## 2012 Data Summary

## Secondhand Smoke and Heart Disease

About 37% (180,000) of adults in Georgia aged 35 years and older with heart disease have been exposed to secondhand smoke<sup>1</sup>

#### **SECONDHAND SMOKE (SHS) EXPOSURE**

- Nationally, approximately 50,000 adult nonsmokers die every year from secondhand smoke exposure<sup>2</sup>.
- Even brief exposure to secondhand smoke can change blood chemistry, damage the cells that line blood vessels, and increase cardiovascular risk<sup>3</sup>.
- Exposure to smoke causes heart rate and blood pressure to increase and eventually, blood vessel walls to thicken, affecting blood flow.
- Hypertensive heart disease (including ischemic heart disease) is the number one cause of death associated with hypertension<sup>4</sup>.
- Exposure to secondhand smoke can trigger heart attacks, particularly in those with underlying cardiovascular conditions<sup>3</sup>.

### **SMOKING PREVALENCE IN GEORGIA<sup>5\*</sup>**

- Smoking prevalence among adults 35 years of age or older in Georgia is 20% (950,000).
- Smoking prevalence among males 35 years and older (22%; 506,000) is higher than among females (17%; 440,000).
- Smoking prevalence among non-Hispanic (NH) whites (21%; 640,000) is similar to that among NH blacks (19%; 230,000).
- Smoking prevalence is significantly higher for graduates of high school only (23%; 325,000)

compared to college or technical school graduates (8%; 100,000).

#### HYPERTENSION PREVALENCE AMONG ADULT GEORGIANS<sup>5\*</sup>

- About 43% (2 million) of adult Georgians have hypertension.
- The prevalence of hypertension is slightly higher among females (44%; 1.1 million) than males (42%; 960,000) (Figure 1).
- The prevalence of hypertension among NH blacks (51%; 625,000) is significantly higher than among NH whites (42%; 1.3 million) (Figure 1).





\*Note: values reflect adults 35 years and older

#### HEART DISEASE PREVALENCE AMONG ADULT GEORGIANS<sup>1\*</sup>

- About 11% (510,000) of adult Georgians have heart disease.
- The prevalence of heart disease is slightly higher among males (12%; 250,000) than among females (10%; 260,000).
- Among non-Hispanic (NH) whites, the heart disease prevalence (12%; 340,000) is similar to that of NH Blacks (10%; 130,000).
- Heart disease prevalence is lowest among adults aged 35 to 44 years (4%; 50,000) and is significantly higher among adults aged 65 years and older (23%; 230,000) (Figure 2).

#### SECONDHAND SMOKE EXPOSURE AMONG ADULT GEORGIANS<sup>1</sup>

- About 39% (1.2 million) of adults in Georgia have been exposed to secondhand smoke within the last 7 days<sup>\*</sup>.
- Approximately 37% (650,000) adults with hypertension were exposed to secondhand smoke within the last 7 days<sup>\*</sup>.
- Approximately 37% (180,000) adults with heart disease were exposed to secondhand smoke<sup>\*</sup>.
- Among all adults in Georgia with heart disease, 14% (73,000) have been exposed to secondhand smoke at home, 38% (51,000) at work, 16% (82,000) in the car, and 26% (130,000) in public places (Figure 3)<sup>\*</sup>.
- Exposure to SHS at work was significantly higher among adult Georgians with heart disease compared to adults without heart disease (Figure 3)<sup>\*</sup>.
- Public Health Districts with the highest prevalence of any exposure to secondhand smoke among all adults include Cobb/Douglas (45%; 190,000),







#### Figure 4. Prevalence of Secondhand Smoke Exposure in Adults, Georgia, 2010<sup>1</sup>



<sup>\*</sup>Note: values reflect adults aged 35 years and older

<sup>&</sup>lt;sup>a</sup>Emergency room visits are determined by underlying cause of illness

<sup>&</sup>lt;sup>b</sup>Hospitalizations are based on principal diagnosis

<sup>&</sup>lt;sup>c</sup>Deaths are based on underlying cause of death

Clayton (Jonesboro, 45%; 64,000), East Central (Augusta, 46%; 140,000), West Central (Columbus, 47%; 95,000), and Southeast (Waycross, 47; 110,000) Districts (Figure 4).

