

Obesity: Health Focus Area 1



Excerpted from Component A of *The Rhode Island State Health Improvement Plan*

July 28, 2017

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Definition

Obesity among adults is determined using the ratio of an individual's weight to his or her height. This ratio is called the Body Mass Index (BMI). To determine the prevalence of Rhode Islanders with obesity, BMI was calculated from two questions from the Rhode Island Behavioral Risk Factor Surveillance Survey (RI BRFSS): "About how much do you weigh without shoes?" and "About how tall are you without shoes?" All Rhode Islanders with a resulting BMI score of 30 kg/m² or higher are classified as obese, while those with a BMI in the range of 25 to 29.9 kg/m² are considered overweight.

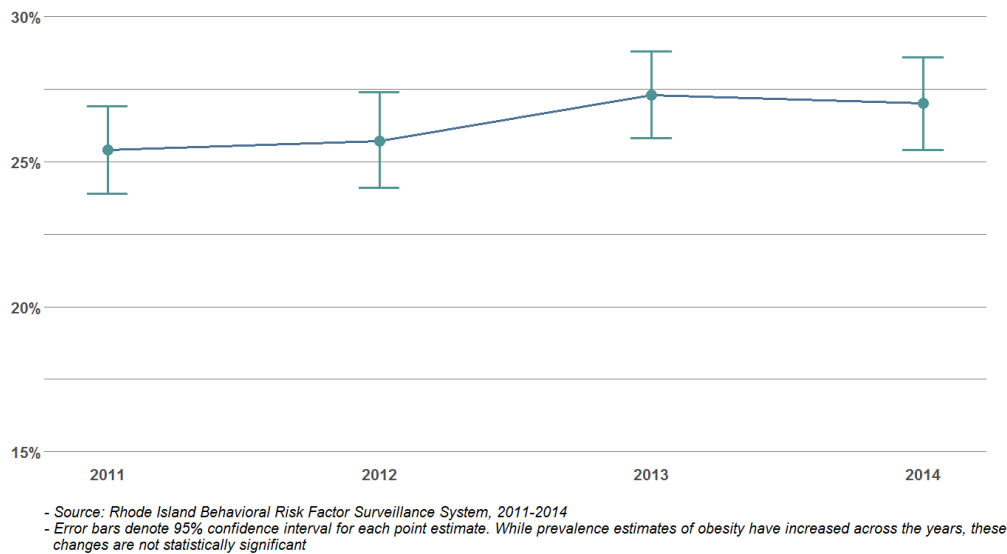
Children and teens (age 2-19) are identified as having obesity or being overweight by comparing their BMIs to those of the same age and sex to account for variations in body composition. A child is defined as being obese if he or she has a BMI at or above the 95th percentile and overweight if he or she has a BMI between the 85th and 95th percentile for children of the same age and sex.¹

Prevalence across the Life Span

Rates of obesity have been increasing at alarming rates in the United States. In 2015, every state had an adult obesity prevalence rate higher than 20%.² Research suggests that overweight and obesity increase the risk for chronic conditions such as diabetes, heart disease, stroke, and specific cancers across the lifecourse.³

According to the RI BRFSS, 27.0% of adult Rhode Islanders were obese in 2014. This is a 1.6% increase from 2011, although this increase is not statistically significant.⁴ (See Figure 1.)

