Arthritis Burden Report

Georgia, 2013

Georgia Department of Public Health

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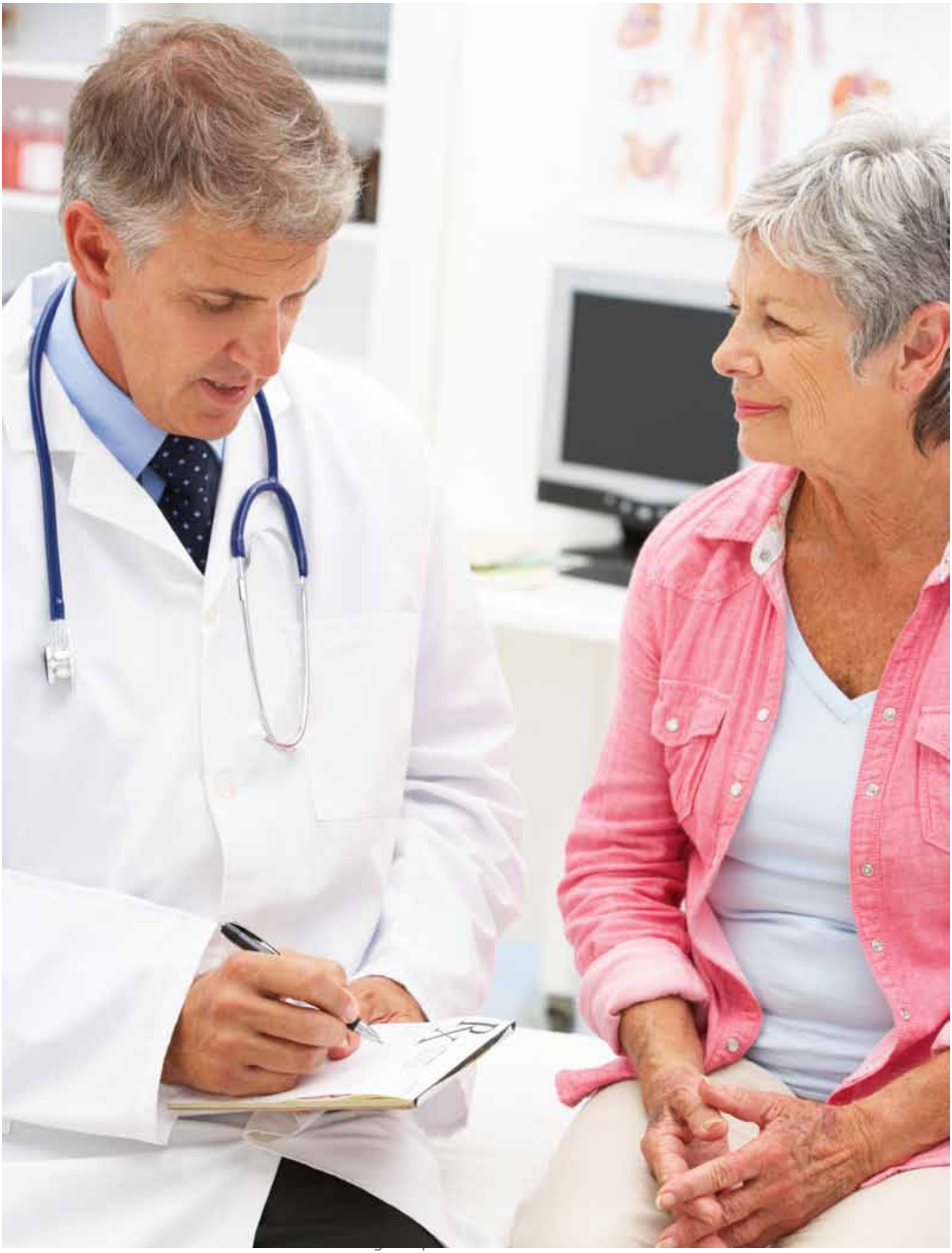


Executive Summary

Arthritis is a major public health problem in Georgia. Roughly 1 in 4 adult Georgians (1.7 million), report having doctor-diagnosed arthritis, and nearly half of those are disabled (76,000). Additionally, adults with doctor-diagnosed arthritis are more likely to report other chronic health conditions, poor physical health, and frequent mental distress. With the high financial burden of arthritis as well as the pain, disability, and limitations associated with doctor-diagnosed arthritis, it is important that Georgia take action to control this problem.

While some risk factors for arthritis cannot be controlled (increased age, female gender, and genetics), there are management techniques that can be used to reduce the risk of developing arthritis or the pain and discomfort associated with the disease. These include maintaining healthy weight, exercising, and taking education classes.

This report identifies prevalence of arthritis management among adults in Georgia; further surveillance is needed to measure whether Healthy People 2020 goals are being met. Additionally, this report identifies a financial barrier to seeking medical help that is experienced more significantly by those with doctor-diagnosed arthritis than the general population.

Highlights

- More than 1.7 million adult Georgians (26%) have doctor-diagnosed arthritis.
- The majority of those with doctor-diagnosed arthritis are white non-Hispanic (69%).
- Doctor-diagnosed arthritis is most prevalent among women (59%).
- In 2010, 24,360 Georgians were hospitalized due to arthritis (age-adjusted rate of 258 per 100,000 population).
- From 1999 to 2008, 2,084 Georgians died from arthritis. Of these, 66% (1,384) of deaths occurred among females.

The age-adjusted hospitalization rate among Georgia adults in non-federal acute hospitals was 258 per 100,000 at a cost exceeding 1.1 billion dollars in 2010. The age-adjusted arthritis death rate in Georgia was 5 per 100,000 from 2000 to 2008. This financial burden, as well as the high morbidity, highlights the importance of managing arthritis using self-management tools.

Lastly, this report describes the incidence and prevalence of systemic lupus erythematosus (SLE) in two metropolitan Atlanta counties. The prevalence of SLE among black females was 227 per 100,000 person years in 2002. This high prevalence of SLE among young black non-Hispanic women identifies a major public health concern among the minority population.

Introduction

Definition of Arthritis:

Arthritis is a term used to describe more than 100 rheumatic diseases and conditions which affect the joints, tissues surrounding the joints, and other connective tissue. Arthritis can also affect the immune system and internal organs. Arthritis comes in many forms; depending on the form of the disease, the pattern of disease development, severity, and location of the inflammation can differ1. The most common form of arthritis is osteoarthritis. Other common forms include rheumatoid arthritis, gout, lupus, and fibromyalgia.

Background:

Burden: Nationwide an estimated 50 million Americans report having arthritis. Arthritis is the leading cause of disability in America, limiting roughly 21 million Americans[2]. The limitations associated with this disability vary and can include reducing a person's ability to walk short distances or climb stairs. The disability associated with arthritis can lead to a loss of independence, difficulty working, and a harder time staying healthy.

Risk Factors: While any person can develop arthritis, some people have an increased risk for developing the disease. Risk factors associated with arthritis can be familial, individual, or behavioral. Familial risk factors include certain genes that can lead to an increased risk of rheumatoid arthritis or systemic lupus erythematous. Individual risk factors for arthritis include older age, being a female, and being non-Hispanic white. Behavioral risk factors such as joint injuries, joint damage associated with the repetitive motion inherent in certain occupations, infections, or being overweight or obese can contribute to the deterioration of joints leading to arthritis[1].

Disparities: While arthritis is more prevalent among non-Hispanic whites, the disability is more severe in racial/ethnic minority groups, leading to work loss, activity limitations, and severe pain[3].

Cost: In 2003, the costs associated with arthritis and other rheumatic conditions (AORC) exceeded $128 billion nationwide. Approximately $80.8 billion were lost due to direct costs such as medical expenditures, while $40.7 billion were lost due to indirect cost such as loss of work earnings. In the same year, Georgia lost $2.4 billion in direct costs and $1.5 billion in indirect costs associated with AORC[4].

National Recommendations: Using scientific measures, experts from several federal agencies developed Healthy People 2020 (HP 2020) Objectives. Healthy People 2020 Objectives represent national goals for disease prevention and overall health expected to be achieved by the year 2020. The HP 2020 goals for arthritis involve increasing the use of arthritis management interventions by: increasing physical activity, losing weight among adults who are overweight and obese, and taking an education course on arthritis self management[5].

1 Centers for Disease Control and Prevention, Arthritis. Atlanta, GA. Available at [http://www.cdc.gov/arthritis/]. Accessed [08/21/2012].

2 Centers for Disease Control and Prevention. [Prevalence of Doctor-Diagnosed Arthritis and Arthritis-Attributable Effects Among Hispanic Adults, by Hispanic Subgroup --- United States, 2002, 2003, 2006, and 2009]. MMWR 2011;60(06);[167-171].

3 Centers for Disease Control and Prevention. [Racial/Ethnic Differences in the Prevalence and Impact of Doctor-Diagnosed Arthritis --- United States, 2002]. MMWR 2005; 54(05) [119-123].

4 Centers for Disease Control and Prevention. [National and State Medical Expenditures and Lost Earnings Attributable to Arthritis and Other Rheumatic Conditions --- United States, 2003]. MMWR 2007; 56(01) [4-7].

5 U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at [http://www.healthypeople.gov/2020/default.aspx]. Accessed [08/21/2012].

Data Source/Methods

The Behavioral Risk Factor Surveillance System (BRFSS) data from 2003, 2005, 2007, and 2009 were used to describe the burden of arthritis in Georgia[6]. The BRFSS is a state-based random-digit dialing telephone survey established in collaboration with the Centers for Disease Control and Prevention (CDC) in 1984. The BRFSS is a population-based survey that collects data from all fifty states, the District of Columbia, and the United States (U.S.) territories (Guam, Puerto Rico, and the U.S. Virgin Islands). The survey collects information on health indicators from non-institutionalized U.S. citizens who are 18 years and older.

The BRFSS core survey includes an Arthritis Module every odd year that asks participants whether they had been told by a doctor or other health professional that they have some form of arthritis. Additionally, every odd year, the BRFSS includes an optional Arthritis Management module. The Arthritis Management module inquires whether participants with doctor-diagnosed arthritis have ever been told by a doctor to lose weight, exercise, or if they had ever taken an educational course on how to manage their arthritis. Georgia included the Arthritis Management module in 2003, 2005, and 2007.

Content of Report

In this report data from the Georgia BRFSS surveys conducted in 2003, 2005, 2007, and 2009 were combined. A total of 26,762 Georgians participated in the BRFSS Arthritis Module during this time.

Data were analyzed to assess 1) the prevalence of doctor-diagnosed arthritis in Georgia; 2) the number of hospitalizations and deaths due to arthritis; 3) the prevalence of chronic conditions among those with and without arthritis; 4) the risk factors that contribute to doctor-diagnosed arthritis; and 5) the prevalence and incidence of systemic lupus erythematosus.

For this report, a person is classified as having doctor-diagnosed arthritis if he or she answered "yes" to the question, "Have you EVER been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia."

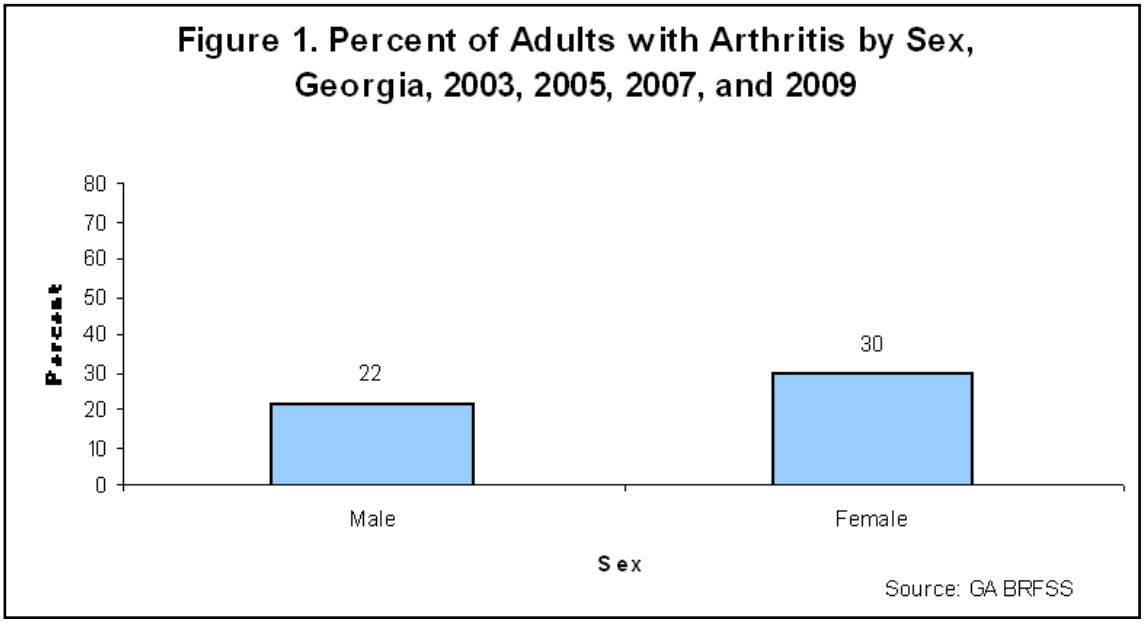
6 Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2003, 2005, 2007, and 2009].

Section 1: Prevalence of Arthritis

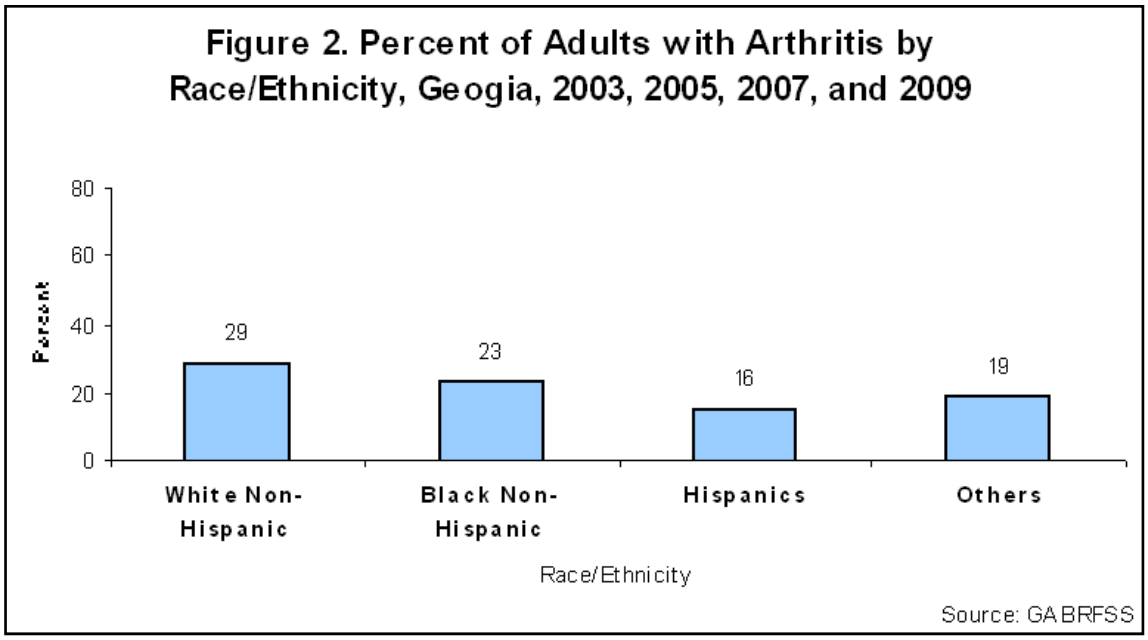
Prevalence of Arthritis

In Georgia, more than one in four adults (26%) report suffering from doctor-diagnosed arthritis.

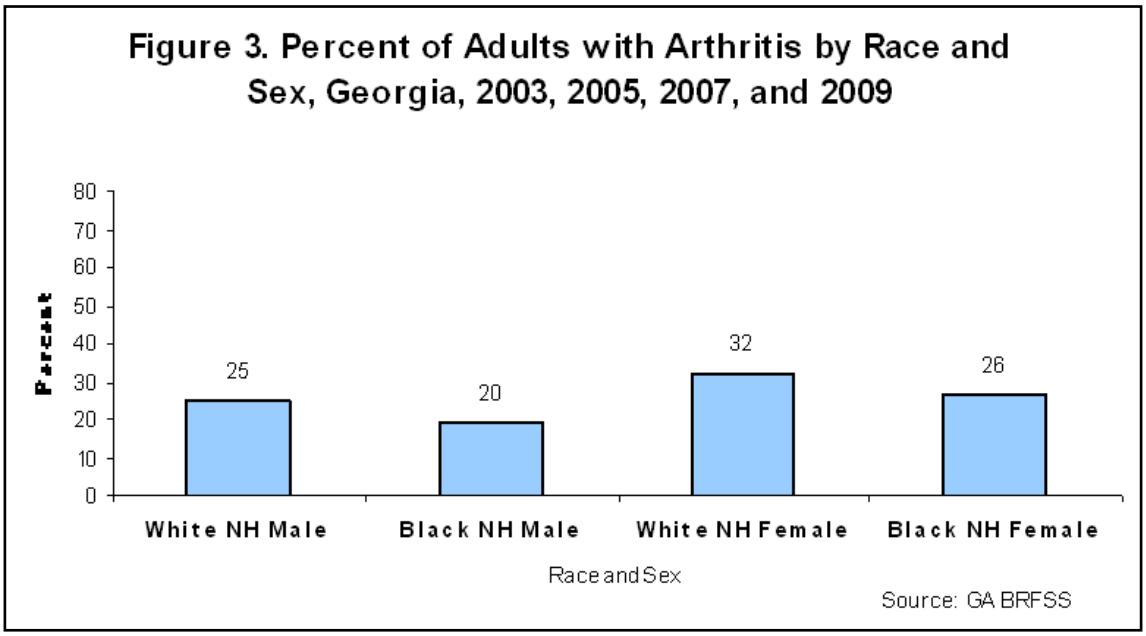
Women (30%) are significantly more likely to report doctor-diagnosed arthritis than men (22%).



