

## CHAPTER 5: OBESITY AND OVERWEIGHT

### Obesity and Overweight in 2006

**Definition** Body Mass Index (BMI) is a calculation that standardizes the meaning of the terms obesity and overweight, thereby improving the accuracy of comparisons. BMI is body weight in kilograms divided by height in meters squared ( $BMI = \text{kg}/\text{m}^2$ ). Obesity is defined as a BMI of 30.0 or higher and overweight as a BMI of 25.0-29.9.

**Prevalence**

*Obesity*  
**WV: 31.0%** (95% CI: 29.2-32.9) in 2006.  
**US: 25.1%** (95% CI: 24.7-25.4) in 2006.  
West Virginia ranked 2<sup>nd</sup> highest among 50 US States and DC in 2006.

*Overweight*  
**WV: 36.0%** (95% CI: 34.1-37.8) in 2006.  
**US: 36.2%** (95% CI: 35.8-36.6) in 2006.  
West Virginia ranked 33<sup>rd</sup> highest among 50 US States and DC in 2006.

**Time Trends** Obesity increased substantially among West Virginia adults between 1993 and 2005. Men and women from a wide range of age, education, and income categories contributed to this unhealthy trend. The prevalence of overweight adults, in contrast, had only slight year-to-year variations around a barely declining long-term trend line.

**Gender**

*Obesity*  
**Men:** 33.3% (95% CI: 30.4-36.1) in 2006.  
**Women:** 28.9% (95% CI: 26.5-31.2) in 2006.

*Overweight*  
**Men:** 41.7% (95% CI: 38.8-44.7) in 2006.  
**Women:** 30.3% (95% CI: 28.1-32.6) in 2006.

Obesity rate differences by gender alone were small. However, men had a significantly higher risk than women from overweight in 2006.

**Age** The prevalence of being either obese or overweight steadily increased through the 18-44 age groups, although adjacent age groups were not significantly different. In the 45-54 age group, prevalence was slightly higher for obesity, but was slightly lower among the overweight group. For the oldest group (age 65+), the prevalence of being overweight remained similar to levels in the middle age groups. Obesity prevalence in the oldest age group (65+), however, dropped to significantly below that in the 45-54 and 55-64 age groups.

**Education and Household Income** Few differences were significant in the prevalence of obesity or overweight by either educational attainment or household income.

#### WV HEALTHY PEOPLE 2010 OBJECTIVES

**Objective 19.1b** Reduce to 20% the proportion of people who are obese as defined by having a body mass index of 30 or greater. (Baseline: 23.9% in 1998; Current: 31.0% in 2006)

**Table 5.1 Obesity by demographic characteristics: WVBRFSS, 2006**

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>TOTAL</b>	1,474	<b>33.3</b>	30.4-36.1	2,175	<b>28.9</b>	26.5-31.2	3,649	<b>31.0</b>	29.2-32.9
<b>Age</b>									
18-24	66	<b>*21.7</b>	11.1-32.2	76	<b>*18.6</b>	7.2-30.0	142	<b>20.2</b>	12.5-27.9
25-34	149	<b>33.4</b>	25.4-41.5	259	<b>30.6</b>	24.6-36.6	408	<b>32.0</b>	27.0-37.1
35-44	227	<b>35.9</b>	29.0-42.8	357	<b>31.0</b>	25.6-36.3	584	<b>33.4</b>	29.0-37.8
45-54	327	<b>42.2</b>	36.4-48.1	404	<b>33.3</b>	28.3-38.3	731	<b>37.9</b>	34.0-41.7
55-64	367	<b>35.4</b>	30.0-40.8	435	<b>33.8</b>	29.0-38.7	802	<b>34.6</b>	31.0-38.2
65+	336	<b>27.1</b>	22.0-32.3	641	<b>24.7</b>	21.0-28.3	977	<b>25.7</b>	22.7-28.8
<b>Education</b>									
Less than H.S.	252	<b>30.5</b>	23.8-37.1	341	<b>32.9</b>	27.3-38.5	593	<b>31.6</b>	27.2-36.0
H.S. or G.E.D.	587	<b>34.4</b>	29.9-39.0	848	<b>30.5</b>	26.7-34.2	1,435	<b>32.5</b>	29.5-35.4
Some Post-H.S.	278	<b>34.9</b>	28.1-41.7	516	<b>29.5</b>	24.1-34.9	794	<b>31.9</b>	27.6-36.1
College Graduate	354	<b>31.7</b>	26.0-37.5	468	<b>22.6</b>	18.4-26.8	822	<b>27.3</b>	23.6-30.9
<b>Income</b>									
Less than \$15,000	163	<b>29.5</b>	21.7-37.4	404	<b>30.9</b>	25.7-36.1	567	<b>30.4</b>	26.1-34.8
\$15,000- 24,999	267	<b>34.3</b>	27.6-41.0	444	<b>36.1</b>	30.3-41.9	711	<b>35.3</b>	30.9-39.7
\$25,000- 34,999	213	<b>37.0</b>	29.3-44.8	265	<b>28.2</b>	21.8-34.6	478	<b>32.9</b>	27.8-38.1
\$35,000- 49,999	235	<b>32.5</b>	25.6-39.4	272	<b>29.9</b>	23.8-36.1	507	<b>31.3</b>	26.6-36.0
\$50,000- 74,999	223	<b>30.8</b>	24.1-37.6	255	<b>26.9</b>	21.0-32.8	478	<b>29.0</b>	24.4-33.5
\$75,000+	246	<b>39.0</b>	32.0-46.0	254	<b>20.1</b>	14.7-25.5	500	<b>30.7</b>	26.0-35.5

