# West Virginia Youth Tobacco Survey 2007 & 2009











Bureau for Public Health Health Statistics Center 350 Capitol Street, Room 165 Charleston, WV 25301

Earl Ray Tomblin, Governor Michael J. Lewis, M.D., Ph.D., Cabinet Secretary

# 2007 & 2009

# WEST VIRGINIA

# YOUTH TOBACCO SURVEY REPORT



Michael J. Lewis, MD, PhD Cabinet Secretary, Department of Health and Human Resources

> Marian L. Swinker, MD, MPH Commissioner, Bureau for Public Health

Nancye M. Bazzle, MPH Deputy Commissioner, Bureau for Public Health

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# **ACKNOWLEDGMENTS**

#### Office of Community Health Systems and Health Promotion

Joe L. Barker, MPA, Director

Chuck E. Thayer, MS, Associate Director

#### West Virginia Division of Tobacco Prevention

Bruce W. Adkins, MS, PA, Director

David M. Deutsch, MA, Program Manager, Youth Tobacco Prevention Program

#### West Virginia Health Statistics Center

Daniel M. Christy, MPA, Director

James C. Doria, Statistical Services Division Director



### **West Virginia Health Statistics Center**

350 Capitol Street, Room 165 Charleston, WV 25301-3701

Phone: (304) 558-9100 Fax: (304) 558-1787 Web: http://www.wvdhhr.org/bph/hsc

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#### **West Virginia Department of Education**

Dr. Jorea M. Marple, State Superintendent of Schools Melanie B. Purkey, Executive Director, Office of Healthy Schools

#### **Authors**

Kathi K. Elkins, MBA, Tobacco Epidemiologist, West Virginia Health Statistics CenterDavid M. Deutsch, MA, Program Manager, Youth Program, WV Division of Tobacco Prevention (Chapter 5 of this report)

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**Availability of this Report** 

Electronically at: <a href="www.wvdhhr.org/bph/hsc/statserv/yts.asp">www.wvdhhr.org/bph/hsc/statserv/yts.asp</a>

 $\underline{www.wvdtp.org/Publications/tabid/694/Default.aspx}$ 

For more information contact: WV Health Statistics Center

(304) 558-9100

www.wvdhhr.org/bph/hsc

WV Division of Tobacco Prevention (304) 558-0644 or toll-free (866) 384-5250

www.wvdtp.org

# **SUMMARY OF FACTS**

## 2007 & 2009 West Virginia Youth Tobacco Survey

#### Middle School

- The percentage of West Virginia middle school students who have never used tobacco has significantly increased: In 2000, 46.0% of students had never smoked a cigarette or cigar or used smokeless tobacco, compared to 55.9% in 2007 and 67.4% in 2009. That represents an increase of 47% from 2000 to 2009.
- From 2000 to 2009, the current cigarette smoking rate among West Virginia middle school students significantly declined 51% (from 18.1% in 2000, to 8.9% in 2009).
- Approximately 1 in 6 (17.3%), or 10,700 West Virginia middle school students reported current use of tobacco products (of any kind) in 2007, and this prevalence dropped slightly to 15.0%, or 9,000 middle school students in 2009.
- Approximately 1 in 7 (13.1%), or 4,300 West Virginia middle school males were current users of smokeless tobacco in 2007, and this prevalence dropped to 1 in 8 (12.2%) or 3,800 middle school males in 2009.
- More than one-half (52.8%) of West Virginia middle school students who had ever smoked a cigarette (even 1 or 2 puffs), had smoked a *whole* cigarette before the age of 13, or the 9<sup>th</sup> grade, in 2007, and this prevalence held steady at 54.3% in 2009.
- More than half (53.8%), or 3,100 West Virginia middle school students who were current cigarette smokers in 2007, wanted to quit smoking. In 2009 that prevalence fell slightly to 50.2%, or 2,200 middle school current smokers.
- In 2007, about 69.0% of West Virginia middle school males who have ever used smokeless tobacco first used smokeless tobacco before the age of 13. In 2009, this remained steady at 69.9%.

## 2007 & 2009 West Virginia Youth Tobacco Survey

## **High School**

- The percentage of West Virginia high school students who have never used tobacco has significantly increased: In 2000, 20.6% of students had never smoked a cigarette or cigar or used smokeless tobacco, compared to 30.1% of students in 2005, 32.3% in 2007 and 39.2% in 2009. That represents an increase of over 90% from 2000 to 2009.
- From 2000 to 2009, the current cigarette smoking rate among West Virginia high school students declined 42% (from 38.5% in 2000, to 22.3% in 2009).
- Almost 4 in 10 (38.9%), or 31,700 West Virginia high school students reported current use of tobacco products (of any kind) in 2007, and this prevalence dropped to 1 in 3 (32.6%), or 26,200 high school students in 2009.
- Approximately 1 in 4 (26.6%), or 10,800 West Virginia high school males were current users of smokeless tobacco in 2007, and this prevalence remained constant at 24.8%, or 10,400 high school males in 2009.
- About one-third (34.8%) of West Virginia high school students who had ever smoked cigarettes (even 1 or 2 puffs) smoked a *whole* cigarette before the age of 13, or the 9<sup>th</sup> grade, in 2007, and this prevalence dropped to 26.6% in 2009.
- About half (49.5%), or 7,300 of West Virginia high school students who were current cigarette smokers in 2009, wanted to quit smoking.
- In 2007, almost 4 out of 10 (38.2%) West Virginia high school males who have ever used smokeless tobacco first used smokeless tobacco before the age of 13. In 2009, this remained steady at 36.4% high school males.

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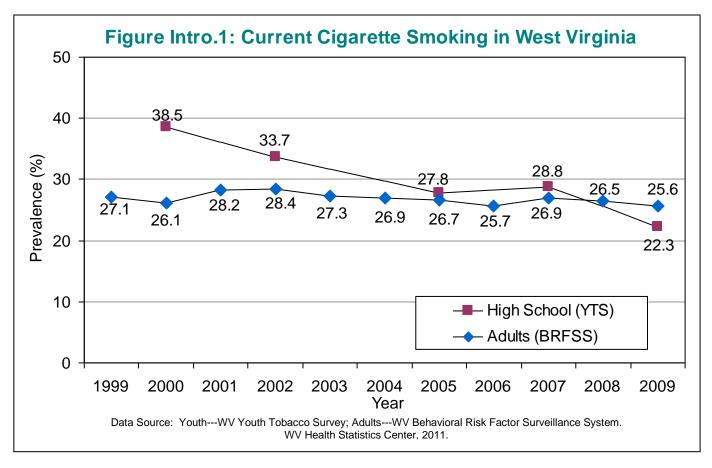
# **INTRODUCTION**

Youth tobacco use is primarily measured nationwide and in West Virginia by the Youth Tobacco Survey. The West Virginia Youth Tobacco Survey was administered to public middle school and high school students in 2000, 2002, 2005 (high school only), 2007 and 2009. This report summarizes data from the 2007 and 2009 West Virginia Youth Tobacco Survey, which was administered to a random sample of public school students in the spring of each of those years. This report is intended to:

- Present an overview of the most current data on youth tobacco use in West Virginia.
- Identify trends and progress in reducing youth tobacco use.
- Identify at-risk populations and behaviors that still need to be addressed through tobacco prevention activities.

The West Virginia Youth Tobacco Survey is conducted by the West Virginia Division of Tobacco Prevention and the West Virginia Department of Education, in collaboration with the United States Centers for Disease Control and Prevention. The West Virginia Health Statistics Center provides data analysis and publishes the West Virginia Youth Tobacco Survey reports. These agencies are working together to ensure that the West Virginia Youth Tobacco Survey continues to be used as a tool to collect data on tobacco use among public school students in grades 6-12. The goal is to administer the survey every other year (e.g., 2011, 2013).

While the prevalence of current cigarette smoking among West Virginia adults remains stagnant, significant improvements have been achieved in decreasing youth prevalence of tobacco use and specifically, current cigarette smoking, in the last decade (see Figure Intro.1):



In 2009, 24.3% of United States high school students were current users of some type of tobacco product (cigarettes, smokeless, cigars or pipe tobacco), compared to 27.3% in 2004. Despite significant declines, West Virginia youth continue to have significantly higher rates of tobacco use than the national average. Overall, in 2009 about one-third (32.6%) of West Virginia high school students smoked a cigarette, cigar, or tobacco in a pipe or used smokeless tobacco in the past 30 days. In fact, in 2009 over one-fifth (22.3%) of West Virginia high school students were current cigarette smokers, and about one-fourth (24.8%) of high school males were current smokeless tobacco users.

# Table Intro.1: Current Tobacco Use\* Among Middle School Students by Gender 2000, 2002, 2007 and 2009 West Virginia Youth Tobacco Survey\*\*

Students Who are	s Who are		FEMALES		TOTAL	
Current	Total # Students ‡	% (95% CI)	Total # Students ‡	% (95% CI)	Total # Students ‡	% (95% CI)
Tobacco Users***	Γ			1		T
2000	9,500	<b>28.4</b> (24.2-32.7)	6,300	<b>20.8</b> (17.0-24.7)	15,900	<b>24.8</b> (21.2-28.4)
2002	8,600	<b>26.1</b> (23.6-28.6)	5,800	<b>19.0</b> (16.6-21.4)	14,500	<b>22.8</b> (20.5-25.1)
2007	6,600	<b>20.6</b> (15.4-25.8)	4,100	<b>13.7</b> (11.0-16.4)	10,700	<b>17.3</b> (14.1-20.5)
2009	5,500	<b>18.0</b> (14.2-21.8)	3,300	<b>11.5</b> (8.6-14.3)	9,000	<b>15.0</b> (12.3-17.6)
Cigarette Smokers		, , , , , , , , , , , , , , , , , , ,		, , , , , ,		,
2000	5,800	<b>17.5</b> (14.6-20.4)	5,700	<b>18.8</b> (15.2-22.3)	11,500	<b>18.1</b> (15.4-20.7)
2002	5,200	<b>15.8</b> (13.8-17.9)	5,100	<b>16.6</b> (14.3-18.9)	10,300	<b>16.3</b> (14.2-18.3)
2007	3,600	<b>11.1</b> (7.5-14.8)	3,300	<b>10.9</b> (8.0-13.8)	6,900	<b>11.1</b> (8.5-13.7)
2009	2,700	<b>8.7</b> (6.6-10.8)	2,600	<b>8.9</b> (6.8-11.1)	5,400	<b>8.9</b> (7.5-10.3)
Smokeless Tobacco Users						
2000	5,000	<b>14.9</b> (11.8-17.9)	900	<b>2.8</b> (1.4-4.2)	5,900	<b>9.1</b> (7.1-11.1)
2002	4,300	<b>12.9</b> (10.9-14.9)	700	<b>2.3</b> (1.7-2.8)	5,100	<b>7.8</b> (6.6-9.0)
2007	4,300	<b>13.1</b> (8.8-17.3)	800	<b>2.7</b> (1.3-4.0)	5,100	<b>8.1</b> (5.8-10.5)
2009	3,800	<b>12.2</b> (8.9-15.5)	800	<b>2.8</b> (2.0-3.7)	4,700	<b>7.7</b> (5.9-9.5)
Cigar Smokers						
2000	4,000	<b>11.7</b> (8.5-14.8)	1,400	<b>4.6</b> (3.1-6.1)	5,500	<b>8.3</b> (6.3-10.4)
2002	3,400	<b>10.1</b> (8.9-11.3)	1,400	<b>4.3</b> (3.6-5.0)	4,800	<b>7.4</b> (6.7-8.1)
2007	2,600	<b>7.8</b> (5.1-10.6)	1,700	<b>5.6</b> (3.7-7.6)	4,200	<b>6.8</b> (5.0-8.5)
2009	1,900	<b>6.0</b> (3.9-8.1)	1,200	<b>4.0</b> (2.9-5.1)	3,100	<b>5.0</b> (3.7-6.3)
Pipe Smokers						
2000	2,000	<b>6.2</b> (4.5-7.8)	300	1.0† (0.4-1.6)	2,500	<b>3.7</b> (2.8-4.7)
2002	1,900	<b>5.6</b> (4.9-6.3)	700	<b>2.4</b> (1.8-2.9)	2,700	<b>4.1</b> (3.7-4.6)
2007	1,500	<b>4.6</b> (2.8-6.5)	600	1.9 (0.4-3.4)	2,100	<b>3.3</b> (2.2-4.4)
2009	900	<b>2.9</b> (1.6-4.1)	400	1.2 (0.6-1.8)	1,300	<b>2.1</b> (1.4-2.8)

<sup>\*</sup>Current users are those students who used a tobacco product in the 30 days prior to the survey.

<sup>\*\*</sup>The 2005 YTS survey was not conducted among West Virginia middle schools.

<sup>\*\*\*</sup>Smoked a cigarette, cigar, or tobacco in a pipe or used SLT in the 30 days prior to the survey.

<sup>\*</sup>Represents the estimated number of West Virginia public high school students who use tobacco. The "Male" and "Female" counts do not sum to the "Total" count because some respondents did not report a gender. Therefore, those respondents are represented in the "Total" count but not the "Male" or "Female" count. The counts presented in this table are the weighted frequencies produced by the SAS software. Like percentages, they are subject to sampling error, and therefore should be considered estimates of the true number of tobacco users.

<sup>†</sup>Use caution in interpreting this estimate --- the 95% CI is greater than 20, and/or the RSE is greater than 30%.

Table Intro.2: Current Tobacco Use\* Among High School Students by Gender 2000, 2002, 2005, 2007 and 2009 West Virginia Youth Tobacco Survey\*\*

		IALES		MALES		)TAL
Students Who are Current	Total #	%	Total #	%	Total #	%
Current	Students ‡	(95% CI)	Students ‡	(95% CI)	Students ‡	(95% CI)
Tobacco Users*** 2000	22,600	<b>51.6</b> (45.9-57.2)	17,400	<b>42.7</b> (37.9-47.5)	40,800	<b>47.7</b> (43.4-51.9)
2002	19,100	<b>46.5</b> (42.2-50.8)	14,100	<b>36.5</b> (31.1-41.9)	33,300	<b>41.7</b> (38.2-45.2)
2005	15,900	<b>39.2</b> (35.0-43.5)	12,400	<b>31.9</b> (25.6-38.2)	28,700	<b>35.8</b> (31.3-40.3)
2007	18,900	<b>45.9</b> (39.0-52.9)	11,800	<b>30.2</b> (24.1-36.4)	31,700	<b>38.9</b> (33.4-44.4)
2009	16,700	<b>40.8</b> (36.4-45.2)	9,500	<b>24.3</b> (20.2-28.3)	26,200	<b>32.6</b> (28.9-36.3)
Cigarette Smokers 2000	15,600	<b>36.0</b> (30.9-41.0)	16,500	<b>40.6</b> (36.0-45.1)	32,700	<b>38.5</b> (34.9-42.1)
2002	13,400	<b>33.3</b> (29.1-37.4)	13,200	<b>34.1</b> (29.2-39.0)	26,600	<b>33.7</b> (30.4-36.9)
2005	10,900	<b>26.6</b> (23.0-30.2)	11,300	<b>28.9</b> (23.1-34.7)	22,500	<b>27.8</b> (23.7-32.0)
2007	12,200	<b>30.2</b> (24.6-35.7)	10,300	<b>26.6</b> (20.9-32.2)	23,200	<b>28.8</b> (23.8-33.8)
2009	9,700	<b>23.7</b> (19.3-28.2)	8,200	<b>20.9</b> (17.6-24.3)	18,000	<b>22.3</b> (19.0-25.7)
Smokeless Tobacco Users 2000	11,600	<b>26.5</b> (21.6-31.5)	1,100	<b>2.6</b> (1.1-4.1)	13,200	<b>15.3</b> (12.3-18.2)
2002	8,900	<b>21.5</b> (17.9-25.1)	1,000	2.5 (1.0-4.1)	10,100	<b>12.4</b> (10.3-14.5)
2005	9,000	<b>22.0</b> (17.6-26.4)	1,000	<b>2.6</b> (1.5-3.7)	10,100	<b>12.6</b> (9.7-15.4)
2007	10,800	<b>26.6</b> (19.9-33.4)	1,200	<b>3.1</b> (1.5-4.7)	12,800	<b>15.6</b> (11.7-19.5)
2009	10,400	<b>24.8</b> (20.8-28.8)	1,000	<b>2.6</b> (1.2-4.0)	11,400	<b>13.9</b> (11.6-16.2)
Cigar Smokers 2000	11,100	<b>25.2</b> (20.6-29.8)	3,500	<b>8.4</b> (5.9-10.9)	14,900	<b>17.2</b> (14.1-20.3)
2002	8,700	<b>20.7</b> (16.5-24.9)	3,500	<b>8.7</b> (5.7-11.7)	12,200	<b>14.9</b> (12.1-17.8)
2005	7,000	<b>16.8</b> (12.7-20.9)	3,600	<b>9.2</b> (6.1-12.4)	10,800	<b>13.2</b> (10.2-16.2)
2007	9,400	<b>22.9</b> (18.5-27.2)	3,400	<b>8.6</b> (5.8-11.4)	13,500	<b>16.5</b> (13.3-19.7)
2009	8,300	<b>20.2</b> (17.1-23.2)	2,800	<b>7.0</b> (4.8-9.2)	11,200	<b>13.7</b> (11.6-15.8)
Pipe Smokers 2000	3,200	<b>7.2</b> (4.7-9.7)	800	<b>2.0</b> (1.1-3.0)	4,400	<b>5.0</b> (3.6-6.5)
2002	2,400	<b>5.7</b> (3.2-8.3)	900	2.2 (1.0-3.4)	3,400	<b>4.1</b> (2.3-5.9)
2005	2,100	<b>5.0</b> (2.7-7.4)	600	1.6 (0.7-2.5)	2,900	<b>3.5</b> (2.0-5.1)
2007	2,900	<b>7.0</b> (4.4-9.5)	800	<b>2.0</b> † (0.5-3.6)	4,500	<b>5.4</b> (3.1-7.6)
2009	2,000	<b>4.9</b> (3.5-6.3)	500	1.3† (0.3-2.3)	2,600	<b>3.1</b> (2.3-4.0)

<sup>\*</sup>Current users are those students who used a tobacco product in the 30 days prior to the survey.