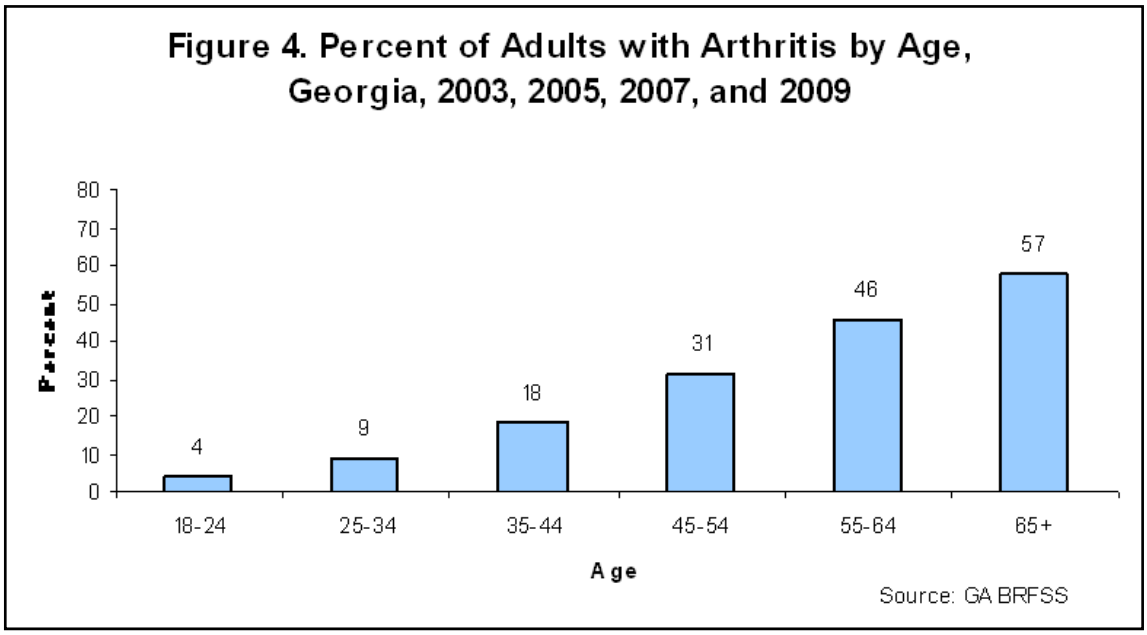
Among racial and ethnic groups, white non-Hispanics (29%) are more likely than any other racial or ethnic groups to report doctor-diagnosed arthritis.



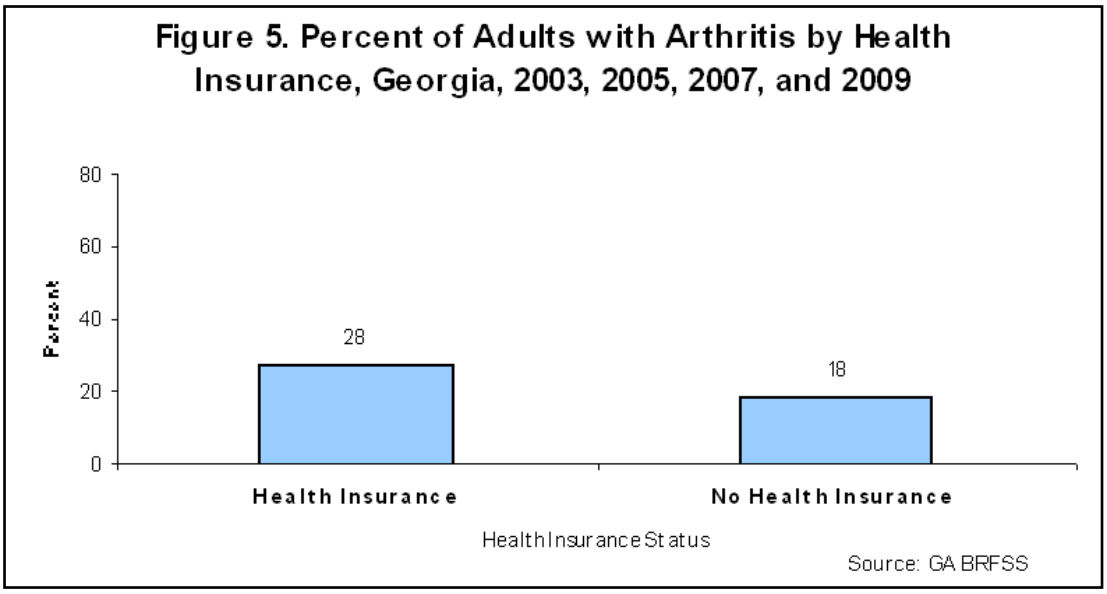
White non-Hispanic females (32%) are most likely to report doctor-diagnosed arthritis followed by white non-Hispanic males (25%), while black non-Hispanic males are least likely (20%) to report doctor-diagnosed arthritis.



Arthritis prevalence gradually increases with age. Georgians who are 65 years and older (57%) are most likely to report doctor-diagnosed arthritis while those aged 18 to 24 years old are least likely (4%) to report this condition.



Georgia adults with health insurance were more likely to report doctor-diagnosed arthritis (28%) than those without health insurance (18%). The difference in doctor diagnoses of arthritis by health insurance status may reflect the disparities among those without health insurance[2].



Burden of Arthritis in Health Districts

The overall Georgia prevalence of arthritis in 2003 and 2005 was 26.2%. The prevalence of arthritis varied by the 18 Public Health Districts ranging from 16.7% in the Clayton Health District to 32.8% in the Dublin Health District. The prevalence of doctor-diagnosed arthritis was significantly lower in metro-Atlanta Health Districts such as Clayton (16.7%), DeKalb (17.6%), and Fulton (20.0%), while the prevalence of doctor-diagnosed arthritis was significantly higher in the Dublin (32.8%), Albany (31.2%), Augusta (31.2%), Waycross (31.1%), and North (31.1%) Health Districts.

Overall, the prevalence of arthritis was lower in 2007 and 2009 (25.6%) than in 2003 and 2005 (26.2%); however, this difference was not significant. There was no significant change in the prevalence of arthritis among the 18 Public Health Districts during this time period (Table 1).

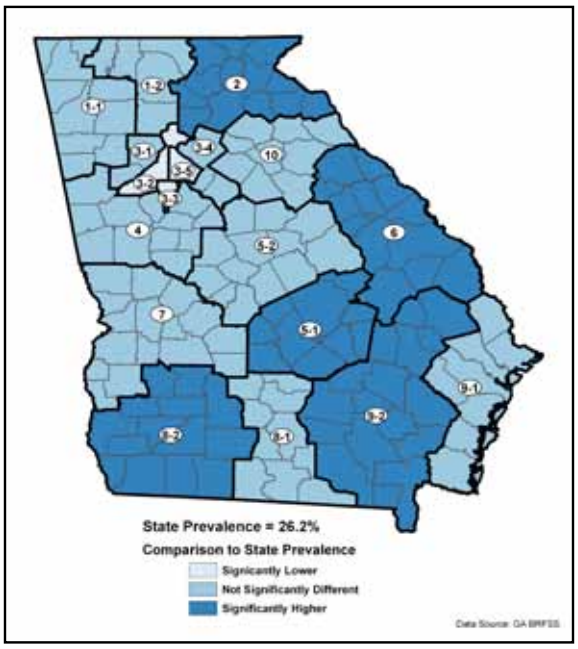


Figure 6. Comparing Health District Arthritis Prevalence to Overall State Arthritis Prevalence Among Georgia Adults, 2003 & 2005

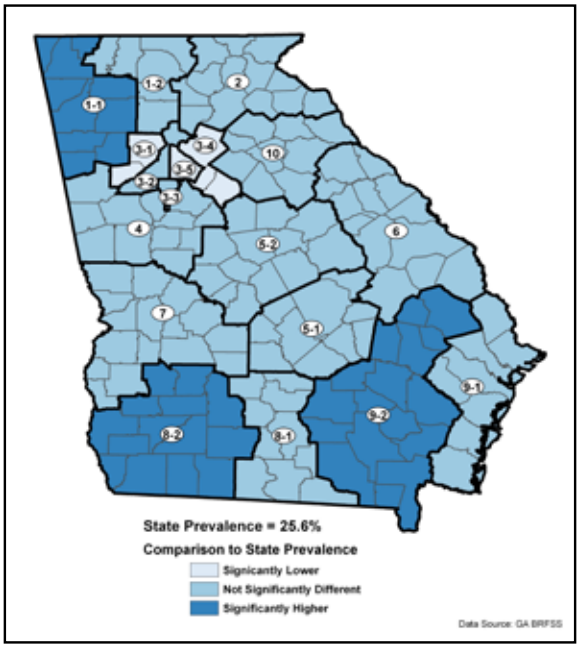


Figure 7. Comparing Health District Arthritis Prevalence to Overall State Arthritis Prevalence Among Georgia Adults, 2007 & 2009

Table 1. Prevalence of Doctor-Diagnosed Arthritis by Public Health District, 2003 & 2005 and 2007 & 2009

Public Health District	2003 & 2005 Arthritis Prevalence	2007 & 2009	Public Health District	2003 & 2005	2007 & 2009 Arthritis Prevalence
1-1 Rome	30.2%	32.6%	5-1 Dublin	32.8%	30.8%
1-2 Dalton	29.8%	25.2%	5-2 Macon	29.7%	26.2%
2 Gainesville	31.1%	26.3%	6 Augusta	31.2%	27.8%
3-1 Cobb-Douglas	22.7%	18.4%	7 Columbus	26.8%	29.1%
3-2 Fulton	20.0%	21.4%	8-1 Valdosta	25.4%	30.6%
3-3 Clayton	16.7%	20.3%	8-2 Albany	31.2%	32.0%
3-4 Lawrenceville	22.3%	20.2%	9-1 Savannah	25.1%	25.8%
3-5 DeKalb	17.6%	20.8%	9-2 Waycross	31.1%	36.5%
4 LaGrange	28.5%	25.9%	10 Athens	26.5%	26.3%

Section 2: Arthritis-Associated Hospitalizations and Deaths

Hospitalizations

In 2010, there were 24,360 hospitalizations with a primary diagnosis of arthritis among adults among non-federal acute care hospitals in Georgia, with an age-adjusted rate of 258 per 100,000. The cost associated with these hospitalizations exceeded 1.1 billion dollars during that time. The average length of stay for arthritis-associated hospitalizations in 2010 was 3.6 days. The majority of hospitalizations were among females (58%), whites (77%), and those 55 years and older (77%) (Table 5).

Among the five leading causes of arthritis (osteoarthritis (70.9%), gout (1.0%), rheumatoid arthritis (0.7%), systemic lupus erythematosus (0.6%), and fibromyalgia (0.3%)), the majority of hospitalizations among adult Georgians in 2010 were due to osteoarthritis. Osteoarthritis accounts for nearly 4 in 5 (79%) total hospitalizations in Georgia among those 65 years and older in 2010. Systemic lupus erythematosus accounts for more than 1 in 10 (12%) hospitalizations in Georgia among those 18 to 24 years of age in 2010 (Table 6 a,b,c).

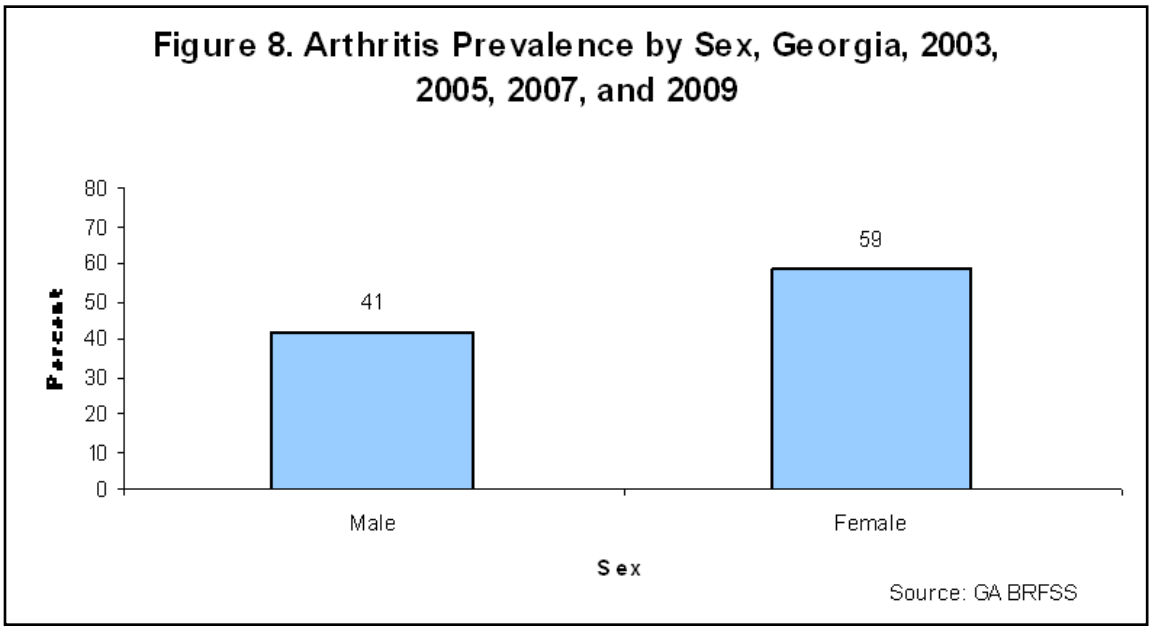
Deaths

Between the years 1999 and 2008, there were 2,084 deaths among adult Georgians with the primary cause being attributed to arthritis, with an age-adjusted rate of 5 per 100,000 for the years 2000 through 2008. The majority of deaths occurred in females (66%), whites (66%), and those age 65 years or older (61%) (Table 7).

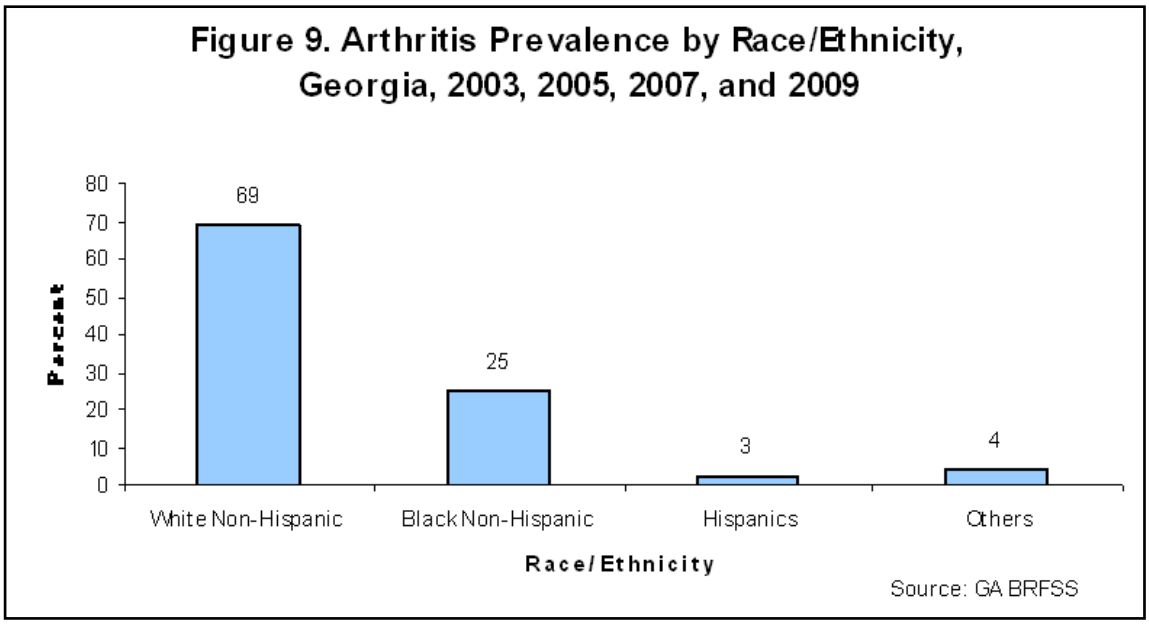
Section 3: Demographics of Arthritis Cases in Georgia

Distribution of Arthritis

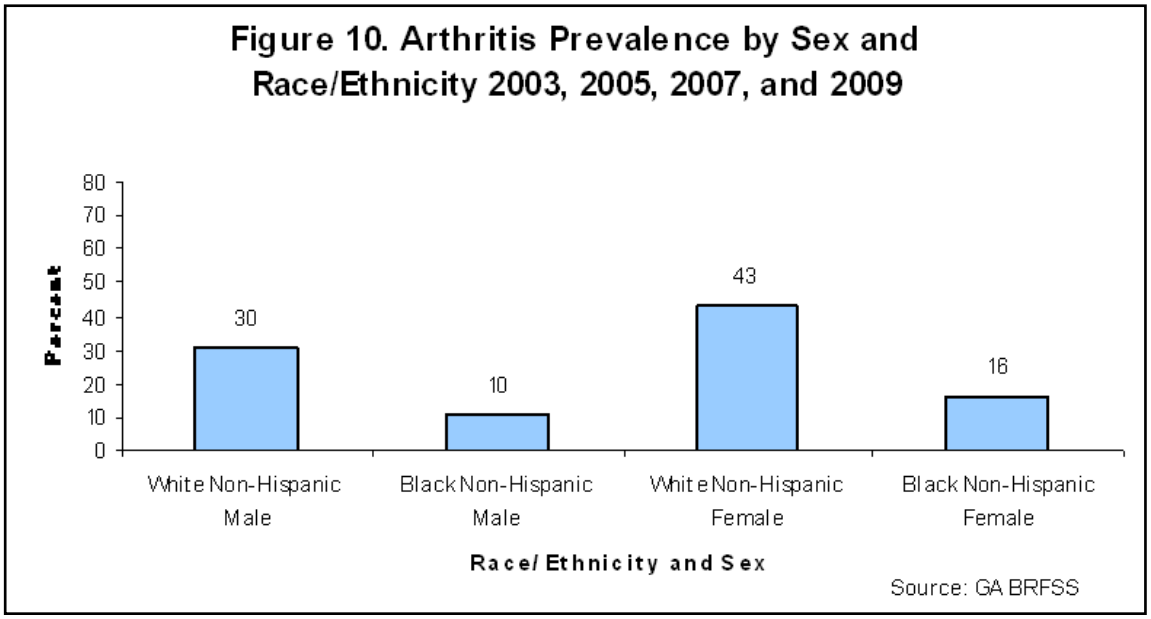
Among Georgians diagnosed with arthritis, women (59%) were more likley to have arthritis than men (41%).



