Introduction

The prevalence of obesity among US adults has dramatically increased during the past 30 years, and has reached epidemic proportions. Obesity is linked to large increases in chronic health conditions and significantly higher healthcare costs. Obesity also takes too many lives in the US every year, and affects more people than smoking, heavy drinking or poverty.\(^1\)

This briefing provides key findings on obesity and overweight status among Hennepin County adults using data gathered from the SHAPE 2006 - Adult Survey. The SHAPE 2006 survey is the third in a series of nationally recognized surveys collecting information on the health of Hennepin County residents and the factors that affect it. More than 10,000 households in the county participated in SHAPE 2006, providing information on 8,000 adults and 4,000 children.\(^2\)

Background

Self-reported weight and height from the SHAPE 2006 - Adult Survey were used to calculate body mass index (BMI) for the survey respondents.\(^1\) Using national guidelines\(^1\), the weight status classifications according to BMI are: underweight (BMI <18.5); normal weight (BMI = 18.5 to 24.9); overweight but not obese (BMI = 25.0 to 29.9); and obese (BMI \(\geq\) 30.0).

An alarming epidemic: 54 percent of county adults are either overweight or obese

In 2006, over half (54.1\%) of county adults were either obese or overweight, an epidemic proportion. This includes 19.1 percent who are obese, and 35.0 percent who are overweight but not obese (Figure 1). Moreover, given that these are self-reported data, these high rates are likely to be underestimates of the true rates.\(^1\)

<table>
<thead>
<tr>
<th>Weight Status</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Underweight (BMI &lt; 18.5)</td>
<td>19.1%</td>
</tr>
<tr>
<td>Normal weight (BMI = 18.5 to 24.9)</td>
<td>44.0%</td>
</tr>
<tr>
<td>Overweight but not obese (BMI = 25.0 to 29.9)</td>
<td>35.0%</td>
</tr>
<tr>
<td>Obese (BMI (\geq) 30.0)</td>
<td>54.1%</td>
</tr>
</tbody>
</table>

SOURCE: SHAPE 2006

Figure 1. Weight status of Hennepin County adults, 2006
Although the obesity rate alone among county adults (19.1%) is lower than the comparable rate among adults in the state (24.7%) and in the nation (25.1%) for the same year, this rate exceeds the Healthy People 2010 objective for healthy weight which aims to reduce the proportion of adults who are obese to 15 percent or lower.

The obesity rate is on the rise

Comparing the SHAPE 2006 - Adult Survey data to the results from previous survey iterations, SHAPE 1998 and SHAPE 2002, an increasing percentage of overweight or obesity is found (48.2% in 1998, 52.2% in 2002 and 54.1% in 2006, p<0.05). This increase was primarily driven by an increase in the rate of obesity, which has increased by 39% percent (from 13.7% in 1998 to 19.1% in 2006, p<0.05), while the percentage of those who are overweight but not obese has remained relatively stable (Figure 2).

While no significant difference in obesity rates is found between men and women, the rate of overweight but not obese among men is about twice the rate among women (45.8% vs. 26.2%, p<0.05). This gender difference drives the significant difference in the combined overweight or obese rates for men and women (64.9% vs. 44.4%, p<0.05) (Figure 3).

Obesity among some racial and ethnic minorities is disproportionately high

Almost two-fifths (38.5%) of US-born Blacks are obese, and the rate for Hispanics/Latinos is 29.5 percent. Both rates are statistically higher than that for Whites (18.4%, p<0.05). Conversely, the obesity rate among Southeast Asian adults is significantly lower than the rate for Whites (8.5% vs.18.4%, p<0.05) (Figure 4).

Variation in the rates of those who are overweight but not obese across racial and ethnic groups is less notable. However, US-born Blacks have a rate that is significantly lower than the rate for Whites (28.2% vs. 36.2%, p<0.05) (Figure 4).
A notable disconnect: being overweight and perceiving oneself to be overweight

In the SHAPE 2006 – Adult Survey, respondents were asked whether they consider themselves to be overweight, underweight or about the right weight. A notable disconnect between self-perceived weight and weight status according to BMI was found among county adults.

