

# The Uganda Global Youth Tobacco Survey Report (2008) – Tobacco Control Policy Implications.

**Brazzaville**  
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**GYTS 2008**

# Contents

<b>ABSTRACT .....</b>	<b>3</b>
<b>1. INTRODUCTION .....</b>	<b>4</b>
<b>2. TOBACCO USE IN UGANDA .....</b>	<b>5</b>
<b>3. THE GLOBAL YOUTH TOBACCO SURVEY (GYTS) .....</b>	<b>6</b>
<b>4. METHODOLOGY .....</b>	<b>7</b>
TABLE 1: STUDY SAMPLE SIZES AMONG SCHOOLS AND STUDENTS .....	7
<b>5. DATA COLLECTION AND ANALYSIS .....</b>	<b>8</b>
<b>6. RESULTS.....</b>	<b>8</b>
6.1. PREVALENCE .....	8
6.3. ENVIRONMENTAL TOBACCO SMOKE .....	9
6.4. MEDIA AND ADVERTISING .....	10
6.5. SCHOOL CURRICULUM AND TOBACCO USE.....	10
6.6. ACCESS, AVAILABILITY AND CESSATION .....	11
<b>7. DISCUSSION.....</b>	<b>12</b>
<b>8. LIMITATIONS .....</b>	<b>15</b>
<b>9. RECOMMENDATIONS .....</b>	<b>15</b>
<b>10. CONCLUSION .....</b>	<b>16</b>
<b>APPENDICES .....</b>	<b>17</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>19</b>

## Abstract

### *Objectives*

This study describes the prevalence as well as knowledge and attitudes of Senior One to Senior Three students in Uganda of tobacco use. It analyses their exposure to environmental tobacco smoke (ETS) as well as the extent to which they receive anti-tobacco instruction in schools and information from the media and exposure to pro-tobacco activities such as media/advertisement. In addition, it describes the students' access to and availability of tobacco products.

### *Method*

This is a cross-sectional survey of students in Senior One to Three conducted in 2007 in 51 secondary schools of Kampala City and the 'rest of the country' (ROC) represented by 5 districts in Uganda. A two-stage cluster sample design was used to produce representative data for the study. At the first stage, schools were selected with probability proportional to enrolment size. At the second stage, classes were randomly selected and all students in selected classes were eligible to participate. A pre-tested, modified Global Youth Tobacco Survey (GYTS) questionnaire was used.

### *Results*

Overall 15.6% of the students have ever smoked cigarettes. There was no significant statistical difference among boys and girls that have ever used tobacco. The overall percentage of students currently using tobacco product was 5.5%. The majority of students (70.5%) were taught about the dangers of smoking and its effect as part of lessons in the class. Perhaps, as a consequence, a majority (70.3%) of the current smokers expressed desire to quit and also made an attempt (76.6%) to stop tobacco use.

One fifth of the students (20%) live in homes where others smoke in their presence and close to half (45.6%) are around others who smoke in places outside their homes. This is so even as most of the students (69.4%) are aware of the harmful effects of smoke from others to them. About half (48.3%) of the students think smoking should be banned from public places.

Findings also indicate high levels of exposure to tobacco messages for students. Over half of students both in the national and the Kampala categories had seen pro-tobacco billboards (54.7% and 57.5%, respectively) in the past 30 days and about a half had seen pro-cigarette ads in newspapers and magazines (48.3%; 49.0% respectively).

The existence of wrong perception of school students about their smoking habits was also evident from the findings. Overall, nearly a third (26.8%) think boys who smoke have more friends while 14.9% think girls who smoke had more friends.

### *Conclusion*

Although Uganda has ratified the WHO FCTC<sup>1</sup> on tobacco prevention and control, and enacted policies regulating smoking in public places, findings from the GYTS 2008 indicate high levels of prevalence of tobacco use, exposure to ETS and pro-tobacco messages through media and advertising among adolescent school students. Moreover, the differences in gender tobacco use patterns that exist among the adult population are changing- the study found no statistical differences in prevalence of tobacco use among boys and girls. Uganda's tobacco control programme efforts need to focus on implementation and enforcement of the WHO FCTC policies that are in place and enactment of additional control policies in areas where they do not exist. The tobacco control efforts needs to be comprehensive, broad based and focused on boys and girls.

### *What this paper adds*

Results from this GYTS study indicate that Uganda faces a number of serious challenges in preventing and controlling tobacco. The country also faces a dearth of data to guide and support the anti- tobacco effort. GYTS data can enhance a country's capacity to monitor tobacco use among youth, guide development, implementation, and evaluation of national tobacco prevention and control programme; and allow comparison of tobacco-related data at national, regional and global levels.

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<sup>1</sup> The World Health Organisation. *WHO Framework Convention on Tobacco Control*. Geneva Switzerland: World Health Organisation, 2003.

## 1. Introduction

Tobacco use is one of the leading preventable causes of disease and death in the world, estimated to kill 4.9 million people annually compared to 3 million annual deaths due to HIV AIDS.<sup>2</sup> The World Health Organization (WHO) estimates 1.1 billion smokers in the world today – a figure expected to rise to 1.64 billion by 2025. By 2020, tobacco's death toll will be 10 million, 70% of these in the developing countries as the tobacco industry is steadily relocating to the poor South due to tighter regulation in the developed countries<sup>3</sup>.

According to the World Health Organization tobacco use prevalence in Africa was 29% in males and 7% in females in 2000<sup>4</sup>. In addition, there were 200,000 tobacco-related deaths<sup>5</sup>.

Africa's tobacco related fatalities are expected to rise because its countries are projected to experience some of the highest increases in the rate of tobacco use amongst developing countries. Moreover, Africa has one of the world's weakest tobacco regulatory and policy frameworks.

