

# EXECUTIVE SUMMARY

## INTRODUCTION

Each year since 1984, the West Virginia Behavioral Risk Factor Survey has measured a range of risk factors that can affect our health. This report presents state survey results for the years 2004 and 2005 as well as county data combined for the latest available five years (typically 2001 through 2005).

The survey is conducted by telephone and represents a collaborative effort between the West Virginia Bureau for Public Health (WVBPH) and the Centers for Disease Control and Prevention (CDC) in Atlanta. Standardized survey methods are provided by CDC. All 50 states, the District of Columbia, and several U.S. territories now participate in the system, known as the Behavioral Risk Factor Surveillance System (BRFSS).

The information in this document serves as a resource for governments, business leaders, schools, and community groups, all of which are helping to shape the health of West Virginia.

## HIGHLIGHTS OF FINDINGS

### Health Status

- West Virginia ranked 2nd highest nationally in 2004 and 2005 in reporting the general health of adults as either “fair” or “poor.”
- Almost one-fourth of West Virginia adults (23.5% in 2004 and 24.7% in 2005) consider their health to be either “fair” or “poor.”
- “Fair” or “poor” health is most common among groups of adults who are the oldest, least educated, or lowest in household incomes.

### Health Care Access

- More than one-fifth of West Virginia adults age 18 to 64 have no health care coverage (22.7% in 2004 and 22.2% in 2005).
- Among adults of all ages, slightly less than one-fifth needed medical care within the past 12 months and could not afford it (19.3% in 2004 and 18.5% in 2005).
- More than one-fifth of all age adults also do not have a specific personal doctor or health care provider (22.9% in 2004 and 22.4% in 2005).

### Physical Inactivity

- Approximately one-fourth of state adults (24.5% in 2004 and 28.5% in 2005) participate in no leisure-time physical activity or exercise. A downward trend occurring between 1998 and 2004 was followed by a significant increase in 2005.
- Women are significantly more likely than men to be physically inactive during leisure time.
- Moderate or vigorous exercise is more frequent among groups who are younger, more educated, or from higher income households.

### Nutrition

- Eight out of every 10 adults (80.0%) consume fewer than the recommended 5 servings of fruits and vegetables each day. West Virginia ranked 7<sup>th</sup> highest nationally in the prevalence of this risk factor in 2005.
- Men have higher rates of this nutrition risk than women.
- Over the long term, this risk factor measured an identical 80.0% in both 1990 and 2005, despite fluctuations recorded during the intervening years.

### **Obesity and Overweight**

- The obese proportion of the adult population was 27.6% in 2004 and 30.6% in 2005, 3<sup>rd</sup> highest nationally in both years.
- Between 1987 and 2005, a substantial increase in obesity occurred among West Virginia adults. Men and women from a wide range of age, education, and income categories contributed to this unhealthy trend.
- During 2004 and 2005, approximately two-thirds of West Virginia adults were either obese or overweight.

### **Tobacco Use and Policies**

- *Current cigarette smoking*: More than one-fourth of adults (26.9% in 2004 and 26.7% in 2005) smoke every day or some days. West Virginia ranked 2<sup>nd</sup> highest in 2004 and 4<sup>th</sup> highest in 2005 in the prevalence of this risk factor among national BRFSS participants.
- *Current smokeless tobacco use*: The 2004 rate of smokeless tobacco use among men was 16.6%, while the prevalence among women in the same year was 0.4%.
- Fewer than half (46.1% in 2004 and 46.3% in 2005) of every day smokers have tried to quit and succeeded for at least one day in the past year.
- Most adults employed indoors report that smoking is prohibited in either work areas, public areas, or both within their workplaces.
- A majority of West Virginia adults report that smoking is not allowed inside their homes.

### **Alcohol Consumption**

- West Virginia alcohol consumption remains notably low in comparison with levels consumed elsewhere in the U.S.
- Binge drinking was 9.7% in 2004 and 9.1% in 2005 (a national rank of 48<sup>th</sup> in 2004 and 51<sup>st</sup> in 2005).
- Heavy drinking was 2.9% in 2004 and 3.1% in 2005 (a national rank of 50<sup>th</sup> in 2004 and 49<sup>th</sup> in 2005).
- No alcohol had been consumed in the last 30 days by over two-thirds (68.0% in 2005) of the age 18 and older population.