## HEART DISEASE AND SMOKING IN GEORGIA<sup>1\*</sup>

- About 21% (108,000) of Georgia adults with heart disease are smokers.
- About 24% (58,000) of adult males with heart disease are smokers, and 19% (50,000) of adult females with heart disease are smokers.
- More NH black adults with heart disease are smokers (28%; 34,000) compared to NH white adults with heart disease (18%; 63,000).

## HEALTH BURDEN OF CARDIOVASCULAR DISEASE (CVD) AMONG ADULT GEORGIANS<sup>\*</sup>

- Cardiovascular disease is the leading cause of death in Georgia.
- Over 53,000 total visits to the emergency room<sup>a,d</sup> and approximately 130,000 total hospitalizations<sup>b,d</sup> resulted from all types of cardiovascular disease in Georgia in 2010<sup>6</sup>:
  - 35,638 hospitalizations in 2010 resulted from obstructive heart disease (including heart attack) (Figure 5)
  - 20,468 hospitalizations were from stroke
  - 3,937 hospitalizations were from hardening of arteries
  - 1,761 hospitalizations were from aortic aneurysm and dissection
  - 1,300 hospitalizations were from hypertensive heart disease
- On average in 2010, there were approximately 21,000 total deaths<sup>c,d</sup> for all types of cardiovascular disease among adult Georgians 35 years of age and older<sup>7</sup>:

- 7,204 deaths in 2010 resulted from obstructive heart disease (including heart attack)
- o 3,595 deaths were from stroke
- 1,290 deaths were from hypertensive heart disease
- 223 deaths were from aortic aneurysm and dissection
- $\circ$   $\$  167 deaths were from hardening of arteries
- Public Health Districts with the highest death rates due to cardiovascular disease include the Southeast (Waycross, 542 per 100,000), West Central (Columbus, 574 per 100,000), North Central (Macon, 576 per 100,000), South (Valdosta, 597 per 100,000), and South Central

# Figure 5. Hospitalizations Among Georgian Adults 35 Years and Older by Heart Disease Type, 2010<sup>6</sup>



# Figure 6. Death Rates for Cardiovascular Disease in Adults 35 Years and Older, Georgia, 2010<sup>7</sup>



\*Note: values reflect adults aged 35 years and older

<sup>&</sup>lt;sup>a</sup>Emergency room visits are determined by underlying cause of illness

<sup>&</sup>lt;sup>b</sup>Hospitalizations are based on principal diagnosis

<sup>&</sup>lt;sup>c</sup>Deaths are based on underlying cause of death

(Dublin, 618 per 100,000) Districts (Figure 6)<sup>7</sup>.

- There were fewer CVD hospitalizations for females (49,726) compared to males (56,090) in 2010<sup>6</sup>.
- Approximately 2,858 CVD deaths during 2004 to 2008 in Georgia were due to smoking, which is 29% of the total deaths due to smoking during 2004 to 2008<sup>8</sup>.
- Adult smokers lose an average of 18 years of life due to cardiovascular disease compared to adult nonsmokers in Georgia<sup>8</sup>.

#### WARNING SIGNS FOR STROKE<sup>9</sup>

- Knowing the signs of stroke are vital because getting treatment within 60 minutes can prevent serious disability.
- If any of the following symptoms occur suddenly, seek medical treatment immediately:
  - Numbness or weakness of the face, arm, or leg
  - Confusion, trouble speaking or understanding speech
  - Difficulties seeing in one or both eyes
  - Trouble walking, dizziness, loss of balance or coordination
  - o Severe headache with no known cause

#### **HEART ATTACK AND STROKE PREVENTION**

The following can prevent heart attack and stroke:

• Smoking cessation reduces the risk of CVD; the risk of heart attack and stroke falls considerably after quitting smoking entirely<sup>3</sup>.

