Dear Fellow Kansans,

The impact of arthritis is felt not only by those living with arthritis, but also by family members, caregivers and the health care system. In 2007, nearly 575,000 fellow Kansans reported living with this disease on a daily basis. Arthritis costs Kansans an estimated $1.1 billion (in 2003) with $700 million spent on direct medical costs and $405 million associated with indirect costs such as lost earnings. Prevention and control measures exist today to substantially curtail the effects of this disease. As we continue to learn more about arthritis and the individuals living with this chronic disease, we know it can be managed effectively through the implementation of evidence-based self-management programs.

As with most chronic disease, healthy living has a profound and positive effect on arthritis. The effects of all types of arthritis can be minimized through early detection, timely and appropriate medical treatment and participation in self-management programs. My Healthy Kansas initiative to increase physical activity, improve nutrition and stop the use of tobacco is supported by the evidence-based self-management programs being implemented across the state. These interventions applied through a wide-scale public health strategy can substantially reduce the cost of arthritis and increase the quality of life for those living with arthritis.

The Kansas Arthritis Plan is based on partnership and collaboration; incorporating surveillance, education, evidence-based programs and policies essential to reducing the burden of arthritis in Kansas. Partners who contributed their time and expertise, as well as those who served on the planning committee, are commended for their efforts in the development of this plan. I encourage all Kansans to take an active role in implementing the Kansas Arthritis Plan.

This plan will help to enhance the lives of Kansans living with arthritis and continue to promote the development of effective chronic disease prevention strategies at both the state and local level. By working together we can reduce the burden of arthritis in our state.

Sincerely yours,

Kathleen Sebelius
Governor of the State of Kansas
Dear Fellow Kansans:

I am pleased to present the Kansas State Plan for Promoting the Health of People with Arthritis. This plan outlines a collaborative approach to reducing the impact of arthritis on those individuals living with the number one cause of disability as well as reducing the burden of arthritis on state and local resources. This document represents the dedication of organizations and individuals committed to improving the quality of life for those affected by arthritis, nearly 575,000 friends and neighbors.

In 2007, 27.5% of adult Kansans reported their physician or health professional had told them they had arthritis. Many of these individuals are also dealing with other chronic diseases: 7.3% adults have doctor-diagnosed diabetes, 36.6% have been tested and diagnosed with high blood cholesterol, 26.8% have doctor-diagnosed hypertension, and 8.4% adults have asthma. Self-management of arthritis and the other chronic diseases is critical to improve or maintain the quality of life for individuals living with these diseases as well as reducing the health care costs associated with chronic disease.

Increasing the awareness of and implementing evidence-based programs in program delivery systems is key to helping Kansans develop the skills necessary to be effective self-managers. Kansas is fortunate to have evidence-based programs in several organizations and facilities across the state, but there is much more work to be done. Embedding the evidence-based programs in large delivery systems will increase the number of programs available for the nearly one out of four Kansans with arthritis.

The focus of this plan is to work with delivery system partners including but not limited to the following settings:

1. Wichita State University
2. Kansas State Research and Extension
3. Worksites and large employer groups
4. Primary care clinics participating in the Diabetes and Hypertension Quality of Care Project
5. Organizations working with and serving minority and disparate populations
6. Kansas Department on Aging and the Area Agencies on Aging

This plan sets the stage for the work required to reduce the impact of arthritis through the implementation of evidence-based interventions to improve the quality of life for those with arthritis. The dedicated members of ACT (Arthritis Community Taskforce) invite you to join them in their work and vision for a Kansas with a decreased prevalence of arthritis and associated disability.

Be Well,

Roderick L. Bremby
Secretary
Foreword

This updated version of the original Kansas Arthritis State Plan builds upon the strong foundation established through the dedicated work of several organizations and individuals. The ACT (Arthritis Community Taskforce) along with their many partners have been successful in increasing the awareness of arthritis, expanding the implementation of self-management interventions and gathering critical information on who is affected by arthritis through the Behavioral Risk Factor Surveillance System.

The National Arthritis Action Plan was used as the framework for the plan in addressing arthritis by increasing community awareness, implementing community-based evidence-based interventions, conducting statewide surveillance and program evaluation as well as addressing arthritis issues through policy strategies in partnership with other chronic disease programs.

Arthritis continues to be the number one cause of disability and disproportionately affects disparate populations. The plan objectives aim to ease the burden of arthritis for these individuals by providing programs and information through delivery system partners working with and providing services for members of the disparate population. Implementing culturally appropriate evidence-based programming through these systems will ensure access to an increased number of individuals who would otherwise not have the opportunity to implement the strategies necessary to manage their arthritis. Individuals currently living with a disability who are struggling to maintain their mobility due to the effects of arthritis will benefit from implementation of these programs through organizations they rely on for support and assistance.

Identifying and meeting the needs of all Kansans affected by arthritis and related conditions will be key in the successful implementation of the Kansas State Plan for Promoting the Health of People with Arthritis. Increasing the quality of life for Kansans with arthritis is the overall goal for the plan and ACT. Please embrace the objectives in this plan and assist in the work to reduce the impact of arthritis.

Richard Morrissey
KDHE, Interim Director of Health
Acknowledgments

A special thanks must be given to the individuals and organizations of the Arthritis Community Taskforce (ACT) that have devoted their time, wealth of knowledge and energy over the past several years to address the needs of Kansans impacted by arthritis. Through their work to implement the strategies identified in the first edition of the “Arthritis in Kansas” strategic plan, lessons were learned and additional data was collected to support the revisions made to this updated version. This document will continue to guide ACT in addressing arthritis in Kansas for the next five years.

• American Association of Retired Persons (AARP)
• Arthritis Foundation: Kansas and Western Missouri/Greater Kansas City Chapters
• Bloom and Associates
• Johnson County Area Agency on Aging
• Johnson County Health Department
• Kansas Activity Directors Association
• Kansas Department of Health and Environment, Office of Health Promotion
  - Injury and Disability Prevention Program
  - Special Studies Section
  - Health Risk Studies Section
• Kansas Department on Aging
• Kansas State University Research and Extension
• University of Kansas Medical Center, School of Allied Health
• University of Kansas, Office of Aging and Long Term Care
• Wichita State University, Center for Physical Activity and Aging
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Arthritis in Kansas Background

In 1999, the National Arthritis Action Plan: A Public Health Strategy (NAAP) was prepared under the leadership of the Arthritis Foundation, Association of State and Territorial Health Officials and the Centers for Disease Control and Prevention (CDC). The NAAP outlines a public health framework to address and reduce the impact of arthritis in the United States.

In 2006, the CDC estimated that as many as 46.4 million Americans had some form of doctor-diagnosed arthritis and an estimated 67 million adults will be affected by the year 2030.\(^1\) Arthritis is the leading cause of disability in the United States with 8.8% of the population reporting activity limitations attributable to arthritis and other rheumatic conditions. The national estimated medical expenditures and lost wages attributed to arthritis was approximately $128 billion ($80.8 billion in direct and $47.0 billion in indirect costs) in 2003.\(^2\)

As stated in the NAAP, “No one organization can effectively address arthritis. Strong partnerships must be built among the medical, voluntary and public health communities to ensure a coordinated, united effort. Only through the collective energy of an interdisciplinary approach, can we truly reduce the arthritis burden. The challenge for public health is to identify and help implement strategies for improving the health of an entire population.”\(^3\)

The Kansas Arthritis Community Taskforce (ACT), formed in July 2000, is comprised of dedicated individuals and organizations with an interest in reducing the impact of arthritis for the people of Kansas. The ACT motto is: **ACT (now) is a Joint Effort to advocate, educate and empower individuals with arthritis.** ACT membership represents organizations that work with individuals living with arthritis, and those professionals and organizations that provide arthritis-related services. In addition, several members of ACT personally deal with the effects of arthritis on a daily basis. ACT members have diligently worked to develop and create a strategic plan that can be implemented through partnerships across the state to reduce the impact of arthritis in Kansas. ACT will ensure the objectives and strategies of the strategic plan are carried forward. In addition, ACT will recruit system partners to promote arthritis prevention and control as a multidisciplinary approach.
Goals/Strategies/Objectives