<sup>\*\*</sup>The 2005 YTS survey was not conducted among West Virginia middle schools.

<sup>\*\*\*</sup>Smoked a cigarette, cigar, or tobacco in a pipe or used SLT in the 30 days prior to the survey.

<sup>\*</sup>Represents the estimated number of West Virginia public high school students who use tobacco. The "Male" and "Female" counts do not sum to the "Total" count because some respondents did not report a gender. Therefore, those respondents are represented in the "Total" count but not the "Male" or "Female" count. The counts presented in this table are the weighted frequencies produced by the SAS software. Like percentages, they are subject to sampling error, and therefore should be considered estimates of the true number of tobacco users.

# **CHAPTER 1 - TOBACCO USE**

Definitions used to analyze data from West Virginia Youth Tobacco Survey (WVYTS):

Never-tobacco use---response of NO to ALL of the following questions: have you ever tried cigarette smoking, even 1 or 2 puffs (see WVYTS Question #7)? Have you ever used chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen (see WVYTS Question #28)? Have you ever tried smoking cigars, cigarillos, or little cigars, even 1 or 2 puffs (see WVYTS Question #36)? Note: The survey does not include a question about ever smoking tobacco in a pipe.

Current tobacco use---smoked a cigarette, cigar, or tobacco in a pipe or used smokeless tobacco (SLT) on one or more days in the 30 days prior to the survey.

Frequent use---used the tobacco product on at least 20 days of the past 30 days.

Daily use---used the tobacco product every day during the past 30 days.

Note: The sale of bidis and kreteks (imported small brown cigarettes, usually flavored and wrapped in a temburni or tendu leaf) has been prohibited in West Virginia (WV) since 2001. The WVYTS survey includes questions concerning bidis and kreteks, but those data have not been analyzed for this report.

## Middle School

## KEY INDICATORS.....

Never Used Tobacco In 2009, 67.4% of middle school (MS) students had never smoked a

cigarette or cigar or used SLT, compared to 55.9% in 2007.

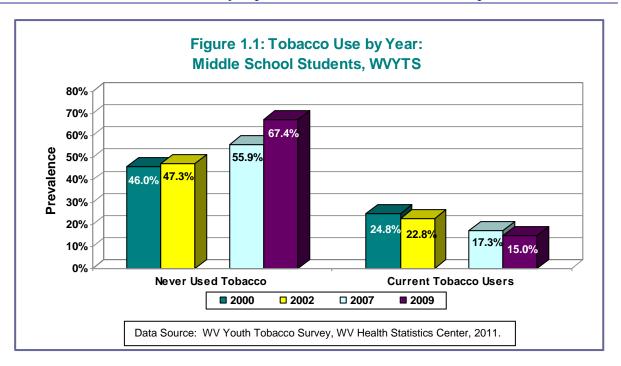
Current Tobacco Users In 2009, 15.0% of MS students smoked a cigarette, cigar, or tobacco in a

pipe or used SLT on one or more days in the 30 days prior to the survey,

compared to 17.3% in 2007.

## SIGNIFICANT FINDINGS .....

Between 2000 and 2009, the percentage of MS students who had never used tobacco increased 47%, from 46.0% to 67.4% (see Appendix B: Detailed Tables, Tables 1.1, 1.3, 1.5). Current tobacco use among MS students significantly declined from 24.8% to 15.0%, a decrease of 40% (see Figure 1.1). During this time, current tobacco use significantly decreased among males (a decrease of 37%, from 28.4% to 18.0%), and females (a decrease of 45%, from 20.8% to 11.5%). Even with these successes, tobacco use remains high among this population. In 2009, almost one-sixth of MS students were current tobacco users.



Note: 2005 YTS was not conducted among WV Middle Schools.

# High School

## KEY INDICATORS.....

#### **Never Used Tobacco**

In 2009, **39.2%** of high school (HS) students had never smoked a cigarette or cigar or used smokeless tobacco, compared to **32.3%** in 2007. From 2000 to 2009, never-tobacco use significantly increased 90%, from 20.6% to 39.2%.

#### **Current Tobacco Users**

In 2009, **32.6%** of HS students smoked a cigarette, cigar, or tobacco in a pipe or used SLT on one or more days in the 30 days prior to the survey, compared to **38.9%** in 2007. From 2000 to 2009, current tobacco use significantly decreased 32%, from 47.7% to 32.6%.

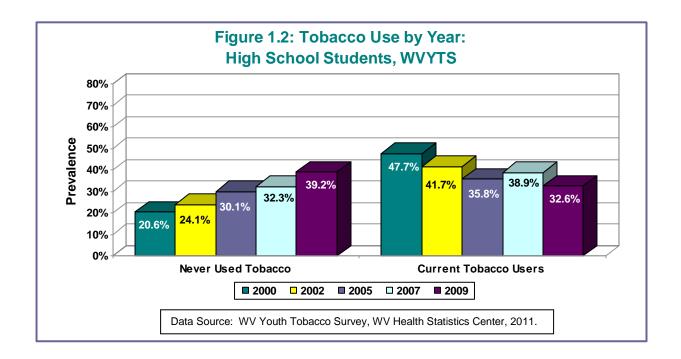
#### **Cessation Program**

In 2009, **7.5%** (95% CI: 5.2-9.8) of HS ever-tobacco users had participated in a program to help them quit using tobacco, compared to **13.6%** (95% CI: 8.6-18.6) in 2007. From 2000 to 2009, ever-tobacco user participation in cessation programs fluctuated from 7.2% to 14.8%.

### SIGNIFICANT FINDINGS .....

Between 2000 and 2009, the percentage of HS students who had never used tobacco significantly increased 90%, from 20.6% to 39.2% (see Figure 1.2 below), and current tobacco use among HS students significantly declined 32%, from 47.7% in 2000 to 32.6% in 2009. During this time, current tobacco use significantly decreased among males (a decrease of 21%, from 51.6% to 40.8%), and females (a decrease of 43%, from 42.7% to 24.3%). However, tobacco use remains high among this population. In 2009, about one-third of HS students were current tobacco users.

Concerning cessation, the low rates of participation in programs to help students quit tobacco use may reflect the lack of opportunity (some high schools do not offer cessation programs), the lack of motivation or lack of confidence in succeeding at quitting. See more in Chapter 2: Cigarette Smoking (Cessation), and Appendix B: Detailed Tables, Tables 1.2, 1.4, 1.6.



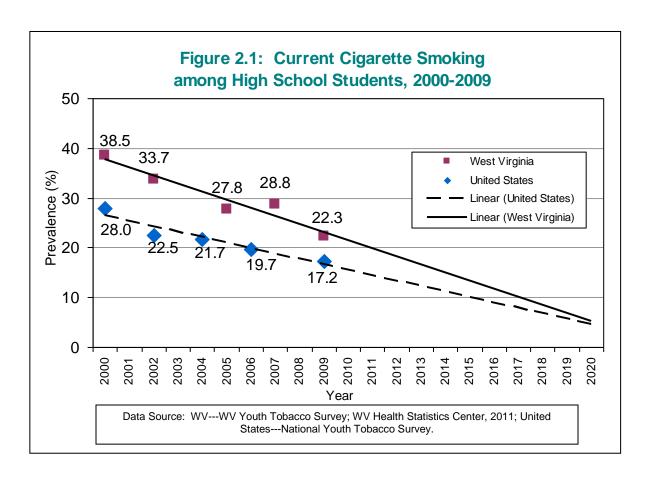
# **CHAPTER 2 - CIGARETTE SMOKING**

Definitions used to analyze data from WVYTS:

Current cigarette smoking---smoked a cigarette on one or more days in the past 30 days prior to the survey.

Note: The WVYTS survey includes questions concerning bidis and kreteks, but those data have not been analyzed for this report.

The National YTS estimated that in 2009, 5.2% of United States (U.S.) MS students were current cigarette smokers, compared to 6.3% in 2006. In 2009, the National YTS estimated that 17.2% of U.S. HS students were current cigarette smokers, compared to 19.7% in 2006. As seen in Figure 2.1 below, it appears that the trend line for WV HS students may intersect with the trend line for U.S. HS students within 15 years, but note that it is unlikely that either line will ever reach zero.



## CIGARETTE SMOKING PREVALENCE

## Middle School

### KEY INDICATORS .....

Never Smoked Cigarette In 2009, 73.1% of MS students had never tried a cigarette, even 1 or 2

puffs, compared to 64.8% in 2007.

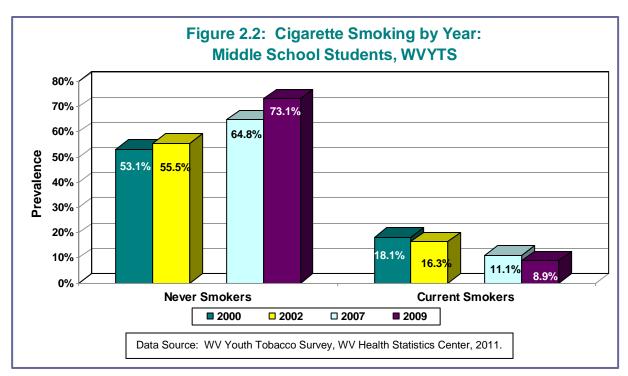
Current Cigarette Smokers In 2009, 8.9% of MS students smoked a cigarette on one or more days in

the 30 days prior to the survey, compared to 11.1% in 2007.

#### SIGNIFICANT FINDINGS .....

From 2000 to 2009, the percentage of MS students who had never tried a cigarette (not even 1 or 2 puffs) significantly increased 38%, from 53.1% to 73.1%, while the prevalence of current smokers significantly declined 51% from 18.1% to 8.9% (see Appendix B: Detailed Tables, Tables 2.1, 2.3, 2.5). Current smoking significantly declined among males (from 17.5% to 8.7%), and females (from 18.8% to 8.9%). In addition, significantly fewer students were smoking on school property during this time.

In 2009, over half of all current smokers wanted to quit smoking, and over half of all current smokers responded YES to the question, "During the past 12 months, did you ever try to quit smoking?" About one-fourth of current smokers said they feel they could not quit even if they wanted to.



Note: 2005 YTS was not conducted among WV Middle Schools.

#### ADDITIONAL INFORMATION – 2009 MS CIGARETTE SMOKING PREVALENCE

- 97.9% (95% CI: 96.5-99.3) of MS students who had never smoked a cigarette said they think they would NOT try a cigarette soon.
- 12.2% (95% CI: 9.4-14.9) of MS students who had ever smoked a cigarette, had smoked 100 or more cigarettes (at least 5 packs) in their lifetime.

## CIGARETTE SMOKING PREVALENCE

# **High School**

Cigarette smoking among HS students has declined since 2000. The percentage of students who had never tried a cigarette (not even 1 or 2 puffs) significantly increased 86%, while the percentages of current smokers, frequent smokers and daily smokers significantly declined. The prevalence of HS current smoking significantly decreased 42%, compared to the prevalence of current smoking in the adult population, which has remained stagnant for many years (as illustrated in Figure Intro.1, Introduction). It cannot be determined at what point in the future the decreasing youth smoking rate will have an impact in reducing the adult smoking rate, as the HS students become part of the adult population.

#### KEY INDICATORS .....

Never Smoked Cigarette In 2009, 47.8% of HS students had never tried a cigarette, even 1 or 2

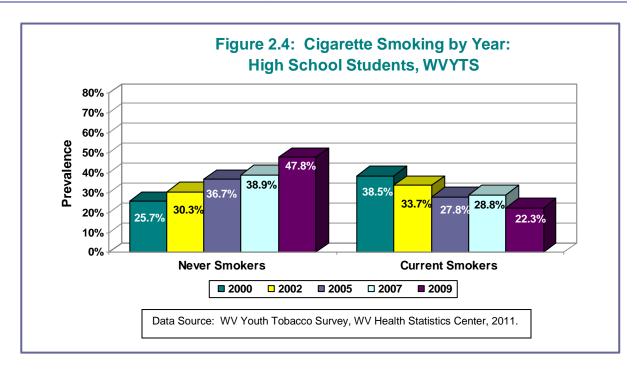
puffs, compared to 38.9% in 2007.

Current Cigarette Smokers In 2009, 22.3% of HS students smoked a cigarette on one or more days

in the 30 days prior to the survey, compared to **28.8%** in 2007.

#### SIGNIFICANT FINDINGS

Between 2000 and 2009, the percentage of HS students who were current smokers significantly declined 42% among all students, from 38.5% to 22.3%, and among males, from 36.0% (95% CI: 30.9-41.0) to 23.7% (95% CI: 19.3-28.2), and females, from 40.6% (95% CI: 36.0-45.1) to 20.9% (95% CI: 17.6-24.3). In addition, the percentage of HS students who had never tried cigarettes significantly increased 86%, from 25.7% to 47.8% (see Appendix B: Detailed Tables, Tables 2.2, 2.4, 2.6).



#### ADDITIONAL INFORMATION – 2009 HS CIGARETTE SMOKING PREVALENCE

- 99.6% (95% CI: 99.1-100.0) of HS students who had never smoked a cigarette said they think they would NOT try a cigarette soon.
- 32.8% (95% CI: 28.7-36.9) of HS students who had ever smoked a cigarette, had smoked 100 or more cigarettes (at least 5 packs) in their life.

# **CIGARETTE SMOKING PATTERNS**

## Middle School

KEY INDICATORS .....

Frequent Cigarette Smokers In 2009, 2.6% (95% CI: 2.0-3.3) of all MS students and 29.6% (95% CI: 22.3-36.9) of current smokers smoked a cigarette on at least 20 days in the 30 days prior to the survey. In 2007, 4.0% (95% CI: 2.5-5.6) of MS students and 36.3% (95% CI: 27.7-44.9) of current smokers smoked a cigarette on at least 20 days in the 30 days prior to the survey.

#### **Daily Cigarette Smokers**

In 2009, **1.5%** (95% CI: 1.0-1.9) of all MS students and **16.5%** (95% CI: 11.3-21.7) of current smokers smoked a cigarette every day in the 30 days prior to the survey. In 2007, **2.7%** (95% CI: 1.4-4.0) of MS students and **24.5%** (95% CI: 15.1-33.9) of current smokers smoked a cigarette every day in the 30 days prior to the survey.

#### **School Cigarette Smokers**

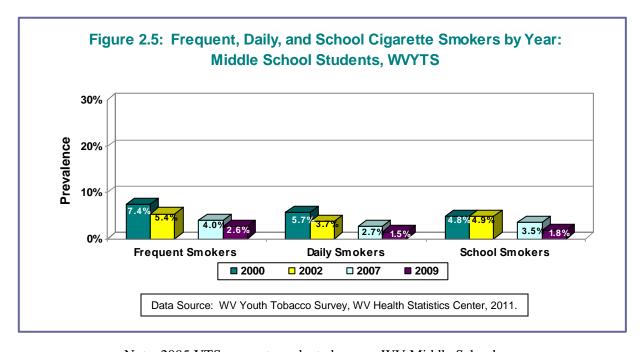
In 2009, **1.8%** (95% CI: 1.2-2.4) of all MS students and **16.7%** (95% CI: 10.9-22.5) of current smokers smoked on school property one or more days in the 30 days prior to the survey. In 2007, **3.5%** (95% CI: 2.4-4.6) of MS students and **27.3%** (95% CI: 20.9-33.6) of current smokers smoked on school property one or more days in the 30 days prior to the survey.