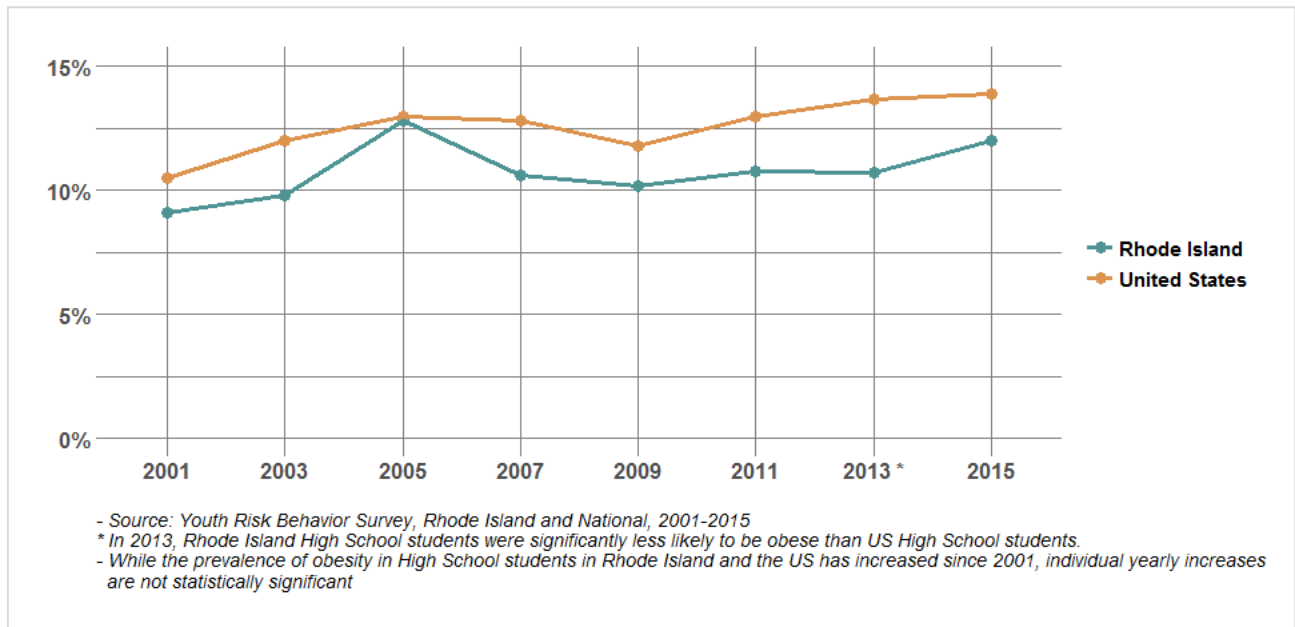
Figure 1: Obesity Prevalence among Rhode Islanders Age 18 or Older, 2011-2014.



Children and Adolescents

According to results of the Rhode Island Youth Risk Behavior Survey (YRBS), the rate of obesity among high school students in Rhode Island has increased slightly between 2001 - 2015, although year to year, the increases were not statistically significant. Figure 2 presents changes in obesity rates among Rhode Island high school students compared to the rate of obesity among United States high school students from 2001-2015.

Figure 2: Obesity among High School Students in Rhode Island and the United States, 2001-2015.