Note: Obesity is defined as a body mass index of 30.0 or higher.

\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates in Methodology.

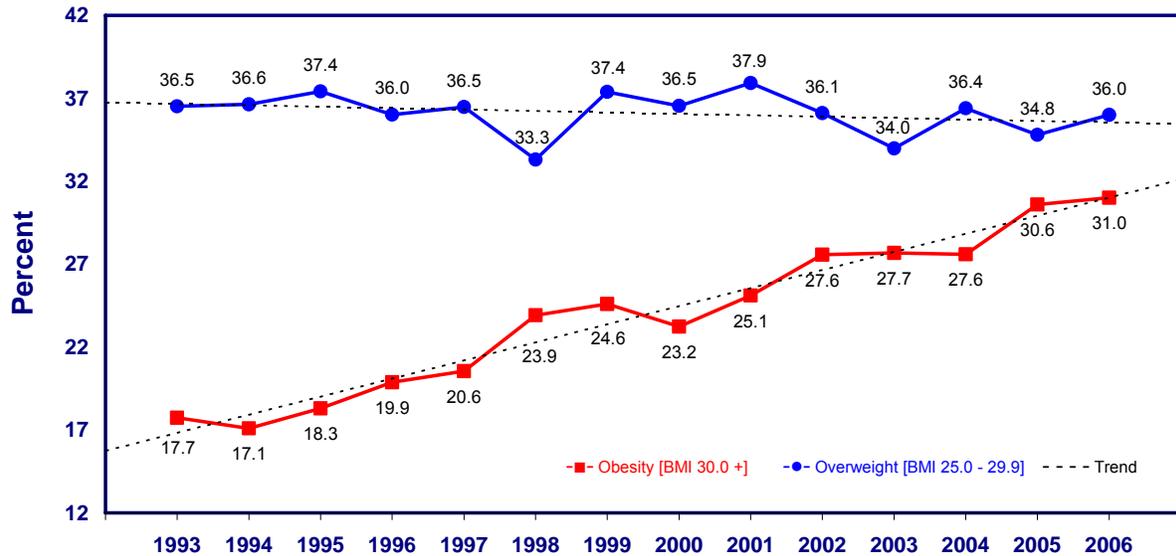
**Table 5.2 Overweight (but not obese) by demographic characteristics: WVBRFSS, 2006**

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>TOTAL</b>	1,474	<b>41.7</b>	38.8-44.7	2,175	<b>30.3</b>	28.1-32.6	3,649	<b>36.0</b>	34.1-37.8
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Note: Overweight is defined as a body mass index of 25.0-29.9.

\* Use caution when interpreting and reporting this estimate. See discussion of unstable estimates in Methodology.

**Figure 5.1 Obesity and overweight by year: WVBRFSS, 1993-2006**



Source: West Virginia Behavioral Risk Factor Surveillance System (WVBRFSS), West Virginia Health Statistics Center, January 2008.  
 Population: Non-institutionalized adults age 18 and older residing in West Virginia.  
 Definitions: Body Mass Index (BMI) is a calculation that standardizes the meaning of the terms obesity and overweight, thereby improving the accuracy of comparisons. BMI is body weight in kilograms divided by height in meters squared (BMI=kg/m<sup>2</sup>). Obesity is defined as a body mass index of 30.0 or higher. Overweight is defined as a body mass index of 25.0 - 29.9.  
 Note: This Y axis does not begin with zero, in order to maintain a 30 percentage point Y axis range that facilitates comparability among a group of graphs presented together.

**Figure 5.2 Obesity (body mass index of 30.0 or higher) by county: WVBRFSS, 2002-2006**

