

Williamson County, Texas

# 2004 Behavioral Risk Factor Surveillance System

*Report on the Williamson County 2004 BRFSS Survey*

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### *Table of Contents*

Section I:	Report on the Williamson County 2004 BRFSS Survey .....	1-13
Section II:	Tables and Graphs for Common Health Indicators & Risk Factors .....	1-13
Section III:	Data Tables .....	1-29
<b>Appendix A:</b>	Technical Documentation & Questionnaire.....	1-27
<b>Appendix B:</b>	Census and BRFSS Demographic Data.....	1-2
<b>Appendix C:</b>	Healthy People 2010 Comparative Indicators .....	1-4

# Section I

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Report on the Williamson County 2004 BRFSS Survey

# Williamson County Behavioral Risk Factor Surveillance System (BRFSS)

## Introduction

In 1999 the Williamson County and Cities Health District (WCCHD) implemented the first Behavioral Risk Factor Surveillance System (BRFSS) survey for Williamson County in an effort to assess and understand the health behaviors and associated risks of county residents. This effort continues with the release of the 2004 Behavioral Risk Factor Surveillance System (BRFSS) survey results.

This report provides information on the results of the BRFSS survey conducted in Williamson County during the summer of 2004. The survey was conducted to gather information on a variety of health indicators and risk factors that can impact health in both positive and negative ways, including smoking, exercise and diet, access to medical care, dental health, quality of life, chronic disease, neighborhood, and public health emergency. These data help WCCHD and our public health partners determine priority health issues and identify populations at highest risk, develop strategic plans and target prevention programs, monitor the effectiveness of intervention strategies, educate the public and policymakers about disease prevention, and support community policies that promote health and prevent disease.

Information in this report provides a broad picture of the of the 2004 BRFSS results for Williamson County with comparisons between East and West Williamson County. The survey yielded a wealth of additional information which allows in many cases for comparisons by demographic characteristics such as age group, race/ethnicity, gender and income in the county. Over the next year, WCCHD will be publishing and publicizing information from the survey highlighting demographic differences in relation to the measured behavioral risk factors. WCCHD also invites all partners in public health to use the Williamson County BRFSS data to assist in public health initiatives.

## **BRFSS Background**

The BRFSS is a population-based phone survey sponsored by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services. The BRFSS was initiated by CDC in some states in 1981; Texas began participating in 1987. In the 1990s, several counties and other communities in Texas sponsored surveys to gather data at the local level. BRFSS survey data has been widely used to monitor health behavior and health status at the state and national levels, and provides important information for the development of public health programs. Detailed information on the BRFSS can be found on CDC's website (<http://www.cdc.gov/brfss/>), on the Department of State Health Services (DSHS) Texas BRFSS website ([http://www.tdh.state.tx.us/chs/brfss/brfss\\_home.htm](http://www.tdh.state.tx.us/chs/brfss/brfss_home.htm)), and on WCCHD's website ([www.publichealthwilliamson.org](http://www.publichealthwilliamson.org)).

In 2004, WCCHD contracted for the BRFSS to be conducted for the second time in Williamson County. The first Williamson County survey was conducted in 1999. DSHS supervised the 2004 survey with technical assistance provided by CDC. The telephone surveys were conducted by Clearwater Research,

Inc. of Boise, Idaho. Mary Young, PhD, Professor of Economics at Southwestern University conducted the initial data analysis and Dan Hilliard, PhD, Professor of Sociology at Southwestern University provided feedback on the draft report and conclusions. The Community Assessment Team in the Center for Health Statistics at DSHS provided additional data analysis and assistance to WCCHD in the preparation of this final report. Funding support for the survey was provided by DSHS, Georgetown Healthcare System, Johns Community Hospital, Seton Healthcare Network, Scott and White, Round Rock Medical Center, and the Greater Williamson County and Georgetown Area United Ways.

## Survey Method

The BRFSS survey is a confidential telephone survey of a sample of adults 18 years of age and older in households with telephones. The BRFSS questionnaire is designed by a working group of state coordinators and CDC staff. There are three components from which questions from this survey are derived: 1) core component questions, 2) optional modules, and 3) state-added questions. WCCHD and staff selected the modules/questions used in this survey. The Williamson County survey includes questions that measure 17 different health indicators and risks, as well as demographic information about the survey participants. There were a total of 66 questions. A copy of the questionnaire is available as Attachment 1 in Appendix A.

The BRFSS data are adjusted, or “weighted”, so that the survey results approximate the age, gender, and racial/ethnic distribution for Williamson County, not just those who responded to the survey. Data weighting is a statistical process that includes the consideration of factors such as the number of residential telephones in the household, the number of adults in the household, and a stratification process (the separation of groups of individuals into subgroups according to specific characteristics) for age, race, and gender distribution.

The Williamson County survey was designed to yield not only a sample adequate for analysis of the county as a whole but also a sufficient sample for sub-county analysis of populations for East and West Williamson County (referred to as East County and West County for the remainder of this report). Therefore, East County was deliberately over sampled to compensate for differences in population density. The advantage of this technique is that health indicators and risks behaviors in East County can now be analyzed in greater detail with the 2004 sample than was possible with the 1999 sample.

For the 2004 survey, East County was defined by 8 zip codes that include the cities of Hutto, Taylor, Granger, Thrall, and Coupland. West County was defined by 14 zip codes that include the cities of Georgetown, Round Rock, Cedar Park, Leander, Florence, Liberty Hill, and Jarrell. A copy of the map of zip codes for the East and West county regions is provided as Attachment 2 in Appendix A.

## Survey Sample

The 2004 BRFSS sample consisted of 827 Williamson County adult residents 18 years of age and older. Residents in East County made up 50.4% (N=417) of the sample. Residents in West County made up the remaining 49.6% (N=410).

By comparison, the 1999 BRFSS was based on a sample of 1,281 residents. The data were categorized into four areas: Cedar Park, Georgetown, Round Rock and Taylor/East Williamson County. The cities in West County represented 88.8% (N=1,138) and East County represented 11.2% (N= 143) of respondents. In the 1999 survey, this distribution corresponded closely with the actual population distribution in Williamson County. A limitation of the 1999 BRFSS was that the sample size in East Williamson County was too small to conduct statistically valid analyses of important health indicators and risk behaviors.

## Demographic Characteristics

The demographic characteristics of the survey sample were statistically similar to most of those for Williamson County as identified in the 2000 U.S. Census data. Age, race/ethnicity, marital status, families with children, education, employment, and income were all similar (see Appendix C).

**Distribution of Survey Respondents by Age and Gender for Year 2004**

Age	Williamson County	East County	West County	Census 2000
	%	%	%	%
18 to 24	10	8	11	11
25 to 34	25	23	25	24
35 to 44	27	23	27	27
45 to 54	16	16	16	18
55 to 64	12	13	12	9
65+	11	17	9	11

**Source:** Williamson County Behavioral Risk Factor Surveillance Survey 2004

### Demographic Differences for East County and West County Samples

There are several important differences among demographic characteristics between respondents in the East County and West County samples. These differences in demographic attributes are supported by Census 2000 data for Williamson County.

**Age:** The mean age of the respondents in East County was 4.6 years older than those in the West County sample.

**Race/Ethnicity:** The racial and ethnic attributes of respondents from the West County and East County regions were different; 24% of respondents in the East County sample identified themselves as non white while only 14% of the West County sample did.

**Education:** There was diversity in educational levels for the East and West samples. East County results show that 18% reported less than a high school education as compared with 4% in West County. Twenty percent of East County respondents graduated from college compared to 45% from West County.

**Income:** Results showed significant regional variations in reported household income. Of the East County sample, 30% respondents reported income less than \$25,000 per year compared with 17% of the West County sample. Forty percent of West County households identified themselves in the highest income grouping (\$75,000+), compared to 17% in East County.

# Key Findings

## Findings for Common Health Indicators & Risk Factors

The Williamson County 2004 survey gathered information on a variety of health indicators and risk factors that can impact health in both positive and negative ways. Refer to Section II for tables and graphs of data discussed in the Key Findings, Section III for tables of all of the response data, Appendix A for technical documentation, Appendix B for demographic data, and Appendix C for Healthy People 2010 information.

The table below shows the findings for 13 common health indicators and risk factors for Texas, the total Williamson County sample, and the East County and West County samples. These 13 indicators are some of those most commonly used by federal, state, and local public health officials in monitoring health status. These items are discussed in more detail in the Summary of Findings. Although there were differences between East County and West County samples for the common health indicators, none of these differences are statistically significant at a 95% confidence interval.

**Common Health Indicators & Risk Factors**

	Texas		County		East		West	
	%	CI 95%	%	CI 95%	%	CI 95%	%	CI 95%
Doctor Diagnosed Diabetes	8*	(7-9)	8	(6-10)	10	(7-13)	7	(5-10)
Diagnosed with High Blood Pressure	24*	(23-25)	22	(19-26)	29	(25-34)	21	(17-25)
Taking Medication To Control High Blood Pressure	n/a	n/a	73	(64-80)	82	(74-89)	70	(58-79)
Cholesterol Checked In Past 5 Years	68*	(67-70)	78	(74-82)	74	(69-79)	79	(74-83)
Diagnosed With High Cholesterol	34*	(32-35)	36	(32-41)	31	(25-36)	38	(32-44)
Current Asthma (Adult)	7	(6-8)	6	(4-8)	7	(4-10)	6	(4-8)
Current Smoker	20	(19-22)	18	(15-22)	19	(15-24)	18	(14-22)
Current Use Of Smokeless Tobacco	n/a	n/a	3	(2-5)	8	(5-11)	2	(1-4)
Flu Shot In Past Year, Age 65+	68	(65-71)	76	(65-84)	75	(64-84)	76	(61-87)
Obese <sup>1</sup>	26	(24-27)	26	(22-30)	26	(22-31)	25	(21-31)
Overweight	37	(36-39)	37	(32-41)	38	(33-43)	36	(31-42)
Meets Physical Activity Recommendations	44	(42-46)	53	(49-58)	52	(46-57)	54	(48-59)
Meets Recommendations for Fruits & Vegetables	23*	(21-24)	22	(18-26)	22	(18-27)	22	(17-26)

Source: Williamson County BRFSS Survey 2004 and the Texas Behavioral Risk Factor Surveillance System 2003, 2004.

\*The Texas BRFSS data in this table are from the year 2004 except for those noted with an asterisk (\*), which are from the survey year 2003. 1 Obese and overweight are exclusive.

### WHAT IS A CONFIDENCE INTERVAL (CI)?

Throughout the report, percent estimates and confidence intervals are presented. Percent estimates are estimates of the true population value (eg 13% of adults are current smokers). However, since estimates are based on a sample and not the entire population, there is some error. Confidence intervals take this error into account and present a range in which the “true value” is likely to fall (eg between 11% and 17% of adults are current smokers). A 95% confidence interval means that among 100 samples drawn, 95 will contain the true population value. When confidence intervals for two population estimates do not overlap, the difference between the estimates is considered statistically significant; that is, the difference is unlikely due to chance.

## Summary of Findings

This section provides a summary of the findings of the BRFSS survey results. Survey respondents were limited to adults aged 18 years and older. The information is presented in five categories: self-reported health status, chronic conditions, risk factors, health care access, and environment. ***Results comparing East County and West County samples are not statistically significant unless otherwise stated.***

### Self Reported Health Status

Self-reported health status is often one of the best indicators of overall physical and mental health. The 2004 Williamson County BRFSS contained four questions about health status. Respondents were asked to rate their general health, to indicate the number of poor physical or mental health days in the past 30 days, and to report how many days in the past 30 days they had not been able to carry out their usual activities because of poor physical or mental health.

Eighty-nine percent of respondents said their health was excellent, very good, or good. A comparison of East and West County samples shows that 90% of respondents in West County and 82% of East County reported their health as 'excellent' or 'very good'. For Texas, 80% of adults said their health was excellent, very good, or good (Texas BRFSS 2004). More respondents in the East County (18%) said their health was 'fair or poor' than did those in West County (10%). This difference is statistically significant.

Of the total county sample, 22% said that their mental health was 'not good' for 5 or more days during the past 30 days. Twenty-two percent of respondents in the West County sample said that their mental health was 'not good' for 5 or more days during the last month while 19% did in East County. Nine percent of respondents reported that poor physical *or* mental health kept them from doing usual activities, such as work or recreation activities, 5 or more days in the past month. Results were similar for East County and West County samples, 11% and 9% respectively.

### Chronic Conditions

Chronic conditions are diseases that may limit the ability to perform usual activities, can impair quality of life, and exacerbate other health conditions. The Williamson County 2004 BRFSS asked about four conditions: diabetes, hypertension (high blood pressure), high cholesterol, and adult asthma.

***Diabetes:*** Eight percent of the total sample reported that they had been diagnosed with diabetes, a 4% increase from the 1999 BRFSS results. The Texas 2003 BRFSS also reported 8% of the adult population diagnosed with diabetes. Both the Texas and Williamson County BRFSS results are higher than the Healthy People 2010<sup>1</sup> (HP 2010) target rate of 2.5%. East County results show a higher percentage of diabetes than do results for the West; 10% in the East sample and 7% in the West sample. However, this difference is not statistically significant.

***High Blood Pressure:*** Twenty-two percent of all respondents had been diagnosed with high blood pressure. Among those, 73% were taking medication to control it. The HP 2010 goal is to reduce the proportion of adults with high blood pressure to 16%. Texas 2003 BRFSS results show that slightly over 24% of adults had been told they had high blood pressure. Respondents in East County reported more cases of high blood pressure (29%) than did those in West County (21%). Though important, the difference between East and West results for high blood pressure is not statistically significant.

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<sup>1</sup> U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health and Objectives for Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000. [<http://www.healthypeople.gov/Document/tableofcontents.htm#parta>]

**High Cholesterol:** Of the total sample, 78% reported having their cholesterol checked within the past 5 years: short of the Healthy People 2010 target of 80% but better than the Texas rate of 68% (Texas BRFSS 2003). The Healthy People 2010 target for the number of adults with high total blood cholesterol levels is 17%. For Williamson County’s 2004 BRFSS, 36% of all respondents, 38% of West County, and 31% of East County had been told by a health professional that they had high cholesterol.

**Adult Asthma:** Survey respondents were asked if a doctor had ever told them that they had asthma and if they still have asthma (referred to as current asthma prevalence). According to the results, 12% had been told by a doctor, nurse, or health professional that they had asthma, and 6% of adults currently have asthma. The Texas BRFSS from 2004 reveals that 13% of the population had been told they had asthma, and 7% currently have asthma. There were no significant differences between the East and West County samples in the number of respondents reporting asthma.

## Risk Factors

The 2004 Williamson County BRFSS asked questions about four factors that can contribute to poor health: body mass index, physical activity, nutrition, and tobacco use.

**Body Mass Index:**<sup>2</sup> Body Mass Index (BMI) is a tool used to indicate weight status in adults, measured by weight and height. The BMI ranges are based on the effect body weight has on disease and death. BMI classifications are underweight (<18.5), normal (18.5 - 24.9), overweight (25.0 - 29.9), and obese (≥ 30.0). The HP 2010 goal is that at least 60% of adults have normal weights (BMI 18.5 - 24.9) and no more than 15% of adults are obese (BMI ≥ 30.0).

In the 2004 Williamson County BRFSS 31% of respondents had normal weights; 37% were overweight; and an additional 26% were obese. The Texas BRFSS obesity rate for 2004 is also 26%. The percentage of individuals who are overweight is slightly higher in the East County than in the West County, 38% and 36% respectively.

### Body Mass Index

Category	HP 2010 Target	Texas BRFSS 2004	WC BRFSS 2004	East WC	West WC
Normal (18.5 - 24.9)	60%	35%	31%	31%	31%
Overweight (25.0 - 29.9)	25%	37%	37%	38%	36%
Obese (≥ 30.0)	15%	26%	26%	26%	26%

HP 2010= Healthy People 2010, WC= Williamson County  
 Source: Williamson County BRFSS Survey 2004, the Texas Behavioral Risk Factor Surveillance System 2004, and U.S. Department of Health and Human Services, Healthy People 2010.

**Physical Activity:** The Healthy People 2010 goals include physical activity targets for adults. The goals include reducing the proportion of adults who engage in no leisure-time physical activity to 20%, increasing the proportion of adults who engage regularly in moderate physical activity for at least 30 minutes per day to 50%, and increasing the proportion of adults who engage in vigorous physical activity 3 or more days per week for 20 or more minutes per occasion to 30%.

In the Williamson County 2004 BRFSS, 9% of respondents engaged in no leisure-time physical activity. However, the majority did report physical activity; 53% did meet the HP2010 recommendations for

<sup>2</sup> Body Mass Index information and calculators available at <http://www.cdc.gov/nccdphp/dnpa/bmi/index.htm>

frequency or duration of physical activity while 38% reported some physical activity but not enough to meet recommendations. Over half of the East County (52%) and West County (54%) samples met recommendations for physical activity. The Texas 2004 BRFSS results show that 44% met recommendations for physical activity.

### Physical Activity

Category	HP 2010 Target	Texas BRFSS 2004	WC BRFSS 2004	East WC	West WC
Meets Recommendations*	80%	44%	53%	52%	54%
Does not meet recommendations**	20%	56%	47%	48%	46%

HP 2010= Healthy People 2010, WC= Williamson County

\* Meets recommendations = Meets goal of regular moderate physical activity for at least 30 minutes per day and/or vigorous physical activity 3 or more days per week for 20 or more minutes per occasion.