Africa's tobacco related figures are consistent with the model of the smoking epidemic<sup>6</sup> based on evidence from countries with longest history of tobacco use, which describe evolution of cigarette smoking and the subsequent mortality. Africa is in stage 1, where health consequences are not yet apparent on a large scale and fewer women than men have taken up the habit.

Many of tobacco's future victims are today's children because tobacco use is initiated in adolescence and continues through adulthood as a result of addiction to the habit. This is a major challenge in African countries where the majority of the population is under 18 years.

The increasing tobacco related disease burden thus represents an enormous challenge and drain on the continent's impoverished public health services already grappling with severe health challenges that include the twin burdens of HIV/AIDS and Malaria.

Uganda has ratified the World Health Organisation Framework Convention on Tobacco Control<sup>7</sup> (WHO FCTC); the world's first public health treaty on tobacco control. The WHO FCTC urges countries to develop action plans for public policies, such as bans on direct and indirect tobacco advertising, tobacco tax and price increases, promoting smoke-free public places and workplaces,

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<sup>2</sup> *Implementation of the Framework Convention on Tobacco Control in the African Region: Current Status and the Way Forward: Report of the Regional Director*, Fifty-fifth session, Maputo, Mozambique August 2005, Provisional Agenda Item 8.7.

<sup>3</sup> Guindon E, Boxcar D., *Past, current and future trends in tobacco use. HNP Discussion Paper, Economics of Tobacco Control Paper*, No.6, Geneva, WHO/World Bank, 2003.

<sup>4</sup> Guindon, E, Boxcar D., *Past, current and future trends in tobacco use. HNP Discussion Paper, Economics of Tobacco Control Paper*, No.6, Geneva, WHO/World Bank, 2003.

<sup>5</sup> WHO, *The World Health Report 2002: Reducing risks, promoting health life*, Geneva, World Health Organisation, 2002.

<sup>6</sup> Lopez AD, Collishaw NE, Piha T. *A descriptive model of cigarette epidemic in developed countries*. *Tobacco Control* 1995; 3:242-7.

<sup>7</sup>The World Health Organisation. *WHO Framework Convention on Tobacco Control*. Geneva Switzerland: World Health Organisation, 2003.

and placing health messages on tobacco packaging. WHO FCTC also calls on countries to establish surveillance programmes of “the magnitude, patterns, determinants, and consequences of tobacco consumption and exposure to tobacco smoke. WHO, the U.S Centers for Disease Control and Prevention, and the Canadian Public Health Association developed the Global Tobacco Surveillance System (GTSS) to assist WHO Member States in establishing continuous tobacco control, surveillance and monitoring.

## 2. Tobacco use in Uganda

The British-American Tobacco (BAT) Company introduced tobacco in Uganda in the 1920s. Tobacco is currently one of the country's leading cash crops and source of tax revenue. Further significance of the economic muscle of tobacco is underlined by the fact that over 600,000 people derive their livelihood from the industry<sup>8</sup>.

Comprehensive studies of prevalence of tobacco use in Uganda are limited. However, the 2006 Uganda Demographic Health Survey<sup>9</sup> indicated that cigarette smoking prevalence among adults is at 23% for males and 4% for females. Kanyesige et al noted that among the youth 19% of the secondary students and about 35% of the students in tertiary institutions smoke<sup>10</sup>.

A study carried out at Mulago Hospital, Uganda's main referral hospital, found that 75% of the patients of oral cancer had a history of smoking with the number of years of cigarette smoking ranging from 2-38 years.<sup>11</sup> In addition, 45% of the patients had a history of smoking within the 10-19 year duration. Data also indicated that smokers in Uganda might be starting at an early age and that under-age smoking is a problem. Lukwiya for instance reported that the mean initiation age of smoking was 13.5 years in Jinja district.<sup>12</sup> Nambi et al in their study carried out in Arua, Kampala, Lira, Mbale, Mbarara and Masaka districts found that the initiation age of underage smokers was as low as 9 years<sup>13</sup>.

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<sup>8</sup> Karugaba P. *Tobacco industry tactics in Uganda*: a paper presented at the 14th conference of the International Union Against Tuberculosis and Lung Cancer Disease, Durban South Africa, 2001.

<sup>9</sup> *Uganda Demographic Household Survey 2006*, Uganda Bureau of Statistics, Kampala, Uganda.

<sup>10</sup> Kanyesige EK, Basiraha R., Ampaire A., Wabwire G., Waniaye, Muchuro S. and Nkangi E. *Prevalence of smoking among medical students of Makerere University*, Kampala Uganda. Proceedings of the Tenth World Conference on Tobacco or Health, Beijing, China 1997.

<sup>11</sup> Batarigaya (2001) *Tobacco use and oral cancer patients in Uganda: A retrospective study*. (Unpublished).

<sup>12</sup> Lukwiya R. *Cigarette smoking among secondary school students in Jinja districts*. Proceedings of the 9th UNACOH Annual Scientific Conference, Kampala, Uganda, 2000.

<sup>13</sup> Nambi J., Owens V. Nyende P., Mwase P., & Amati A. (2001) *Factors Influencing Underage Smoking*. Report presented by Department of Mental Health and Community Psychology to British American Tobacco Uganda Ltd.

One of the most comprehensive studies of tobacco use in Uganda was the Uganda 2002 GYTS Survey, which this study replicated. The Uganda GYTS 2002<sup>14</sup>, which focused on Arua, the Central region and Kampala, analysed tobacco use, attitudes and related behaviours of school-going 13 to 15 year old adolescents. It found that while in Kampala about 5% of the students were current smokers the figure for Arua in North Eastern Uganda, a tobacco growing district was 22%. Boys were significantly more likely to use cigarettes and other tobacco products than girls.