For county adults who are obese, a great majority (92.3%) perceived themselves to be overweight. This is about equally true for obese men as it is for obese women. However, compared to obese Whites, obese Hispanics/Latinos, obese African-born Blacks and U.S.-born Blacks are significantly less likely to consider themselves as being overweight (Figure 5).

This disconnect is more evident among county adults who are overweight but not obese (Figure 6). Only half (52.7%) of overweight but not obese adults perceive themselves to be overweight. This low awareness of being overweight among overweight but not obese adults is more evident among men than among women (40.9% vs. 74.5%, p<0.05). It is also much more evident among overweight but not obese racial and ethnic minorities: only 25.4 percent of overweight but not obese African-born Blacks, and 35.8 percent of overweight but not obese U.S.-born Blacks perceive themselves to be overweight. Both rates are significantly lower than the rate among overweight but not obese Whites (54.6%, p<0.05) (Figure 6).

Receiving weight loss advice from a health care provider - a missed opportunity

The US Preventive Services Task Force (USPSTF) recommends that clinicians screen all adult patients for obesity and offer intensive counseling and behavioral interventions to promote sustained weight loss for obese adults. The SHAPE 2006 – Adult Survey shows that 55.0 percent of all county adults and 60.7 percent of those who are obese have seen a health care provider for a complete physical exam during the past year. This provides an opportunity for healthcare providers to screen for obesity and to offer advice, counseling or intervention for those who are obese.
The SHAPE 2006 - Adult Survey indicates that 77.0 percent of obese adults who have had complete physicals within the past year reported that they had received weight-loss advice. The rate may deserve applause, but nearly one-fourth (23.0%) of obese adults who could have been offered weight-loss help, missed out. This missed opportunity is disproportionately higher among obese US-born Blacks, and obese African-born Blacks who have seen a healthcare provider for a complete physical within the past year. The rates of receiving weight loss advice for these groups are 58.8 percent and 55.3 percent respectively, whereas the rate for their White peers is 80.6 percent (p<0.05) (Figure 7).

Summary

In 2006, one in five (19.1%) Hennepin County adults was obese, a 39 percent increase from the rate in 1998 (13.7%), and exceeding the Healthy People 2010 objective of 15 percent. Additionally, 35 percent of adults were overweight but not obese. This means that 54.1 percent of county adults are either obese or overweight, an epidemic proportion. Overweight or obesity disproportionately affects some population groups, such as men and those who are racial or ethnic minorities. To make the concern even more significant, the groups most likely to be overweight or obese are also the groups that have lower awareness of being overweight, and who are less likely to have received weight loss advice from a health professional.

Obesity and overweight are among the most important public health challenges faced by our communities. Understanding the dynamics of obesity and overweight in Hennepin County by using local data is critical for the development of effective public health strategies. The SHAPE 2006 - Adult Survey provides such an opportunity.

Acknowledgments

The SHAPE project would like to thank the many individuals, community organizations, and subject-area experts who provided advice and support for the development of SHAPE 2006. A partial list of those who provided assistance to the SHAPE 2006 project can be found on the SHAPE web site listed below. The SHAPE project would especially like to thank the more than 10,000 residents of Hennepin County who generously took the time to complete the SHAPE survey.

For More Information

SHAPE 2006 is a collaborative project between the Hennepin County Human Services and Public Health Department and the University of Minnesota School of Public Health.

For more information on this Briefing or other topics related to the SHAPE project, or to receive this information in an alternate format, please contact SHAPE@co.hennepin.mn.us or 612-348-6150.

www.hennepin.us/SHAPE

Notes:


2. Hennepin County Human Services and Public Health Department. SHAPE Briefing Number 1, What’s new? What’s coming?. July 2007. Available at: www.hennepin.us/SHAPE.