\*\* Does Not Meet Recommendations = No physical activity and/or some physical activity.

Source: Williamson County BRFSS Survey 2004, the Texas Behavioral Risk Factor Surveillance System 2004, and U.S. Department of Health and Human Services, Healthy People 2010.

Respondents to the BRFSS were also asked how much time they spent watching TV or videos or using a computer outside of work each day. Of the total sample, 28% spent 3 to 4 hours and 18% spent 5 or more hours watching TV or using the computer outside of work. Similar results were found for the East and West samples.

**Nutrition:** The Department of Health and Human Services (HHS) and the Department of Agriculture (USDA) publish Dietary Guidelines for Americans<sup>3</sup> every 5 years. The Guidelines provide advice about how good dietary habits can promote health and reduce risk for major chronic diseases. In the United States, persons of all ages eat fewer than the recommended number of servings of grain products, vegetables, and fruits.<sup>4</sup> The Guidelines, last published in January 2005, recommend that Americans choose a variety of fruits and vegetables each day, selecting from all 5 vegetable subgroups in particular (dark green, orange, legumes, starchy vegetables, and other vegetables) several times a week.

HP 2010 targets include increasing the proportion of persons 2 years of age and older who consume at least two daily servings of fruit to 75% and increasing the proportion of persons 2 years of age and older who consume at least 3 daily servings of vegetables to 50%. The BRFSS results indicate that 22% of Williamson County respondents reported consumption of 5 or more fruits or vegetables per day. Percentages were the same for the East County and West County samples. Texas 2003 BRFSS results were similar to Williamson County with 23% of Texans meeting recommendations for fruit and vegetable consumption.

**Tobacco Use:** The HP 2010 target is that not more than 12% of adults smoke cigarettes. The 2004 BRFSS results show that 18% of the sample smoked cigarettes. Smoking rates in the East and West County were similar to the county as a whole. The Texas 2004 BRFSS results show that 20% of respondents smoked. Of current smokers in the East County, 68% had tried to stop smoking for one day or longer in the past 12 months compared with 50% in the West County.

Three percent of respondents currently use chewing tobacco or snuff everyday or some days, considerably higher than the national 2010 target of not more than 0.4% of adults. The East County sample (8%) was

<sup>3</sup> Dietary Guidelines for Americans 2005, <http://www.healthierus.gov/dietaryguidelines/>

<sup>4</sup> Crane, NT; Hubbard, VS; and Lewis, CJ National nutrition objectives and the Dietary Guidelines for Americans. Nutrition Today 33:49-58, 1998

more likely than the West County sample (2%) to regularly use chewing tobacco or snuff. This difference is statistically significant.

## Health Care Access

The 2004 Williamson County BRFSS asked questions about three aspects of health care access: health insurance and use of medical services, dental care, and adult immunizations.

**Health Insurance and Use of Medical Services:** Of the Williamson County 2004 BRFSS respondents, 84% said that they have some type of health care coverage. This is lower than the rate of 89.2% found in the 1999 BRFSS but higher than the Texas BRFSS 2004 rate of 73%. The HP 2010 target is 100%.

For the Williamson County 2004 BRFSS, 80% of respondents had one or more persons they considered to be their personal health care provider. The HP 2010 national target is 85%. Twelve percent of respondents said that there was a time in the last year when they needed to see a doctor but could not because of the cost. Although not statistically significant, this figure is higher for respondents in the East County (15%) than in the West County (11%).

**Dental Care:** The Williamson County 2004 BRFSS asked respondents how long it had been since they had last visited a dentist or dental clinic: 68% within the last year; 10% not in over 5 years (or never). There was a statistically significant difference between East County and West County samples for those who visited dentist or dental clinic in the last year (West 71%, East 59%). Fifty-nine percent of the Texas 2004 BRFSS respondents had visited a dentist or dental clinic in the last year.

**Adult Immunizations:** Of respondents aged 65 years or older, 76% reported receiving a flu shot during the 2003-2004 flu season. This exceeds the Texas BRFSS 2004 rate of 67% but is short of the HP 2010 target of 90% flu shot coverage among those age 65 years or older. Fewer than 30% of all Williamson County respondents age 65 years or older in 1999 reported receiving a flu shot in the previous year.<sup>5</sup>

## Environment

The 2004 Williamson County BRFSS included questions about two aspects of environment and health: attitudes towards health and the built environment<sup>6</sup> and public health emergency.

**Built Environment:** Respondents to the Williamson County 2004 BRFSS were asked what their perceptions were about the neighborhood and/or community in which they live.<sup>7</sup> Of the total sample, 62% said that their neighborhood is a “very pleasant” place to walk, and 80% feel that people in their neighborhood are very or somewhat physically active. There was a greater amount of respondents from the West County sample (83%) who perceived their neighborhood as physically active compared to the East County sample (67%).

Of the total sample, 33% said that they felt “extremely safe” from crime in their neighborhood, which is somewhat lower than the 38% who reported the same in 1999. Of the East County sample, 17% said they felt “slightly safe” from crime in their neighborhood while 9% did in West County. This difference is statistically significant.

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<sup>5</sup> The Williamson County 2004 BRFSS survey addressed the 2003-2004 flu season, not the most recent 2004-2005 flu season that had well publicized problems with flu vaccine production.

<sup>6</sup> Built environment is the urban environment consisting of buildings, roads, fixtures, parks, and all other improvements that form the physical character of a city or community.

<sup>7</sup> For the purpose of the BRFSS survey, neighborhood is defined as the area within one-half mile or a ten minute walk from an interviewee’s house and community is defined as a 5 mile or 10 mile drive from an interviewee’s house.

When asked if their neighborhood had any sidewalks, 62% of all respondents said they did. Statistically significant disparities were found among East County and West County respondents for sidewalks; 26% of respondents in the East County said they have sidewalks in their neighborhood compared with 70% in the West County. The rural nature of the East County could have influenced this result.

When asked if respondents use walking trails, parks, playgrounds, and sports fields in their community for physical activity, 53% said that they did use those types of facilities. East County respondents are statistically less likely to use such facilities; 62% of East County and 39% of West County respondents said they did not use walking trails, parks, playgrounds, and sports fields in their community. Seven percent of East County respondents said that no such facilities are available in their community while only 2% of West County respondents did.

**Public Health Emergency:** Williamson County 2004 BRFSS respondents were asked several questions about what would happen if there were a health emergency or natural disaster in Williamson County. For all respondents, 68% said they have a radio that will work without regular electricity. While 86% have a 3-day supply of food, only 50% have a 3-day supply of water. Sixty percent of East County respondents and 47% of West County respondents had a 3-day supply of water; this difference is statistically significant.

In an open-ended question respondents were asked “If you believed that you were exposed to a new or dangerous disease, and you wanted more information, where would you go first to get that information?” Of all respondents, 39% said they would seek information from the Internet, 24% would seek information from their doctor, 11% would get information from a hospital, and 10% would go to the local health department (Williamson County). When asked if their doctor requested they get a vaccination to prevent a new dangerous disease, 93% of all respondents said they would agree to get a vaccination and stay home if advised to in order to avoid spreading the disease. There were no differences in the results for the same questions for the East County and West County samples.

# Conclusions

In general, outcomes of the 2004 Williamson County BRFSS show that as a whole Williamson County fares better than the State of Texas on many measures of health. It is reasonable to conclude that this outcome is influenced by its favorable demographics, including a relatively young population and higher average levels of education and income than the State of Texas.

Williamson County measures for chronic disease prevalence are very near the statewide figures, but both Williamson County and Texas fall short of the Healthy People 2010 targets for disease prevalence. For preventive care measures such as cholesterol check, flu shots, and dental visits, Williamson County measures are better than statewide figures but again below Healthy People 2010 targets. Williamson County also fares better than the state on overall health status, health insurance coverage, physical activity, and exercise but is below the Healthy People 2010 target for health insurance coverage.

## Comparison of Texas, Williamson County, and Healthy People 2010

Category	WC BRFSS 2004	Texas BRFSS	HP 2010
Diabetes	8%	8%*	2.5%
High Blood Pressure	22%	24%*	16%
Cholesterol Check within past 5yrs	78%	68%*	80%
High Cholesterol	36%	34%*	17%
Adult Asthma	6%	7%	n/a
Current Smoker	18%	20%	12%
Smokeless Tobacco	3%	n/a	n/a
Flu Shot, Over 65 <sup>(1)</sup>	76%	68%	90%
Obese <sup>(2)</sup>	26%	26%	15%
Overweight	37%	37%	25%
Physical Activity	53%	44%	80% <sup>(3)</sup>
Nutrition	22%	23%	50-75 <sup>(4)</sup>
Overall Health Fair or Poor	11%	20%	n/a
Health Insurance	84%	73%	100%
Primary Provider	80%	n/a	85%
Dental Visit within past year	68%	59%	n/a

\* The Texas BRFSS data in this table are from the year 2004 except for those noted with an asterisk (\*), which are from the survey year 2003.

- (1) The Williamson County 2004 BRFSS survey addressed the 2003-2004 flu season, not the most recent 2004-2005 flu season that had well publicized problems with flu vaccine production.
- (2) Obese and overweight are mutually exclusive.
- (3) Combined value of Healthy People 2010 targets for objectives 22-2 and 22-3 (See Appendix C).
- (4) Healthy People 2010 recommend 50% over the age of 2 consume 3 daily servings of vegetables and 75% consume at least 2 daily servings of fruit. (See objectives 19-5 and 19-6 in Appendix C).

n/a – Not available

**Source:** Williamson County BRFSS Survey 2004, the Texas Behavioral Risk Factor Surveillance System 2003, 2004, and Healthy People 2010: Understanding and Improving Health and Objectives for Improving Health. 2nd ed.

Chronic disease prevalence and behavioral risk factors such as those measured in the 1999 and 2004 Williamson County BRFSS vary by indicators that are identified with social advantage, such as educational attainment, occupational class, and income level. Populations that are older, poorer, and have lower levels of education and income tend to have higher chronic disease prevalence and greater behavioral risks. According to the US Department of Health and Human Services, there are continuing disparities in the burden of illness and death experienced by African Americans, Hispanic Americans, Asian Americans/Pacific Islanders, and American Indians/Alaska Natives, as compared to the U.S. population as a whole.

Where the 1999 and 2004 surveys are comparable, differences in chronic disease prevalence and behavioral risks between the surveys have generally been very small. There appear to have been increases in the prevalence of diabetes and in the proportion of the adult population above normal weight, both of which are consistent with national trends over the same time period. Likewise, a decline in the proportion of the adult population covered by some kind of health insurance is consistent with the national trend.

**Note: Tests of statistical significance have not been run between the Williamson County 2004 and 1999 data, and differences may be due to sampling error.**

**Comparison of Williamson County BRFSS 1999 and 2004**

Category	WC BRFSS 1999	WC BRFSS 2004
Diabetes	5%	8%
High Blood Pressure	21%	22%
Cholesterol Check within past 5yrs	77%	78%
High Cholesterol	35%	36%
Adult Asthma	n/a	6%
Current Smoker	18%	18%
Smokeless Tobacco	3.5%	3%
Flu Shot, Over 65 <sup>(1)</sup>	63%	76%
Obese <sup>(2)</sup>	21%	26%
Overweight	34%	37%
Physical Activity <sup>+</sup>	44%	53%
Nutrition <sup>+</sup>	14%	22%
Overall Health Fair or Poor	11%	11%
Health Insurance	89%	84%
Primary Provider	n/a	80%
Dental Visit within past year	n/a	68%

(1) The Williamson County 2004 BRFSS survey addressed the 2003-2004 flu season, not the most recent 2004-2005 flu season that had well publicized problems with flu vaccine production.

(2) Obese and overweight are mutually exclusive.

+ Changes in the questions used to measure diet account for most of the difference between 1999 and 2004.

n/a – Not available

**Source:** Williamson County BRFSS Survey 2004, Williamson County BRFSS Survey 1999

Differences between the West County and East County samples in the 2004 BRFSS can also largely be explained in terms of demographic differences. The East County population has greater chronic disease prevalence and behavioral risk, and it also has the demographic characteristics that would predict greater risk. The East County population is older, less educated, and earns less income. The East also has more African Americans and Hispanics. As noted above, there are continuing disparities in the burden of illness and death experienced by these racial/ethnic populations. In addition, because the eastern portion of the county is rural and less densely populated, there are fewer medical services; therefore, residents in eastern Williamson County have to travel farther to access medical care, especially specialty care. The East County sample's results on the 2004 BRFSS mirror very closely the statewide results; most of the county's "advantage" is related to the more populous West portion of the county.

Compared to the East County sample, the West County sample has a lower prevalence of diabetes, high blood pressure, and adult asthma. However, the East County sample has a lower prevalence of high cholesterol. The East County sample experiences poorer overall health and has more difficulty gaining access to medical and dental care. The built environment in the eastern section of the county is less conducive to use for recreation and physical activity.

#### Comparison of East County and West County Samples

Factor	East County Sample	West County Sample
Diabetes	10%	7%
High Blood Pressure	29%	21%
High Cholesterol	31%	38%
Adult Asthma	7%	6%
Current Smoker	19%	18%
→ Smokeless Tobacco	8%	2%
Flu Shot, Over 65 <sup>(1)</sup>	75%	76%
Obese <sup>(2)</sup>	26%	25%
Overweight	38%	36%
Physical Activity	52%	54%
Nutrition	22%	22%
→ General Health Fair or Poor	18%	10%
→ Physical Health "not good" 5+ days	18%	11%
No Health Insurance	17%	15%
No Primary Provider	22%	20%
No Doctor due to Cost	15%	11%
No Dental Visit in 5+ yrs.	13%	8%
→ Neighborhood Slightly Safe	17%	9%
→ No Sidewalks	74%	30%
→ Private Recreation Facility Use	11%	32%
→ Walking Trails and Park use	32%	58%
→ Public Recreation Center Use	17%	28%

→ Indicates a difference that is statistically significant at a 95% confidence interval.

(1) The Williamson County 2004 BRFSS survey addressed the 2003-2004 flu season, not the most recent 2004-2005 flu season that had well publicized problems with flu vaccine production.

(2) Obese and overweight are mutually exclusive.

**Source:** Williamson County BRFSS Survey 2004

***What do these findings mean for public health planning and the future health of the people of Williamson County?***

While Williamson County's levels of chronic disease prevalence and behavioral risk are generally favorable compared to the State of Texas, the county does contain chronically ill and at-risk residents who often have difficulty accessing medical care. Williamson County residents, communities, health care providers, and public health advocates must not be complacent or adopt a false sense of security. Despite its demographic advantages, Williamson County falls short of almost all Healthy People 2010 objectives.

Designed to increase quality and years of healthy life and to eliminate health disparities, the Healthy People 2010 target measures should motivate Williamson County to put into practice a systematic approach to monitor health of residents and to focus on expanding achievements in health. Williamson County must strive in supporting the health of residents by encouraging positive lifestyle choices and promoting healthy physical and social environments and the policies and interventions used to promote health, prevent disease, and ensure access to quality health care.

