# **Chronic Diseases**

Chronic diseases and conditions, such as heart disease, cancer, diabetes and obesity, are the leading causes of death and disability in the United States. Chronic diseases account for 70 percent of all deaths in the U.S., or 1.7 million deaths each year. In DeKalb County cancer, cardiovascular diseases and respiratory diseases are the top three leading causes of death. Refer to Leading Causes section for more information.

Although chronic diseases are among the most common and costly health problems, they are also among the most preventable. Adopting healthy behaviors such as eating nutritious foods, being physically active and avoiding tobacco can prevent or control the devastating effects of these diseases.

Healthy behavior changes in youth may help reduce the risk of developing chronic diseases later in life. The Youth Risk Behavior Survey describes the percentage of DeKalb County public high school students who are engaging in behaviors that could put them at risk for certain cancers, cardiovascular diseases, diabetes, asthma and other chronic diseases.

DeKalb County adults also engage in behaviors that put them at risk for developing chronic diseases or worsening symptoms of existing chronic diseases. The DeKalb County Behavioral Risk Factor Surveillance System (BRFSS) survey collects information about the behaviors of adults 18 years and older. According to the 2007 BRFSS survey among DeKalb County adults:

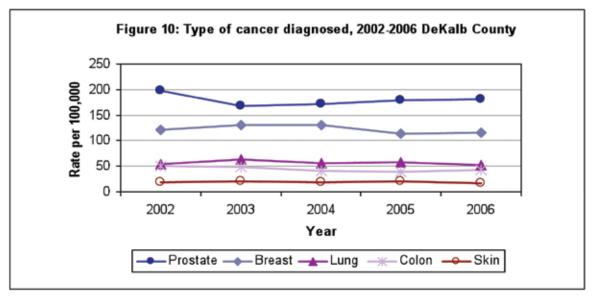
- 35 percent are overweight.
- 24 percent are obese.
- 29 percent eat the recommended number of fruits and vegetables per day.
- 47 percent get the recommended amount of physical activity per day.
- 12 percent currently smoke every day.
- 57 percent of current smokers have tried to stop smoking within the past year.
- 21 percent are former smokers.
- 12 percent have been told by a health professional that they have asthma.
- 7 percent have been told by a health professional that they have diabetes.

Between 2005 and 2007 there were no significant changes in any of the adult behaviors reported through the BRFSS.

## CANCER

Cancer occurs when abnormal cells in a part of the body begin to grow out of control. There are many different kinds of cancer and the risk for developing most cancers can be reduced by simple lifestyle changes, like eating healthier or quitting smoking.

DeKalb County has five locations that participate in the Georgia Comprehensive Cancer Registry. This registry collects the number of cancer cases diagnosed throughout the state of Georgia. The top five cancers diagnosed in DeKalb, at the five locations captured by the registry, were prostate, breast, lung, colon and skin cancers (Figure 10).



Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health. Note: Graph displays overall age-adjusted incidence rates.

Tables 12 and 13 show:

- Prostate cancer was the most common cancer among males and breast cancer was the most common cancer among females.
- Lung and colon cancer were ranked second and third respectively for both males and females.
- Males had higher total rates than females for both lung (77 compared to 43.1/100,000) and colon (52.4 compared to 38.6/100,000) cancer.

Table 12: Cancer rates among males, 2002-2006 DeKalb County	
Site	Rate
Prostate	179.6
Lung (incl. Bronchial)	77.0
Colon (incl. Rectal)	52.4
Skin (Melanoma)	27.7
Bladder	26.5

Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health.

Table 13: Cancer rates among females, 2002-2006 DeKalb County	
Site	Rate
Breast	122.4
Lung (incl. Bronchial)	43.1
Colon (incl. Rectal)	38.6
Uterine	17.8
Non-Hodgkin Lymphoma	14.5

Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health. From 2002 to 2006:

- Prostate cancer decreased 14 percent among white males, while it decreased 13 percent among black males.
- Lung cancer increased 2 percent among white males, but decreased 18 percent among black males.
- Skin cancer decreased 18 percent among white males.
- Colon cancer decreased 21 percent among black males.