The study found high levels of exposure to second-hand tobacco both at home in public places among adolescents and it reported that about 7 in 10 students were in favour of a ban on smoking in the public. Most students who were current smokers expressed a desire to stop smoking: (80.7%) for Arua; (77.9%) for Kampala and (76.8%) for the rest of Central Districts and almost similar numbers attempted to stop smoking and failed. Further more, a large number of students, over three quarters for all districts, reported high levels of exposure to tobacco advertising (80.6%) although a significant majority, over two-thirds in all districts had been taught about the dangers of smoking.

It is important to note at this stage that unlike this study that drew scientific sample intended for generalisation at the national level, the 2002 GYTS took a regional sampling approach whose findings were useful in understanding the situation of tobacco use among young people in the regions studied, but could not be used for making inferences at the national level. Thus, the data of the two studies cannot be directly compared at the national level. Therefore, attempts at comparison between the two studies have been restricted to Kampala findings.

### 3. The Global Youth Tobacco Survey (GYTS)

The GYTS is a school-based tobacco specific global survey, which focuses on adolescents of ages 13-15 and corresponding grades (in Uganda this corresponds to high school grades – Senior One to Senior Three). It establishes the prevalence of tobacco use status of school-going students in a country, assesses knowledge, attitude and behaviour related to tobacco use and exposure to environmental tobacco smoke (ETS) and related factors. It also assesses students' exposure to pro-tobacco and anti tobacco activities in a country.

#### *Objectives of GYTS:*

- To find out the magnitude and extent of tobacco use among school students with special focus to 13-15 years age group and to monitor the change over years.
- To assess and understand the level of exposure to pro-tobacco and anti-tobacco activities and corresponding knowledge and attitudes of students regarding tobacco use so as to plan and implement effective anti-tobacco programmes in a country.

This report, like GYTS in other countries, attempts to unveil the following issues related to tobacco use in Uganda:

- Determine the level of tobacco use by school students
- Estimate age of initiation of cigarette use
- Assess students' knowledge and attitude regarding tobacco use
- Find out the level of exposure of school students to pro-tobacco activities such as media / advertisement, access and availability
- Assess students' exposure to environmental tobacco smoke and cessation efforts

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<sup>14</sup> Mpabulungi, L. *Uganda Global Youth Tobacco Report*. Parliament Research Service, Kampala, Uganda, 2002.

- Assess anti-tobacco instructional activities in school
- Provide data to guide tobacco control activities in Uganda and to be used in benchmarking tobacco control laws and policies in Uganda

## 4. Methodology

The 2007 Uganda GYTS was a school based cross-sectional survey, which employed a two-stage cluster sampling design to produce a two-stage cluster representative sample from Kampala (Uganda's capital) and the 'Rest of the Country' (ROC) which comprised five districts of Arua, Gulu, Jinja, Masindi, and Mpigi. Kampala is the Uganda's major urban centre while the other districts represented the 5 official regions of the country i.e. Northern, North-western, Eastern, Western and Central respectively (see map under appendix 2).

### 4.1. Study design and sampling technique:

The GYTS survey sample used a two-stage cluster design. In the first stage of sampling, public and private secondary schools with Senior One to Senior Three classes were selected randomly with a probability proportional to enrolment size. National school enrolment data was obtained from the Ministry of Education and Sports. A total of 56 secondly schools were sampled, with 25 schools from Kampala and 26 schools from the Rest of the Country i.e. 5 schools for each of the districts with the exception of Jinja which had 6 schools selected due to a higher student population. Schools with big enrolment size had a greater chance of being selected. See *Table 1* for the number of schools and students drawn for the sample.

**Table 1: Study sample sizes among schools and students**

District/Region	No. of schools in the sample	No. of students selected (Senior 1-3)
<i>Capital city</i>		
Kampala	25	2,074
<i>Rest of the country (i.e. Arua, Gulu, Jinja, Masindi and Mpigi)</i>		
ROC	26	2,194
<b>Total</b>	<b>51</b>	<b>4,268</b>

The second stage consisted of systematic equal probability sampling. Classes (Senior One to Three) were randomly selected from within the selected schools and all the students from within the selected class were eligible to participate in the survey.

### 4.2. Development of questionnaire

A self-administered questionnaire was used for data collection. It consisted of 55 questions with core questions adopted from a questionnaire developed under the guidance of WHO and the Centres for Disease Control, which comprised core component that provided similar data for the comparison between countries and regions and a set of optional component that provided data to analyse the special issues relevant to the Ugandan situation.

A weighting factor was applied to each questionnaire to reflect the likelihood of sampling each student and reduce bias by compensating for different patterns of non-response.

The weight used for estimation is given by:

$$W = W1 * W2 * f1 * f2 * f3 * f4$$

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 class adjustment factor calculated by school  
 f3 = a student-level non-response adjustment factor calculated by class  
 f4 = a post stratification adjustment factor calculated by gender and grade

## 5. Data Collection and analysis

Printed questionnaires along with School ID forms and Class level ID forms were made available to the survey administrators. A letter was sent to all selected schools for their consent to undertake the survey. The purpose of the survey was discussed with the school authorities and the classes were selected as per the school level form. After selection of class, the anonymous self-administered questionnaire was administered with due explanation of the nature and the intent of the survey. The teachers and school personnel were not present during administration of the questionnaire to encourage the students to provide their own answers without bias. The survey was carried out from March to April 2007.

The answer sheets were sent to CDC/OSH where data was entered and analysed using Epi Info, a software package, which executed the complex sampling design and weighing factors in the data set, to calculate standard errors and prevalence estimates. The statistical differences included in this report were determined by comparing the range of the 95% confidence interval (95%CI) for the estimates. If the ranges for the 95% CI did not overlap then the difference was statistically significant. The weighted results were used to make important inferences concerning tobacco use risk behaviours of surveyed students. The following response rate was obtained in the study:

**Schools:** 96.1%

**Students:** 84.5%

**Overall response rate:** 81.2%

## 6. Results

### 6.1. Prevalence

To analyse prevalence of tobacco use, students were asked questions pertaining to whether they had ever-smoked, status of current tobacco and cigarette use, and the likelihood of starting to smoke.