# Section II

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Tables and Graphs for Common Health Indicators & Risk Factors

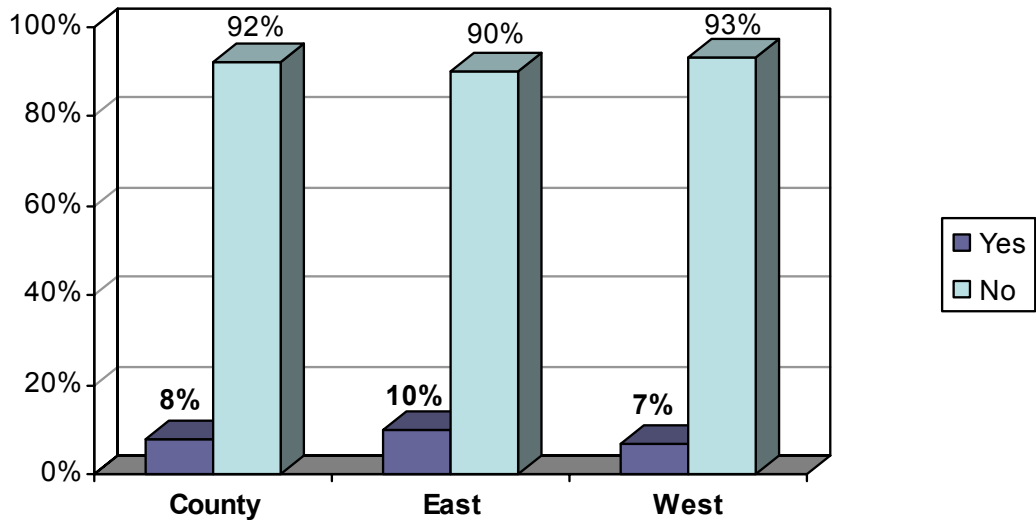
## Williamson County – Diabetes Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Doctor diagnosed diabetes:

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	8	(6-10)	10	(7-13)	7	(5-10)
No	92	(90-94)	90	(87-93)	93	(90-95)

Source: Williamson County BRFSS Survey 2004

### Doctor Diagnosed Diabetes



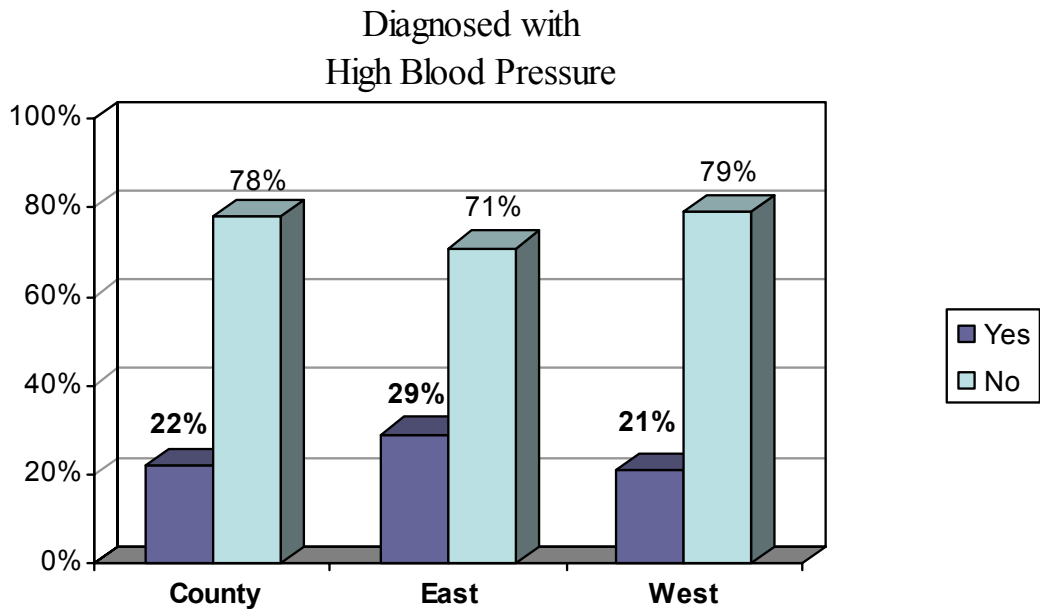
Source: Williamson County BRFSS Survey 2004

## Williamson County – High Blood Pressure Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Diagnosed with High Blood Pressure:

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	22	(19-26)	29	(25-34)	21	(17-25)
No	78	(74-81)	71	(66-75)	79	(75-83)

Source: Williamson County BRFSS Survey 2004



Source: Williamson County BRFSS Survey 2004

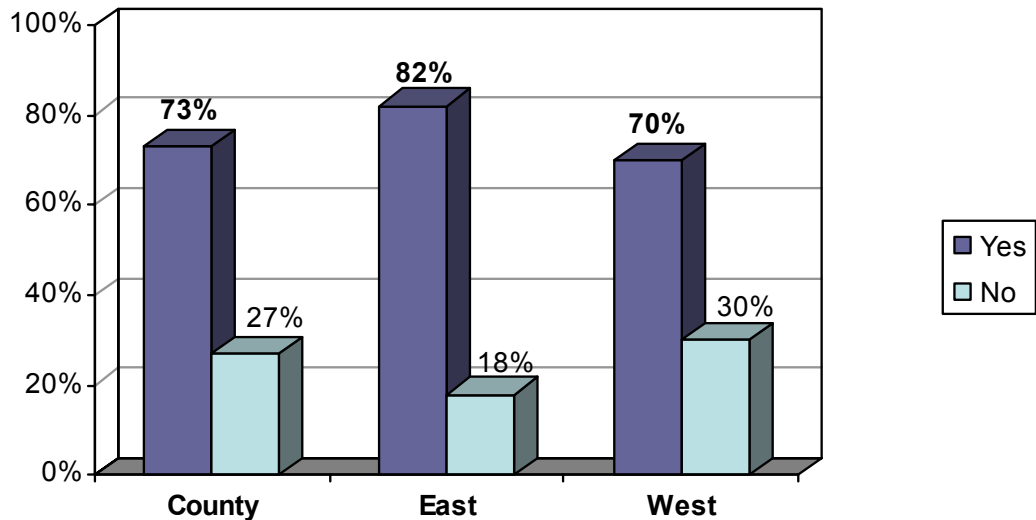
## Williamson County – High Blood Pressure Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Taking Medication to Control High Blood Pressure :

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	73	(64-80)	82	(74-89)	70	(58-79)
No	27	(20-36)	18	(11-26)	30	(21-42)

Source: Williamson County BRFSS Survey 2004

### Taking Medication to Control High Blood Pressure



Source: Williamson County BRFSS Survey 2004

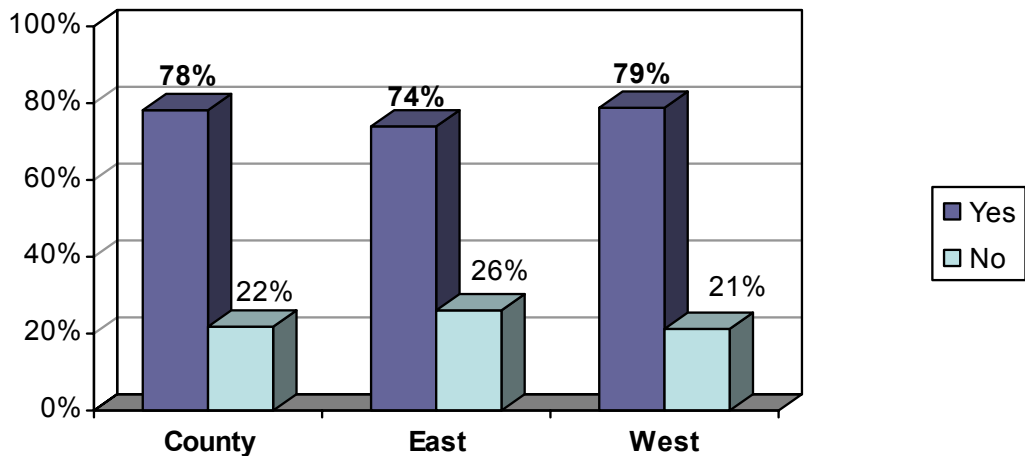
## Williamson County – Cholesterol Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Cholesterol Checked In Past 5 Years :

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	78	(74-82)	74	(69-79)	79	(74-83)
No	22	(18-26)	26	(21-31)	21	(17-26)

Source: Williamson County BRFSS Survey 2004

### Cholesterol Checked in Past 5 Years



Source: Williamson County BRFSS Survey 2004

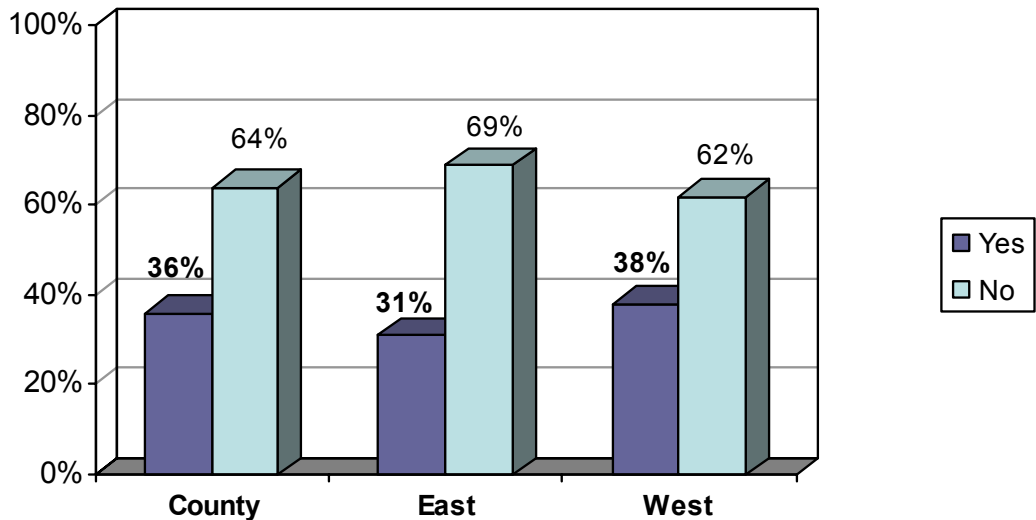
## Williamson County – Cholesterol Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Diagnosed With High Cholesterol :

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	36	(32-41)	31	(25-36)	38	(32-43)
No	64	(59-68)	69	(64-75)	62	(57-68)

Source: Williamson County BRFSS Survey 2004

### Diagnosed with High Cholesterol



Source: Williamson County BRFSS Survey 2004

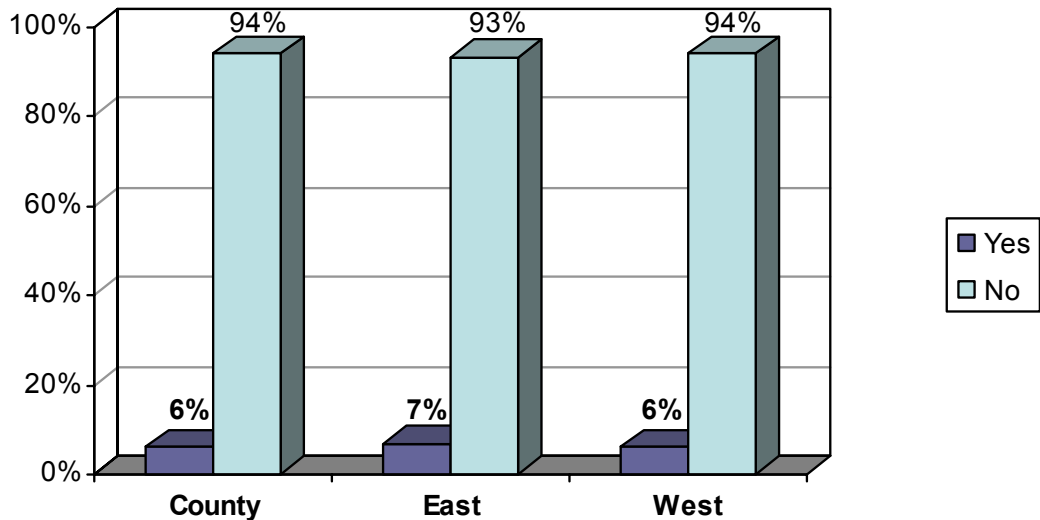
## Williamson County – Adult Asthma Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Current Asthma (Adult):

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	6	(4-8)	7	(4-10)	6	(4-8)
No	94	(92-96)	93	(90-96)	94	(92-96)

Source: Williamson County BRFSS Survey 2004

### Current Asthma (Adult)



Source: Williamson County BRFSS Survey 2004

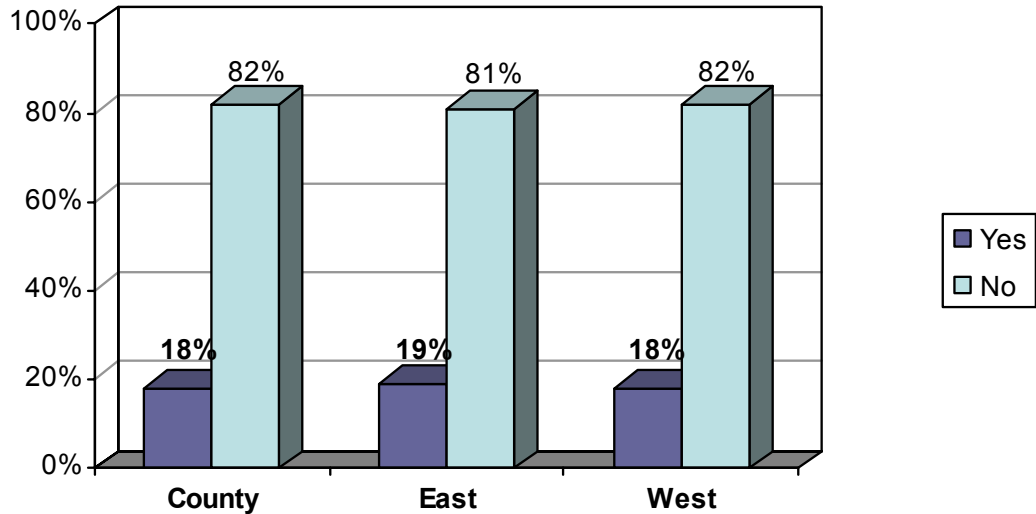
## Williamson County – Tobacco Use Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Current Smoker:

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	18	(15-22)	19	(15-24)	18	(14-22)
No	82	(78-85)	81	(76-85)	82	(78-86)

Source: Williamson County BRFSS Survey 2004

### Current Smoker



Source: Williamson County BRFSS Survey 2004

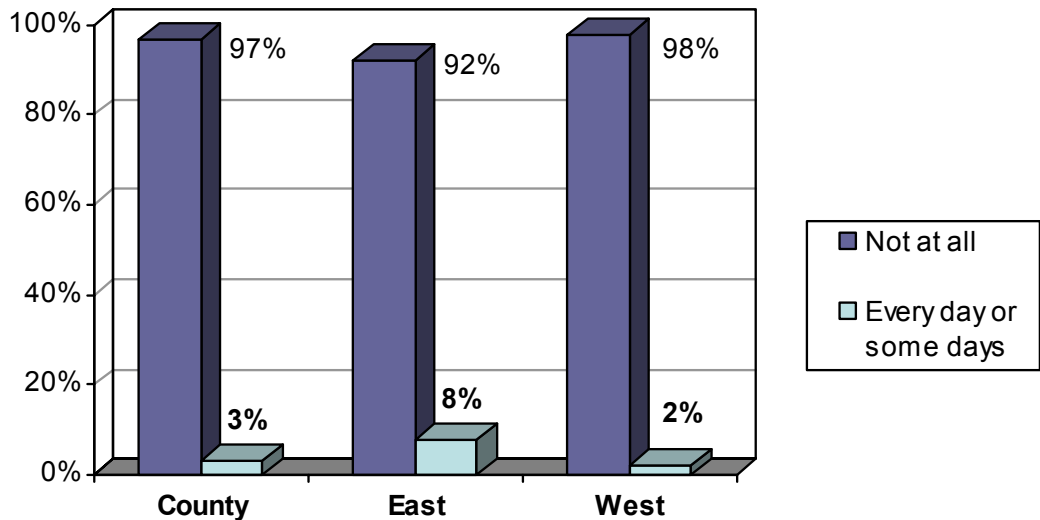
## Williamson County – Tobacco Use Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Current Use of Smokeless Tobacco:

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Not at all	97	(95-98)	92	(89-95)	98	(96-99)
Every day or some days	3	(2-5)	8	(5-11)	2	(1-4)

Source: Williamson County BRFSS Survey 2004

### Current Use of Smokeless Tobacco



Source: Williamson County BRFSS Survey 2004

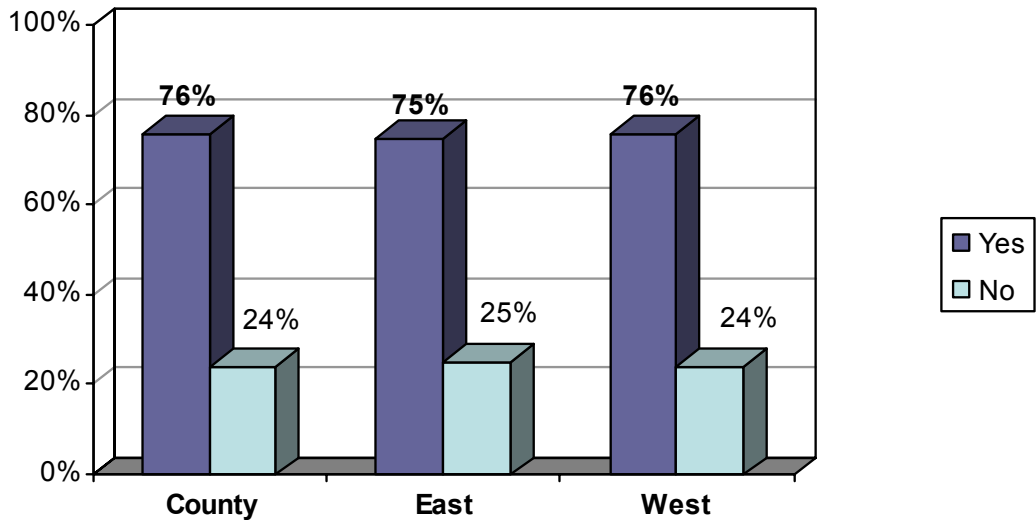
## Williamson County – Immunization Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Flu Shot In Past Year, Age 65+:

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	76	(65-84)	75	(64-84)	76	(61-87)
No	24	(16-35)	25	(16-36)	24	(13-39)

Source: Williamson County BRFSS Survey 2004

Flu Shot in Past Year, Age 65+



Source: Williamson County BRFSS Survey 2004

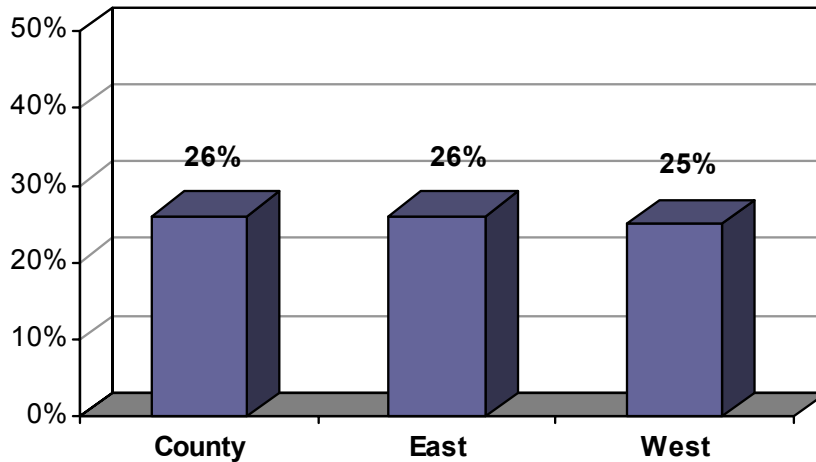
**Williamson County – Body Mass Index  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