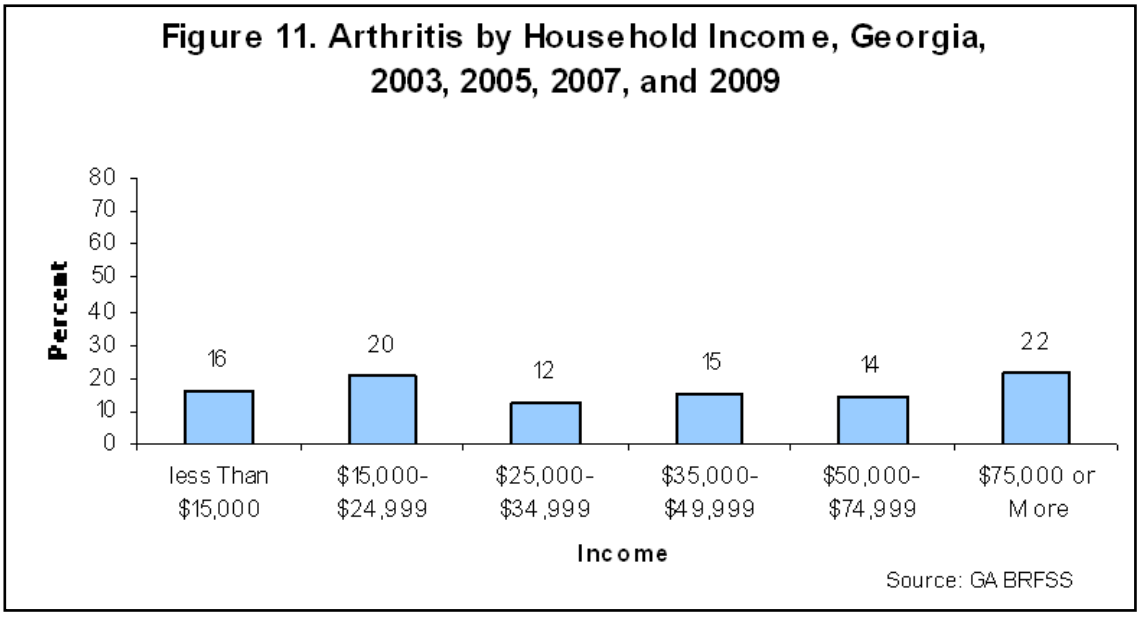
The majority of Georgians with doctor-diagnosed arthritis were white non-Hispanic (69%), while Hispanics (3%) had the lowest prevalence of arthritis in Georgia.



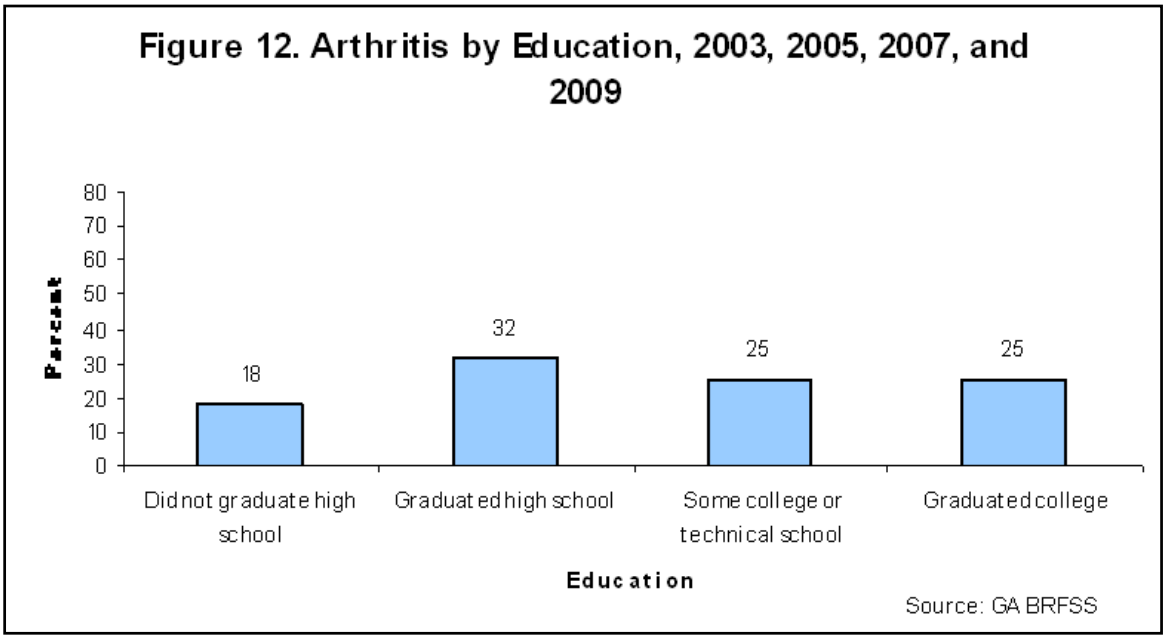
White non-Hispanic women (43%) in Georgia were more than 2.5 times more likely to have doctor-diagnosed arthritis than black non-Hispanic women (16%). White non-Hispanic men (30%) were 3 times more likely to have doctor-diagnosed arthritis than black non-Hispanic men (10%).



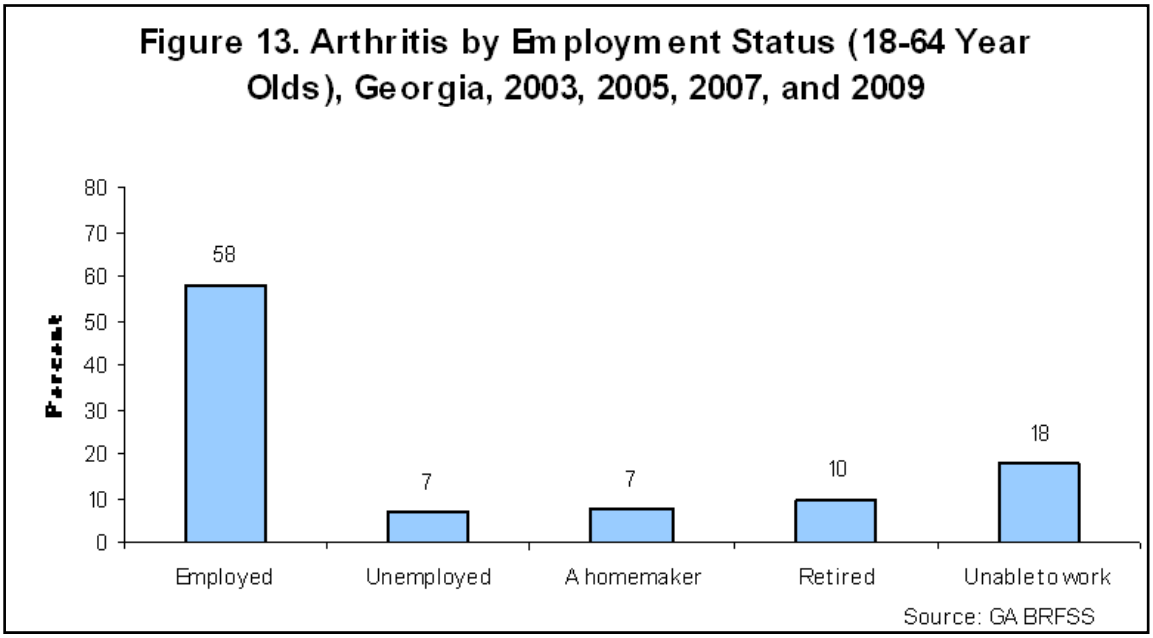
Among Georgians with doctor-diagnosed arthritis, those earning more than $75,000 annually had a higher prevalence of doctor-diagnosed arthritis than any other income group.



Almost a third of Georgians who were doctor diagnosed with arthritis were high school graduates (32%). Roughly half of those with doctor-diagnosed arthritis had either some college or graduated from college (50%).



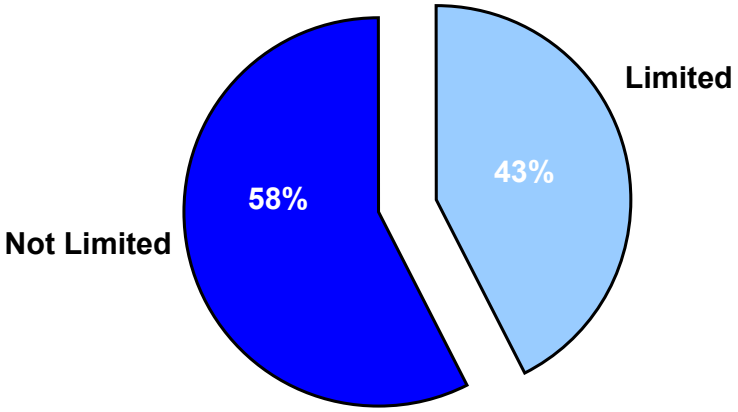
Arthritis is the leading cause of disability in the United States and Georgia. Among Georgia adults aged 18 to 64 years old diagnosed with arthritis, more than half (58%) were employed, one in ten (10%) were retired, and one in five (18%) were unable to work.



Activity Limitations due to arthritis

Nearly half of Georgia adults with doctor-diagnosed arthritis reported that their arthritis or joint symptoms limited their usual activities in some way (43%).

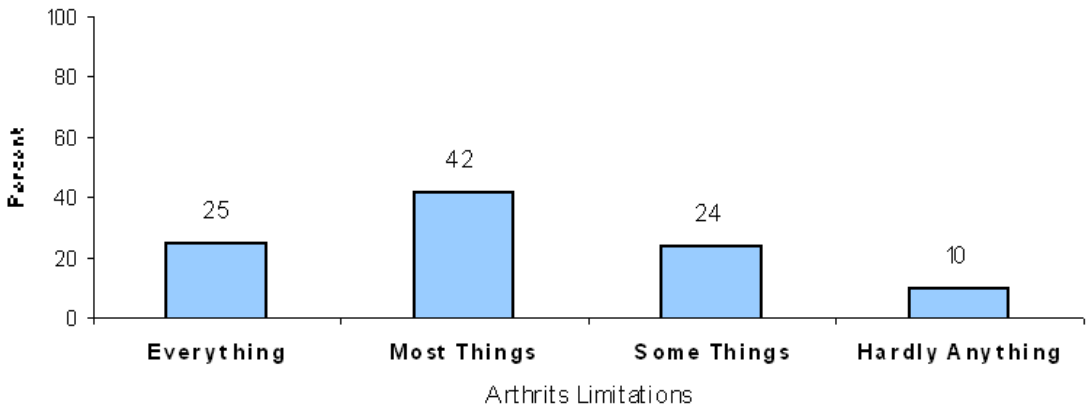
Figure 14. Arthritis Symptoms Causing Limitations Among Adults with Arthrtis, Gerogia, 2003, 2005, 2007, and 2009



Source: GA BRFSS

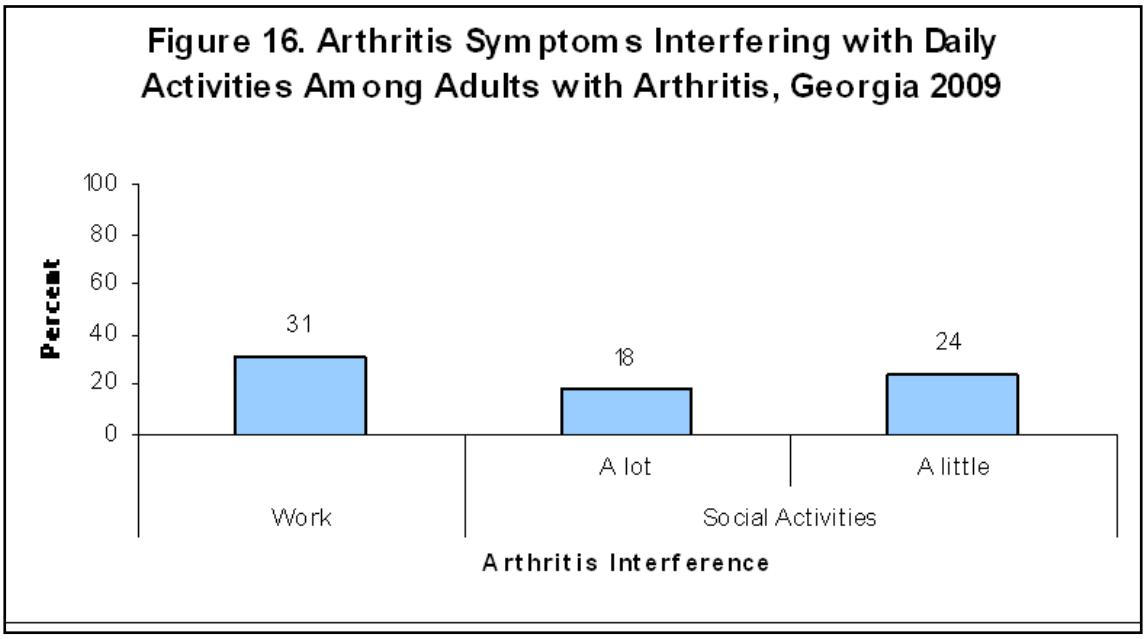
Nearly 2 in 3 adults with doctor-diagnosed arthritis in Georgia said they were able to do everything (25%) or most everything (42%) they wanted to do despite their arthritic and joint symptoms. However, one in ten people were not able to do what they would have liked to do because of their arthritic or joint symptoms.

Figure 15. Ability of Those with Arthritis to do what they would like, Georgia, 2003, 2005, and 2007



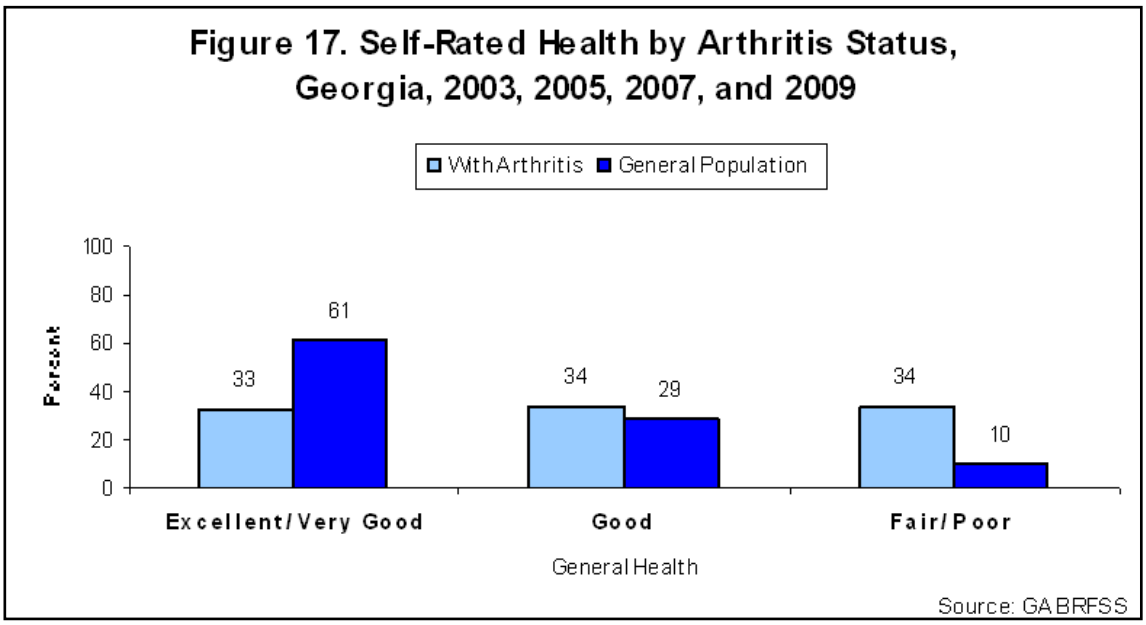
Source: GA BRFSS

When Georgia adults with doctor-diagnosed arthritis were asked whether their arthritis or joint symptoms interfered with their ability to work, roughly one in three people said yes (31%). Of those with arthritis, 18% stated that their arthritis or joint symptoms interfered with their normal social activities greatly and 24% stated it interfered a little.

