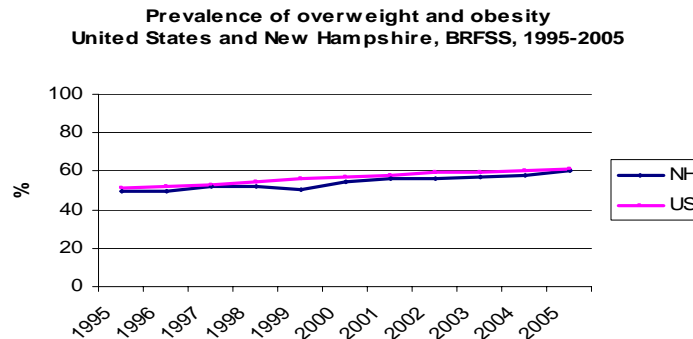




## Weight Status and Chronic Disease Findings of New Hampshire Behavioral Risk Factor Surveillance Survey Data Brief – December 2007

Since the mid 1970's, the prevalence of overweight and obesity has increased sharply for both adults and children, as documented from national and state surveys. The NHANES (National Health and Nutrition Examination Survey) show that among adults aged 20–74 years, the prevalence of obesity increased from 15.0% (in the 1976–1980 survey) to 32.9% (in the 2003–2004 survey). According to the New Hampshire Behavioral Risk Factor Surveillance Survey (NH BRFSS), obesity and overweight among New Hampshire adults (18 years and older) has also been increasing. In New Hampshire, the prevalence of overweight and obesity increased from 49.4% in 1995 to 59.9% in 2005.



This trend raises concerns because of the impact overweight and obesity has on health. Being overweight or obese increases the risk of many diseases and health conditions, including the following:

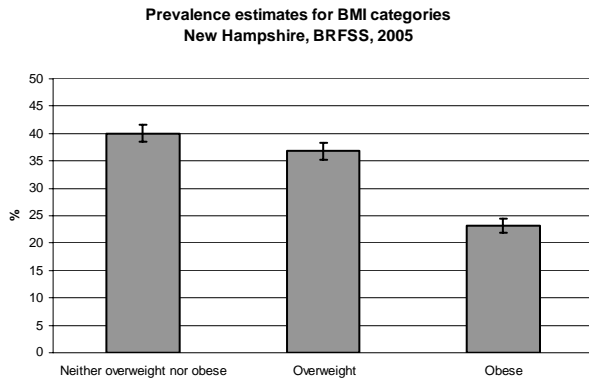
- Hypertension
- Dyslipidemia (for example, high total cholesterol)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Arthritis
- Sleep apnea and respiratory problems
- Some cancers.<sup>1</sup>

For adults, overweight and obesity ranges are determined by using weight and height to calculate a number called the “body mass index” (BMI). According to the BMI weight status categories, adults age 20 and over with a BMI at or over 25 are classified as overweight and anyone with a BMI at or over 30 is classified as obese.<sup>2</sup>

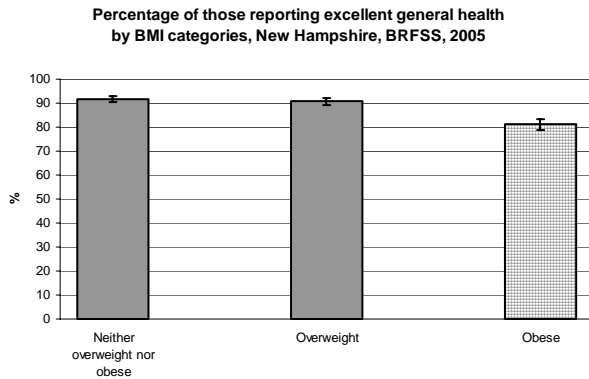
BMI is an inexpensive and easy-to-perform method of screening for weight categories that may lead to health problems. This data brief summarizes the main findings of the 2005 BRFSS related to weight status and prevailing chronic conditions as reported by New Hampshire adult residents. The BRFSS data are self-reported, and likely an underestimate of the real weight status. Graphs present prevalence estimates with 95% confidence intervals.