Obese<sup>1</sup> (Body Mass Index  $\geq$  30.0) :

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Obese	26	(22-30)	26	(22-31)	25	(21-31)

Source: Williamson County BRFSS Survey 2004

Obese (BMI  $\geq$  30)



Source: Williamson County BRFSS Survey 2004

<sup>1</sup> Obese and overweight are exclusive

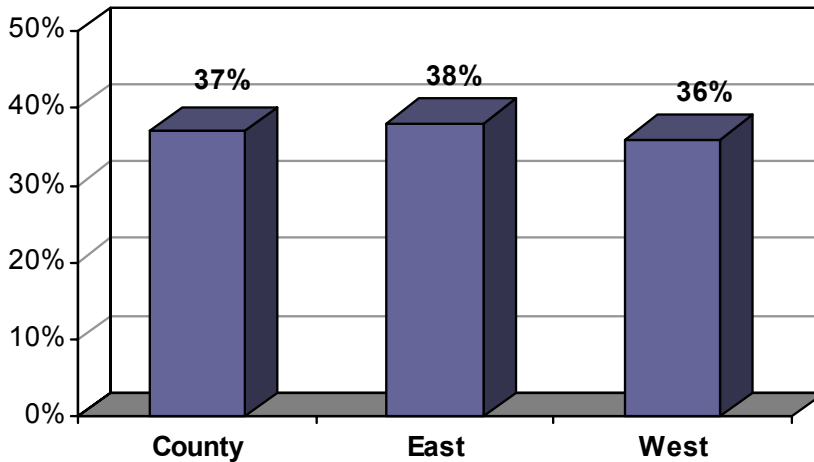
## Williamson County – Body Mass Index Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Overweight<sup>1</sup> (Body Mass Index 25.0-29.9) :

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Overweight	37	(32-41)	38	(33-43)	36	(31-42)

Source: Williamson County BRFSS Survey 2004

Overweight (BMI 25.0-29.9)



Source: Williamson County BRFSS Survey 2004

<sup>1</sup> Obese and overweight are exclusive

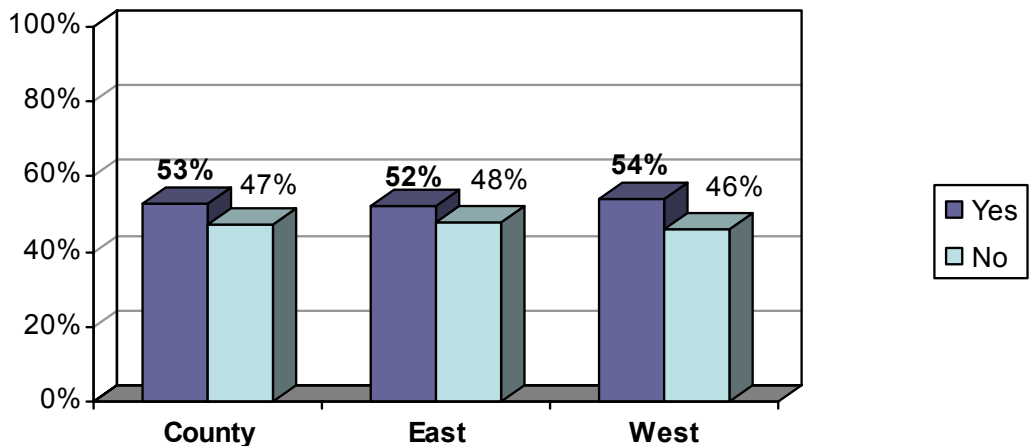
## Williamson County – Body Mass Index Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Meets recommendations for moderate or vigorous physical activity:

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	53	(49-58)	52	(46-57)	54	(48-59)
No	47	(42-51)	48	(43-54)	46	(41-52)

Source: Williamson County BRFSS Survey 2004

### Meets Recommendations for Moderate or Vigorous Physical Activity



Source: Williamson County BRFSS Survey 2004

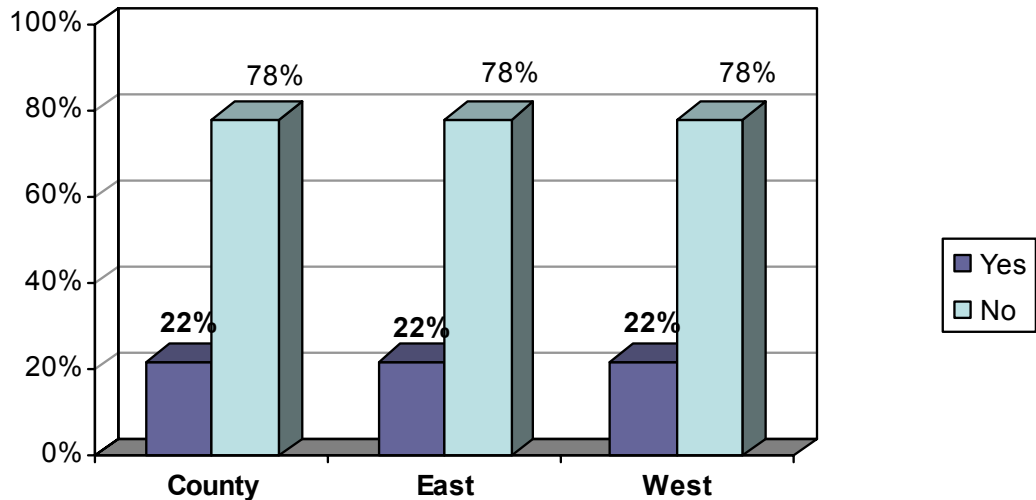
## Williamson County – Body Mass Index Adults Ages 18 Years and Over Behavioral Risk Factor Surveillance System, 2004

Meets recommendations for fruits and vegetables:

	County		East		West	
	Percent (%)	95% CI	Percent (%)	95% CI	Percent (%)	95% CI
Yes	22	(18-26)	22	(18-27)	22	(17-26)
No	78	(74-82)	78	(73-82)	78	(74-83)

Source: Williamson County BRFSS Survey 2004

### Meets Recommendations for Fruits and Vegetables



Source: Williamson County BRFSS Survey 2004

# Section III

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Data Tables

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

## HEALTH STATUS

Would you say that in general your health is excellent, very good, good, fair, or poor?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	Health is fair or poor	11	9	14
		Health is good, very good, or excellent	89	85	91
<b>East</b>	417	Health is fair or poor	18	14	22
		Health is good, very good, or excellent	82	78	86
<b>West</b>	410	Health is fair or poor	10	7	13
		Health is good, very good, or excellent	90	87	93

## HEALTH DAYS

Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	810	No days or less than 5 days	88	85	90
		5 or more days	12	10	15
<b>East</b>	403	No days or less than 5 days	82	77	86
		5 or more days	18	14	23
<b>West</b>	407	No days or less than 5 days	89	86	92
		5 or more days	11	8	14

Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	808	No days or less than 5 days	78	74	82
		5 or more days	22	18	26
<b>East</b>	404	No days or less than 5 days	81	76	85
		5 or more days	19	15	24
<b>West</b>	404	No days or less than 5 days	78	73	82
		5 or more days	22	18	27

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
Total	822	No days or less than 5 days	91	88	93
		5 or more days	9	7	12
East	413	No days or less than 5 days	89	85	92
		5 or more days	11	8	15
West	409	No days or less than 5 days	91	87	94
		5 or more days	9	6	13

### HEALTH CARE ACCESS

Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
Total	826	Yes	84	80	88
		No	16	12	20
East	417	Yes	83	79	87
		No	17	13	21
West	409	Yes	85	80	89
		No	15	11	20

Do you have one person you think of as your personal doctor or health care provider?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
Total	824	Yes, only one	73	69	77
		More than one	7	5	9
		No	20	17	24
East	415	Yes, only one	69	64	74
		More than one	9	6	11
		No	22	18	27
West	409	Yes, only one	74	69	79
		More than one	6	4	9
		No	20	16	24

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Was there a time in the past 12 months when you needed to see a doctor but could not because of the cost?**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	822	<b>Yes</b>	12	9	15
		<b>No</b>	88	85	91
<b>East</b>	413	<b>Yes</b>	15	12	19
		<b>No</b>	85	81	88
<b>West</b>	409	<b>Yes</b>	11	8	15
		<b>No</b>	89	85	92

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**TOBACCO USE**

**Current Smokers**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	825	<b>Not at risk</b>	82	78	85
		<b>At risk</b>	18	15	22
<b>East</b>	417	<b>Not at risk</b>	81	76	85
		<b>At risk</b>	19	15	24
<b>West</b>	408	<b>Not at risk</b>	82	78	86
		<b>At risk</b>	18	14	22

**Smoking Status**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	825	<b>Current smoker - every day</b>	13	10	16
		<b>Current smoker - some days</b>	5	4	8
		<b>Former smoker</b>	22	18	26
		<b>Never smoked</b>	60	56	64
<b>East</b>	417	<b>Current smoker - every day</b>	12	9	16
		<b>Current smoker - some days</b>	7	5	11
		<b>Former smoker</b>	18	14	22
		<b>Never smoked</b>	63	57	68
<b>West</b>	408	<b>Current smoker - every day</b>	13	10	17
		<b>Current smoker - some days</b>	5	3	8
		<b>Former smoker</b>	23	19	28
		<b>Never smoked</b>	59	54	65

**During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	145	<b>Yes</b>	54	43	64
		<b>No</b>	46	36	57
<b>East</b>	75	<b>Yes</b>	68	55	79
		<b>No</b>	32	21	45
<b>West</b>	70	<b>Yes</b>	50	38	62
		<b>No</b>	50	38	62

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**OTHER TOBACCO**

Have you ever used or tried any smokeless tobacco products such as chewing tobacco or snuff?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Yes</b>	21	17	25
		<b>No</b>	79	75	83
<b>East</b>	417	<b>Yes</b>	24	20	29
		<b>No</b>	76	71	80
<b>West</b>	410	<b>Yes</b>	20	16	25
		<b>No</b>	80	75	84

Do you currently use chewing tobacco or snuff every day, some days, or not at all?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Not at all</b>	97	95	98
		<b>Every day or some days</b>	3	2	5
<b>East</b>	417	<b>Not at all</b>	93	89	95
		<b>Every day or some days</b>	7	5	11
<b>West</b>	410	<b>Not at all</b>	98	95	99
		<b>Every day or some days</b>	2	1	5

Current smokeless tobacco users:

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Yes</b>	3	2	5
		<b>No</b>	97	95	98
<b>East</b>	417	<b>Yes</b>	8	5	11
		<b>No</b>	92	89	95
<b>West</b>	410	<b>Yes</b>	2	1	4
		<b>No</b>	98	96	99

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**DIABETES**

Have you ever been told by a doctor that you have diabetes?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Yes</b>	8	6	10
		<b>No</b>	92	90	94
<b>East</b>	417	<b>Yes</b>	10	7	13
		<b>No</b>	90	87	93
<b>West</b>	410	<b>Yes</b>	7	5	10
		<b>No</b>	93	90	95

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

## HIGH BLOOD PRESSURE

Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Yes</b>	22	19	26
		<b>No</b>	78	74	81
<b>East</b>	417	<b>Yes</b>	29	25	34
		<b>No</b>	71	66	75
<b>West</b>	410	<b>Yes</b>	21	17	25
		<b>No</b>	79	75	83

Are you currently taking medicine for your high blood pressure?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	232	<b>Yes</b>	73	64	80
		<b>No</b>	27	20	36
<b>East</b>	136	<b>Yes</b>	82	74	89
		<b>No</b>	18	11	26
<b>West</b>	96	<b>Yes</b>	70	58	79
		<b>No</b>	30	21	42

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**CHOLESTEROL**

Have you ever had your blood cholesterol checked?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	818	<b>Yes</b>	82	78	85
		<b>No</b>	18	15	22
<b>East</b>	413	<b>Yes</b>	79	74	83
		<b>No</b>	21	17	26
<b>West</b>	405	<b>Yes</b>	82	77	86
		<b>No</b>	18	14	23

Cholesterol Checked Within Last 5 Years

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	810	<b>Yes</b>	78	74	82
		<b>No</b>	22	18	26
<b>East</b>	409	<b>Yes</b>	74	69	79
		<b>No</b>	26	21	31
<b>West</b>	401	<b>Yes</b>	79	74	83
		<b>No</b>	21	17	26

Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	678	<b>Yes</b>	36	32	41
		<b>No</b>	64	59	68
<b>East</b>	334	<b>Yes</b>	31	25	36
		<b>No</b>	69	64	75
<b>West</b>	344	<b>Yes</b>	38	32	44
		<b>No</b>	62	57	68

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

## ADULT ASTHMA

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

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
Total	827	Yes	12	9	15
		No	88	85	91
East	417	Yes	11	8	15
		No	89	85	92
West	410	Yes	12	9	16
		No	88	84	91

Do you currently have asthma?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
Total	826	Yes	6	4	8
		No	94	92	96
East	417	Yes	7	4	10
		No	93	90	96
West	409	Yes	6	4	8
		No	94	92	96

## CHILDHOOD ASTHMA

Children with Current Asthma

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
Total	346	Current Asthma	8	5	10
East	164	Current Asthma	6	3	9
West	182	Current Asthma	8	5	11

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**ORAL HEALTH**

How long has it been since you last visited a dentist or a dental clinic for any reason?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	823	<b>Within the past year</b>	68	64	72
		<b>Within the past 2 years</b>	12	9	15
		<b>Within the past 5 years</b>	10	7	12
		<b>5 or more years ago</b>	9	7	12
		<b>Never</b>	1	1	2
<b>East</b>	414	<b>Within the past year</b>	59	53	64
		<b>Within the past 2 years</b>	14	11	19
		<b>Within the past 5 years</b>	12	9	16
		<b>5 or more years ago</b>	13	9	17
		<b>Never</b>	3	1	6
<b>West</b>	409	<b>Within the past year</b>	71	66	75
		<b>Within the past 2 years</b>	11	8	15
		<b>Within the past 5 years</b>	9	7	13
		<b>5 or more years ago</b>	8	5	12
		<b>Never</b>	1	1	3

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**IMMUNIZATION**

During the past 12 months, have you had a flu shot?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Yes</b>	38	33	42
		<b>No</b>	62	58	67
<b>East</b>	417	<b>Yes</b>	39	34	44
		<b>No</b>	62	56	66
<b>West</b>	410	<b>Yes</b>	37	32	43
		<b>No</b>	63	57	68

Flu shot within the past year, Ages 65 years and older:

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	130	<b>Yes</b>	76	65	84
		<b>No</b>	24	16	35
<b>East</b>	81	<b>Yes</b>	75	64	84
		<b>No</b>	25	16	36
<b>West</b>	49	<b>Yes</b>	76	61	87
		<b>No</b>	24	13	39

During the past 12 months, have you had a flu vaccine that was sprayed in your nose?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Yes</b>	2	1	3
		<b>No</b>	98	97	99
<b>East</b>	417	<b>Yes</b>	1	1	3
		<b>No</b>	99	97	99
<b>West</b>	410	<b>Yes</b>	2	1	4
		<b>No</b>	98	96	99

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**FRUITS AND VEGETABLES**

**Fruit and Vegetable Serving Index**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Less than 1 time per day or never</b>	5	4	8
		<b>1 to less than 3 times per day</b>	37	33	42
		<b>3 to less than 5 times per day</b>	36	32	40
		<b>5 or more times per day</b>	22	18	26
<b>East</b>	417	<b>Less than 1 time per day or never</b>	5	3	9
		<b>1 to less than 3 times per day</b>	39	34	44
		<b>3 to less than 5 times per day</b>	34	29	39
		<b>5 or more times per day</b>	22	18	29
<b>West</b>	410	<b>Less than 1 time per day or never</b>	5	3	8
		<b>1 to less than 3 times per day</b>	37	32	42
		<b>3 to less than 5 times per day</b>	36	31	42
		<b>5 or more times per day</b>	22	17	26

**Five Fruits and Vegetables A Day**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Less than 5</b>	78	74	82
		<b>5 or more</b>	22	18	26
<b>East</b>	417	<b>Less than 5</b>	78	73	82
		<b>5 or more</b>	22	18	27
<b>West</b>	410	<b>Less than 5</b>	78	74	83
		<b>5 or more</b>	22	17	26

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**DEMOGRAPHICS**

**Age Groups (Years)**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	814	<b>18 to 44</b>	62	58	66
		<b>45 to 64</b>	28	24	31
		<b>65+</b>	11	9	13
<b>East</b>	412	<b>18 to 44</b>	54	49	59
		<b>45 to 64</b>	29	25	34
		<b>65+</b>	17	14	21
<b>West</b>	402	<b>18 to 44</b>	64	58	69
		<b>45 to 64</b>	27	23	32
		<b>65+</b>	9	7	12