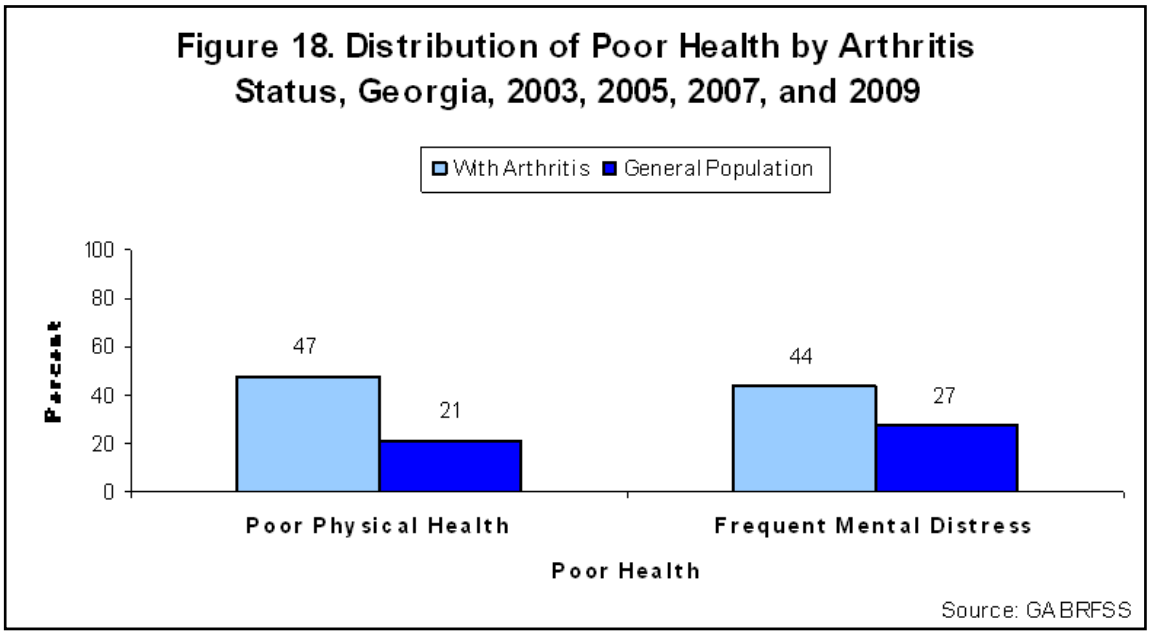


Arthritis and Overall Health

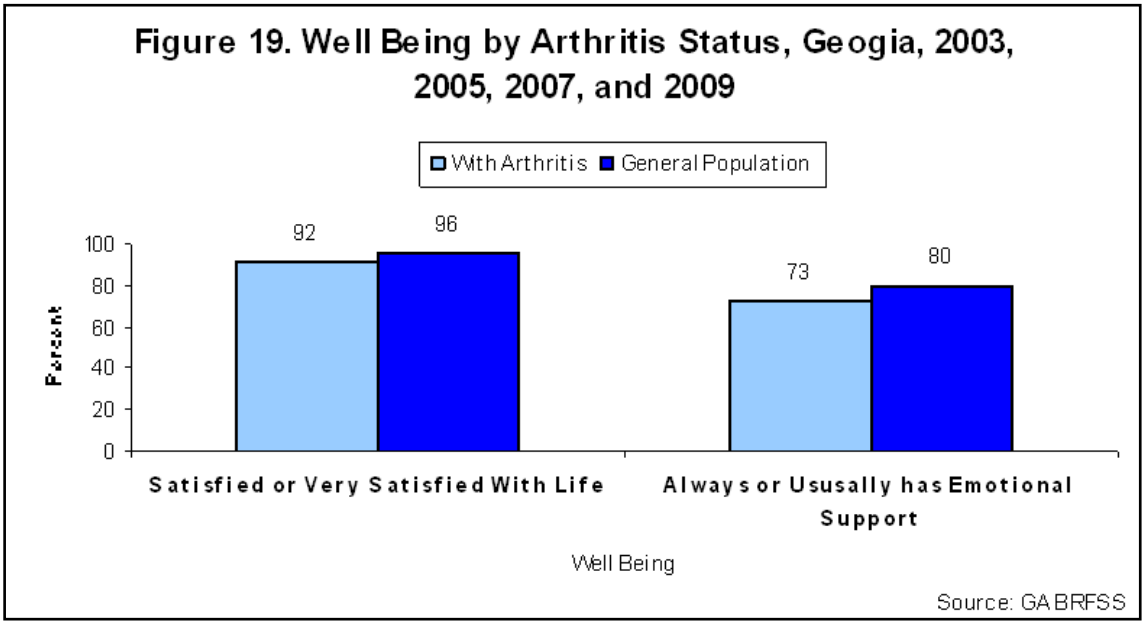
When asked to self-rate their general health, one in three Georgia adults with doctor-diagnosed arthritis reported they were in excellent or very good (33%) health, which less than the general population (61%). Additionally, one in three persons with doctor-diagnosed arthritis reported their health to be fair or poor (34%), that is significantly higher than the general population (10%).



Georgia Adults with doctor-diagnosed arthritis (47%) were more than twice as likely to self-report poor physical health than the general population (21%). In addition, those with doctor-diagnosed arthritis (44%) were more likely to report frequent mental distress than the general population (27%).

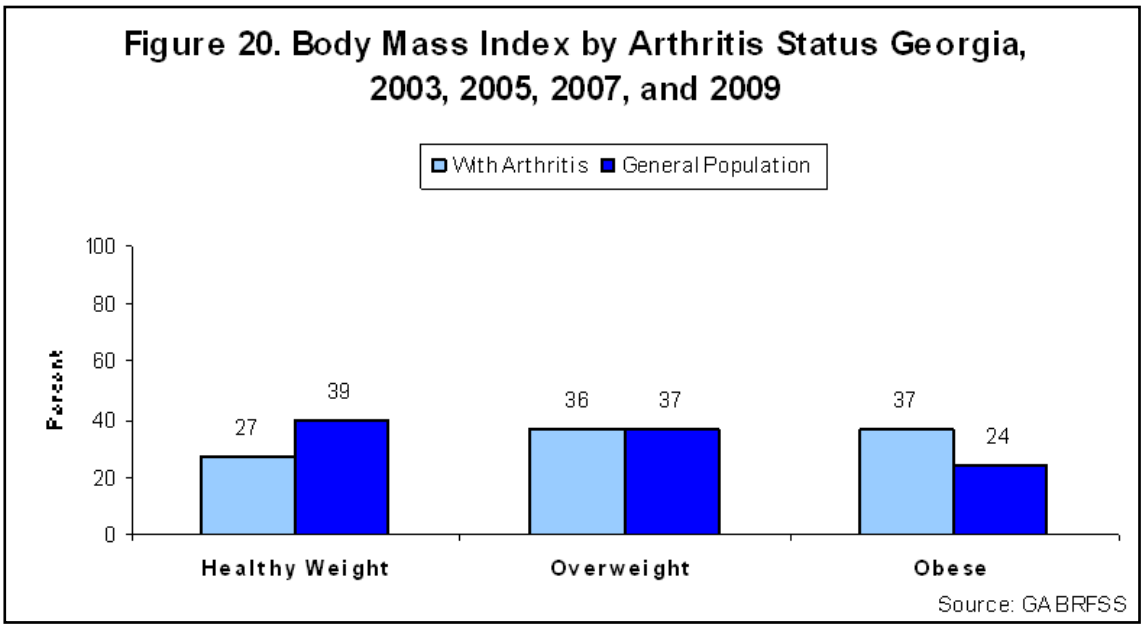


Adult Georgians were more likely (96%) to report that they were satisfied or very satisfied with life compared to those with doctor-diagnosed arthritis (92%). However, those with doctor-diagnosed arthritis (73%) were more likely to report that they always or usually have emotional support than the general population (80%).

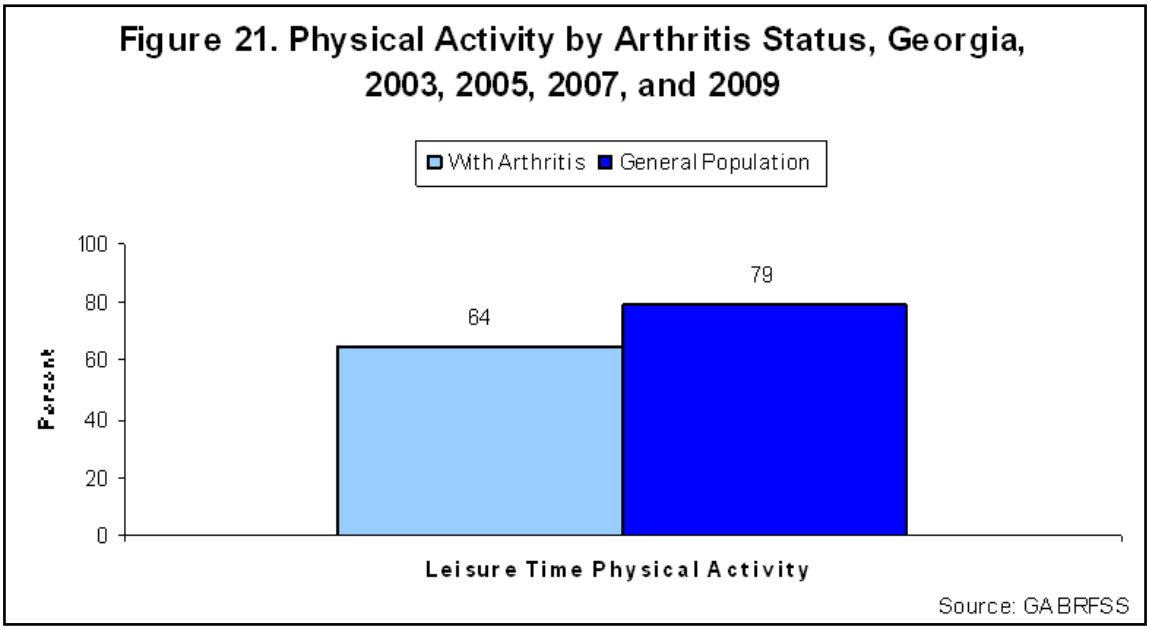


Arthritis and Risk Factors

Excess weight can damage joints and increase the risk of arthritis. Seventy-three percent of Georgians with doctor-diagnosed arthritis were overweight or obese. Georgians with doctor-diagnosed arthritis have a higher prevalence of obesity (37%) than the general population (24%), while overweight prevalence was similar between persons diagnosed with arthritis (36%) compared to the general population (37%).



Overall, Georgians with doctor-diagnosed arthritis engaged in less leisure time physical activity or exercise (64%) than the general population (79%).



Physical activity and weight control are important arthritis management tools. Even among adult Georgians with a healthy body weight, those with doctor-diagnosed arthritis were less likely to be physically active (70%) than the general population (81%). Among those who were overweight, persons with doctor-diagnosed arthritis were less likely to be physically active (69%) than the general population (81%). Among those who were obese, persons with doctor-diagnosed arthritis were less likely to be physically active (58%) than the general population (73%). Regardless of body mass index, Georgians with doctor-diagnosed arthritis were less likely to be physically active than the general population

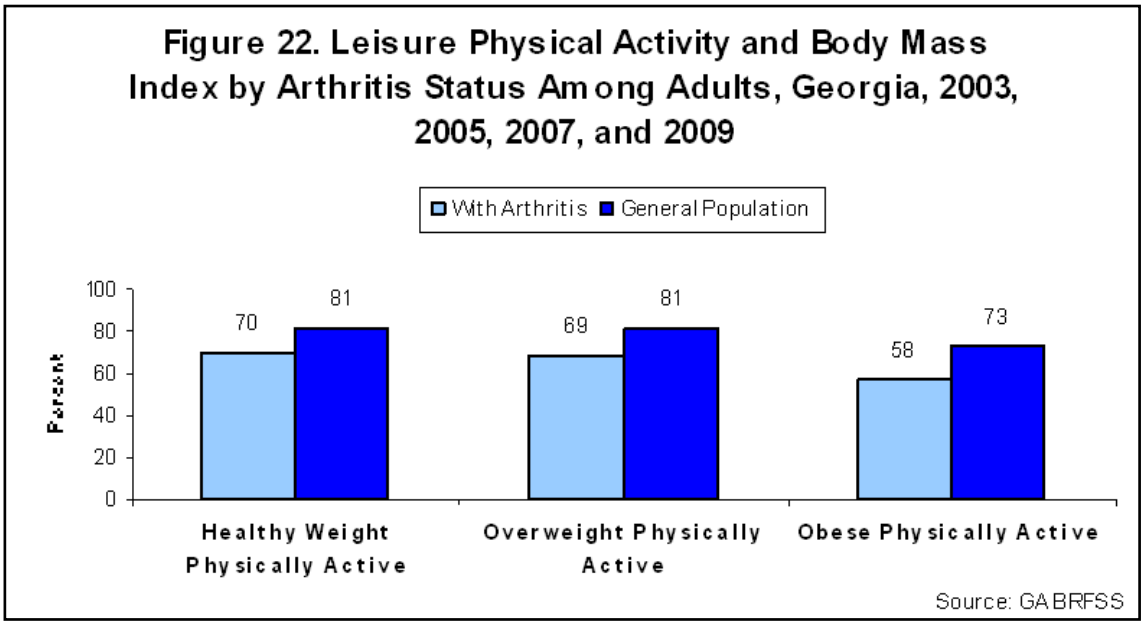


Figure 22. Leisure Physical Activity and Body Mass Index by Arthritis Status Among Adults, Georgia, 2003, 2005, 2007, and 2009

In 2007 and 2009, there was no significant difference in smoking prevalence between Georgia adults with doctor-diagnosed arthritis (22%) and the general population (20%).

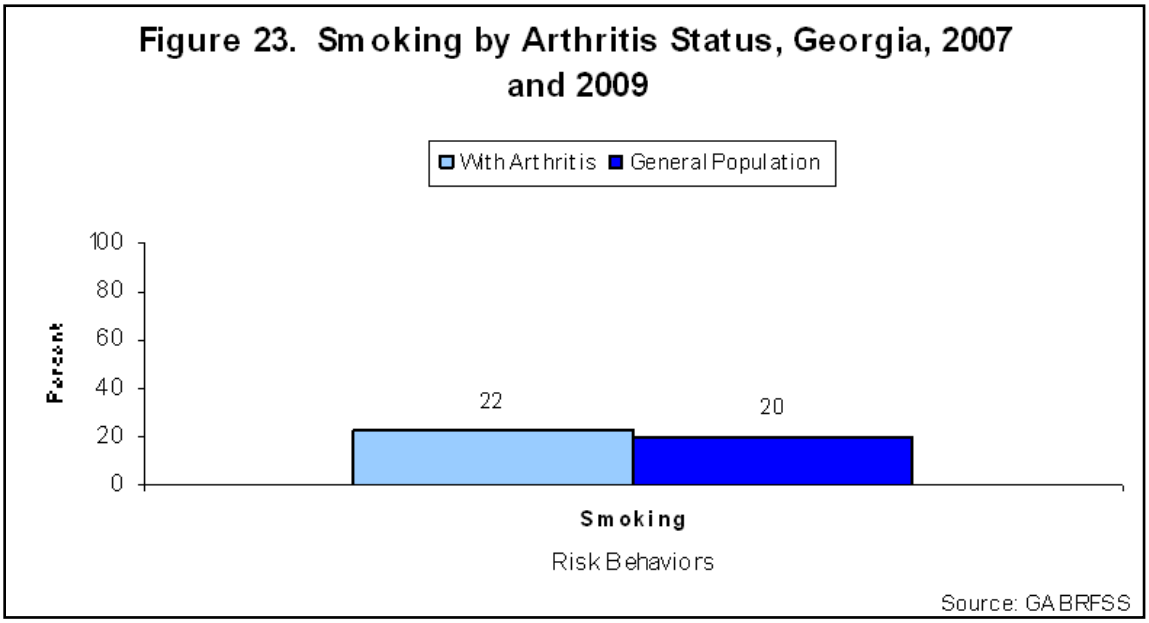
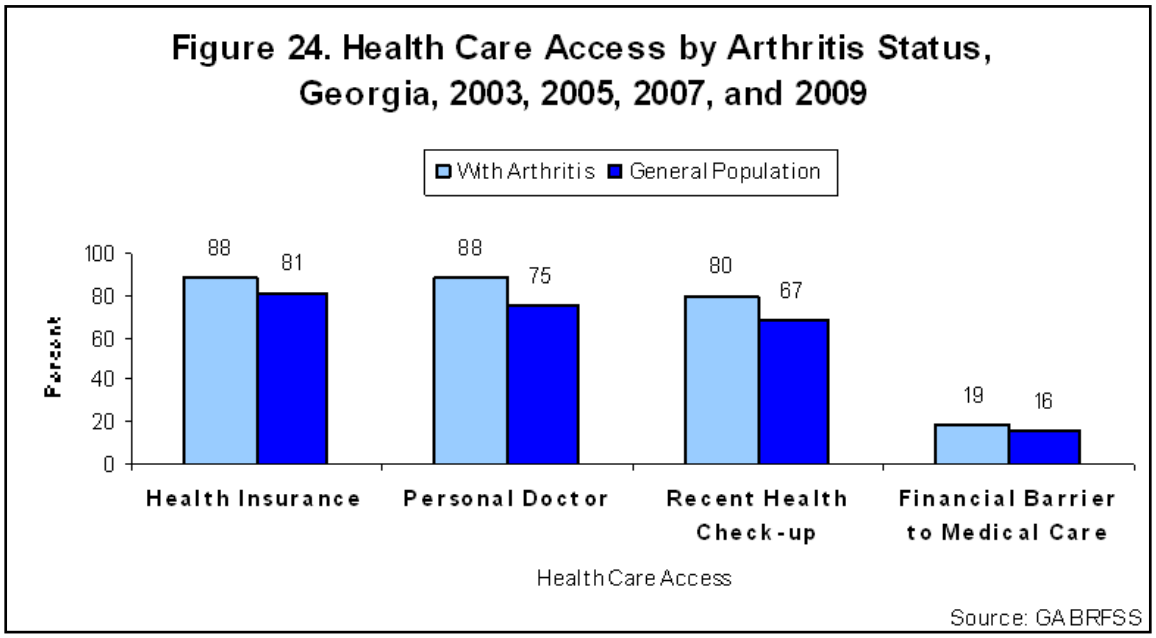