*Table 2: Percentage of students who use tobacco, Uganda GYTS, 2007*

Category	Ever smoked cigarettes, even one or two puffs	Current tobacco user	Current cigarette smoker	Currently use other tobacco products	Percent never smokers likely to initiate smoking within a year
<b>National</b>	15.6 (13.1 - 18.4)	16.6 (14.4 - 19.2)	5.5 (4.2 - 7.1)	13.9 (11.9 - 16.2)	6.7 (5.4 - 8.3)
Male	19.2 (15.7 - 23.3)	17.3 (14.7 - 20.2)	6.6 (5.2 - 8.5)	13.8 (11.5 - 16.4)	8.1 (6.3 - 10.4)
Female	11.2 (9.3 - 13.6)	15.3 (12.8 - 18.2)	4.0 (2.7 - 5.8)	13.5 (11.0 - 16.5)	5.1 (3.5 - 7.5)
<b>Kampala</b>	15.0 (11.8 - 18.8)	15.6 (12.3 - 19.6)	5.2 (3.5 - 7.7)	13.3 (10.4 - 16.9)	5.9 (4.5 - 7.7)
Male	18.2 (14.2 - 23.0)	16.3 (12.4 - 21.2)	5.7 (3.5 - 9.2)	14.3 (10.2 - 19.7)	6.9 (4.5 - 10.3)
Female	11.4 (8.4 - 15.4)	14.1 (10.5 - 18.8)	4.2 (2.7 - 6.4)	12.0 (8.8 - 16.1)	5.0 (3.8 - 6.6)

Overall, 15.6 percent of the students at the national level had ever smoked cigarettes (male: 19.2% and females: 11.2%). Current tobacco users were 16.6%, with no statistical difference between



males and females students. Findings also suggest high usage of tobacco in other forms rather than cigarettes. Overall 13.9% at the national level reported current use of other tobacco products with the difference between male and female not statistically significant. Regarding another key prevalence factor, predisposition to smoke, overall, 6.7% of never smokers were likely to initiate smoking next year. There was no statistically significant difference between prevalence rates for Kampala and the national level category.

## 6.2. Knowledge and attitudes

Knowledge and attitudes is often a guide to behaviour. Thus, students were asked whether they thought of boys and girls who smoke had more friends or looked more attractive.

*Table 3: Knowledge and attitudes, Uganda GYTS, 2007*

Category	Think boys who smoke have more friends	Think girls who smoke have more friends	Think smoking makes boys look more attractive	Think smoking makes a girl look more attractive
National	26.8 (24.1- 29.7)	14.9 (13.5- 16.5)	10.7 (9.4 - 12.3)	7.3 (6.0 - 8.7)
Male	23.9 (20.2 - 28.1)	13.0 (10.7- 15.8)	10.0 (8.7 -11.5)	6.4 (5.3- 7.8)
Female	29.4 (26.3 -32.7)	16.8 (14.7 - 19.2)	11.3 (9.2 - 13.7)	7.8 (5.9 -10.3)
Kampala	27.3 (24.3 -30.6)	16.7 (14.1-19.5)	10.7 (8.5- 13.3)	7.0(5.0- 9.6)
Male	23.4 (19.9 - 27.3)	14.8 (11.6 - 18.5)	10.6 (8.0-13.9)	6.4 (4.2 -9.8)
Female	30.2 (26.8- 33.9)	18.2 (15.4- 21.3)	10.4 (7.5-14.2)	7.2 (4.7 - 10.9)

Over a quarter, (26.8%) of the students nationally thought that boys who smoke have more friends than those who did not smoke. Correspondingly, 14.9% of the students think that girls who smoke are more attractive than those who do not. The difference in the findings between the national level and Kampala was not statistically significant.

## 6.3. Environmental tobacco smoke

The overall environmental tobacco smoke (ETS) situation among high schools students in Uganda is viewed in terms of the extent to which students are exposed to second-hand smoking in their surrounding and their attitudes towards ETS.

*Table 4: Environmental tobacco smoke exposure*

Category	Percent who live in homes where others smoke	Percent who are around others who smoke in places outside their home	Percent who have one or more parents who smoke	Percent who think smoking should be banned from public places
<b>National</b>	20.0 (16.5 - 24.1)	45.6 (42.3 - 49.0)	11.5 (8.9 - 14.6)	48.3 (43.3 - 53.4)
Male	20.7 (16.8 - 25.3)	46.1 (41.1 - 51.2)	12.4 (9.4 - 16.1)	49.6 (41.8 - 57.4)
Female	18.8 (15.3 - 22.8)	45.2 (42.5 - 47.9)	10.3 (8.1 - 13.1)	47.5 (43.2 - 51.8)
<b>Kampala</b>	15.0 (12.5 - 18.0)	43.3 (41.0 - 45.6)	8.7 (7.0 - 10.6)	56.0 (50.3 - 61.7)
Male	15.4 (12.1 - 19.4)	46.0 (43.0 - 49.0)	7.4 (5.3 - 10.2)	59.6 (52.6 - 66.2)
Female	13.6 (11.3 - 16.4)	41.2 (38.2 - 44.3)	9.4 (7.6 - 11.6)	53.7 (47.1 - 60.1)

At the national level, exposure to second-hand smoking among students at home is one fifth and in Kampala it is 15.0%. Students at both the national and Kampala levels reported being significantly exposed to tobacco smoke outside their homes. Around half of the students in general think smoking in public places should be banned. There was no significant difference in the levels of exposure to ETS between boys and girls.

