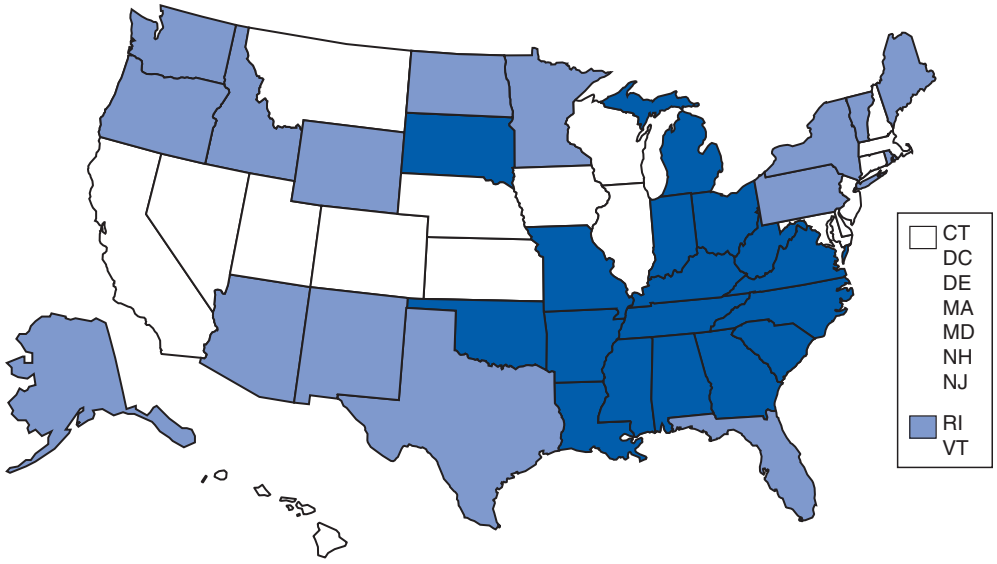
AT A GLANCE

Targeting Arthritis

Improving Quality of Life for More Than 46 Million Americans

2008

Arthritis-Attributable Work Limitations Affect 1 in 7 Working-Age Adults in Some States*



* Age-adjusted population prevalence for adults aged 18–64 years.
Source: CDC, Behavioral Risk Factor Surveillance System, 2003.

"Public health in the future will be increasingly about improving the quality of life, not merely its length. Arthritis, with the pain and limitation it inflicts on millions of our people, young and old, sits right in the center of that future."

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION
COORDINATING CENTER FOR HEALTH PROMOTION

What Is Arthritis?

Arthritis comprises over 100 different diseases and conditions. The most common is osteoarthritis. Other frequently occurring forms of arthritis include rheumatoid arthritis, lupus, fibromyalgia, and gout. Arthritis also affects children. A recent study estimated that 1 in 250 children has some form of arthritis or related condition.

Common symptoms include pain, aching, stiffness, and swelling in or around the joints. Some forms of arthritis, such as rheumatoid arthritis and lupus, can affect multiple organs and cause widespread symptoms.

Why Is Arthritis a Public Health Problem?

An estimated 46 million U.S. adults (about 1 in 5) reported doctor-diagnosed arthritis, according to annual estimates from combined 2003–2005 data. As the U.S. population ages, these numbers are likely to increase sharply. The number of adults with doctor-diagnosed arthritis is projected to increase to 67 million by 2030, and a good proportion of U.S. adults will have limited activity as a result (see graph, page 3).

Arthritis is the nation's most common cause of disability. Nearly 19 million U.S. adults reported activity limitations because of arthritis each year during 2003–2005. Among adults of working age (18–64 years), work limitations attributable to arthritis affect about 1 in 20 adults in the general population and one-third of those with arthritis. Each year, arthritis results in 750,000 hospitalizations and 36 million outpatient visits.

Annual Arthritis Burden in United States

- 46 million adults with self-reported, doctor-diagnosed arthritis
- Nearly 19 million people with activity limitations
- $128 billion in total costs
- $81 billion in medical costs
- 36 million outpatient visits
- 750,000 hospitalizations
- 9,500 deaths

In 2003, the total cost of arthritis was $128 billion—nearly $81 billion in direct costs and $47 billion in indirect costs, equal to 1.2% of the 2003 U.S. gross domestic product. Arthritis is not just an old person's disease. Nearly two-thirds of people with arthritis are younger than 65. Although arthritis affects children and people of all racial and ethnic groups, it is more common among women and older adults.