Figure 23. Smoking by Arthritis Status, Georgia, 2007 and 2009

Arthritis and Access to Health Care

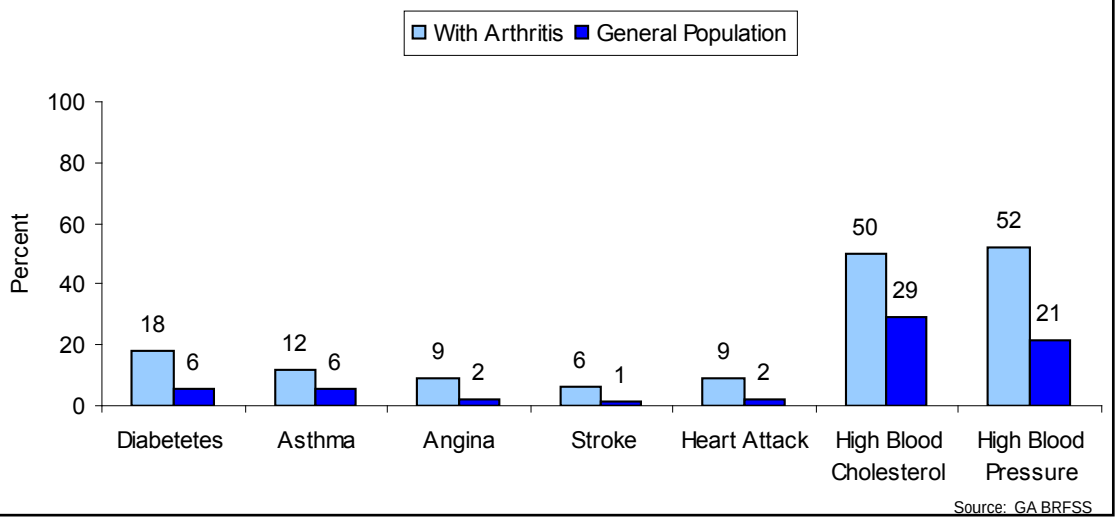
Georgia adults with doctor-diagnosed arthritis were more likely to have health insurance (88%), a personal health care provider (88%), and have had a checkup within the last year (80%) compared to the general population (81%, 75%, and 17% respectively). However, Georgians with doctor-diagnosed arthritis were also more likely to experience financial barriers interfering with their ability to visit medical professionals (19%) compared to those in the general population (16%). These financial barriers may cause unnecessary pain for persons with doctor-diagnosed arthritis, if they are unable to get treatment for their arthritis and joint symptoms.



Co-morbid Health Conditions by Arthritis Status

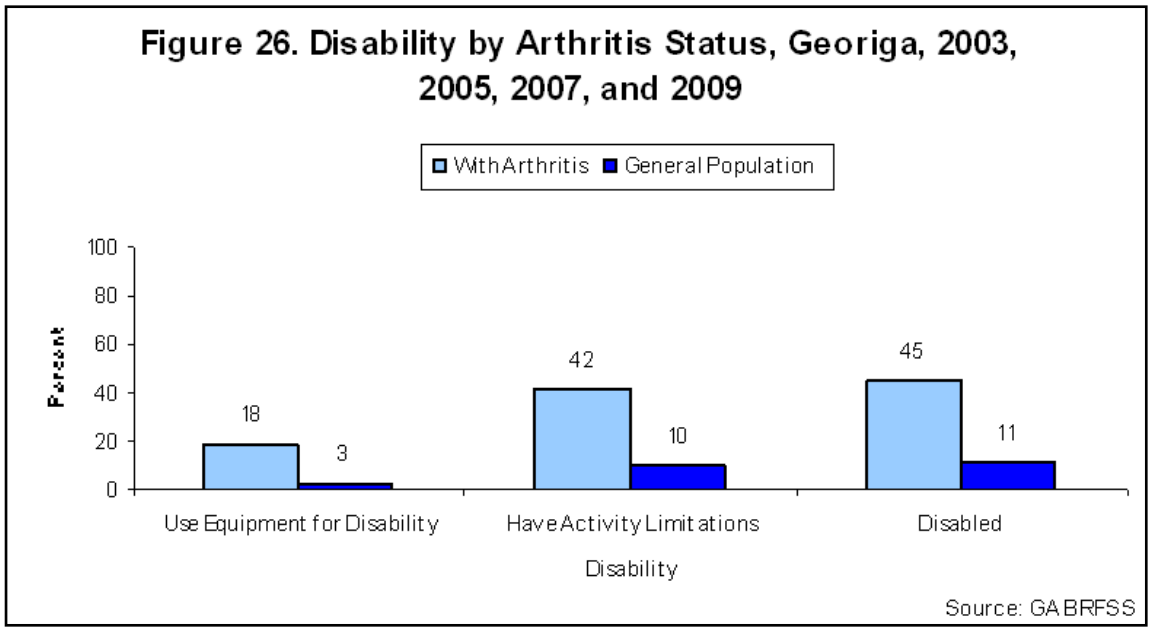
Georgia adults with doctor-diagnosed arthritis were more likely to experience other chronic health conditions (comorbidities) compared to the overall population. Those with doctor-diagnosed arthritis (18%) were three times more likely to have diabetes or a stroke than the general population (6% and 1%, respectively). Nearly half of Georgia adults with doctor-diagnosed arthritis had high blood cholesterol (50%) or high blood pressure (52%), which was roughly twice the prevalence among the general population (29% and 21%, respectively). Nearly 1 in 10 adults with doctor-diagnosed arthritis had experienced angina or a heart attack (9%), which is four times the prevalence of the general population (2%). Overall, 74% of Georgia adults with doctor-diagnosed arthritis reported having at least one of the selected chronic conditions compared to 40% in the general population. This is thought because co-morbid conditions experienced by adults with doctor-diagnosed arthritis can cause additional stress and health problems and limit the person's ability to be physically active and maintain a healthy body weight.

Figure 25. Health Conditions Among Adults by Arthritis Status, Georgia, 2003, 2005, 2007, and 2009

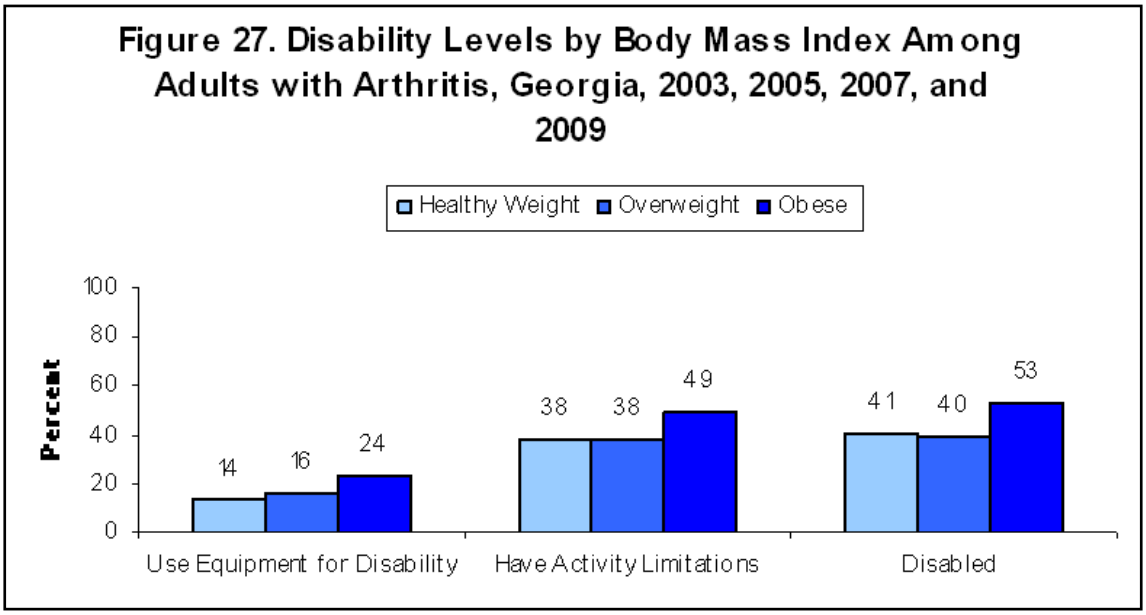


Arthritis and Disability

Since doctor-diagnosed arthritis is the leading cause of disability in the nation, it is expected that adults with doctor-diagnosed arthritis in Georgia would experience higher levels of disability than the general population. Overall, adult Georgians with doctor-diagnosed arthritis (45%) were more likely to be disabled than those in the general population (11%).Those with doctor-diagnosed arthritis were more likely to use special equipment (18%), or have activity limitations due to their disability (42%) than the general population (3% and 10%, respectively).



Those who were obese and had doctor-diagnosed arthritis were more likely to need equipment for their disability (24%), have activity limitations (49%), or be disabled (53%) than those who are within the healthy weight range (14%, 38%, and 41%, respectively) or overweight (15%, 38%, and 40%, respectively).

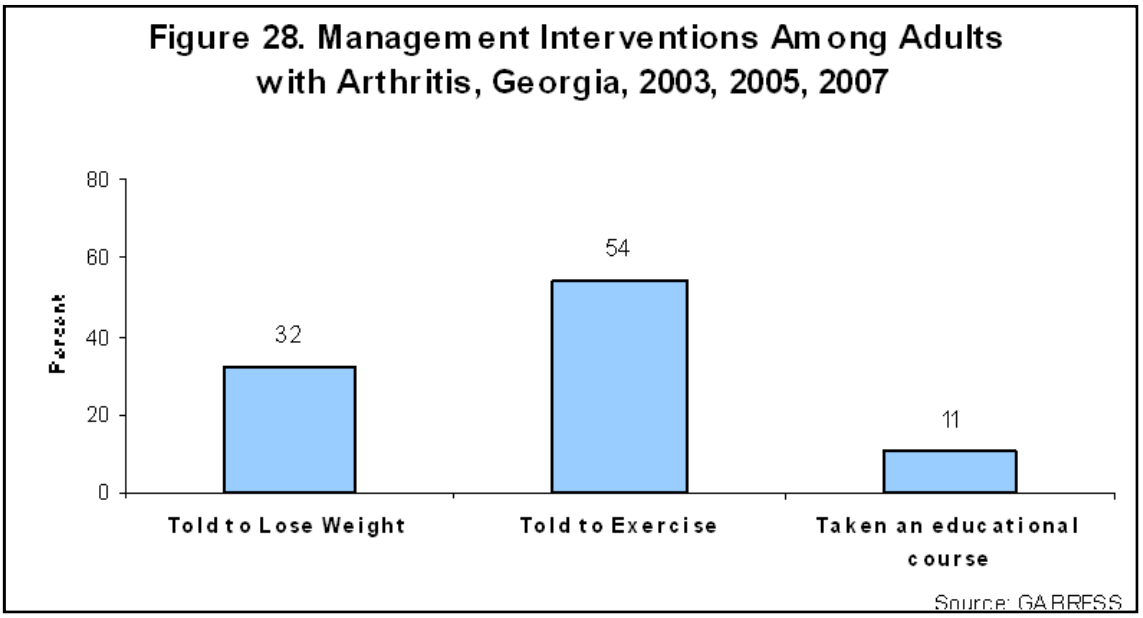


Section 4: Arthritis Management

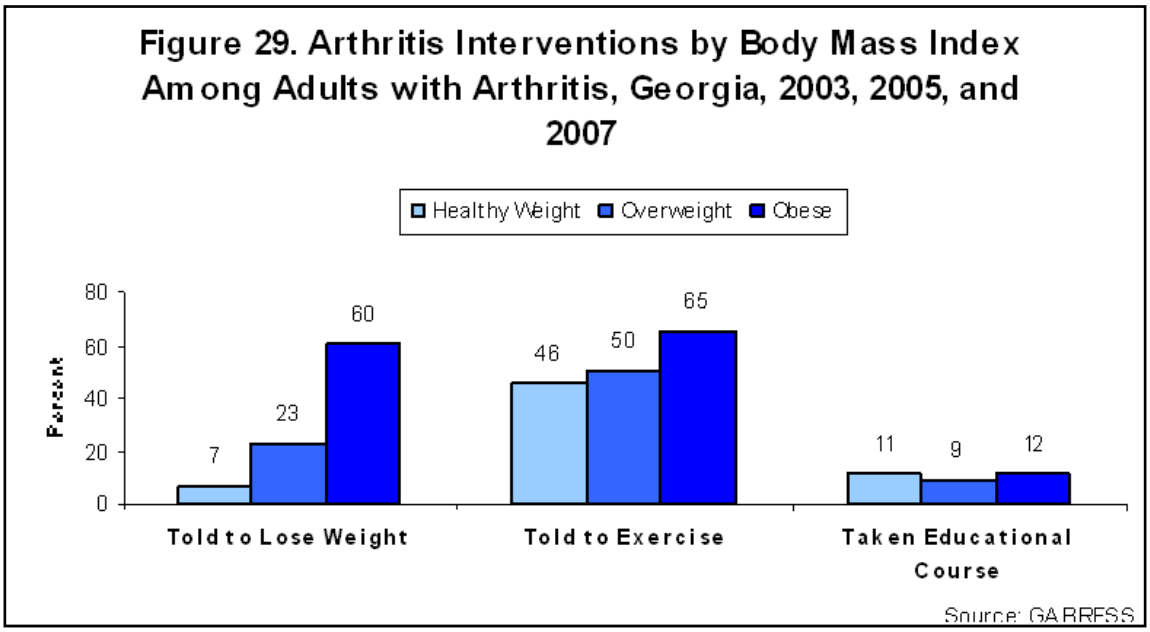
Management of Arthritis

To manage arthritis, Healthy People 2020 recommends maintaining a healthy weight, exercising, and taking a self-management educational course. In 2003, 2005, and 2007 Georgia BRFSS collected information on arthritis management to measure adherence to and to asses whether adult Georgians with doctor-diagnosed arthritis were being informed about these recommendations by their health care professionals.

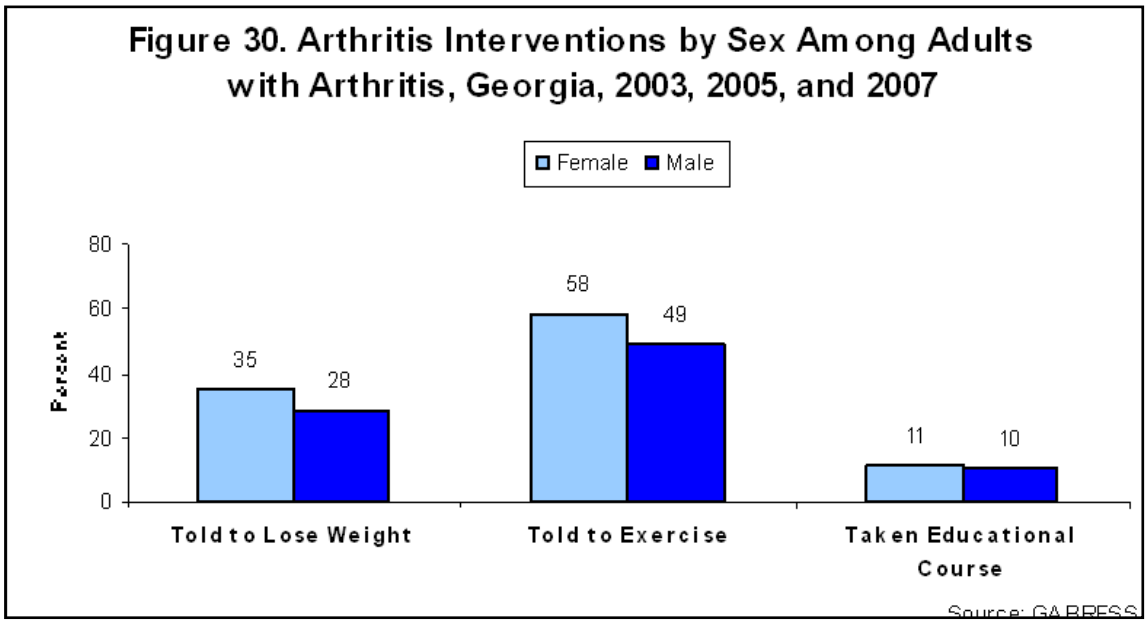
To manage their arthritis symptoms, 1 in 3 adult Georgians with arthritis were told by their doctor or other health care professional to lose weight (32%), and more than half were told to exercise (54%). Roughly one in four adults was advised to both lose weight and exercise (27%, Table 15). However, only 1 in 10 adults with doctor-diagnosed arthritis had taken an educational course to manage their symptoms (11%).