The ACT’s overarching goal is to improve the quality of life among Kansans with arthritis. This goal was created to encompass the many facets of addressing this chronic disease. Reaching this goal over the next several years will entail the collaboration of partnerships at the state and local level. With that in mind, ACT developed strategies and objectives to expand upon and enhance the established public and private partnerships to address arthritis related issues in Kansas. The objectives fall under four main strategies:

- Awareness
- Community-Based Interventions
- Evaluation/Surveillance
- Policy strategies

The overarching goal of the strategic plan is to:
Increase the quality of life for Kansans with arthritis.
Arthritis Awareness
In Kansas, data from the 2007 Kansas Behavioral Risk Factor Surveillance System (BRFSS) survey indicates that an estimated 575,000 or 27.5% of adults in Kansas have doctor-diagnosed arthritis. Of the adult Kansas population, 9% report having activity limitations due to arthritis or joint symptoms. Among adults with doctor-diagnosed arthritis, 34% reported activity limitations. The estimated medical expenditures and lost wages in Kansas during 2003 were $1.1 billion ($700 million in direct costs and $405 million in indirect costs).²

Arthritis can cause pain, stiffness and swelling around joints resulting in decreased participation in activities of daily living. There is no cure for arthritis at this time, however steps can be taken to prevent or delay the onset of certain types of arthritis and to manage the symptoms associated with the disease. In addition, there are more than 100 different types of arthritis and related conditions. It is important to be properly diagnosed in order to receive appropriate treatment to prevent or slow disability associated with the disease.

In 2003, the Kansas Arthritis Program gathered baseline information from adult Kansans with doctor-diagnosed arthritis by asking specific state-added questions on the BRFSS. These individuals were asked about their awareness of self-management techniques or programs that were available in the state at that time. The results of the state added survey questions are displayed in Table 1.

<table>
<thead>
<tr>
<th>2003 BRFSS State Added Questions</th>
<th>Response</th>
<th>Weighted Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To your knowledge, are there educational courses or classes available in your community that could teach you how to manage problems related to your arthritis or joint symptoms?</td>
<td>Yes</td>
<td>49.7%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>50.3%</td>
</tr>
<tr>
<td>2. Do you currently participate in physical activity or exercise to help manage problems related to your arthritis or joint symptoms?</td>
<td>Yes</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>64%</td>
</tr>
<tr>
<td>3. Do you currently participate in any support group to help manage problems related to your arthritis or joint symptoms?</td>
<td>Yes</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>97%</td>
</tr>
<tr>
<td>4. Has a doctor or other health professional ever suggested you participate in an Arthritis Foundation program to help manage problems related to your arthritis or joint symptoms?</td>
<td>Yes</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>98%</td>
</tr>
</tbody>
</table>

Source: Kansas Behavioral Risk Factor Surveillance System (BRFSS) - 2003

The information contained in Table 1 confirms the need to increase awareness of arthritis and the steps that can be taken to reduce the impact of arthritis. In order to accomplish this, ACT has decided to conduct an evidence-based health communications campaign through partnerships throughout the state.
Objective 1: Implement a coordinated media/public awareness campaign annually that targets the general public, employers and health professionals using the CDC “Physical Activity: The Arthritis Pain Reliever” materials for the purpose of promoting strategies for controlling and managing arthritis through December 2013.

ACT has decided to adopt a health communications campaign developed by the CDC Arthritis Program titled, “Physical Activity: The Arthritis Pain Reliever.” The Spanish version is titled, “Buenos Dias Artritis.” The campaign consists of a variety of materials including print public service announcements, taped radio spots, brochures and posters. Certain materials can be localized for specific areas. General campaign material as well as senior-friendly materials are also available. Campaign materials can be viewed and downloaded from the CDC Arthritis Program webpage located at http://www.cdc.gov/arthritis/campaigns/index.htm.

Action 1: Develop a comprehensive marketing plan that can be readily updated, implemented and monitored each year.

Action 2: Use the most current Kansas BRFSS data available to identify geographic areas of the state each year for implementation of the media/public awareness campaign.

Action 3: Recruit potential partners located in identified geographic areas and priority populations each year to assist in implementation.

Action 4: Monitor plan implementation for results and make identified changes or additions to the comprehensive marketing plan.

Action 5: Identify large employers in identified areas to disseminate the updated Arthritis and Kansas Worker Fact Sheet with follow up discussion regarding implementation of CDC approved self-management programs.

Action 6: Develop and update a calendar of professional conferences across the state and submit proposals for presentations to promote CDC approved...
self-management programs. The following are associations or groups that meet at annual conferences in Kansas:

- Parks and Recreation
- Physical Therapy
- Occupational Therapy
- Nurses
- Activity Directors
- Primary Care Physicians
- Rheumatologists
- Orthopedic Surgeons
- Chronic Disease Practitioners
- Disability Caucus

**Action 7:** Develop a scripted power point slideshow that can be presented by partners on the benefits of physical activity for individuals with arthritis and the evidence-based programs available for implementation.

**Action 8:** Make the presentation available to partners.

**Expected Outcomes:**

- Increased requests by partnering organizations (e.g. AF, KDOA, KAP) to implement physical activity programs in geographical areas that are exposed to the awareness campaign.
- Increased participation in established CDC approved self-management interventions offered in the area.
- Increased partnerships across the state.
- Increased number of individuals with and without arthritis who participate in physical activity.

---

**Don’t sit still for arthritis pain.**

Arthritis hurts. Physical activity can help. Studies show that 30 minutes of moderate physical activity three or more days a week can reduce pain and help you move more easily. If 30 minutes is too much, try 10 minutes or 15 minutes at a time. Take a 15 minute walk. Then later, go for a 15 minute bike ride or swim. Or go dancing, wash the car, or rake some leaves. Make it more fun by asking friends or family members to join you. Keep it up, and in four to six weeks you could be hurting less and enjoying life more.

**Physical Activity.**

**The Arthritis Pain Reliever.**

A MESSAGE FROM THE
CENTERS FOR DISEASE CONTROL AND PREVENTION
THE ARTHRITIS FOUNDATION
THE DEPARTMENT OF HEALTH & HUMAN SERVICES
THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
Community-Based Interventions

The 2002 “Arthritis in Kansas” strategic plan recommended the creation of two pilot projects, one urban and one rural. These projects provided a “testing ground” for key stakeholders to begin collaborative work to address arthritis in their community. Both pilot projects have resulted in expansion of the Arthritis Foundation Self-Help Program and the Arthritis Foundation Exercise Program offerings. These programs have been sustained over time through the development of relationships with a variety of partners in each geographic location. Relationship development and maintenance takes time and resources but is critical for implementation and sustainability of programs.

Lessons learned during implementation of the pilot projects will be used to expand evidence-based programming in targeted geographic areas. In addition, a systematic approach will be used to implement programs by utilizing data collected through the BRFSS to identify areas of the state with the largest target population for program implementation. Gradual program expansion will take place in identified geographic areas.

The evidence-based programs ACT has chosen to implement have been identified by the CDC Arthritis Program as programs that help individuals with arthritis manage the pain and symptoms associated with the disease. The CDC continues to study and research additional programs that show potential for positive outcomes for individuals with arthritis. Expansion of the approved community-based interventions for individuals with arthritis provides additional opportunities for partnerships across the state as well as program integration with other chronic disease programs.

The evidence-based self-management programs include the following:

- Arthritis Foundation Exercise Program - this low impact class uses gentle range-of-motion movements suitable for every fitness level and can be done either standing or sitting.
- Arthritis Foundation Aquatics Program - this warm water exercise program moves the major joints through gentle range-of-motion for improved flexibility and muscle strengthening.
- Arthritis Foundation Self-Help Program - this interactive class allows participants to learn and practice strategies for pain and symptom control from their peers through brainstorming and problem solving techniques.
- Chronic Disease Self-Management Program/Kansans Optimizing Health Program (KOHP) - this interactive class is lead by peer leaders and provides participants the opportunity to learn various disease management skills through action planning and problem solving.
- Enhance Fitness/Seniors Together Enhance Physical Success (STEPS) - is a group exercise program designed specifically for older adults incorporating personal training principles, taught by nationally certified fitness instructors.
Detailed descriptions of each of the evidence-based programs can be found in the appendix.