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	814	<b>18 to 24</b>	10	7	14
		<b>25 to 34</b>	25	21	29
		<b>35 to 44</b>	27	23	31
		<b>45 to 54</b>	16	13	19
		<b>55 to 64</b>	12	9	15
		<b>65+</b>	11	9	13
<b>East</b>	412	<b>18 to 24</b>	8	5	12
		<b>25 to 34</b>	23	19	29
		<b>35 to 44</b>	23	18	28
		<b>45 to 54</b>	16	13	20
		<b>55 to 64</b>	13	10	16
		<b>65+</b>	17	14	21
<b>West</b>	402	<b>18 to 24</b>	11	7	16
		<b>25 to 34</b>	26	21	31
		<b>35 to 44</b>	27	23	33
		<b>45 to 54</b>	16	12	20
		<b>55 to 64</b>	12	9	15
		<b>65+</b>	9	7	12

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Hispanic or Latino?**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	826	<b>Yes</b>	16	12	19
		<b>No</b>	84	81	88
<b>East</b>	417	<b>Yes</b>	23	18	28
		<b>No</b>	77	72	82
<b>West</b>	409	<b>Yes</b>	14	10	18
		<b>No</b>	86	82	90

**Race**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	815	<b>White</b>	84	80	87
		<b>Black or African American</b>	4	3	6
		<b>Asian</b>	2	1	3
		<b>Native Hawaiian or Other Pacific Islander</b>	0	0	3
		<b>American Indian, Alaskan Native</b>	1	0	2
		<b>Other</b>	9	7	12
		<b>East</b>	410	<b>White</b>	76
<b>Black or African American</b>	8			6	12
<b>Asian</b>	1			0	2
<b>Native Hawaiian or Other Pacific Islander</b>	0			0	0
<b>American Indian, Alaskan Native</b>	1			0	4
<b>Other</b>	14			11	19
<b>West</b>	405			<b>White</b>	86
		<b>Black or African American</b>	3	2	5
		<b>Asian</b>	2	1	4
		<b>Native Hawaiian or Other Pacific Islander</b>	0	0	3
		<b>American Indian, Alaskan Native</b>	1	0	2
		<b>Other</b>	8	5	12

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Race/Ethnicity**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	824	<b>White</b>	76	72	80
		<b>Black</b>	4	3	6
		<b>Hispanic</b>	16	12	19
		<b>Other</b>	5	3	7
<b>East</b>	415	<b>White</b>	66	61	71
		<b>Black</b>	8	6	12
		<b>Hispanic</b>	23	18	28
		<b>Other</b>	3	2	5
<b>West</b>	409	<b>White</b>	78	73	83
		<b>Black</b>	3	2	5
		<b>Hispanic</b>	14	10	18
		<b>Other</b>	5	3	8

**Marital Status**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	824	<b>Married</b>	69	65	73
		<b>Divorced</b>	8	6	10
		<b>Widowed</b>	3	2	4
		<b>Separated</b>	1	1	3
		<b>Never Married</b>	15	11	19
		<b>A member of an unmarried couple</b>	4	2	6
<b>East</b>	416	<b>Married</b>	70	65	74
		<b>Divorced</b>	7	5	10
		<b>Widowed</b>	6	4	8
		<b>Separated</b>	2	1	4
		<b>Never Married</b>	12	8	16
		<b>A member of an unmarried couple</b>	3	2	6
<b>West</b>	408	<b>Married</b>	69	64	74
		<b>Divorced</b>	8	6	11
		<b>Widowed</b>	3	2	4
		<b>Separated</b>	1	1	3
		<b>Never Married</b>	15	11	20
		<b>A member of an unmarried couple</b>	4	2	7

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Marital Status, Condensed**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	824	<b>Married</b>	69	65	73
		<b>Unmarried</b>	31	27	35
<b>East</b>	416	<b>Married</b>	70	65	74
		<b>Unmarried</b>	30	26	35
<b>West</b>	408	<b>Married</b>	69	64	74
		<b>Unmarried</b>	31	26	36

**Gender**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	<b>Male</b>	49	45	54
		<b>Female</b>	51	46	55
<b>East</b>	417	<b>Male</b>	50	45	56
		<b>Female</b>	50	44	55
<b>West</b>	410	<b>Male</b>	49	43	54
		<b>Female</b>	51	46	57

**Children less than 18 years of age live in household**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	826	<b>None</b>	50	46	55
		<b>1</b>	22	18	26
		<b>2</b>	16	13	20
		<b>3 or more</b>	11	9	15
		<b>East</b>	417	<b>None</b>	51
<b>1</b>	17	14		22	
<b>2</b>	18	14		23	
<b>3 or more</b>	13	10		17	
<b>West</b>	409	<b>None</b>		50	44
<b>1</b>		23	19	28	
<b>2</b>		16	13	20	
<b>3 or more</b>		11	8	15	

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Highest grade or year in school completed**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	824	Never attended or only attended kindergarten	0	0	2
		Grades 1 through 8 (Elementary)	2	1	4
		Grades 9 through 11 (Some high school)	5	4	7
		Grade 12 or GED (High school graduate)	27	23	31
		College 1 year to 3 years (Some college or technical school)	25	22	29
		College 4 years or more (College graduate)	40	36	44
<b>East</b>	415	Never attended or only attended kindergarten	0	0	1
		Grades 1 through 8 (Elementary)	6	4	9
		Grades 9 through 11 (Some high school)	12	9	16
		Grade 12 or GED (High school graduate)	35	30	41
		College 1 year to 3 years (Some college or technical school)	27	22	32
		College 4 years or more (College graduate)	20	16	25
<b>West</b>	409	Never attended or only attended kindergarten	0	0	3
		Grades 1 through 8 (Elementary)	1	0	4
		Grades 9 through 11 (Some high school)	3	2	6
		Grade 12 or GED (High school graduate)	25	21	30
		College 1 year to 3 years (Some college or technical school)	25	21	30
		College 4 years or more (College graduate)	45	40	50

**Education Categories**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	824	Less than high school	8	6	10
		High school graduate	27	23	31
		Some college	25	22	29
		College graduate	40	36	44
<b>East</b>	415	Less than high school	18	14	22
		High school graduate	35	30	41
		Some college	27	22	32
		College graduate	20	16	25
<b>West</b>	409	Less than high school	4	3	8
		High school graduate	25	21	30
		Some college	25	21	30
		College graduate	45	40	50

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Employment Status, All Ages**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	Employed for wages	56	51	60
		Self-employed	10	8	13
		Out of work for more than 1 year	2	1	4
		Out of work for less than 1 year	4	3	6
		Homemaker	9	7	12
		Student	4	2	6
		Retired	12	10	15
		Unable to work	2	1	4
<b>East</b>	417	Employed for wages	56	51	62
		Self-employed	10	7	13
		Out of work for more than 1 year	3	2	6
		Out of work for less than 1 year	4	2	7
		Homemaker	9	7	13
		Student	1	0	2
		Retired	14	11	17
		Unable to work	4	2	6
<b>West</b>	410	Employed for wages	56	50	61
		Self-employed	10	8	14
		Out of work for more than 1 year	2	1	5
		Out of work for less than 1 year	5	3	8
		Homemaker	9	7	13
		Student	4	2	8
		Retired	12	9	15
		Unable to work	2	1	4

**Employment Status, All Ages, Condensed**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	827	Employed	66	62	70
		Not Employed	34	30	38
<b>East</b>	417	Employed	66	61	71
		Not Employed	34	29	39
<b>West</b>	410	Employed	66	61	71
		Not Employed	34	29	39

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Employment Status, Ages Less Than 65 Years**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	535	<b>Employed</b>	85	82	89
		<b>Not Employed</b>	15	12	18
<b>East</b>	274	<b>Employed</b>	80	75	85
		<b>Not Employed</b>	20	15	25
<b>West</b>	261	<b>Employed</b>	87	82	90
		<b>Not Employed</b>	13	10	18

**Annual Household Income**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	730	<b>Less than \$10,000</b>	2	1	4
		<b>\$10,000 to less than \$15,000</b>	3	2	4
		<b>\$15,000 to less than \$20,000</b>	6	4	8
		<b>\$20,000 to less than \$25,000</b>	9	6	12
		<b>\$25,000 to less than \$35,000</b>	8	6	11
		<b>\$35,000 to less than \$50,000</b>	14	12	18
		<b>\$50,000 to less than \$75,000</b>	22	19	26
		<b>\$75,000+</b>	36	31	41
		<b>East</b>	366	<b>Less than \$10,000</b>	3
<b>\$10,000 to less than \$15,000</b>	6	4		10	
<b>\$15,000 to less than \$20,000</b>	10	7		14	
<b>\$20,000 to less than \$25,000</b>	10	7		14	
<b>\$25,000 to less than \$35,000</b>	11	8		15	
<b>\$35,000 to less than \$50,000</b>	18	14		23	
<b>\$50,000 to less than \$75,000</b>	25	20		30	
<b>\$75,000+</b>	17	13		22	
<b>West</b>	364	<b>Less than \$10,000</b>		2	1
<b>\$10,000 to less than \$15,000</b>		2	1	4	
<b>\$15,000 to less than \$20,000</b>		5	3	7	
<b>\$20,000 to less than \$25,000</b>		8	5	13	
<b>\$25,000 to less than \$35,000</b>		8	5	11	
<b>\$35,000 to less than \$50,000</b>		14	10	18	
<b>\$50,000 to less than \$75,000</b>		22	18	27	
<b>\$75,000+</b>		40	35	46	

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Annual Household Income**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	730	<b>Less than \$15,000</b>	5	4	7
		<b>\$15,000 to less than \$25,000</b>	14	11	18
		<b>\$25,000 to less than \$35,000</b>	8	6	11
		<b>\$35,000 to less than \$50,000</b>	14	12	18
		<b>\$50,000+</b>	58	53	63
<b>East</b>	366	<b>Less than \$15,000</b>	10	7	14
		<b>\$15,000 to less than \$25,000</b>	20	16	25
		<b>\$25,000 to less than \$35,000</b>	11	8	15
		<b>\$35,000 to less than \$50,000</b>	18	14	23
		<b>\$50,000+</b>	42	36	47
<b>West</b>	364	<b>Less than \$15,000</b>	4	2	6
		<b>\$15,000 to less than \$25,000</b>	13	9	18
		<b>\$25,000 to less than \$35,000</b>	8	5	11
		<b>\$35,000 to less than \$50,000</b>	14	10	18
		<b>\$50,000+</b>	62	56	67

**Annual Household Income**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	730	<b>Less than \$25,000</b>	19	16	23
		<b>\$25,000 to less than \$75,000</b>	45	40	50
		<b>\$75,000+</b>	36	31	41
<b>East</b>	366	<b>Less than \$25,000</b>	30	25	35
		<b>\$25,000 to less than \$75,000</b>	54	48	59
		<b>\$75,000+</b>	17	13	22
<b>West</b>	364	<b>Less than \$25,000</b>	17	13	22
		<b>\$25,000 to less than \$75,000</b>	43	38	49
		<b>\$75,000+</b>	40	35	46

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**OVERWEIGHT AND OBESITY**

**BMI Categories**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	782	Not overweight or obese (BMI < 25.0)	38	33	42
		Overweight (BMI 25.0 - 29.9)	37	32	41
		Obese (BMI ≥ 30.0)	26	22	30
<b>East</b>	397	Not overweight or obese (BMI < 25.0)	36	31	41
		Overweight (BMI 25.0 - 29.9)	38	33	43
		Obese (BMI ≥ 30.0)	26	22	31
<b>West</b>	385	Not overweight or obese (BMI < 25.0)	38	33	44
		Overweight (BMI 25.0 - 29.9)	36	31	42
		Obesity (BMI ≥ 30.0)	26	21	31

**BMI Categories**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	782	Underweight (BMI < 18.5)	7	4	10
		Not overweight or obese (BMI ≥ 18.5 and BMI < 25.0)	31	27	36
		Overweight (BMI 25.0 - 29.9)	37	32	41
		Obese (BMI ≥ 30.0)	17	14	21
		Morbidly Obese (BMI ≥ 35.0)	8	6	11
<b>East</b>	397	Underweight (BMI < 18.5)	4	3	8
		Not overweight or obese (BMI ≥ 18.5 and BMI < 25.0)	31	27	37
		Overweight (BMI 25.0 - 29.9)	38	33	43
		Obese (BMI ≥ 30.0)	14	11	18
		Morbidly Obese (BMI ≥ 35.0)	12	9	16
<b>West</b>	385	Underweight (BMI < 18.5)	7	4	11
		Not overweight or obese (BMI ≥ 18.5 and BMI < 25.0)	31	26	36
		Overweight (BMI 25.0 - 29.9)	36	31	42
		Obese (BMI ≥ 30.0)	18	14	23
		Morbidly Obese (BMI ≥ 35.0)	7	5	11

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**PHYSICAL ACTIVITY**

When you are at work, which of the following best describes what you do?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	526	<b>Mostly sitting or standing</b>	67	62	72
		<b>Mostly walking</b>	21	17	25
		<b>Mostly heavy labor/ physically demanding work</b>	12	9	16
<b>East</b>	261	<b>Mostly sitting or standing</b>	60	53	67
		<b>Mostly walking</b>	25	19	31
		<b>Mostly heavy labor / physically demanding work</b>	15	11	21
<b>West</b>	265	<b>Mostly sitting or standing</b>	69	63	75
		<b>Mostly walking</b>	20	15	25
		<b>Mostly heavy labor / physically demanding work</b>	11	7	16

Meets recommendations for moderate or vigorous physical activity:

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	805	<b>Meets recommendations</b>	53	49	58
		<b>Some physical activity, but does not meet recommendations</b>	38	33	42
		<b>No physical activity</b>	9	7	12
<b>East</b>	401	<b>Meets recommendations</b>	52	46	57
		<b>Some physical activity, but does not meet recommendations</b>	38	33	43
		<b>No physical activity</b>	10	7	14
<b>West</b>	404	<b>Meets recommendations</b>	54	48	59
		<b>Some physical activity, but does not meet recommendations</b>	38	33	43
		<b>No physical activity</b>	9	6	12

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Meets recommendations for moderate or vigorous physical activity:**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	810	<b>Yes</b>	53	49	58
		<b>No</b>	47	42	51
<b>East</b>	405	<b>Yes</b>	52	46	57
		<b>No</b>	48	43	54
<b>West</b>	405	<b>Yes</b>	54	48	59
		<b>No</b>	46	41	52

**TV VIEWING**

**Over the past 30 days, on a typical day, how much time did you spend sitting and watching TV or videos or using a computer outside of work?**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	819	<b>Less than 1 hour</b>	8	6	11
		<b>1 hour</b>	17	14	20
		<b>2 hours</b>	29	26	34
		<b>3 hours</b>	19	15	22
		<b>4 hours</b>	9	7	12
		<b>5 hours or more</b>	18	15	22
		<b>You do not watch TV or videos or use a computer outside of work</b>	0	0	1
<b>East</b>	412	<b>Less than 1 hour</b>	10	7	13
		<b>1 hour</b>	18	14	23
		<b>2 hours</b>	27	22	32
		<b>3 hours</b>	16	13	21
		<b>4 hours</b>	10	7	13
		<b>5 hours or more</b>	18	14	23
		<b>You do not watch TV or videos or use a computer outside of work</b>	1	1	3
<b>West</b>	407	<b>Less than 1 hour</b>	8	5	11
		<b>1 hour</b>	16	13	21
		<b>2 hours</b>	30	25	35
		<b>3 hours</b>	19	15	24
		<b>4 hours</b>	9	6	12
		<b>5 hours or more</b>	18	14	23
		<b>You do not watch TV or videos or use a computer outside of work</b>	0	0	1

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**NEIGHBORHOOD (BUILT ENVIRONMENT)**

In general, would you say that the people in your neighborhood are...

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	757	Very physically active	14	11	18
		Somewhat physically active	66	61	70
		Not very physically active	16	13	20
		Not at all very physically active	3	2	5
<b>East</b>	376	Very physically active	12	9	17
		Somewhat physically active	55	49	61
		Not very physically active	26	21	31
		Not at all very physically active	7	4	11
<b>West</b>	381	Very physically active	15	11	19
		Somewhat physically active	68	63	73
		Not very physically active	14	11	18
		Not at all very physically active	3	1	5

Overall, how would you rate your neighborhood as a place to walk? Would you say...