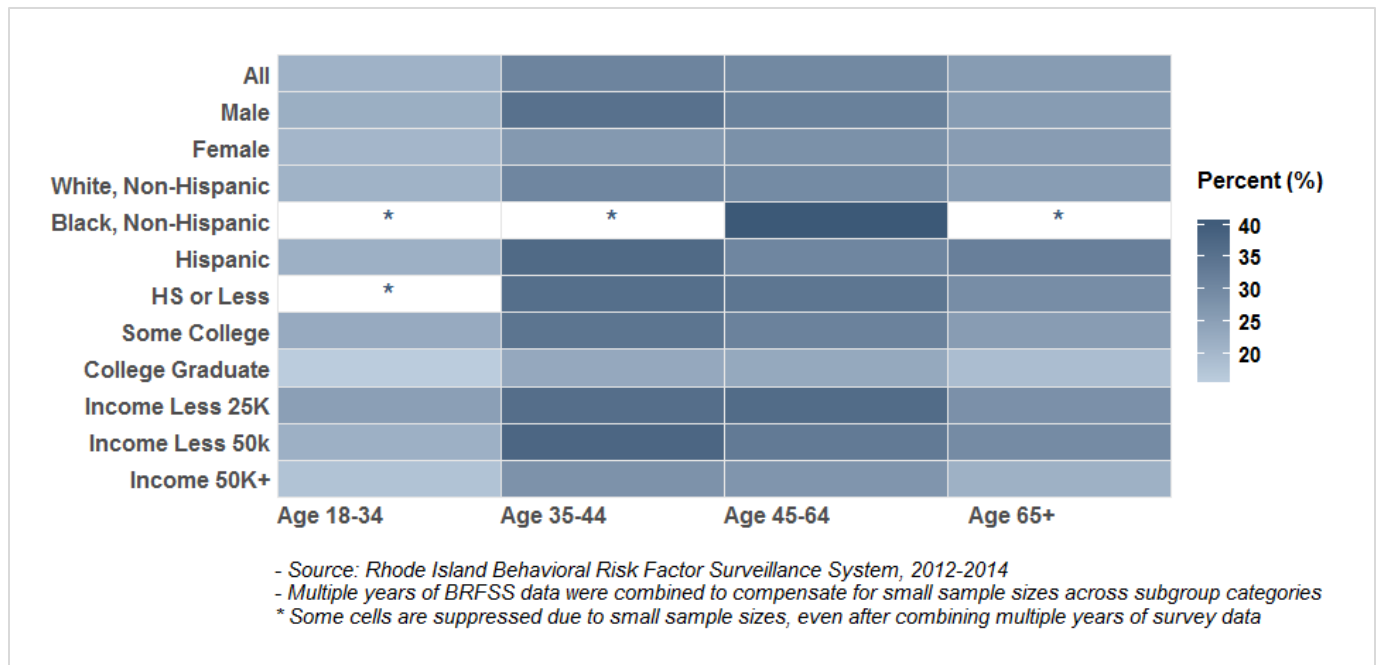


There is a lack of comprehensive data regarding the actual BMI values of Rhode Island children. Future iterations of this *Health Assessment Report* should attempt to paint a more comprehensive picture of obesity among this population.

Adults

The rate of obesity among adults in Rhode Island increases as adults reach middle age, with the highest prevalence among adults 35-44. Figure 3 presents obesity rates by age groups, using RI BRFSS population estimates.

Figure 3: Obesity Prevalence across the Life Span, by Sex, Race/Ethnicity, Education, and Income, 2012 – 2014.



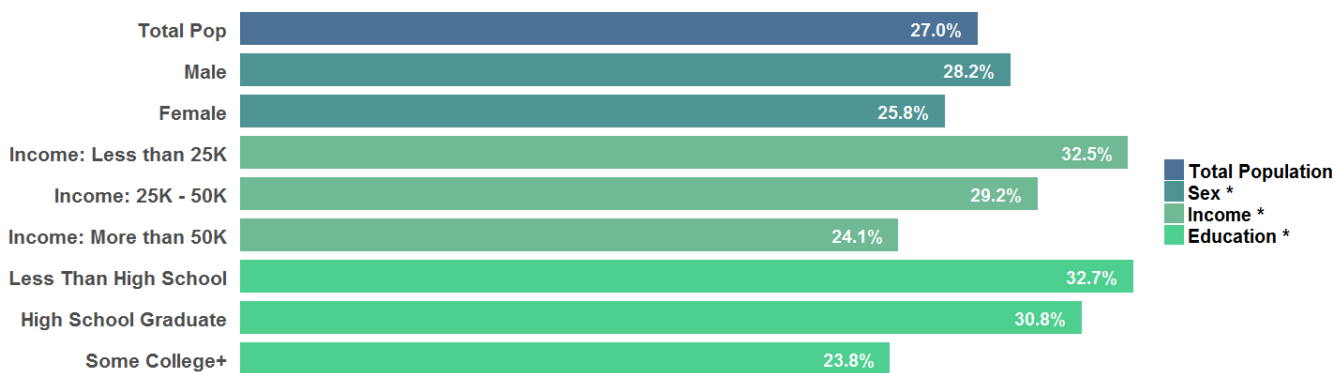
Older Adults

According to 2012-2014 RI BRFSS data, obesity rates among adults age 65 and older are not dramatically different from obesity rates among adults (age 18-64) in general (21.2 to 31.0% vs. 25.8%)

At-Risk Populations and Disparities

Analysis of 2014 RI BRFSS data determined that compared to other racial/ethnic groups Black, non-Hispanic Rhode Islanders have the highest rate of obesity at 34.7%, but this difference was not statistically significant possibly due to sample size. In addition, analysis determined that men are significantly more likely than women to be obese (28.2% vs. 25.8%, respectively),⁵ Furthermore, education and income levels also are associated with obesity: as educational levels and incomes increase, obesity rates decrease. Figure 4 illustrates these differences among subgroups.

Figure 4: Obesity Prevalence among Adults, by Sex, Race/Ethnicity, Education, and Income, 2014.



- Source: Rhode Island Behavioral Risk Factor Surveillance System, 2014
 - Estimates above demonstrate crude prevalence and have not been adjusted for age
 * Statistical (chi-square) tests were performed to determine statistically significant differences within subgroups. Groups with asterisks indicate a statistically significant difference within the group.

