

## CHAPTER 4: OBESITY AND OVERWEIGHT

**Obesity: Defined as a Body Mass Index (BMI) of 30.0 or higher.<sup>5</sup>**

**Overweight: Defined as a Body Mass Index (BMI) between 25.0 and 29.9.**

<b>State Prevalence</b>	<p><b>Obesity: 27.7%</b> (95% CI: 25.9-29.5); 3<sup>rd</sup> highest among 54 BRFSS participants. National prevalence: 22.8% (95% CI: 22.5-23.1).</p> <p><b>Overweight: 34.0%</b> (95% CI: 32.1-35.8); 51<sup>st</sup> among 54 BRFSS participants. National prevalence: 36.6% (95% CI: 36.2-37.0).</p>
<b>Time Trends</b>	<p>Generally, the prevalence of obesity has shown a consistent upward trend since 1987. The prevalence of overweight has remained fairly stable during this period; 2003 marks the second consecutive year of decline in the rate of overweight.</p>
<b>Gender</b>	<p><b>Obesity:</b> <b>Men 30.5%</b> (95% CI: 27.6-33.3); <b>Women 25.0%</b> (95% CI: 22.9-27.2).</p> <p><b>Overweight:</b> <b>Men 39.0%</b> (95% CI: 36.0-41.9); <b>Women 29.2%</b> (95% CI: 26.9-31.4).</p> <p>Men had a significantly higher rate of both obesity and overweight than women.</p>
<b>Age</b>	<p>Obesity was most prevalent among adults aged 35 to 44, whereas overweight was most prevalent among those aged 55 to 64. Adults aged 35 to 44 were significantly more likely to be obese than the youngest and oldest adults. Men aged 25 to 34 and 55 to 64 were significantly more likely to be overweight than their female counterparts.</p>
<b>Education</b>	<p>Obesity declined significantly as educational attainment increased, especially among women. Among men, the prevalence of overweight significantly increased with education. Men with a college degree were significantly more likely to be overweight than female college graduates (47.1% versus 27.6%).</p>
<b>Household Income</b>	<p>Obesity was highest among adults in the middle income categories, whereas overweight was most prevalent among the wealthiest adults. Women with incomes of \$75,000 or more were significantly less likely to be obese than all other women and all men. In addition, women with an income between \$50,000 and \$74,999 had a significantly lower rate of overweight than their male counterparts.</p>
<b>Quick Stats</b>	<ul style="list-style-type: none"><li>• 61.7% of adults were overweight or obese (8<sup>th</sup> highest among 54 BRFSS participants).</li></ul>

### West Virginia Healthy People 2010 Objectives

<b>Objective 19.1a</b>	Reduce to 37% the proportion of people who are obese as defined by the Metropolitan Life Insurance tables as being at least 20% over ideal body weight. (Baseline: 43.0% in 1998)
<b>Objective 19.1b</b>	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: 27.7% in 2003)

<sup>5</sup> Body Mass Index equals body weight in kilograms divided by the height in meters squared ( $BMI = kg/m^2$ ).