#### **Age of Initiation**

In 2009, **54.3%** (95% CI: 49.7-58.8) of MS students who had ever tried cigarettes (ever smokers) smoked a whole cigarette before age 13. In 2007, **52.8%** (95% CI: 46.1-59.6) of MS ever smokers smoked a whole cigarette before age 13.

#### SIGNIFICANT FINDINGS .....

Between 2000 and 2009, the prevalence (among all students) of frequent smokers, daily smokers, and school smokers significantly declined (see Figure 2.5 below, and Appendix B: Detailed Tables, Tables 2.1, 2.3, 2.5). Among current smokers, the prevalence of those who smoked on school property did not significantly decline.



Note: 2005 YTS was not conducted among WV Middle Schools.

# **CIGARETTE SMOKING PATTERNS**

# **High School**

### KEY INDICATORS .....

Frequent Cigarette Smokers In 2009, 10.6% (95% CI: 8.0-13.2) of all HS students and 47.3% (95% CI: 39.3-55.4) of current smokers smoked a cigarette on at least 20 days in the 30 days prior to the survey. In 2007, 12.5% (95% CI: 8.5-16.4) of HS students and 43.3% (95% CI: 35.0-51.6) of current smokers smoked a cigarette on at least 20 days in the 30 days prior to the survey.

**Daily Cigarette Smokers** 

In 2009, **7.9%** (95% CI: 6.1-9.7) of all HS students and **35.2%** (95% CI: 29.8-40.5) of current smokers smoked a cigarette every day in the 30 days prior to the survey. In 2007, 7.8% (95% CI: 5.1-10.5) of HS students and 27.1% (95% CI: 20.0-34.2) of current smokers smoked a cigarette every day in the 30 days prior to the survey.

**School Cigarette Smokers** 

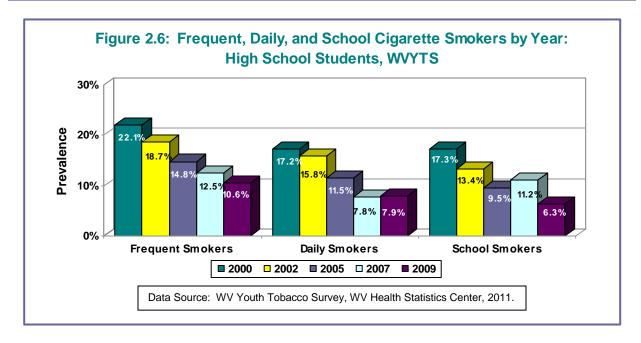
In 2009, **6.3%** (95% CI: 4.0-8.6) of all HS students and **26.5%** (95% CI: 18.4-34.7) of current smokers smoked on school property one or more days in the 30 days prior to the survey. In 2007, 11.2% (95% CI: 7.5-15.0) of HS students and 37.2% (95% CI: 28.3-46.2) of current smokers smoked on school property one or more days in the 30 days prior to the survey.

**Age of Initiation** 

In 2009, 26.6% (95% CI: 22.4-30.7) of HS students who had ever tried cigarettes (ever smokers) smoked a whole cigarette before age 13, in 2009. In 2007, 34.8% (95% CI: 28.5-41.1) of ever smokers smoked a whole cigarette before age 13.

## SIGNIFICANT FINDINGS .....

Between 2000 and 2009, the prevalence (among all HS students) of frequent smokers, daily smokers, and school smokers significantly declined (see Figure 2.6 and also Appendix B: Detailed Tables, Tables 2.2, 2.4, 2.6). The prevalence of smoking on school property did not significantly decline among current smokers



## ADDITIONAL INFORMATION - 2009 HS CIGARETTE SMOKING PATTERNS

- 16.8% (95% CI: 11.7-21.8) of HS students were ex-smokers at the time of the survey (former smokers who had smoked at least 100 cigarettes in their lifetime, and had not smoked cigarettes during the past 30 days).
- 33.9% (95% CI: 28.5-39.2) of current smokers smoked six or more cigarettes per day on the days they smoked in the 30 days prior to the survey.

# **CIGARETTE SMOKING CESSATION**

## Middle School

KEY INDICATORS	•••••••••••••••••••••••••••••••••••••••
Want to Quit	As estimated from 2009 survey, <b>50.2%</b> (95% CI: 42.6-57.9) of MS current smokers want to quit smoking.
Tried to Quit	Note: Due to the small number of MS students who were current smokers who had tried to quit, analysis has resulted in unreliable data and is not reported here.
<b>Could Not Quit</b>	In 2009, <b>26.7%</b> (95% CI: 17.9-35.5) of MS current smokers said they could not quit smoking now if they wanted to.

### SIGNIFICANT FINDINGS .....

In 2009, current smokers indicate that they want to quit, many have tried to quit, and feel that they could not quit now if they wanted to (see Appendix B: Detailed Tables, Tables 2.1, 2.3, 2.5). This indicates an opportunity for increased programmatic interventions to reach this group. Note: Due to the smaller number of MS students in 2009 who are frequent or daily smokers, the data cannot be analyzed to provide insights into cigarette smoking behaviors of these sub-groups.

#### ADDITIONAL INFORMATION – 2009 MS CIGARETTE SMOKING CESSATION

- 27.1% (95% CI: 17.2-37.0) of current smokers had not tried to quit smoking in the past 12 months.
- 49.8% (95% CI: 41.8-57.7) of current smokers had tried to quit at least three times in the past 12 months.
- 67.2% (95% CI: 57.9-76.5) of current smokers said they would definitely or probably be smoking five years from now.

# **CIGARETTE SMOKING CESSATION**

## **High School**

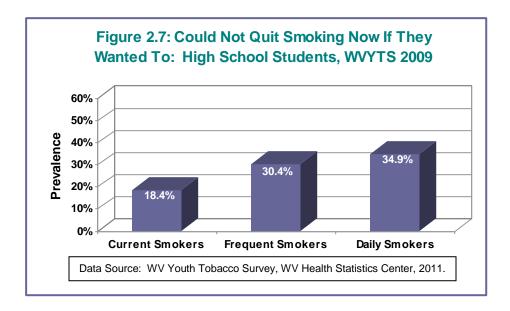
KEY INDICATORS	
Want to Quit	In 2009, <b>49.5%</b> (95% CI: 43.6-55.4) of HS current smokers want to quit smoking.
Tried to Quit	In 2009, <b>49.5%</b> (95% CI: 43.0-56.0) of HS current smokers, and <b>48.9%</b> (95% CI: 39.8-58.0) of frequent smokers tried to quit smoking during the 12 months prior to the survey.
<b>Could Not Quit</b>	In 2009, <b>18.4%</b> (95% CI: 14.9-21.9) of HS current smokers, <b>30.4%</b> (95% CI: 23.7-37.0) of frequent smokers, and <b>34.9%</b> (95% CI: 26.9-42.9) of daily smokers said they could not quit smoking now if they wanted to.
<b>Cessation Program</b>	In 2009, <b>6.6%</b> (95% CI: 4.4-8.7) of ever-smokers had participated in a program to help them quit smoking.

#### SIGNIFICANT FINDINGS

In 2009, about half of all HS current smokers (49.5%), frequent smokers (48.8%), and daily smokers (45.4%) said they wanted to quit smoking cigarettes. About half of all these smokers said they had tried to quit smoking (see Appendix B: Detailed Tables, Tables 2.2, 2.4, 2.6).

In comparing smoker sub-groups, there was a significant difference among frequent smokers (30.4%) and daily smokers (34.9%), who feel they could not quit smoking, compared to current smokers (18.4%). There were no significant differences among current, frequent and daily smokers, nor between male and female smokers, in any of the other cessation categories (see Figure 2.7 below, and Appendix B: Detailed Tables, Tables 2.2, 2.4, 2.6).

Note: Due to the smaller number of HS students in 2009 who are frequent or daily smokers, the data cannot be analyzed to provide insights into cigarette smoking behaviors of these sub-groups.



#### ADDITIONAL INFORMATION – 2009 HS CIGARETTE SMOKING CESSATION

- 50.5% (95% CI: 44.0-57.0) of current smokers had not tried to quit smoking in the past 12 months.
- 27.8% (95% CI: 23.1-32.4) of current smokers had tried to quit at least three times in the past 12 months.
- 37.2 (95% CI: 28.9-45.5) of current smokers who, when last they tried to quit, were able to stay off cigarettes for 30 days or longer.
- Only 10.5% (95% CI: 6.7-14.2) of HS students said, YES, their school offered the Not On Tobacco cessation program to students.
- 52.0% (95% CI: 45.2-58.9) of current smokers said they would definitely or probably be smoking five years from now.

## PHYSICIAN COUNSELING TO NOT SMOKE

## Middle School

## KEY INDICATORS .....

Doctor/AHP ask In 2009, only 19.4% (95% CI: 17.1-21.7) of all MS students indicated that a

doctor or allied health professional (AHP) asked if they smoked cigarettes.

**Doctor/AHP** advise In 2009, only 35.7% (95% CI: 32.4-39.0) of all MS students indicated that a

> doctor/AHP advised them to NOT smoke; 44.0% (95% CI: 36.6-51.5) of current smokers, and 34.6% (95% CI: 31.4-37.9) of current nonsmokers were advised to

not smoke by a doctor/AHP.

## SIGNIFICANT FINDINGS .....

In 2009, about one-fifth of MS students indicated that a doctor/AHP asked them if they smoked, and about one-third of MS students said they were advised to not smoke. MS students indicated that the majority did not receive counseling from doctor/AHP about not smoking. Since behavior change is often influenced by advice from physicians, perhaps this issue of physician counseling could be addressed in programmatic interventions.

## PHYSICIAN COUNSELING TO NOT SMOKE

# **High School**

## KEY INDICATORS .....

Doctor/AHP ask

In 2009, only **36.1%** (95% CI: 32.4-39.8) of all HS students indicated that a doctor/AHP asked if they smoked cigarettes, and 51.3% (95% CI: 45.1-57.4) of current smokers, and 31.6% (95% CI: 27.2-36.0) of current nonsmokers were asked by a doctor/AHP if they smoked.

**Doctor/AHP** advise

In 2009, only 30.5% (95% CI: 26.5-34.6) of all HS students indicated that a doctor/AHP advised them to not smoke, and 41.1% (95% CI: 35.4-46.8) of current smokers, and 27.3% (95% CI: 23.4-31.2) of current nonsmokers were advised to NOT smoke by a doctor/AHP.

## SIGNIFICANT FINDINGS .....

In 2009, about one-third of HS students indicated that a doctor/AHP asked them if they smoked, and less than half of the students said they were advised to not smoke. Similar results were found when looking at all students, and by gender and by current smoking status.

A significantly higher percentage of HS current smokers, compared to current nonsmokers, were asked if they smoke cigarettes. While not significantly different, 46.3% (95% CI: 39.1-53.5) of female current smokers were advised to not smoke cigarettes, compared to only 36.6% (95% CI: 29.5-43.8) of male There is potential to increase doctor/AHP counseling through programmatic current smokers. interventions, such as physician training.

# **CHAPTER 3 - SMOKELESS TOBACCO USE**

Definitions used to analyze data from WVYTS:

Smokeless Tobacco (SLT) Products---powdered dry or powdered moist tobacco (snuff) in a can or small pouch (snus), or chewing tobacco in a pouch, plug, or brick.

Current SLT Use---use of any SLT product on one or more days in the 30 days prior to the survey.

SLT use remains a predominately male behavior. In 2009, about 1 in 8 (12.2%) MS males and 1 in 4 (24.8%) HS males were current SLT users, compared to less than 3% for females of any grade. While there has been a decline in cigarette use among MS and HS students, there has been no significant decrease in the prevalence or frequency of SLT use among males of any grade.

Note that in Chapter 3, data will be presented for ONLY MALES, but data for females can be found in the Appendix (see Appendix B: Detailed Tables, Tables 3.1, 3.2, 3.3, 3.4, 3.7, 3.8).

## SMOKELESS TOBACCO USE PREVALENCE

## Middle School Males

## KEY INDICATORS

Never Used SLT In 2009, 78.9% (95% CI: 75.4-82.5) of MS males had never used SLT. For 2007,

**70.3%** (95% CI: 64.8-75.9) of MS males had never used SLT products.

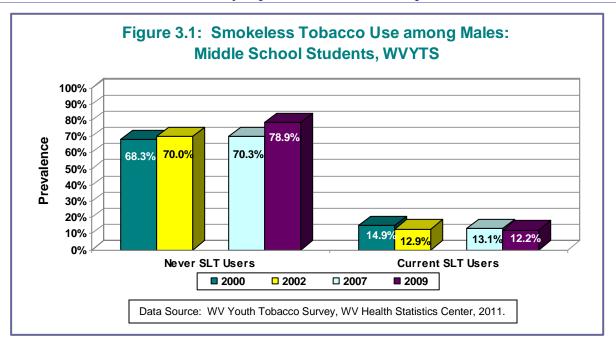
Current SLT Users In 2009, 12.2% (95% CI: 8.9-15.5) of MS males used SLT on one or more days

in the 30 days prior to the survey. For 2007, 13.1% (95% CI: 8.8-17.3) of MS

males had used SLT on one or more days in the past 30 days.

## SIGNIFICANT FINDINGS .....

Between 2000 and 2009, there was a significant increase of 16% in the percentage of MS males who had never used SLT, from 68.3% to 78.9%. During this time period the prevalence of current SLT use did not significantly change, but has fluctuated from 14.9% to 12.2% (see Appendix B: Detailed Tables, Tables 3.1, 3.3, 3.5, 3.7).



Note: 2005 YTS was not conducted among WV Middle Schools.

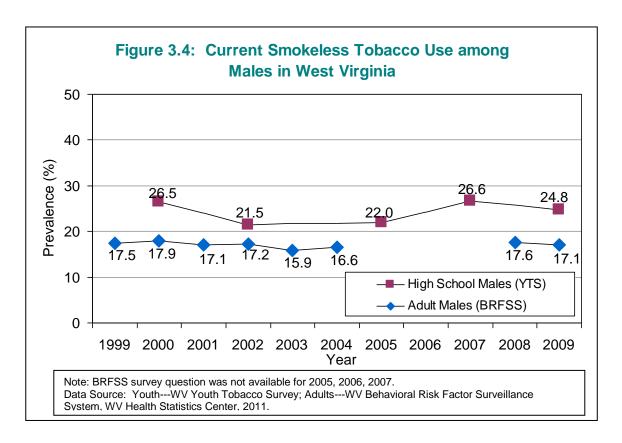
## ADDITIONAL INFORMATION – 2009 MS SMOKELESS TOBACCO

- 15.1% (95% CI: 10.6-19.5) of MS male ever-SLT users had ever participated in a program to help them quit using tobacco.
- 4.9% (95% CI: 3.5-6.3) of MS males currently smoked cigarettes AND used SLT on one or more days in the past 30 days.

## SMOKELESS TOBACCO USE PREVALENCE

# **High School Males**

The prevalence of SLT use among HS males is significantly higher than adult males for 2009 [WVYTS HS males 24.8% (95% CI: 20.8-28.8) compared to adult males 2009 (from WV Behavioral Risk Factor Surveillance System) 17.1% (95% CI: 14.8-19.4)], but no decrease is seen in either population (see Figure 3.4 below):



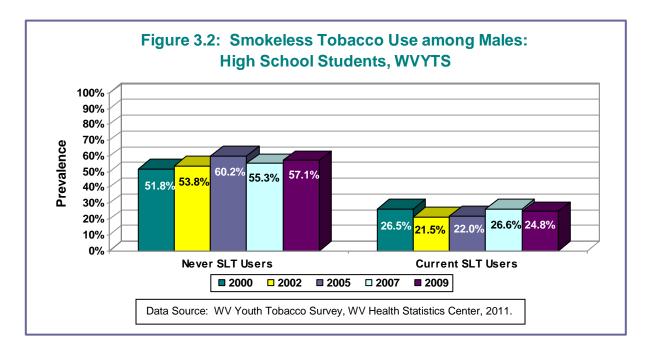
#### KEY INDICATORS ..