- Creating smokefree environments through the adoption of model smokefree ordinances that prohibit all indoor smoking in workplaces and public places<sup>10</sup>
- Blood pressure management
- Lowering cholesterol
- Diet modification with five or more servings of fruits and vegetables per day
- Regular physical activity

### SOLUTIONS TO THE PROBLEM OF SECONDHAND SMOKE EXPOSURE<sup>3</sup>

There are no safe levels of exposure to SHS; secondhand smoke contains more than 4,000 toxic chemicals that are breathed in when near someone who is smoking. Most persons are exposed to secondhand smoke when they breathe smoke from others at work, public places, at home, and in cars.

Along with heart disease and stroke, secondhand smoke can cause lung cancer and breathing problems in adults. Therefore, it is very important to avoid being exposed to SHS and eliminate SHS exposure where you live, work, and play. Protect yourself and your loved ones from exposure to secondhand smoke.

#### Definitions:

Cardiovascular Disease (CVD): includes all diseases of the heart and blood vessels, including ischemic heart disease, stroke, congestive heart failure, hypertensive disease, and atherosclerosis.

Ischemic Heart Disease (IHD): also known as coronary heart disease, refers to narrowing of the coronary arteries, which reduces blood flow and oxygen to the heart. IHD includes myocardial infarction (MI) and complications from a previous MI.

Stroke (Cerebrovascular Disease): refers to an infarct or hemorrhage in the brain.

Atherosclerosis: the hardening and narrowing of the arteries caused by deposits of cholesterol and other substances.

Secondhand smoke exposure: exposed to secondhand smoke at home, work, in a vehicle, or in public on one or more days in the past seven days.

\*Note: values reflect adults aged 35 years and older

<sup>a</sup>Emergency room visits are determined by underlying cause of illness

<sup>b</sup>Hospitalizations are based on principal diagnosis

<sup>c</sup>Deaths are based on underlying cause of death

#### Footnotes/Data Sources:

- 1. Georgia data from the 2010 National Adult Tobacco Survey (ATS).
- 2. <u>Campaign for Tobacco Free Kids</u>. Toll of Tobacco in the United States. http://www.tobaccofreekids.org/facts\_issues/toll\_us/.
- U.S. Department of Health and Human Services. How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010.
- 4. <u>WebMD</u>. 2012. http://www.webmd.com/hypertension-high-blood-pressure/guide/hypertensive-heart-disease.
- 5. 2011 Georgia Behavioral Risk Factor Surveillance System (BRFSS) Data.
- 6. 2010 Georgia Deduplicated Emergency Department and Hospital Inpatient Discharge Data; Online Analytical Statistical Information System (OASIS) (http://oasis.state.ga.us/oasis/qryMorbMort.aspx).
- 7. 2010 Georgia Mortality Data; Online Analytical Statistical Information System (OASIS) (http://oasis.state.ga.us/oasis/oasis/qryMorbMort.aspx).
- 8. Georgia Vital Statistics, 2004-2008; CDC SAMMEC web application (http://apps.need.cdc.gov/sammec/).
- 9. <u>National Institute of Neurological Disorders and Stroke</u>. 2010. http://www.ninds.nih.gov/disorders/stroke/knowstroke.htm.
- 10.
   Szabo, Liz. "Smoking bans cut number of heart attacks, strokes." USA Today. 2012. 05 November, 2012 <</td>

   http://www.usatoday.com/story/news/nation/2012/10/29/smoking-bans-heart-attacks-strokes/1664193/>.

For more information on being smoke free and on adopting 100% Tobacco free policies, visit: http://www.livehealthygeorgia.org/peoplesmokefree.shtml



\*Note: values reflect adults aged 35 years and older

<sup>a</sup>Emergency room visits are determined by underlying cause of illness

<sup>b</sup>Hospitalizations are based on principal diagnosis

<sup>c</sup>Deaths are based on underlying cause of death