

Georgia

Arthritis

Report

The Burden of Arthritis **in Georgia**
The Georgia Arthritis **Action Plan**



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Table of Contents

PART I

Introduction to Report

03 Acknowledgements

03 A Word to Volunteers

04 Executive Summary

04 Background

PART II

The Burden of Arthritis in Georgia

06 Introduction

06 Content of Report

06 What is Arthritis?

06 Source of Information

07 Data and Statistics

07 Highlights

09 Arthritis Prevalence

13 Health & Quality of Life

- Impact

- Hospitalizations

- Deaths

15 Conclusions

16 Appendices

16 Appendix A: Definitions

18 Appendix B: Technical Notes

18 Appendix C: Abbreviations

PART III

The Georgia Arthritis Action Plan

20 Partnerships, Collaboration, and Plan Development

21 Surveillance and Evaluation

23 Communication and Education

24 Programs, Policies, and Systems

31 Progress on Interventions

34 Appendices

34 Appendix A: Georgia Arthritis Action Plan Steering Committee Members

35 Appendix B: Georgia Arthritis Action Plan Partners

35 Appendix C: Columbus Area Partnerships and Local Pilot Program Sponsors



■ The Arthritis Foundation, Georgia Chapter and the Georgia Department of Human Resources, Division of Public Health are pleased to share with you the 2002 Georgia Arthritis Report and Georgia Arthritis Action Plan. The document contains current information on the prevalence of arthritis and its impact on Georgians' health and presents a plan to address the burden of pain and disability that arthritis imposes upon our citizens. This initiative has been funded by a grant from the Centers for Disease Control and Prevention (CDC). Georgia is one of eight states to receive funding to develop and implement model interventions and conduct epidemiological studies on arthritis.

Arthritis includes over 100 different conditions that affect the joints and other connective tissues. According to data collected through the Behavioral Risk Factor Surveillance System (BRFSS), one out of three Georgians over the age of 18—or 1.8 million residents—has arthritis. Contrary to popular stereotype, 57% of persons with arthritis are younger than 55 years old. Arthritis causes significant pain, suffering, and discomfort, which contributes to lost productivity, premature withdrawal from the workforce, hospitalization, and growing health care costs. Arthritis is a serious public health problem. If action is not taken now to address it, arthritis will only get worse as the population of Georgia ages.

This document provides reliable information and sound recommendations to address the problem of arthritis in Georgia. It supports the provision of community, patient, family, and health care provider education on arthritis and outlines strategies to improve quality of care and access to it. Additionally, the plan promotes physical activity and active self-management for adults with arthritis. Through collaborative efforts, Georgia can mobilize concerned citizens and resources to implement this plan and reduce the burden of arthritis.

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■ The Arthritis Foundation, Georgia Chapter and Georgia Department of Human Resources, Division of Public Health wish to acknowledge the many individuals, groups, associations, organizations, agencies, and corporations who gave their time, money, and talent to support the Georgia Arthritis Action Plan and 2002 Georgia Arthritis Report. This plan was established to eliminate barriers and challenges that have made it difficult for Georgians to receive the care and education necessary to live better lives with arthritis and other related conditions.

A Word to Volunteers

■ Considerable effort has been exerted by a volunteer group of various teams, committees, and professionals from diverse backgrounds. In addition to their already busy schedules, these dedicated individuals have put in long hours on this project—meeting, researching, planning, and documenting. They all share a common goal of reaching the arthritis community in Georgia with grassroots messages of help, hope, and empowerment.

Executive Summary

■ Arthritis is the general term that refers to over 100 different conditions that affect the joints, bones, and muscles; it can also affect the internal organs, eyes, and skin. Some of the most common forms of arthritis are osteoarthritis, rheumatoid arthritis, lupus, and fibromyalgia.

Currently, 43 million Americans have some form of arthritis. This number will grow to 60 million by the year 2020. Arthritis is a leading cause of disability in the United States. The public health approach to the burden of arthritis was outlined in the National Arthritis Action Plan, developed in 1999 by the Centers for Disease Control and Prevention (CDC), the National Arthritis Foundation, and the Association of State and Territorial Health Officials; the establishment of state arthritis programs funded by the CDC followed. Georgia was one of eight states to receive funding to prepare a state plan, conduct surveillance and epidemiological studies, increase public awareness of arthritis, and develop and test interventions for persons with arthritis.

This report presents the most recent surveillance data on the burden of arthritis in Georgia, the Georgia Arthritis Action Plan, and a description of the successful pilot of a community-based physical activity intervention for persons with arthritis.

Background

■ In September 1999, the Centers for Disease Control and Prevention awarded a grant to the Chronic Disease Prevention and Health Promotion Branch within the Division of Public Health (DPH) to address the burden of arthritis. Georgia's application was developed in a formal partnership with the Arthritis Foundation, Georgia Chapter (AF-GC). AF-GC and DPH forged a strong bond prior to the availability of CDC funding. This partnership began in fall 1997 when AF-GC sought information about the burden of arthritis in Georgia to develop its six-year action plan. This request stimulated the initiation of the first efforts in Georgia to conduct surveillance on arthritis. The DPH included the arthritis module in the 1998 Behavioral Risk Factor Surveillance System Survey (BRFSS). The results were published as the 2000 Georgia Arthritis Report, the first in the nation. This report provided information on the burden of arthritis in Georgia, including prevalence, impact and behavioral characteristics, lifestyle and prevention, medical care, and arthritis management. The data findings provided the basis for the Georgia Arthritis Action Plan's goals and objectives.

Beginning in 1999, the AF-GC received three years of funding from the Robert W. Woodruff Foundation, Inc. to conduct surveillance studies, develop a statewide communication plan, and develop a community-focused intervention. In the same year, the DPH received federal funding from the CDC to establish a state arthritis program. A management team with representatives from the Division of Public Health's Chronic Disease Prevention and Health Promotion Branch; the Division of Public Health's Epidemiology Branch; the Division of Aging Services; and the Arthritis Foundation, Georgia Chapter, has provided oversight of program activities since inception in 1999. A larger steering committee (see appendix) consisting of the management team and key stakeholders, led efforts to develop and implement the community-based intervention, professional education programs, special epidemiological studies, and the state plan.

The steering committee established the following guiding principles for the state plan:

- Eliminate the disparity that exists in racial and socio-economic segments of Georgia's population through targeted and customized interventions.
- Build arthritis capacity and competency into the Georgia public health infrastructure.
- Modify Georgia health care systems to better meet the needs of people with arthritis.

Five work groups, each comprised of different stakeholders and addressing a specific area of concern, established the framework upon which the state plan and community-based intervention are based. The work groups focused on community awareness, health care providers, patient and family education, physical activity, and surveillance and evaluation.

Staff of the DPH and the AF-GC produced the final version of the Georgia Arthritis Action Plan presented in this report, based on the work groups' efforts and on the guidelines presented in the National Arthritis Action Plan and the goals and objectives contained in Healthy People 2010.

The Burden of Arthritis **in Georgia**

INTRODUCTION

CONTENT OF REPORT

■ This report reviews the prevalence of arthritis in Georgia within specific demographic groups including age, race, sex, and geography. The report also addresses disease awareness and compares Georgians with and without arthritis in terms of inactivity, weight, health status, employment, and measures of quality of life. Finally, the report offers information about the hospitalizations and hospital charges for arthritis in Georgia, information on people hospitalized with arthritis, and deaths due to arthritis.

WHAT IS ARTHRITIS?

■ Arthritis is a word used in many different ways by many different people. Technically, arthritis is inflammation of the joint or joints; in practice, it commonly includes more. The twelfth edition of *The Primer on Rheumatic Diseases*, an Arthritis Foundation publication, identifies more than 100 different types of arthritis. Although a few of these conditions do not actually cause inflammation of the joints, they share the ability to cause pain, aching, stiffness, or swelling in or around joints. For the purposes of this report, these conditions defined as “arthritis and other related conditions” are termed “arthritis.”

In 1998, arthritis affected nearly 43 million Americans, including more than 1.8 million Georgians. In addition, arthritis is a leading cause of disability in the United States, limiting activities for more than seven million Americans. Besides the physical toll, arthritis cost the country \$65 billion in 1992 with direct medical costs at \$15 billion and indirect costs due to lost wages at \$50 billion.¹

The proper diagnosis and management of arthritis can prevent or reduce long-term effects such as disability and poor quality of life. To maximize quality of life, however, people with joint problems need to understand their condition and actively participate in their own disease management.

SOURCE OF INFORMATION

■ The Behavioral Risk Factor Surveillance System (BRFSS) telephone survey is an ongoing data collection tool utilized by the Division of Public Health to collect information about important public health issues such as smoking, physical activity, and diet. The Centers for Disease Control and Prevention provides support and assistance with the BRFSS.

Beginning in 1998, questions about arthritis were included on the Georgia BRFSS² and have since been included on an annual basis. In 2000, a random sample of 4,114 adult Georgians, ages 18 and over, participated in this survey. Statewide estimates, including the information in this report, are based on their responses.³

In 2000, the first Georgia Arthritis Report was published based on findings from the 1998 BRFSS. Since the analysis and release of that data, the Arthritis Foundation, Georgia Chapter and Division of Public Health have continued to track arthritis prevalence statistics on a regular basis.

Information from two other data sources is also reviewed for arthritis, including hospital discharge data for 2000 from non-federal acute care hospitals in Georgia and 1995 – 1998 death certificate data. The Georgia Hospital Association provides hospital discharge data to the Division of Public Health's Office of Health Information and Policy on an annual basis. The Division of Public Health's Vital Statistics Branch compiled death certificate data.

¹ Yelin E., Callahan L. (1995). The Economic Cost and Social and Psychological Impact of Musculoskeletal Conditions. *Arthritis and Rheumatism*, 38: 1351-1362.

² Specific questions from the Arthritis Module are shown in the appendix.

³ This is a telephone health survey of adults, so the results do not reflect the impact arthritis has on children 17 or younger.