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	823	Very pleasant	62	58	66
		Somewhat pleasant	30	27	35
		Not very pleasant	5	4	7
		Not at all pleasant	2	1	4
<b>East</b>	413	Very pleasant	55	50	60
		Somewhat pleasant	35	30	41
		Not very pleasant	7	5	10
		Not at all pleasant	2	1	5
<b>West</b>	410	Very pleasant	64	59	69
		Somewhat pleasant	29	25	34
		Not very pleasant	5	3	7
		Not at all pleasant	2	1	4

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

How safe from crime do you consider your neighborhood to be?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	818	<b>Extremely safe</b>	33	29	37
		<b>Quite safe</b>	55	51	60
		<b>Slightly safe</b>	10	8	13
		<b>Not at all safe</b>	2	1	4
<b>East</b>	410	<b>Extremely safe</b>	31	26	36
		<b>Quite safe</b>	49	44	55
		<b>Slightly safe</b>	17	13	22
		<b>Not at all safe</b>	3	1	5
<b>West</b>	408	<b>Extremely safe</b>	33	28	38
		<b>Quite safe</b>	57	51	62
		<b>Slightly safe</b>	9	6	12
		<b>Not at all safe</b>	2	1	4

Does your neighborhood have any sidewalks?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	825	<b>Yes</b>	62	58	66
		<b>No</b>	38	34	42
<b>East</b>	417	<b>Yes</b>	26	21	30
		<b>No</b>	74	70	79
<b>West</b>	408	<b>Yes</b>	70	65	75
		<b>No</b>	30	25	35

Do you use any private or membership only recreation facilities in your community for physical activity?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	823	<b>Yes</b>	28	24	32
		<b>No</b>	68	64	72
		<b>My community does not have these facilities</b>	4	2	6
<b>East</b>	416	<b>Yes</b>	11	8	15
		<b>No</b>	84	80	88
		<b>My community does not have these facilities</b>	5	3	7
<b>West</b>	407	<b>Yes</b>	32	27	37
		<b>No</b>	64	59	69
		<b>My community does not have these facilities</b>	4	2	7

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**Do you use walking trails, parks, playgrounds, sports fields in your community for physical activity?**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	826	<b>Yes</b>	53	48	57
		<b>No</b>	43	39	48
		<b>My community does not have these facilities</b>	4	3	6
<b>East</b>	416	<b>Yes</b>	32	27	37
		<b>No</b>	62	56	67
		<b>My community does not have these facilities</b>	7	4	10
<b>West</b>	410	<b>Yes</b>	58	52	63
		<b>No</b>	39	34	44
		<b>My community does not have these facilities</b>	3	2	6

**Do you use any public recreation centers in your community for physical activity?**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	825	<b>Yes</b>	26	22	30
		<b>No</b>	71	66	75
		<b>My community does not have these facilities</b>	3	2	5
<b>East</b>	416	<b>Yes</b>	17	13	21
		<b>No</b>	76	71	80
		<b>My community does not have these facilities</b>	7	5	10
<b>West</b>	409	<b>Yes</b>	28	24	33
		<b>No</b>	70	64	74
		<b>My community does not have these facilities</b>	2	1	5

**Do you use schools that are open in your community for public recreation activities?**

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	818	<b>Yes</b>	18	15	22
		<b>No</b>	80	76	84
		<b>Schools in my community are not open for the public to use</b>	2	1	4
<b>East</b>	413	<b>Yes</b>	16	13	20
		<b>No</b>	81	76	85
		<b>Schools in my community are not open for the public to use</b>	3	2	6
<b>West</b>	405	<b>Yes</b>	18	14	23
		<b>No</b>	80	75	84
		<b>Schools in my community are not open for the public to use</b>	2	1	4

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

**PUBLIC HEALTH EMERGENCY**

Does your household have a radio that would work if the power went out?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	821	<b>Yes</b>	68	64	72
		<b>No</b>	32	28	36
<b>East</b>	415	<b>Yes</b>	63	58	68
		<b>No</b>	37	32	42
<b>West</b>	406	<b>Yes</b>	69	64	74
		<b>No</b>	31	26	36

Does your household have a 3 day supply of food for everyone who lives there?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	824	<b>Yes</b>	86	83	89
		<b>No</b>	14	11	17
<b>East</b>	417	<b>Yes</b>	84	80	88
		<b>No</b>	16	12	20
<b>West</b>	407	<b>Yes</b>	87	83	90
		<b>No</b>	13	10	17

Does your household have a 3 day supply of water for everyone who lives there?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	822	<b>Yes</b>	50	45	54
		<b>No</b>	50	46	55
<b>East</b>	417	<b>Yes</b>	60	55	65
		<b>No</b>	40	35	45
<b>West</b>	405	<b>Yes</b>	47	42	53
		<b>No</b>	53	48	58

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

If you believed that you were exposed to a new or dangerous disease, and you wanted more information, where would you go first to get that information?

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	769	Your doctor's office	24	20	28
		A hospital or emergency room	11	8	14
		The local health department (Williamson County)	10	8	14
		A relative or friend	0	0	1
		Call 911	3	2	5
		The Texas Department of Health	3	2	5
		The internet	39	35	44
		TV or radio	2	1	4
		Pharmacist	0	0	0
		Other	6	5	9
<b>East</b>	385	Your doctor's office	24	20	29
		A hospital or emergency room	16	12	20
		The local health department (Williamson County)	11	8	15
		A relative or friend	1	0	3
		Call 911	6	4	9
		The Texas Department of Health	6	4	9
		The internet	26	21	31
		TV or radio	1	0	3
		Pharmacist	0	0	1
		Other	9	6	12
<b>West</b>	384	Your doctor's office	24	20	29
		A hospital or emergency room	10	7	14
		The local health department (Williamson County)	10	7	14
		A relative or friend	0	0	2
		Call 911	2	1	5
		The Texas Department of Health	3	2	5
		The internet	42	37	48
		TV or radio	3	1	5
		Pharmacist	0	0	0
		Other	6	4	9

**Williamson County  
Adults Ages 18 Years and Over  
Behavioral Risk Factor Surveillance System, 2004**

If my doctor or health care provider advised me to, I would get a free vaccine to prevent the disease would you say you...

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	800	<b>Strongly agree</b>	45	40	49
		<b>Agree</b>	48	43	52
		<b>Disagree</b>	6	4	9
		<b>Strongly disagree</b>	1	1	3
<b>East</b>	402	<b>Strongly agree</b>	37	32	42
		<b>Agree</b>	56	50	61
		<b>Disagree</b>	6	4	9
		<b>Strongly disagree</b>	1	1	3
<b>West</b>	398	<b>Strongly agree</b>	47	41	52
		<b>Agree</b>	46	40	51
		<b>Disagree</b>	6	4	9
		<b>Strongly disagree</b>	1	1	3

If health officials asked me to, I would stay home for a week, without outside visitors, to avoid spreading the disease, would you say you...

Area	Sample Size	Factor	%	95% CI	
				Lower	Upper
<b>Total</b>	811	<b>Strongly agree</b>	48	43	52
		<b>Agree</b>	45	41	50
		<b>Disagree</b>	6	4	9
		<b>Strongly disagree</b>	1	1	2
<b>East</b>	407	<b>Strongly agree</b>	41	36	46
		<b>Agree</b>	50	45	55
		<b>Disagree</b>	7	5	11
		<b>Strongly disagree</b>	2	1	4
<b>West</b>	404	<b>Strongly agree</b>	49	44	54
		<b>Agree</b>	44	39	49
		<b>Disagree</b>	6	4	9
		<b>Strongly disagree</b>	1	0	2

# Appendix A

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Technical Documentation & Questionnaire

# Williamson County and Cities Health District Survey

## Technical Report

*For:*

Williamson County and Cities Health District

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August 2004



## Contents

INTRODUCTION .....	- 1 -
SURVEY INSTRUMENT.....	- 1 -
SAMPLE DESIGN .....	- 1 -
DATA COLLECTION.....	- 2 -
FINAL DISPOSITIONS .....	- 2 -
DATA PREPARATION AND ANALYSIS.....	- 2 -
ATTACHMENT A: CATI QUESTIONNAIRE.....	- 4 -
ATTACHMENT B: NON-QUESTIONNAIRE VARIABLES IN FINAL DATA SET .....	- 27-

## Introduction

In this research project, Williamson County & Cities Health District examined health patterns of Williamson County residents using a questionnaire composed largely of BRFSS items.

Clearwater Research, Inc., provided sample design, questionnaire consultation, data collection, and data preparation services for the Williamson County & Cities Health District Survey. This report provides technical information regarding those services.

## Survey Instrument

Clearwater Research collaborated with the Williamson County & Cities Health District to refine the study questionnaire. Clearwater provided recommendations regarding question wording and also corrected and added skip patterns within the questionnaire. The questionnaire is presented in Attachment A.

## Sample Design

The 2004 Behavioral Risk Factor Surveillance System (BRFSS) random digit-dialing (RDD) method was used to obtain a probability sample of the noninstitutionalized adult (18 years and older) population in Williamson County. This method uses a sample frame that includes all telephone numbers serving households in the geographic target areas. This RDD method involves disproportionate stratification (DSS), dividing the telephone number sampling frame into listed and unlisted telephone numbers. The listed number stratum is sampled at a rate 1.5 times the rate for unlisted numbers, which improves the sample efficiency (ratio of sample records to completed interviews) compared with an unstratified RDD approach. The sample size goal (800) was exceeded by 27 completed interviews.

The required 800 completed interviews were divided evenly among two regions of Williamson County, East Williamson County and West Williamson County (please see Attachment A for a breakdown of the zip codes that comprised each region).

## Data Collection

Clearwater Research conducted interviews between June 20, 2004 and August 6, 2004. The average interview length was 15 minutes. Interviewer performance was closely monitored throughout the field period to assure data quality.

Sampled telephone numbers were called according to a schedule designed to minimize bias problems associated with difficult-to-reach respondents. Each sample record was resolved by attempting it a minimum of 15 times during the calling period or until a final disposition code (such as “completed interview” or “disconnected/nonworking number”) was assigned. The calling occasions for the project were weekdays, weekday evenings and weekends. However, the number of weekday calls were restricted in order to maximize the chance of reaching potential respondents.

### ***Final Dispositions***

At the close of the field period, each sampled telephone number was assigned a final disposition that summarizes the separate outcomes of each call attempt for that number. The final dispositions for the Williamson County & Cities Health District Survey sample are presented in Table 1. A total of 827 interviews were completed during the field period.

**Table 1. Final Dispositions**

<i>Disposition</i>	<i>Description</i>	<i>Records</i>
1	Completed interview	827
2	Refused interview, selected respondent	219
3	Refused interview, no selected respondent	1051
4	Disconnected / non-working number	4476
5	Not a private residence	1251
6	No eligible respondent at this number	28
7	Selected respondent not available during the interviewing period	242
8	Language barrier	14
9	Interview terminated within questionnaire	44
10	Communication barrier	21
11	Technological barrier	280
12	No answer / busy / answering machine	736
13	Out of study area	1661
<b><i>Total</i></b>		<b>10850</b>

## Data Preparation and Analysis

Survey data were entered and automatically consolidated into a CATI database as the interviews were being conducted. At the conclusion of data collection, interviewer errors previously documented on data change forms were corrected in the data set using CI3 data editing capabilities. Clearwater Research then implemented a comprehensive routine of data preparation. Data were converted from the CATI database and formatted for review and

analysis in SPSS, a statistical analysis software package. Data were thoroughly checked and verified as necessary to correct any potential errors or out-of-range values.

In addition, open-ended responses were examined and cleaned for overall comprehension. Open-ends cleaning involved correcting spelling, putting responses into sentence text, and sorting responses into a logical order. Responses to all open-ended questions are included in a separate MS Excel file as well as a text file version. This file includes the cleaned open-ended responses as well as the following information: RESPNUM (which allows for linking back to the data), the question, and the open ended response.

A listing of non-questionnaire variables included in the final data set is presented in Attachment B.

# Attachment A: CATI Questionnaire

## Williamson County & Cities Health District

### INTROQ

HELLO, I'm calling for the Williamson County & Cities Health District, the local health department in Williamson County. My name is \_\_\_\_ **(name)** \_\_\_\_\_. We're gathering information on the health of Williamson County residents. Your phone number has been chosen randomly, and I'd like to ask some questions about health and health practices.

Is this XXX-XXX-XXXX?

1. Correct Number (Proceed to next question)
2. Number is not the same – **SKIP TO WRONGNUM**

### PRIVRES

Is this a private residence?

1. Yes, continue.
2. No, non-residential – **SKIP TO NONRES**

### NONRES – ONLY GET THIS IF PRIVRES = 2 (NON-RESIDENTIAL)

Thank you very much, but we are only interviewing private residences. (Disp 25)

### WRONGNUM – ONLY GET THIS IF INTROQ = 2 (NUMBER IS NOT THE SAME)

Thank you very much, but it I seem to have dialed the wrong number. It's possible that your number may be called at a later time.

### COUNTY

What county do you live in?

\_\_ \_\_ \_\_ FIPS county code (Williamson=491)

777. DON'T KNOW / NOT SURE

999. REFUSED

If Fips code !=491 skip to **Out of area 1**.

### ZIP—ONLY GET IF COUNTY =491 OR 777 OR 999

What is the zip code where you live?

\_\_\_\_\_ Enter zip code

77777 DON'T KNOW / NOT SURE

99999 REFUSED

CONTINUE IF Region =1 and ZIP = 78634, 76511, 76530, 76574, 76578, 76577,78615, 78621.  
OTHER ZIPS = **Out of area 2** .

CONTINUE IF Region =2 and ZIP =76527, 76537, 78626, 78627, 78628, 78642, 78673, 78674,  
76573, 78613, 78630, 78641, 78646, 78651, 78664, 78680, 78681, 78683, 78717, 78727,  
78728, 78729. OTHER ZIPS = **Out of area 2** .

**Out of area 1 ONLY GET IF COUNTY<>491 AND <>777 AND <>999**

I'm sorry, but we are only interviewing residents of Williamson County.  
Thank you for your time. Good bye.  
(Terminate) (Disp 37)

**Out of area 2**

I'm sorry, but we are only interviewing specific zip codes in Williamson County.  
Thank you for your time. Good bye.  
(Terminate) (Disp 37)

**ADULTS**

I need to randomly select one adult who lives in your household to be interviewed. How many members of your household, including yourself, are 18 years of age or older?

\_\_ ENTER THE NUMBER OF ADULTS

**IF ANS = 1 SKIP TO ONEADULT**

**MEN**

How many of these adults are men?

- 0. None
- 1. One
- 2. Two
- 3. Three
- 4. Four
- 5. Five
- 6. Six
- 7. Seven
- 8. Eight
- 9. Nine

**IF ANS = ADULTS SKIP TO SELECTED**

**WOMEN**

How many of these adults are women?

- 0. None
- 1. One
- 2. Two
- 3. Three
- 4. Four
- 5. Five

- 6. Six
- 7. Seven
- 8. Eight
- 9. Nine

**IF ANS + MEN = ADULTS SKIP TO SELECTED**

**WRONGTOT – ONLY GET IF MEN + WOMEN <> ADULTS**

I'm sorry, something is not right.

Number of Men -  
 Number of Women -  
 -----  
 Number of Adults –

- 1. CORRECT THE NUMBER OF MEN
- 2. CORRECT THE NUMBER OF WOMEN
- 3. CORRECT THE NUMBER OF ADULTS

**SELECTED - ONLY GET IF MORE THAN ONE ADULT IN HOUSEHOLD**

The person in your household I need to speak with is the \_\_\_\_\_ .

Are you the \_\_\_\_\_ ?

- 1. YES – **SKIP TO YOURTHE1**
- 2. NO – **SKIP TO GETNEWAD**

**ONEADULT – ONLY GET THIS IF ONE ADULT IN HOUSEHOLD**

Are you the adult?

- 1. YES AND THE RESPONDENT IS A MALE – **SKIP TO YOURTHE1**
- 2. YES AND THE RESPONDENT IS A FEMALE – **SKIP TO YOURTHE1**
- 3. NO – **SKIP TO ASKGENDR**

**ASKGENDER – ONLY GET IF ONEADULT = 3**

Is the Adult a man or a woman?

- 1. Male
- 2. Female

**GETADULT - ONLY GET IF ONEADULT = 3**

May I speak with him or her?

1. YES, ADULT COMING TO THE PHONE
2. NO, GO TO NEXT SCREEN, PRESS F3 AND SCHEDULE A CALL-BACK

**\*\*\*DO NOT USE <F3> ON THIS SCREEN\*\*\***

**YOURTHE1 - ONLY GET IF ONEADULT = 1 (YES) OR IF SELECTED = 1 (YES)**

Then you are the person I need to speak with.

1. PERSON INTERESTED, CONTINUE – **SKIP TO INTROSCR**
2. GO BACK TO ADULTS QUESTION. WARNING:A NEW RESPONDENT MAY BE SELECTED

**GETNEWAD - ONLY GET IF SELECTED = 2 (NO)**

May I speak with the           ?

1. YES, SELECTED RESPONDENT COMING TO THE PHONE
2. NO, GO TO NEXT SCREEN, PRESS F3 AND SCHEDULE A CALL-BACK
3. GO BACK TO ADULTS QUESTION. WARNING:A NEW RESPONDENT MAY BE SELECTED

**\*\*\*DO NOT USE F3 ON THIS SCREEN\*\*\***

**GETNEWAD - ONLY GET IF SELECTED = 2 (NO)**

HELLO, I'm \_\_\_\_\_ calling for the Williamson County & Cities Health District, the local health department in Williamson County. We're gathering information on the health of Williamson County residents. Your phone number has been chosen randomly to be interviewed, and I'd like to ask some questions about health and health practices.

1. PERSON INTERESTED, CONTINUE – **SKIP TO INTROSCR**
2. GO BACK TO ADULTS QUESTIONS. WARNING: A NEW RESPONDENT MAY BE SELECTED

**INTROSCR – ONLY GET IF NEWADULT = 1 OR YOURTHE1 = 1**

I won't ask for your name, address, or other personal information that can identify you. You don't have to answer any question you don't want to, and you can end the interview at any time. Any information you give to me will be confidential. If you have any questions about this survey, I will provide a telephone number for you to call to get more information.

1. Person interested, continue
2. Go Back to Adults Question. Warning: A New Respondent may be selected

**NONQAL - ONLY GET IF CATI THINKS THE QUOTACELL IS FULL**

INTERVIEWER:

PLEASE ALERT YOUR SUPERVISOR IMMEDIATELY!!!!  
THE QUOTAS SET FOR THIS STUDY ARE INCORRECT.