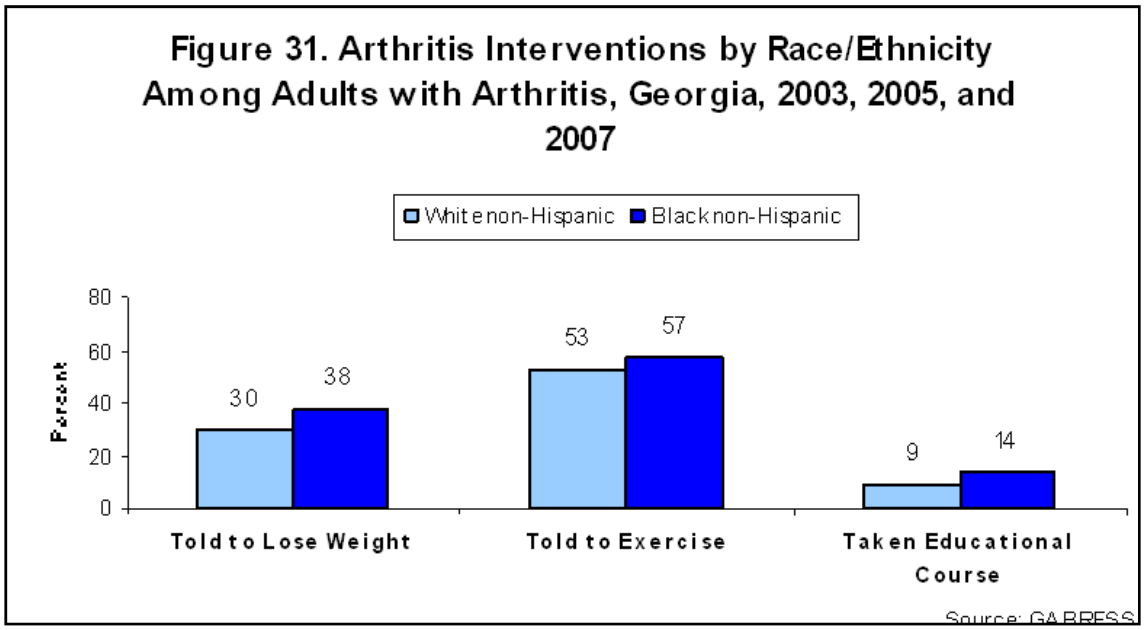
Arthritis interventions were most prevalent among adult Georgians who were obese. Nearly 3 in 5 adults who were obese and had doctor-diagnosed arthritis (60%) were told to lose weight to control their arthritis and joint symptoms while only 1 in 4 overweight adults with doctor-diagnosed arthritis (23%) were given the same recommendations. Exercise is an important tool for everyone with arthritis to manage their symptoms; however, only 1 of 2 adult Georgians who were of healthy weight or overweight and 2 out of 3 obese adults were told to exercise by their doctor. Overall, there was no difference between body mass index and participation in arthritis educational course among adults Georgians diagnosed with arthritis.



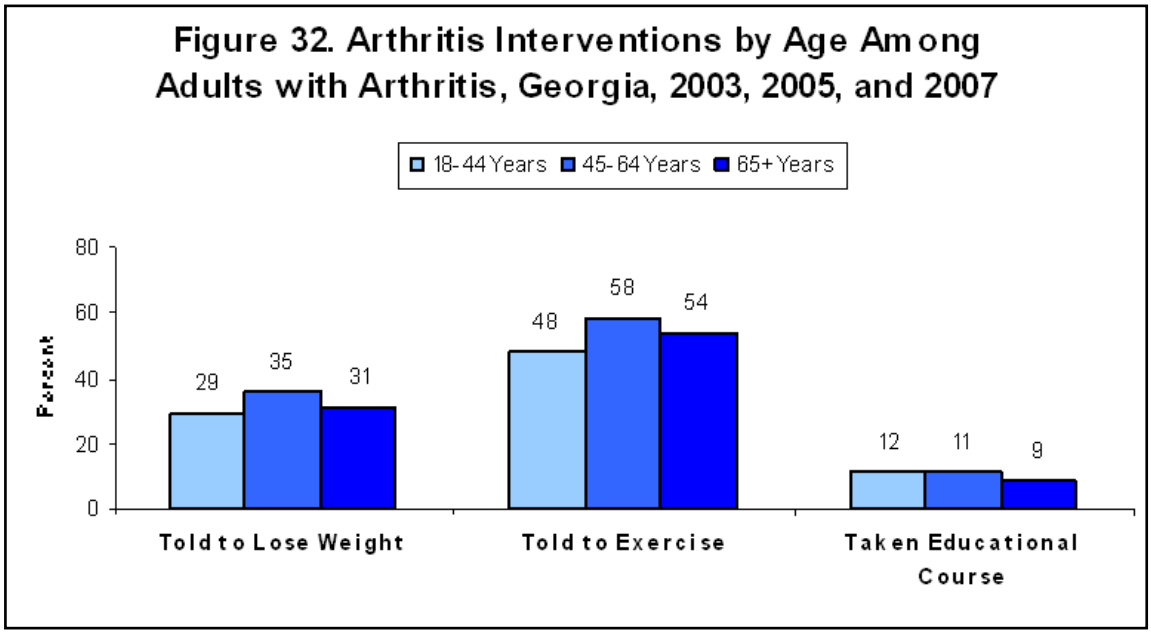
Women with doctor-diagnosed arthritis were more likely to be instructed by their doctor or health care professional to lose weight (35%) or instructed to exercise (58%) than men (28% and 49%, respectively). There was no significant difference between women and men taking arthritis educational courses (11% and 10%, respectively).



Among adult Georgians with doctor-diagnosed arthritis, white non-Hispanics were less likely to be told to lose weight (30%), told to exercise (53%), and/or to have taken an educational course to manage their arthritis (9%) than black non-Hispanic adults with doctor-diagnosed arthritis (Figure 35).



Regardless of age, roughly one in three Georgia adults with doctor-diagnosed arthritis were told by a doctor or health care professional to lose weight; nearly half were told to exercise by a doctor or health care professional, and 1 in 10 had previously taken an educational course for arthritis management.



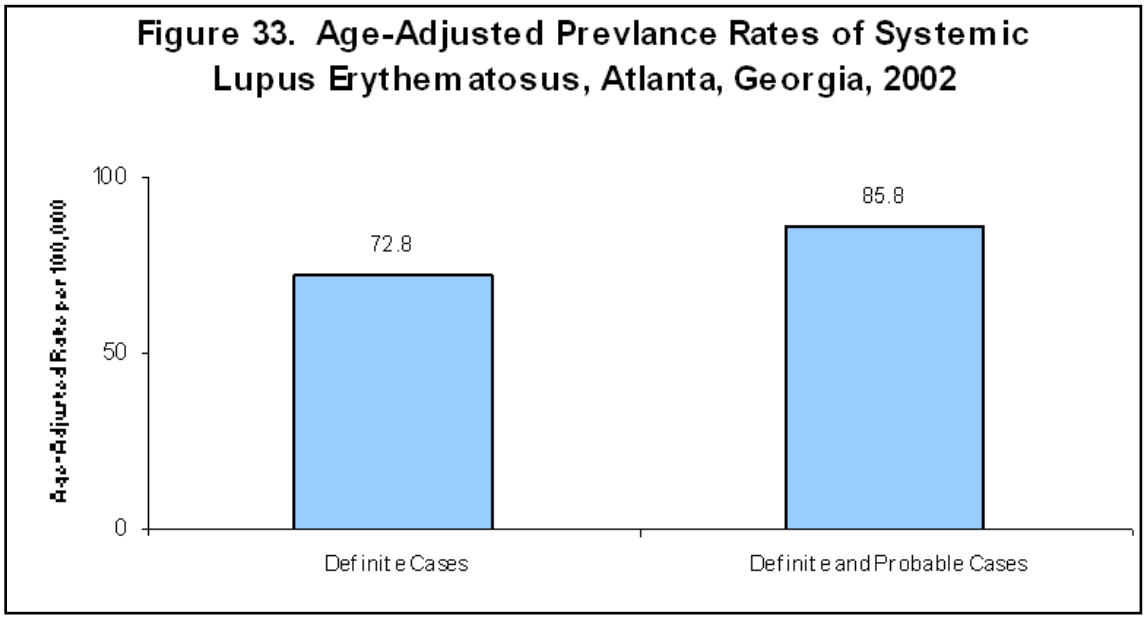
Section 5: Systemic Lupus Erythematosus

Systemic lupus erythematosus (SLE), a form of arthritis, is an autoimmune disease that attacks healthy tissue and can affect the skin, joints, kidneys, brain, and other organs. The causes of SLE are unknown, and while any person can develop the disease, young African-American or Asian women in their childbearing years carry the heaviest burden of the disease.

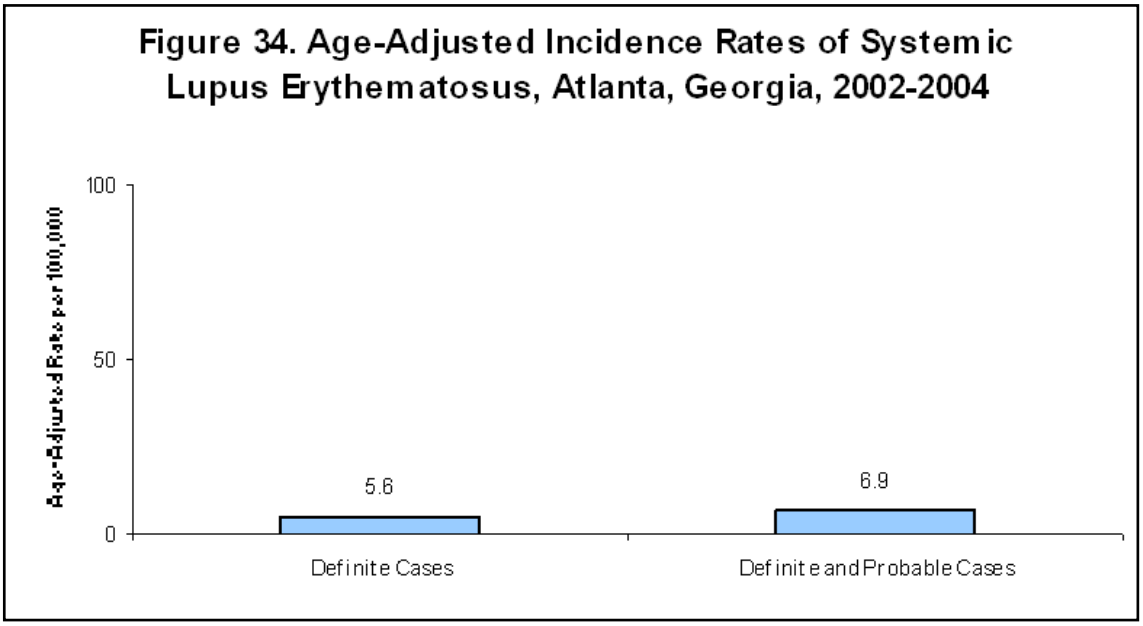
The data for this portion of the report comes from the Georgia Lupus Registry (GLR). The GLR is one of two population-based registries funded by the Centers for Disease Control and Prevention to better define the incidence and prevalence of SLE. The GLR is maintained by the Division of Rheumatology at Emory University in collaboration with the Georgia Department of Public Health. The registry aims to accurately determine the incidence and prevalence of SLE in two metropolitan Atlanta counties (Fulton and DeKalb counties). Prevalence was estimated for the 2002 calendar year while incidence was estimated for calendar years the 2002-2004.

The GLR measures the incidence and prevalence of SLE for both definite and probable cases. Definite cases are cases that meet four or more of the 11 American College of Rheumatology (ACR) criteria for SLE, while probable cases are cases that meet three of the ACR criteria with a final diagnosis from a rheumatologist.

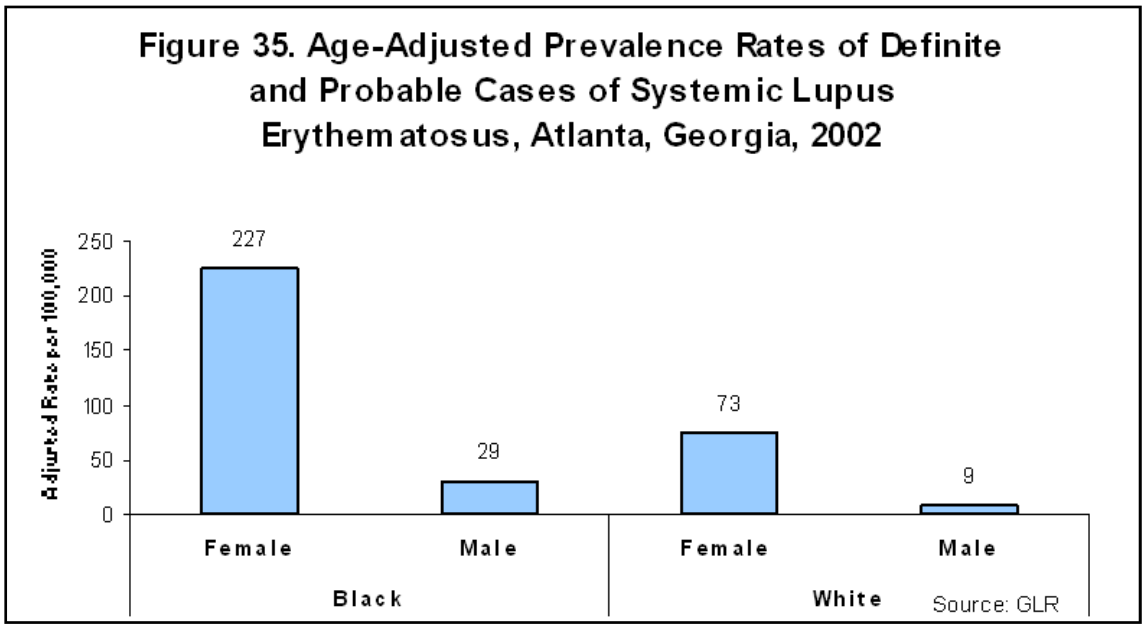
The age-adjusted prevalence rate of definite cases of SLE in Fulton and DeKalb Counties in 2002 was 72.8 per 100,000 persons per year, while the age-adjusted prevalence of definite and probable cases was 85.8 per 100,000 persons per year.



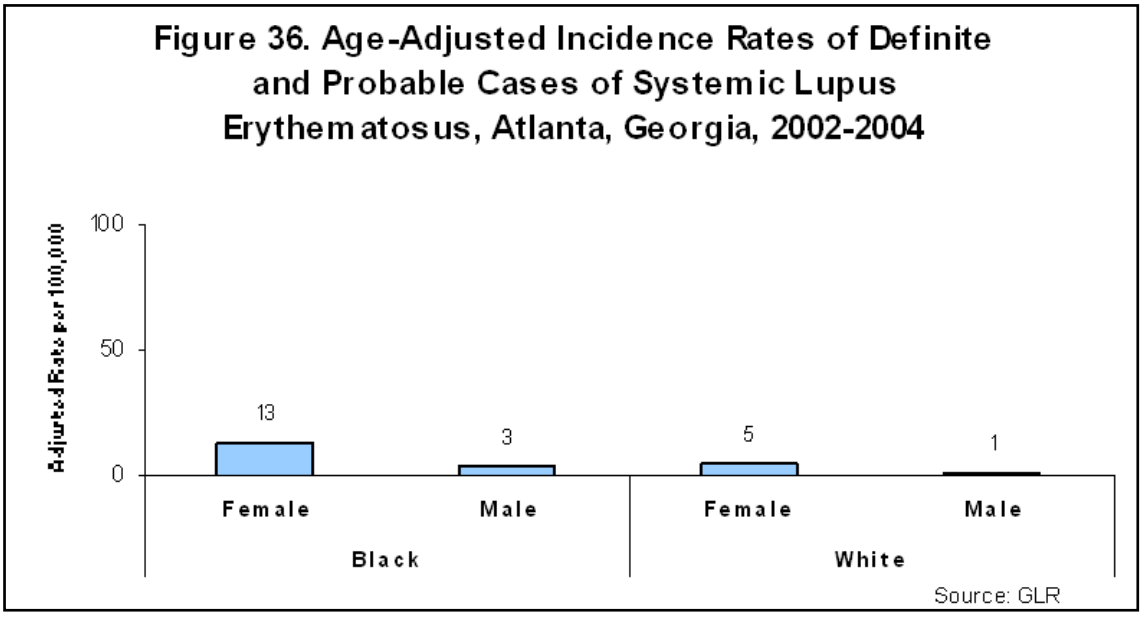
The age-adjusted incidence rate of definite SLE in Fulton and DeKalb Counties during 2002-2004 was 5.6 per 100,000 persons per year while the age-adjusted incidence rate of definite and probable SLE was 6.9 per 100,000 persons per year.



The age-adjusted prevalence rates of definite and probable cases of SLE in Fulton and DeKalb Counties in 2002 was highest among black females at 227 per 100,000 and lowest among white males at 9.4 per 100,000 person years.



The age-adjusted incidence rate of SLE in Fulton and DeKalb Counties during 2002-2004 was highest among black females at 13 per 100,000 person years and lowest among white males at 1 per 100,000 person years.



Appendix

Definitions

Poor physical health: Respondents who answered between 14 and 30 days, to the question "Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"

Frequent mental distress: Respondents who answered between 14 and 30 days, to the question "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

Body Mass Index (BMI): BMI is defined as weight in kilograms divided by height in meters squared (weight/height^2). Respondents having a BMI less than or equal to 25 were in the healthy weight range, a BMI of more than 25 and less than 30 were classified as overweight, and a BMI greater than or equal to 30 was classified as obese.

Leisure time physical activity: Respondents who answered between 14 and 30 days, to the question, "During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?"

Disabled: Respondents who answered "Yes" to both of the following questions: "Are you limited in any way in any activities because of physical, mental, or emotional problems?" and "Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone? (Include occasional use or use in certain circumstances.)."

Access to Health Care:

Insurance: Respondents who answered "Yes" to the question "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?"

Personal Doctor: Respondents who stated they had one or more personal doctor or health care provider.

Routine Checkup: Respondents that stated that their last routine checkup with a doctor was within the past year.

Financial Difficulty: Respondents who answered "Yes" to the question, "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?"

American College of Rheumatology (ACR) criteria for Classification of Systemic Lupus Erythematosus[7]: The ACR developed a list of 11 common measures to help diagnose SLE including: malar rash, discoid rash, photosensitivity, oral ulcers, arthritis, serositis, kidney disorder, neurological disorder, blood disorder, immunologic disorder, and abnormal antinuclear antibody (ANA)

[7] Lupus Foundation of American. Common Symptoms of Lupus. Washington, DC. Available at [http://www.lupus.org/webmodules/webarticlesnet/templates/new_donatenow.aspx?articleid=2241&zoneid=43]. Accessed [06/28/2013].