### **Diabetes**

- West Virginia ranked highest nationally in 2004 for the prevalence of diabetes. West Virginia ranked 2<sup>nd</sup> highest nationally in 2005.
- Over 10% of West Virginia adults identify themselves as having diabetes (10.9% in 2004 and 10.4% in 2005).
- Among diabetic adults, 12% have not had an HbA1c test, 30%-33% have not had a dilated eye exam, and 30%-35% have not had a professional foot exam in the past one year.
- About one-third (39.7% in 2004 and 34.9% in 2005) of diabetic adults check their blood glucose at home less than once daily or never.

### **Hypertension**

- West Virginia ranked 2<sup>nd</sup> highest nationally in 2005 in the prevalence of hypertension (high blood pressure). Almost a third of the state's adults (31.4%) have ever been diagnosed with high blood pressure.
- Reports of high blood pressure increase steeply and significantly with increasing age. In 2005, the prevalence ranged from a low of 10.9% among young adults (25-34) to a high of 57.5% among older adults (age 65 and older).
- Two-thirds (66.5% in 2005) of the adults with hypertension have received advice from a health professional to exercise to help lower or control their high blood pressure, and 58.1% reported that they were exercising for this reason.

- Other activities of adults with hypertension in 2005 to help lower or control their high blood pressure were taking medicine (83.1%), cutting down on salt (76.1%), changing eating habits (70.1%), and reducing alcohol (49.0%).

### **Cholesterol**

- In 2005, 20.5% of adults had never had their cholesterol checked. Of those who had, 39.9% reported that it was high (1<sup>st</sup> highest nationally).

### **Cardiovascular Disease**

- West Virginia ranked higher than any other state in 2005 in the prevalence of heart attack among adults. Seven percent (7.0%) of the state's adults had had a heart attack, compared with a national average of 4.1%.
- Men report a significantly higher incidence of heart attack than women (8.5% vs. 5.5% in 2005).
- More than half (52.1%) of the adults with a history of heart attack had their first attack before the age of 55.
- In the prevalence of stroke among adults, West Virginia ranked 5<sup>th</sup> highest nationally in 2005. Three percent (3.4%) of the state's adults had had a stroke, compared with the national average of 2.6%.
- Approximately three-fourths of adults who had experienced heart attack or stroke said they did not receive any outpatient rehabilitation after leaving the hospital in 2004 or 2005.
- More than one in three adults age 35 and older report that they are on daily or alternate-day aspirin therapy.

### **Cancer Screening**

- *Colon cancer:* Almost three-quarters (72.8% in 2004) of adults aged 50 and older reported that they did not perform a home stool blood test in the past two years. About half (53.7% in 2004) had never had a sigmoidoscopy or colonoscopy (5<sup>th</sup> highest in the nation).
- *Prostate cancer:* Forty percent (40.3%) of men aged 40 and older had never had a PSA (prostate specific antigen) test in 2004.
- *Breast cancer:* Among women aged 40 and older, 27.5% reported in 2004 that they did not have a mammogram in the past two years.
- *Cervical cancer:* Seventeen percent (17.4%) of all women aged 18 and older did not have a Pap test in the past three years. Five percent (5.4%) had never had a Pap test.

### **Asthma**

- In 2005, 13.4% of adults had ever been diagnosed with asthma (16<sup>th</sup> highest nationally) while 9.2% had asthma currently (8<sup>th</sup> highest nationally).
- Women had significantly higher rates of both lifetime and current asthma than men in 2005.

### **Arthritis**

- West Virginia ranked higher than any other state in 2005 in the prevalence (34.9%) of adults with some form of an arthritis diagnosis.
- The prevalence of arthritis increased significantly among adults at each higher age grouping through age 64. Fewer than 10% of adults aged 18 to 24 had ever been diagnosed with some form of arthritis, compared with nearly 60% of those aged 65 and older. The statewide prevalence in 2005 was 34.9%.
- More than 4 in 10 adults with arthritis symptoms (43.5% in 2005) also reported some related limitations in their usual activities.