AFTER NOTIFYING YOUR SUPERVISOR, RETURN THE RECORD

## **Health Status**

[CORE 1, 2004 BRFSS TEXAS]

**Q1. EVERYONE**

Would you say that in general your health is excellent, very good, good, fair, or poor?

- 1. Excellent
- 2. Very good
- 3. Good
- 4. Fair
- 5. Poor
  
- 7. DON'T KNOW/NOT SURE
- 9. REFUSED

## **Health Days – Health-related Quality of Life**

[CORE 2, 2004 BRFSS TEXAS]

**Q2. EVERYONE**

Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

\_\_ \_\_ Number of days

- 88. NONE
- 77. DON'T KNOW/NOT SURE
- 99. REFUSED

**Q3. EVERYONE**

Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

\_\_ \_\_ Number of days

- 88. NONE
- 77. DON'T KNOW/NOT SURE
- 99. REFUSED

**Q4. – ONLY GET IF Q02 <> 88 OR Q03 <> 88**

During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

\_\_ \_\_ Number of days

- 88. NONE
- 77. DON'T KNOW/NOT SURE
- 99. REFUSED

## Health Care Access

[CORE 3, 2004 BRFSS TEXAS]

### Q5. EVERYONE

Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?

1. Yes
2. No
  
7. DON'T KNOW/NOT SURE
9. REFUSED

### Q6. EVERYONE

Do you have one person you think of as your personal doctor or health care provider?

**(If "No," ask: "Is there more than one or is there no person who you think of?")**

1. Yes, only one
2. More than one
3. No
  
7. DON'T KNOW/NOT SURE
9. REFUSED

### Q7. EVERYONE

Was there a time in the past 12 months when you needed to see a doctor but could not because of the cost?

1. Yes
2. No
  
7. DON'T KNOW/NOT SURE
8. REFUSED

## Tobacco Use

[CORE 7, 2004 BRFSS TEXAS]

### Q8. EVERYONE

Have you smoked at least 100 cigarettes in your entire life?

**NOTE: 5 packs = 100 cigarettes**

1. Yes
2. No – **SKIP TO Q11**

7. DON'T KNOW / NOT SURE – **SKIP TO Q11**
9. REFUSED – **SKIP TO Q11**

Q9. – ONLY GET IF Q8=1

Do you now smoke cigarettes every day, some days, or not at all?

1. Everyday
2. Some days
3. Not at all – **SKIP TO Q11**
  
9. REFUSED – **SKIP TO Q11**

Q10. – ONLY GET IF Q9<3

During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?

1. Yes
2. No
  
7. DON'T KNOW / NOT SURE
9. REFUSED

## **Other Tobacco Products**

[MODULE 14, 2004 BRFSS TEXAS]

Q11. EVERYONE

Have you ever used or tried any smokeless tobacco products such as chewing tobacco or snuff?

1. Yes
2. No – **SKIP TO Q13**
  
7. DON'T KNOW/ NOT SURE – **SKIP TO Q13**
9. REFUSED – **SKIP TO Q13**

Q12. ONLY GET IF Q11=1

Do you currently use chewing tobacco or snuff every day, some days, or not at all?

1. Every day
2. Some days
3. Not at all
  
7. DON'T KNOW/ NOT SURE
9. REFUSED

# Diabetes

[CORE 10, 2004 BRFSS TEXAS]

Q13. EVERYONE

These next questions are about a variety of general health topics.  
Have you ever been told by a doctor that you have diabetes?

(If "Yes" and respondent is female, ask: "*Was this only when you were pregnant?*" -  
If Respondent says pre-diabetes or borderline diabetes, use response code 4.)

1. Yes
2. Yes, but female told only during pregnancy
3. No
4. No, pre-diabetes or borderline diabetes
  
7. DON'T KNOW / NOT SURE
9. REFUSED

Q13V. ONLY GET IF Q13=2 AND RESP IS MALE

INTERVIEWER: You recorded that the respondent was told by a doctor  
during pregnancy that she had diabetes. Are you sure?  
The respondent selected was the

Is the previous answer correct?

# Hypertension Awareness

[MODULE 3, 2004 BRFSS DRAFT]

Q14. EVERYONE

Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?

(If "Yes" and respondent is female, ask: "Was this only when you were pregnant?")

1. Yes
2. Yes, but female told only during pregnancy **SKIP TO Q16**
3. No **SKIP TO Q16**
  
7. DON'T KNOW / NOT SURE **SKIP TO Q16**
9. REFUSED **SKIP TO Q16**

Q14V. ONLY GET IF Q14=2 AND RESP IS MALE

INTERVIEWER: You recorded that the respondent was told by a health  
professional during pregnancy that she had high blood

pressure. Are you sure?  
The respondent selected was the

Is the previous answer correct?

Q15. ONLY GET IF Q14=1

Are you currently taking medicine for your high blood pressure?

1. Yes
2. No
  
7. DON'T KNOW / NOT SURE
9. REFUSED

### **Cholesterol Awareness**

[MODULE 4, 2004 BRFS DRAFT]

Q16. EVERYONE

Blood cholesterol is a fatty substance found in the blood. Have you ever had your blood cholesterol checked?

1. Yes
2. No
  
7. DON'T KNOW / NOT SURE
9. REFUSED

Q17. Only ask if Q16=1

About how long has it been since you last had your blood cholesterol checked?

- Read only if necessary
1. Within the past year (anytime less than 12 months ago)
  2. Within the past 2 years (1 year but less than 2 years ago)
  3. Within the past 5 years (2 years but less than 5 years ago)
  4. 5 or more years ago
  
  7. DON'T KNOW / NOT SURE
  9. REFUSED

Q18. ONLY GET IF Q16=1

Have you ever been told by a doctor, nurse, or other health professional that your blood cholesterol is high?

1. Yes
2. No
  
7. DON'T KNOW / NOT SURE

9. REFUSED

## Adult Asthma

[CORE 9, 2004 BRFSS TEXAS]

Q19. EVERYONE

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

1. Yes
2. No – **SKIP TO Q21**
  
7. DON'T KNOW / NOT SURE – **SKIP TO Q21**
9. REFUSED – **SKIP TO Q21**

Q20. - ONLY GET IF Q19=1

Do you still have asthma?

1. Yes
2. No
  
7. DON'T KNOW / NOT SURE
9. REFUSED

## Oral Health

[CORE 11, 2004 BRFSS TEXAS]

Q21. EVERYONE

How long has it been since you last visited a dentist or a dental clinic for any reason?

**NOTE: Include visits to dental specialists, such as orthodontists**

**PLEASE READ:**

1. Within the past year (anytime less than 12 months ago)
2. Within the past 2 years (1 year but less than 2 years ago)
3. Within the past 5 years (2 years but less than 5 years ago)
4. 5 or more years ago
  
8. NEVER
7. DON'T KNOW / NOT SURE
9. REFUSED

## Immunization

[CORE 12, 2004 BRFSS TEXAS]

Q22. EVERYONE

During the past 12 months, have you had a flu shot?

**IF NECESSARY: *We want to know if you had a flu shot injected in your arm.***

1. Yes
2. No
  
7. DON'T KNOW / NOT SURE
9. REFUSED

Q23. EVERYONE

During the past 12 months, have you had a flu vaccine that was sprayed in your nose?

1. Yes
2. No
  
7. DON'T KNOW / NOT SURE
9. REFUSED

## Fruits and Vegetables

[Section 11, Travis County STEPS Survey]

Q24. EVERYONE

These next questions are about the foods you usually eat or drink. Please tell me how often you eat or drink each one, for example, twice a week, three times a month, and so forth. Remember, I am only interested in the foods you eat. Include all foods you eat, both at home and away from home.

How often do you drink fruit juices such as orange, grapefruit, or tomato?

- 1\_\_ Per day
- 2\_\_ Per week
- 3\_\_ Per month
- 4\_\_ Per year

888. NEVER
777. DON'T KNOW / NOT SURE
999. REFUSED

Q25. EVERYONE

Not counting juice, how often do you eat fruit?

- 1\_\_ \_\_ Per day
- 2\_\_ \_\_ Per week
- 3\_\_ \_\_ Per month
- 4\_\_ \_\_ Per year

- 888. NEVER
- 777. DON'T KNOW / NOT SURE
- 999. REFUSED

**Q26. EVERYONE**

How often do you eat green salad?

- 1\_\_ \_\_ Per day
- 2\_\_ \_\_ Per week
- 3\_\_ \_\_ Per month
- 4\_\_ \_\_ Per year

- 888. NEVER
- 777. DON'T KNOW / NOT SURE
- 999. REFUSED

**Q27. EVERYONE**

How often do you eat potatoes not including French fries, fried potatoes, or potato chips?

- 1\_\_ \_\_ Per day
- 2\_\_ \_\_ Per week
- 3\_\_ \_\_ Per month
- 4\_\_ \_\_ Per year

- 888. NEVER
- 777. DON'T KNOW / NOT SURE
- 999. REFUSED

**Q28. EVERYONE**

How often do you eat carrots?

- 1\_\_ \_\_ Per day
- 2\_\_ \_\_ Per week
- 3\_\_ \_\_ Per month
- 4\_\_ \_\_ Per year

- 888. NEVER
- 777. DON'T KNOW / NOT SURE
- 999. REFUSED

**Q29. EVERYONE**

Not counting carrots, potatoes, or salad, how many servings of vegetables do you usually eat?

(Example: A serving of vegetables at both lunch and dinner would be two servings.)

- 1\_\_ \_\_ Per day
- 2\_\_ \_\_ Per week
- 3\_\_ \_\_ Per month
- 4\_\_ \_\_ Per year

- 888. NEVER
- 777. DON'T KNOW / NOT SURE
- 999. REFUSED

## Demographics

[CORE 13, 2004 BRFSS TEXAS]

**Q30. EVERYONE**

What is your age?

\_\_ \_\_ Enter age in years

- 07. DON'T KNOW / NOT SURE
- 09. REFUSED

**Q31. EVERYONE**

Are you Hispanic or Latino?

- 1. Yes
- 1. No
  
- 7. DON'T KNOW / NOT SURE
- 9. REFUSED

**Q32. EVERYONE**

Which one of these groups would you say best represents your race?

- 1. White
- 2. Black or African American
- 3. Asian
- 4. Native Hawaiian or Other Pacific Islander
- 5. American Indian, Alaska Native or
- 6. Other [**specify**]\_\_\_\_\_
  
- 7. DON'T KNOW / NOT SURE
- 9. REFUSED

**Q33. EVERYONE**

Are you married, divorced, widowed, separated, never married, or a member of an unmarried couple?

**Please read:**

1. Married
2. Divorced
3. Widowed
4. Separated
5. Never married
6. A member of an unmarried couple
  
9. REFUSED

**Q34. EVERYONE**

How many children less than 18 years of age live in your household?

\_\_ \_\_ Number of children

88. NONE
99. REFUSED

**Q35. EVERYONE**

What is the highest grade or year of school you completed?

**Read only if necessary:**

1. Never attended school or only attended kindergarten
2. Grades 1 through 8 (Elementary)
3. Grades 9 through 11 (Some high school)
4. Grade 12 or GED (High school graduate)
5. College 1 year to 3 years (Some college or technical school)
6. College 4 years or more (College graduate)
  
9. REFUSED

**Q36. EVERYONE**

Are you currently: employed for wages, self-employed, out of work for more than 1 year, out of work for less than 1 year, a homemaker, a student, retired, or unable to work?

1. Employed for wages
2. Self-employed
3. Out of work for more than 1 year
4. Out of work for less than 1 year
5. A Homemaker
6. A Student
7. Retired
8. Unable to work
  
9. REFUSED

**Q37. EVERYONE**

Is your annual household income from all sources?

1. Less than \$10,000
2. Less than \$15,000 (\$10,000 to less than \$15,000)
3. Less than \$20,000 (\$15,000 to less than \$20,000)
4. Less than \$25,000 (\$20,000 to less than \$25,000)
5. Less than \$35,000 (\$25,000 to less than \$35,000)
6. Less than \$50,000 (\$35,000 to less than \$50,000)
7. Less than \$75,000 (\$50,000 to less than \$75,000)
8. \$75,000 or more

77. DON'T KNOW/NOT SURE

99. REFUSED

**Q38. EVERYONE**

About how much do you weigh without shoes?

**Round fractions up**

\_\_\_ \_\_\_ \_\_\_ Weight (*pounds*)  
 9 \_\_\_ \_\_\_ \_\_\_ Weight (*kilograms*)

7777. DON'T KNOW / NOT SURE

9999. REFUSED

**Q39. EVERYONE**

About how tall are you without shoes?

**Round fractions down**

\_\_\_ \_\_\_ \_\_\_ Height ft/inches (Ex. 5 feet 9 inches = 509)  
 9 \_\_\_ \_\_\_ \_\_\_ Height meters/centimeters

7777. DON'T KNOW / NOT SURE

9999. REFUSED

**Q40. EVERYONE**

Do you have more than one telephone number in your household? Do not include cell phones or numbers that are only used by a computer or fax machine.

1. Yes
2. No – **SKIP TO Q42**
7. DON'T KNOW / NOT SURE – **SKIP TO Q42**
9. REFUSED – **SKIP TO Q42**

**Q41. – ONLY GET IF Q40=1**

How many of these phone numbers are residential numbers?

\_\_\_ Residential telephone numbers [**6=6 or more**]

7. DON'T KNOW / NOT SURE

9. REFUSED

Q42. EVERYONE

Indicate sex of respondent. Ask only if necessary.

1. Male
2. Female

**GENDER CHECK**

## Childhood Asthma

[MODULE 10, 2004 BRFSS TEXAS]

Q43. – ONLY GET IF Q34 <>88 AND Q34<>99

Earlier you said there were **[fill in number from Q34]** children age 17 or younger living in your household. How many of these children have ever been diagnosed with asthma?

\_ \_ Number of children

88. NONE – **SKIP TO Q45**  
77. DON'T KNOW/ NOT SURE – **SKIP TO Q45**  
99. REFUSED – **SKIP TO Q45**

Q44. – ONLY GET IF Q43 <77

*Does this child/how many of these children still have asthma?*

If only one child from Q34 and response is "Yes" to this question, code '01'. If response is "No," code as '88.'

\_ \_ Number of children

88. NONE  
77. DON'T KNOW/ NOT SURE  
99. REFUSED

## Physical Activity

[STATE ADDED 4, 2004 BRFSS TEXAS]

Q45. ONLY GET IF Q36=2 OR Q36=1

When you are at work, which of the following best describes what you do? Would you say...

1. Mostly sitting or standing
2. Mostly walking
3. Mostly heavy labor or physically demanding work.
  
7. DON'T KNOW / NOT SURE
9. REFUSED

**Q46. EVERYONE**

We are interested in two types of physical activity – vigorous and moderate. Vigorous activities cause large increases in breathing or heart rate while moderate activities cause small increases in breathing or heart rate.

Now, thinking about the moderate activities you do [fill in (when you are not working,) if **Q36=1 OR Q36=2**] in a usual week, do you do moderate activities for at least 10 minutes at a time, such as brisk walking, bicycling, vacuuming, gardening, or anything else that causes some increase in breathing or heart rate?

1. Yes
2. No – **SKIP TO Q49**
  
7. DON'T KNOW / NOT SURE – **SKIP TO Q49**
9. REFUSED – **SKIP TO Q49**

**Q47. – ONLY GET IF Q46=1**

How many days do you do these moderate activities for at least 10 minutes?

\_ Days per week

77. DON'T KNOW / NOT SURE - **SKIP TO Q49**
88. DO NOT DO ANY MODERATE PHYSICAL ACTIVITY FOR AT LEAST 10 MINUTES AT A TIME –**SKIP TO Q49**
99. REFUSED - **SKIP TO Q49**

**Q48. – ONLY GET IF Q47<77**

On days when you do moderate activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

\_ \_ \_ Hours and minutes per day

777. DON'T KNOW / NOT SURE
999. REFUSED

**Q49. EVERYONE**

Now, thinking about the vigorous activities you do [fill in (when you are not working) if **“employed” or “self-employed”**] in a usual week, do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate?

1. Yes
2. No – **SKIP TO Q52**
  
7. DON'T KNOW / NOT SURE – **SKIP TO Q52**
9. REFUSED – **SKIP TO Q52**

**Q50. – ONLY GET IF Q49=1**

How many days do you do these vigorous activities for at least 10 minutes?

\_ Days per week

77. DON'T KNOW / NOT SURE - **SKIP TO Q52**

88. DO NOT DO ANY MODERATE PHYSICAL ACTIVITY FOR AT LEAST 10 MINUTES AT A TIME – **SKIP TO Q52**

99. REFUSED - **SKIP TO Q52**

**Q51. – ONLY GET IF Q50<77**

On days when you do vigorous activities for at least 10 minutes at a time, how much total time per day do you spend doing these activities?

\_\_ \_ Hours and minutes per day

777. DON'T KNOW / NOT SURE

999. REFUSED

## TV Viewing

[STATE ADDED 5, 2004 BRFSS TEXAS]

**Q52. EVERYONE**

Over the past 30 days, on a typical day, how much time did you spend sitting and watching TV or videos or using a computer outside of work? Would you say...

1. Less than 1 hour
2. 1 hour
3. 2 hours
4. 3 hours
5. 4 hours
6. 5 hours or more
8. You do not watch TV or videos or use computer outside of work.

