

CHAPTER 5: OBESITY AND OVERWEIGHT

Obesity and Overweight in 2004 and 2005

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: 27.6% (95% CI: 25.9-29.4) in 2004; 30.6% (95% CI: 28.8-32.4) in 2005.
US: 23.5% (95% CI: 23.2-23.8) in 2004; 24.5% (95% CI: 24.2-24.8) in 2005.
West Virginia ranked 3rd highest among 52 BRFSS participants in 2004 and 3rd highest among 53 BRFSS participants in 2005.

Overweight

WV: 36.4% (95% CI: 34.5-38.3) in 2004; 34.8% (95% CI: 33.0-36.7) in 2005.
US: 36.7% (95% CI: 36.4-37.1) in 2004; 36.8% (95% CI: 36.5-37.1) in 2005.
West Virginia ranked 32nd highest among 52 BRFSS participants in 2004 and 50th highest among 53 BRFSS participants in 2005.

Time Trends

Between 1987 and 2005, a substantial increase in obesity prevalence occurred among West Virginia adults. Men and women from a wide range of age, education, and income categories contributed to this unhealthy trend. The rate of overweight, in contrast, had only slight year-to-year variations around a flat long-term trend line. Between 2004 and 2005, obesity estimates increased, while the overweight prevalence declined marginally, but these one-year changes were not significant. During both 2004 and 2005, approximately two-thirds of West Virginia adults were either obese or overweight.

Gender

Obesity

Men: 28.5% (95% CI: 25.8-31.3) in 2004; 31.0% (95% CI: 28.2-33.8) in 2005.
Women: 26.7% (95% CI: 24.6-28.9) in 2004; 30.2% (95% CI: 28.0-32.5) in 2005.

Overweight

Men: 43.6% (95% CI: 40.5-46.6) in 2004; 40.7% (95% CI: 37.7-43.7) in 2005.
Women: 29.5% (95% CI: 27.3-31.8) in 2004; 29.1% (95% CI: 26.9-31.3) in 2005.

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

Age

The prevalence of being either obese or overweight steadily increased into the middle age groups (18-54) in both 2004 and 2005, although adjacent age groups were not significantly different. Among those aged 65 and older, the prevalence of being overweight (but not obese) continued its association with increased age. In contrast, the prevalence of obesity in both years was steeply and significantly lower among the oldest age group when compared with the next oldest age group.

Education and Household Income

Few differences were significant in the prevalence of either obesity or overweight by educational attainment in 2004 and 2005. Similarly, no significant differences were noted by household income.

Table 5.1 Obesity by demographic characteristics: WVBRFSS, 2004

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	1,313	28.5	25.8-31.3	2,019	26.7	24.6-28.9	3,332	27.6	25.9-29.4
Age									
18-24	74	19.7	10.0-29.3	111	14.0	7.3-20.7	185	16.9	11.0-22.9
25-34	179	31.9	24.7-39.2	269	21.1	15.6-26.5	448	26.7	22.1-31.2
35-44	236	29.7	23.2-36.1	346	28.2	23.0-33.3	582	28.9	24.8-33.0
45-54	296	32.0	26.2-37.7	383	31.9	26.8-36.9	679	31.9	28.1-35.8
55-64	255	37.1	30.7-43.4	365	37.4	31.8-43.0	620	37.2	33.0-41.5
65+	271	19.6	14.7-24.5	543	24.7	20.8-28.7	814	22.6	19.4-25.7
Education									
Less than H.S.	224	31.0	24.1-37.9	384	32.1	26.7-37.4	608	31.6	27.3-35.9
H.S. or G.E.D.	523	27.8	23.6-32.0	757	30.2	26.6-33.8	1,280	29.0	26.2-31.8
Some Post-H.S.	260	30.2	23.7-36.7	449	25.5	21.0-30.0	709	27.7	23.8-31.6
College Graduate	304	26.2	20.7-31.7	427	17.0	13.2-20.9	731	21.6	18.2-25.0
Income									
Less than \$15,000	167	31.1	22.6-39.6	442	30.4	25.7-35.2	609	30.7	26.3-35.1
\$15,000- 24,999	260	30.1	23.5-36.7	391	33.7	28.4-39.0	651	31.9	27.7-36.1
\$25,000- 34,999	164	29.8	22.1-37.5	244	26.0	20.1-32.0	408	27.8	23.0-32.7
\$35,000- 49,999	213	32.7	25.7-39.7	297	22.8	17.7-27.8	510	27.7	23.4-32.0
\$50,000- 74,999	214	23.8	17.6-30.0	222	24.5	18.4-30.6	436	24.1	19.7-28.5
\$75,000+	187	26.8	20.1-33.4	182	19.3	13.3-25.3	369	23.6	19.0-28.2