**Objective II:** Increase the number of evidence-based arthritis self-management programs conducted in targeted geographic locations by 25% each year until 2013.

**Action 1:** Use current available BRFSS data to identify targeted geographic locations for program implementation annually.

**Action 2:** Identify and recruit potential system partners and possible program location sites in identified areas.

**Action 3:** Identify and contact key personnel within chosen system partners for program material dissemination.

**Action 4:** Organize and conduct leader training in the identified area recruiting from partner organizations that have committed to implementing a program through a signed letter of agreement.

**Action 5:** Monitor the number of programs implemented and length of time these programs are sustained.

**Expected Outcomes:**
- Increased number of organizations that implement one or more of the CDC approved self-management interventions.
- Increased number of trained leaders in the identified geographic location who regularly offer one or more of the CDC approved self-management interventions.
- Increased number of counties/sites will offer one or more of the CDC approved self-management interventions.
- Increased number of individuals with arthritis participate in the CDC approved self-management interventions.
- Decreased number of individuals with arthritis will report activity limitations due to their arthritis.
- Identification and maintenance of regional trainers in the six public health districts of the state in one or more of the CDC approved self-management interventions.
Objective III: Increase the number of system partners that implement programs and/or participate as members of ACT by 2013.

Action 1: Identify potential system partners in the identified geographic location each year by answering the following questions:
- What is the mission of the system?
- What population do they currently work with or have access to?
- How will they benefit?
- Do they have the infrastructure necessary to support implementation of a program or support expansion of programs?
  - Meeting space
  - Staff
  - Equipment
  - Financial support for start up costs and maintenance
  - Transportation for participants
  - Communication vehicle to reach the population they serve
  - What is the commitment and sustainability level of the partnership?

Action 2: Develop a template that can be individualized to highlight specific roles and responsibilities of identified partner organization.

Action 3: Identify and implement other tools that can be used in partnership building and maintenance such as position descriptions, evaluation tools, etc.

Action 4: Monitor effectiveness of identified tools from Action 3 and make changes as needed.

Action 5: Identify opportunities or avenues to acknowledge successful partnerships.

Action 6: Maintain regular communication with system partners.

Action 7: Provide technical assistance to system partners for continued maintenance of the program.

Action 8: Evaluate the effectiveness of partnerships on an annual basis.

Expected Outcomes:
- Increased number of CDC approved self-management programs implemented by system partners across the state.
- Increased number of individuals with doctor-diagnosed arthritis participating in self-management programs offered within systems in which they are involved.
- Increased number of self-management program trainers located within systems.
- Increased number of self-management leaders conducting classes within systems.
- The CDC self-management programs implemented in Kansas maintain long-term sustainability.
Evaluation/Surveillance
Evaluation/Surveillance

Evaluation is a vital component of program implementation and sustainability. Understanding the successes and barriers to program implementation improves the success rate of future implementation and maintenance of programs at the community level.

Surveillance is necessary to understand the impact of arthritis on the individual, the community and the state. Conducting surveillance activities on a regular basis provides essential information on the incidence, prevalence and risk factors associated with arthritis. The National Arthritis Action Plan states that surveillance would "facilitate greater understanding of who is affected; who is at greatest risk; what health beliefs and behaviors increase that risk; which occupations and occupational activities increase that risk; and how disease affects physical health, quality of life, economics and other areas."3

The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, annual population-based survey system, tracking health conditions and risk behaviors in the United States since 1984. It is coordinated by the Centers for Disease Control and Prevention (CDC) and is conducted in every state and several territories in the United States. The Health Risk Studies (HRS) Section of the Office of Health Promotion (OHP), KDHE conducted the first BRFSS survey in Kansas in 1990 as a point-in-time survey. Since 1992, OHP has conducted the Kansas BRFSS survey annually providing an ability to examine and monitor the trends of various diseases and risk factors/behaviors that are of public health importance in Kansas. The Kansas BRFSS produces high quality data with respect to scientific accuracy and reliability as well as high response rates as indicated by above average CASRO Response rates and other measures of data quality set by the CDC.

Research shows that personal health behaviors play a major role in the morbidity and mortality of chronic and communicable diseases. The primary focus of the BRFSS has been on behaviors related to the leading causes of death (e.g. heart disease, cancer, stroke, diabetes and injury) and other important health issues such as arthritis, obesity, cancer screenings, immunizations and access to health care. While many national studies measure health behaviors, the BRFSS is the only state-based surveillance system and is the largest continuously conducted telephone survey in the world. This state-based surveillance system is essential for state and local programs. Data from the Kansas BRFSS is used to: identify emerging health problems and at risk populations, develop strategic plans, track progress towards goals and objectives, evaluate public health programs, examine trends in behaviors over time and establish policies and laws. The Kansas BRFSS is also a main data source to monitor progress in meeting the health objectives in Healthy People 2010 and is utilized to establish and monitor the Healthy Kansans 2010 objectives.
The KDHE Health Risk Studies Program was recently awarded a grant from the Kansas Health Foundation to expand the number of completed Kansas BRFSS surveys from 8,000 to 16,000 in odd numbered years. The Kansas Arthritis Program has been collecting and plans to continue collecting arthritis specific information through the arthritis module of the BRFSS in the odd numbered years. The purpose of the expanded project is to have an adequate sample size needed to produce estimates for individual counties/groups of small counties in addition to state level estimates. The increased sample size in these years will provide local estimates that will be used by the Kansas Arthritis Program for scientific evidence-based decision making and planning of programming efforts.

The data collected is used to identify populations at greatest risk for arthritis, the impact of arthritis on the individual, the health risk behaviors associated with arthritis as well as the overall prevalence rate of arthritis for adults in Kansas. In addition to informing program implementation efforts, data collected through the Kansas BRFSS is used to update established fact sheets providing information on the effects of arthritis for Kansas adults. The “Osteoporosis in Kansas”, “Impact of Doctor-Diagnosed Arthritis for Kansans” and “Arthritis and the Kansas Worker” fact sheets can be found in the appendix as well as on the Kansas Arthritis Program website at www.k dheks.gov/arthritis. These fact sheets help to increase the awareness of arthritis with targeted audiences.

Data collected in the 2003 BRFSS was used to develop a detailed report of the impact of arthritis on Kansas adults. This report can also be found on the Kansas Arthritis Program website at www.k dheks.gov/arthritis. A similar report will be published every four to five years to assist in identifying trends over time and further guide the work of ACT and other interested parties in the state.

The Kansas Arthritis Program in conjunction with the Health Risk Studies Section will be conducting a special arthritis call back survey in 2009. The special survey will be conducted with individuals identified as having doctor-diagnosed arthritis through the 2009 Kansas BRFSS survey who have agreed to participate in a more in-depth survey specific to arthritis related issues. This survey will be used to assess the opinions, attitudes and needs of individuals with arthritis to guide the implementation of programs throughout the state.

**Objective IV:** Implement the arthritis core questions annually on the BRFSS and the Arthritis module on the BRFSS in the odd numbered years through 2013.

**Action 1:** Inform partners of the annual BRFSS planning meeting for the purpose of introducing or defending implementation of arthritis questions.

**Action 2:** Attend the annual BRFSS planning meeting to present and defend the rationale for inclusion of arthritis questions and identify other program questions that can be used to support program planning.
Action 3: Use BRFSS data to develop burden reports or fact sheets to keep policy makers, stakeholders, system partners and the general public informed of the results on a periodic basis.

Action 4: Use BRFSS data to update or make midcourse corrections to program implementation and planning.