#### 6.4. Media and advertising

*Table 5: Media and advertising*

Category	Percent who saw pro-cigarette ads on billboards in the past 30 days	Percent who have seen pro-cigarette ads in newspapers or magazines in the past 30 days	Percent who have an object with a cigarette brand logo	Percent were offered free cigarettes by a tobacco company representative
<b>TOTAL</b>	54.7 (51.1 - 58.3)	48.3 (45.8 - 50.9)	12.3 (10.5 - 14.2)	10.3 (8.3 - 12.8)
Male	56.3 (52.4 - 60.1)	47.5 (44.2 - 50.9)	12.4 (9.6 - 15.9)	11.2 (8.4 - 14.9)
Female	52.4 (48.3 - 56.5)	49.0 (46.0 - 52.0)	11.6 (9.5 - 14.1)	9.4 (7.5 - 11.7)
<b>Kampala</b>	57.5 (53.6 - 61.3)	51.3 (47.9 - 54.6)	11.1 (8.8 - 13.8)	9.1 (6.8 - 12.2)
Male	61.9 (54.2 - 69.1)	54.6 (48.4 - 60.7)	11.3 (7.8 - 15.9)	10.3 (6.5 - 15.9)
Female	53.6 (51.0 - 56.2)	49.4 (46.5 - 52.2)	11.1 (8.8 - 13.9)	8.0 (5.9 - 10.6)

Over half of students both in Kampala and from the national sample had seen pro-tobacco billboards (54.7% and 57.5%, respectively). Again about a half of the students across sexes had seen pro-cigarette ads in newspapers and magazines in the past 30 days. One in ten students for both sexes in Kampala as well as the national category reported owning a cigarette brand logo and had been offered free cigarettes by representatives of a tobacco company.

#### 6.5. School curriculum and tobacco use

*Table 6: School curriculum and tobacco, GYTS Uganda 2007*

Category	Percent who had been taught in class, during the past year, about the dangers of smoking	Percent who had discussed in class, during the past year, reasons why people their age smoke	Percent who had taught in class, during the past year, the effects of smoking
<b>National</b>	70.5 (67.2 - 73.7)	62.4 (59.2 - 65.4)	69.4 (65.9 - 72.7)
Male	70.3 (65.4 - 74.8)	61.1 (55.6 - 66.2)	69.0 (63.0 - 74.5)
Female	71.1 (66.3 - 75.4)	64.2 (60.7 - 67.6)	69.8 (66.1 - 73.2)
<b>Kampala</b>	64.3 (59.5 - 68.9)	55.8 (51.1 - 60.4)	61.8 (56.4 - 67.0)
Male	61.2 (56.2 - 65.9)	52.4 (48.1 - 56.7)	59.4 (52.8 - 65.7)
Female	66.7 (58.9 - 73.7)	58.9 (51.9 - 65.5)	63.3 (56.3 - 69.9)

To examine the awareness levels of students about tobacco use and effects, questions about health education at school were asked. About 7 in 10 students had been taught in the year preceding the survey about the dangers and effects of smoking (see table 8). The difference between boys and girls both for Kampala and national was not statistically significant. About 6 in 10 students had discussed in class reasons why people their age smoke.

#### 6.6. Access, availability and cessation

Students were also asked questions regarding their access to and availability of cigarettes to them as well as and cessation. However the results were statistically insignificant to be reported.

#### 6.7. Comparison between 2002 and 2008 Kampala GYTS findings

As noted the GYTS 2002 study did not draw a scientific national sample to allow direct comparisons of the findings of the two studies at the national level. This means that comparisons can only be done among similar districts or between 2002 and 2007 Kampala GYTS findings. This section compares Kampala data across the two studies on the basis of prevalence and factors influencing tobacco use.

*Table 7: Prevalence –Uganda - Kampala 2002 and 2007*

Prevalence	2002			2007		
	Total	Boy	Girl	Total	Boy	Girl
Ever smoked cigarettes	12.7 (10.4 - 15.5)	16.0 (11.1 - 22.6)	9.8 (8.1 - 11.9)	15.0 (11.8 - 18.8)	18.2 (14.2 - 23.0)	11.4 (8.4 - 15.4)
Ever Smokers, first smoked cigarettes before age 10	47.6 (40.5 - 54.8)	43.7 (33.2 - 54.8)	52.5 (35.8 - 68.6)	46.6 (40.3 - 53.1)	44.0 (32.2 - 56.5)	53.8 (38.1 - 68.7)
Current cigarette smoker	3.2 (1.7 - 5.6)	3.7 (1.6 - 8.3)	2.6 (1.2 - 5.4)	5.2 (3.5 - 7.7)	5.7 (3.5 - 9.2)	4.2 (2.7 - 6.4)
Current user of other tobacco products	9.7 (7.8 - 12.1)	9.7 (8.5 - 11.2)	9.8 (6.8 - 13.9)	13.3 (10.4 - 16.9)	14.3 (10.2 - 19.7)	12.0 (8.8 - 16.1)
Never smokers likely to initiate smoking in the next year	5.5 (4.1 - 7.5)	6.1 (3.5 - 10.6)	4.9 (3.7 - 6.3)	5.9 (4.5 - 7.7)	6.9 (4.5 - 10.3)	5.0 (3.8 - 6.6)

The findings above suggest that there were no statistical differences between the 2002 and 2007 GYTS studies of the students in Kampala as regards ever smokers and current smokers or use of other tobacco product. This shows that the level of tobacco use among young people in schools remains a problem yet to be addressed.