## GENERAL HEALTH

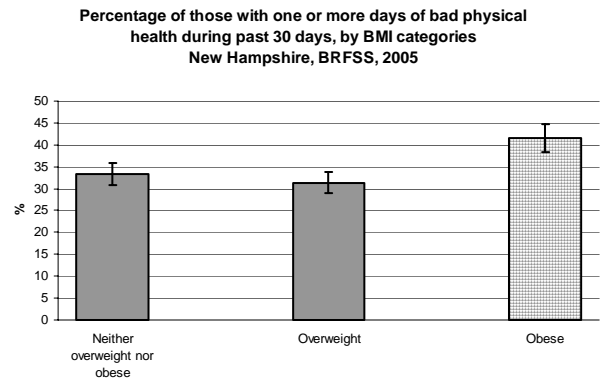
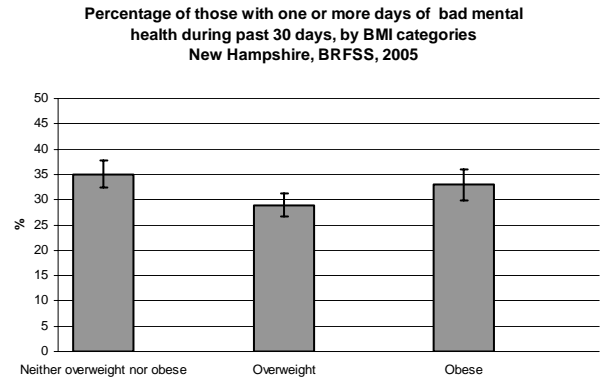
According to the NH BRFSS, 36.8% of NH residents were overweight and 23.1% were obese in 2005.



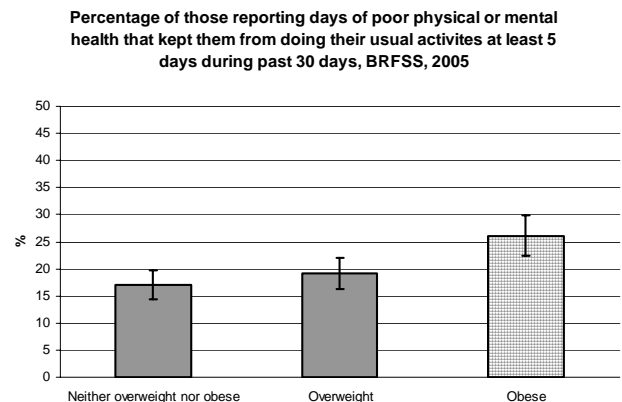
The BRFSS includes questions related to general physical and mental health. Among obese adults, 81.1% rate their general health as excellent, while 91.8% of healthy weight adults and 90.8% of overweight adults consider their general health as excellent.



In 2005, there was no difference, by weight category, in the proportion of those reporting at least one bad day of mental health during the previous 30 days. However, a significantly higher proportion of those categorized as obese report at least one bad day of physical health during the previous 30 days compared to other weight categories.

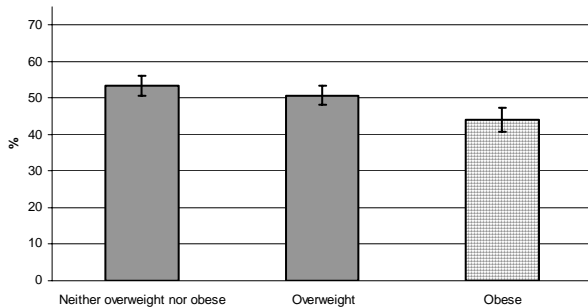


Some adults, who reported one or more days of bad physical or mental health during the past 30 days, were kept from doing their usual activities, such as self-care, work, or recreation. A significantly higher proportion of obese respondents were kept from their usual activities at least 5 days during the past thirty days.



A healthy weight contributes to better mental health and life satisfaction. Significantly fewer obese individuals are very satisfied with life compared to the rest of adult population.

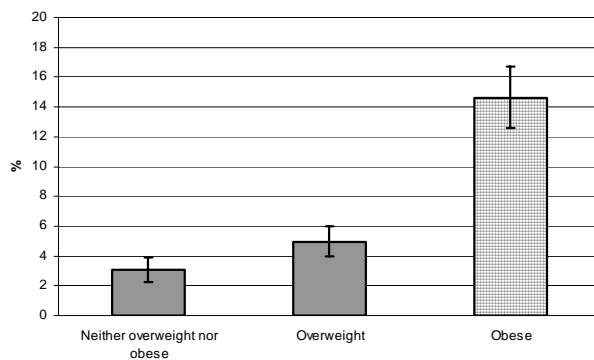
Percentage of those very satisfied with life, by BMI categories  
New Hampshire, BRFSS, 2005



## DIABETES

Overweight and obesity are risk factors for diabetes.<sup>3</sup> Diabetes is the seventh leading cause of death in New Hampshire. Diabetes is also a leading cause of blindness, kidney failure, and lower limb amputation. The percentage of obese adults who have diabetes was 14.6% compared to 5.0% of overweight respondents and 3.1% of healthy weight respondents.