Never Used SLT In 2009, **57.1%** (95% CI: 51.2-63.0) of HS males had never used SLT. For 2007, **55.3%** (95% CI: 48.6-61.9) of HS males had never used SLT.

Current SLT Users In 2009, 24.8% (95% CI: 20.8-28.8) of HS males used SLT on one or more days in the 30 days prior to the survey. For 2007, 26.6% (95% CI: 19.9-33.4) of HS males had used SLT on one or more days in the past 30 days.

#### SIGNIFICANT FINDINGS ......

Between 2000 and 2009 there was no significant change in the percentage of HS males who had never used SLT (see Appendix B: Detailed Tables, Tables 3.2, 3.4, 3.6, 3.8). Similarly, during this time there was no significant change in current SLT use among this group.



#### ADDITIONAL INFORMATION – 2009 HS SMOKELESS TOBACCO

- 6.5% (95% CI: 3.0-10.0) of HS male ever-SLT users had ever participated in a program to help them quit using tobacco.
- 11.7% (95% CI: 8.4-15.0) of HS males currently smoked cigarettes AND used SLT on one or more days in the past 30 days.

## SMOKELESS TOBACCO USE PATTERNS

In 2009, the prevalence of current, frequent and daily SLT use was significantly higher among HS males, compared to MS males, perhaps expected as students transition from MS to HS. The prevalence of SLT use on school property among HS males was three-fold higher than for MS males. Note: WV regulation prohibits the use of any tobacco product by anyone at any time on school property or at school events.

## Middle School Males

#### KEY INDICATORS.....

**Frequent SLT Users** 

In 2009, **3.1%** (95% CI: 1.6-4.6) of all MS males used SLT on at least 20 days in the 30 days prior to the survey. The 2007 data for this measure is unreliable and not reported in this chapter.

**Daily SLT Users** 

In 2009, **2.4%** (95% CI: 1.1-3.6) of all MS males and **19.3%** (95% CI: 9.9-28.7) of MS male current SLT users used SLT every day in the 30 days prior to the survey. The 2007 data for this measure is unreliable and not reported in this chapter.

#### **School SLT Users**

In 2009, **5.1%** (95% CI: 3.1-7.2) of all MS males used SLT on school property one or more days in the 30 days prior to the survey. For 2007, **7.3%** (95% CI: 3.6-11.0) of all MS males used SLT on school property one or more days in the past 30 days.

## SLT Use in Smoke-free Places

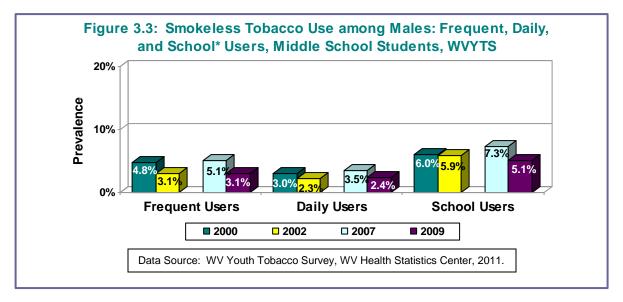
In 2009, **9.7%** (95% CI: 7.4-12.0) of all MS males and **58.7%** (95% CI: 50.9-66.4) of MS male current SLT users responded that they have used SLT products (including snus) in places where smoking was not allowed. (Note: This question was not asked prior to 2009).

## **Age of Initiation**

In 2009, **69.9%** (95% CI: 63.0-76.7) of MS male ever-SLT users first used SLT before age 13. For 2007, **69.0%** (95% CI: 62.2-75.8) of MS male ever-SLT users first used SLT before age 13.

## SIGNIFICANT FINDINGS .....

There are no significant changes in SLT use patterns among MS males from 2000 to 2009 (see Appendix B: Detailed Tables, Tables 3.1, 3.3, 3.5, 3.7). The majority of current users first used SLT before age 13. Much of the data for SLT use patterns among current SLT users is unreliable due to small sample size (see Appendix A: Methodology).



Note: 2005 YTS was not conducted among WV Middle Schools.

Note: Use caution when interpreting the 2007 estimates---the 95% CI is greater than 20, and/or the RSE is greater than 30%.

\*Note: School Users among all the male students in the school.

## SMOKELESS TOBACCO USE PATTERNS

# **High School Males**

## KEY INDICATORS .....

**Frequent SLT Users** 

In 2009, **11.4%** (95% CI: 8.6-14.3) of all HS males and **46.1%** (95% CI: 38.1-54.2) of HS male current SLT users used SLT on at least 20 days in the 30 days prior to the survey. For 2007, **12.2%** (95% CI: 8.0-16.3) of all HS males used SLT on at least 20 days in the past 30 days.

**Daily SLT Users** 

In 2009, **9.6%** (95% CI: 7.0-12.1) of all HS males and **38.6%** (95% CI: 30.0-47.1) of HS male current SLT users used SLT every day in the 30 days prior to the survey. For 2007, **8.7%** (95% CI: 4.8-12.5) of all HS males used SLT every day in the past 30 days.

**School SLT Users** 

In 2009, **15.7%** (95% CI: 12.0-19.5) of all HS males and **61.7%** (95% CI: 53.0-70.4) of HS male current SLT users used SLT on school property one or more days in the 30 days prior to the survey. For 2007, **18.0%** (95% CI: 13.5-22.5) of all HS males and **61.1%** (95% CI: 53.2-69.1) of HS male current SLT users used SLT on school property one or more days in the past 30 days.

SLT Use in Smoke-free Places

In 2009, **19.5%** (95% CI: 16.0-22.9) of all HS males and **57.8%** (95% CI: 49.1-66.5) of HS male current SLT users responded that they have used SLT products (including snus) in places where smoking was not allowed. (Note: This question was not asked prior to 2009).

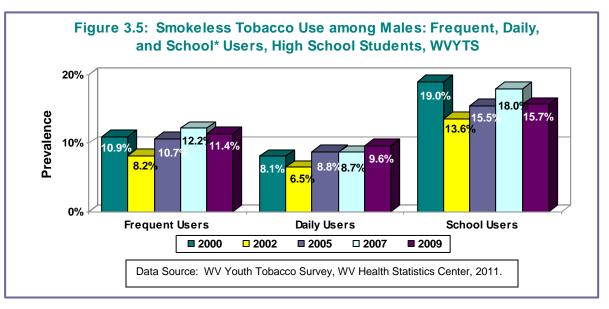
**Age of Initiation** 

In 2009, 31.2% (95% CI: 26.5-35.9) of all HS male ever-SLT users first used SLT before age 13. For 2007, 38.2% (95% CI: 28.8-47.6) of HS male ever-SLT users first used SLT before age 13.

## SIGNIFICANT FINDINGS .....

In 2009, about half of HS male current SLT users were using snuff, snus, chewing tobacco or other similar products, on 20 days or more in the past month, and about one-third were using it daily. About 2 out of 3 current users were using it while on school property. Over half of the HS male current SLT users used these products in places where smoking was not allowed. About one-third of current users first used SLT before age 13.

There appears to be no significant change in SLT use patterns during the years 2000-2009. Fluctuations have occurred, but no trend is evident (see Appendix B: Detailed Tables, Tables 3.2, 3.4, 3.6, 3.8).



\*Note: School Users among all the male students in the school.

## SNUS USE: PREVALENCE AND PATTERNS OF USE

"Snus" (rhymes with "goose") is a moist, SLT product that is usually sold in small pouches and placed under the lip against the gum. It has been used most widely in northern Europe, but is being marketed now in WV and across the U.S. It is sold in many convenience stores and sometimes displayed in refrigerated cases to maintain its freshness. To investigate the degree of snus use in WV, two questions were added to the 2009 YTS survey and analyzed in this report, with comparisons to YTS questions on SLT use among males. Note: Snus is included in the definition of SLT products.

Similar to SLT use in general, the prevalence of snus use among HS males was significantly higher than snus use among MS males. Conversely, the prevalence of MS males who had never used snus was significantly higher than the prevalence for HS males. The prevalence of current snus use among MS and HS females was extremely low (less than 2%).

## Middle School Males

## KEY INDICATORS.....

Never Snus Users In 2009, 86.8% (95% CI: 83.1-90.5) of all MS males had never used snus.

(Note: 96.1% of MS females had never used snus).

Current Snus Users In 2009, 7.1% (95% CI: 4.6-9.5) of all MS males had used snus on one or more

days in the 30 days prior to the survey. (Note: Only 1.9% of the MS females

were current snus users.)

Note: Much of the 2009 data on MS male snus use is not reliable, due to small sample size, so snus use patterns cannot be fully investigated (see Appendix A: Methodology).

## SNUS USE: PREVALENCE AND PATTERNS OF USE

## **High School Males**

### KEY INDICATORS.....

Never Snus Users In 2009, 72.3% (95% CI: 67.5-77.2) of all HS males had never used snus. (Note:

94.3% of HS females had never used snus).

Current Snus Users In 2009, 15.3% (95% CI: 11.7-18.9) of all HS males had used snus on one or

more days in the 30 days prior to the survey. (Note: Only 1.9% of the HS

females were current snus users.)

Frequent Snus Users In 2009, only 2.9% (95% CI: 1.8-4.1) of all HS males had used snus on at least

20 days in the 30 days prior to the survey.

Daily Snus Users In 2009, only 2.7% (95% CI: 1.5-3.9) of all HS males had used snus every day in

the 30 days prior to the survey.

## SIGNIFICANT FINDINGS .....

Current snus use among all males in MS and HS appears to be relatively low (see Appendix B: Detailed Tables, Tables 3.7, 3.8). The prevalence of current snus use among males currently using other SLT products is unreliable, but it would be logical to assume that some of the SLT users were including snus among their other SLT products. Female use of snus is very low for any grade level.

# **CHAPTER 4 - CIGAR AND PIPE SMOKING**

Between 2000 and 2009, there were some significant declines in cigar use among youth in West Virginia. In fact, the percentage of students who had never tried a cigar significantly increased 15% among MS students and 36% among HS students. Current cigar smoking is significantly higher among HS students than MS students, and cigar smoking is more common among males than females at any grade level (see Tables Intro.1 and Intro.2).

Note: "Blunts" are cigars that have a hollow core to allow the insertion of flavorings, or other smoking products, such as marijuana. Blunts are legally sold and available in some stores and on the internet. There is no data source to determine the current use of blunts in West Virginia.

## **CIGAR SMOKING**

## Middle School

# KEY INDICATORS .....

**Never Smoked Cigar** 

In 2009, **86.3%** (95% CI: 84.2-88.4) of MS students had never smoked a cigar, cigarillo, or little cigar, even 1 or 2 puffs. For 2007, **79.3%** (95% CI: 77.0-81.6) of MS students had never smoked a cigar, cigarillo, or little cigar, even 1 or 2 puffs.

**Current Cigar Smokers** 

In 2009, **5.0%** (95% CI: 3.7-6.3) of MS students smoked a cigar, cigarillo, or little cigar on one or more days in the 30 days prior to the survey. For 2007, **6.8%** (95% CI: 5.3-8.3) of MS students smoked a cigar, cigarillo, or little cigar on one or more days in the 30 days prior to the survey.

**Frequent Cigar Smokers** 

In 2009, **0.8%**† (95% CI: 0.2-1.3) of all MS students and **15.2%** (95% CI: 7.3-23.1) of current cigar smokers smoked a cigar, cigarillo, or little cigar on 20 or more days in the 30 days prior to the survey. For 2007, **1.0%** (95% CI: 0.5-1.5) of MS students and **14.9%** (95% CI: 7.8-21.9) of current cigar smokers smoked a cigar, cigarillo, or little cigar on 20 or more days in the 30 days prior to the survey.

**Daily Cigar Smokers** 

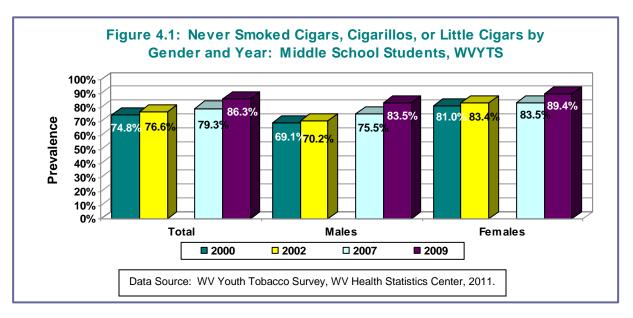
In 2009, **0.5**%† (95% CI: 0.1-0.9) of all MS students and **9.7%** (95% CI: 4.1-15.4) of current cigar smokers smoked a cigar, cigarillo, or little cigar every day in the 30 days prior to the survey. For 2007, **0.8%** (95% CI: 0.4-1.3) of MS students and **12.4%** (95% CI: 5.8-19.0) of current cigar smokers smoked a cigar, cigarillo, or little cigar every day in the 30 days prior to the survey.

<sup>†</sup>Use caution in interpreting this data. Analysis indicates that it is unreliable.

#### SIGNIFICANT FINDINGS .....

Cigar smoking among MS students is relatively rare, compared to cigarettes or SLT use, and like cigarette smoking, the prevalence of never-cigar-smokers significantly increased---15% from 2000 to 2009.

Between 2000 and 2009, the percentage of students who had never smoked a cigar significantly increased among both males and females (see Table Intro.1, Figure 4.1 below, and also Appendix B: Detailed Tables, Tables 4.1, 4.3, 4.5). There is a downward trend in the overall prevalence of current cigar smoking, and during this time, current cigar smoking did significantly decrease among MS males [2000: 11.7% (95% CI: 8.5-14.8); 2009: 6.0% (95% CI: 3.9-8.1)].



Note: 2005 YTS was not conducted among WV Middle Schools.

## **CIGAR SMOKING**

# High School

## KEY INDICATORS .....

Never Smoked Cigar In 2009, 64.9% (95% CI: 62.2-67.6) of HS students had never smoked a

cigar, cigarillo, or little cigar, even 1 or 2 puffs. For 2007, 60.0% (95% CI: 55.2-64.7) of HS students had never smoked a cigar, cigarillo, or

little cigar, even 1 or 2 puffs.

Current Cigar Smokers In 2009, 13.7% (95% CI: 11.6-15.8) of HS students smoked a cigar,

cigarillo, or little cigar on one or more days in the 30 days prior to the survey. For 2007, **16.5%** (95% CI: 13.3-19.7) of HS students smoked a cigar, cigarillo, or little cigar on one or more days in the 30 days prior to

the survey.

Frequent Cigar Smokers In 2009, 1.4% (95% CI: 0.9-2.0) of all HS students and 10.5% (95% CI:

7.8-13.2) of current cigar smokers smoked a cigar, cigarillo, or little cigar on 20 or more days in the 30 days prior to the survey. For 2007, **0.9%** (95% CI: 0.4-1.3) of HS students and **5.3%** (95% CI: 3.1-7.6) of current cigar smokers smoked a cigar, cigarillo, or little cigar on 20 or

more days in the 30 days prior to the survey.

**Daily Cigar Smokers** In 2009, **1.0%** (95% CI: 0.5-1.4) of all HS students and **7.0%** (95% CI:

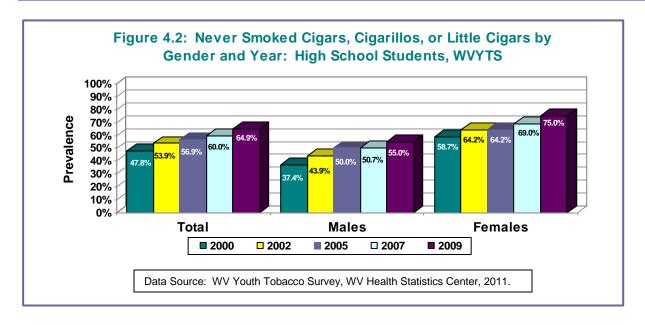
4.2-9.7) of current cigar smokers smoked a cigar, cigarillo, or little cigar every day in the 30 days prior to the survey. The 2007 data for this

measure is unreliable and not reported in this chapter.

## SIGNIFICANT FINDINGS .....

Between 2000 and 2009, the percentage of HS students who had never smoked a cigar significantly increased 36% among all students, and among males and females (see Figure 4.2 and also Appendix B: Detailed Tables, Tables 4.2, 4.4, 4.6). In 2009, the prevalence of females never smoking a cigar, cigarillo, or little cigar was significantly greater than the prevalence for males (75.0% vs. 55.0%), whereas the prevalence for current cigar smoking was significantly higher among males than females (20.2% vs.7.0%).

Current cigar smoking among all HS students has declined from 2000 to 2009, but not significantly.