Table 8: Factors influencing tobacco use –Uganda – Kampala 2002 and 2007

Factors	2002			2007		
	Total	Boy	Girl	Total	Boy	Girl
<b>EXPOSURE TO SMOKE</b>						
One or more parents smoke	14.9 (12.3 - 18.0)	14.3 (10.3 - 19.6)	15.3 (13.7 - 17.0)	8.7 (7.0 - 10.6)	7.4 (5.3 - 10.2)	9.4 (7.6 - 11.6)
All or most best friends smoke	2.0 (1.2 - 3.0)	2.2 (1.0 - 4.5)	1.4 (0.9 - 2.2)	1.9 (1.1 - 3.4)	2.5 (1.0 - 5.9)	1.6 (0.7 - 3.6)
Exposed to smoke in public places	46.2 (38.6 - 54.0)	50.7 (45.0 - 56.4)	42.3 (33.5 - 51.6)	43.3 (41.0 - 45.6)	46.0 (43.0 - 49.0)	41.2 (38.2 - 44.3)
In favor of banning smoking in public places	67.1 (60.3 - 73.3)	68.6 (63.1 - 73.7)	66.0 (56.9 - 74.0)	56.0 (50.3 - 61.7)	59.6 (52.6 - 66.2)	53.7 (47.1 - 60.1)
<b>SCHOOL</b>						
During this school year, were taught in any classes about the dangers of smoking	64.3 (60.8 - 67.6)	61.9 (58.6 - 65.2)	66.1 (60.8 - 71.0)	64.3 (59.5 - 68.9)	61.2 (56.2 - 65.9)	66.7 (58.9 - 73.7)
<b>MEDIA/ADVERTISING</b>						
During the past month saw any advertisement for cigarettes on billboards	76.0 (70.9 - 80.4)	80.1 (76.3 - 83.4)	72.8 (66.6 - 78.3)	57.5 (53.6 - 61.3)	61.9 (54.2 - 69.1)	53.6 (51.0 - 56.2)
During the past month saw any advertisements or promotions for cigarettes in newspapers or magazines	70.5 (66.8 - 73.9)	73.4 (69.1 - 77.3)	67.9 (64.9 - 70.7)	51.3 (47.9 - 54.6)	54.6 (48.4 - 60.7)	49.4 (46.5 - 52.2)
Have an object (t-shirt, pen, backpack, etc) with a cigarette brand logo on it	14.0 (11.6 - 16.8)	14.3 (10.8 - 18.6)	13.3 (10.9 - 16.1)	11.1 (8.8 - 13.8)	11.3 (7.8 - 15.9)	11.1 (8.8 - 13.9)

In 2007, the number of students in Kampala who reported that their parents were smokers was less than that of 2002. Likewise, the number of students reporting exposure to cigarette messages on billboards and newspapers and magazines reduced significantly. This can be partially explained by self-restraint tactics of the tobacco industry aimed at deflecting public criticism, which have seen it change tactics in the last few years in Uganda and now focuses on promotions such as sponsoring street parties and point of sale promotions.

As regards other factors such as exposure to second hand smoke and students owning an object with a cigarette brand, there were no statistically significant differences between findings on these factors in the two studies.

## 7. Discussion

This section discusses the 2007 GYTS findings in relation to existing tobacco policies in Uganda within the context of the WHO FCTC framework.

The general situation of tobacco as regards young people all over the world, including in less developed countries such as Uganda, shows that they are at a high health risk not only as users but non-users exposed to environmental tobacco smoke.

It is a well-known fact that tobacco use starts early in life when apparently, children and teenagers know less about the health effects of tobacco use than adults and are yet to fully appreciate the risk of becoming addicted to nicotine. The tobacco industry is targeting this age group all over the world to hook them with nicotine addiction.

The 2007 GYTS results show that although the number of current smokers among students 13-15 is low in Uganda (5.2%), one in 10 students reported using other tobacco products. More research is needed to establish the reported other forms of tobacco use by students.

A significant finding of this study was the changing pattern of tobacco use among boys and girls. Whereas the Uganda Demographic Household Survey 2006<sup>15</sup> show that in Uganda more men smoke compared to women (prevalence is estimated to be 23% in Men and 4% in among Women 4%), this study found no statistically significant difference between boys and girls, which means that more girls are taking up the tobacco habit. This implies that tobacco control interventions targeting young people need to prioritise reducing tobacco among young females even though the problem is just beginning.

The main goal of comprehensive tobacco control programme is to improve the health of the population by encouraging smokers to quit, eliminating exposure to second hand smoke, and encouraging people not to initiate tobacco use. Previous studies have shown that demand reduction measures primarily those that increase the price of tobacco, are effective in significantly reducing initiation of tobacco use and consumption among young people<sup>16</sup>. In addition, comprehensive tobacco control programs often include non-price interventions such as restrictions on smoking in public places and workplaces; a complete ban on advertising and promotion of tobacco companies; promotion of quitting among adults and youth; mobilising community efforts to restrict minors' access to tobacco product; development and implementation of school-based educational programmes in combination with community-based activities; and dissemination of information on health consequences of smoking, such as having prominent warning labels on cigarette packs<sup>17</sup>.

#### *WHO Framework Convention on Tobacco Control*

The WHO FCTC includes specific articles related to each of these interventions. This section reviews tobacco control programme efforts in Uganda in relation to the findings of the 2008 GYTS.

#### Second hand smoke

Article 8 of the WHO FCTC addresses the issue of "Protection from exposure to tobacco smoke. The article states

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<sup>15</sup> *Uganda Demographic Household Survey 2006*, Uganda Bureau of Statistics, Kampala, Uganda.

<sup>16</sup> Jha P . Chaloupka FJ. *Tobacco Control in Developing Countries*. Oxford, UK: Oxford University Press, 2000.

<sup>17</sup> *WHO Report on the Global Tobacco Epidemic, 2008 : The MPOWER package*. Geneva, World Health organisation, 2008

Parties recognise that scientific evidence has unequivocally established that exposure to tobacco smoke causes death, disease and disability. Each party shall adopt and implement ... measures, providing for protection from exposure to tobacco smoke in indoor workplaces, public transport, indoor public places and, as appropriate, other public places.