Tables 14 and 15 describe cancer rates among white and black males.

Table 14: Cancer rates among white males, 2002-2006 DeKalb County	
Site	Rate
Prostate	142.0
Lung (incl. Bronchial)	66.9
Skin (Melanoma)	50.3
Colon (incl. Rectal)	45.3
Bladder	34.3

Table 15: Cancer rates among black males, 2002-2006 DeKalb County	
Site	Rate
Prostate	264.8
Lung (incl. Bronchial)	105.7
Colon (incl. Rectal)	67.0
Non-Hodgkin Lymphoma	19.9
Kidney	16.5

Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health.

Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health.

### From 2002 to 2006:

- Breast cancer decreased 13 percent among white females, but increased 1 percent among black females.
- Lung cancer decreased 1 percent among white females, while it decreased 18 percent among black females.
- Skin cancer increased 27 percent among white females.
- Colon cancer increased 37 percent among black females.

Tables 16 and 17 describe cancer rates among white and black females.

Table 16: Cancer rates among white females, 2002-2006 DeKalb County	
Site	Rate
Breast	126.4
Lung (incl. Bronchial)	45.5
Skin (Melanoma)	31.9
Colon (incl. Rectal)	30.3
Uterine	21.0

	Site	Rate
	Breast	131.1
	Colon (incl. Rectal)	54.4
	Lung (incl. Bronchial)	43.9
	Uterine	15.0
	Pancreas	14.1
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Table 17: Cancer rates among black females, 2002-2006 DeKalb County Site

Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health.

Source: Georgia Comprehensive Cancer Registry, Georgia Department of Community Health, Division of Public Health.

Lung cancer was ranked second among the top five cancers among males and females. One cause of lung cancer is smoking, which can be a habit that is formed early in life. The following tables show the percentages of high school students and adults who use tobacco.

Table 18: Tobacco use among DeKalb County high school students, 2003-2009				
Risk Behavior	2003	2005	2007	2009
Ever tried cigarette smoking, even one or two puffs <sup>*</sup>	51.0%	46.7%	45.6%	44.0%
Smoked cigarettes in the past 30 days	9.5%	8.8%	8.5%	8.8%
Current smoker who smoked more than 10 cigarettes per day in the past 30 days*	2.1%	4.6%	7.8%	6.3%
Smoked cigars, cigarillos, or little cigars in past 30 days*	8.8%	10.1%	11.4%	12.8%

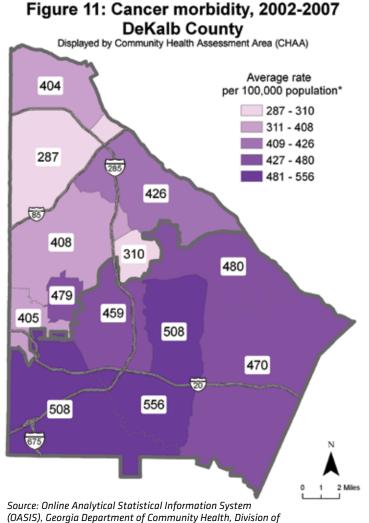
\*Trend is statistically significant. Source: DeKalb Youth Risk Behavior Survey.

Table 19: Tobacco use among DeKalb County adults, 2005-2007					
Risk Behavior 2005 2006 2007					
Currently smoke	14%	13%	12%		
Are former smokers	19%	18%	21%		

Source: DeKalb Behavioral Risk Factor Surveillance System Survey.



The map below displays cancer illness based on geographic location in DeKalb County. There are higher rates of cancer in the southern portion of the county. (See Methodology for more information.)