## PIPE TOBACCO SMOKING

## Middle School

## KEY INDICATORS .....

**Current Pipe Smokers** 

In 2009, **2.1%** (95% CI: 1.4-2.8) of MS students smoked tobacco in a pipe on one or more days in the 30 days prior to the survey. For 2007, **3.3%** (95% CI: 2.4-4.2) of MS students smoked tobacco in a pipe on one or more days in the 30 days prior to the survey.

**Frequent Pipe Smokers** 

In 2009, **0.6%** (95% CI: 0.3-0.9) of all MS students smoked tobacco in a pipe on 20 or more days in the past 30 days. For 2007, **0.8%** (95% CI: 0.4-1.2) of MS students smoked tobacco in a pipe on 20 or more days in the 30 days prior to the survey.

## SIGNIFICANT FINDINGS .....

Very few youth are current pipe smokers. There appear to be few significant changes in the prevalence or pattern of pipe smoking across the years from 2000 to 2009 (see Appendix B: Detailed Tables, Tables 4.1, 4.3, 4.5). However, from 2000 to 2009 there has been a significant decrease in the prevalence of current pipe smoking among males in MS [2000: 6.2% (95% CI: 4.5-7.8); 2009: 2.9% (95% CI: 1.6-4.1)].

## PIPE TOBACCO SMOKING

## High School

#### KEY INDICATORS .....

**Current Pipe Smokers** 

In 2009, **3.1%** (95% CI: 2.3-4.0) of HS students smoked tobacco in a pipe on one or more days in the 30 days prior to the survey. For 2007, **5.4%** (95% CI: 3.1-7.6) of HS students smoked tobacco in a pipe on one or more days in the 30 days prior to the survey.

**Frequent Pipe Smokers** 

In 2009, **1.2%** (95% CI: 0.7-1.7) of all HS students smoked tobacco in a pipe on 20 or more days in the past 30 days. For 2007, **1.1%** (95% CI: 0.6-1.7) of HS students, and **21.2%** (95% CI: 15.9-26.6) of current pipe smokers, smoked tobacco in a pipe on 20 or more days in the 30 days prior to the survey.

#### SIGNIFICANT FINDINGS .....

The prevalence of current pipe smoking has historically been significantly greater for HS males than for HS females. In 2009, 4.9% (95% CI: 3.5-6.3) of males had smoked tobacco in a pipe in the 30 days prior to the survey, compared to 1.3% † (95% CI: 0.3-2.3) of females. No significant differences were observed across the years 2000 to 2009, but pipe smoking appears to be on the decline (see Appendix B: Detailed Tables, Tables 4.2, 4.4, 4.6).

†Use caution in interpreting this data. Analysis indicates that it is unreliable.

# CHAPTER 5 – PROGRAM AND POLICY INTERVENTIONS TO REDUCE TOBACCO USE IN WEST VIRGINIA

## A message from the WV Division of Tobacco Prevention

The 2007 & 2009 WV Youth Tobacco Survey Report describes the nature and scope of youth tobacco use in our state. The information contained here aids in the evaluation of the WV Division of Tobacco Prevention's progress in achieving its youth-related goals, by monitoring key indicators related to short and long-term outcomes. The report shows that between 2000 and 2009 WV experienced:

- A 90% increase in the percentage of high school students who have never used any form of tobacco (39.2% in 2009; was 20.6% in 2000).
- An 86% increase in the percentage of high school students who have never tried cigarettes (47.8% in 2009; was 25.7% in 2000).
- A 42% decrease in the percentage of high school students who currently smoke cigarettes (22.3% in 2009; was 38.5% in 2000). Note that this exceeds the 30% decrease for the entire nation over the same time frame.
- A 38% increase in the percentage of middle school students who have never tried cigarettes (73.1% in 2009; was 53.1% in 2000).

One factor thought to underlie these improvements is the work of Raze®---the youth-led tobacco prevention initiative in WV. Formed in 2001, Raze® "crews" are housed in schools and community organizations throughout the state. Raze® members seek to empower their peers by calling attention to the dangers of tobacco use and to the methods the tobacco industry employs to market its products. Increasingly, Raze® has been involved in the promotion of tobacco-free zones and Clean Indoor Air regulations.

The improvements summarized above are worthy of praise. However, despite this continual progress, unacceptably high levels of tobacco use persist, particularly in relation to use of smokeless tobacco products among the male youth of the state. Additional emphasis on youth tobacco prevention is indicated.

It is well documented that in order to have the greatest impact, youth programs, tobacco prevention policy interventions, media, and cessation efforts must all reinforce one another. The WV Division of Tobacco Prevention should continue to implement youth interventions in tandem with policy, media, cessation initiatives and work to better integrate these efforts. In particular, the following is suggested:

- Raze® should continue to be supported, and the activities of Raze® should be integrated into ongoing media, policy development (particularly Clean Indoor Air), and cessation programming to the greatest extent possible.
- Given the strong evidence indicating that higher cigarette taxes/higher price lead to reductions in tobacco use (particularly among youth, who have less expendable income and are therefore more sensitive to tax/price increases than adults), all efforts should be made to increase the state tobacco excise taxes in WV.

- Research reveals that strong smoke-free regulations result in lower youth smoking rates.
  Therefore, attempts should be made to continue to strengthen Clean Indoor Air
  regulations in WV, in order to protect the health of all citizens, and as a means to lower
  youth tobacco use.
- All efforts should be made to maintain funding for tobacco prevention efforts at CDC-recommended levels. For WV, \$28 million annually is recommended from CDC's Best Practices for Comprehensive Tobacco Prevention Programs (October 2007). Dramatic decreases in youth smoking rates are directly tied to the amount of funding for interventions. In states where funding has been reduced, progress made in youth smoking rates has begun to reverse (see the article "The Impact of Reductions in Tobacco Control Program Funding" at www.tobaccofreekids.org/research/factsheets/pdf/0270.pdf).
- In this report it is clear that even established youth smokers have a great desire to quit smoking (about 50% of all current smokers in MS and HS want to quit, and about 50% have tried to quit). Given the improved-though-unacceptable rates of tobacco use in the state, as well as this high prevalence of smokers who want to quit, it is essential that efforts be made to increase youth access to effective cessation programs such as the WV Quitline and *Not-On-Tobacco* youth cessation program.
- The static rates of smokeless tobacco use points to the need to devote more program effort toward reducing the use of smokeless tobacco among youth.

Although the focus of this report has been limited to youth, the tobacco problem depicted here is relevant to the economic and health status of the state as a whole. According to the recent WV report, *Tobacco Is Killing (and Costing) Us* (August 2009), about 3,785 WV adults die prematurely from smoking-related illnesses, and the economic costs for our state are about \$2.4 billion annually. For many individuals, tobacco use patterns are established before they become adults, and considering the high cost and significant challenges associated with adult tobacco cessation, it is critical that public health interventions emphasize prevention among the youth of WV.

For more information about policy and program issues please visit us online at <a href="www.wvdtp.org">www.wvdtp.org</a> or call our offices at (304) 558-0644 or toll-free at (866) 384-5250.

## **APPENDIX A - METHODOLOGY**

The 2007 WV Youth Tobacco Survey (WVYTS) was administered via pencil and paper to public MS students (grades 6-8) and public HS students (grades 9-12) in the spring of 2007. Questionnaire booklets and separate answer sheets were used. A total of 1,509 students from 33 public middle schools, and 1,198 students from 34 public high schools completed useable questionnaires. The results presented in this report are based on those questionnaires and have been weighted to be representative of all WV public school students enrolled in 2007.

The 2009 WV Youth Tobacco Survey (WVYTS) was administered via pencil and paper to public MS students (grades 6-8) and public HS students (grades 9-12) in the spring of 2009. Questionnaire booklets included space for answers, so separate answer sheets were not used. A total of 1,762 students from 33 public middle schools, and 1,686 students from 34 public high schools completed useable questionnaires. The results presented in this report are based on those questionnaires and have been weighted to be representative of all WV public school students enrolled in 2009.

#### Sampling & Weighting .....

All regular public schools containing grades 6-8 and 9-12 were included in the sampling frame. A two-stage cluster sample design was used to produce a representative sample of students. Alternative schools and special education classes were not included in the sampling parameters.

- School Level The first-stage sampling frame consisted of all schools containing any classrooms of grades 6-8 or 9-12. Schools were selected with probability proportional to school enrollment size.
- Class Level The second sampling stage consisted of systematic equal probability sampling (with a random start) of classes from each school that participated in the survey. All 2nd period classes in the selected schools were included in the sampling frame. All students in the selected classes were eligible to participate in the survey.

A sampling weight was calculated for each participant by the Centers for Disease Control and Prevention (CDC). The sampling weights adjust for any unequal probabilities of selection, non-response, and disproportionate selection of different population groups. Sampling weights adjust the data to ensure that they are representative of the population of interest (i.e., public MS students or HS students). They enable us to make accurate inferences about all public school students based on the responses of the students who participated in the survey.

#### RESPONSE RATES .....

The table below provides the Sample History for 2007 and 2009. The desired Overall Response Rate is 80%:

MIDDLE SCHOOL	2007	2009
# Schools selected	35	35
# Schools participating	33	33
School response rate	94.3%	94.3%
# Questionnaires/Students selected	2,060	2,122
# Usable questionnaires	1,509	1,762
Student response rate	73.3%	83.0%
Overall response rate	69.1%	78.3%
HIGH SCHOOL	2007	2009
# Schools selected	35	35
# Schools participating	34	34
School response rate	97.1%	97.1%
# Questionnaires/Students selected	1,862	2,065
# Usable questionnaires	1,198	1,686
Student response rate	64.3%	81.7%
Overall response rate	62.5%	79.3%

#### CLEANING AND VETTING DATA.....

Completed questionnaires were shipped to the CDC, where they were scanned and inputted into data tables. The data were "cleaned" according to CDC protocol. Some questionnaires may have been determined to be unusable, especially if obvious response patterns were used, or too many questions were left uncompleted. CDC analyzed the data to prepare data tables by sex, age and grade for each of the questions asked on the survey. The analysis done by the WV Health Statistics Center (HSC) involved using SAS code to vet, or validate, the data tables created by CDC. All data in this report have been vetted against CDC data tables, or vetted by multiple analysts, as is the case with cross-tabulated data. This allows the HSC to "mine" richer information that can be used to develop programs and interventions to reduce tobacco use in West Virginia.

#### ESTIMATES, CONFIDENCE INTERVALS, AND RELIABILITY.....

The results presented in this report are derived from surveying a sample of students rather than all public school students in the population; therefore, the results are estimates of the true values. For this reason, estimates are presented together with their associated confidence intervals. A confidence interval (CI) is a range of values around an estimate, which reflects sampling error and represents the uncertainty of the estimate. This report presents 95% CI, therefore, we can be 95% confident that the CI contains the true value that we are estimating.

Confidence intervals presented in this report were calculated by the following formulas:

95% CI = 1.96 \* SELower 95% Confidence Limit = E - CIUpper 95% Confidence Limit = E + CI

Where

SE is the standard error of the estimate produced by SAS survey procedures. E is the weighted estimate produced by SAS survey procedures.

Reliability refers to the precision of an estimate. If an estimate is termed reliable, there is confidence that the same, or a very similar, estimate would be obtained if the survey were to be repeated within the same time period and under similar circumstances. Results that do not meet one or more of the following criteria are unreliable and should be interpreted and reported with caution. Please refer to Appendix B: Detailed Tables for notation (†) of estimates that do not meet reliability criteria.

- 1) The estimate is based on responses from more than 50 respondents. A respondent is any student who answered the question at hand (ex: "Have you ever smoked cigarettes, even 1 or 2 puffs?" Whether the answer is YES or NO, all the students who answered are considered respondents, and would be represented in the denominator for the prevalence calculation).
- 2) The 95% CI of the estimate has a width or range less than 20 (e.g., 95% CI = 53.1-69.2).
- 3) The estimate has a relative standard error (RSE) less than 30.0%. The RSE is obtained by dividing the standard error of the estimate by the estimate itself. It is calculated by the SAS software.

Note: All CI in *this report* for years 2000, 2002, 2005, 2007 and 2009, have been automatically calculated from the SAS software program. The CI in this report are wider (suggesting a more conservative interpretation of confidence in the values) when compared to the 2005 YTS Report. Although the CI may be different, all prevalence data and population data are exactly the same as in previous reports.

#### SIGNIFICANCE .....

Significance is the term used in this report to describe prevalence estimates that have been tested and found to be significantly different. Statistically significant differences between estimates are determined using statistical tests such as a t-test or chi-squared test. This report uses a simpler, more conservative method for determining significance: two prevalence estimates are said to be "significantly" different when the 95% CI associated with each of the estimates do not overlap. In other words, it can be stated with 95% certainty that the difference found between the two prevalence estimates is not a random occurrence. Although this is not the "classical" statistical test of differences, this conservative method better highlights the results important to the design of effective and efficient tobacco-related interventions. Identifying differences as significant by this method targets the characteristics most strongly associated with tobacco use and directs attention to the largest changes in prevalence over time.

#### RACE AND ETHNICITY

Race and ethnicity data are collected from the YTS survey, but the population sizes (other than "white/Caucasian") are too small to provide reliable estimates for any measures in this survey.

### **DEMOGRAPHIC SUMMARY**

### West Virginia Youth Tobacco Survey 2007, Middle School

Characteristic	# Respondents	% Unweighted Sample	% Weighted Sample	
TOTAL	1509	100.0	100.0	
<u>SEX</u>				
Male	749	49.7	51.8	
Female	758	50.3	48.2	
<u>AGE</u>				
11 or younger	93	6.2	8.2	
12	408	27.1	30.2	
13	568	37.7	33.6	
14	361	23.9	22.7	
15 or older	78	5.2	5.3	
<u>GRADE</u>				
6th	365	24.3	33.0	
7th	625	41.6	33.4	
8th	511	34.0	33.6	

#### West Virginia Youth Tobacco Survey 2007, High School

Characteristic	# Respondents	% Unweighted Sample	% Weighted Sample
TOTAL	1198	100.0	100.0
<u>SEX</u>			
Male	599	50.7	50.9
Female	582	49.3	49.1
<u>AGE</u>			
14 or younger	110	9.2	8.9
15	335	28.0	23.3
16	400	33.4	27.7
17	240	20.1	25.8
18 or older	112	9.4	14.3
<u>GRADE</u>			
9th	345	29.2	28.9
10th	457	38.7	25.5
11th	218	18.4	23.6
12th	162	13.7	22.0

West Virginia Youth Tobacco Survey 2009, Middle School

Characteristic	# Respondents	% Unweighted Sample	% Weighted Sample	
TOTAL	1762	100.0	100.0	
<u>SEX</u>				
Male	850	48.7	51.5	
Female	896	51.3	48.5	
<u>AGE</u>				
11 or younger	136	7.8	10.7	
12	427	24.3	28.4	
13	653	37.2	35.0	
14	460	26.2	21.9	
15 or older	79	4.5	4.0	
<u>GRADE</u>				
6th	425	24.3	32.8	
7th	585	33.5	33.0	
8th	739	42.3	34.2	

## West Virginia Youth Tobacco Survey 2009, High School

Characteristic	# Respondents	% Unweighted Sample	% Weighted Sample
TOTAL	1686	100.0	100.0
<u>SEX</u>			
Male	843	50.2	51.5
Female	835	49.8	48.6
<u>AGE</u>			
14 or younger	124	7.4	8.9
15	443	26.3	26.3
16	473	28.1	24.7
17	369	21.9	23.1
18 or older	274	16.3	17.1
GRADE			
9th	380	22.6	28.5
10th	587	34.9	25.2
11th	340	20.2	23.5
12th	375	22.3	22.9

# **APPENDIX B - DETAILED TABLES**

This appendix presents tables of the key indicators discussed in the chapters of this report. These tables display the prevalence estimate (%), and the 95% confidence interval of the estimate (95% CI). A discussion of prevalence estimates and 95% CI is included in Appendix A. Definitions of the key indicators are included in the corresponding chapters of the report.

#### CHAPTER 1 – TOBACCO USE .....

Table 1.1: Tobacco Use by Gender: WVYTS 2007, Middle School

Voy Indicator	MALES		FEMALES		TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Used Tobacco	52.4	46.6-58.2	59.8	54.2-65.4	55.9	51.0-60.8
<b>Current Tobacco Users</b>	20.6	15.4-25.8	13.7	11.0-16.4	17.3	14.1-20.5
Cessation Program*	13.4	7.7-19.1	18.3	9.7-26.8	15.6	10.9-20.3

<sup>\*</sup>Among ever-tobacco users.