The *2008 WHO Report on the Global Tobacco Epidemic* summarises this coverage regarding eight specific public places (i.e. health care facilities, educational facilities, university facilities, government facilities, indoor offices, restaurants, pubs, bars, and other indoor workplaces) (*See Appendix 1 for summary table on Uganda's status*). Uganda has regulation banning smoking in public, which applies to all the eight places. However, implementation of this law is still weak and enforcement ranges from strong (e.g. schools) to weak (e.g. restaurants, hotels) to no enforcement at all (e.g. security facilities such as Police or Military barracks or in most pubs).

The GYTS 2007 study reported high levels of exposure by students to second hand smoke in public places (43.3%) as did the GYTS 2002 for Kampala (46%) when the law against smoking in the public had not been passed. This suggests that although the law has been in existence for over four years, its enforcement does not seem to be working.

#### *Tobacco Advertising, promotion and sponsorship*

Article 13 of the WHO FCTC addresses the issue of "Tobacco advertising, promotion and sponsorship." The article states

Parties recognise that a comprehensive ban on advertising, promotion and sponsorship would reduce the consumption of tobacco products. Each party shall ... undertake a comprehensive tobacco ban of all tobacco advertising, promotion and sponsorship. This shall include ... a comprehensive ban on cross-border advertising, promotion and sponsorship originating from its territory.

#### *Tobacco advertising bans*

The *WHO Report on the Global Tobacco Epidemic, 2008* summarises advertising bans for all countries including Uganda. The report includes whether the countries have national and international bans on TV, radio, newspaper, billboard, and point of sale advertising. According to the report, Uganda has not passed laws banning direct advertising on billboards as well as both local and international radio, TV, magazines and newspapers.

The GYTS 2007 study found that one in two students in Uganda reported exposure to advertisements for cigarettes on billboards and in newspapers and magazines. This significantly high exposure rate to advertising remains a major extenuating factor in tobacco use among young people in Uganda. This study, therefore, provides further evidence that laws banning tobacco advertising are urgently needed in Uganda as well as the will to actively implement them.

#### Promotion

The 2008 WHO Report on the Global Tobacco Epidemic includes information on whether the countries have laws banning promotion of free distribution of tobacco products and promotion of non-tobacco products. The GTYS includes an indicator on whether the students have an item with a tobacco company logo on it (e.g. a shirt, cap, back-pack, e.t.c.). The study found that one in 10 students had an item with a tobacco company logo on it and one in two had seen a tobacco promotion in the last 30 days.

According to the 2008 *WHO Report on the Global Tobacco Epidemic*, Uganda is among the African countries with no laws banning promotions and sponsorship of tobacco products. This is so even as the tobacco industry in the country has over the years been focusing on promotions and sponsorships in targeting young people such as using street parties and sponsorship of events that are popular with young people as well as point of sale promotions. The findings of the two Uganda GYTS studies thus are testimony to the need for total bans in Uganda on tobacco promotion and sponsorship.

### School

Article 12 of the WHO FCTC addresses the issue of "Education, communication, training and public awareness<sup>18</sup>."

The article states

Each Party shall promote and strengthen public awareness of tobacco control issues, using all available communication tools, as appropriate....each Party shall...promote broad access to effective and comprehensive educational and public awareness programmes on the health risks including addictive characteristics of tobacco consumption and exposure to tobacco smoke.

Results from GYTS 2007 showed that 64.3% of the students in Uganda had been taught in classes the past school year about the dangers of tobacco. This figure was similar to the finding of the 2002 GYTS for Kampala schools. WHO recognises school and community tobacco control programme efforts are important but they are most likely to be successful after a favourable policy environment has been created, including tax and price policies, 100% smoke-free public places and indoor workplaces, and a comprehensive ban on all tobacco advertising, promotion, and sponsorship.

## **8. Limitations**

The purpose of GYTS studies is to conduct a survey of school going adolescents for the ages 13 to 15 years, which in Uganda is around the first three years of high school. However, in Uganda, a significant number of adolescents of that age do not go to school or have dropped out by this age. This means that this section of the population has not been included in the study. However, studies done in some countries have shown a decreasing trend of tobacco smoking rate and development of favourable attitudes with increasing educational status among young people. As the present study represents the school going adolescents, it does not capture the complete picture. The ongoing universal primary education (UPE) and universal secondary school education (USE) initiatives which have seen greater numbers of young people go to school in Uganda than ever before, has somehow mitigated this factor for this study. However, even then, studies are needed to analyse tobacco prevalence among out of school young people.

## **9. Recommendations**

1. A significant number of adolescents were exposed to pro-tobacco advertisement and many of them received free gifts. There is an urgent need to pass legislation for a total ban on tobacco on all forms of tobacco advertisement in Uganda as well as a full implementation

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<sup>18</sup> World Health Organisation. *WHO Framework Convention on Tobacco Control*. Geneva, Switzerland: World Health Organisation, 2003.

- of the Framework Convention on Tobacco Control (FCTC) to which Uganda is a signatory. Advocacy and political will are needed to achievement enactment and implementation of laws intended to achieve this objective.
2. A substantial number of students were exposed to tobacco smoke at home and public places and over half of the students demanded that tobacco smoking in public places should be banned. There is thus a need for effective implementation of the laws that ban tobacco smoking in public places, which have already been passed in Uganda.
  3. The majority of students reported having learnt and discussed in class cigarette smoking and the effects of tobacco use. However, there is need to focus on the nature, comprehensiveness as well as standardisation of anti-smoking training in schools.
  4. Young people who smoke in Uganda are able to buy tobacco the products in the shop and they were not refused purchase in spite of their young age. It is therefore imperative laws prohibiting sale of tobacco products to the minors are enacted.