Technical note

Definition of doctor-diagnosed arthritis

The Georgia BRFSS collected doctor-diagnosed arthritis related questions annually from 1998 to 2000 and every odd year starting in 2001. In 2002, the BRFSS changed the definition of doctor-diagnosed arthritis, making data prior to 2003 incomparable data from 2003 to the present.

Doctor-diagnosed arthritis management questions were removed from the 2009 Georgia BRFSS due to lack of funding. These questions were added to the 2011 Georgia BRFSS through state-added questions.

Fewer than 50 Respondents

Any sample size that was less than 50 was too small to give reliable measurements and was not reported or interpreted.

Race/Sex Groups

Prevalence statistics were only presented for black non-Hispanics and white non-Hispanics when reporting sex specific results. Sample size for other race and ethnicity groups were less than 50, therefore data were not analyzed for this report.

Statistical Analysis

The report generated statistics using the SAS-callable SUDAAN, proc crosstab function in SAS 9.3.

Hospital Discharge Data

Arthritis related hospitalizations and charges comes from hospital discharge data for the year 2010 released from non-federal acute care hospitals in Georgia. Those who have a primary diagnosis of arthritis were determined using the primary ICD-9 code.

Arthritis ICD-9 codes: 710-716, 719 (excluding 719.1), 720, 721, 725-727, 728 (excluding 728.4 and 728.5), 729.0, 729.1, 729.4, 95.6, 95.7, 98.5, 99.3, 136.1, 274, 277.2, 287.0, 344.6, 353.0, 354.0, 355.5, 357.1, 390, 391, 437.4, 443.0, 446, 447.6, and 696.0.

Multiple hospital visits were not included in the analysis; if a patient had multiple visits, only the first visit with the primary diagnosis of arthritis was included for analysis.

Death Data

Death data comes from death certificates for those adults who died in Georgia between the years 1999 and 2008 who had a primary ICD-10 code for arthritis.

Arthritis ICD-10 codes: M00-M25, M30, M32, M33, M35, M45-M49, M60-M63, M65-M68, M70-M79, and M89.

Tables

Table 2. Prevalence of Doctor-Diagnosed Arthritis Among Adults, Georgia, 2003, 2005, 2007, and 2009			
	Total n	Doctor-diagnosed Arthritis	
		%	95% CI
Total	26,762	25.9	(25.2, 26.6)
Sex			
Male	9,405	22.0	(20.9, 23.1)
Female	17,357	29.6	(28.7, 30.5)
Race/Ethnicity			
White Non-Hispanic	19,097	28.5	(27.7, 29.3)
Black Non-Hispanic	5,800	23.0	(21.6, 24.5)
Hispanics	614	15.7	(11.6, 21.1)
Others	950	18.6	(15.8, 21.8)
Sex by Race/Ethnicity			
White Non-Hispanic Male	6,946	24.5	(23.2,25.8)
Black Non-Hispanic Male	1,715	19.5	(17.2,21.7)
White Non-Hispanic Female	12,108	32.2	(31.1,33.2)
Black Non-Hispanic Female	4,073	26.1	(24.4,27.8)
Age			
18-24	1,297	4.0	(3.0, 5.4)
25-34	3,359	8.5	(7.2, 10.1)
35-44	4,563	18.3	(16.9, 19.8)
45-54	5,548	30.9	(29.4, 32.5)
55-64	5,141	45.7	(43.9, 47.5)
65+	6,641	57.3	(55.7, 58.8)
Health Insurance Status			
Health Insurance	23,091	27.5	(26.7, 28.3)
No Health Insurance	3,598	18.3	(16.6, 20.2)

Table 3. Prevalence of Doctor-Diagnosed Arthritis Among Adults by Health District, Georgia, 2003 & 2005

	Total			Sex				Race			
				Male		Female		White		Black	
Health District	n	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Georgia	13,550	26.2	25.3-27.2	22.7	21.2-24.3	29.6	28.3-30.8	28.6	27.4-29.8	23.5	21.5-25.6
1-1 Rome	613	30.2	26.2-34.5	23.2	17.6-29.9	36.1	30.7-41.7	32.4	28.0-37.0	15.9	7.8-29.8
1-2 Dalton	520	29.8	25.6-34.4	24.3	18.2-24.3	34.6	29.2-40.5	31.4	26.9-36.3	---*	
2 Gainesville	1,205	31.1	28.1-34.3	29.2	24.7-34.2	33.1	29.3-37.2	32.3	29.1-35.7	---*	
3-1 Cobb-Douglas	520	22.7	18.9-27.0	19.4	14.1-26.2	25.8	20.8-31.5	25.9	21.4-31.0	12.1	6.6-21.1
3-2 Fulton	502	20.0	16.1-24.7	19.4	13.3-27.4	20.7	16.1-26.2	18.3	13.6-24.3	23.4	17.0-31.5
3-3 Clayton	442	16.7	13.2-21.0	8.8	5.0-14.9	23.8	19.1-29.2	28.5	21.1-37.3	13.2	9.5-18.1
3-4 Lawrenceville	547	22.3	18.6-26.5	16.7	11.8-23.0	28.7	23.6-34.3	26.2	21.6-31.3	18.8	5.5-10.2
3-5 DeKalb	475	17.6	14.1-21.8	13.0	8.1-20.2	21.8	17.2-27.2	23.4	17.6-30.3	15.5	10.8-21.7
4 LaGrange	510	28.5	24.2-33.3	26.3	19.4-34.5	30.6	25.5-36.2	27.6	22.7-33.2	29.7	20.6-40.8
5-1 Dublin	1,122	32.8	28.6-37.3	28.7	22.5-36.0	37.4	33.2-41.8	35.9	31.9-40.4	32.1	25.7-39.3
5-2 Macon	518	29.7	25.4-34.4	25.4	19.2-25.4	34.2	28.8-40.2	33.0	27.4-39.2	26.4	19.5-34.8
6 Augusta	1,135	31.2	28.2-34.4	29.5	24.9-34.5	32.8	29.0-36.8	33.3	29.4-37.5	27.5	22.7-32.9
7 Columbus	596	26.8	22.9-31.2	23.2	17.2-30.5	30.0	25.2-35.3	29.3	23.7-35.5	27.3	21.1-34.6
8-1 Valdosta	531	25.4	21.4-29.7	17.0	12.0-23.5	32.8	27.5-38.5	27.5	22.7-32.9	23.0	16.1-31.8
8-2 Albany	1,120	31.2	27.8-34.8	30.0	24.2-36.6	32.1	28.4-36.0	30.4	26.5-34.7	32.2	26.2-38.9
9-1 Savannah	1,087	25.1	22.1-28.4	23.8	19.1-29.3	26.5	23.0-30.2	25.9	22.6-29.6	27.0	20.0-35.5
9-2 Waycross	1,075	31.1	27.7-34.7	27.6	22.6-33.1	34.4	30.1-39.0	31.6	28.1-35.3	32.3	23.1-43.0
10 Athens	1,032	26.5	23.5-29.8	24.1	19.3-29.6	28.7	25.0-32.7	26.0	22.6-29.7	29.9	22.2-39.0

	Age Group					
	18-44 Years		45-64 Years		65+ Years	
Health District	%	95% CI	%	95% CI	%	95% CI
Georgia	11.8	10.7-13.1	38.6	36.9-40.4	58.2	55.7-60.6
1-1 Rome	14.6	10.1-20.7	41.9	34.8-49.4	55.8	47.1-64.2
1-2 Dalton	14.5	9.8-20.9	41.3	34.2-48.8	54.4	43.3-65.0
2 Gainesville	11.9	9.0-15.5	44.6	39.1-50.2	59.7	53.6-65.5
3-1 Cobb-Douglas	8.8	5.3-14.3	34.6	27.4-42.7	57.1	45.3-68.1
3-2 Fulton	11.6	7.0-18.5	25.5	19.2-33.1	47.8	36.0-59.9
3-3 Clayton	7.6	4.8-11.8	32.8	24.9-41.8	42.4	29.2-56.9
3-4 Lawrenceville	11.6	7.8-17.0	35.1	28.1-42.9	57.6	44.9-69.3
3-5 DeKalb	8.3	5.0-13.5	29.8	22.7-38.1	51.9	38.0-65.6
4 LaGrange	13.0	8.2-19.9	42.6	34.8-50.1	55.5	44.3-66.2
5-1 Dublin	13.7	9.9-18.5	44.2	37.9-50.7	68.0	61.4-73.9
5-2 Macon	11.6	7.4-17.8	40.3	32.7-48.5	65.4	55.2-74.3
6 Augusta	13.1	10.0-16.9	43.1	37.9-48.5	68.6	61.3-75.0
7 Columbus	10.0	6.3-15.5	43.5	36.2-51.2	65.4	55.5-74.1
8-1 Valdosta	11.3	7.6-16.5	39.6	31.8-48.0	54.8	45.4-63.9
8-2 Albany	14.7	10.4-20.4	42.0	36.1-48.2	60.8	53.7-67.5
9-1 Savannah	13.3	9.7-17.9	36.8	31.5-42.5	51.4	43.4-59.3
9-2 Waycross	13.2	9.2-18.7	45.4	40.0-51.0	63.5	56.5-69.9
10 Athens	13.0	9.4-17.5	37.4	32.1-43.0	62.4	54.0-70.1

Table 4. Prevalence of Doctor-Diagnosed Arthritis Among Adults by Health District, Georgia, 2007 & 2009											
	Total			Sex				Race			
				Male		Female		White		Black	
Health District	n	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Georgia	13,212	25.6	24.6-26.6	21.3	19.8-22.9	29.6	28.4-30.9	28.5	27.3-29.6	22.6	20.6-24.6
1-1 Rome	772	32.6	28.6-36.8	29.3	23.3-36.1	36.0	31.0-41.3	33.2	29.0-37.7	27.6	17.0-41.4
1-2 Dalton	739	25.2	21.6-29.2	21.0	16.1-26.9	29.2	24.4-34.6	29.4	25.4-33.8	---*	
2 Gainesville	698	26.3	22.9-30.1	20.8	16.0-26.5	30.7	26.1-35.7	27.1	23.5-31.1	---*	
3-1 Cobb-Douglas	790	18.4	15.7-21.5	12.1	8.8-16.4	23.2	19.4-27.6	23.2	19.6-27.2	11.3	7.1-17.6
3-2 Fulton	721	21.4	18.1-25.2	14.9	10.7-20.3	27.9	23.4-32.9	27.4	22.6-32.9	20.5	15.2-27.1
3-3 Clayton	571	20.3	16.2-25.1	20.3	13.6-29.1	20.4	15.9-25.7	35.3	26.6-45.1	17.2	12.3-23.6
3-4 Lawrenceville	694	20.2	17.0-23.9	14.2	10.5-19.1	26.6	21.9-32.0	25.0	21.0-29.5	19.3	12.1-29.5
3-5 DeKalb	715	20.8	17.5-24.4	17.4	12.6-23.5	23.5	19.4-28.2	25.0	20.5-30.1	18.3	13.6-24.2
4 LaGrange	750	25.9	21.2-31.3	27.9	19.6-38.0	24.2	19.9-29.0	27.2	22.6-32.3	17.4	11.1-26.3
5-1 Dublin	596	30.8	26.1-35.9	24.4	17.9-32.3	36.9	30.8-43.5	33.3	27.5-39.7	30.1	21.7-40.0
5-2 Macon	726	26.2	22.7-30.0	22.6	17.5-28.8	29.2	24.6-34.2	26.8	22.6-31.5	22.3	16.3-29.8
6 Augusta	724	27.8	23.8-32.2	23.9	18.3-30.7	32.0	27.1-37.3	30.4	25.6-35.6	28.2	20.7-37.1
7 Columbus	682	29.1	24.7-34.0	27.1	20.1-35.3	31.3	26.6-36.5	29.3	24.5-34.7	26.0	18.9-34.6
8-1 Valdosta	702	30.6	26.2-35.3	24.7	18.4-32.1	35.9	30.5-41.7	33.1	28.5-38.1	26.5	17.3-38.4
8-2 Albany	709	32.0	27.6-36.7	22.7	17.1-29.5	40.7	35.1-46.6	31.9	27.2-37.0	34.3	25.3-44.7
9-1 Savannah	732	25.8	21.9-30.1	22.8	17.1-29.7	29.1	24.6-34.2	25.6	21.8-29.8	26.2	17.6-37.0
9-2 Waycross	679	36.5	31.7-41.5	32.1	24.5-40.8	40.4	34.9-46.2	37.7	32.6-43.1	36.5	24.5-50.4
10 Athens	686	26.3	22.5-30.5	20.1	15.2-26.2	32.4	27.2-38.0	27.6	23.3-32.3	28.5	18.6-41.0

	Age Group					
	18-44 Years		45-64 Years		65+ Years	
Health District	%	95% CI	%	95% CI	%	95% CI
Georgia	11.5	10.3-12.9	35.7	34.1-37.3	56.5	54.5-58.4
1-1 Rome	14.8	10.1-21.2	49.2	42.7-55.7	56.2	49.0-63.1
1-2 Dalton	11.8	7.9-17.4	32.1	26.4-38.3	55.6	48.3-62.7
2 Gainesville	7.5	4.6-11.9	33.3	27.4-39.9	63.9	56.7-70.5
3-1 Cobb-Douglas	6.3	4.1-9.6	25.2	19.9-31.2	58.2	50.2-65.9
3-2 Fulton	8.9	5.6-13.9	26.3	20.9-32.6	56.2	48.2-63.9
3-3 Clayton	9.8	5.2-17.7	30.6	23.8-38.4	47.5	34.7-60.7
3-4 Lawrenceville	11.5	7.9-16.6	25.9	20.9-31.6	54.3	44.4-63.9
3-5 DeKalb	6.0	3.4-10.2	31.4	25.2-38.3	55.1	45.7-64.1
4 LaGrange	14.9	8.7-24.2	38.3	31.9-45.1	51.8	43.4-60.2
5-1 Dublin	13.9	8.4-22.3	45.6	38.1-53.2	57.0	48.6-65.0
5-2 Macon	10.0	6.2-15.7	34.5	29.0-40.5	52.7	44.8-60.5
6 Augusta	11.3	7.6-16.4	44.1	37.7-50.7	62.2	54.0-69.7
7 Columbus	13.5	8.5-20.7	42.1	35.0-49.5	55.3	46.9-63.4
8-1 Valdosta	18.7	13.0-26.2	35.0	29.1-41.5	62.2	53.8-69.9
8-2 Albany	16.1	11.0-23.0	44.6	37.8-51.6	56.5	48.8-63.8
9-1 Savannah	12.3	7.9-18.7	36.9	30.7-43.6	56.9	48.8-64.6
9-2 Waycross	21.3	14.5-30.2	43.9	37.3-50.6	66.4	58.7-73.3
10 Athens	10.8	7.0-16.3	44.5	37.9-51.2	51.1	42.9-59.1

Table 5. Hospitalizations and Charges for Primary Diagnoses of Arthritis Among Adults, Georgia, 2010				
	Number of Hospitalizations	% of Total	Charges ($)	% of Total Charges
Total	24,360	100.0	1,140,692,290	100.0
Sex				
Male	10,189	41.8	480,219,910	42.1
Female	14.171	58.2	660,472,380	57.9
Race				
White	18,335	77.2	867,337,244	77.8
Black	5,427	22.8	248,036,889	22.8
Age				
18-24	208	0.9	6,430,218	0.6
25-34	469	1.9	17,696,205	1.6
35-44	1,239	5.1	57,409,320	5.0
45-54	3,796	15.6	182,917,163	16.0
55-64	7,013	28.8	337,169,182	29.6
65+	11,635	47.8	539,070,202	47.3

Source: Hospital Discharge Data

Table 6. Hospitalizations Due to the Five Most Common Types of Arthritis by Age, Georgia, 2010

Table 6a.			
		Osteoarthritis	
	Total Arthritis hospitalizations	Number of hospitalizations	% total Arthritis hospitalizations
Total	24,360	17281	70.9
Age (Years)			
18-24	208	10	4.8
25-34	469	61	13.0
35-44	1239	397	32.0
45-54	3796	2278	60.0
55-64	7013	5332	76.0
65+	11635	9203	79.1

Table 6b.				
	Gout		Rheumatoid Arthritis	
	Number of hospitalizations	% total Arthritis hospitalizations	Number of hospitalizations	% total Arthritis hospitalizations
Total	252	1.0	180	0.7
Age Group (Years)				
18-24	4	*	6	*
25-34	22	4.7	9	*
35-44	41	3.3	20	1.6
45-54	53	1.4	35	0.9
55-64	132	1.9	37	0.5
65+	4		73	0.6

Table 6b.				
	Systemic Lupus Erythematosus		Fibromyalgia	
	Number of hospitalizations	% total Arthritis hospitalizations	Number of hospitalizations	% total Arthritis hospitalizations
Total	145	0.6	70	0.3
Age Group (Years)				
18-24	24	11.5	3	*
25-34	30	6.4	7	*
35-44	49	4.0	8	*
45-54	27	0.7	22	0.6
55-64	10	0.1	8	
65+	5		22	0.2

Table 7. Demography for Fatal Cases of Arthritis, Georgia, 1999-2008		
	Deaths	
	n	%
Total	2084	100.0
Sex		
Male	700	33.6
Female	1384	66.4
Race		
White	1349	65.5
Black	712	34.6
Age Group (Years)		
18-24	40	1.9
25-34	105	5.0
35-44	144	6.9
45-54	233	11.2
55-64	283	13.6
65+	1279	61.4