#### Public Health; Atlanta Regional Commission.

#### What may put you at risk

- Family History Some cancers may run in families.
- Age Some cancers arise at certain stages of life.
- Gender Some cancers are specific to males (prostate) or females (uterine) while others are not (breast cancer can affect both males and females).
- Risk Behaviors Risk behaviors include smoking, alcohol use, sun exposure, environmental factors (e.g., chemicals, air pollution, radiation, and asbestos), being overweight or obese and/or not getting screened.

### What you can do

- Get screened for prostate, breast, cervical, ovarian, colon, skin and lung cancer as recommended.
- Maintain regular doctor visits once a year (Pap smears, mammograms, physicals).
- Perform self breast exams and call a doctor if a lump is felt.
- Ask your doctor questions about screening procedures and your risk for cancer.
- Aim for and keep a healthy weight.
- Avoid tobacco, smoking and secondhand smoke.
- Limit alcohol intake.
- Protect your skin from the sun (wear sunscreen) and avoid tanning beds.
- Stay physically active.
- Eat more fruits and vegetables.
- Reduce or avoid environmental factors.

### For more information

- American Cancer Society: www.cancer.org.
- BreastCancer.org The Five Steps of a Breast Self-Exam: http://www.breastcancer.org/symptoms/testing/types/self\_exam/bse\_steps.jsp.
- Centers for Disease Control and Prevention, Division of Cancer Prevention and Control:
- http://www.cdc.gov/cancer/dcpc/about/index.htm.
- National Cancer Institute: www.cancer.gov.

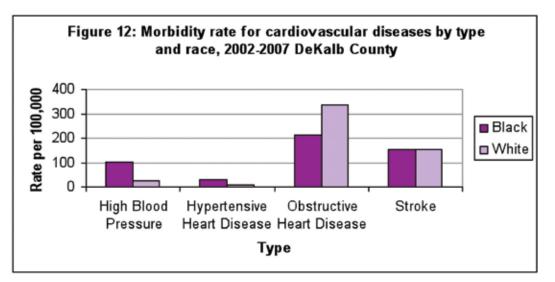


## CARDIOVASCULAR DISEASES

Cardiovascular diseases affect the heart or blood vessels, like high blood pressure, heart disease (hypertensive and obstructive), heart attack and stroke. Morbidity rates show how many people are affected by cardiovascular disease and mortality rates show how many people die from cardiovascular disease.

As shown in Figure 12, the morbidity data by race for 2002 through 2007 reflect that:

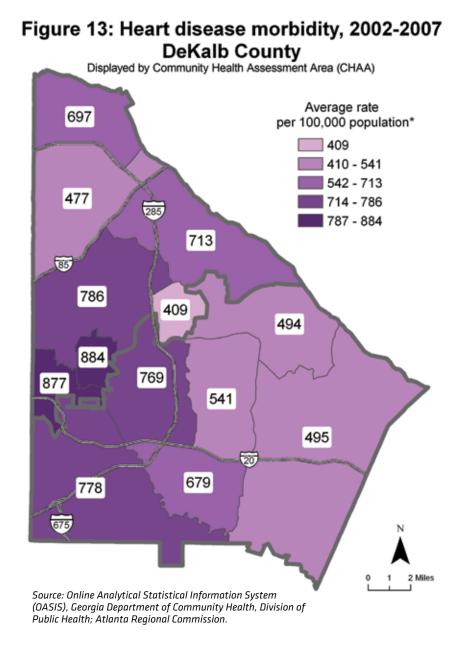
- Blacks had higher rates than whites for high blood pressure (100.5 compared to 24/100,000) and hypertensive heart disease (28.9 compared to 9.2/100,000).
- Obstructive heart disease (includes heart attacks) was higher among whites than blacks (335.3 compared to 214.5/100,000).



Source: Online Analytical Statistical Information System (OASIS), Georgia Department of Community Health, Division of Public Health.