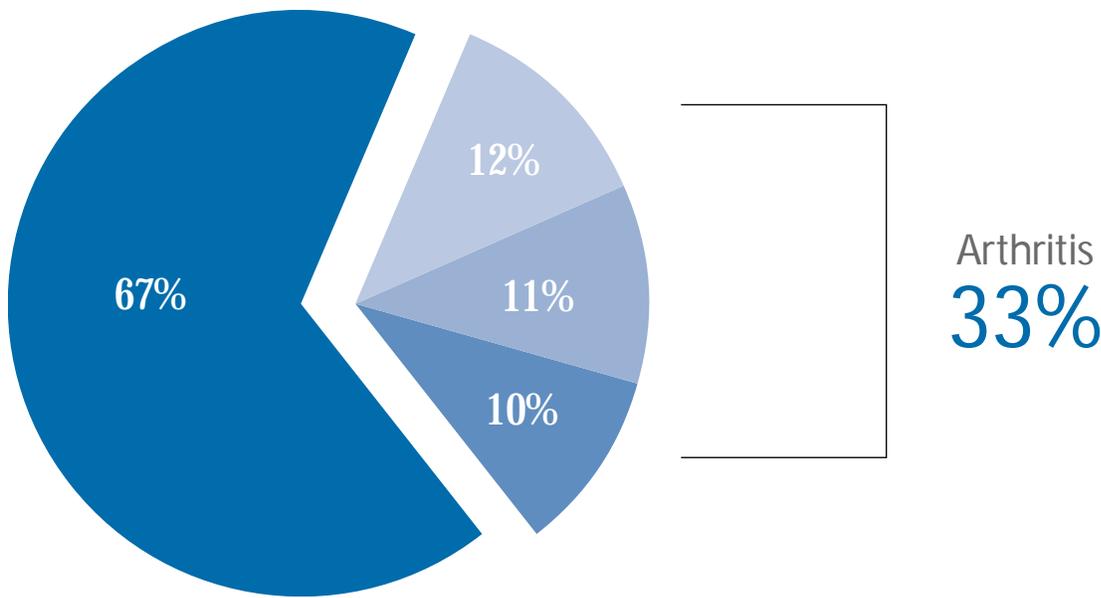
DATA AND STATISTICS

HIGHLIGHTS

■ Results from the 2000 BRFSS show that arthritis is a major public health issue in the state, affecting one out of every three (33%) adults (Figure 1).

The 33% of people with arthritis includes 12% who have been told by a physician they have arthritis and report chronic joint symptoms described as pain, aching, stiffness, or swelling in or around a joint on most days for at least one month over one year. Another 11% have been told by a physician they have arthritis, but do not report chronic joint symptoms at this time, and 10% have not been told by a physician they have arthritis, but do report chronic joint symptoms.

figure 3



Percentage of Adult Georgians with Arthritis, 2000

12%

Physician Diagnosed Arthritis, Chronic Joint Symptoms

11%

Physician Diagnosed Arthritis, No Chronic Joint Symptoms

10%

No Physician Diagnosed Arthritis, Chronic Joint Symptoms

Based on the 2000 Georgia BRFSS:

- Arthritis is more common in whites (35%) than blacks (28%).
- Arthritis is more common in women (36%) than men (30%).
- Arthritis is more common in non-metropolitan areas of Georgia (38%) than in Atlanta (31%) and other metropolitan areas (31%).
- People with arthritis report being inactive and being obese more than people without arthritis.
- People with arthritis are more likely to report days of poor mental health and/or physical health when compared to others.
- People with arthritis are five times more likely to be unable to work than others.
- People with arthritis are more likely to feel sad, stressed, tired, and in poor health compared to those without arthritis.
- People with arthritis are three times more likely than others to have their regular activities affected by pain.

33% of adult Georgians-about 1.8 million people-have arthritis.

- 57% are younger than 55 years old.
- 68% do not know the type of their condition.
- 75% are not currently under a physician's care for arthritis.

Based on the 2000 hospital discharge data for Georgia :

- » Total hospital charges for arthritis hospitalizations exceeded \$317 million.
- » The average length of stay for these hospitalizations was 4.5 days.
- » About half of arthritis hospitalizations were due to osteoarthritis and other related conditions.

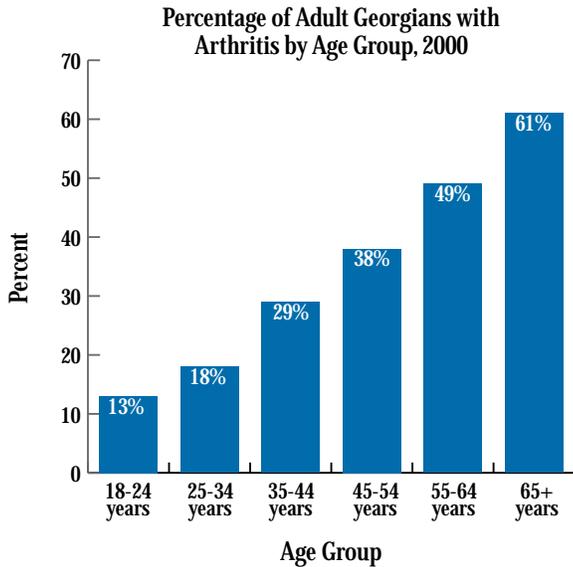
Based on 1995-1998 death certificate data for Georgia

- » The average number of deaths due to arthritis was 248 per year.

DATA AND STATISTICS

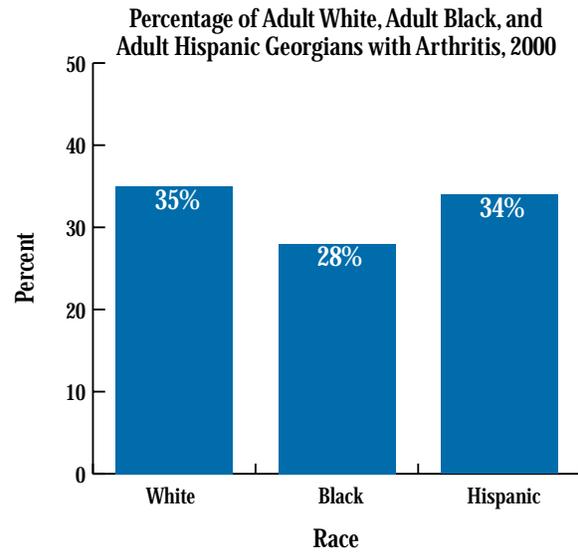
ARTHRITIS PREVALENCE AMONG DEMOGRAPHIC SECTORS

■ Arthritis affects people of all ages, both sexes, and all race and ethnic groups. However, some groups are more likely to be affected than others.



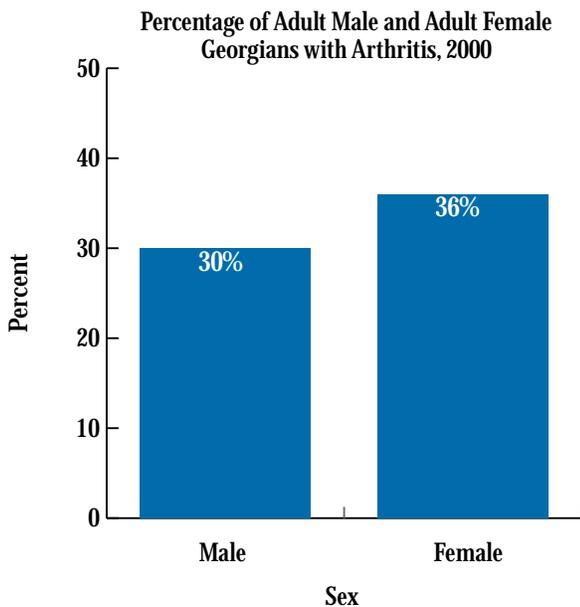
age | figure 2

Older Georgians are more commonly affected by arthritis. The prevalence of people with these conditions increases with age, rising from 13% among 18-24 year olds, to 61% among those 65 years old and older.



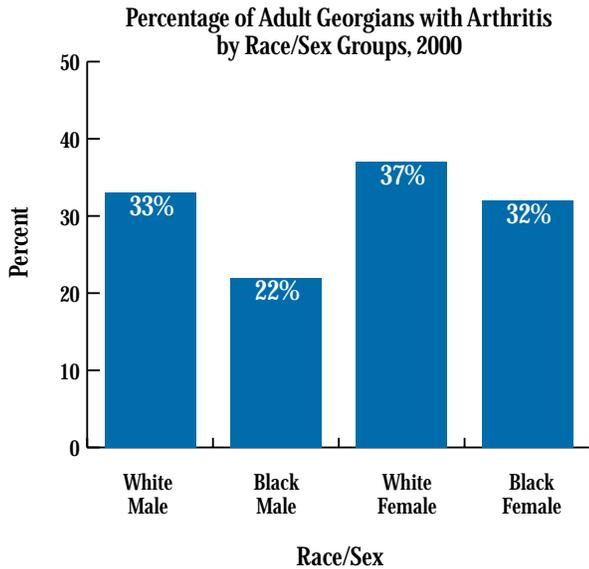
race | figure 3

Arthritis affects all race and ethnic groups; however whites (35%) are more likely to report having arthritis than blacks (28%). No statistical differences were found when comparing Hispanics (34%) to whites or blacks.



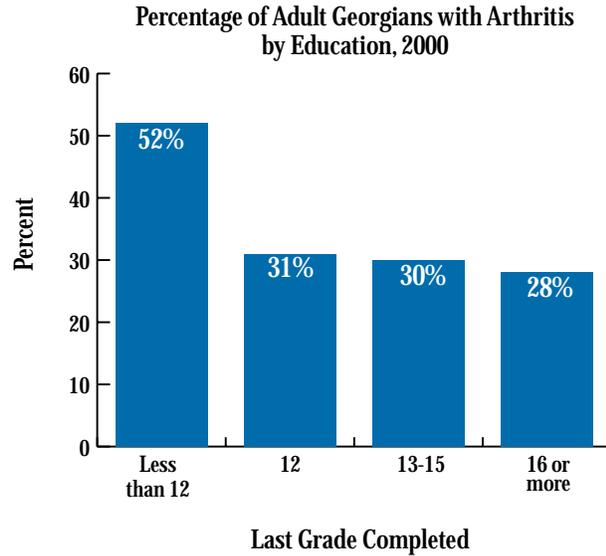
sex | figure 4

Though arthritis affects both sexes, women are more likely to have this condition than men. Among females, 36% have arthritis, compared with 30% of the male population.



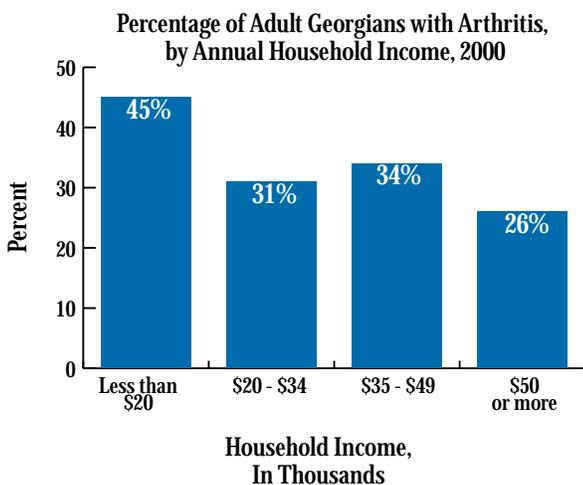
race/sex | figure 5

Among race/sex groups, white females are most likely to be affected with arthritis (37%). White males (33%) are next most likely to be affected.