Table 1.2: Tobacco Use by Gender: WVYTS 2007, High School

Koy Indicator	MALES		FEMALES		TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Used Tobacco	28.4	23.5-33.4	35.9	28.8-43.1	32.3	27.1-37.5
<b>Current Tobacco Users</b>	45.9	39.0-52.9	30.2	24.1-36.4	38.9	33.4-44.4
Cessation Program*	14.6	9.2-19.9	12.2	5.5-18.9	13.6	8.6-18.6

<sup>\*</sup>Among ever-tobacco users.

Table 1.3: Tobacco Use by Gender: WVYTS 2009, Middle School

Voy Indicator	MALES		FEMALES		TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Used Tobacco	65.8	60.6-70.9	69.2	65.7-72.7	67.4	63.7-71.0
<b>Current Tobacco Users</b>	18.0	14.2-21.8	11.5	8.6-14.3	15.0	12.3-17.6
Cessation Program*	11.6	7.6-15.7	10.1†	2.8-17.3	11.3	7.6-14.9

<sup>\*</sup>Among ever-tobacco users.

Table 1.4: Tobacco Use by Gender: WVYTS 2009, High School

Voy Indicator	MALES		FEMALES		TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Used Tobacco	34.9	31.0-38.8	43.7	38.0-49.4	39.2	35.1-43.3
<b>Current Tobacco Users</b>	40.8	36.4-45.2	24.3	20.2-28.3	32.6	28.9-36.3
Cessation Program*	6.9	3.8-10.0	8.4	5.4-11.4	7.5	5.2-9.8

<sup>\*</sup>Among ever-tobacco users.

 $<sup>\</sup>dagger$ Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or RSE is greater than 30%.

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or RSE is greater than 30%.

 Table 1.5: Tobacco Use by Year: WVYTS, Middle School (95% confidence interval in parentheses)

Van Indiantan	2000	2002	2005	2007	2009
Key Indicator	%	%	%	%	%
Never Used Tobacco	46.0 (42.2-49.7)	47.3 (44.0-50.6)		55.9 (51.0-60.8)	67.4 (63.7-71.0)
<b>Current Tobacco Users</b>	24.8 (21.2-28.4)	22.8 (20.5-25.1)	Not available	17.3 (14.1-20.5)	15.0 (12.3-17.6)
Cessation Program*	10.9 (7.9-13.8)	11.5 (9.9-13.1)		15.6 (10.9-20.3)	11.3 (7.6-14.9)

<sup>\*</sup>Among ever-tobacco users.

 Table 1.6: Tobacco Use by Year: WVYTS, High School (95% confidence interval in parentheses)

Van Indiantan	2000	2002	2005	2007	2009
Key Indicator	%	%	%	%	%
Never Used Tobacco	20.6	24.1	30.1	32.3	39.2
	(16.9-24.3)	(20.8-27.5)	(25.7-34.4)	(27.1-37.5)	(35.1-43.3)
<b>Current Tobacco Users</b>	47.7	41.7	35.8	38.9	32.6
	(43.4-51.9)	(38.2-45.2)	(31.3-40.3)	(33.4-44.4)	(28.9-36.3)
Cessation Program*	11.0	7.2	14.8	13.6	7.5
	(7.7-14.3)	(5.1-9.3)	(10.6-19.1)	(8.6-18.6)	(5.2-9.8)

<sup>\*</sup>Among ever-tobacco users

## CHAPTER 2 - CIGARETTE SMOKING

Table 2.1: Cigarette Smoking by Gender: WVYTS 2007, Middle School

V I - 1 - 1 - 1	1	MALES	FEMALES		TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Smoked Cigarette	64.9	58.6-71.2	64.8	58.1-71.5	64.8	59.2-70.4
Current Cigarette Smokers	11.1	7.5-14.8	10.9	8.0-13.8	11.1	8.5-13.7
Frequent Cigarette Smokers	4.1	2.1-6.2	3.9	2.1-5.7	4.0	2.5-5.6
Daily Cigarette Smokers	2.9†	1.1-4.8	2.5	1.2-3.8	2.7	1.4-4.0
School Cigarette Smokers						
Total Students	3.2	1.6-4.8	3.6	1.9-5.4	3.5	2.4-4.6
Current Smokers	26.4	16.7-36.2	27.4	19.2-35.5	27.3	20.9-33.6
First Smoked < Age 13*	52.4	46.2-58.5	53.5†	40.6-66.5	52.8	46.1-59.6
Want to Quit						
Current Smokers	57. <b>4</b> †	39.9-74.8	50.1†	40.1-60.2	53.8†	43.5-64.1
Frequent Smokers	43.7†	11.1-76.3	51.0†	30.3-71.6	47.2†	32.3-62.2
Daily Smokers	37.5†	0.0-80.2	47.7†	24.0-71.4	42.3†	17.8-66.8
Tried to Quit						
Current Smokers	49.4†	34.1-64.8	58.2†	47.5-69.0	53.8†	43.5-64.1
Frequent Smokers	54.2†	25.3-83.1	51.8†	37.0-66.7	53.0†	35.5-70.5
Daily Smokers	47.3†	6.4-88.1	63.3†	49.5-77.0	55.1†	36.0-74.3
Could Not Quit						
Current Smokers	28.1†	15.4-40.8	29.9†	17.8-42.0	29.0†	17.8-40.1
Frequent Smokers	44.2†	17.2-71.3	46.7†	21.6-71.7	45.4†	22.8-68.1
Daily Smokers	48.0†	12.9-83.2	47.8†	15.5-80.1	47.9†	23.4-72.4
Cessation Program*	13.8†	7.2-20.3	17.8	8.9-26.7	15.6	10.8-20.3

<sup>\*</sup>Among ever-cigarette smokers.

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or the RSE is greater than 30%, and/or the sample size <50.

Table 2.2: Cigarette Smoking by Gender: WVYTS 2007, High School

V - I - I' - A	1	MALES	FE	EMALES	TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Smoked Cigarette	37.3	32.6-41.9	40.2	31.7-48.7	38.9	32.7-45.0
Current Cigarette Smokers	30.2	24.6-35.7	26.6	20.9-32.2	28.8	23.8-33.8
Frequent Cigarette Smokers	13.2	8.6-17.8	11.7	6.9-16.4	12.5	8.5-16.4
Daily Cigarette Smokers	8.1	5.2-10.9	7.5	4.4-10.7	7.8	5.1-10.5
School Cigarette Smokers						
Total Students	13.0	7.2-18.8	8.2	5.0-11.5	11.2	7.5-15.0
Current Smokers	39.3†	25.7-52.9	31.7	21.9-41.5	37.2	28.3-46.2
First Smoked < Age 13*	38.8	30.9-46.6	30.5	23.6-37.3	34.8	28.5-41.1
Want to Quit						
Current Smokers	56.2†	45.4-67.0	53.2†	42.0-64.5	53.8†	43.8-63.9
Frequent Smokers	52.1†	38.9-65.2	54.7†	37.2-72.2	52.9†	41.3-64.4
Daily Smokers	53.6†	36.9-70.3	61.7†	39.3-84.1	56.7†	41.6-71.8
Tried to Quit						
Current Smokers	54.5	47.6-61.5	60.1	51.0-69.3	56.2	51.5-60.9
Frequent Smokers	54.7†	43.2-66.2	64.3†	47.9-80.7	58.3	51.1-65.4
Daily Smokers	52.8†	36.8-68.8	58.7†	35.7-81.8	54.7	45.4-64.1
Could Not Quit						
Current Smokers	22.8	15.1-30.6	22.4†	10.6-34.3	24.3	16.7-31.9
Frequent Smokers	32.6†	19.2-46.0	38.0†	22.6-53.4	35.2	27.3-43.1
Daily Smokers	30.4†	9.2-51.6	54.4†	35.8-73.0	41.8†	31.7-52.0
Cessation Program*	14.6	9.3-20.0	12.2†	5.4-19.0	13.5	8.5-18.5

<sup>\*</sup>Among ever-cigarette smokers.

 $<sup>\</sup>dagger$ Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or the RSE is greater than 30%. .

Table 2.3: Cigarette Smoking by Gender: WVYTS 2009, Middle School

77 7 11 /	N	MALES	FE	MALES	TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Smoked Cigarette	74.3	70.7-77.9	72.1	68.7-75.4	73.1	70.2-76.0
Current Cigarette Smokers	8.7	6.6-10.8	8.9	6.8-11.1	8.9	7.5-10.3
Frequent Cigarette Smokers	2.6	1.7-3.6	2.6	1.7-3.5	2.6	2.0-3.3
Daily Cigarette Smokers	1.7	0.9-2.6	1.1	0.6-1.6	1.5	1.0-1.9
School Cigarette Smokers						
Total Students	1.9	1.1-2.8	1.7	1.0-2.5	1.8	1.2-2.4
Current Smokers	20.2	10.9-29.6	13.7†	4.8-22.5	16.7	10.9-22.5
First Smoked < Age 13*	54.5	46.9-62.1	53.7	47.7-59.8	54.3	49.7-58.8
Want to Quit						
Current Smokers	43.2†	31.5-54.8	57.2†	46.6-67.7	50.2	42.6-57.9
Frequent Smokers	34.8†	14.6-54.9	49.8†	35.6-64.0	43.7†	31.0-56.4
Daily Smokers	37.8†	11.3-64.3	52.7†	15.9-89.5	46.0†	24.2-67.9
Tried to Quit						
Current Smokers	56.1†	39.7-72.4	62.2†	52.0-72.5	59.8†	48.4-71.1
Frequent Smokers	35.8†	15.8-55.8	52.3†	34.0-70.6	45.0†	29.3-60.8
Daily Smokers	33.6†	10.6-56.6	50.7†	9.8-91.5	42.0†	18.8-65.1
Could Not Quit						
Current Smokers	25.2	16.2-34.1	29.5†	17.4-41.5	26.7	17.9-35.5
Frequent Smokers	46.6†	26.4-66.8	45.3†	21.1-69.4	45.2†	27.8-62.5
Daily Smokers	54.6†	28.1-81.1	59.8†	19.5-100.0	54.7†	30.0-79.4
Cessation Program*	11.1	5.5-16.7	9.7†	3.4-15.9	10.8	6.7-14.9

<sup>\*</sup>Among ever-cigarette smokers.

 $<sup>\</sup>dagger$ Use caution in interpreting this estimate – the 95% CI is wider than 20, and/or the sample size is <50.

Table 2.4: Cigarette Smoking by Gender: WVYTS 2009, High School

V I - l' /	1	MALES	FE	EMALES	,	TOTAL
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Smoked Cigarette	47.4	42.9-52.0	47.9	42.0-53.9	47.8	43.1-52.5
Current Cigarette Smokers	23.7	19.3-28.2	20.9	17.6-24.3	22.3	19.0-25.7
Frequent Cigarette Smokers	11.5	7.5-15.5	9.6	7.0-12.1	10.6	8.0-13.2
Daily Cigarette Smokers	8.0	5.2-10.7	7.7	5.5-9.9	7.9	6.1-9.7
School Cigarette Smokers						
Total Students	8.2	4.8-11.6	4.4	2.4-6.3	6.3	4.0-8.6
Current Smokers	31.6†	20.8-42.4	20.6	11.9-29.4	26.5	18.4-34.7
First Smoked < Age 13*	27.7	22.5-32.8	25.5	20.8-30.1	26.6	22.4-30.7
Want to Quit						
Current Smokers	47.7	38.2-57.2	51.2	43.5-58.9	49.5	43.6-55.4
Frequent Smokers	46.5†	31.5-61.6	51.1†	39.8-62.3	48.8†	38.4-59.1
Daily Smokers	41.3†	23.9-58.7	49.3†	35.9-62.8	45.4†	34.2-56.6
Tried to Quit						
Current Smokers	48.2	40.3-56.0	50.9	42.1-59.7	49.5	43.0-56.0
Frequent Smokers	45.8†	35.5-56.2	52.3†	39.9-64.7	48.9	39.8-58.0
Daily Smokers	40.4†	25.3-55.5	46.7†	32.4-61.0	43.8†	31.4-56.1
Could Not Quit						
Current Smokers	15.9	12.1-19.6	20.9	13.7-28.2	18.4	14.9-21.9
Frequent Smokers	24.3	15.9-32.6	37.0†	24.3-49.6	30.4	23.7-37.0
Daily Smokers	29.9†	19.2-40.6	39.1†	24.8-53.5	34.9	26.9-42.9
Cessation Program*	5.9	3.1-8.6	7.5	4.3-10.7	6.6	4.4-8.7

<sup>\*</sup>Among ever-cigarette smokers.

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is wider than 20, and/or the RSE is greater than 30%, and/or the sample size is <50.

Table 2.5: Cigarette Smoking by Year: WVYTS, Middle School (95% confidence interval in parentheses)

Key Indicator	2000	2002	2005	2007	2009
1103 1110100001	%	%	%	%	%
Navou Smalad Cigaretta	53.1	55.5		64.8	73.1
Never Smoked Cigarette	(49.4-56.8)	(52.2-58.9)		(59.2-70.4)	(70.2-76.0)
C	18.1	16.3		11.1	8.9
Current Cigarette Smokers	(15.4-20.7)	(14.2-18.3)		(8.5-13.7)	(7.5-10.3)
Engagent Cigaretta Smalrara	7.4	5.4		4.0	2.6
Frequent Cigarette Smokers	(5.5-9.3)	(4.4-6.3)		(2.5-5.6)	(2.0-3.3)
Doily Cigaretta Smalrona	5.7	3.7		2.7	1.5
Daily Cigarette Smokers	(4.1-7.3)	(2.9-4.5)		(1.4-4.0)	(1.0-1.9)
School Cigarette Smokers					
Total Students	4.8	4.9		3.5	1.8
Total Students	(3.6-6.0)	(3.8-5.9)		(2.4-4.6)	(1.2-2.4)
Current Smokers	23.9	27.7	Not Available	27.3	16.7
Current Smokers	(18.1-29.8)	(23.1-32.2)		(20.9-33.6)	(10.9-22.5)
First Smalred < Age 12*	60.0	57.3		52.8	54.3
First Smoked < Age 13*	(56.1-63.9)	(55.4-59.2)		(46.1-59.6)	(49.7-58.8)
Went to Ouit**	60.0	50.8		53.8†	50.2
Want to Quit**	(52.3-67.7)	(47.9-53.7)		(43.5-64.1)	(42.6-57.9)
Tried to Ouit**	53.3	56.7		53.8†	59.8†
Tried to Quit**	(45.7-60.8)	(54.3-59.1)		(43.5-64.1)	(48.4-71.1)
Could Not Ouit**	35.0	28.2		29.0†	26.7
Could Not Quit**	(25.4-44.7)	(25.9-30.5)		(17.8-40.1)	(17.9-35.5)
Cessation Program*	9.2	11.6		15.6	10.8
Cessauon Frogram"	(6.6-11.9)	(9.9-13.2)		(10.8-20.3)	(6.7-14.9)

<sup>\*</sup> Among ever-cigarette smokers.

 Table 2.6: Cigarette Smoking by Year: WVYTS, High School (95% confidence interval in parentheses)

Key Indicator	2000	2002	2005	2007	2009
racy indicator	%	%	%	%	%
Name Constant Character	25.7	30.3	36.7	38.9	47.8
Never Smoked Cigarette	(21.4-30.0)	(26.6-34.1)	(31.9-41.6)	(32.7-45.0)	(43.1-52.5)
Command Circumsta Soundary	38.5	33.7	27.8	28.8	22.3
Current Cigarette Smokers	(34.9-42.1)	(30.4-36.9)	(23.7-32.0)	(23.8-33.8)	(19.0-25.7)
Engagent Ciagnetta Smaltana	22.1	18.7	14.8	12.5	10.6
Frequent Cigarette Smokers	(18.7-25.6)	(15.2-22.2)	(11.5-18.2)	(8.5-16.4)	(8.0-13.2)
Doile Cigonotto Smoleona	17.2	15.8	11.5	7.8	7.9
Daily Cigarette Smokers	(14.1-20.3)	(12.5-19.2)	(8.5-14.6)	(5.1-10.5)	(6.1-9.7)
School Cigarette Smokers					
T-4-1 C4-14-	17.3	13.4	9.5	11.2	6.3
Total Students	(13.4-21.2)	(10.6-16.2)	(6.4-12.5)	(7.5-15.0)	(4.0-8.6)
Current Smokers	43.3	37.9	31.7	37.2	26.5
Current Smokers	(34.4- 52.1)	(29.9-45.9)	(24.2-39.2)	(28.3-46.2)	(18.4-34.7)
First Smalred & Age 12*	40.5	35.7	36.0	34.8	26.6
First Smoked < Age 13*	(36.0-45.1)	(31.8-39.5)	(30.7-41.3)	(28.5-41.1)	(22.4-30.7)
Want to Quit**	59.4	59.2	55.0	53.8†	49.5
want to Quit	(52.5-66.3)	(53.7-64.6)	(46.2-63.8)	(43.8-63.9)	(43.6-55.4)
Tried to Onit**	56.1	57.9	55.0	56.2	49.5
Tried to Quit**	(50.7-61.5)	(53.1-62.6)	(49.4-60.7)	(51.5-60.9)	(43.0-56.0)
Could Not Onit**	32.0	27.5	31.7	24.3	18.4
Could Not Quit**	(26.4-37.7)	(19.4-35.5)	(26.2-37.3)	(16.7-31.9)	(14.9-21.9)
Cossetion Program*	10.4	6.9	14.6	13.5	6.6
Cessation Program*	(7.3-13.6)	(4.7-9.1)	(10.0-19.2)	(8.5-18.5)	(4.4-8.7)

<sup>\*</sup> Among ever-cigarette smokers.