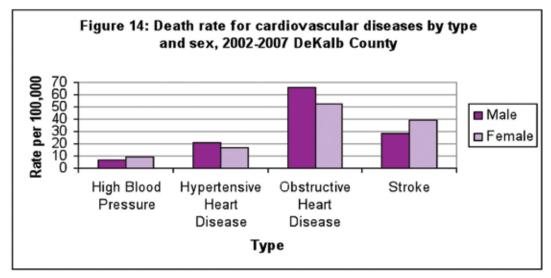


The map below (Figure 13) displays the rate of heart disease based on geographic location in DeKalb County. (See Methodology for more information.)



As shown in Figure 14, death data by sex for 2002 through 2007 reflect that:

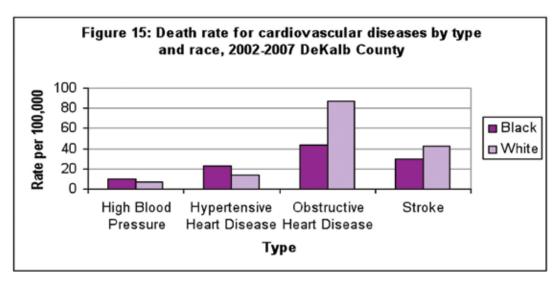
- More females died from high blood pressure than males (9.4 compared to 7/100,000).
- More males died from hypertensive heart disease (20.5 compared to 16.3/100,000) and obstructive heart disease (66.2 compared to 52.3/100,000) than females.
- More females died from stroke than males (39.3 compared to 28.5/100,000).



Source: Online Analytical Statistical Information System (OASIS), Georgia Department of Community Health, Division of Public Health.

As shown in Figure 15, total death rates by type and race for 2002 through 2007 reflect that:

- Blacks had a higher rate of death from hypertensive heart disease than whites (23.2 compared to 13.6/100,000).
- Whites were two times more likely to die from obstructive heart disease (including heart attack) than blacks (87.2 compared to 43.3/100,000).
- Whites had a higher rate of death from stroke than blacks (42.2 compared to 30.1/100,000).



Source: Online Analytical Statistical Information System (OASIS), Georgia Department of Community Health, Division of Public Health.

Heart disease and stroke were the leading cardiovascular diseases for both morbidity and mortality among blacks and whites and among males and females. Adopting healthy behaviors early in life, like exercising, may reduce the chance of getting a cardiovascular disease and/or dying from one. The following tables describe physical activity behaviors among DeKalb youth and adults.

Table 20: Physical activity among DeKalb County high school students, 2003-2009				
Risk Behavior	2003	2005	2007	2009
Met current recommendations for physical activity (at least 60 minutes on five or more days per week)*	N/A	30.8%	35.7%	35.0%
Watched three or more hours of TV per day on an average school day <sup>*</sup>	55.8%	52.0%	52.3%	49.3%
Attended physical education classes daily in an average week	25.9%	30.9%	28.2%	27.1%

\*Trend is statistically significant.

Source: DeKalb Youth Risk Behavior Survey.

Table 21: Physical activity among DeKalb County adults, 2005-2007					
Risk Behavior 2005 2006 2007					
Met current recommendations for physical activity each week	45%	51%	47%		

Source: DeKalb Behavioral Risk Factor Surveillance System Survey.

#### What may put you at risk

- Family History Some cardiovascular diseases and conditions run in families.
- Diabetic The risk of cardiovascular diseases increases if you have diabetes.
- Age The risk of heart disease increases with age.
- Gender Women and men are equally at risk. However, women are more at risk after the onset of menopause, while men are generally at risk earlier in life.

#### What you can do

- Avoid tobacco, smoking and secondhand smoke.
- Aim for and keep a healthy weight.
- Eat more fruits and vegetables.
- Stay physically active.
- Reduce your stress level.
- Ask your doctor about your risk for cardiovascular diseases.
- Get your cholesterol checked and ask your doctor what the results mean.
- Check your blood pressure and ask your doctor if it is too high or too low.
- Maintain healthy blood pressure and cholesterol levels.