Expected Outcomes:

- Policy makers, stakeholders, system partners are aware of the impact of arthritis in the state using BRFSS data.
- Policy makers, stakeholders, system partners are aware of the impact of arthritis on the individual using BRFSS data.
- Trends in the impact of arthritis in Kansas will be identified.
- Tracking participation in physical activity among doctor-diagnosed individuals will be implemented.
- Tracking participation in educational courses or classes used to teach individuals how to manage their arthritis will be implemented.
- Corrections or midcourse planning will be made based on the data collected through the BRFSS arthritis module and supporting data.
Objective V: Evaluate unmet needs and barriers of arthritis related programs through the arthritis call-back survey by 2013.

Action 1: Develop the call back survey tool to identify the gaps, barriers and need for self-management programs.

Action 2: Conduct the call back survey in partnership with the Health Risk Studies Section from individuals identified with doctor-diagnosed arthritis during the 2009 BRFSS.

Action 3: Develop survey tools to identify additional gaps, barriers and needs for self-management programs implemented through delivery system partners in the identified geographical location of the state.

Action 4: Identify different survey techniques and implementation methods considering the demographics in the geographical area such as:
- Phone
- Mail
- Internet

Action 5: Use survey data results to make decisions, modifications and plans.

Action 6: Conduct individual program evaluation and share the results with stakeholders, policy makers, general public and potential funders.

Expected Outcomes:
- Gaps and needs will be addressed and reduced.
- Identified barriers would be used to make informed decisions, modifications or plans.
- Identify programs that are appropriate for implementation in various geographic locations.
- Program evaluation data will guide future decisions about program development, implementation and funding.
Policy Strategies
Implementing or changing policy at the state, local and organizational level will help improve access to programs and support strategies identified in this document. Policy strategies can be formal such as requiring legislative action or can be informal such as worksite policies that support healthy food options in vending machines. Policy change can be used to reach specific goals in a variety of settings.

The Kansas ACT will follow the framework of the National Arthritis Action Plan which recommends implementation of policies that create an environment supporting prevention through the promotion of increased opportunities for physical activity as well as social community norms promoting improved quality of life. Physical activity can reduce the pain associated with arthritis, and can improve physical function and mental health among people with arthritis. The Surgeon General recommends accumulating 30 minutes of physical activity on most days of the week. Walking is an activity that people of all ages and varied levels of physical ability can participate in. It is free, can be done almost anywhere and does not require special equipment. Walkable communities provide all residents with physical attributes that make walking and wheeling easy, enjoyable and safe. Walkable communities promote physical activity through well-maintained and wide continuous, level sidewalks; and connectivity to places of business and residences. Walkable areas are well lit and aesthetically pleasing. Ramped curb cuts allow for safe and easy crosswalks and provide a buffer between the street and the sidewalk. All of these attributes can have a strong impact on whether individuals choose to walk.

At the national level, arthritis objectives have been incorporated into Healthy People 2010 where the second chapter is devoted to objectives designed to reduce the impact of arthritis, osteoporosis and chronic back conditions. A mid-course review of Healthy People 2010 objectives was recently completed resulting in revised objectives which can be found in the appendix.

The Kansas plan will focus initially on increasing awareness of arthritis as a public health issue among key state and local level stakeholders and policy-makers. Fact sheets, the strategic plan and burden reports developed through the ACT partnership will be used to raise awareness of the impact of arthritis at the state and local level. As awareness of arthritis as a public health issue increases, the ACT partnership will work to develop policy initiatives that support a prevention focused environment and an improved quality of life for Kansans with arthritis.

An estimated 27.5% (575,000) adults in Kansas have doctor-diagnosed arthritis. Co-morbidities are also present. Doctor-diagnosed arthritis is prevalent among those with other chronic conditions: in 52% of adults with diabetes; 48% of adults with hypertension; 44% of adults tested
and diagnosed with high blood cholesterol; and 41% of adults with asthma as illustrated in Table 2 (2007 BRFSS).

<table>
<thead>
<tr>
<th>Health Condition</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>52%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>48%</td>
</tr>
<tr>
<td>High Blood Cholesterol</td>
<td>44%</td>
</tr>
<tr>
<td>Current Asthma</td>
<td>41%</td>
</tr>
</tbody>
</table>

Table 2: Percentage of Adults With Doctor-Diagnosed Arthritis by Health Condition, 2007 Kansas BRFSS


Because many chronic diseases share the same risk factors, the ACT partnership will work with chronic disease organizations and develop partnerships to bring the need for policy changes to the forefront to reduce the prevalence of those risk factors.

**Objective VI:** Convene a workgroup that will develop a policy framework to advocate for arthritis related issues at the state and local level by 2013.

**Action 1:** Identify other chronic disease policy workgroups or policy initiatives occurring in chronic disease as potential partners or to use as role models.

**Action 2:** Identify avenues and opportunities to represent arthritis in the policy arena.

**Action 3:** Advocate for inclusion of the self-management programs as evidence-based prevention programs for arthritis or other chronic diseases with the Kansas Health Policy Authority and other policy-makers.

**Action 4:** Develop fact sheets on the benefits of participating in self-management programs.

**Expected Outcomes:**
- Increased awareness by decision makers on the benefits of addressing prevention through the implementation of self-management programs.
- Legislative and/or policy action to promote and support the implementation of arthritis prevention and education.
References


Healthy People 2010 Revised
Objectives

Arthritis and Other Rheumatic Conditions

2-1. Reduce the mean level of joint pain among adults with doctor-diagnosed arthritis.

Target: 5.3 mean pain level.

Baseline: Based on a scale of 0 (no pain) to 10 (pain as bad as it can be), 5.6 was the mean pain level rating among adults aged 18 years and older with doctor-diagnosed arthritis in 2002 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

2-2. Reduce the proportion of adults with doctor-diagnosed arthritis who experience a limitation in activity due to arthritis or joint symptoms.

Target: 33 percent.

Baseline: 36 percent of adults aged 18 years and older with doctor-diagnosed arthritis experienced a limitation in activity due to arthritis or joint symptoms in 2002 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

2-3. Reduce the proportion of adults with doctor-diagnosed arthritis who have difficulty in performing two or more personal care activities, thereby preserving independence.

Target: 1.5 percent.

Baseline: 2.1 percent of adults aged 18 years and older with doctor-diagnosed arthritis had difficulty performing two or more personal care activities in 2002 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.
2-4. Increase the proportion of adults with doctor-diagnosed arthritis who receive health care provider counseling.

**Target and baseline:**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Increase the Proportion of Adults Aged 18 Years and Older With Doctor-Diagnosed Arthritis Who Receive Health Care Provider Counseling</th>
<th>2002 Baseline*</th>
<th>2010 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td>2-4a.</td>
<td>For weight reduction among overweight and obese persons</td>
<td>35</td>
<td>46</td>
</tr>
<tr>
<td>2-4b.</td>
<td>For physical activity or exercise</td>
<td>52</td>
<td>67</td>
</tr>
</tbody>
</table>

**Target setting method:** Better than the best.

**Data Source:** National Health Interview Survey (NHIS), CDC, NCHS.

2-5. Reduce the impact of doctor-diagnosed arthritis on employment in the working-aged population.

**Target and baseline:**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Reduction in the Impact of Doctor-Diagnosed Arthritis on Employment in the Working-Aged Population Aged 18 to 64 Years</th>
<th>2002 Baseline*</th>
<th>2010 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td>2-5a.</td>
<td>Reduction in the unemployment rate among adults with doctor-diagnosed arthritis</td>
<td>33</td>
<td>27</td>
</tr>
<tr>
<td>2-5b.</td>
<td>Reduction in the proportion of adults with doctor-diagnosed arthritis who are limited in their ability to work for pay due to arthritis</td>
<td>30</td>
<td>23</td>
</tr>
</tbody>
</table>

**Target setting method:** Better than the best.

**Data Source:** National Health Interview Survey (NHIS), CDC, NCHS.

2-6. Eliminate racial disparities in the rate of total knee replacements among persons aged 65 years and older.

**Target:** 0 percent.

**Baseline:** In 2000, the rate for the white non-Hispanic population was 34 percent higher than the rate for the black non-Hispanic population.