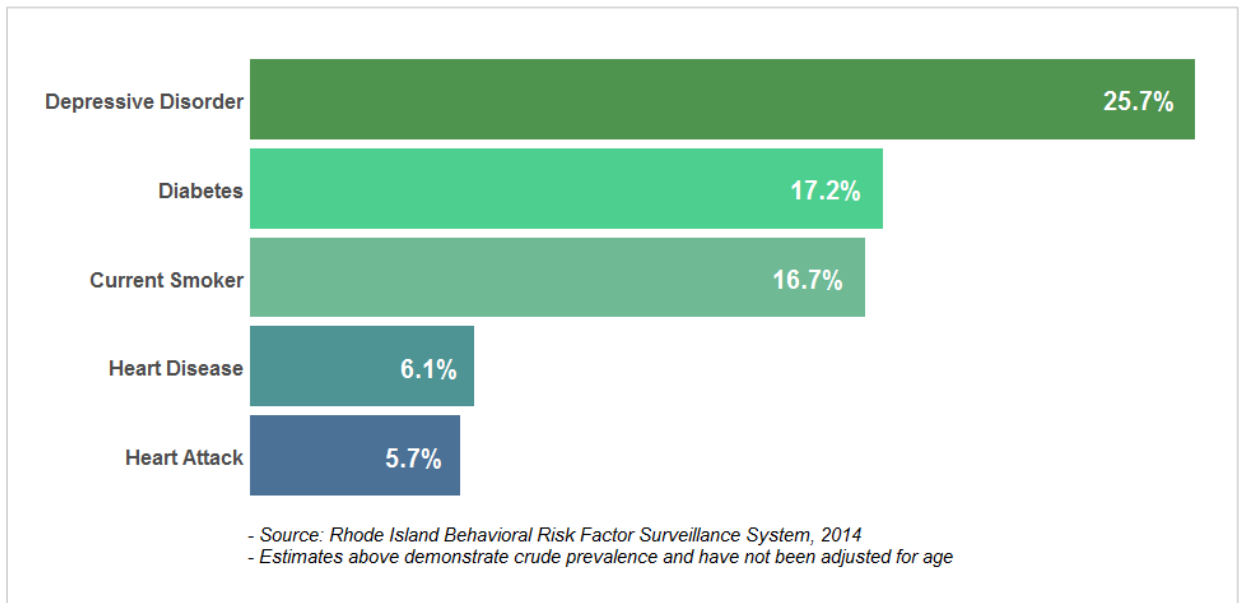
Co-Morbidities

Analysis of RI BRFSS data collected between 2012 and 2014 reveal that a variety of conditions and behaviors co-occur with obesity:

- Approximately 17.2% of respondents with obesity report being told by a physician that they have diabetes.
- Around 6.1% of those with obesity have been told they have heart disease.
- Approximately 5.7% have been told they had a heart attack.
- About 16.7% of respondents with obesity also identified as ‘current smokers’.
- Approximately 25.7% of respondents with obesity have been told they have a depressive disorder.

Figure 5 illustrates the co-occurrence of some of the health focus areas in this report with obesity.

Figure 5: Prevalence of Conditions Co-Occurring with Obesity, Rhode Island Adults, 2014



National data show that people with behavioral health issues are also more likely to be overweight or obese.⁶ According to Mental Health America:

- Adults with depression are 1.2 to 1.8 times more likely than the general public to be obese.
- Adults with bipolar disorder are 1.5 to 2.3 times more likely than the general public to be obese.
- Adults with schizophrenia are 3.5 times more likely than the general public to be obese.

References

- ¹ Defining childhood obesity (2015). Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. Retrieved May 15, 2017, from <https://www.cdc.gov/obesity/childhood/defining.html>
- ² Adult obesity in the United States, 2015 (2016). The State of Obesity. Retrieved May 16, 2017 from <http://stateofobesity.org/adult-obesity/>
- ³ Obesity and overweight (2016). World Health Organization. Retrieved June 1, 2017 from <http://www.who.int/mediacentre/factsheets/fs311/en/>
- ⁴ Rhode Island Behavioral Risk Factor Surveillance System survey (2011-2014).
- ⁵ Rhode Island Behavioral Risk Factor Surveillance System survey (2011-2014).
- ⁶ Position statement 16: Health and wellness for people with serious mental illnesses. (2012). Alexandria, VA: Mental Health America. Retrieved May 16, 2017 from <http://www.mentalhealthamerica.net/positions/wellness>