#### For more information

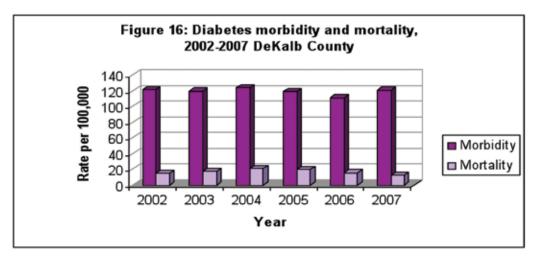
- American Heart Association: http://www.americanheart.org.
- Centers for Disease Control and Prevention: http://www.cdc.gov/HeartDisease/index.htm.
- National Heart, Lung, and Blood Institute: www.nhlbi.nih.gov/health/index.htm.
- The Brain Attack Coalition: http://www.ninds.nih.gov// and http://stroke.nih.gov/.

## DIABETES

Diabetes is a disease in which blood glucose (sugar) levels are above normal. Most of the food we eat turns into glucose for our bodies to use for energy. When you have diabetes, your body either does not make enough insulin or cannot use its own insulin as well as it should. This causes sugar to build up in your blood.

- Diabetes is one of the top ten leading causes of morbidity in DeKalb County.
- There were 4,963 hospitalizations and 534 deaths due to diabetes between 2002 and 2007.
- Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and foot and leg amputations.

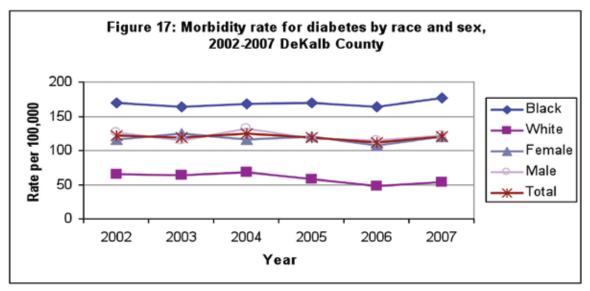
Sometimes the cause of a person's death is listed as one of the above complications rather than diabetes even though diabetes may have caused the complication. Therefore diabetes deaths may be underreported. The risk for severe diabetes-related complications can be reduced and controlled by simple lifestyle changes. Figure 16 below presents diabetes illness and death rates among DeKalb residents.



Source: Online Analytical Statistical Information System (OASIS), Georgia Department of Community Health, Division of Public Health.

From 2002 to 2007, diabetes data (Figure 17) indicate that:

- Male and female diabetes rates were generally consistent with the total rate.
- Blacks were nearly three times more likely to develop diabetes than whites.
- The percentage difference between blacks' and whites' diabetes rates grew from 62 percent in 2004 to 70 percent in 2007.
- The diabetes rate increased 9.7 percent for black females (157.3 to 172.6/100,000).
- Diabetes rates decreased:
  - 17 percent for white females (64.2 to 53.1/100,000).
  - 17 percent for white males (65.2 to 54.3/100,000).
  - 2 percent for black males (183.3 to 180.1/100,000).



Source: Online Analytical Statistical Information System (OASIS), Georgia Department of Community Health, Division of Public Health.

The following table describes self-reported diabetes and related tests among DeKalb County adults.

Table 22: Diabetes among DeKalb County adults, 2005-2007			
Risk Behavior	2005	2006	2007
Ever been told by a doctor or nurse that they had diabetes	6%	8%	7%
Of those who have diabetes:	~		
-had a clinical foot exam within the past 12 months	73%	84%	81%
-received a hemoglobin A1C measurement at least twice in the last year	67%	67%	71%
-monitored their blood glucose at least twice daily	40%	37%	38%

Source: DeKalb Behavioral Risk Factor Surveillance System Survey.

A risk factor for diabetes is being overweight or obese. The Body Mass Index (BMI) calculates whether or not a person is at a healthy weight for their height. Keeping a healthy weight by staying active and eating healthy foods may reduce your risk of diabetes. It is important to start these healthy behaviors early in life. The following tables describe behaviors among DeKalb County youth and adults that may put them at risk for or protect them from developing diabetes.