education | figure 6

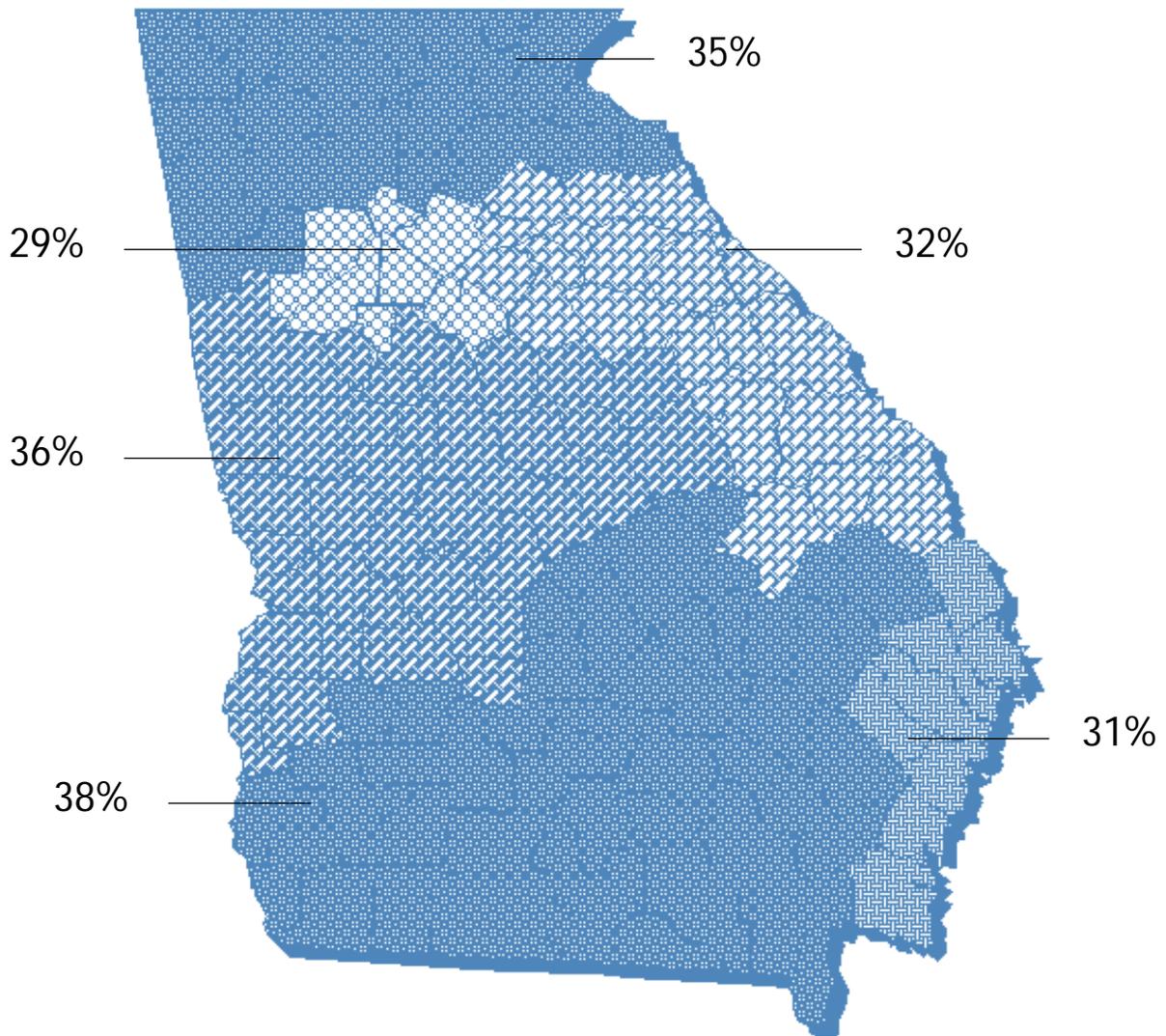
Over half (52%) of people with less than a 12th grade education have arthritis. Among people with a minimum of 12th grade education, 28% to 31% have arthritis.



income | figure 7

People with less than \$20,000 a year in household income have the highest prevalence of arthritis at 45%. Households with higher income levels have lower percentages, between 26% and 34%.

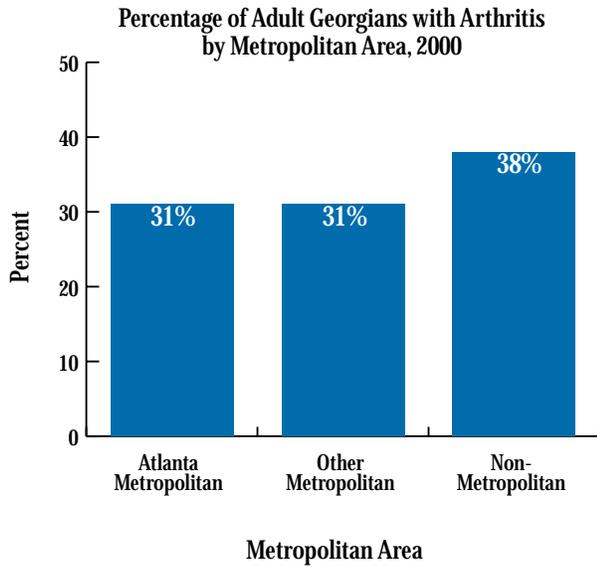
Percentage of Adult Georgians with Arthritis, by Geographic Region, 2000



geography | figure 8

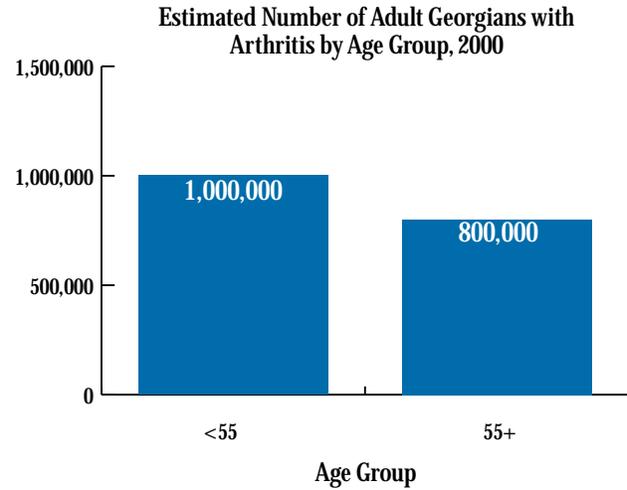
The prevalence of arthritis in Georgia ranges from 29% to 38% throughout regions of the state. In general, prevalence rates are lowest in the Atlanta area and highest in the southern region of the state.

Atlanta	29%
Coast	31%
Northeast	32%
North	35%
Midwest	36%
South	38%



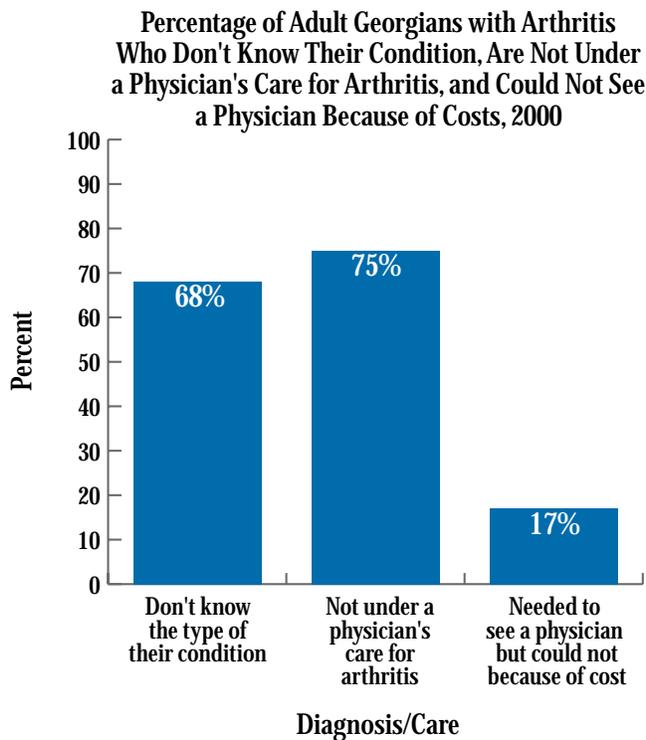
metropolitan areas | figure 9

Residents of non-metropolitan areas in Georgia are more commonly affected with arthritis (38%) than residents of metropolitan Atlanta (31%) and other metropolitan areas (31%).



1.8 million Georgians | figure 10

An estimated 1.8 million adult Georgians have arthritis. Despite the fact that older people as a group are more likely to be affected than younger people, 57% of the people with arthritis in the state of Georgia are less than 55 years old.



arthritis awareness and access to care | figure 11

Among people with arthritis, 68% do not know what type of arthritis they have, and 75% are not under a physician's care for their arthritis. In addition, 17% of those with arthritis needed to see a physician but could not afford medical care. This indicates that although treatments are available that can help-and in some cases cure-certain types of arthritis, some people are experiencing unnecessary pain and disability because they do not know enough about their disease and are not receiving adequate health care.

DATA AND STATISTICS

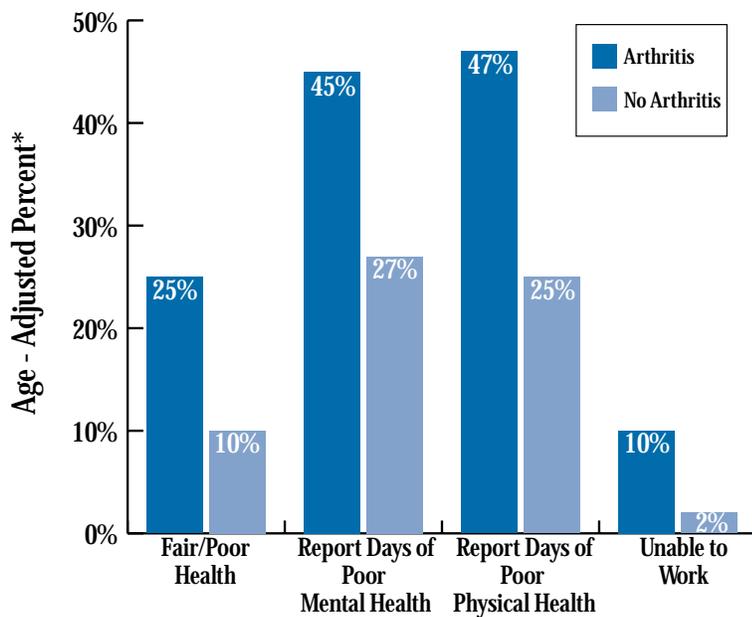
HEALTH & QUALITY OF LIFE STATISTICS

■ Because arthritis affects quality of life as well as physical and mental health, the fact that one in three adult Georgians has arthritis constitutes an important statewide public health issue. Findings in this section of the report compare the impact of arthritis and health behaviors of people with arthritis to those without arthritis.⁴

impact

Arthritis is a leading cause of disability in the United States, limiting everyday activities for seven million Americans and adversely affecting the physical and mental health of people with arthritis. Limitations in activity will, according to projections, increase from the current 2.8% of the entire U.S. population to 3.6% of the population by 2020, or 11.6 million people.⁵

Impact of Arthritis on Measures of Health and Ability to Work Among Adult Georgians, 2000



*Age-adjusted to U.S. 2000 standard population

⁴Statistics are age-adjusted to the 2000 adult (18 years and older) projected population of the United States.
⁵Praemer A., Furner S., & Rice D. (1999). *Musculoskeletal Conditions in the United States*. Illinois: American Academy of Orthopedic Surgeons.

