

## Background

Weight that is higher than what is considered healthy for a given height is described as overweight or obese.<sup>1,a</sup> This brief reports estimated prevalence of 1) overweight and obesity combined 2) overweight, and 3) obesity among Michigan adults (18 years and older) in 2015. Additionally, chronic disease prevalence estimates by weight status classification are given.<sup>a</sup>

All estimates were determined using 2015 data from the Michigan Behavioral Risk Factor Surveillance System (MiBRFSS) at [www.michigan.gov/brfs](http://www.michigan.gov/brfs).

Nearly, two-thirds of Michigan adults (66.2%) were either overweight or obese (overweight and obesity combined) in 2015. Disparities in overweight and obesity combined prevalence were observed for all characteristics (Table 1):

- The estimated prevalence of overweight and obesity combined was 20% higher among adult males compared to the estimated prevalence among adult females.
- A lower percentage of non-Hispanic White Michigan adults were classified as either overweight or obese compared to non-Hispanic Black and Hispanic adults.
- The combined overweight and obesity prevalence among 45-64 year olds was comparable to those 65 years and older.<sup>b</sup> Both were about 20% higher than the estimated prevalence among 18-44 year olds.<sup>b</sup>
- Over two thirds of adults with less than a college degree were either overweight or obese. The prevalence estimates among those with a high school degree or some college were about 6% higher than the estimate among those with a college degree.

Tables 1a-e. Combined Overweight and Obesity Prevalence Estimates by Characteristic, Adult, Michigan, 2015 MiBRFSS<sup>a</sup>

Table 1a. Overall

Characteristic	% overweight and obese (95% CI)
Overall	66.2 (64.9-67.5)

Table 1b: Gender

Characteristic	% overweight and obese (95% CI)
Male	72.0 (70.1-73.8)
Female	60.4 (58.6-62.2)

Table 1c: Race/ethnicity

Characteristic	% overweight and obese (95% CI)
White, Non-Hispanic	65.6 (64.1-67.0)
Black, Non-Hispanic	72.9 (68.8-76.6)
Other, Non-Hispanic	53.4 (46.8-60.0)
Hispanic	70.4 (62.2-77.4)

Table 1d: Age

Characteristic	% overweight and obese (95% CI)
18-44	59.5 (57.1-61.8)
45-64	72.5 (70.6-74.3)
65+	69.8 (67.7-71.9)

Table 1e: Education

Characteristic	% overweight and obese (95% CI)
Less than high school	68.5 (62.9-73.6)
High school graduate	67.4 (65.1-69.7)
Some college	67.0 (64.7-69.2)
College graduate	62.9 (60.8-64.8)

An estimated 35.1% of Michigan adults classified as overweight and 31.2% were classified as obese in 2015. Table 2 reports overweight and obesity estimates by characteristic. In 2015:

- The percentage of adult males classified as overweight was 35% higher than the percentage of adult females who were classified as overweight.
- The percentage of adults classified as obese was comparable between males and females.<sup>b</sup>
- The overweight prevalence estimates were comparable among Hispanic adults and non-Hispanic White and Black adults.<sup>b</sup>
- Estimated obesity prevalence among non-Hispanic Black adults was 35% higher when compared to the prevalence among non-Hispanic White adults. The obesity prevalence estimate among Hispanic adults was 38% higher than the prevalence estimate among non-Hispanic White adults.
- The overweight prevalence estimates were comparable among 45-64 year olds and those 65 years and older.<sup>b</sup>
- The overweight prevalence estimate among 18-44 year olds was about 20% lower when compared to prevalences among 45-64 year olds and those 65 years and older.
- The obesity prevalence estimates were comparable between 18-44 year olds and those 65 years and older.<sup>b</sup>

Table 2a-e. Overweight and Obesity Prevalence Estimates by Characteristic, Adult, Michigan, 2015 MiBRFSS<sup>a,\*</sup>

Table 2a. Overall

Characteristic	% overweight (95% CI)	% obese (95% CI)
Overall	35.1 (33.8-36.4)	31.2 (29.9-32.4)