**Target setting method:** Total elimination.

**Data source:** Medicare Parts A and B, CMS.
2-7. Increase the proportion of adults with chronic joint symptoms who have seen a health care provider for their symptoms.

**Target:** 61 percent.

**Baseline:** 56 percent of adults aged 18 years and older with chronic joint symptoms saw a health care provider for their symptoms in 2002 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data Source:** National Health Interview Survey (NHIS), CDC, NCHS.

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2-8. Increase the proportion of adults with doctor-diagnosed arthritis who have had effective, evidence-based arthritis education as an integral part of the management of their condition.

**Target:** 13 percent.

**Baseline:** 11 percent of adults aged 18 years and older with doctor-diagnosed arthritis had effective, evidence-based arthritis education as an integral part of the management of their condition in 2002 (age adjusted to the year 2000 standard population).

**Target setting method:** Better than the best.

**Data source:** National Health Interview Survey (NHIS), CDC, NCHS.

---

**Osteoporosis**

2-10. Reduce the proportion of adults who are hospitalized for vertebral fractures associated with osteoporosis.

**Target:** 14.0 hospitalizations per 10,000 adults aged 65 years and older.

**Baseline:** 17.5 hospitalizations per 10,000 adults aged 65 years and older were for vertebral fractures associated with osteoporosis in 1998 (age adjusted to the year 2000 standard population).

**Target setting method:** 20 percent improvement.

**Data source:** National Hospital Discharge Survey (NHDS), CDC, NCHS.
Aquatic Facts

The Arthritis Foundation Aquatic Program, launched in 1983, is a recreational exercise program designed to accommodate the abilities of individuals with arthritis and other chronic diseases (each person exercises at his/her own pace). The program is held in a warm water pool (minimum water temperature 83 degrees). Classes are lead by Arthritis Foundation certified leaders/instructors for an hour twice a week.

Participants do not need to know how to swim to participate in the basic or plus program. A deep-water program was introduced in 2002 with a combination of shallow and deep-water activities. The nationally standardized exercises are done below the surface of the warm water to help relax the muscles, reduce stress on joints and reduce pain associated with moving the joint through range-of-motion.

This program provides socialization, education and independence to thousands of participants each day. It may address the following goals:

- Increase sense of well-being
- Decrease depression and isolation
- Increase socialization
- Decrease pain and stiffness
- Improve and maintain mobility/flexibility
- Improve posture
- Increase strength and endurance
- Improve balance and coordination
- Improve mobility
- Improve performance of daily activities
- Improve methods for joint protection and self-care skills

Components of the Arthritis Foundation Aquatics Program include:

- Range-of-motion or flexibility exercises
- Stretching exercises
- Muscle strengthening exercises
- Conditioning/endurance exercises
- Balance and coordination exercises
- Breathing exercises
- Posture and body mechanics
- Games and special activities
- Relaxation techniques
- Participant Education:
  - Body awareness
  - Joint protection & energy conservation
Participant benefits include:
- Decreased pain
- Increased flexibility and range-of-motion
- Better, more relaxed sleep
- Increased energy
- Improved outlook
- Improved overall health status

Criteria for Aquatic Program Leader/Instructor:
The Aquatic Program is lead by Arthritis Foundation certified trained leaders/instructors. Qualified leaders are individuals with arthritis who are CPR certified. Qualified instructors are also certified lifeguards.

Leader/Instructor Training:
The one or 1-1/2 day training is provided by the Arthritis Foundation. Training materials provide in-depth information needed to conduct and market classes. Trained leaders/instructors are asked to conduct at least one class series annually in their community. The Arthritis Foundation provides support to trained leaders in the form of technical assistance for participant recruitment, marketing assistance and program implementation.

Leader/Instructor Expectations:
- Identify location to conduct program
- Help market and promote the program
- Teach at least one class series annually and maintain certification according to program guidelines
- Lead program classes in accordance with program guidelines
- Maintain daily attendance records, complete participant evaluation according to program guidelines and provide participant information to sponsoring agency

Program Sites:
The Aquatic Program can only be implemented in a warm pool with water temperatures between 83° and 88°.

Rewards and Recognition:
- Help others learn to take control of a chronic disease and improve their quality of life
- Provide a valuable educational program in the community
- Form new and lasting relationships

For more information on the Arthritis Foundation Aquatic Program contact:

Arthritis Foundation Chapter Offices:
Kansas Chapter
1999 N. Amidon, Suite 105
Wichita, KS  67203
316-263-0116 or 1-800-362-1108

Western Missouri/Greater Kansas City Chapter
Johnson and Wyandotte counties
1900 W. 75th Street, Suite 200
Prairie Village, KS  66208
913-262-2233
This exercise program was developed by physical therapists specifically for people with arthritis to keep joints flexible, muscles strong and to help reduce the pain associated with arthritis. The program is also beneficial for individuals with other chronic conditions who are currently inactive or have mobility limitations and want to begin an exercise program.

The exercise routines use gentle range-of-motion movements that are suitable for every fitness level. One-hour classes are held 2 – 3 times per week where routines can be quickly learned for easy adaptation at home.

The program curriculum includes health education lesson plans on topics to help participants learn strategies to maintain a lifelong exercise program, manage pain, reduce stress, improve diet and understand the role of medications.

The Arthritis Foundation Exercise Program is a recreational program and is not designed to meet specific therapeutic problems; it may address the following goals:

- Reduce pain, fatigue & stiffness
- Increase flexibility of the structure surrounding the joint
- Improve posture
- Increase endurance
- Restore or maintain joint range-of-motion
- Maintain or increase muscle strength
- Improve balance & coordination

Components of the Arthritis Foundation Exercise Program include:

- Strengthening exercises
- Posture & body mechanics
- Breathing exercises
- Activities to promote self-care
- Weight-bearing activities
- Body awareness
- Relaxation techniques

The variety of exercises in the program allow instructors to fit the general format of the class to the needs of the participants. Instructors can tailor a class targeted to sedentary adults in a senior center by focusing on seated exercises.

A course taught at a worksite with younger adults with few joint problems could feature standing exercises, floor exercises and longer endurance routines. In classes that include a combination of participants with different capabilities, the instructor can ensure that each class member can continue to exercise and be challenged.

Participant benefits include:

- Decreases in depression, pain and fatigue
- Improved self-reported health
- Increased self-efficacy
Exercise Facts

Criteria for Exercise Program Instructor:
The Exercise Program is led by Arthritis Foundation certified trained instructors. Qualified instructors have an exercise, fitness or health-related background through course work, experience, degree or diploma as well as CPR certification.

Leader Training:
The one day training is provided by the Arthritis Foundation in partnership with the Kansas Arthritis Program. Certified trainers conduct the training. Training materials provide in-depth information needed to conduct and market classes. The Kansas Arthritis Program underwrites training related costs. Trained instructors are asked to conduct at least two class series annually in their community. The Arthritis Foundation and the Kansas Arthritis Program provide support to trained leaders in the form of technical assistance for participant recruitment, marketing assistance and program implementation.

Leader Expectations:
- Identify location to conduct program
- Help market and promote the program
- Teach at least twice annually and maintain certification according to program guidelines
- Lead program classes in accordance with program guidelines
- Maintain daily attendance records, complete participant evaluation according to program guidelines and provide participant information to sponsoring agency

Program Sites:
The Exercise Program can be implemented any place people gather such as:
- Worksites
- Churches
- Senior Centers
- Hospitals
- Fitness Facilities

Rewards and Recognition:
- Help others learn to take control of a chronic disease and improve their quality of life
- Provide a valuable educational program in the community
- Form new and lasting relationships

For more information on the Arthritis Foundation Exercise Program contact:

Arthritis Foundation Chapter Offices:
Kansas Chapter
1999 N. Amidon, Suite 105
Wichita, KS 67203
316-263-0116 or 1-800-362-1108

Western Missouri/Greater Kansas City Chapter
(Johnson and Wyandotte counties)
1900 W. 75th Street, Suite 200
Prairie Village, KS 66208
913-262-2233

Kansas Arthritis Program
1000 SW Jackson, Suite 230
Topeka, KS 66612
785-296-8150
www.kdheks.gov/arthritis
KOHP Facts

**Kansas Optimizing Health Program**

**General Overview:**
KOHP, the Chronic Disease Self-Management Program developed at Stanford University is designed for individuals with arthritis, diabetes, heart disease, lung disease, asthma and stroke. The workshop is conducted over a six week period, once a week for 2.5 hours. The copyrighted KOHP curriculum is facilitated by trained program leaders. Kansas Department of Health and Environment (KDHE) holds the license to implement the program through statewide partnerships.