Table 23: Weight and nutrition among DeKalb County high school students, 2003-2009						
Risk Behavior 2003 2005 2007 200						
Are overweight	16.6%	17.3%	16.3%	18.9%		
Are obese	12.1%	12.4%	13.1%	13.4%		
Ate 5 or more servings of fruits and vegetables per day during the past 7 days*	17.2%	19.1%	21.0%	21.3%		

\*Trend is statistically significant.

Source: DeKalb Youth Risk Behavior Survey.

Table 24: Nutrition and weight among DeKalb County adults, 2005-2007						
Risk Behavior	2005	2006	2007			
Consumed fruits and vegetables five or more times per day	28%	29%	29%			
Overweight	36%	35%	35%			
Obese	21%	26%	24%			

Source: DeKalb Behavioral Risk Factor Surveillance System Survey.

For a map displaying diabetes rates based on geographic location in DeKalb County, refer to the Differences in Health Status section (Figure 51).

#### What may put you at risk

- Family History Diabetes runs in families.
- Gender Women and men are affected by diabetes differently.

## What you can do

- Aim for and keep a healthy weight.
- Eat more fruits and vegetables.
- Stay physically active.
- Reduce your stress level.
- Ask your doctor about your risk for diabetes.
- Get your glucose checked and ask your doctor what the results mean.
- Maintain healthy glucose (sugar) levels.

#### For more information

- American Association of Diabetes Educators: www.diabeteseducator.org/.
- American Diabetes Association and BMI calculator: www.diabetes.org and http://www.diabetes.org/diabetes-cholesterol/bmicalc.jsp.
- Centers for Disease Control and Prevention: www.cdc.gov/diabetes/consumer/index.htm.
- National Institute of Diabetes and Digestive and Kidney Diseases: www.diabetes.niddk.nih.gov/dm/pubs/overview.



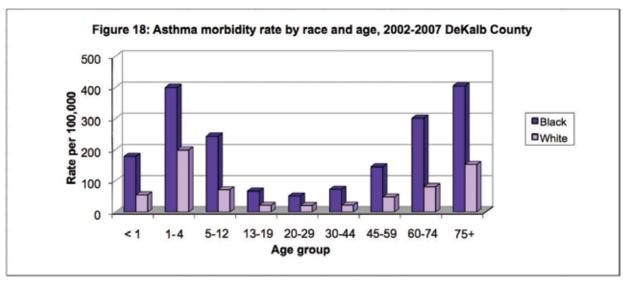
## ASTHMA

Asthma is a respiratory disease that affects the lungs and can cause repeated episodes of wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. Asthma can be controlled by avoiding or removing triggers that may cause an attack. It can also be controlled by taking medicine.

Asthma is a long-term disease that is most common among children. In DeKalb County, between 2002 and 2007, asthma affected those under 12 years and over 60 years more than other ages.

Between 2002 and 2007 (Figure 18):

- Asthma was more prominent among blacks than whites regardless of age.
- Blacks who were less than one year old, age five to 12 years and age 45 to 59 years were three times more likely to have asthma than whites the same age.



• Blacks 60 to 74 years old were four times more likely than whites to have asthma.

Source: Online Analytical Statistical Information System (OASIS), Georgia Department of Community Health, Division of Public Health.

The following tables show the percentages of DeKalb County youth and adults who have ever had asthma.

Table 25: Self-reported asthma among DeKalb County high school students, 2003-2009					
Risk Behavior	2003	2005	2007	2009	
Had ever been told by a doctor or nurse that they had asthma*	21.2%	22.9%	25.3%	25.6%	
Had been told by a doctor or nurse that they had asthma and who still have asthma	N/A	N/A	12.5%	12.0%	

\*Trend is statistically significant.

Source: DeKalb Youth Risk Behavior Survey.