Prevalence of diabetes, by BMI categories  
New Hampshire, BRFSS, 2005

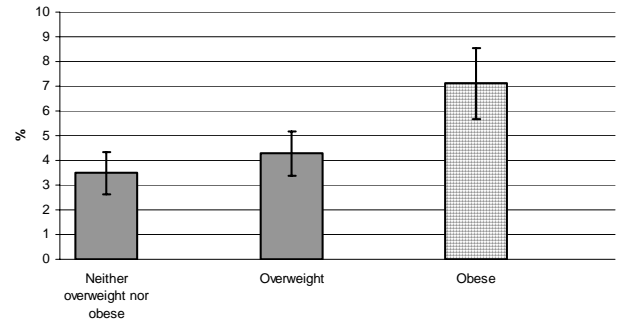


## CARDIOVASCULAR DISEASE

Cardiovascular disease is a term used to refer to a broad spectrum of diseases and conditions, all involving the heart or blood vessels. The most recognized of these are heart disease and stroke. The most common heart condition in the United States is coronary heart disease (CHD), which can lead to heart attack. The most common symptom of CHD is angina. Angina is chest pain

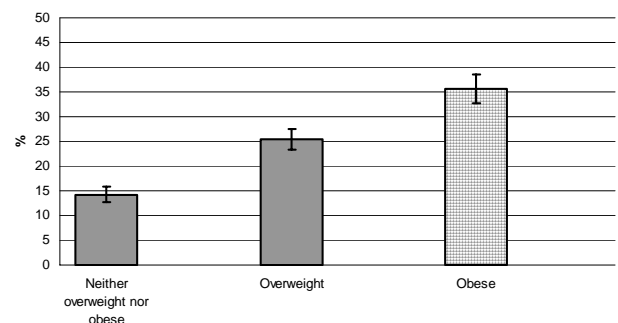
or discomfort that occurs when the heart muscle is not getting enough blood. Overweight and obesity are contributing factors to the development of heart disease and stroke.<sup>4,5</sup>

Prevalence of angina, by BMI categories  
New Hampshire, BRFSS, 2005



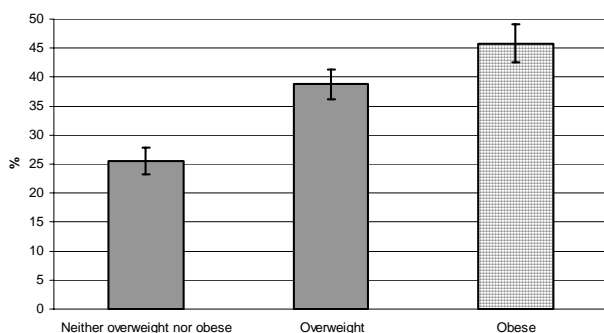
Blood pressure is the force of blood against the artery walls and normally rises and falls throughout the day. When it consistently stays too high for too long, it is called hypertension. High blood pressure is a major risk factor for heart failure and stroke.<sup>4,5</sup> Additionally, high blood pressure can result in damage to the eyes, kidney disease and kidney failure. High blood pressure is a major risk factor for heart disease. High blood pressure can be prevented or controlled through lifestyle changes and with medications. A significantly higher proportion of obese respondents report being told by their healthcare provider they have high blood pressure.

Prevalence of hypertension, by BMI categories  
New Hampshire, BRFSS, 2005

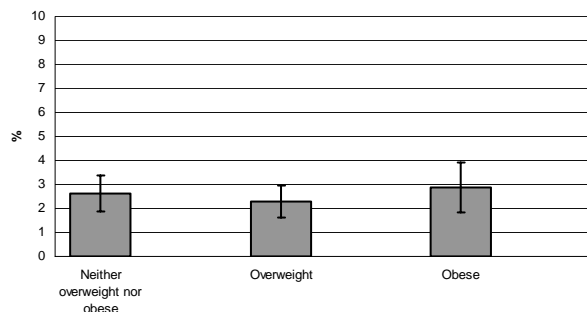


Cholesterol is a fat-like substance that is needed for the body to function normally. However, too much cholesterol can lead to heart disease. High blood cholesterol does not produce symptoms, but can be easily checked and controlled.<sup>4,5</sup>

Prevalence of high cholesterol among those ever tested by BMI categories, New Hampshire, BRFSS, 2005



Prevalence of stroke, by BMI categories New Hampshire, BRFSS, 2005

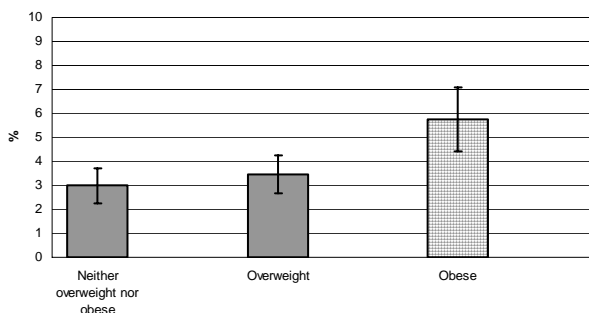


The heart attack results when the blood supply to the heart is cut off. Having high blood pressure or high blood cholesterol, smoking, and having had a previous heart attack, stroke or diabetes can increase a person's chances of developing heart disease and having a heart attack.

