SHAPE Briefing

The obesity epidemic: current status and disparities among Hennepin County adults

1998 2002 **2006**

Number 14

Trends and insights from SHAPE, the Survey of the Health of All the Population and the Environment

Highlights

- In 2006, over half (54.1%) of Hennepin County adults were either obese or overweight, an epidemic proportion. Moreover, this rate is likely to be an underestimate of the true rate.
- The obesity rate among county adults is on the rise. The rate in 1998 was 13.7 percent and increased to 19.1 percent in 2006 (a 39% increase).
- Overweight and obesity disproportionately affects some population groups, such as those who are male and those who are racial or ethnic minorities.
- The groups most likely to be overweight or obese often are the groups that have lower awareness of being overweight, and those who are less likely to have received weight loss advice from a health care professional.

Upcoming Issues

- Children's leisure time activities
- Adult and child health care access
- Adult chronic conditions

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

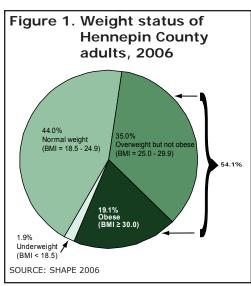
This briefing provides key findings on obesity and overweight status among Hennepin County adults using data gathered from the *SHAPE 2006 - Adult Survey*. The *SHAPE 2006* survey is the third in a series of nationally recognized surveys collecting information on the health of Hennepin County residents 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 guidelines¹, 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 ≥ 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



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,³ 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.⁴

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).

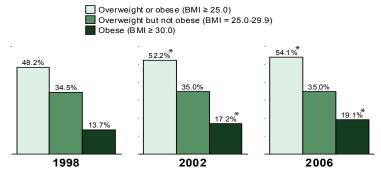
While no significant difference in *obesity* rates is found between men and women, the rate of *overweight but not obese* among men is about twice the rate among women (45.8% vs. 26.2%, p<0.05). This gender difference drives the significant difference in the combined *overweight or obese* rates for men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

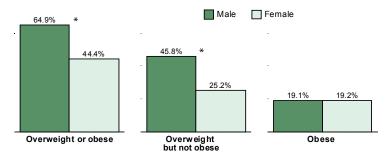
Variation in the rates of those who are overweight but not obese across racial and ethnic groups is less notable. However, US-born Blacks have a rate that is significantly lower than the rate for Whites (28.2% vs. 36.2%, p<0.05) (Figure 4).

Figure 2. Weight status of Hennepin County adults, 1998, 2002 & 2006



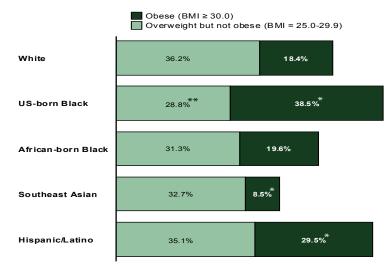
* Difference in rates between this and rate for 1998 is statistically significant. SOURCES: SHAPE 1998, SHAPE 2002 & SHAPE 2006

Figure 3. Weight status by gender, Hennepin County adults, 2006



 $\ensuremath{^{*}}$ Difference in rates between genders is statistically significant. SOURCE: SHAPE 2006

Figure 4. Weight status by race and ethnicity, Hennepin County adults, 2006



Difference in rates of obesity between this group and Whites is statistically significant.
*** Difference in rates of overweight, but not obese between this group and Whites is statistically significant.

SOURCE: SHAPE 2006

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.

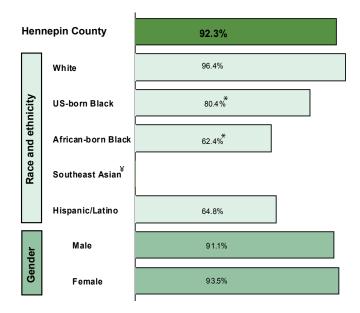
For county adults who are *obese*, a great majority (92.3%) perceived themselves to be *overweight*. This is about equally true for *obese* men as it is for *obese* women. However, compared to *obese* Whites, *obese* Hispanics/Latinos, *obese* African-born Blacks and U.S.-born Blacks are significantly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

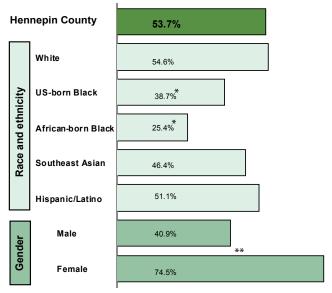
The US Preventive Services Task Force (USPSTF) recommends that clinicians screen all adult patients for *obesity* and offer intensive counseling and behavioral interventions to promote sustained weight loss for *obese* adults.⁵ The *SHAPE 2006 – Adult Survey* shows that 55.0 percent of all county adults 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*.

Figure 5. Percent perceiving themselves to be overweight among adults who are obese (BMI ≥30.0), Hennepin County 2006



- Difference in rates between this group and Whites is statistically significant at p<0.05.
- ** Difference in rates between genders is statistically significant at p<0.05.
- \$ Sample size for this group is too small to provide statistically reliable data. SOURCE: SHAPE 2006

Figure 6. Percent perceiving themselves to be overweight among adults who are overweight, but not obese (BMI=25.0-29.9), Hennepin County 2006



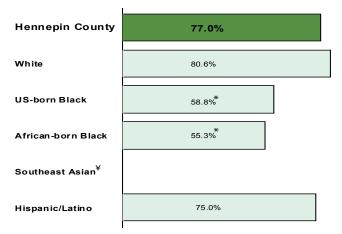
- Difference in rates between this group and Whites is statistically significant at n<0.05
- ** Difference in rates between genders is statistically significant at p<0.05. SOURCE: SHAPE 2006

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

Figure 7. Percent that have ever received weight loss advice from a health care provider among adults who are obese (BMI ≥30.0) and have seen a healthcare provider within past year for a complete physical exam, Hennepin County 2006



* Difference in rates between this group and Whites is statistically significant at p<0.05. ¥ Sample size for this group is too small to provide statistically reliable data.

of 15 percent.² 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 subjectarea 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:

- 1. Hennepin County Human Services and Public Health Department. Technical compendium for SHAPE Briefing Number 14. The obesity epidemic: current status among Hennepin Count adults. August 2008. Available at: www.hennepin.us/SHAPE.
- 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.
- 3. CDC. Behavioral Risk Factor Surveillance System 2006 (BRFSS). Available at: www.cdc.gov/BRFSS
- 4. U.S. Department of Health and Human Service. *Healthy People 2010. 2nd Edition.* Washington D.C.: U.S. Department of Health and Human Service, Government Printing Office. 2000. Available at: www.healthyoeople.gov.
- 5. U.S. Preventive Services Task Force (USPSTF). Screening for obesity in Adults: recommendations and rationale. Agency for Health Care Research and Quality (AHRQ) Pub. No. 04-0528A, December 2003.



Human Services and Public Health Department