impact and measures of health and ability to work

| figure 12

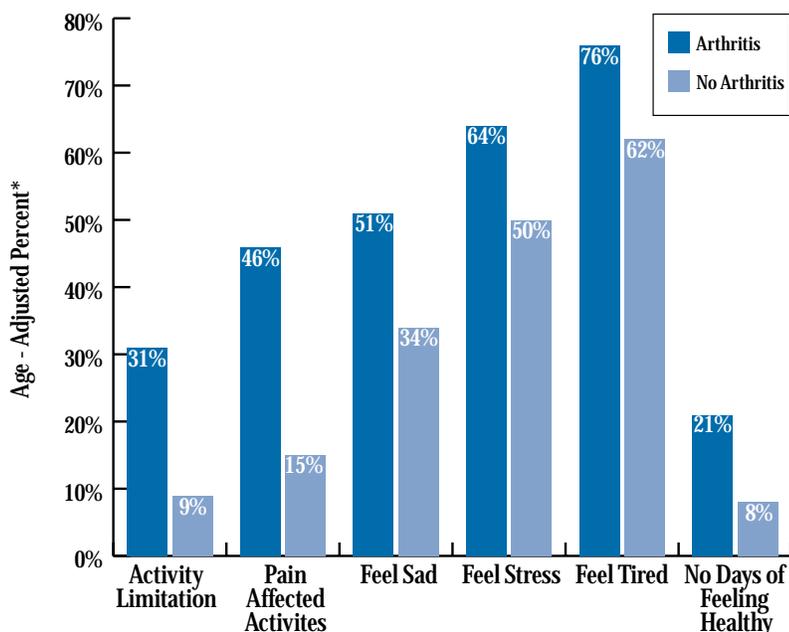
Among adult Georgians with arthritis, the age-adjusted prevalence of fair or poor health (versus good or excellent health) is 25% (Figure 12). This is two-and-a-half times what people without arthritis report (10%).

Further, almost half of all people with arthritis report days when mental health is poor and days when physical health is poor compared with only one fourth of people without arthritis.

The percentage of people with arthritis who remain in the workforce is lower than those without the condition. Statewide, people with arthritis are five times more likely to be unable to work than others in the population (10% vs. 2%).

Comparing blacks and whites with arthritis, blacks are more likely to report fair or poor health (35% vs. 21%), days of poor physical health (56% vs. 43%) and inability to work (18% vs. 7%); the percentage reporting days of poor mental health was not significantly different (49% vs. 42%). (Data not shown.)

Impact of Arthritis on Quality of Life Among Adult Georgians, 2000



*Age-adjusted to U.S. 2000 standard population

impact and quality of life | figure 13

Arthritis can reduce quality of life. Compared to adult Georgians without arthritis, adult Georgians with arthritis are more likely to report that their activities are limited because of a health problem (31% vs. 9%) and to report that they have days when their activities are affected by pain (46% vs. 15%). In addition, adult Georgians with arthritis are more likely to report that they have days when they feel sad, stressed, tired, or unhealthy.

inactivity and obesity | figure 14

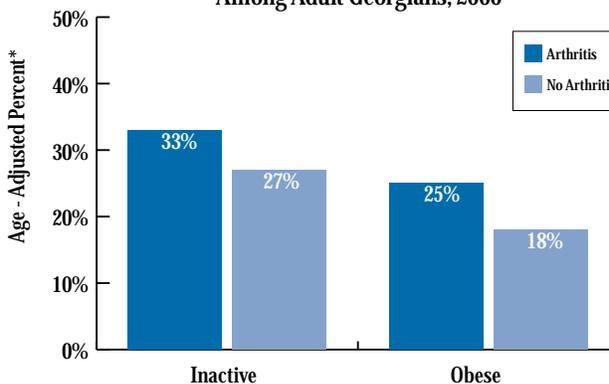
The level of discomfort and disability people with arthritis regularly experience is directly influenced by everyday behaviors. For most types of arthritis, regular physical activity and maintaining an appropriate body weight can be helpful in keeping arthritis-related discomfort to a minimum, while maximizing physical ability.

Results from the BRFSS, however, indicate that people with arthritis are more likely to be inactive when compared to others. The age-adjusted prevalence of inactivity is 33% among those with arthritis, compared to 27% of others in the population.

Among those with arthritis, 25% are obese, while only 18% of those without arthritis have the same problem.

Comparing blacks and whites with arthritis, blacks are more likely to be inactive (40% vs. 28%) and obese (35% vs. 23%). (Data not shown.)

Inactivity and Obesity Status Among Adult Georgians, 2000



*Age-adjusted to U.S. 2000 standard population

hospitalizations

At non-federal acute care hospitals in Georgia in 2000, there were 16,842 hospitalizations for Georgia residents with a primary diagnosis of arthritis. Total charges for these hospitalizations exceeded \$317 million with the average length of stay lasting about 4.5 days.

Of all hospitalizations for arthritis and other related conditions, 61% were for females and almost half (47%) were for persons 65 years of age and older. Osteoarthritis accounted for 54% of all arthritis hospitalizations.

deaths

From 1995 through 1998, a total of 991 Georgia residents died from arthritis, an average of 248 deaths per year. Of the 991 deaths, 322 (32%) were due to diffuse connective tissue diseases and 214 (22%) were due to rheumatoid arthritis. Of those dying, 70% were female and 59% were 65 years of age and older.

CONCLUSIONS

■ Data from the 2000 BRFSS confirms that arthritis continues to be a major public health issue. Affecting one out of three adults – or 1.8 million people – the everyday pain of arthritis dramatically impacts the quality of life for Georgians. They report worse physical and mental health, pain, restricted activity, and the inability to continue contributing to the workforce.

The data in this report also raise concerns about access to medical care and treatment for those with arthritis. Sixty-eight percent of people with arthritis do not know what type of arthritis they have, 75% are not under a doctor's care for their arthritis, and 17% have been unable to receive care due to cost-related issues.

Through awareness, education, and action, the serious problems depicted in this data can change. Advances in the management and treatment of arthritis make it possible to stop or reduce disease progression and maintain physical function. However, it is vital for patients to learn about their condition and treatment options, to participate in self-management and prevent further deterioration, and to relieve the symptoms resulting from arthritis. Regular physical activity and maintaining an appropriate body weight, as approved by individual physicians and recommended by the Arthritis Foundation, should be incorporated into individual treatment plans to provide control and relief of symptoms.

The state Arthritis Program and the Arthritis Foundation, Georgia Chapter work together to promote education, self-management, treatment, and physical activity to help people with arthritis take control. The Arthritis Foundation, Georgia Chapter and the Division of Public Health want to ensure that dissemination of information about arthritis leads to wider adoption of physical activity and self-management so that future reports assessing the impact of arthritis in Georgia will reflect an improved quality of life for Georgians who battle the daily pain, fatigue, and discomfort of arthritis.

APPENDICES

APPENDIX A:

DEFINITIONS FROM THE BRFSS

Age-adjusted prevalence

Prevalence calculated in a manner that allows for the comparison of prevalence derived from populations with different age structures. When comparing persons with and without arthritis, the prevalence estimates are age-adjusted because the average age of persons with arthritis is older than the average age of persons without arthritis.

Activity limitation

Respondents who answered “yes” when asked, “Are you limited in any way in any activities because of any impairment or health problem?”

Arthritis and other related conditions (BRFSS)

Respondents were asked:

- 1) During the past 12 months, have you had pain, aching, stiffness, or swelling in or around a joint?
- 2) Were these symptoms present on most days for at least one month?
- 3) Have you ever been told by a doctor that you have arthritis?

Respondents were categorized as having arthritis and other related conditions if they responded “yes” to questions one and two or “yes” to question three.

Arthritis and other related conditions (death certificate and hospital discharge data)

Death certificate and hospital discharge records with a primary diagnosis of arthritis or other related conditions were selected. Arthritis and other related conditions were identified using the approximately 600 ICD9-CM codes established by the National Arthritis Data Workgroup. Arthritis diagnoses were grouped into ten categories: soft tissue disorders; joint pain effusion and other unspecified joint disorders; osteoarthritis and allied disorders; rheumatoid arthritis; myalgia/myositis, unspecified; carpal tunnel syndrome; spondylosis, spondylitis, and allied disorders; diffuse connective tissue disease; gout and other crystal arthropathies; and other specified rheumatic conditions.

Days of poor mental health

Respondents who answered anywhere between “1-30 days” when asked, “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?”

Days of poor physical health

Respondents who answered anywhere between “1-30 days” when asked, “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?”

Feel sad

Respondents who answered anywhere between “1-30 days” when asked, “During the past 30 days, for about how many days have you felt sad, blue, or depressed?”

Feel stress

Respondents who answered anywhere between “1-30 days” when asked, “During the past 30 days, for about how many days have you felt worried, tense, or anxious?”

Feel tired

Respondents who answered anywhere between “1-30 days” when asked, “During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?”

Fair to poor health

Respondents who answered “fair” or “poor” when asked, “Would you say that in general your health is excellent, very good, good, fair, or poor?”

Inactive

Respondents who report not participating in non-occupational physical activity in the past 30 days.

Needed to see a physician, but could not because of costs

Respondents who answered “yes” when asked, “Was there a time during the last 12 months when you needed to see a doctor, but could not because of the cost?”

No days of feeling healthy

Respondents who answered “none” when asked, “During the past 30 days, for about how many days have you felt very healthy and full of energy?”

Obesity

Based on body mass index (BMI). Body mass index is computed as weight in kilograms divided by height in meters squared (weight/height²). Obesity is defined as having a body mass index greater than or equal to 30.0.

Pain affected activities

Respondents who answered anywhere between “1-30 days” when asked, “During the past 30 days, for about how many days did pain make it hard for you to do your usual activities, such as self-care, work, or recreation?”

Prevalence

The percentage of a population that has a disease or risk factor at a specific moment in time.

Unable to work

Respondents who answered “unable to work” when asked, “Are you currently (1) employed for wages, (2) self-employed, (3) out of work for more than one year, (4) out of work for less than one year, (5) homemaker, (6) student, (7) retired, or (8) unable to work?”

APPENDICES

APPENDIX B: TECHNICAL NOTES

Cost of Arthritis

Hospital charges are the hospital's full, established rates, which do not necessarily reflect true costs or reimbursement. Hospital charges do not include physician fees or medications.

Geographic Regions

Georgia Division of Public Health Districts are grouped into regions to provide more stable prevalence estimates and are as follows:

<u>Region</u>	<u>Georgia Health Districts</u>
North	Northwest, North Georgia, North
Atlanta	Cobb/Douglas, Fulton, Clayton, East Metro, DeKalb
Midwest	LaGrange, North Central, West Central
Coast	East, Coastal
Northeast	East Central, Northeast
South	South Central, South, Southwest, Southeast

Metropolitan Areas

Based on metropolitan statistical areas according to the U.S. Bureau of Census. Metropolitan Atlanta includes the following counties: Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, Pickens, Rockdale, Spaulding, and Walton.