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

Table 5.2 Obesity by demographic characteristics: WVBRFSS, 2005

Characteristic	Men			Women			Total		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
TOTAL	1,348	31.0	28.2-33.8	2,097	30.2	28.0-32.5	3,445	30.6	28.8-32.4
Age									
18-24	67	*22.3	11.9-32.6	98	20.0	11.6-28.5	165	21.2	14.5-28.0
25-34	182	32.3	25.0-39.6	274	29.9	24.0-35.8	456	31.1	26.4-35.8
35-44	223	38.3	31.5-45.1	329	31.0	25.5-36.5	552	34.7	30.3-39.1
45-54	284	37.5	31.5-43.6	442	34.6	29.7-39.5	726	36.1	32.2-40.0
55-64	272	29.2	23.4-35.1	342	40.5	34.8-46.3	614	34.8	30.7-39.0
65+	318	22.1	17.2-27.0	603	25.1	21.2-29.0	921	23.8	20.8-26.9
Education									
Less than H.S.	248	32.8	26.0-39.7	364	31.6	26.0-37.2	612	32.3	27.8-36.7
H.S. or G.E.D.	548	31.2	26.8-35.7	833	31.7	28.1-35.4	1,381	31.5	28.6-34.3
Some Post-H.S.	247	31.0	24.4-37.7	482	30.2	25.5-35.0	729	30.6	26.6-34.5
College Graduate	304	28.6	22.9-34.3	416	26.1	21.4-30.7	720	27.3	23.6-31.0
Income									
Less than \$15,000	164	33.8	25.0-42.7	417	30.3	25.2-35.4	581	31.7	27.0-36.3
\$15,000- 24,999	268	31.0	24.6-37.4	447	29.8	24.8-34.8	715	30.4	26.3-34.4
\$25,000- 34,999	211	32.4	25.3-39.5	244	33.4	26.6-40.1	455	32.8	27.9-37.8
\$35,000- 49,999	207	28.2	21.5-34.9	253	34.9	28.1-41.7	460	31.3	26.5-36.1
\$50,000- 74,999	209	36.2	29.0-43.4	252	28.4	22.4-34.3	461	32.5	27.8-37.3
\$75,000+	174	25.5	18.7-32.3	204	25.0	18.5-31.4	378	25.3	20.6-30.0

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 on page 9.

Table 5.3 Overweight but not obese by demographic characteristics: WVBRFSS, 2004

Characteristic	Men			Women			Total		
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Note: Overweight is defined as body mass index of 25.0-29.9.