## **Disability**

- West Virginia had the highest disability rate nationwide in both 2004 and 2005. More than one-fourth of adults were disabled because of a physical, mental, or emotional problem (25.7% in 2004 and 27.4% in 2005).
- Almost 10% of state adults use special equipment such as a cane, a wheelchair, a special bed, or a special telephone (8.7% in 2004 and 9.6% in 2005).

## **Emotional Support and Life Satisfaction**

- Almost 8 in 10 (78.9%) West Virginia adults reported in 2005 that they always or usually get the emotional support they need.
- Over 9 in 10 (91.8%) West Virginia adults were satisfied with their own lives in 2005.

## **Immunization**

- Among adults aged 65 and older, over 30% had not had a flu shot in the past 12 months (31.5% in 2004 and 36.2% in 2005). Over 30% of state seniors had never had a pneumonia shot (35.3% in 2004 and 31.8% in 2005).

## **Sexually Transmitted Diseases**

- Most adults aged 18 to 64 (90.2% in 2004) have not received any counseling about condom use from a health professional in the past one year.
- Between 2% and 3% of adults aged 18 to 64 engage in high-risk behavior for sexually transmitted diseases (2.3% in 2004 and 3.0% in 2005).

## **Family Planning**

- Parenthood questions were asked of women aged 18-44 and not currently pregnant and men aged 18-59. Among this group, 46.2% of West Virginians and 41.5% of U. S. adults responded in 2004 that they would like to have a child in the future.
- Among a similar subset of West Virginia adults in 2004, the majority reported taking steps to avoid pregnancy. The most common types of contraception were sterilization, followed in order by birth control pills, condoms, and all other methods combined.

## **Oral Health**

- Thirty-six percent (36.0%) of adults in 2004 had not had their teeth cleaned by a dentist or dental hygienist in the past year. West Virginia's rank was 9<sup>th</sup> highest nationally.

## **Sunburn**

- In 2004, more than a third (35.1%) of adults had experienced sunburn with redness lasting at least 12 hours sometime in the past 12 months.

## **Firearms**

- Six percent (6.0%) of West Virginia adults kept loaded and unlocked firearms in or around their homes in 2004.
- Although the national average was significantly lower at 4.3%, the state ranked close to the middle (20<sup>th</sup> highest) nationally in 2004.
- Men (8.8%) reported a significantly higher prevalence than women (3.8%) in the presence of loaded and unlocked firearms in the home.

## ESTIMATED NUMBER OF PERSONS AT RISK

Table I below shows selected risk factor rates and the corresponding numbers of West Virginians who are estimated to be at risk. Data are shown for the latest available year.

**Table I: Percentage and number of persons estimated at risk due to selected risk factors (among adults aged 18 and older or appropriate subset): WVBRFSS, 2004-2005**

Risk Factor	Year	Percentage Estimated at Risk <sup>a</sup>	Number Estimated at Risk <sup>a</sup>
Self-rated general health is fair or poor	2005	24.7	352,900
No health care coverage, ages 18-64	2005	22.2	253,100
Unable to afford needed medical care	2005	18.5	264,700
No personal doctor or health care provider	2005	22.4	320,100
No leisure-time exercise	2005	28.5	407,800
Fewer than 5 servings of fruit/vegetables per day	2005	80.0	1,135,100
Obesity (BMI 30.0+)	2005	30.6	425,600
Overweight (BMI 25.0-29.9)	2005	34.8	484,000
Current cigarette smoking	2005	26.7	380,700
Current smokeless tobacco use	2004	8.1	114,200
Binge drinking	2005	9.1	128,800
Heavy drinking	2005	3.1	44,100
Diabetes	2005	10.4	149,100
High blood pressure	2005	31.4	448,800
High blood cholesterol (among those ever checked)	2005	39.9	438,100
Have had heart attack	2005	7.0	99,300
Have angina or coronary heart disease	2005	8.2	117,000
Have had stroke	2005	3.4	48,000
No home stool blood test in past 2 years, ages 50+	2004	72.8	451,800
Never had sigmoidoscopy or colonoscopy, ages 50+	2004	53.7	336,500
Never had digital rectal exam, men ages 40+	2004	29.7	124,700
Never had Prostate Specific Antigen (PSA) test, men ages 40+	2004	40.3	163,300
No clinical breast exam in past 1 year, women ages 40+	2004	35.8	169,400
No mammogram in past 2 years, women ages 40+	2004	27.5	132,100
No Pap test in past 3 years, women ages 18+	2004	17.4	94,500
Never had Pap test, women ages 18+	2004	5.4	39,600
Lifetime asthma	2005	13.4	191,100
Current asthma	2005	9.2	131,100
Arthritis	2005	34.9	494,100
Disability	2005	27.4	391,100
No flu immunization in past 12 months, ages 65+	2005	36.2	103,000
Never had pneumonia shot, ages 65+	2005	31.8	87,700
No professional dental cleaning in past year (among those with teeth)	2004	36.0	433,800
6 or more teeth removed due to tooth decay or gum disease	2004	31.9	451,500
All teeth removed, ages 65+	2004	42.9	118,900
Sunburn with redness lasting 12 or more hours in past 12 months	2004	35.1	499,400
Loaded and unlocked firearms in home	2004	6.2	84,000