Other metropolitan counties include Dougherty and Lee (Albany); Clarke, Madison, and Oconee (Athens); Columbia, McDuffie, and Richmond (Augusta); Catoosa, Dade, and Walker (Chattanooga); Chattahoochee, Harris, and Muscogee (Columbus); Bibb, Houston, Jones, Peach, and Twiggs (Macon); and Bryan, Chatham, and Effingham (Savannah).

Race/Ethnicity

The sample in 2000 was too small to provide reliable prevalence sex-specific estimates for race/ethnic groups other than blacks and whites. In addition, no statistical differences were noted for Hispanics as compared to blacks or whites, which could be due to a smaller sample size.

Statistical Tests

In the body of the report, prevalence estimates for two groups (e.g., men and women) are said to be different only when the difference between groups achieved the standard level of significance, $p < .05$. Statistical tests were performed using SUDAAN software.

APPENDIX C: ABBREVIATIONS

AF-GC	ARTHRITIS FOUNDATION, GEORGIA CHAPTER
BRFSS	BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM
CDC	CENTERS FOR DISEASE CONTROL AND PREVENTION
DHR	DEPARTMENT OF HUMAN RESOURCES
DPH	DIVISION OF PUBLIC HEALTH
GAAP	GEORGIA ARTHRITIS ACTION PLAN

The Georgia Arthritis **Action Plan**

PARTNERSHIPS, COLLABORATION, AND PLAN DEVELOPMENT

Guiding Principles

Partnerships and Collaboration – Building partnerships and working collaboratively maximizes effective use of resources, minimizes unnecessary duplication of effort through improved communication, creates a unified voice to advocate for policy and system change, and strengthens each partner to address the problem of arthritis and other related conditions more efficiently and effectively. No single agency or organization working alone can reduce the burden of arthritis across the entire state of Georgia.

Plan Development – Developing a statewide plan to address the burden of arthritis improves understanding of the problem among all groups and individuals affected and involved, facilitates setting priorities and allocating resources, and provides a benchmark to measure success of efforts.

» GOAL Establish partnerships among public agencies, voluntary health organizations, health care providers, businesses, community groups, and persons affected by arthritis to develop and implement a comprehensive plan to reduce the burden of arthritis in Georgia.

Objective 1 Establish and sustain management and program advisory structures to oversee, direct, and manage the Georgia Arthritis Program.

Activities

- Identify and recruit partners for an Arthritis Advisory Council, steering committee, and management team.
- Conduct regular meetings of the management groups.
- Produce progress reports and applications for CDC.

Time Frame October 1999 and throughout the duration of the program

Indicators of Success/Evaluation

- Number of steering committee and management team members
- Number of attendees at meetings; meeting minutes
- Number of members recruited for and active on the Arthritis Advisory Council; meeting minutes
- Progress reports and applications completed and submitted

Objective 2 Establish work groups and a steering committee to develop a Georgia Arthritis Action Plan and associated interventions.

Activities

- Identify work group participants and steering committee members; invite to participate.
- Establish scope of work for the work groups and steering committee.
- Conduct regular meetings.
- Develop contract between Arthritis Foundation, Georgia Chapter and Division of Public Health for stronger staff support for management of steering committee and work groups.
- Oversee community-based physical activity and education program.
- Produce Georgia Arthritis Action Plan.

Time Frame October 1999 through June 2003

Indicators of Success/Evaluation

Indicators of Success/Evaluation:

- Number of work group members recruited
- Number of attendees at work group meetings; meeting minutes
- Progress reports and CDC applications completed and approved
- Completion of Georgia Arthritis Action Plan

Objective 3 Establish and sustain a broad-based, statewide Arthritis Advisory Council to raise awareness about the burden of arthritis and implement the Georgia Arthritis Action Plan.

Activities	<ul style="list-style-type: none"> • Identify all potential stakeholders interested in supporting and implementing the Georgia Arthritis Action Plan. • Plan Arthritis Summit to convene stakeholders. • Recruit members to Arthritis Advisory Council. • Promote implementation of the Georgia Arthritis Action Plan. • Promote replication of the community-based physical activity and education program.
Time Frame	June 2002 through 2004
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Number of stakeholders identified and invited to Summit • Number of attendees at Summit; Summit evaluation by participants • Number of attendees who join the Arthritis Advisory Council • Number of attendees who agree to replicate the community-based physical activity and education program • Number of attendees who endorse the Georgia Arthritis Action Plan

SURVEILLANCE AND EVALUATION

Guiding Principles

Data-driven planning and science-based interventions are the foundation of the public health approach to reducing the burden of chronic disease, including arthritis. Surveillance, epidemiology, and prevention research are the tools used in the field of public health to obtain accurate and reliable data on the extent of health problems and the population segments affected, identify gaps in knowledge about health problems, monitor the impact of interventions to address health problems, and disseminate data on health problems to policy makers and program managers.

» GOAL Develop a comprehensive Georgia arthritis surveillance system to gather information, promote increased awareness, and establish a baseline for program evaluation. The surveillance system will collect and analyze data on the following: (1) patterns and trends related to arthritis prevalence, burden, and risk factors; (2) health care provider and patient knowledge regarding diagnosis and treatment of arthritis and other related conditions, including self-management strategies; and (3) cost and impact of arthritis on the health care system.

Objective 1 Enhance statewide surveillance of the prevalence and treatment of arthritis and other related conditions through administration of the Behavioral Risk Factor Surveillance System (BRFSS) Arthritis Module at least every two years.

Activities

- Collect information on arthritis using BRFSS module to establish baseline for initial burden report.
- Monitor changes in the occurrence of arthritis and its impact on disability through continued collection and analysis of BRFSS data.

Time Frame January 1998 and ongoing

Indicators of Success/Evaluation Inclusion of arthritis questions in BRFSS every other year, including core and module

Objective 2 Evaluate the reliability and validity of the BRFSS Arthritis Module.

Activities

- Develop the research design and survey instrument.
- Recruit study participants and examiners (rheumatologists).
- Conduct the research (administer BRFSS questions by telephone to participants, followed by rheumatologists' physical exam and medical history of participants).
- Analyze results.
- Prepare reports and publications.

Time Frame January 2000 through December 2002

Indicators of Success/Evaluation

- Research conducted; data collected
- Completion of analyses, reports, and manuscripts prepared and accepted for publication

Objective 3	Increase awareness of the prevalence of arthritis and associated risk factors by producing and widely distributing a Burden of Arthritis report at least once every three years.
Activities	<ul style="list-style-type: none"> • Develop and publish Burden of Arthritis report at least once every three years.
Time Frame	October 1999 and ongoing
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Initial Burden of Arthritis report published 2000; second report scheduled for publication 2002
Objective 4	Examine the availability and value of other data sets as potential sources of surveillance data in determining the burden of arthritis and other related conditions in Georgia.
Activities	<ul style="list-style-type: none"> • Contract with the Georgia Medical Care Foundation for analysis of state Medicaid data. • Contract with Kaiser Permanente for analysis of membership data. • Prepare reports and publications based on specialized studies.
Time Frame	January 2001 through September 2002
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Contracts with partners to analyze data • Completion of analyses, reports, and manuscripts prepared for publication
Objective 5	Enhance surveillance of the prevalence and incidence of less common forms of arthritis through partnerships with universities engaged in medical research and clinical treatment.
Activities	<ul style="list-style-type: none"> • Apply for supplemental funding to conduct planning for Lupus Registry with Emory University/Grady Hospital. • If funded, assemble planning teams. • Develop plan to establish registry. • Apply for funding to establish registry if made available.
Time Frame	May 2002 through June 2003, ongoing with availability of funding for Lupus Registry
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Receipt of planning grant • Participants recruited for planning committees • Completion of Lupus Registry plan with recommendations
Objective 6	Evaluate a community-based secondary prevention intervention promoting physical activity, social support, and self-management.
Activities	<ul style="list-style-type: none"> • Identify appropriate instruments for evaluation of physical activity intervention. • Recruit adequate sample of participants in pilot project for statistical analysis of results. • Administer surveys; collect physical activity logs. • Conduct focus groups with participants and interviews with project administrators. • Analyze qualitative and quantitative data. • Develop evaluation section for “How To” guide. • Prepare reports and manuscripts for publication.
Time Frame	January 2001 through June 2003
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Adoption of instruments • Number of participants recruited for pilot program • Number of surveys and logs collected from participants • Number of focus group participants • Evaluation section in “How To” guide • Final reports and manuscripts

COMMUNICATION AND EDUCATION

Guiding Principles

Communication strategies and educational programs will be data-driven and grounded in social marketing and behavior change theories. Tailoring the content and delivery mode of health communication messages, health education programs, and related materials will assist in raising awareness and promoting behavioral change. For all audiences, messages and materials will use factual information and consistent terminology to convey that something can be done to reduce the burden of arthritis and other related conditions. Messages will be based on marketing research and educational programs will be based on theories of behavioral change.

>> GOAL Promote awareness of the burden and impact of arthritis and other related conditions, the importance of early diagnosis and appropriate treatment, and the availability of effective prevention and management strategies throughout Georgia.

Objective 1 Increase proportion of Georgians with chronic joint symptoms and related conditions and the general public who know how to contact the Arthritis Foundation for information and resources about arthritis and other related conditions.

Objective 2 Increase the proportion of Georgians with chronic joint symptoms and related conditions and their family members who know that early diagnosis and treatment reduces the disability and suffering associated with arthritis.

Objective 3 Increase the proportion of Georgians with chronic joint symptoms and related conditions and their family members who know that there are appropriate treatment and effective self-management strategies, especially physical activity, that can relieve the pain, discomfort, and disability associated with arthritis.

Objective 4 Increase the proportion among the general population who know what signs and symptoms are associated with arthritis and other related conditions and know that there are education, support, and treatment resources available for persons with arthritis.

- Activities**
- Develop logo and theme for the Georgia Arthritis Action Program (pilot project) and related activities.
 - Conduct multi-component social marketing campaign in three counties of pilot project, including: developing advertisements, public service announcements, and promotional items for Georgia Arthritis Action Program; preparing press releases, feature articles and presentations for broadcast media; and sponsoring community awareness events during pilot project.
 - Use materials developed and tested by the CDC to promote benefits of physical activity to persons with arthritis in broader statewide campaign, building on lessons learned in the pilot.
 - Incorporate lessons learned from the pilot program into the “How To” guide.
 - Develop and disseminate Arthritis Resource Guide to persons with arthritis, health care providers, and other agencies and organizations serving persons with arthritis.
 - Create a Community Awareness subcommittee of the Arthritis Advisory Council to continue promotion efforts.

Time Frame January 2000 – December 2001 for pilot program; January 2002 through June 2002 for “How To” guide and Arthritis Resource Guide; December 2002 and ongoing for statewide communications campaign and second media campaign

- Indicators of Success/Evaluation**
- Communication materials developed
 - Number of ads, feature stories, and other items appearing in the media
 - Communication section of “How To” guide
 - Number of members of Community Awareness subcommittee
 - Number of requests for information received by the Arthritis Foundation

PROGRAMS, POLICIES, AND SYSTEMS

Guiding Principles

Only system change will produce increased quality of life and enhanced prevention efforts for persons with chronic disease. Reducing the burden of arthritis requires modifying the health care system to incorporate a continuum of health services that include primary, secondary, and tertiary prevention and bridge medical, public, and voluntary health organizations within a supportive policy environment.

