## 2009 Georgia Data Summary:

# STROKE



Stroke is the third leading cause of death in Georgia and is a major cause of disability. Education and better patient care can improve stroke outcomes. Nearly 2.8 million Georgia adults do not know the signs of stroke.<sup>1</sup>

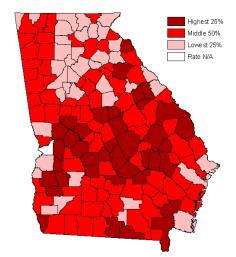
## DEFINITION

- A stroke, or brain tissue death, can be the result of a thrombus (blocked artery) or a hemorrhage (ruptured artery) that prevents blood flow to the brain
- An ischemic stroke is caused by blockage or constriction of blood vessels supplying blood to the brain
- A hemorrhagic stroke is caused by a rupture in the blood vessels supplying blood to the brain
- A transient ischemic attack is a temporary blockage of blood flow in the brain, which causes a short-lived neurological deficit
- Some strokes can be prevented through behavioral lifestyle modification

### DEATHS

- Stroke was the third most frequent cause of death in Georgia, accounting for 6% of all deaths, with 3,749 stroke deaths in 2007
- In 2007, strokes were responsible for 18% of all cardiovascular deaths in Georgia
- In 2006, Georgia's stroke death rate was 16% higher than the national rate
- The stroke death rate in Georgia was **1.5** times **higher** for blacks than whites in 2007
- 23% of persons dying from stroke in Georgia in 2007 were less than 65 years old
- In 2007:
  - 4% of Georgia's stroke deaths were due to ischemic stroke, or stroke caused by blockage or constriction of blood vessels supplying blood to the brain
  - 26% of Georgia's stroke deaths were due to hemorrhagic stroke, or stroke caused by a rupture in the blood vessels supplying blood to the brain

#### Age-Adjusted Stroke Death Rates by County, Georgia, 2003-2007



## HOSPITALIZATIONS

- Approximately **19,900** hospitalizations occurred among Georgia residents due to stroke in 2007
- 76% of stroke hospitalizations were due to ischemic stroke, while 17% were due to hemorrhagic stroke
- The average hospitalization length of stay for stroke was 6 days in 2007, compared to a national average of 5 days (2006 data)

## **ESTIMATED COSTS**

- Total hospital charges for stroke in Georgia were **\$635 million** in 2007, accounting for **14%** of all CVD hospital charges
- The average charge per stroke hospitalization in Georgia was **\$32,000** in 2007
- The cost of stroke in Georgia in 2007 is estimated at **\$1.7 billion**, which includes direct health care costs and lost productivity from morbidity and mortality (indirect costs)<sup>2</sup>

<sup>1</sup> Data Source: 2006 Georgia Stroke and Heart Attack Awareness Survey

<sup>2</sup> Derived from national estimates published by the American Heart Association. *Heart Disease and Stroke Statistics -- 2007 Update.* Dallas, TX: American Heart Association; 2007.

## **STROKE RISK FACTORS**

#### SMOKING

- **2,949** deaths due to CVD were attributable to smoking among adults ages 35 or older in 2007
- Quitting smoking greatly reduces the risk for heart disease and stroke
- In Georgia, 18% of adults ages 35 or older reported smoking cigarettes in 2008

#### LACK OF PHYSICAL ACTIVITY

- Lack of physical activity increases the risk for heart disease and stroke
- Regular physical activity helps to maintain proper body weight and improves general health
- In 2008, **23%** of adults in Georgia had no leisure time physical activity in the last 30 days

#### **POOR EATING HABITS**

- Poor eating habits such as a high-fat diet can lead to obesity, ischemic heart disease, stroke, and other chronic diseases
- Eating five or more servings of fruits and vegetables a day can help prevent heart disease, cancer, and other chronic conditions
- The majority (75%) of adults in Georgia did not consume the recommended five or more servings of fruits and vegetables per day in 2007

#### OBESITY

 Obesity, which is present in 27% of adults in Georgia, increases the risk of cardiovascular disease

#### **HIGH BLOOD PRESSURE**

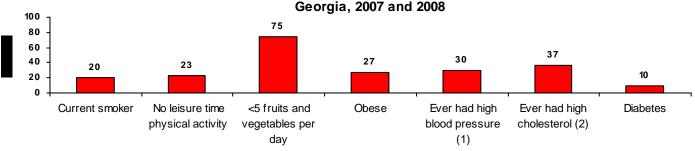
- High blood pressure can be controlled through lifestyle changes such as physical activity and healthy diet and, if necessary, medications
- The percentage of adults in Georgia who have been told that they have high blood pressure increased from **21%** in 1997 to **30%** in 2007

#### **HIGH CHOLESTEROL**

- Many people can control high cholesterol by modifying their diet. For those who cannot, medication can lower blood cholesterol levels
- The percentage of adults in Georgia who have been told that they have high cholesterol increased from 24% in 1997 to 37% in 2007

#### DIABETES

- Diabetes can cause atherosclerosis, also known as hardening of the arteries
- Diabetes increases the risk for CVD death
- The percentage of adults who report having diabetes increased from 6% in 1998 to 10% in 2008



#### Prevalence of risk factors for cardiovascular disease among adults, Georgia, 2007 and 2008

(1) The percentage of Georgians who reported having been told they had high blood pressure

(2) Of persons who had their blood cholesterol level checked, the percentage told that they have high cholesterol

Data Source: Georgia Behavioral Risk Factor Surveillance System 2007 and 2008

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Visit http://health.state.ga.us/epi/cdiee/index.asp for more information about stroke and other chronic diseases in Georgia.