**Table 4.1: Prevalence of obesity: WVBRESS, 2003**

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>TOTAL</b>	1,311	<b>30.5</b>	(27.6-33.3)	1,925	<b>25.0</b>	(22.9-27.2)	3,236	<b>27.7</b>	(25.9-29.5)
<b>Age</b>									
18-24	89	<b>23.7</b>	(12.8-34.6)	108	<b>16.4</b>	(8.9-23.8)	197	<b>20.2</b>	(13.4-27.0)
25-34	185	<b>27.3</b>	(20.5-34.1)	255	<b>25.0</b>	(19.2-30.8)	440	<b>26.2</b>	(21.7-30.7)
35-44	234	<b>40.3</b>	(33.5-47.1)	309	<b>29.5</b>	(23.9-35.1)	543	<b>34.9</b>	(30.4-39.3)
45-54	283	<b>35.1</b>	(29.1-41.2)	368	<b>28.4</b>	(23.5-33.4)	651	<b>31.9</b>	(27.9-35.8)
55-64	249	<b>30.7</b>	(24.5-36.8)	373	<b>32.4</b>	(27.2-37.6)	622	<b>31.5</b>	(27.5-35.5)
65+	270	<b>22.5</b>	(17.3-27.7)	506	<b>19.0</b>	(15.5-22.6)	776	<b>20.5</b>	(17.5-23.5)
<b>Education</b>									
Less than H.S.	239	<b>32.6</b>	(25.1-40.2)	371	<b>31.7</b>	(26.5-37.0)	610	<b>32.2</b>	(27.6-36.8)
H.S. or G.E.D.	525	<b>31.3</b>	(26.9-35.6)	752	<b>27.2</b>	(23.6-30.9)	1,277	<b>29.2</b>	(26.4-32.0)
Some Post-H.S.	265	<b>30.4</b>	(24.4-36.5)	449	<b>21.7</b>	(17.6-25.9)	714	<b>25.7</b>	(22.1-29.2)
College Graduate	279	<b>27.2</b>	(21.2-33.1)	352	<b>17.5</b>	(13.3-21.7)	631	<b>22.6</b>	(18.8-26.3)
<b>Income</b>									
Less than \$15,000	168	<b>25.1</b>	(17.6-32.7)	341	<b>27.4</b>	(22.1-32.6)	509	<b>26.4</b>	(22.0-30.8)
\$15,000- 24,999	261	<b>28.8</b>	(22.8-34.8)	442	<b>26.1</b>	(21.6-30.5)	703	<b>27.3</b>	(23.6-30.9)
\$25,000- 34,999	193	<b>29.0</b>	(22.0-36.0)	252	<b>32.0</b>	(25.7-38.3)	445	<b>30.6</b>	(25.9-35.3)
\$35,000- 49,999	211	<b>36.6</b>	(29.4-43.7)	259	<b>23.6</b>	(17.8-29.4)	470	<b>30.6</b>	(25.8-35.3)
\$50,000- 74,999	167	<b>28.3</b>	(21.2-35.4)	217	<b>27.5</b>	(21.0-34.1)	384	<b>27.9</b>	(23.1-32.8)
\$75,000+	182	<b>32.6</b>	(25.0-40.2)	140	<b>9.1</b>	(4.4-13.8)	322	<b>24.4</b>	(19.1-29.8)