Programs are the actual implementation at the state and community level of effective interventions for primary, secondary, and tertiary prevention of public health problems. The 2002 Georgia Arthritis Plan focuses on secondary prevention and tertiary prevention strategies targeting persons affected by arthritis to prevent disability and improve quality of life.

» GOALS Assure availability of needed information, materials, and resources to implement a broad range of policy, clinical, and population-based intervention activities. Assure access to treatment and interventions by all populations, especially those with a disproportionate burden of arthritis and other conditions.

Objective 1 Develop and disseminate a community-based secondary prevention program that provides education, social support, and encourages persons with arthritis to exercise at a moderate level on a regular basis. A moderate level of physical activity is defined as at least 120 minutes per week of activities such as walking, bicycling, gardening, swimming, water exercises, dancing, or attending an arthritis exercise class.

- Activities
- Establish work groups to develop pilot program components, identify evaluation instruments, and manage implementation of pilot program.
 - Recruit participants and partners for implementation of pilot program.
 - Implement community-based program in three counties (Muscogee, Webster, and Crisp).
 - Develop “How To” guide for community-based program, based on process evaluation and lessons learned during implementation.
 - Recruit community partners to replicate community-based intervention during the Arthritis Summit.
 - Create a Community Partners subcommittee of the Arthritis Advisory Council.
 - Conduct training sessions on community-based intervention with new partners.
 - Replicate community-based intervention in new settings.
 - Promote adoption of community-based intervention throughout the state of Georgia.

Time Frame January 2000 through June 2003 and ongoing

- Indicators of Success/Evaluation
- Participant recruitment goals reached
 - Participant retention goals reached; data collected
 - “How To” guide (sections on recruitment, training of participants and team leaders, conducting group events)
 - Number of community partners recruited to replicate intervention
 - Number of members of the Community Partners subcommittee
 - Number of community partners trained to replicate intervention
 - Number of community partners who replicate intervention
 - Number of inquiries received by Arthritis Foundation about intervention

Objective 2a Increase the proportion of persons with arthritis, and their family members, who have had effective, evidence-based arthritis education as an integral part of the management of their condition by increasing the availability of Arthritis Foundation Self-Help, PACE, Aquatics, and other courses across the state.

Increased numbers of persons completing Arthritis Foundation courses will:

Objective 2b Increase the proportion of persons with arthritis who are taking an active role in self-management of their condition.

Objective 2c Increase the proportion of persons with arthritis who know how to communicate effectively with their health care provider about their chronic joint symptoms.

Objective 2d	Increase the proportion of persons with arthritis who know how to use medications appropriately to relieve pain and other symptoms associated with arthritis.
Activities	<ul style="list-style-type: none"> • Compile Arthritis Resource Guide identifying availability of courses. • Disseminate Arthritis Resource Guide to health care professionals, libraries, organizations, and community groups. • Recruit new trainers; conduct train-the-trainer sessions. • Update the Arthritis Resource Guide every three years; continue to circulate throughout the state.
Time Frame	January 2002 and ongoing
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Completion of Arthritis Resource Guide • Mailing list for Arthritis Resource Guide • Number of new trainers trained • Number of new sites offering courses • Number of participants taking courses • Evaluation of participants on knowledge and skills
Objective 3	Increase the proportion of persons with arthritis who seek and receive help in coping as they experience personal and emotional problems by increasing the number of arthritis support and wellness groups across the state.
Activities	<ul style="list-style-type: none"> • Compile Arthritis Resource Guide identifying availability of support and wellness groups. • Disseminate Arthritis Resource Guide to health care professionals, libraries, organizations, and community groups. • Recruit new group leaders; conduct group leader training sessions. • Update the Arthritis Resource Guide every three years; continue to circulate throughout the state.
Time Frame	January 2002 and ongoing
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Completion of Arthritis Resource Guide • Mailing list for Arthritis Resource Guide • Number of new group leaders trained • Number of new sites offering support and wellness groups • Number of participants in support and wellness groups • Evaluation of participants on their emotional well-being
Objective 4	Identify, obtain, and disseminate culturally appropriate arthritis education materials and programs, with a special focus on minority, low-literate, and rural populations.
Activities	<ul style="list-style-type: none"> • Utilizing the partnership between the Division of Public Health and the Arthritis Foundation, Georgia Chapter, work with CDC and other state arthritis programs to identify or develop culturally appropriate arthritis education materials. • Adapt materials for use in Georgia and distribute to community partners (health departments, senior centers, parks and recreation departments, faith-based organizations, etc.). • Invite representatives of minority organizations and agencies serving minorities to participate in the Arthritis Summit. • Invite representatives of minority organizations and agencies serving minorities to join the Arthritis Advisory Council.
Time Frame	January 2000 and ongoing
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Numbers of minority groups contacting the Arthritis Foundation for information and assistance • Minority participation in arthritis courses • Individuals representing minority groups trained to implement arthritis courses

<p>» GOAL</p>	<p>Improve awareness of and adherence to American College of Rheumatology guidelines for treatment of arthritis and other related conditions among primary health care providers.</p>
<p>Objective 1</p>	<p>Establish baseline of health care providers' knowledge, attitudes, and treatment practices of arthritis and other related conditions through surveys of practitioners and review of treatment protocols.</p>
<p>Activities</p>	<ul style="list-style-type: none"> • Develop survey or interview guide for physician study. • Identify practitioners to be surveyed or interviewed. • Identify partners to conduct study (Rollins School of Public Health at Emory; Mercer School of Public Health; Georgia State University; University of Georgia) • Obtain treatment protocols from relevant professional organizations (primary and family care, specialists other than rheumatologists); review and summarize recommendations. • Determine best strategies to implement provider education programs.
<p>Time Frame</p>	<p>July 2003 through June 2004 (funding permitting)</p>
<p>Indicators of Success/Evaluation</p>	<ul style="list-style-type: none"> • Survey or interview guide developed • Mailing list developed • Survey response rate • Treatment protocols obtained • Report with recommendations
<p>Objective 2a</p>	<p>Increase proportion of health care providers, especially primary care and public health providers, who have received pre-professional or continuing education on arthritis and other related conditions.</p> <p><i>Educating health care providers about arthritis and other related conditions will:</i></p>
<p>Objective 2b</p>	<p>Increase the proportion of health care providers, especially primary care and public health providers, who know that early diagnosis and treatment reduces the disability and suffering associated with arthritis.</p>
<p>Objective 2c</p>	<p>Increase the proportion of health care providers, especially primary care and public health providers, who effectively diagnose arthritis, adhere to American College of Rheumatology guidelines for treatment, and provide case management for patients to reduce secondary and tertiary conditions.</p>
<p>Objective 2d</p>	<p>Increase the proportion of Georgians with chronic joint symptoms and related conditions who are appropriately diagnosed with arthritis and receive medical advice and treatment.</p>
<p>Objective 2e</p>	<p>Increase the proportion of health care providers, especially primary care and public health providers, who make referrals to specialists for appropriate treatment and education for patients with chronic joint pain and related conditions.</p>
<p>Activities</p>	<ul style="list-style-type: none"> • Form a Professional Education subcommittee or work group of the Arthritis Advisory Council. • Develop new or adapt existing educational materials and programs on arthritis and other related conditions in a variety of formats for use in pre-professional or continuing education with health care providers, including physicians, nurses, and allied health professionals. • Partner with Area Health Education Centers, medical and professional schools, and professional associations and organizations to sponsor educational programs on arthritis and other related conditions. • Develop and implement workshops for health care providers at the Arthritis Summit. • Invite health care providers to participate in the Arthritis Summit. • Invite health care providers to join the Arthritis Advisory Council. • Evaluate educational program participants for changes in knowledge, attitudes, and professional practice.
<p>Time Frame</p>	<p>January 2002 through June 2004, and ongoing</p>

Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Educational materials and programs on arthritis in a variety of formats for health care providers • Number of members of Professional Education sub-committee • Number of partners sponsoring educational programs • Number of educational programs offered • Number of participants in educational programs • Changes in knowledge, attitudes, and professional practice among participants
Objective 3a	<p>Increase the proportion of health care providers, especially primary care and public health providers, who know that physical activity is an important component of effective arthritis self-management, and who actively promote physical activity to their patients.</p> <p><i>Health care providers who actively promote physical activity to their patients will:</i></p>
Objective 3b	<p>Increase the proportion of persons with arthritis who are counseled appropriately by their health care provider about physical activity and nutrition.</p>
Activities	<ul style="list-style-type: none"> • Develop guidelines for research project on physicians' willingness to prescribe physical activity and distribute pedometers to their patients. • Develop educational materials for physicians regarding the importance of physical activity in the management of arthritis and explaining the pedometer study. • Recruit physicians to participate in pedometer study and distribute educational materials and pedometers to them. • Collect and analyze data on physicians' willingness to prescribe physical activity and distribute pedometers to their patients. • Develop, implement, and evaluate communications campaign to promote physicians' promotion of physical activity to their patients.
Time Frame	<p>September 2001 through June 2003</p>
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Materials developed for physicians • Number of physicians recruited to participate • Number of physicians who participate by distributing pedometers • Number of pedometers distributed to patients • Communications materials developed • Number of communications materials distributed to physicians
Objective 4	<p>Increase proportion of health care providers, especially primary care and public health providers, who contact the Arthritis Foundation for information and resources about arthritis and other related conditions.</p>
Activities	<ul style="list-style-type: none"> • Distribute Arthritis Resource Guide and other Arthritis Foundation educational materials to health care providers.
Time Frame	<p>October 2002 and ongoing</p>
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Number of health care providers who contact the Arthritis Foundation for information and resources <p><i>Policies include legislation, regulations, ordinances, guidelines, and norms that establish an environment conducive to prevention.</i></p>
» GOAL	<p>Create awareness of arthritis as an important public health issue, especially its relationship to disability and health care costs, among policy makers in Georgia.</p>
Objective 1	<p>Provide reliable data and information to educate policy makers on the health burden and costs of arthritis and on effective prevention and intervention strategies.</p>
Activities	<ul style="list-style-type: none"> • Distribute copies of the 2002 Georgia Arthritis Report, Georgia Arthritis Action Plan, and Arthritis Resource Guide to policy makers.