## **10. Conclusion**

The Government of Uganda realises the health, social and economic costs linked to tobacco and has thus ratified the WHO FCTC. In line with this policy, the Ministry of Health has made tobacco prevention and control a primary health issue. However, findings from in this study as well as in the GYTS 2002 suggest that tobacco control programme efforts need to focus on implementation and enforcement as regards tobacco control policies that are in place and their enactment in areas where they do not exists such as attaining a total ban on tobacco advertising and promotion. The tobacco control efforts needs to be comprehensive, broad based and focused on boys and girls. The WHO FCTC and the Uganda National Tobacco Control Plan provide useful frameworks for implementing such a comprehensive approach.

The 2007 GYTS study found high levels of prevalence of tobacco use, exposure to ETS and pro-tobacco messages through media and advertising among adolescent school students in Uganda. Moreover, the differences in gender tobacco use patterns that exist among the adult population are changing in the young population as the study found no statistical differences in prevalence of tobacco use among boys and girls. Additionally, there is a need to study the tobacco use situation among out-of-school adolescents in Uganda.

Conducting the first 2002 and repeat 2007 studies offers Uganda an opportunity to develop, implement and evaluate comprehensive tobacco control policies.



## Appendix 1

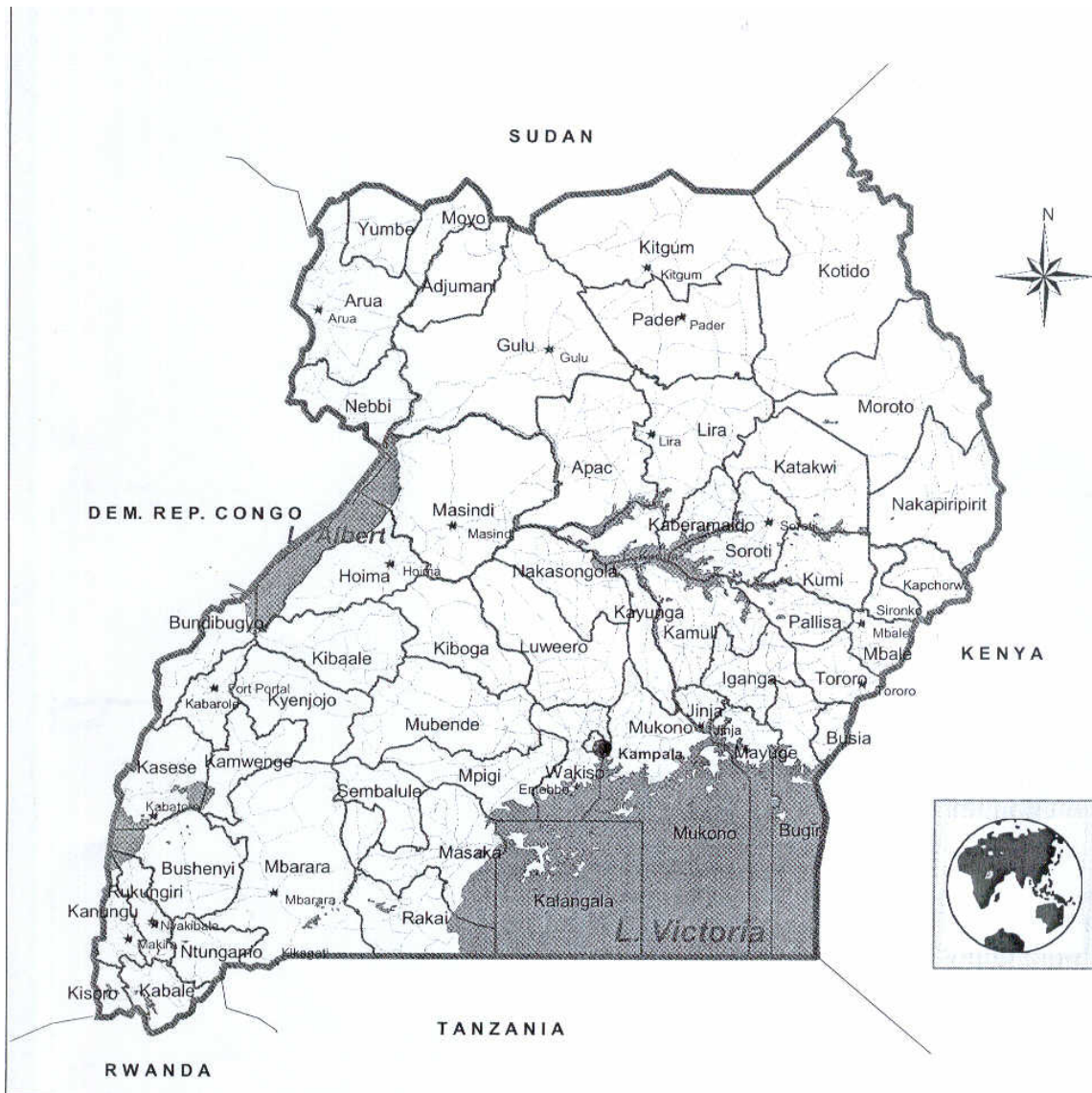
### Tobacco Control Programme and Policy efforts in Uganda, 2008 WHO Report on the Global Tobacco Epidemic<sup>19</sup>

Policy	Smoke-free places with laws, policies or regulations	Laws, policies or regulations banning advertising	Cessation programmes	Access	School
Status	<p>Yes – health care, education, university facilities, government facilities, indoor offices, other indoor workplaces, restaurants pubs and bars</p> <p>Enforcement – Ranges from strict (e.g. schools) to no enforcement(e.g. military barracks or pubs)</p>	<p>No laws against direct advertising or promotion and sponsorship</p> <p>Enforcement -non</p>	No – quit line, NRT and bupropion or support in primary care facilities, hospitals, offices of health care professionals and community	No age limit	No specific programmes for schools

<sup>19</sup> **Source:** WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER package. Geneva, World Health organisation, 2008.

## Appendix 2

## Map of Uganda



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