a. The percentages and numbers of persons estimated to be at risk are subject to sampling error. Please refer to the confidence intervals presented in the chapters of this report for a more complete perspective. In addition, the risk estimates were derived from population estimates available at the end of the data collection period. Later estimates of the same population may result in different estimated numbers of persons at risk.

## DEFINITIONS OF COMMON TERMS

### **Risk Factor**

A risk factor is a health-related behavior or practice that has been shown to increase the probability of developing a condition or disease. This report presents West Virginia prevalences for selected risk factors.

### **Prevalence**

Prevalence is the percentage of the population having a particular condition or characteristic or practicing a certain health-related behavior. This report presents the results of the Behavioral Risk Factor Surveillance Survey (BRFSS) in West Virginia as a series of “prevalence” estimates for selected risk factors. Prevalence is also referred to as rate or frequency.

### **Confidence Intervals**

Confidence intervals (CIs) reflect sampling error. They are presented as upper and lower boundary values surrounding the prevalence estimate; the true value of the estimate can be expected to fall within this range with a confidence of 95%.

### **Significant**

Significant is the term used to describe prevalence estimates that have been tested and found to be statistically different. In this report, a difference is said to be significant when the 95% confidence intervals (CIs) associated with each of the prevalence estimates do not overlap. In other words, it can be stated with 95% certainty that the difference found between the two prevalence estimates is not a random occurrence. Identifying differences as “significant” can detect changes in prevalence over time and direct attention to characteristics associated with a particular health condition or risk behavior. In this report, adjectives such as slight, minor, and little may be used to describe less reliable differences, those for which the confidence intervals do overlap. See Methodology on page 9 for additional discussion.

## WHAT'S NEW IN THIS REPORT

### **Two Years of Data**

For the first time since 1986-1987, the BRFSS report includes two years of data – 2004 and 2005. Note that some data were not collected in both years of the survey.

### **First-Time Data**

Type of health care coverage, including PEIA (Chapter 2)  
Doctor advice and related actions taken to reduce hypertension risks (Chapter 11)  
Adult asthma symptoms, prescription use, and health care utilization (Chapter 17)  
Child asthma prevalence (Chapter 17)  
Illness due to poor indoor and outdoor air (Chapter 17)  
Life satisfaction and emotional support (Chapter 20)  
Child influenza immunization (Chapter 21)  
STD high-risk behavior (Chapter 22)  
Family planning (Chapter 23)  
Comorbidities – the presence of multiple risk factors and health conditions (Chapter 27)

### **New County Maps and Appendix**

County prevalence estimates are now compared to the overall West Virginia prevalence rather than the United States prevalence. See Methodology and Appendix L for additional information.

### **New Methods to Determine Reliability of Estimates**

All estimates were judged on three reliability criteria. Estimates meeting any of these criteria were noted as unreliable. Be cautious in reporting and interpreting these estimates. See Methodology for additional discussion.