Activities, cont.	<ul style="list-style-type: none"> • Prepare and distribute arthritis fact sheets to policy makers. • Invite key policy makers to participate in the Arthritis Summit. • Invite key policy makers to join the Arthritis Advisory Council. • Prepare report on arthritis-related health care costs, based on special epidemiological studies, and distribute to policy makers. • Prepare report on community-based intervention and distribute to policy makers.
Time Frame	October 2002 through June 2003
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • List of policy makers who have received copies of 2002 Georgia Arthritis Report, Georgia Arthritis Action Plan, Arthritis Resource Guide, health care cost studies, and intervention report • Number of policy makers who participate in the Arthritis Summit
Objective 2	Seek legislative support to fund the ongoing operations of the state Arthritis Program within the Division of Public Health.
Activities	<ul style="list-style-type: none"> • Work with appropriate legislative committees to support funding for the Arthritis Program. • Submit budget requests to the Commissioner of the Department of Human Resources.
Time Frame	Ongoing
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Appropriations in public health budget for Arthritis Program. <p><i>System strategies</i> affect the health infrastructure required to operate and manage effective programs. The health care system is based on complex relationships between public and private sectors, individual practitioners, managed care organizations, and voluntary health organizations.</p>
>> GOAL	Assure the integration of arthritis education and treatment into community, worksite, and health care organization health promotion initiatives and treatment programs.
Objective 1	Integrate arthritis and other related conditions into the planning, training, resource development, and all related activities of the Division of Public Health, Chronic Disease Prevention and Health Promotion Branch and all public health districts.
Activities	<ul style="list-style-type: none"> • Develop Georgia Arthritis Action Plan according to guidelines developed by the Centers for Disease Control, and formats prepared by the Chronic Disease Prevention and Health Promotion Branch. • Develop training materials, communication tools, and educational resources for use by Chronic Disease Prevention Initiative Coordinators and other public health staff in the public health districts. • Provide training on community based intervention (“How To” guide) to public health staff. • Invite public health staff to attend the Arthritis Summit. • Invite public health staff to join the Arthritis Advisory Council. • Distribute Arthritis Resource Guide to public health staff. • Prepare educational displays and posters on the Arthritis Program for display at state and national public health and Arthritis Foundation meetings.
Time Frame	October 1999 and ongoing
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Development and completion of Georgia Arthritis Action Plan • Training materials, communication tools, and educational resources on arthritis • Educational displays and posters on the Arthritis Program • Number of meetings attended and presentations delivered • Number of Arthritis Resource Guides distributed • Number of attendees at the Arthritis Summit • Number of public health-affiliated members of the Arthritis Advisory Council

Objective 2	Identify health care delivery system and policy barriers to access of effective diagnosis, treatment, and medications that impact arthritis management and related health outcomes.
Activities	<ul style="list-style-type: none"> • Develop a subcommittee of the Arthritis Advisory Council to address health care delivery system and policy barriers that impact arthritis management. • Conduct an assessment of the health care delivery system and policy barriers that impact arthritis management. • Prepare a report with recommendations for system and policy changes.
Time Frame	November 2002 through June 2004
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Formation of subcommittee; committee minutes • Assessment tools • Report with recommendations for changes
Objective 3	Strengthen alliances among government agencies, businesses, community organizations, and persons with arthritis to promote increased availability of arthritis education and treatment in worksite and community settings.
Activities	<ul style="list-style-type: none"> • Invite a wide variety of government agencies, businesses, community organizations, and persons with arthritis to the Arthritis Summit. • Recruit a wide variety of members to participate in the Arthritis Advisory Council. • Provide educational materials and training to members of the Arthritis Advisory Council so they can be effective advocates within their respective agencies, businesses, organizations, and coalitions for the increased availability of arthritis education and treatment. • Encourage members of the Arthritis Advisory Council to distribute copies of the Arthritis Resource Guide within their respective agencies, businesses, organizations, and coalitions. • Encourage members of the Arthritis Advisory Council to solicit resources, including funding, volunteers, expertise, and in-kind donations to support the implementation of the Georgia Arthritis Action Plan.
Time Frame	November 2002 and ongoing
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Number of members of the Arthritis Advisory Council • Resources contributed by members of the Arthritis Advisory Council • Progress made in implementing the Georgia Arthritis Action Plan
Objective 4	Increase the proportion of employees who participate in arthritis education by increasing the proportion of worksites offering comprehensive employee health promotion programs that include arthritis education.
Activities	<ul style="list-style-type: none"> • Identify employers who offer worksite wellness and health promotion programs to their employees who could benefit from adding an arthritis education component. • Develop a worksite-based version of the community-based intervention program. • Invite employers to attend the Arthritis Summit. • Invite employers to join the Arthritis Advisory Council. • Recruit employers to partner with the Georgia Arthritis Program and the Arthritis Foundation to sponsor worksite arthritis programs. • Implement a worksite arthritis education program.
Time Frame	June 2002 and ongoing
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • List of employers interested in implementing program • Number of employers who attend Arthritis Summit • Number of employers recruited to implement a worksite arthritis education program • Number of employees who participate in worksite arthritis education programs

Objective 5	Increase the proportion of health care organizations that include arthritis education in their patient and family education programs.
Activities	<ul style="list-style-type: none"> • Survey health care organizations to determine what information and education on arthritis is included in their patient and family education programs. • Develop and disseminate Arthritis Resource Guide to persons with arthritis, health care providers, and other agencies and organizations serving persons with arthritis. • Invite health care organizations to attend the Arthritis Summit. • Invite health care organizations to participate in the Arthritis Advisory Council. • Recruit health care organizations to partner with the Georgia Arthritis Program and the Arthritis Foundation to include arthritis education in their patient and family education programs.
Time Frame	October 2002 through June 2004
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Number of health care organizations that include arthritis education in their patient and family education programs • Number of health care organizations that attend the Arthritis Summit • Number of health care organizations that participate in the Arthritis Advisory Council
Objective 6	Increase the proportion of hospitals and managed care organizations that partner with the Arthritis Foundation to sponsor arthritis education programs and activities in their communities.
Activities	<ul style="list-style-type: none"> • Distribute the Arthritis Resource Guide to hospitals and managed care organizations that do not sponsor arthritis education programs and activities in their communities along with a letter soliciting their participation. • Invite health care organizations to attend the Arthritis Summit. • Invite health care organizations to participate in the Arthritis Advisory Council. • Recruit health care organizations to partner with the Georgia Arthritis Program and the Arthritis Foundation to sponsor arthritis education programs and activities in their communities. • Provide training and materials on arthritis education to health care organizations.
Time Frame	June 2002 through June 2004
Indicators of Success/Evaluation	<ul style="list-style-type: none"> • Number of health care organizations that attend the Arthritis Summit • Number of health care organizations that join the Arthritis Advisory Council • Number of health care organizations sponsoring arthritis education programs and activities in their communities • Number of persons receiving arthritis education

PROGRESS ON INTERVENTIONS

■ The Division of Public Health, Chronic Disease Prevention and Health Promotion Branch developed the Georgia Arthritis Action Program in partnership with the Arthritis Foundation, Georgia Chapter. As a state receiving core-level funding from the CDC, Georgia undertook several special epidemiological studies and the development and implementation of a community-based intervention. This section of this report presents a brief overview of the development and implementation of the community-based intervention. Extensive analysis of the results is ongoing, with publication of several papers anticipated in 2003.

The community-based intervention was planned initially by the members of the five work groups convened during the second half of the first year of funding. Each of the work groups focused on a different component of the project: community awareness, health care providers, patient and family education, physical activity, and surveillance and evaluation. Each of the work groups participated in facilitator-led strategic planning sessions that outlined goals and objectives for each project component.

Representatives from the Division of Public Health and the Arthritis Foundation, Georgia Chapter met with representatives of the West Central Health District to identify potential county sites for the community-based intervention. The only state branch of the Arthritis Foundation, Georgia Chapter is located in Columbus (Muscookee County), and the majority of the area served by the Southwest Branch overlaps with that of the sixteen-county West Central Health District. Three counties were selected as representative of urban, semi-rural, and rural areas of the state. These counties were Muscookee, with a population of approximately 186,000; Crisp County, with a population of approximately 22,000; and Webster County, with a population of approximately 2,400. Webster County is the smallest and poorest county in Georgia.

After the important questions of what the intervention would be and who would be targeted for inclusion were determined, the work of developing intervention materials and coordinating implementation logistics was assumed by several key members of the work groups and staff from the Chronic Disease Prevention and Health Promotion Branch and the Arthritis Foundation, Georgia Chapter. Work group members and state level staff worked closely with staff in the West Central Health District, the West Central Area Agency on Aging, and the Arthritis Foundation, Georgia Chapter-Southwest Branch, as well as numerous community organizations and volunteers, to refine the original project, coordinate county and community level involvement, and bring the intervention from plan to reality.

The Georgia Arthritis Action Program represents one of the first efforts nationally to launch a coordinated community campaign to increase arthritis awareness in combination with a physical activity program for persons with arthritis. The goals of the intervention were to increase the proportion of participants who are moderately physically active and the proportion who know that appropriate exercise can reduce pain and other symptoms.

Physical activity is an important part of self-management of arthritis. Physical activity reduces joint pain and stiffness and increases flexibility, muscle strength, and cardiac endurance. It also helps with weight reduction, depression, fatigue, and contributes to an overall sense of well-being. Persons with arthritis tend to be less physically active, however, either because initial exercise efforts may seem to aggravate their condition by increasing pain and stiffness or because they may mistakenly believe that exercise will make their condition worse.

The intervention began with a media awareness and community education campaign. Staff from the health department and the Arthritis Foundation, Georgia Chapter-Southwest Branch staff conducted numerous meetings, health fairs, and



“It changed my life. It made me feel more positive about myself. I had pretty much given up; I was so tired of being sick. It was like, ‘Why did this have to happen to me? I can’t work anymore, I don’t have the money I used to have.’ I had almost totally given up. Being on board for the group, even when I was having a bad day, helped give me a more positive attitude to be there for them.”

— Elayne Neely, GAAP County Coordinator, Interview (Elayne has Lupus and is on medical disability.)

public presentations in the weeks leading up to the launch of the physical activity program in July 2001. Stories about arthritis and the Georgia Arthritis Action Program appeared in local media, and the Arthritis Foundation, Georgia Chapter ran ads encouraging physical activity among persons with arthritis in the Columbus paper, the *Columbus Ledger-Enquirer*. The Community Awareness work group created a GAAP logo and tag line that was used on promotional items distributed to participants, including the GAAP membership card, t-shirts, and water bottles.

The community awareness campaign increased awareness of the GAAP program as well as arthritis itself. Participants interviewed after the completion of the program had seen or heard some of the newspaper and television stories, and agreed that the campaign had succeeded in increasing awareness of the condition and its associated symptoms among themselves and their family members. The community awareness campaign succeeded in raising over \$55,000 in donations for the Arthritis Foundation, Georgia Chapter-Southwest Branch as well as in recruiting more participants than the original number projected.

Community agencies and individuals assisted with recruiting participants and team leaders, sponsoring group events, and supporting program activities. These agencies included local YMCAs, rehabilitation and sports medicine facilities, physical therapists, physicians, home health care agencies, hospitals, senior centers, county extension services, and local businesses that provided donations of food, meeting rooms, and other support to the program. Involvement of the local media in all three counties, which provided a wealth of coverage of the Georgia Arthritis Action Program, was also significant to the success of the program.

In all three counties, the Arthritis Foundation, Georgia Chapter-Southwest Branch sponsored large group events at the beginning, middle, and end of the twenty-week physical activity program. These group events provided participants with information about arthritis, physical activity, and the Georgia Arthritis Action Program, and also served to keep participants excited and motivated. During these group events, participants also completed evaluation instruments and received additional education about arthritis. The final meetings were “graduation celebrations” where participants received certificates.