<sup>\*\*</sup> Among current cigarette smokers.

<sup>†</sup>Use caution in interpreting this estimate - the 95% CI is greater than 20, and/or the RSE is greater than 30%.

<sup>\*\*</sup> Among current cigarette smokers.

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or the RSE is greater than 30%.

#### CHAPTER 3 – SMOKELESS TOBACCO USE

Table 3.1: Smokeless Tobacco (SLT) Use by Gender: WVYTS 2007, Middle School

Key Indicator	M	ALES	FEMALES		TOTAL	
ixcy indicator	%	95% CI	%	95% CI	%	95% CI
Never Used SLT	70.3	64.8-75.9	89.9	86.6-93.2	79.7	75.7-83.7
Current SLT Users	13.1	8.8-17.3	2.7	1.3-4.0	8.1	5.8-10.5
Frequent SLT Users	5.1†	1.6-8.6	0.2†	0.0-0.6	2.8†	0.9-4.6
Daily SLT Users	3.5†	0.1-6.9	0.1†	0.0-0.4	1.9†	0.1-3.7
School SLT Users						
Total Students	7.3	3.6-11.0	1.9	1.0-2.9	4.7	2.7-6.7
Current SLT Users	48.7†	32.4-64.9	49.3†	22.2-76.4	48.4†	34.0-62.8
First Used SLT < Age 13*	69.0	62.2-75.8	53.2†	40.2-66.3	65.1	58.5-71.7

<sup>\*</sup>Among students who had ever used chewing tobacco, snuff, or dip.

Table 3.2: Smokeless Tobacco (SLT) Use by Gender: WVYTS 2007, High School

V. J. J. J	MA	LES	FEMALES		TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Used SLT	55.3	48.6-61.9	82.5	78.5-86.5	69.0	64.6-73.4
Current SLT Users	26.6	19.9-33.4	3.1	1.5-4.7	15.6	11.7-19.5
Frequent SLT Users	12.2	8.0-16.3	0.2†	0.0-0.6	6.1	4.0-8.2
Daily SLT Users	8.7	4.8-12.5	0.1†	0.0-0.4	4.3	2.4-6.3
School SLT Users						
Total Students	18.0	13.5-22.5	1.5†	0.2-2.8	10.7	7.6-13.8
Current SLT Users	61.1	53.2-69.1	30.8†	0.0-67.3	60.0	50.9-69.0
First Used SLT < Age 13*	38.2	28.8-47.6	35.0†	22.1-47.9	37.6	28.7-46.5

<sup>\*</sup>Among students who had ever used chewing tobacco, snuff, or dip.

Table 3.3: Smokeless Tobacco (SLT) Use by Gender: WVYTS 2009, Middle School

Voy Indicator	N.	IALES	FEMALES		TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Used SLT	78.9	75.4-82.5	92.0	89.8-94.2	85.3	83.2-87.4
Current SLT Users	12.2	8.9-15.5	2.8	2.0-3.7	7.7	5.9-9.5
Frequent SLT Users	3.1	1.6-4.6	0.5†	0.0-0.9	1.9	1.0-2.7
Daily SLT Users	2.4	1.1-3.6	0.4†	0.0-0.8	1.4	0.7-2.1
School SLT Users						
Total Students	5.1	3.1-7.2	0.7†	0.2-1.2	3.1	2.0-4.1
Current SLT Users	38.3†	28.1-48.4	19.5†	4.4-34.5	35.7	27.5-43.9
First Used SLT < Age 13*	69.9	63.0-76.7	69.5†	56.9-82.0	69.6	61.9-77.3

<sup>\*</sup>Among students who had ever used chewing tobacco, snuff, or dip.

<sup>†</sup>Use caution in interpreting this estimate - the 95% CI is greater than 20, and/or the RSE is greater than 30%.

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or RSE is greater than 30%.

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or the RSE is greater than 30%.

Table 3.4: Smokeless Tobacco (SLT) Use by Gender: WVYTS 2009, High School

V I 1 4	M	ALES	FEI	MALES	TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Used SLT	57.1	51.2-63.0	88.6	85.8-91.4	72.4	68.8-76.1
Current SLT Users	24.8	20.8-28.8	2.6	1.2-4.0	13.9	11.6-16.2
Frequent SLT Users	11.4	8.6-14.3	0.8†	0.2-1.4	6.2	4.8-7.6
Daily SLT Users	9.6	7.0-12.1	0.4†	0.0-1.1	5.1	3.8-6.3
School SLT Users						
Total Students	15.7	12.0-19.5	1.9†	0.7-3.1	8.9	7.0-10.9
Current SLT Users	61.7	53.0-70.4	53.1†	27.8-78.5	60.9	52.3-69.6
First Used SLT < Age 13*	36.4	30.3-42.6	11.3	6.4-16.3	31.2	26.5-35.9

<sup>\*</sup>Among students who had ever used chewing tobacco, snuff, or dip.

Table 3.5: Smokeless Tobacco Use by Year: WVYTS, Middle School, MALES ONLY

(95% confidence interval in parentheses)

Voy Indicator	2000	2002	2005	2007	2009
Key Indicator	%	%	%	%	%
Never Used Smokeless	68.3	70.0		70.3	78.9
Tobacco	(64.8-71.7)	(66.9-73.2)	Not available	(64.8-75.9)	(75.4-82.5)
Current Smokeless	14.9	12.9	Not available	13.1	12.2
Tobacco Users	(11.8-17.9)	(10.9-14.9)		(8.8-17.3)	(8.9-15.5)

Table 3.6: Smokeless Tobacco Use by Year: WVYTS, High School, MALES ONLY

(95% confidence interval in parentheses)

Var Indiantan	2000	2002	2005	2007	2009
Key Indicator	%	%	%	%	%
Never Used Smokeless	51.8	53.8	60.2	55.3	57.1
Tobacco	(46.1-57.4)	(48.6-59.1)	(54.4-66.1)	(48.6-61.9)	(51.2-63.0)
Current Smokeless	26.5	21.5	22.0	26.6	24.8
Tobacco Users	(21.6-31.5)	(17.9-25.1)	(17.6-26.4)	(19.9-33.4)	(20.8-28.8)

Table 3.7: Snus Use by Gender: WVYTS 2009, Middle School

Key Indicator	M	ALES	FEMALES		TOTAL	
Key mulcator	%	95% CI	%	95% CI	%	95% CI
Never Used Snus	86.8	83.1-90.5	96.1	94.7-97.4	91.3	89.2-93.4
Current Snus Users	7.1	4.6-9.5	1.9	1.2-2.6	4.6	3.3-5.9
Frequent Snus Users	1.2†	0.2-2.1	0.4†	0.0-0.8	0.8†	0.2-1.3
Daily Snus Users	0.9†	0.2-1.7	0.3†	0.0-0.6	0.6†	0.2-1.0

<sup>†</sup>Use caution in interpreting this estimate - the 95% CI is greater than 20, and/or the RSE is greater than 30%.

Table 3.8: Snus Use by Gender: WVYTS 2009, High School

Key Indicator	MALES		FEMALES		TOTAL	
	%	95% CI	%	95% CI	%	95% CI
Never Used Snus	72.3	67.5-77.2	94.3	92.3-96.4	83.0	80.0-86.0
Current Snus Users	15.3	11.7-18.9	1.9	0.9-2.8	8.7	6.6-10.8
Frequent Snus Users	2.9	1.8-4.1	0.1†	0.0-0.5	1.6	1.0-2.1
Daily Snus Users	2.7	1.5-3.9			1.4	0.8-2.0

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or the RSE is greater than 30%.

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or the RSE is greater than 30%.

#### CHAPTER 4 - CIGAR AND PIPE SMOKING

Table 4.1: Cigar and Pipe Smoking by Gender: WVYTS 2007, Middle School

V. J. P. A.	MALES		FEMALES		TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Smoked Cigar	75.5	70.9-80.2	83.5	80.4-86.6	79.3	75.8-82.8
Current Cigar Smokers	7.8	5.1-10.6	5.6	3.7-7.6	6.8	5.0-8.5
Frequent Cigar Smokers	1.5	0.6-2.4	0.5†	0.0-1.0	1.0	0.5-1.5
Daily Cigar Smokers	1.3†	0.5-2.0	0.4†	0.0-0.9	0.8	0.3-1.3
Current Pipe Smokers	4.6	2.8-6.5	1.9†	0.4-3.4	3.3	2.2-4.4
Frequent Pipe Smokers	1.3†	0.2-2.5	0.2†	0.0-0.5	0.8†	0.2-1.4

<sup>†</sup>Use caution in interpreting this estimate - the 95% CI is greater than 20, and/or the RSE is greater than 30%.

Table 4.2: Cigar and Pipe Smoking by Gender: WVYTS 2007, High School

Key Indicator	MALES		FEMALES		TOTAL	
	%	95% CI	%	95% CI	%	95% CI
Never Smoked Cigar	50.7	45.1-56.3	69.0	62.4-75.7	60.0	55.2-64.7
Current Cigar Smokers	22.9	18.5-27.2	8.6	5.8-11.4	16.5	13.3-19.7
Frequent Cigar Smokers	1.4†	0.5-2.4	0.3†	0.0-0.8	0.9	0.4-1.3
Daily Cigar Smokers	1.0†	0.0-2.0	0.1†	0.0-0.5	0.6†	0.2-1.0
Current Pipe Smokers	7.0	4.4-9.5	2.0†	0.5-3.6	5.4	3.1-7.6
Frequent Pipe Smokers	1.9	1.0-2.9	0.4†	0.0-0.9	1.1	0.6-1.7

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or the RSE is greater than 30%.

Table 4.3: Cigar and Pipe Smoking by Gender: WVYTS 2009, Middle School

V I . I' 4	MALES		FEMALES		TOTAL	
Key Indicator	%	95% CI	%	95% CI	%	95% CI
Never Smoked Cigar	83.5	80.2-86.7	89.4	87.6-91.2	86.3	84.2-88.4
Current Cigar Smokers	6.0	3.9-8.1	4.0	2.9-5.1	5.0	3.7-6.3
Frequent Cigar Smokers	1.1†	0.2-1.9	0.5†	0.0-1.0	0.8†	0.2-1.3
Daily Cigar Smokers	0.7†	0.1-1.4	0.3†	0.0-0.7	0.5†	0.1-0.9
Current Pipe Smokers	2.9	1.6-4.1	1.2	0.6-1.8	2.1	1.4-2.8
Frequent Pipe Smokers	0.9†	0.2-1.6	0.3†	0.0-0.7	0.6	0.3-0.9

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or the RSE is greater than 30%.

Table 4.4: Cigar and Pipe Smoking by Gender: WVYTS 2009, High School

Key Indicator	MALES		FEMALES		TOTAL	
	%	95% CI	%	95% CI	%	95% CI
Never Smoked Cigar	55.0	50.6-59.4	75.0	70.7-79.4	64.9	62.2-67.6
Current Cigar Smokers	20.2	17.1-23.2	7.0	4.8-9.2	13.7	11.6-15.8
Frequent Cigar Smokers	2.0	1.0-3.0	0.9	0.5-1.2	1.4	0.9-2.0
Daily Cigar Smokers	1.5	0.7-2.4	0.3	0.3-0.4	1.0	0.5-1.4
Current Pipe Smokers	4.9	3.5-6.3	1.3†	0.3-2.3	3.1	2.3-4.0
Frequent Pipe Smokers	1.9	1.1-2.8	0.4†	0.0-0.9	1.2	0.7-1.7

<sup>†</sup>Use caution in interpreting this estimate - the 95% CI is greater than 20, and/or the RSE is greater than 30%.

Table 4.5: Cigar and Pipe Smoking by Year: WVYTS Middle School (95% confidence interval in parentheses)

Van Indiantan	2000	2002	2005	2007	2009
Key Indicator	%	%	%	%	%
Never Smoked Cigar	<b>74.8</b> (71.5-78.0)	<b>76.6</b> (74.8-78.3)		<b>79.3</b> (75.8-82.8)	<b>86.3</b> (84.2-88.4)
Current Cigar Smokers	<b>8.3</b> (6.3-10.4)	<b>7.4</b> (6.7-8.1)		<b>6.8</b> (5.0-8.5)	<b>5.0</b> (3.7-6.3)
Frequent Cigar Smokers	1.0 (0.4-1.6)	<b>0.9</b> (0.7-1.2)	Not Available	1.0 (0.5-1.5)	<b>0.8</b> † (0.2-1.3)
Daily Cigar Smokers	<b>0.8</b> † (0.3-1.3)	<b>0.5</b> (0.4-0.7)	Not Available	<b>0.8</b> (0.3-1.3)	<b>0.5</b> † (0.1-0.9)
Current Pipe Smokers	<b>3.7</b> (2.8-4.7)	<b>4.1</b> (3.7-4.6)		<b>3.3</b> (2.2-4.4)	<b>2.1</b> (1.4-2.8)
Frequent Pipe Smokers	<b>0.7</b> † (0.2-1.2)	<b>0.6</b> (0.4-0.7)		<b>0.8</b> † (0.2-1.4)	<b>0.6</b> (0.3-0.9)

<sup>†</sup>Use caution in interpreting this estimate – the 95% CI is greater than 20, and/or RSE is greater than 30%.

Table 4.6: Cigar and Pipe Smoking by Year: WVYTS High School (95% confidence interval in parentheses)

Von Indianton	2000	2002	2005	2007	2009
Key Indicator	%	%	%	%	%
Never Smoked Cigar	<b>47.8</b> (43.6-52.1)	<b>53.9</b> (48.9-58.8)	<b>56.9</b> (52.3-61.5)	<b>60.0</b> (55.2-64.7)	<b>64.9</b> (62.2-67.6)
Current Cigar Smokers	<b>17.2</b> (14.1-20.3)	<b>14.9</b> (12.1-17.8)	<b>13.2</b> (10.2-16.2)	<b>16.5</b> (13.3-19.7)	<b>13.7</b> (11.6-15.8)
Frequent Cigar Smokers	1.5 (0.8-2.1)	1.3† (0.5-2.2)	1.4 (0.6-2.2)	<b>0.9</b> (0.4-1.3)	<b>1.4</b> (0.9-2.0)
Daily Cigar Smokers	<b>1.1</b> (0.5-1.6)	<b>0.6</b> † (0.2-1.1)	<b>0.8</b> (0.3-1.4)	<b>0.6</b> † (0.2-1.0)	<b>1.0</b> (0.5-1.4)
Current Pipe Smokers	<b>5.0</b> (3.6-6.5)	<b>4.1</b> (2.3-5.9)	<b>3.5</b> (2.0-5.1)	<b>5.4</b> (3.1-7.6)	<b>3.1</b> (2.3-4.0)
Frequent Pipe Smokers	1.0† (0.2-1.7)	<b>0.6</b> † (0.1-1.1)	1.0† (0.3-1.6)	<b>1.1</b> (0.6-1.7)	<b>1.2</b> (0.7-1.7)

<sup>†</sup>Use Caution in interpreting this estimate – the 95% CI is greater than 20, and/or RSE is greater than 30%.