**Table 4.2: Prevalence of overweight: WVBRESS, 2003**

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>TOTAL</b>	1,311	<b>39.0</b>	(36.0-41.9)	1,925	<b>29.2</b>	(26.9-31.4)	3,236	<b>34.0</b>	(32.1-35.8)
<b>Age</b>									
18-24	89	<b>27.1</b>	(17.2-37.0)	108	<b>15.8</b>	(8.6-23.0)	197	<b>21.7</b>	(15.5-28.0)
25-34	185	<b>42.9</b>	(35.3-50.5)	255	<b>28.2</b>	(22.2-34.1)	440	<b>35.7</b>	(30.8-40.6)
35-44	234	<b>33.2</b>	(26.9-39.6)	309	<b>28.9</b>	(23.3-34.4)	543	<b>31.0</b>	(26.8-35.2)
45-54	283	<b>39.5</b>	(33.3-45.6)	368	<b>29.6</b>	(24.6-34.6)	651	<b>34.7</b>	(30.7-38.7)
55-64	249	<b>50.7</b>	(44.0-57.3)	373	<b>31.9</b>	(26.7-37.1)	622	<b>41.4</b>	(37.1-45.7)
65+	270	<b>40.0</b>	(33.7-46.3)	506	<b>35.1</b>	(30.6-39.6)	776	<b>37.1</b>	(33.4-40.8)
<b>Education</b>									
Less than H.S.	239	<b>33.2</b>	(26.4-40.1)	371	<b>29.4</b>	(24.2-34.6)	610	<b>31.3</b>	(27.0-35.6)
H.S. or G.E.D.	525	<b>38.7</b>	(34.1-43.2)	752	<b>31.5</b>	(27.8-35.1)	1,277	<b>35.0</b>	(32.1-37.9)
Some Post-H.S.	265	<b>37.5</b>	(31.0-43.9)	449	<b>26.5</b>	(21.9-31.1)	714	<b>31.4</b>	(27.6-35.3)
College Graduate	279	<b>47.1</b>	(40.7-53.6)	352	<b>27.6</b>	(22.5-32.6)	631	<b>37.8</b>	(33.5-42.0)
<b>Income</b>									
Less than \$15,000	168	<b>31.4</b>	(23.4-39.5)	341	<b>30.7</b>	(25.0-36.3)	509	<b>31.0</b>	(26.3-35.7)
\$15,000- 24,999	261	<b>38.2</b>	(31.8-44.6)	442	<b>33.2</b>	(28.2-38.1)	703	<b>35.4</b>	(31.5-39.4)
\$25,000- 34,999	193	<b>40.2</b>	(32.7-47.6)	252	<b>29.8</b>	(23.6-36.0)	445	<b>34.9</b>	(30.0-39.7)
\$35,000- 49,999	211	<b>37.4</b>	(30.3-44.4)	259	<b>31.1</b>	(25.1-37.1)	470	<b>34.5</b>	(29.7-39.2)
\$50,000- 74,999	167	<b>47.3</b>	(39.2-55.5)	217	<b>23.8</b>	(17.8-29.9)	384	<b>35.7</b>	(30.4-41.0)
\$75,000+	182	<b>44.8</b>	(36.7-53.0)	140	<b>29.9</b>	(21.4-38.3)	322	<b>39.6</b>	(33.5-45.7)

Figure 4.1: Prevalence of obesity and overweight by year: WVBRFSS, 1987-2003

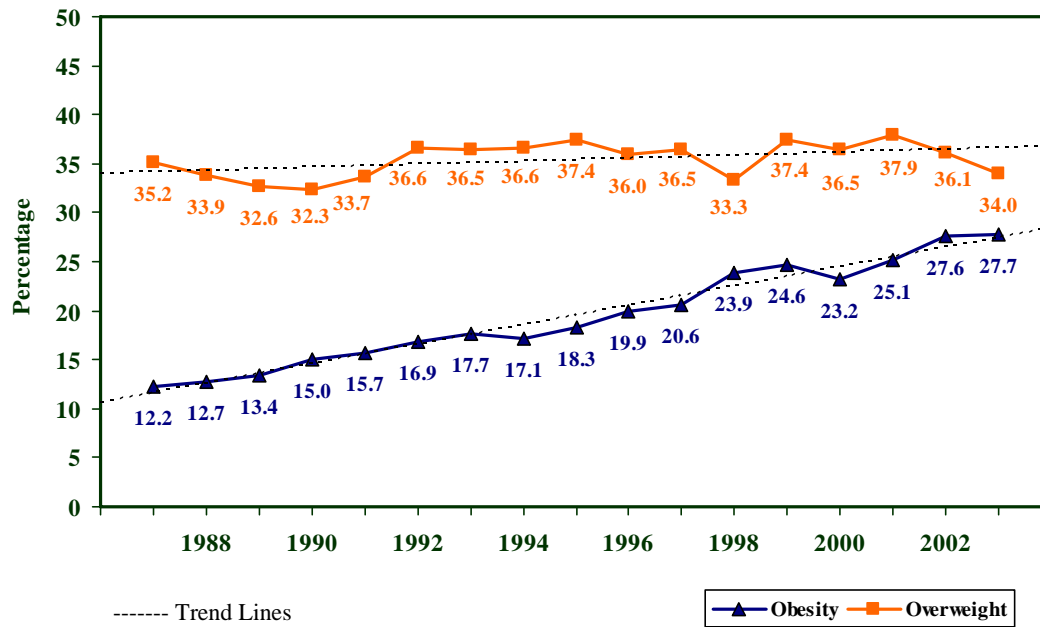


Figure 4.2: Prevalence of obesity by county: WVBRFSS, 1999-2003