The physical activity program featured a strong social support component. Instead of enrolling as individuals, participants were organized into teams, and each team had a team captain who monitored participants on a weekly basis through telephone calls and personal visits, sent them ongoing tips and messages of encouragement, distributed incentives, assisted with scheduling group activities, and reminded participants to complete their exercise logs and survey forms. Some team captains became very involved with their teams, and spent hours each week making telephone calls and visiting with members. The team structure helped both retain participants in the program and helped with data collection for evaluation purposes.

The physical activity program consisted of two ten-week sessions. Participants chose their own activities such as gardening, walking, water aerobics, and dancing and recorded daily minutes of activity on a log sheet. Participants were asked to set a goal of minutes of physical activity per week, with the intent of slowly increasing the total number of minutes each week. The recommendation was to proceed very slowly, and not to stop if an arthritis flare or other physical problem made it difficult to exercise up to the previous week's level. Participants were instructed to start back again at whatever level they could comfortably manage without causing undue stress on their joints. Participants were also given a pamphlet with range of motion stretches to do for specific joints, and were encouraged to do these stretches everyday. Some teams scheduled group activities in which individuals could participate; on others, team members exercised as individuals.



“I have arthritis in my feet, and the pain just does not go away. [With GAAP] I realized that walking on my feet did strengthen the tendons. Even though I was experiencing pain [while walking], it was – in the long run – beneficial. The [best] thing about GAAP for me was the camaraderie – the fact that it was arthritis sufferers doing something together.”

- Jerry Barnes, GAAP Team Leader and Focus Group Participant

The evaluation of the Georgia Arthritis Action Program focused on improvements in participants' level of physical activity and health status. Participants completed medical history questionnaires, the Medical Outcomes Study 12-Item Short Form (SF-12), and the Physical Activity Scale for the Elderly (PASE) surveys at the beginning, middle, and end of the physical activity intervention. Focus groups and interviews were conducted to assess participants' satisfaction with the program.

Coordination of group events, support for the team captains, and data collection were the functions performed by three part-time county coordinators. Each of the county coordinators worked closely with the team captains, and forwarded completed participant logs and surveys to a professor at Georgia State University for data cleaning and entry. When some of the team captains dropped out of the program, county coordinators ended up inheriting their participants, which created "super teams" of thirty or more individuals in both Muscogee and Webster Counties.

While 354 individuals contacted the Arthritis Foundation about participating, 331 individuals actually completed initial survey forms and were assigned to teams. There were 73 participants on ten teams in Crisp County, 96 participants on seven teams in Webster County, and 162 participants on 20 teams in Muscogee County. Participants ranged in age from 23 to 98 years (mean=63); 74% were female.

The program had extremely high rates of participant retention and satisfaction. In Crisp County, 67% completed the program; in Muscogee, 65% completed the program; and in tiny Webster County, an incredible 93% of participants completed the program. Preliminary data analysis indicates that project goals were attained. Participants increased their levels of physical activity and noted improvement in their daily symptoms. During focus groups and interviews, participants reported benefits such as weight loss, reduced pain and stiffness, increased energy, and positive emotional changes, as well as their intention to continue to be as physically active as possible. Analysis of the qualitative and quantitative data will be completed during the fall of 2002, and submitted for publication.

In response to the requests from participants for additional information on arthritis, Arthritis Foundation, Georgia Chapter and public health staff developed and implemented a series of community forums in all three counties. The forums include additional exercise demonstrations, as well as a presentation by a rheumatologist of current treatments and medications for arthritis. In addition, several team captains and members of the GAAP program will be trained as instructors of the Persons with Arthritis Can Exercise (PACE) course, aquatics, and Arthritis Self-Help courses in the summer of 2002; they will begin conducting classes in their respective counties later in the year.

The strength of the GAAP program grows as it continues to gain momentum. Results from the focus groups have been used to plan follow-up activities tailored to the specific needs of each of the participating counties, including developing support groups for persons with arthritis in Muscogee, planning a walking trail in Webster, and expanding availability of the Arthritis Foundation aquatics program in Crisp. Plans are also underway to develop a version of GAAP as a worksite wellness program. The state Arthritis Program and the Arthritis Foundation, Georgia Chapter are planning to recruit additional partners and community groups so the program can be replicated in other sites around the state.



"Before I started [GAAP], I would get up in the morning and just drag all day. That has changed a lot. I feel better about myself. [Now] when I get up in the morning and I feel stiff, I know there is something I can do for the pain. Exercise, walking—I can do something about it."

— Diane Wills, GAAP Team Leader and Focus Group Participant

APPENDICES

APPENDIX A:

GEORGIA ARTHRITIS ACTION PLAN STEERING COMMITTEE MEMBERS

Wheda A. Acolatse, M.P.H.

ARTHRITIS FOUNDATION, GEORGIA CHAPTER
Director, Programs and Services

James H. Brannon, Jr. M.S., M.Ed.

GEORGIA DEPARTMENT OF HUMAN RESOURCES,
DIVISION OF PUBLIC HEALTH
*Director, Chronic Disease Prevention and Health
Promotion Branch*

Doyt Conn, M.D.

GRADY HEALTH SYSTEM
Chief of Rheumatology
EMORY UNIVERSITY SCHOOL OF MEDICINE
Director of Rheumatology

Jean Gearing, Ph.D., M.P.H.

GEORGIA DEPARTMENT OF HUMAN RESOURCES,
DIVISION OF PUBLIC HEALTH
*Manager, Georgia Arthritis Program-Chronic
Disease Prevention and Health Promotion Branch*

Allan Goldman, M.P.H.

GEORGIA DEPARTMENT OF HUMAN RESOURCES
DIVISION OF AGING SERVICES
Assistant to Director

Judy Griffith, R.N., M.S.

GEORGIA DEPARTMENT OF HUMAN RESOURCES,
DIVISION OF PUBLIC HEALTH
*Director, Health Promotion Section-Chronic
Disease Prevention and Health Promotion Branch*

Mary Long, R.N.

ARTHRITIS FOUNDATION, NATIONAL OFFICE
Vice President, Special Projects

William McClellan, M.D., M.P.H.

GEORGIA MEDICAL CARE FOUNDATION
Medical Director

Jennifer McGinnis, M.S.P.H.

ARTHRITIS FOUNDATION, GEORGIA CHAPTER
Director, Surveillance and Epidemiology

Jennifer McKenna

ARTHRITIS FOUNDATION, GEORGIA CHAPTER
Vice President, Development

Brad Parcels

ARTHRITIS FOUNDATION, GEORGIA CHAPTER
President/CEO

Kenneth E. Powell, M.D., M.P.H.

GEORGIA DEPARTMENT OF HUMAN RESOURCES,
DIVISION OF PUBLIC HEALTH
*Chief, Chronic Disease, Injury, and Environmental
Epidemiology Section*

Leslie Taylor, Ph.D., P.T.

GEORGIA STATE UNIVERSITY,
DEPARTMENT OF PHYSICAL THERAPY
Assistant Professor

W. Hayes Wilson, M.D.

ARTHRITIS FOUNDATION, GEORGIA CHAPTER
Immediate Past-Chairman, Board of Trustees

Special Recognition:

Pam Eidson, M.Ed.

GEORGIA DEPARTMENT OF HUMAN RESOURCES,
DIVISION OF PUBLIC HEALTH
*Immediate Past Director, Health Promotion Section -
Chronic Disease Prevention and Health Promotion
Branch*

Elizabeth A. Martin, P.T.

ARTHRITIS FOUNDATION, GEORGIA CHAPTER
Immediate Past-President/CEO

APPENDIX B:

GEORGIA ARTHRITIS ACTION PLAN PARTNERS

AMERICAN ASSOCIATION OF RETIRED PERSONS	GEORGIA STATE UNIVERSITY
AREA AGENCIES ON AGING	– DEPARTMENT OF PHYSICAL THERAPY
ARTHRITIS FOUNDATION, GEORGIA CHAPTER	– DEPARTMENT OF NUTRITION
ARTHRITIS FOUNDATION, NATIONAL OFFICE	– SCHOOL OF NURSING
CENTERS FOR DISEASE CONTROL AND PREVENTION	GOVERNOR'S COMMISSION ON PHYSICAL ACTIVITY AND SPORTS
COBB/DOUGLAS HEALTH SYSTEM	GRADY HEALTH SYSTEM
– DIVISION OF PREVENTION RESEARCH AND ANALYTIC METHODS	KAISER PERMANENTE
EMORY UNIVERSITY SCHOOL OF MEDICINE	LATIN AMERICAN ASSOCIATION
– DIVISION OF RHEUMATOLOGY	MEDICAL ASSOCIATION OF GEORGIA
EMORY UNIVERSITY	OLDER WOMEN'S LEAGUE
– ROLLINS SCHOOL OF PUBLIC HEALTH	PAN-ASIAN ASSOCIATION
GEORGIA CENTER FOR NONPROFITS	PIEDMONT RHEUMATOLOGY
GEORGIA COLLEGE OF PHYSICIANS	PROMINA HEALTH SYSTEMS
GEORGIA DEPARTMENT OF HUMAN RESOURCES	THREE RIVERS AREA HEALTH EDUCATION
– DIVISION OF AGING SERVICES	UNIVERSITY OF GEORGIA
– DIVISION OF PUBLIC HEALTH	U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
• <i>Chronic Disease, Injury, and Environmental Epidemiology Section</i>	– REGION IV- SOUTHEASTERN U.S.
• <i>Chronic Disease Prevention and Health Promotion Branch</i>	WEST CENTRAL GEORGIA AREA AGENCY ON AGING
GEORGIA MEDICAL CARE FOUNDATION	WEST CENTRAL HEALTH DISTRICT
GEORGIA PARKS AND RECREATION	
GEORGIA SOCIETY OF RHEUMATOLOGY	

APPENDIX C:

COLUMBUS AREA PARTNERSHIPS AND LOCAL PILOT PROGRAM SPONSORS

CENTRAL YMCA	LOGO'S
COLUMBUS BANK AND TRUST	MCALLISTARS
COLUMBUS LEDGER- ENQUIRER	MCCLURE BROADCASTING
COLUMBUS METRO AIRPORT	MOM'S KITCHEN
COLUMBUS REGIONAL HEALTHCARE SYSTEM	MUSCOGEE COUNTY MEDICAL SOCIETY
COUNTRY'S BARBECUE	PROGRESSIVE REHAB-CORDELE
CRISP COUNTY REGIONAL HOSPITAL-CORDELE	RENTAL SERVICES-COLUMBUS
D.A. TURNER YMCA	REHABILITATION SERVICES OF COLUMBUS
FINE HOST-COLUMBUS	SUNNY 100 – WGSY FM
HCA DOCTORS HOSPITAL	SYNOVUS FOUNDATION
HCA HUGHSTON SPORTS MEDICINE HOSPITAL	THE HUGHSTON CLINIC
HEALTH DYNAMICS OF ST. FRANCIS	TSYS
HOME CARE OF ST. FRANCIS	VFW Post 665
KINKO'S-COLUMBUS	