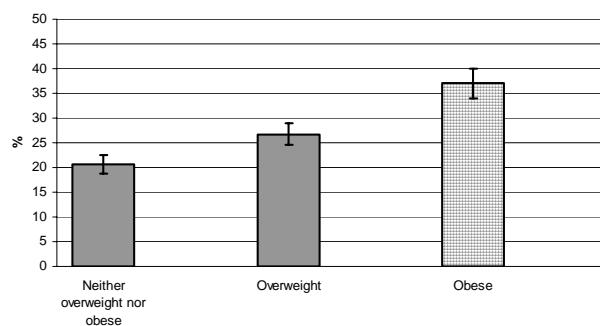
## ARTHRITIS

Arthritis is the leading cause of disability in the United States, limiting the activities of nearly 19 million adults. Certain factors have been shown to be associated with a greater risk of arthritis, including excess weight, which can contribute to both the onset and progression of disease.

Prevalence of heart attack, by BMI categories New Hampshire, BRFSS, 2005



Prevalence of arthritis, by BMI categories New Hampshire, BRFSS, 2005

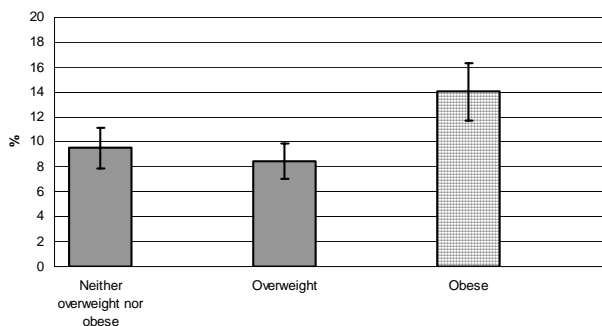


Similarly, a stroke occurs when the blood supply to part of the brain is blocked or when a blood vessel in the brain bursts, causing damage to a part of the brain. A stroke is sometimes called a brain attack. Stroke is the third leading cause of death in the United States. Among survivors, stroke can cause significant disability including paralysis as well as speech and emotional problems.<sup>4,5</sup>

## ASTHMA

Asthma is a chronic lung disease that involves swelling and inflammation of the airways, reversible airway obstruction, and muscle spasm. The relationship between asthma and obesity is not yet well understood, however there is evidence that obese individuals have a higher prevalence of asthma. Obese and overweight individuals with asthma are generally advised that weight loss may also improve asthma control.

Prevalence of current asthma, by BMI categories  
New Hampshire, BRFSS, 2005

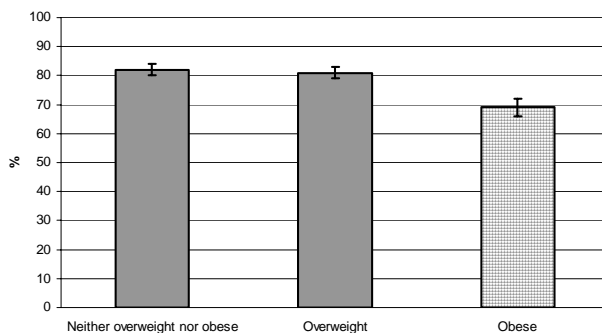


## PHYSICAL ACTIVITY

The Centers for Disease Prevention and Control physical activity recommendation for adults is 30 minutes of moderate activity on 5 or more days per week, or 20 minutes of vigorous activity on 3 or more days per week to reduce the risk for overweight or obesity.

Obese adults were significantly less likely to report engaging in any physical activity or exercise, other than in their regular job, than adults in other weight categories.

Percentage of those reporting exercise during past 30 days  
New Hampshire, BRFSS, 2005



## SUMMARY

There is a steady increase in the prevalence of overweight and obesity, as reported by BMI, among New Hampshire residents. Increases in BMI are associated with lower satisfaction with life and higher rates of chronic disease including diabetes, heart disease, stroke and musculoskeletal diseases such as arthritis. Participating in regular physical activity and consuming a healthy diet, including fruits and vegetables, can help to achieve or maintain a healthy weight. For more information about

strategies to increase physical activity and healthier eating, visit our website:

<http://www.dhhs.state.nh.us/DHHS/NHP/default.htm>

## ADDITIONAL INFORMATION

For more information on the data presented contact: NH Division of Public Health Services  
29 Hazen Drive, Concord  
New Hampshire 03301-6504  
Phone: 1-800-852-3345 ext. 4473.

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Indicates statistically significantly different estimates