Table 8. Distribution of Demographics Among Adults with Doctor-Diagnosed Arthritis, Georgia, 2003, 2005, 2007, and 2009			
	Total		
	n	%	95% CI
Sex			
Male	2,913	41.3	(39.8, 42.8)
Female	6,733	58.8	(57.2, 60.2)
Race/Ethnicity			
White Non-Hispanic	7,205	68.5	(67.0, 70.0)
Black Non-Hispanic	1,893	24.6	(23.3, 26.0)
Hispanics	152	2.7	(2.0, 3.7)
Others	274	4.2	(3.6, 4.9)
Sex by Race/Ethnicity			
White Non-Hispanic Male	2,240	30.4	(29.1, 31.8)
Black Non-Hispanic Male	497	10.4	(9.3, 11.6)
White Non-Hispanic Female	4,965	43.1	(41.8, 44.5)
Black Non-Hispanic Female	1,396	16.0	(15.0, 17.1)
Age Group (Years)			
18-24 yr	74	1.7	(1.3, 2.3)
25-34 yr	318	7.0	(5.9, 8.2)
35-44 yr	873	16.1	(14.9, 17.4)
45-54 yr	1,882	22.0	(20.9, 23.2)
55-64 yr	2,521	23.2	(22.1, 24.3)
65+ yr	3,916	30.1	(28.9, 31.2)
Annual Income			
less Than $15,000	1,682	16.3	(15.3, 17.5)
$15,000-$24,999	1,732	20.4	(19.1, 21.9)
$25,000-$34,999	1,089	12.4	(11.4, 13.3)
$35,000-$49,999	1,169	15.0	(13.9, 16.1)
$50,000-$74,999	1,060	14.0	(13.0, 15.1)
$75,000 or More	1,388	21.9	(20.6, 23.2)
Education			
Did not graduate high school	1,899	17.8	(16.7, 18.9)
Graduated high school	3,123	31.7	(30.4, 33.1)
Some college or technical school	2,348	25.2	(24.0, 26.5)
Graduated college	2,249	25.3	(24.1, 26.5)
Employment Status*			
Employed	3,045	58.1	(56.2, 60.0)
Out of work	321	6.9	(5.9, 8.1)
Homemaker	394	7.3	(6.1, 8.6)
Retired	727	9.8	(8.9, 10.8)
Unable to work	1,128	18.0	(16.6, 19.4)

*Employment status includes those <65 years old

Table 9. Limitations Among Adults with Doctor-Diagnosed Arthritis, Georgia, 2003, 2005, 2007, and 2009			
	Total		
	n	%	95% CI
Limited due to doctor-diagnosed arthritis or joint symptoms			
Yes	4,222	42.5	(41.0, 43.9)
No	5,332	57.5	(56.1,59.0)
Description of doctor-diagnosed arthritis symptoms today			
I can do everything I would like to do	1,497	24.8	(23.3,26.3)
I can do most things I would like to do	3,120	41.7	(40.1,43.3)
I can do some things I would like to do	1,772	23.8	(22.4,25.2)
I can do hard do anything I would like to do	824	9.8	(8.9,10.7)
Doctor-diagnosed arthritis Interfered with Work (2009 Only)			
Yes	595	31.4	(28.1,34.9)
No	1,388	68.6	(65.1,71.9)
Doctor-diagnosed arthritis Interfered with Social Activities			
A lot	407	17.9	(15.8, 20.2)
A little	443	24.1	(20.9, 27.7)
Not at all	1,163	58.0	(54.6, 61.3)

Table 10. Self-Reported of General Health Status Among Adults by Arthritis Status, Georgia, 2003, 2005, 2007, and 2009						
	Doctor-Diagnosed Arthritis			General Population		
	n	%	95% CI	n	%	95% CI
General Health						
Excellent/Very Good	2,884	32.7	(31.4, 34.1)	10,006	61.3	(60.2, 62.4)
Good	3,104	33.5	(32.1, 34.8)	4,984	28.8	(27.8, 29.8)
Fair/Poor	3,588	33.8	(32.4, 35.2)	2,040	9.9	(9.3, 10.5)
Poor Physical Health						
Adequate Physical Health	2,388	53.4	(51.4, 55.4)	3,615	79.1	(77.3, 80.7)
Poor Physical Health	2,387	46.6	(44.6, 48.6)	1,175	21.0	(19.3, 22.7)
Frequent Mental Distress						
No Frequent Mental Distress	1,805	56.5	(54.0, 59.0)	3,593	72.7	(70.9, 74.1)
Frequent Mental Distress	1,456	43.5	(41.0, 46.0)	1,480	27.3	(25.6, 29.1)
Satisfied with Life						
Satisfied or Very Satisfied	6280	91.6	(90.6, 92.5)	11,164	95.5	(94.9, 96.0)
Dissatisfied or Very Dissatisfied	582	8.4	(7.6, 9.4)	533	4.5	(4.0, 5.2)
Emotional Support Provided						
Always and Usually	4906	73.1	(71.6, 74.5)	9,284	79.2	(78.0, 80.4)
Sometimes	1171	17.0	(15.7, 18.3)	1,437	13.3	(12.3, 14.3)
Rarely and Never	724	10.0	(9.1, 10.9)	870	7.5	(6.8, 8.4)

Table 11. Risk Factors Among Adults by Arthritis Status, Georgia, 2003, 2005, 2007, and 2009						
	Doctor-Diagnosed Arthritis			General Population		
	n	%	95% CI	n	%	95% CI
Body Mass Index						
Healthy	2,620	27.4	(26.1, 28.7)	6,625	39.4	(38.3, 40.6)
Overweight	3,320	36.1	(34.7, 37.5)	5,846	36.7	(35.6, 37.8)
Obese	3,271	36.5	(35.1, 37.9)	3,930	23.9	(22.9, 24.9)
PHYSICAL ACTIVITY						
Physically Active	6,017	64.4	(63.0, 65.8)	13,068	78.7	(77.8, 79.6)
Not Physically Active	3,618	35.6	(34.2, 37.1)	4,030	21.3	(20.4, 22.2)
Body Mass Index/Physical Activity						
Healthy Weight Physically Active	1,783	69.8	(67.2, 72.3)	5,255	81.3	(79.9, 82.7)
Healthy Weight Not Physically Active	831	30.2	(27.7, 32.8)	1,359	18.7	(17.3, 20.1)
Overweight Physically Active	2,238	68.7	(66.4, 70.9)	4,571	80.9	(79.3, 82.3)
Overweight Not Physically Active	1,079	31.3	(29.1, 33.6)	1,272	19.2	(17.7, 20.7)
Obese Physically Active	1,769	57.6	(55.2, 59.9)	2,735	72.7	(70.6, 74.7)
Obese Not Physically Active	1,500	42.4	(40.1, 44.8)	1,192	27.3	(25.3, 29.4)
Smoking						
Smoking	1,846	21.9	(20.7, 23.2)	3,322	19.8	(18.9, 20.8)
No Smoking	7,759	78.1	(76.8, 79.3)	13,730	80.2	(79.3, 81.1)

Table 12. Health Care Coverage Among Adults by Arthritis Status, Georgia, 2003, 2005, 2007, and 2009						
	Doctor-Diagnosed Arthritis			General Population		
	n	%	95% CI	n	%	95% CI
Insurance Status						
Health Insurance	8,632	87.9	(86.7, 89.0)	14,459	81.1	(80.0, 82.1)
No Health Insurance	992	12.1	(11.1, 13.3)	2,606	18.9	(17.9, 20.0)
Personal Health Care Provider						
At least 1 Doctor	8,804	88.1	(86.8, 89.3)	13,869	75.4	(74.3, 76.5)
No Doctor	816	11.9	(10.7, 13.2)	3,201	24.6	(23.5, 25.7)
Time Since Last Routine Checkup						
Within past year	5,782	79.6	(78.0, 81.1)	8,479	67.4	(66.0, 68.7)
2 or more years	1,223	20.4	(18.9, 22.0)	3,449	32.6	(31.3, 34.0)
Financial Barrier to Visiting Doctor						
Financial Barrier	1,621	19.2	(17.9, 20.5)	2,400	15.7	(14.8, 16.6)
No Financial Barrier	7,983	80.8	(79.5, 82.1)	14,679	84.4	(83.4, 85.2)

Table 13. Co-morbidities Among Adults by Arthritis Status, Georgia, 2003, 2005, 2007, and 2009						
	Doctor-Diagnosed Arthritis			General Population		
Condition	n	%	95% CI	n	%	95% CI
Diabetes	9,634	18.4	(17.3, 19.4)	17,107	5.7	(5.2, 6.2)
Current Asthma	9,555	11.5	(10.6, 12.5)	17,042	5.8	(5.3, 6.4)
Angina	9,365	9.0	(8.3, 9.8)	16,822	2.2	(1.9, 2.4)
Stroke	9,517	5.9	(5.3, 6.6)	16,896	1.4	(1.2, 1.6)
Heart Attack	9,480	8.7	(8.0, 9.5)	16,869	2.3	(2.0, 2.7)
High Blood Cholesterol	8,770	50.2	(48.7, 51.7)	13,817	29.0	(27.9, 30.0)
High Blood Pressure	9,584	52.0	(50.5, 53.4)	17,043	21.2	(20.4, 22.1)

Table 14. Disability Among Adults by Arthritis Status, Georgia, 2003, 2005, 2007, and 2009						
	Doctor-Diagnosed Arthritis			General Population		
	n	%	95% CI	n	%	95% CI
Use Equipment for Disability						
Yes	1,961	18.3	(17.3, 19.4)	613	2.6	(2.3, 2.9)
No	7,673	81.7	(80.6, 82.7)	16,484	97.4	(97.1, 97.7)
Activity Limitations due to Disability						
Yes	4,231	41.7	(40.3, 43.2)	2,098	10.3	(9.7, 11.0)
No	5,355	58.3	(56.9, 59.7)	14,939	89.7	(89.0, 90.3)
Disabled (Both)						
Yes	4,570	45.0	(43.5, 46.4)	2,294	11.0	(10.4, 11.7)
No	5,027	55.0	(53.6, 56.5)	14,745	89.0	(88.3, 89.6)

Table 15. Disability by Body Mass Index Among Adults by Arthritis Status, Georgia, 2003, 2005, 2007, and 2009

	Doctor-Diagnosed arthritis			General Population		
	n	%	95% CI	n	%	95% CI
Use Equipment for Disability						
Healthy Weight	2,605	40.9	(38.3, 43.6)	6,591	9.8	(8.8, 10.8)
Overweight	3,307	40.3	(37.9, 42.6)	5,819	10.8	(9.7, 12.0)
Obese	3,255	53.1	(50.6, 55.5)	3,920	14.2	(12.7, 15.7)
Activity Limitations due to Disability						
Healthy Weight	2,603	37.6	(35.0, 40.3)	6,591	9.3	(8.4, 10.3)
Overweight	3,303	37.6	(35.3, 39.4)	5,819	10.1	(9.0, 11.2)
Obese	3,252	49.3	(46.9, 51.7)	3,920	13.1	(11.7, 14.6)
Disabled (Both)						
Healthy Weight	2,616	14.3	(12.6, 16.2)	6,617	2.2	(1.8, 2.7)
Overweight	3,315	15.7	(14.1, 17.5)	5,839	2.4	(2.0, 3.0)
Obese	3,268	23.5	(21.5, 25.5)	3,926	3.6	(2.9, 4.3)

Table 16. Arthritis Management Interventions Among Adults with Doctor-Diagnosed Arthritis, Georgia, 2003, 2005, and 2007

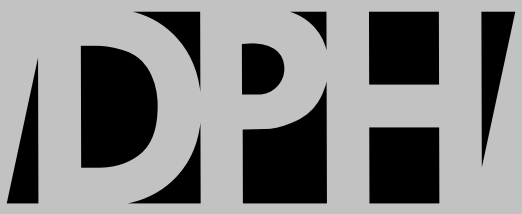
	Doctor-Diagnosed Arthritis		
	n	Percent	95% CI
Doctor suggested losing weight for arthritis	7,206	32.3	(30.9,33.9)
Doctor suggested exercise for arthritis	7,175	54.2	(52.6,55.8)
Doctor suggested lose weight and exercise for arthritis	7,138	26.7	(25.3, 28.2)
Taken an educational course to manage arthritis	7,228	10.5	(9.5,11.7)

Table 17. Arthritis Management Interventions by Demography Among Adults with Doctor-Diagnosed Arthritis, Georgia, 2003, 2005, and 2007

	Doctor suggested losing weight for arthritis management			Doctor suggested exercise for arthritis management			Taken an arthritis Education Course		
	n	%	95% CI	N	%	95% CI	n	%	95% CI
BMI									
Healthy Weight	2,006	7.4	(6.0, 9.1)	1,996	45.6	(42.5, 48.7)	2,006	11.0	(9.0, 13.4)
Overweight	2,472	22.8	(20.6, 25.3)	2,463	49.8	(47.0, 52.6)	2,481	8.7	(7.3, 10.3)
Obese	2,416	60.4	(57.6, 63.1)	2,403	64.6	(61.9, 67.3)	2,427	11.8	(10.0, 14.0)
Sex									
Male	2,167	28.4	(25.9, 31.1)	2,161	49.0	(46.1, 51.9)	2,180	10.4	(8.6, 12.6)
Female	5,039	35.1	(33.4, 36.9)	5,014	57.9	(56.0, 59.7)	5,048	10.6	(9.5, 11.8)
Race/Ethnicity									
White non-Hispanic	5,442	30.1	(28.5, 31.8)	5,420	53.2	(51.4, 55.0)	5,459	9.1	(8.2, 10.2)
Black non-Hispanic	1,367	38.0	(34.4, 41.8)	1,362	57.3	(53.3, 61.2)	1,369	13.8	(11.1, 17.1)
Age									
18-44	1,023	28.8	(25.2, 32.7)	1,023	47.6	(43.5, 51.8)	1,026	11.7	(9.0, 15.1)
45-64	3,328	35.4	(33.4, 37.5)	3,316	58.1	(55.9, 60.3)	3,338	11.1	(9.8, 12.6)
65+	2,812	30.9	(28.7, 33.2)	2,794	54.1	(51.6, 56.5)	2,821	8.6	(7.4, 10.0)

Table 18. Prevalence Rates of Systemic Lupus Erythematosus, Fulton and DeKalb Counties, Georgia, 2002						
		Definite Cases				
Race/Sex	Population	Cases	Crude Rate	95% CI	Age-adjusted Rate	95% CI
Total	1,552,970	1,153	74.2	(70.1, 78.7)	72.8	(68.6, 77.3)
Black	765,475	889	116.1	(108.8, 124.0)	118.5	(129.4, 127)
Female	408,642	806	197.2	(184.1, 211.3)	196.2	(182.6, 210.7)
Male	356,833	83	23.3	(18.8, 28.8)	23.7	(18.5, 31.3)
White	720, 292	251	34.8	(30.8, 39.4)	32.7	(28.8, 37.2)
Female	352,914	222	62.9	(55..2, 71.7)	59.0	(51.4, 67.5)
Male	367, 378	29	7.9	(5.5, 11.3)	7.5	(5.0, 11.2)
		Definite and Probable Cases				
Race/Sex	Population	Cases	Crude Rate	95% CI	Age-adjusted Rate	95% CI
Total	1,552,970	1,345	86.6	(82.1, 91.4)	85.8	(81.2, 90.5)
Black	765,475	1,021	133.4	(125.5, 141.8)	138.0	(129.4, 147.2)
Female	408,642	922	225.6	(211.5, 240.6)	226.6	(211.9, 242.3)
Male	356,833	99	27.7	(22.8, 33.8)	29.2	(23.3, 37.4)
White	720, 292	311	43.2	(38.6, 488.2)	40.7	(36.3, 45.7)
Female	352,914	276	78.2	(69.5, 88.0)	73.3	(64.9, 82.7)
Male	367, 378	35	9.5	(6.9, 13.2)	9.4	(6.4, 13.5)

Table 19. Average Annual Incidence Rates of Systemic Lupus Erythematosus, Fulton and Dekalb Counties, Georgia, 2002-2004						
		Definite Cases				
Race/Sex	Population	Cases	Crude Rate	95% CI	Age-adjusted Rate	95% CI
Total	4,742,264	266	5.6	(5.0, 6.3)	5.6	(4.9, 6.3)
Black	2,321,302	196	8.4	(7.3, 9.7)	8.6	(7.4, 9.8)
Female	1,239,819	168	13.6	(11.7, 15.8)	13.4	(11.4, 15.7)
Male	1,081,483	28	2.6	(1.8, 3.7)	3.0	(1.9, 5.2)
White	2,210,389	62	2.8	(2.2, 3.6)	2.7	(2.0, 3.5)
Female	1,082,131	53	4.9	(3.7, 6.4)	4.7	(3.5, 6.2)
Male	1,128,258	9	0.8	(0.4, 4.5)	0.7	(0.3, 1.5)
		Definite and Probable Cases				
Race/Sex	Population	Cases	Crude Rate	95% CI	Age-adjusted Rate	95% CI
Total	4,742,264	332	7.0	(6.3, 7.8)	6.9	(6.1, 7.7)
Black	2,321,302	245	10.6	(9.3, 12.0)	10.7	(9.3, 12.0)
Female	1,239,819	215	17.3	(15.2, 19.8)	17.0	(14.7, 19.5)
Male	1,081,483	30	2.8	(1.9, 4.0)	3.3	(2, 5.4)
White	2,210,389	77	3.5	(2.8, 4.4)	3.3	(2.6, 4.2)
Female	1,082,131	66	6.	(4.8, 7.8)	5.8	(4.5, 7.5)
Male	1,128,258	11	1.0	(0.5, 1.7)	0.8	(0.4, 1.7)



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