# **APPENDIX C - 2009 WVYTS QUESTIONNAIRE**

#### START HERE THE FIRST QUESTIONS ASK FOR SOME BACKGROUND INFORMATION ABOUT YOU.

#### 1. How old are you?

11 years old or younger

12 years old

13 years old

14 years old

15 years old 16 years old

17 years old

18 years old or older

#### 2. What is your gender?

Female

Male

#### 3. What grade are you in?

7th

8th 9th

10th

11th

Ungraded or other grade

#### 4. How do you describe yourself? (You can CHOOSE ONE ANSWER, or MORE THAN ONE)

American Indian or Alaskan Native

Asian

Black or African American

Hispanic or Latino

Native Hawaiian or Other Pacific

Islander

White

#### 5. Which one of these groups BEST describes you? (CHOOSE ONLY ONE ANSWER)

American Indian or Alaska Native

Asian

Black or African American

Hispanic or Latino

Native Hawaiian or Other Pacific

Islander

White

#### 6. During the last 4 weeks, about how much money did you have each week to spend any way you want to?

None

Less than \$1

\$1 to \$5

\$6 to \$10

\$11 to \$20

\$21 to \$50

More than \$50

#### THE NEXT GROUP OF OUESTIONS ASKS ABOUT TOBACCO USE.

#### **Cigarette Smoking**

#### 7. Have you ever tried cigarette smoking, even one or two puffs?

No

#### 8. How old were you when you smoked a whole cigarette for the first time?

I have never smoked a whole

cigarette

8 years old or younger

9 or 10 years old

11 or 12 years old

13 or 14 years old

15 or 16 years old

17 years old or older

#### 9. About how many cigarettes have you smoked in your entire life?

None

1 or more puffs but never a whole

cigarette

1 cigarette

2 to 5 cigarettes

6 to 15 cigarettes (about 1/2 a pack

total)

16 to 25 cigarettes (about 1 pack

total)

26 to 99 cigarettes (more than 1

pack, but less than 5 packs)

100 or more cigarettes (5 or more

packs)

#### 10. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?

Yes

No

#### 11. During the past 30 days, on how many days did you smoke cigarettes?

0 days

1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days

20 to 29 days

All 30 days

#### 12. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?

I did not smoke cigarettes during the

past 30 days

Less than 1 cigarette per day

1 cigarette per day

2 to 5 cigarettes per day

6 to 10 cigarettes per day

11 to 20 cigarettes per day

More than 20 cigarettes per day

#### 13. During the past 30 days, what brand of cigarettes did you usually smoke? (CHOOSE ONLY ONE ANSWER)

I did not smoke cigarettes during the

past 30 days

I do not have a usual brand

Camel Marlboro

Newport

Virginia Slims

GPC, Basic, or Doral

Some other brand

#### 14. During the past 30 days, were any of the cigarettes that you smoked flavored to taste like candy, fruit, chocolate, or other sweets?

I did not smoke cigarettes during the

past 30 days

Yes

No

#### 15. During the past 30 days, how did you usually get your own cigarettes? (CHOOSE ONLY ONE ANSWER)

I did not smoke cigarettes during the

past 30 days

I bought them in a store such as a

convenience store, supermarket,

discount store, or gas station

I bought them from a vending

machine

I gave someone else money to buy

them for me

I borrowed (or bummed) them from

someone else

A person 18 years old or older gave

them to me

I took them from a store or family

member

I got them some other way

#### 16. During the past 30 days, where did you buy the last pack of cigarettes you bought? (CHOOSE ONLY ONE ANSWER)

I did not buy a pack of cigarettes

during the past 30 days

A gas station

A convenience store

A grocery store

A drugstore

A vending machine

I bought them over the Internet

Other

#### 17. When you bought or tried to buy cigarettes in a store during the past 30 days, were you ever asked to show proof of age?

I did not try to buy cigarettes in a

store during the past 30 days

Yes, I was asked to show proof of

No, I was not asked to show proof of

#### 18. During the past 30 days, did anyone ever refuse to sell you cigarettes because of

your age?

I did not try to buy cigarettes in a store during the past 30 days Yes, someone refused to sell me

cigarettes because of my age

No, no one refused to sell me cigarettes because of my age

#### 19. During the past 30 days, on how many days did you smoke cigarettes on school property?

0 days 1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days

20 to 29 days

All 30 days

#### 20. When was the last time you smoked a cigarette, even one or two puffs?

I have never smoked even one or two

Earlier today

Not today but sometime during the

past 7 days

Not during the past 7 days but

sometime during the past 30 days

Not during the past 30 days but

sometime during the past 6 months Not during the past 6 months but

sometime during the past year

1 to 4 years ago

5 or more years ago

#### 21. Do you want to stop smoking cigarettes?

I do not smoke now

Yes

No

#### 22. During the past 12 months, did you see a doctor, dentist, nurse, or other health professional for any kind of care?

Yes

No

Don't know / Not sure

#### 23. During the past 12 months, did any doctor, dentist , nurse, or other health professional ask you if you smoke?

Yes

No

Don't know / not sure

#### 24. During the past 12 months, did any doctor, dentist, nurse, or other health professional advise you not to smoke?

Yes

No

Don't know / not sure

#### 25. During the past 12 months, did you ever try to quit smoking cigarettes?

I did not smoke during the past 12

months

Yes

#### 26. How many times during the past 12 months have you stopped smoking for one day or longer because you were trying to quit smoking?

I have not smoked in the past 12

months

I have not tried to quit

1 time

2 times

3 to 5 times

6 to 9 times 10 or more times

#### 27. When you last tried to quit, how long did you stay off cigarettes?

I have never smoked cigarettes I have never tried to guit

Less than a day

1 to 7 days

More than 7 days but less than 30

days

30 days or more but less than 6

months

6 months or more but less than a year

1 year or more

## Smokeless Tobacco: Chewing Tobacco, Snuff, or

28. Have you ever used chewing tobacco, snuff, or dip, such as Redman, Levi

Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?

Yes No

#### 29. How old were you when you used chewing tobacco, snuff, or dip for the first time?

I have never used chewing tobacco,

snuff, or dip

8 years old or younger

9 or 10 years old

11 or 12 years old

13 or 14 years old

15 or 16 years old

17 years old or older

#### 30. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?

0 days

1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days 20 to 29 days

All 30 days

#### 31. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip on school property?

0 days

1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days

20 to 29 days

All 30 days

#### 32. During the past 30 days, how did you usually get your own chewing tobacco, snuff, or dip? (CHOOSE ONLY ONE ANSWER)

I did not use chewing tobacco, snuff,

or dip during the past 30 days

I bought them in a store such as a

convenience store, supermarket,

discount store, or gas station

I gave someone else money to buy

them for me

I borrowed (or bummed) them from

someone else

A person 18 years old or older gave

them to me

I took them from a store or family member

I got them some other way

33. "Snus" is a moist, smokeless tobacco, usually sold in small pouches, that is placed under the lip against the gum. Have you ever tried snus, even just one time in your entire life?

No

#### 34. During the past 30 days, on how many days did you use snus?

0 days

1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days 20 to 29 days

All 30 days

35. Have you ever used chewing tobacco, snuff, dip, or snus instead of smoking a cigarette or other tobacco product because you were in a place where

smoking was not allowed?

Yes No

#### Cigars

#### 36. Have you ever tried smoking cigars, cigarillos, or little cigars, even one or two puffs?

Yes

No

#### 37. During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?

0 days

1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days

20 to 29 days

All 30 days

#### Pipe

#### 38. During the past 30 days, on how many days did you smoke tobacco in a pipe?

0 days

1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days

20 to 29 days All 30 days

#### **Bidis and Kreteks**

THE NEXT OUESTIONS ARE ABOUT BIDIS (OR "BEEDIES") AND KRETEKS (ALSO CALLED "CLOVE CIGARETTES"). BIDIS ARE SMALL BROWN CIGARETTES FROM INDIA CONSISTING OF TOBACCO WRAPPED IN A LEAF TIED WITH A THREAD. KRETEKS ARE CIGARETTES CONTAINING TOBACCO AND CLOVE EXTRACT.

#### 39. Have you ever tried smoking any of the following:

Bidis

Kreteks

I have tried both bidis and kreteks

I have never smoked bidis or kreteks

# 40. During the past 30 days, on how many days did you smoke bidis?

0 days

1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days

20 to 29 days

All 30 days

# THE NEXT QUESTIONS ASK ABOUT YOUR THOUGHTS ABOUT TOBACCO.

## 41. Do you think that you will try a cigarette

I have already tried smoking

cigarettes

Yes

No

# 42. Do you think you will smoke a cigarette at anytime during the next year?

Definitely yes

Probably yes

Probably not

Definitely not

# 43. Do you think you will be smoking cigarettes 5 years from now?

I definitely will

I probably will

I probably will not

I definitely will not

# 44. If one of your best friends offered you a cigarette, would you smoke it?

Definitely yes

Probably yes

Probably not

Definitely not

# 45. In the past 12 months, how often have your parents or guardians discussed the dangers of tobacco use with you?

Never

Rarely

Sometimes

Often

Very often

# 46. Have your parents ever told you not to use chewing tobacco, snuff, or dip?

Yes

No

# 47. Have your parents ever told you not to smoke cigarettes?

Yes

No

#### 48. Do your parents know that you smoke cigarettes?

I do not smoke cigarettes

Yes

No

Don't know / not sure

# 49. Do you think people can get addicted to using tobacco just like they can get addicted to using cocaine or heroin?

Definitely yes

Probably yes

Probably not

Definitely not

# 50. Do you think young people who smoke cigarettes have more friends?

Definitely yes

Probably yes

Probably not

Definitely not

# 51. Do you think smoking cigarettes makes young people look cool or fit in?

Definitely yes Probably yes

Probably not

Definitely not

# 52. Do you think young people risk harming themselves if they smoke from 1 - 5 cigarettes per day?

Definitely yes

Probably yes

Probably not

Definitely not

53. Do you think it is safe to smoke for only a year or two, as long as you quit after that?

Definitely yes

Probably yes

Probably not

Definitely not

# 54. Do you think you would be able to quit smoking cigarettes now if you wanted to?

I do not smoke now

Yes

No

# 55. Have you ever participated in a program to help you quit using tobacco?

I have never used tobacco

Yes

No

# **56.** Does your school offer the N-O-T tobacco cessation program to students?

Yes

No

Don't know/not sure

# 57. During this school year, were you taught in any of your classes about the dangers of tobacco use?

Yes

No

Not sure

# 58. During this school year, did you practice ways to say NO to tobacco in any of your classes (for example by role-playing)?

Yes

No

Not sure

# THE NEXT QUESTIONS ASK ABOUT EVENTS YOU MAY HAVE ATTENDED OR WHAT YOU HAVE SEEN ON TV, AT THE MOVIES, OR ON THE INTERNET.

# 59. During the past 12 months, have you participated in any community activities to discourage people your age from using cigarettes, chewing tobacco, snuff, dip, or cigars?

Yes

No

I did not know about any activities

#### 60. Have you heard of RAZE?

No

Don't Know/Not sure

61. During the past year, did you notice RAZE activities such as student presentations, skits, poster displays or announcements?

Yes

Don't Know/Not sure

62. During the past 60 days, do you remember seeing or hearing ads or campaigns advertising against the use of tobacco products by any of the following groups? (You can CHOOSE ONE ANSWER, or MORE THAN ONE)

TRUTH

**RAZE** 

Through With Chew or SAVE

**FACE** 

reACT

I don't remember ads from any of

these campaigns.

63. During the past 30 days, have you seen or heard commercials on TV, the Internet, or on the radio about the dangers of cigarette smoking?

Not in the past 30 days

1-3 times in the past 30 days

1-3 times per week

Daily or almost daily

More than once a day

SOME TOBACCO COMPANIES MAKE ITEMS LIKE SPORTS GEAR, T-SHIRTS, LIGHTERS, HATS, JACKETS, AND SUNGLASSES THAT PEOPLE CAN BUY OR RECEIVE FREE.

64. During the past 12 months, did you buy or receive anything that has a tobacco company name or picture on it?

Yes

65. Would you ever use or wear something that has a tobacco company name or picture on it such as a lighter, t-shirt, hat,

or sunglasses?

Definitely yes

Probably yes Probably not

Definitely not

THE NEXT OUESTIONS ASK ABOUT YOUR EXPOSURE TO TOBACCO USE.

66. During the past 7 days, on how many days were you in the same room with someone who was smoking cigarettes?

0 days

1 or 2 days

3 or 4 days

5 or 6 days

7 days

#### 67. Which of these best describes the rules about smoking inside the house where you live? Smoking is...

Never allowed inside my home

Allowed only at some times or in

some places

Always allowed inside my home

#### 68. Which of the following best describes the rules about smoking in the vehicle you drive or ride in the most? Smoking is ...

Never allowed inside the vehicle Sometimes allowed inside the

vehicle

Always allowed inside the vehicle.

69. During the past 7 days, on how many days did you ride in a car with someone who was smoking cigarettes?

0 days

1 or 2 days

3 or 4 days

5 or 6 days

7 days

#### 70. What do you think employers should do about smoking in indoor areas in places where people work? Employers should...

Never allow smoking in places

where people work

Allow smoking only at some times

or in some places

Always allow smoking in places

where people work

#### 71. Which of these best describes smoking where you work? Smoking is...

I do not have a job

Never allowed where I work

Allowed but only at some times or in

some places

Always allowed where I work

#### 72. On how many of the past 7 days did you breathe the smoke from someone who was smoking in the place where you work?

I do not have a job

I have a job but did not work in the

past 7 days.

0 days

1 to 3 days

4 to 6 days

all 7 days

73. Now think about indoor public places such as malls, movie theaters, clubs or restaurants. Which of these best describes what you think about smoking in indoor public places? Smokingshould...

Never be allowed in indoor public

places

Be allowed in indoor public places

but only at some times or in some

Always be allowed in indoor public Places

#### 74. How many of your four closest friends use chewing tobacco, snuff, or dip?

None

One

Two

Three Four

Not sure

# 75. Do you think the smoke from other people's cigarettes is harmful to you?

Definitely yes Probably yes Probably not Definitely not

# 76. Does anyone who lives with you now smoke cigarettes?

Yes

# 77. Does anyone who lives with you now use chewing tobacco, snuff, or dip?

Yes No

# 78. How many of your four closest friends smoke cigarettes?

None One Two Three Four

Not sure

# THE NEXT QUESTIONS ASK ABOUT ASTHMA.

# 79. Have you ever been told by a doctor, nurse, or other health professional that you had asthma?

Yes No

Don't know/Not sure

#### 80. Do you still have asthma?

I have never had asthma

Yes

Don't know/Not sure

# 81. Have you had an asthma attack or episode of asthma in the past 12 months?

I do not have asthma

Yes No

Don't know/Not sure

# 82. Are you taking prescription medicine for asthma?

I do not have asthma

Yes

No

Don't know/Not sure

# 83. During this school year, how many days of school did you miss due to your asthma?

I do not have asthma 11 or more days 6-10 days 1-5 days None Don't know/Not sure

# THANK YOU VERY MUCH FOR YOUR COOPERATION!

# APPENDIX D – ADDITIONAL INFORMATION

#### NATIONAL YTS .....

The Centers for Disease Control and Prevention provides support for state administration of the YTS, but also coordinates the National YTS (NYTS). Through the NYTS, a sample of public middle schools and high schools across the U.S. is pulled, which will become representative of all public school students in the country. Often, schools from WV become part of the NYTS, but these schools are chosen independently from schools chosen for the WVYTS. The latest NYTS report (2006) is available at <a href="https://www.cdc.gov/tobacco/data">www.cdc.gov/tobacco/data</a> statistics/surveys/nyts/index.htm.

#### YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM (YRBSS) ......

The YRBSS is collected in WV during the same period as the YTS survey. The schools selected go through a double-classroom sampling---half of the classrooms receive the YTS survey and half receive the YRBSS. The questionnaires are administered simultaneously. The YRBSS is a more general survey of health risks, but does include about 10 tobacco-related questions exactly as they are phrased for YTS. The latest WV YRBSS is available at <a href="https://www.cdc.gov/HealthyYouth/yrbs/index.htm">www.cdc.gov/HealthyYouth/yrbs/index.htm</a>.

Likewise, there is a National YRBSS, with information available at www.cdc.gov/HealthyYouth/yrbs/data/index.htm.

#### USEFUL WEBSITES .....

American Legacy Foundation (ALF)
Campaign for Tobacco-Free Kids: Research and Fact Sheets
Centers for Disease Control
National Spit Tobacco Education Program
Raze Movement, WV Division of Tobacco Prevention
Robert Wood Johnson Foundation
Tobacco Is Killing (and Costing Us) Report
WV Division of Tobacco Prevention
WV Health Statistics Center
WV Quit Line, YNOT QUIT

www.tobaccofreekids.org
www.cdc.gov/tobacco/data.htm
www.nstep.org
www.razewv.com
www.rwjf.org
www.wvdhhr.org/bph/hsc/pubs/other/
www.wvdhhr.org/bph/oehp/tobacco
www.wvdhhr.org/bph/hsc/statserv/publist.asp
www.ynotquit.com

www.americanlegacy.org