KOHP provides participants with the opportunity to learn and share experiences with their peers while learning new strategies and techniques to reduce pain, improve mobility and maintain independence. Participants receive the *Living a Healthy Life with Chronic Conditions* book as a supporting resource.

**The topics presented and discussed include:**
- Making an action plan
- Managing symptoms
- Problem solving techniques
- Dealing with difficult emotions
- Managing pain, fatigue, depression
- Developing and adapting an individualized exercise program
- Working with your health care team and system
- Understanding medications
- Improving nutrition
- Developing communication techniques for family and friends
- Making treatment decisions
- Improving breathing

**Participant benefits include:**
- Fewer days in the hospital
- Fewer outpatient and ER visits
- Decreased functional limitations
- Less fatigue
- Less health distress

**Criteria for KOHP leader:**
KOHP is designed to be lead by a team of leaders one of which is living successfully with a chronic disease and/or a health professional.
Leader Training:
Leader training is provided by the KDHE Office of Health Promotion and is conducted over a four-day timeframe by certified trainers. Training materials provide in-depth information needed to conduct and market the classes. The Office of Health Promotion underwrites training and training related costs. Trained leaders are asked to conduct a minimum of two workshops per year in their community. The Office of Health Promotion provides support to trained leaders in the form of technical assistance for participant recruitment, marketing assistance, and program implementation.

Leader expectations:
- Identify location to conduct program
- Help market and promote the program
- Teach at least twice annually and maintain certification according to program guidelines
- Lead program classes in accordance with program guidelines
- Maintain daily attendance records, complete participant evaluation according to program guidelines and provide participant information to sponsoring agency

Program Sites:
KOHP can be implemented any place people gather such as:
- Worksites
- Churches
- Senior Centers
- Hospitals
- Fitness Facilities

Rewards and Recognition:
- Help others learn to take control of a chronic disease and improve their quality of life
- Provide a valuable educational program in the community
- Form new and lasting relationships

For more information on KOHP please contact:

Cindy Winters
1000 SW Jackson, Suite 230
Topeka, KS 66612
785-296-8150
cwinters@kdhe.state.ks.us

Teri Caudle
1000 SW Jackson, Suite 230
Topeka, KS 66612
785-368-7289
tcaudle@kdhe.state.ks.us
General Overview:
The Arthritis Foundation Self-Help Program was developed at the Stanford Arthritis Center in 1979 and has been successfully conducted for over 25 years throughout the world for people with arthritis.

This workshop consists of six, two-hour sessions held over a six-week period. Each course is facilitated by a team of trained leaders and is designed to complement, not replace, traditional medical care.

The workshop covers:
- Basic aspects of arthritis and joint anatomy
- Benefits of exercise & how to exercise safely
- Ways to use joints wisely & conserve energy
- Sharing of ideas to improve one’s functional ability
- Appropriate utilization of arthritis medications
- Communication with health care providers
- Sharing of experiences and group problem solving
- Cognitive pain-management techniques
- Discussion of behaviors designed to decrease stress, pain and depression
- Skills and practice to improve self-efficacy

The Arthritis Foundation Self-Help Program is a group education program designed to complement the care provided by participant’s health-care team and allows participants to share experiences with others. Trained volunteers, many who have arthritis or fibromyalgia, lead the workshops.

Participant benefits include:
- Increased knowledge about their arthritis
- Increased frequency of exercise and relaxation
- Increased self-confidence
- Decreased depression
- Cost savings associated with:
  - Decreased pain resulting in decreased medication use
  - Decreased physician visits
Criteria for Self-Help Leader:
This workshop is designed to be lead by a team, either a health professional and/or individuals living successfully with arthritis or fibromyalgia.

Leader Training:
The two-day training is provided by the Arthritis Foundation in partnership with the KDHE Kansas Arthritis Program. Certified trainers conduct the training. Training materials provide in-depth information needed to conduct and market workshops. The Kansas Arthritis Program underwrites training related costs. Trained leaders are asked to conduct a minimum of two workshops per year in their community. The Arthritis Foundation and the Kansas Arthritis Program provide support to trained leaders in the form of technical assistance for participant recruitment, marketing assistance and program implementation.

Leader Expectations:
• Identify location to conduct program
• Help market and promote the program
• Teach at least twice annually and maintain certification according to program guidelines
• Lead program classes in accordance with program guidelines
• Maintain daily attendance records, complete participant evaluation according to program guidelines and provide participant information to sponsoring agency

Program Sites:
The Arthritis Foundation Self-Help Program can be implemented any place people gather such as:
• Worksites
• Hospitals
• Churches
• Fitness Facilities
• Senior Centers

Rewards and Recognition:
• Help others learn to take control of a chronic disease and improve their quality of life
• Provide a valuable educational program in the community
• Form new and lasting relationships

For more information on the Arthritis Foundation Self-Help Program contact:

Arthritis Foundation Chapter Offices:
Kansas Chapter
1999 N. Amidon, Suite 105
Wichita, KS  67203
316-263-0116
or 1-800-362-1108
Western Missouri/Greater Kansas City Chapter
(Johnson and Wyandotte counties)
1900 W. 75th Street, Suite 200
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913-262-2233
Kansas Arthritis Program
1000 SW Jackson, Suite 230
Topeka, KS  66612
785-296-8150
www.kdheks.gov/arthritis
A full hour of fun, dynamic cardiovascular exercise, strength training, and stretching make STEPS the premier choice for older adults. Based on solid research and tested at over 100 sites around the country, STEPS focuses on stretching, flexibility, balance, low impact aerobics, and strength training exercises — everything health professionals say is needed to maintain health and function as people grow older. STEPS is generally offered three times a week for one hour.

The Kansas Department on Aging holds the license to implement the program through the senior network. Classes are lead by certified instructors with special training in physical fitness for older adults.

What participants experience in a typical class:
- 5 minute warm-up to get the blood flowing to the muscles
- 20 minute aerobic workout that gets participants moving or walking, workout to lively music chosen by classmates.
- 5 minute cool-down
- 20 minute strength training workout with soft ankle and wrist weights
- 10 minute stretch to keep muscles flexible
- Balance exercises throughout the class

Participant benefits include:
- Improved physical progress tracked every 4 months
- Increased strength
- Increased activity levels
- Elevated mood
- Decreased depression

Criteria for STEPS Instructor:
STEPS is lead by instructors with certification from a nationally recognized fitness organization and are CPR certified.

Instructor Training:
The twelve hour training is conducted over two consecutive days by nationally certified Enhance Fitness trainers. Trained leaders/instructors are asked to conduct the class on a regular basis in their community. The Kansas Department on Aging provides support to trained instructors in the form of technical assistance for participant recruitment, marketing assistance and program implementation.
Instructor Expectations:
- Identify location to conduct program
- Help market and promote the program
- Teach classes on a regular basis and maintain certification according to program guidelines
- Lead program classes in accordance with program guidelines
- Maintain daily attendance records, complete participant evaluation according to program guidelines
  and provide participant information to sponsoring agency

Program Sites:
STEPS is implemented in:
- Churches
- Senior Centers
- Fitness Facilities
- Park and Recreation Sites

Rewards and Recognition:
- Help others learn to take control of a chronic disease and improve their quality of life
- Provide a valuable educational program in the community
- Form new and lasting relationships

For more information on STEPS contact:
The Kansas Department on Aging
Jennifer Springer
503 S. Kansas
Topeka, KS 66612
785-296-6448
Jennifer.springer@aging.ks.gov
Arthritis and the Kansas Worker in 2005

Arthritis includes more than 100 diseases and conditions affecting the joints, surrounding tissue, and other connective tissues.