Table 2b: Gender

Characteristic	% overweight (95% CI)	% obese (95% CI)
Male	40.3 (38.4-42.3)	31.7 (29.9-33.5)
Female	29.8 (28.1-31.5)	30.6 (29.0-32.4)

Table 2c: Race/ethnicity

Characteristic	% overweight (95% CI)	% obese (95% CI)
White, Non-Hispanic	35.7 (34.3-37.2)	29.8 (28.5-31.2)
Black, Non-Hispanic	32.7 (28.9-36.6)	40.2 (36.2-44.4)
Other, Non-Hispanic	30.8 (25.0-37.2)	22.7 (17.9-28.3)
Hispanic	29.4 (22.5-37.4)	41.0 (33.2-49.3)

Table 2d: Age

Characteristic	% overweight (95% CI)	% obese (95% CI)
18-44	30.9 (28.8-33.2)	28.6 (26.5-30.7)
45-64	37.4 (35.4-39.4)	35.1 (33.1-37.1)
65+	39.8 (37.6-42.2)	30.0 (27.9-32.2)

Table 2e: Education

Characteristic	% overweight (95% CI)	% obese (95% CI)
Less than high school	36.6 (31.3-42.3)	31.8 (26.8-37.3)
High school graduate	33.2 (31.0-35.5)	34.2 (31.9-36.6)
Some college	34.9 (32.7-37.1)	32.1 (30.0-34.2)
College graduate	36.9 (35.0-38.9)	25.9 (24.2-27.8)

\*Estimated overweight and obesity prevalence may not equal the combined prevalence estimate shown in Table 1 due to rounding.

- The estimated obesity prevalence among 45-64 year olds was about 20% higher when compared to the prevalences among 18-44 years and 15% higher among those 65 years and older.
- The estimated overweight prevalences were comparable among education levels.<sup>b</sup>
- The estimated obesity prevalence among college graduates (25.9%) was at least 19% lower than those with less than a college degree. Obesity prevalence estimates were comparable among those with less than a college education.<sup>b</sup>

Table 3. Chronic Disease Prevalence Estimates by BMI Classification, Michigan, Adults, 2015  
MiBRFSS<sup>a,\*</sup>

Weight Status Classification	% Diabetes (95% CI)	% Cardiovascular Disease (95% CI)	% High Blood Pressure (95% CI)
Healthy	(3.7-5.6)	7.4 (6.4-8.6)	18.9 (17.3-20.7)
Overweight	(7.9-10.5)	9.1 (8.0-10.3)	33.8 (31.8-35.8)
Obese	(17.9-21.5)	11.9 (10.5-13.3)	47.8 (45.4-50.2)

\*Underweight was excluded.

Table 3 shows chronic disease prevalence estimates by weight status classification among Michigan adults in 2015.

- Diabetes prevalence estimates increased with higher weight status.
- The estimated prevalence of cardiovascular disease (CVD) among adults classified as normal status or overweight were comparable.<sup>b</sup> However, adults classified as obese had a higher estimated CVD prevalence compared to that of adults classified with lower weight status.
- The estimated prevalence of lifetime high blood pressure increased with higher weight status.

#### Footnotes

- In the US, obesity is technically defined as a Body Mass Index (BMI) of 30.0 kg/m<sup>2</sup> or higher. <sup>1</sup> A BMI between 25.0 kg/m<sup>2</sup> and 29.9 kg/m<sup>2</sup> is considered overweight, and a BMI between 18.5 kg/m<sup>2</sup> to 24.9% is defined as normal BMI or Healthy. Less than 18.5 kg/m<sup>2</sup> is defined as underweight.<sup>1</sup> Underweight was excluded due to a high degree of uncertainty in the measurements.
- Comparable meant no evidence of a statistically significant difference between estimates,  $\alpha = 0.05$ .
- One limitation of the cross-sectional data is that a temporal relationship cannot be established between chronic disease and weight status, i.e., whether higher weight status preceded the chronic disease.

#### Reference

- Centers for Disease Control and Prevention. Available on-line: Please click [Defining Adult Overweight and Obesity](#). Accessed on April 15, 2017.

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