reasons for their decisions. Over twelve percent (12.59%) stated it was to improve their health; 1.90% indicated it was to save money; 2.16% indicated it was because their family did not approve; and 7.43% stated it was because their friends did not approve.

Over seven percent (7.30%) said they had other reasons when asked if they thought they could stop smoking if they wanted to. Over fourteen percent (14.26%) indicated yes and results showed that they had tried and succeeded because a similar percentage, 14.49% indicated they had already stopped.

### Media and Advertising

**Table 6:** Percentage of Respondents Who Saw Media & Advertising Messages and Their Reactions

Category	Percent saw a lot of anti-smoking media messages	Percent saw pro-tobacco messages in magazine & newspaper		Percent who had object with a cigarette brand logo on it		Percent offered free cigarettes by a tobacco company	
	% CI	% CI Never Sm	% CI Curr Smoke	% CI Nev Smoke	% CI CurSmoke	% CI Nev Smok	% CI CurSmok
<b>Total</b>	37.5 ±2.7	43.1 ±3.3	38.2 ±8.5	17.9 ±2.4	31.1 ±7.3	8.7 ±1.8	23.5 ±7.2
<b>Sex</b>							
<b>Male</b>	38.8 ±4.5	41.4 ±5.4	36.8 ±11.5	19.4 ±3.8	32.1 ±11.8	11.0 ±3.3	24.9 ±11.7
<b>Female</b>	36.8 ±3.2	44.5 ±3.6	42.1 ±11.2	16.0 ±3.1	30.2 ±9.5	5.8 ±1.9	21.3 ±8.3
<b>Form</b>							
<b>One</b>	40.6 ±4.7	42.4 ±4.6	46.5 ±16.5	16.9 ±3.3	20.2 ±12.0	8.2 ±3.0	24.6 ±13.5
<b>Two</b>	37.2 ±5.8	45.1 ±6.4	20.0 ±14.1	19.2 ±3.3	34.4 ±12.4	9.6 ±4.2	18.4 ±11.5
<b>Three</b>	37.7 ±5.7	41.4 ±7.0	46.1 ±14.8	19.0 ±6.4	22.2 ±9.6	8.0 ±3.7	19.8 ±13.6
<b>Four</b>	31.5 ±7.8	44.2 ±9.9	39.2 ±20.6	14.3 ±3.6	48.5 ±21.1	6.2 ±6.3	36.0 ±20.5

Information collected during the survey indicated that the respondents from secondary as well as primary schools were exposed to both positive and negative information from various media sources. Students were asked about their exposure to anti-smoking messages as well as promotion of cigarettes. Only one-third (37.5%) had seen "a lot" of anti-smoking media messages. Approximately 4 in 10 never smokers and current smokers had see pro-tobacco messages in newspapers and magazines. Almost 1 in 3 current smokers had an object with a cigarette brand logo on it compared to 17.9% for never smokers. Almost 1 in 4 (23.5%) current smokers had been offered free cigarettes from tobacco companies compared to 8.7% for never smokers.

## School Curriculum

**Table 7:** Percentage Taught Dangers of Smoking At School

Category	Percent taught dangers of smoking	Percent discussed reasons why people their age smoke
	% CI	% CI
Total	58.3 ±4.7	42.4 ±4.4
Sex		
Male	53.3 ±6.2	37.6 ±5.4
Female	63.7 ±5.0	46.9 ±5.3
Form		
One	62.9 ±8.7	42.7 ±9.1
Two	53.3 ±8.8	40.7 ±8.1
Three	60.8 ±8.7	49.7 ±8.1
Four	54.5 ±11.6	32.4 ±9.0

Health and Family Life Education has been a component of the primary school curriculum for many years. However, this component is only now being officially implemented in the secondary schools. Nevertheless, sporadic sessions on drug prevention through the Drug Awareness Resistance Education (DARE) programme have been conducted at the secondary schools.

Students' exposure to education sessions on tobacco smoking was higher for the respondents from the primary schools. Over half (58.3%) of the respondents were taught the dangers of smoking and (42.4%) of them had discussed why students their age smoked. 43.43% did not discuss that topic. 54.44% were taught the effects of smoking.

## Discussion

The Dominica GYTS provided data on prevalence of cigarette and other tobacco use as well as information on five determinants of tobacco use. These include: access in terms of price and availability; environmental tobacco smoke exposure; cessation; media awareness and advertisement and school curriculum.

Analysis of data has revealed valuable information that could:

- Give guidelines for a comprehensive school and community based intervention programme.
- Inform policy makers of the true tobacco picture among youth who are at school and the need to make every effort to provide the necessary political will and resources to address the situation in order to deter the use of tobacco among youth.
- Inform parents/guardians of the tobacco use among their children and the way their smoking habits influence the children's tobacco habits and attitude.