7. DON'T KNOW / NOT SURE

9. REFUSED

## Neighborhood

[STATE ADDED 7, 2004 BRFSS TEXAS]

**Q53. EVERYONE**

I will be asking you some questions about the neighborhood in which you live, followed by some questions about the community in which you live. For the purposes of this interview, neighborhood is defined as the area within one-half mile or a ten-minute walk from your house and community is defined as a 5-mile or 10-mile drive from your house.

In general, would you say that the people in your neighborhood are...

1. Very physically active
2. Somewhat physically active
3. Not very physically active
4. Not at all physically active

7. DON'T KNOW/NOT SURE

9. REFUSED

**Q54. EVERYONE**

Overall, how would you rate your neighborhood as a place to walk? Would you say...

1. Very pleasant
2. Somewhat pleasant
3. Not very pleasant
4. Not at all pleasant
  
7. DON'T KNOW/NOT SURE
9. REFUSED

**Q55. EVERYONE**

How safe from crime do you consider your neighborhood to be? Would you say...

1. Extremely safe
2. Quite safe
3. Slightly safe
4. Not at all safe
  
7. DON'T KNOW/NOT SURE
9. REFUSED

**Q56. EVERYONE**

Does your neighborhood have any sidewalks?

1. Yes
2. No
  
7. DON'T KNOW / NOT SURE
9. REFUSED

**Q57. EVERYONE**

Do you use any private or membership only recreation facilities in your community for physical activity?

1. Yes
2. No
3. My community does not have these facilities
  
7. DON'T KNOW / NOT SURE
9. REFUSED

**Q58. EVERYONE**

Do you use walking trails, parks, playgrounds, sports fields in your community for physical activity?

1. Yes
2. No
3. My community does not have these facilities
  
7. DON'T KNOW / NOT SURE

9. REFUSED

**Q59. EVERYONE**

Do you use any public recreation centers in your community for physical activity?

1. Yes
2. No
3. My community does not have these facilities
  
7. DON'T KNOW / NOT SURE
9. REFUSED

**Q60. EVERYONE**

Do you use schools that are open in your community for public recreation activities?

1. Yes
2. No
3. Schools in my community are not open for the public to use
  
7. DON'T KNOW / NOT SURE
9. REFUSED

## **Public Health Emergency**

**Q61. EVERYONE**

The next questions are about what would happen if there were a health emergency or natural disaster in Williamson County.

Does your household have a radio that would work if the power went out?

1. Yes
2. No
  
7. DON'T KNOW/NOT SURE
9. REFUSED

**Q62. EVERYONE**

Does your household have a 3-day supply of food for everyone who lives there?

1. Yes
2. No
  
7. DON'T KNOW/NOT SURE
9. REFUSED

**Q63. EVERYONE**

Does your household have a 3-day supply of water for everyone who lives there?  
A 3-DAY SUPPLY OF WATER IS 1/2 TO 1 GALLON OF WATER PER PERSON PER DAY

1. Yes
2. No

- 7 DON'T KNOW/NOT SURE
- 9 REFUSED

**Q64. EVERYONE**

If you believed that you were exposed to a new or dangerous disease, and you wanted more information, where would you go first to get that information? DO NOT READ LIST

- 01 YOUR DOCTOR'S OFFICE
- 02 A HOSPITAL OR EMERGENCY ROOM
- 03 THE WILLIAMSON COUNTY & CITIES HEALTH DISTRICT (THE LOCAL HEALTH DEPARTMENT)
- 04 A RELATIVE OR FRIEND
- 05 CALL 911
- 06 THE TEXAS DEPARTMENT OF HEALTH (THE STATE HEALTH DEPARTMENT)
- 07 THE INTERNET
- 08 TV OR RADIO
- 09 PHARMACIST
- 10 OTHER (PLEASE SPECIFY)
- 77 DON'T KNOW/NOT SURE,
- 99 REFUSED

**Q65. EVERYONE**

Imagine now that Texas' Governor has declared that a new and dangerous disease is spreading toward Texas. How strongly would you agree or disagree with the following statements?

If my doctor or health care provider advised me to, I would get a free vaccine to prevent the disease. Would you say you...

READ LIST

- 1 Strongly Agree
- 2 Agree
- 3 Disagree
- 4 Strongly Disagree
- 7 DON'T KNOW/NOT SURE
- 9 REFUSED

**Q66. EVERYONE**

If health officials asked me to, I would stay at home for a week, without outside visitors, to avoid spreading the disease or catching it. Would you say you...

READ LIST

- 1 Strongly Agree
- 2 Agree
- 3 Disagree
- 4 Strongly Disagree
- 7 DON'T KNOW/NOT SURE
- 9 REFUSED

**CLOSING EVERYONE**

That's my last question. Everyone's answers will be combined to give us information about the health practices of people in this county. Thank you very much for your time and cooperation.

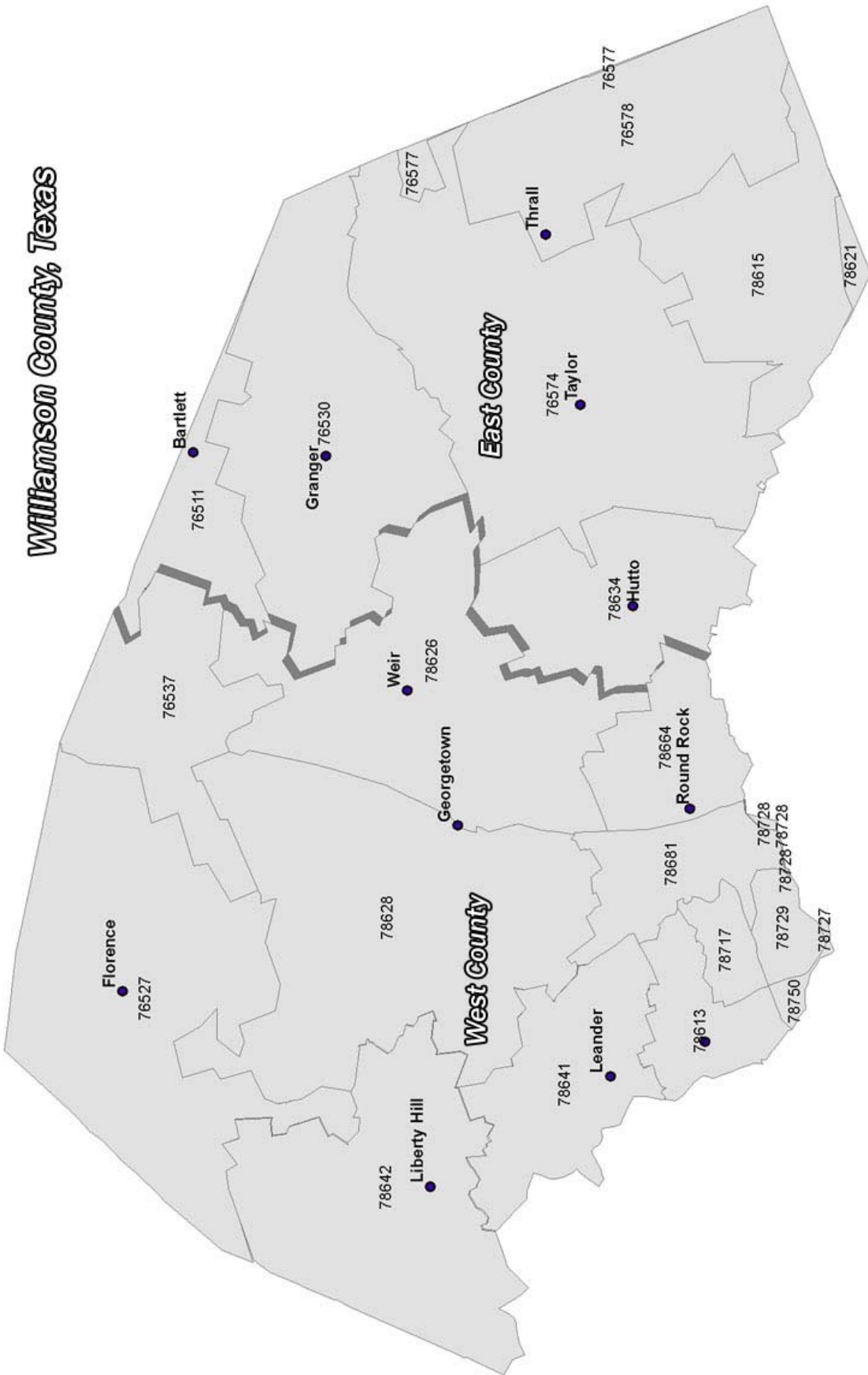
**West County Zip Codes**

76527 .....Florence  
76537 .....Jarrell  
78626 .....Georgetown  
78627 .....Georgetown  
78628 .....Georgetown (also Andice, Sun City)  
78642 .....Liberty Hill  
78673 .....Walburg  
78674 .....Weir  
76573 .....Schwertner (PO Box)  
78613 .....Cedar Park  
78630 .....Cedar Park  
78641 .....Leander  
78646 .....Leander - Williamson & Travis Counties  
78651 .....Mc Neil (PO Box)  
78664 .....Round Rock  
78680 .....Round Rock (PO Box)  
78681 .....Round Rock  
78683 .....Round Rock  
78717 .....Austin (Brushy Creek) All Williamson  
78727 .....Austin- Williamson & Travis Counties  
78728 .....Austin- Williamson & Travis Counties  
78729 .....Austin (East Anderson Mill)- Williamson & Travis Counties

**East County Zip Codes**

78634 .....Hutto  
76511 .....Bartlett- Williamson & Bell Counties  
76530 .....Granger  
76574 .....Taylor  
76578 .....Thrall  
76577 .....Thorndale- Williamson & Milam Counties  
78615 .....Coupland- Williamson & Travis Counties  
78621 .....Elgin- Williamson, Travis, & Bastrop Counties

# Williamson County, Texas



## Attachment B: Non-Questionnaire Variables in Final Data Set

Variable	Description
respnum\$	Record identifier assigned by CATI programming software.
zippy	The respondent's zip code.
lang	The language in which the interview was conducted (1 = English, 2 = Spanish).
Respgend	The gender of the respondent (1 = Male, 2 = Female)
numadult	Number of adults in the household as indicated by the person answering the phone.
nummen	Number of male adults in the household as indicated by the person answering the phone.
numwomen	Number of female adults in the household as indicated by the person answering the phone.
geostr	Sampling variable (1= East and 2= West)
repnum	The replicate number used for sampling purposes.
idate	Date the interview was completed.

# Appendix B

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Census 2000 and Williamson County 2004 BRFSS Demographic Data

## Census 2000 and Williamson County 2004 BRFSS Demographic Data

	Williamson County	East County	West County	Census 2000
	%	%	%	%
<b>Age</b>				
18 to 24	10	8	11	11
25 to 34	25	23	25	24
35 to 44	27	23	27	27
45 to 54	16	16	16	18
55 to 64	12	13	12	9
65+	11	17	9	11
<b>Gender</b>				
Male	49	50	49	49
Female	51	50	51	51
<b>Race / Ethnicity</b>				
Hispanic or Latino	16	22	14	15
White	84	76	86	84
Black or African American	4	9	3	5
Asian	2	1	2	3
Native Hawaiian or Other Pacific Islander	0	0	1	0
American Indian, Alaskan Native	1	1	1	0
Other	9	14	8	8
<b>Marital Status</b>				
Married	69	70	68	64
Divorced	8	7	8	9
Widowed	3	6	3	4
Separated	1	2	1	1
Never Married	15	12	16	21
A member of an unmarried couple <sup>1</sup>	4	4	4	4

<sup>1</sup> Census 2000 data for members of an unmarried couple is from a different dataset, or universe, than marital status. Therefore the percentages will not add up to 100.

	<b>Williamson County</b>	<b>East</b>	<b>West</b>	<b>Census 2000</b>
	%	%	%	%
<b>Children in Household</b>				
Children > 18 in household:	50	48	50	57
No children > 18 in household:	50	52	50	43
<b>Education</b>				
Less than high school	8	19	5	11
High school graduate	27	35	25	22
Some college	25	26	25	26
College graduate	40	20	45	40
<b>Employed for Wages</b>	56	57	56	71
Self-employed	10	9	11	--
Out of work for more than 1 year	2	3	2	--
Out of work for less than 1 year	4	4	5	--
Homemaker	9	9	9	--
Student	4	1	5	--
Retired	12	13	11	--
Unable to work	2	4	2	--
<b>Income</b>				
Less than \$10,000	2	3	3	4
\$10,000 to less than \$15,000	3	7	2	3
\$15,000 to less than \$20,000	6	9	5	3
\$20,000 to less than \$25,000	9	10	8	4
\$25,000 to less than \$35,000	8	11	8	9
\$35,000 to less than \$50,000	14	18	13	16
\$50,000 to less than \$75,000	22	24	21	26
\$75,000+	36	16	40	36

# Appendix C

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Healthy People 2010 Comparative Indicators

## Healthy People 2010 Comparative Indicators

### Diabetes

#### **5-3. Reduce the overall rate of diabetes that is clinically diagnosed.**

**Target:** 25 overall cases per 1,000 population (2.5%)

**Baseline:** 40 overall cases (including new and existing cases) of diabetes per 1,000 population occurred in 1997 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best (retain year 2000 target).

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

### Blood Pressure

#### **12-9. Reduce the proportion of adults with high blood pressure.**

**Target:** 16 percent.

**Baseline:** 28 percent of adults aged 20 years and older had high blood pressure in 1988–94 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

### Cholesterol

#### **12-14. Reduce the proportion of adults with high total blood cholesterol levels.**

**Target:** 17 percent.

**Baseline:** 21 percent of adults aged 20 years and older had total blood cholesterol levels of 240 mg/dL or greater in 1988–94 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

#### **12-15. Increase the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.**

**Target:** 80 percent.

**Baseline:** 67 percent of adults aged 18 years and older had their blood cholesterol checked within the preceding 5 years in 1998 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

## Weight Status and Growth

### **19-1. Increase the proportion of adults who are at a healthy weight.**

**Target:** 60 percent.

**Baseline:** 42 percent of adults aged 20 years and older were at a healthy weight (defined as a body mass index [BMI] equal to or greater than 18.5 and less than 25) in 1988–94 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

### **19-2. Reduce the proportion of adults who are obese.**

**Target:** 15 percent.

**Baseline:** 23 percent of adults aged 20 years and older were identified as obese (defined as a BMI of 30 or more) in 1988–94 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.

## Physical Activity in Adults

### **22-1. Reduce the proportion of adults who engage in no leisure-time physical activity.**

**Target:** 20 percent.

**Baseline:** 40 percent of adults aged 18 years and older engaged in no leisure-time physical activity in 1997 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

### **22-2. Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.**

**Target:** 50 percent.

**Baseline:** 15 percent of adults aged 18 years and older engaged in moderate physical activity for at least 30 minutes 5 or more days per week in 1997 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:**

### **22-3. Increase the proportion of adults who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.**

**Target:** 30 percent.

**Baseline:** 23 percent of adults aged 18 years and older engaged in vigorous physical activity 3 or more days per week for 20 or more minutes per occasion in 1997 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

National Health Interview Survey (NHIS), CDC, NCHS.

## Food and Nutrient Consumption

**19-5. Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit.**

**Target:** 75 percent.

**Baseline:** 28 percent of persons aged 2 years and older consumed at least two daily servings of fruit in 1994–96 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** Continuing Survey of Food Intakes by Individuals (CSFII) (2-day average), USDA.

**19-6. Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables.**

**Target:** 50 percent.

**Baseline:** 3 percent of persons aged 2 years and older consumed at least three daily servings of vegetables, with at least one-third of these servings being dark green or orange vegetables in 1994–96 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** Continuing Survey of Food Intakes by Individuals (CSFII) (2-day average), USDA.

## Tobacco Use in Population Groups

**27-1. Reduce tobacco use by adults.**

**Target and baseline:**

Objective	Reduction in Tobacco Use by Adults Aged 18 Years and Older	1998 Baseline*	2010 Target
		<i>Percent</i>	
<b>27-1a.</b>	Cigarette smoking	24	12
<b>27-1b.</b>	Spit tobacco	2.6	0.4
<b>27-1c.</b>	Cigars	2.5	1.2
<b>27-1d.</b>	Other products	Developmental	

\*Age adjusted to the year 2000 standard population.

**Target setting method:** Better than the best.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

## Clinical Preventive Care

### 1-1. Increase the proportion of persons with health insurance.

**Target:** 100 percent.

**Baseline:** 83 percent of persons under age 65 years were covered by health insurance in 1997 (age adjusted to the year 2000 standard population).

**Target setting method:** Total coverage.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

## Primary Care

### 1-5. Increase the proportion of persons with a usual primary care provider.

**Target:** 85 percent.

**Baseline:** 77 percent of the population had a usual primary care provider in 1996.

**Target setting method:** Better than the best.

**Data source:** Medical Expenditure Panel Survey (MEPS), AHRQ.

## Immunization and Infectious Diseases

### 14-29. Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.

**Target and baseline:**

Objective	Increase in Adults Vaccinated	<u>1998* Baseline</u>	<u>2010 Target</u>
		<i>Percent</i>	
	<b>Noninstitutionalized adults aged 65 years and older</b>		
<b>14-29a.</b>	Influenza vaccine	64	90

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Source: U.S. Department of Health and Human Services. Healthy People 2010: Understanding and Improving Health and Objectives for Improving Health. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000. [<http://www.healthypeople.gov/Document/tableofcontents.htm#parta>]