- Among Kansans who are employed for wages or self-employed, 20% have doctor diagnosed arthritis.
- Of Kansans with arthritis or chronic joint symptoms who are of working age (18-64), 27% report being limited in their usual activities because of arthritis or joint symptoms.

Physical Activity Saves Health Care Costs

- Individuals who participate in physical activity at least 1-2 times per week save $250 in health care costs per year compared to individuals who are inactive. *
- Individuals with arthritis who are inactive spend approximately $1250 more per year on health care costs than individuals who are active. Active, ≥ 30 minutes of moderate or strenuous physical activity on ≥ 3 days per week; inactive, less than this amount.**

Cost-Saving Prevention/Self Management Programs

The Arthritis Foundation offers several cost effective evidence-based programs that have been shown to reduce the impact of arthritis:

The Arthritis Foundation Self-Help Program is designed to: identify and teach individuals the latest pain management techniques, create an individualized exercise program, manage fatigue and stress more effectively, the purposes and effective use of medications, find solutions to problems caused by arthritis, identify ways to deal with difficult emotions, the role of nutrition in arthritis management, new ways to communicate with family and friends and how to form a partnership with a health-care team.

- Benefits include: improved self-efficacy, decline in number of physician visits and reduced pain by 18-20%.
- For individuals with rheumatoid arthritis, the self-help program saves $648 in health care costs over a 4-year period. For individuals with osteoarthritis, the self-help program saves $189 in health care costs over a 4-year period.

Arthritis Foundation Exercise Program: This program is a gentle low impact land-based exercise class.

- Benefits include: increasing or maintaining joint flexibility, increased range-of-motion, increased muscle strength, reduction in pain, increased stamina, and increase in perceived self-efficacy.

Arthritis Foundation Aquatics Program: This is a warm water exercise program.

- Benefits include: improved joint flexibility, improved range-of-motion, improved muscle strength, decreases in pain and increase in functional ability.

Easy and Inexpensive Workplace Accommodations

- Provide easily adjustable chairs
- Install work assist arms or wrist rest at keyboards
- Use lateral file cabinets for easier access
- Supply pens with large grips and/or large barrels
- Use telephones with big buttons
- Offer ergonomic keyboards
- Encourage employees to take frequent short breaks
- Place rubber mats on concrete floors
- Encourage proper lifting techniques
PREVENTION

- Physical Activity: Improves flexibility and joint mobility while reducing joint pain and stiffness.
  - Kansans are encouraged to participate in the recommended amount of physical activity which is a minimum of 30 minutes of moderate physical activity at least 5 days per week or vigorous activity at least 3 days per week for 20 minutes.
  - Physical activity can be broken down into 10 minute increments.
  - 41% of adult Kansans with doctor-diagnosed arthritis participate in the recommended amount of physical activity.

- Weight Control: There is an association between obesity and certain types of arthritis such as osteoarthritis and gout. Excess body weight increases the pressure and stress on weight bearing joints.
  - Approximately 35.4% of obese Kansans versus 22% of normal/underweight Kansans has doctor-diagnosed arthritis.
  - Body mass index (BMI) is a weight stature indicator measuring weight for height.
    - Obese: BMI ≥30
    - Overweight: BMI between 25 and 29.9

- Decreasing BMI by 2 units reduces a person’s risk for osteoarthritis by approximately 50%.

- Avoid Injuries: Strategies include: stretching, use of equipment such as knee braces and wrists supports, and reducing repetitive motion.

GENERAL INFORMATION ON ARTHRITIS

- An estimated 554,043 Kansans or 27% of the adult population of Kansas have doctor-diagnosed arthritis.
  - Possible arthritis includes individuals who have chronic joint symptoms but have not been told by a doctor that he/she has arthritis.
  - Individuals with possible arthritis should be referred to a physician or health care professional for proper diagnosis. With a proper diagnosis, a person can begin to properly manage symptoms and prevent or reduce disability.

- People of all ages are affected by arthritis. Among Kansans age 18-64, 21.5% have doctor-diagnosed arthritis.

- Types of arthritis include: osteoarthritis, tendonitis, bursitis, carpal tunnel syndrome, rheumatoid arthritis and ankylosing spondylitis.
  - Visit the Arthritis Foundation’s website: www.arthritis.org for more information on the different types of arthritis.

Contact the Arthritis Foundation for information on how to incorporate cost saving programs into your worksite.

Kansas Chapter
1999 N. Amidon, Suite 105
Wichita, KS 67203-2122
1-800-362-1108

Western MO/Greater KC Chapter
1900 W. 75th Street, Suite 200
Prairie Village, KS 66208
1-888-719-5670

Information on this document is from the 2005 Kansas Behavioral Risk Factor Surveillance System (BRFSS)
This publication was supported by Cooperative Agreement #U58/CCU722793-04 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.
An estimated 556,938 Kansans or 26.9% of adults (18 years and older) have doctor-diagnosed arthritis.

Overall impact of doctor-diagnosed arthritis:
- Arthritis costs Kansans an estimated $1.1 billion in 2003: $700 million in direct costs and $405 million in indirect costs.
- 60.2% of Kansans who reported that their poor physical or mental health kept them from doing their usual activities for more than 14 days during the past 30 days have doctor-diagnosed arthritis.
- 57.8% of Kansans with a disability report having doctor-diagnosed arthritis.
- 34.0% of Kansans with doctor-diagnosed arthritis have reported activity limitations due to arthritis or joint symptoms.

The impact of doctor-diagnosed arthritis can be reduced through physical activity and maintaining proper weight.
- Arthritis affects individuals of all ages. Prevalence of doctor-diagnosed arthritis increases with increasing age.

Information on this document is from the 2005 Kansas Behavioral Risk Factor Surveillance System (BFRSS).
Arthritis includes more than 100 diseases that affect the joints, surrounding tissues, and other connective tissues.
Doctor-Diagnosed Arthritis Definition: Individuals who reported that they have been told by a doctor or other health professional that they have some form of arthritis, osteoarthritis, rheumatoid arthritis, lupus, gout, fibromyalgia or carpal tunnel syndrome. [Source: Centers for Disease Control and Prevention].
This publication was supported by Cooperative Agreement # US8/CCU722793 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.
There is a relationship between obesity and certain types of arthritis including gout and osteoarthritis. Excess body weight increases the pressure and stress on weight bearing joints.
- Approximately 35.4% of obese Kansans vs. 21.9% of normal/underweight Kansans have doctor-diagnosed arthritis.
- Body Mass Index (BMI) is a weight status indicator measuring weight for height.
  - Obese: BMI ≥ 30
  - Overweight: BMI between 25 and 29.9
  - Normal/Underweight: BMI < 25
- Weight Control: Decreasing BMI by 2 units reduces an obese or overweight person’s risk for osteoarthritis by approximately 50%.

Among Kansans who perceive their health status as fair or poor, 54.6% have doctor-diagnosed arthritis, whereas 22.7% of those who perceive their health as good to excellent have doctor-diagnosed arthritis.
- Overall, Kansans with doctor-diagnosed arthritis have a lower rate of physical activity compared to Kansans without doctor-diagnosed arthritis.
  - 19.7% of Kansans with doctor-diagnosed arthritis reported no moderate or vigorous physical activity.
  - Levels of Physical Activity defined as:
    - Recommended Activity: participating in moderate physical activity at least 5 times per week for at least 30 minutes or vigorous physical activity at least 3 times per week for at least 20 minutes.
    - Insufficient: some activity but not enough to meet recommendations.
    - Inactive: not participating in any physical activity or exercise other than their regular job in the past 30 days.

Arthritis Foundation Self-Management Programs:
- Arthritis Foundation Exercise Program: Improves flexibility and joint mobility while reducing joint pain and stiffness.
- Arthritis Foundation Aquatics Program: Warm water exercise program that improves joint mobility and muscle strength while reducing pain and stiffness.
- Arthritis Foundation Self Help Program: Six-week behavior change program that teaches pain management skills and techniques.