Figure 5.1 Obesity and overweight by year: WVBRFSS, 1987-2005

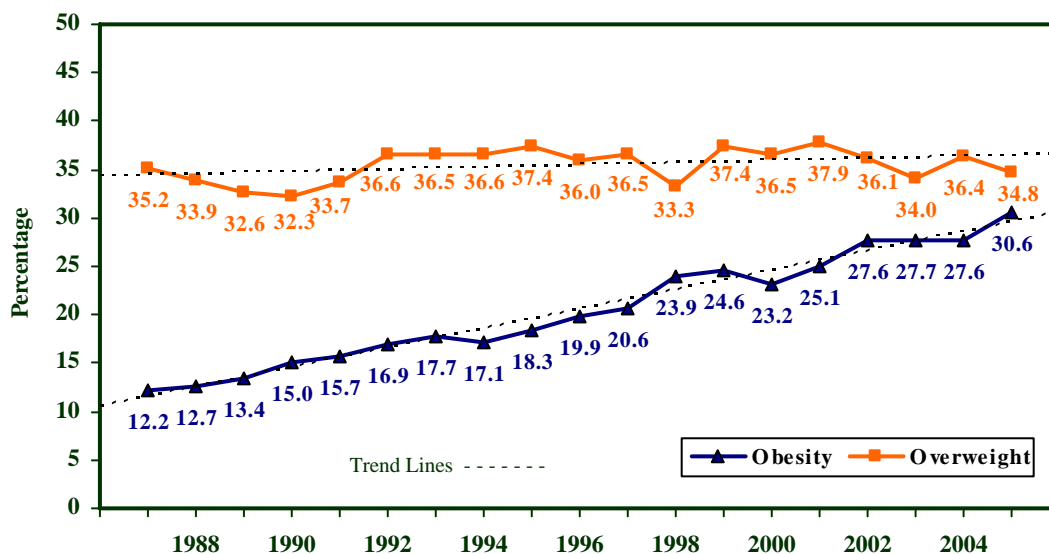
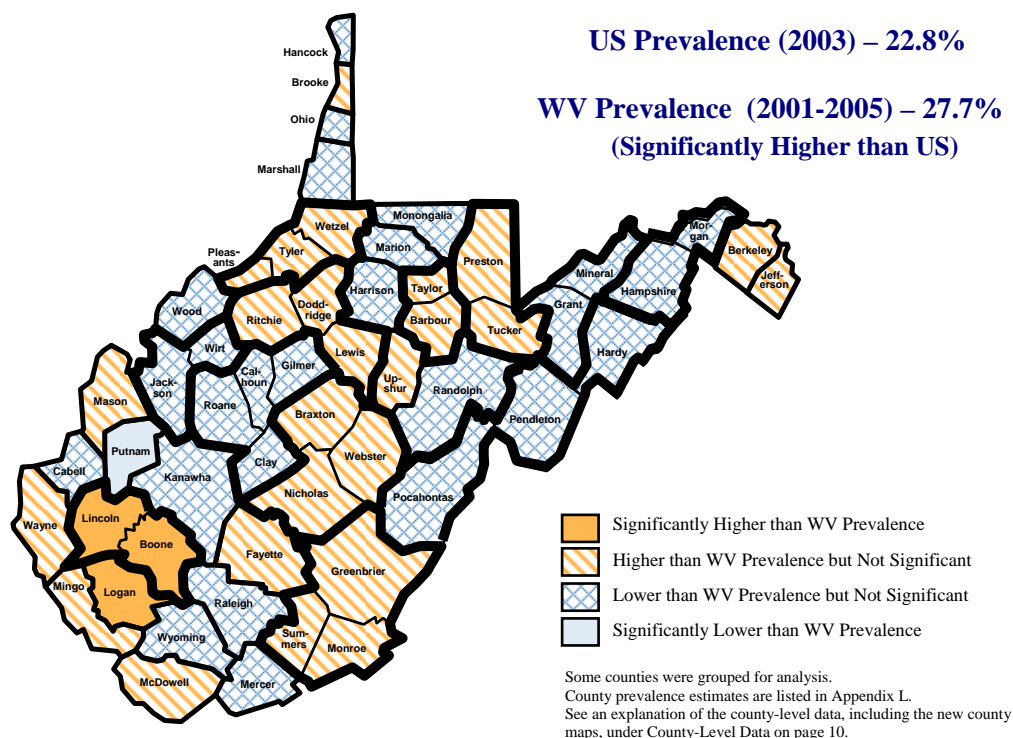


Figure 5.2 Obesity (body mass index of 30.0 or higher) by county: WVBRFSS, 2001-2005



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: 30.6% in 2005)