Contact the Arthritis Foundation for more information at www.arthritis.org.
Osteoporosis (oss-tee-oh-puh-ro-sis) is a disease that causes bones to lose mass and become brittle, which can lead to rounded shoulders, loss of height, and bone fractures\(^1\).

- In the United States, an estimated 10 million adults over the age of 50 have osteoporosis\(^2\).
- In Kansas, approximately 100,000 (12\%) of adults over the age of 50 have osteoporosis\(^3\).
- 18\% of adult Kansans 65 years and older have osteoporosis\(^3\).

**RISK FACTORS**
The amount of bone mass a person has as a young adult and the rate at which it is lost with increasing age determines a person’s risk for osteoporosis\(^1\). There are many factors associated with osteoporosis.

- Low calcium intake
- Physical inactivity
- More than 2 alcoholic drinks per day (heavy alcohol consumption)
- Tobacco use
- Use of cortisone or thyroid hormones
- Heredity
- Reduced levels of estrogen
- Anorexia nervosa or bulimia
- Women

**ECONOMIC IMPACT**

**National Cost Estimates:** Fractures are the biggest problem among most individuals with osteoporosis. Approximately 1.5 million osteoporosis related fractures occur in the United States every year. On average the annual direct care expenditure for osteoporosis related fractures was approximately $15 billion per year in 2002.

**Kansas Cost Estimates:** Based on the national figure for osteoporosis related fractures, an estimated 12,176 osteoporosis related fractures occur in Kansas. Based on the national cost estimates, the direct care expenditures for osteoporosis related fractures in Kansas would be roughly $121 million.
For individuals with osteoporosis, falls increase their risk of fracturing bones.

- The prevalence of falls during the past 3 months is highest among adults 50 years and older with osteoporosis compared to adults 50 years and older without osteoporosis (18% vs. 11% respectively).
- The prevalence of injury from falls within the past 3 months is highest among adults 50 years and older with osteoporosis than adults without osteoporosis (44% vs. 27% respectively).

**PREVENTION**

**EDUCATION AND EXERCISE PROGRAMS**

- Individuals with osteoporosis can reduce the risk of injury and increase strength and flexibility by participating in the Arthritis Foundation Self-Help program, Arthritis Foundation Exercise program, Chronic Disease Self Management program or EnhanceFitness. For a listing of program locations, go to www.kdheks.gov/arthritis.

**NUTRITION**

- Calcium is a major component of bones. Adults should consume between 1000 mg and 1300 mg of calcium per day depending upon their age and gender. Sources of calcium include dairy products, broccoli, kale, sardines with bones, and foods fortified with calcium such as orange juice and breakfast cereals.
- Other nutrients important for bone health include: Vitamin D, phosphorus and magnesium.
- To obtain these bone health nutrients, it is important to eat a well balanced diet including at least 5 servings of fruits and vegetables each day. One out of 5 (20%) adult Kansans consume fruits and vegetables at least 5 times per day.

**FALLS**

To reduce the risk of falls, individuals should:

- Receive regular vision checkups
- Eliminate (where possible) medications and/or dosages that may cause dizziness, low blood pressure, or confusion
- Remove environmental obstacles that can lead to falls (remove throw rugs, install night lights, install railings on stairs, wear rubber soled shoes, etc).

**PHYSICAL ACTIVITY**

- Regular physical activity can reduce the risk of numerous chronic diseases and conditions such as hypertension, diabetes, certain types of arthritis, and osteoporosis.
- Physical activity is important throughout the life span. Physical activity during childhood can promote bone growth while physical activity during adulthood maintains bone mass.
- It is recommended that adults participate in moderate physical activity (walking, gardening, vacuuming) 30 minutes or more per day, 5 or more days per week OR vigorous physical activity (running, aerobics) 20 minutes or more per day, 3 or more days per week. In 2005, approximately 1 out of 2 (51%) adult Kansans did not participate in the recommended amount of physical activity.
- The best exercise for bones is weight bearing exercise. It is recommended that adults participate in weight bearing exercise 30 minutes for 3 to 5 days per week.

**References**

ACT (The Arthritis Community Taskforce) will continue to work to make certain the objectives and strategies of the strategic plan are carried forward.

Partner Agency Contact Information

Mr. Tim Edwards  
AARP Driver Safety Program  
5512 SW 23rd Street  
Topeka, KS  66614  
785.271.8508

Dennis H. Bender, APR  
Arthritis Foundation  
Heartland Region  
President & CEO  
Kansas Chapter  
1999 N. Amidon Ave., Suite 105  
Wichita, Kansas  67203-2122  
316.263.3016, ext. 108  
316.263.3260 (fax)  
dbender@arthritists.org

Valerie Fairchild – Program Director  
316.263.3016, ext. 107  
vfairchild@arthritists.org

Johnson County Area Agency on Aging  
11811 S. Sunset Drive  
Suite 230  
Olathe, KS  66061  
913.715.8800 Main  
913.715.8850 Direct  
913.715.8825 (fax)

Barbara Mitchell  
Public Information Officer  
Johnson County Health Department  
11875 S. Sunset Drive, Suite 300  
Olathe, KS  66061  
913.477.8364  
www.health.jocogov.org

Kansas Department of Health and Environment  
Office of Health Promotion  
1000 SW Jackson, Suite 230  
Topeka, KS  66612

Cindy Winters – Arthritis Program Manager  
785.296.8150  
cwinters@kdhe.state.ks.us

Paula Marmet – Director, Office of Health Promotion  
785.296.8916  
pmarmet@kdhe.state.ks.us

Marti Macchi – Director, Special Studies Section  
785.291.3743  
rmmacchi@kdhe.state.ks.us

Ghazala Perveen – Health Officer II, Director of Science and Surveillance  
785.296.8039  
gperveen@kdhe.state.ks.us

Lori Haskett – Injury and Disability Prevention Section Manager  
785.296.8163  
lhaskett@kdhe.state.ks.us

Jamie Lloyd-Simpson - Disability Program Coordinator  
785-296-7990  
jlsimpson@kdhe.state.ks.us

Jennifer Springer – In-Home Program Manager  
785.296.6448  
JenniferSpringer@aging.ks.gov

Bloom & Associates Therapy, PA  
1045 SW Gage Blvd.  
Topeka, KS  66604  
785.273.7700  
785.273.7551 (fax)  
www.BloomPT.com  
BloomPT@aol.com

Debbie Cooper – Director of Health and Fitness Programs  
913.262.2253, ext. 103  
dcooper@arthritists.org

Kansas Physical Therapy Association  
214 SW 6th Ave.  
Topeka, KS  66603  
785.233.5400  
785.290.0476 (fax)  
www.kpta.com

Blanche Parks – Senior Manager  
785.296.0463  
BlancheParks@aging.ks.gov

Wilda Davison – Aging Information & Assistance Program Manager  
785.368.7215  
WildaDavison@aging.ks.gov

Deb Sellers, Ph.D.  
Assistant Professor and Extension Specialist  
School of Family Studies and Human Services  
Kansas State University Research and Extension  
343 Justin Hall  
Manhattan, KS  66506  
785.532.5773  
785.332.6969 (fax)  
dsellers@ksu.edu  
www.aging.ksu.edu

Mary Jane Youngstrom  
University of Kansas Medical Center  
School of Allied Health  
3033 Robinson  
3901 Rainbow Boulevard  
Kansas City, KS  66161  
my@everestkc.net

Julie Sergeant  
University of Kansas School of Social Welfare  
Dole Building, Room 3090  
1000 Sunnyside Ave.  
Lawrence, KS  66045  
julesgrt@ku.edu

Ruth M. Bohlen, PhD M.Ed.CDT  
Director, The Center for Physical Activity and Aging  
Wichita State University  
1845 Fairmount  
Heskett Center, Room 107A  
Wichita, KS  67260-0016  
316.978.5150  
ruth.bohlen@wichita.edu