More than half of adults with diabetes or heart disease also have arthritis. Physical activity is a crucial element of managing these chronic conditions, but having arthritis presents barriers to increasing physical activity. Research shows that pain, fear of pain, and lack of information on how to exercise safely prevents people with arthritis from exercising. Effectively managing diabetes or heart disease in people with arthritis will require targeting these barriers to encourage increased physical activity.

What Can Be Done to Target Arthritis?

There are effective ways to reduce symptoms, improve physical function, and improve the quality of life for people with arthritis. For example,

- Self-management education programs can reduce pain and costs. The Arthritis Foundation's Self-Help Program teaches people how to manage arthritis and lessen its effects. This 6-week course reduces arthritis pain by 20% and physician visits by 40%. However, courses are not offered in all areas of the country.

  More widespread use of this course and similar programs—such as the Chronic Disease Self-Management Program, which addresses arthritis along with other chronic diseases—could save money and improve quality of life for people with arthritis.

- Physical activity has been shown to have significant benefits for people with arthritis, including reductions in pain and improvements in physical function, mental health, and quality of life. Community exercise programs, such as the Arthritis Foundation's Exercise Program or EnhanceFitness, have been shown to improve health status among participants.

- Weight control and injury prevention measures can lower a person's risk for developing osteoarthritis. Weight loss can reduce symptoms for people with knee osteoarthritis.

- The pain and disability that accompany arthritis can be decreased or avoided through early diagnosis and appropriate management, including self-management activities such as weight control and physical activity.

What Are CDC and Its Partners Doing About Arthritis?

CDC is committed to leading strategic public health efforts to promote well-being, prevent chronic disease, and achieve health equity. With $13 million in fiscal year 2008 funding, CDC is working with the Arthritis Foundation and other partners to improve the quality of life for adults with arthritis and to change people's attitudes and behaviors related to self-management.

For example, the *National Arthritis Action Plan: A Public Health Strategy* was developed by CDC, the Arthritis Foundation, the Association of State and Territorial Health Officials, and 90 other organizations to address the growing problem of arthritis. By implementing the goals of the action plan, CDC and its partners are moving toward achieving the first-ever arthritis-related national objectives outlined in *Healthy People 2010*.

What Activities Does CDC's Arthritis Program Support?

The primary goal of CDC's arthritis program is to improve the quality of life for people affected by arthritis. The program achieves this goal by supporting the following five key activities:

1. Building state programs.
Over the past 5 years, state health departments have successfully used CDC funding to build capacity in their arthritis programs. These efforts include creating new partnerships, increasing public awareness, improving their ability to monitor the burden of arthritis, and delivering evidence-based interventions.

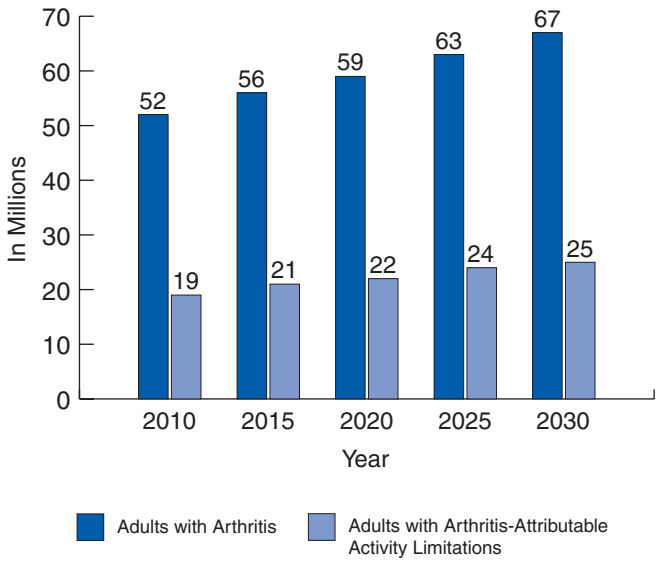
In Spring 2007, as states entered the final year of their cooperative agreements with CDC, the agency convened national experts to guide future program directions. These experts made several important recommendations, including the following:

- Fund state programs at higher levels to address arthritis through broader public health efforts. Current funding averages $140,000 for 28 states and $240,000 for 8 states. Funded states include Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, and Wisconsin.
- Work to expand evidence-based interventions. Develop new interventions and expand existing ones to provide services to more people with arthritis.
- Create and expand innovative partnerships at local, state, and national levels.
- Consider national campaigns, marketing and health communications, and policy interventions.

These recommendations will drive future state program activities, building on the lessons learned by the 36 states funded during 2003–2008.

2. Reaching the public.
CDC, working with state health departments and Arthritis Foundation chapters, developed a communications campaign that promotes physical activity among people with arthritis who are aged 45–70 and of low socioeconomic status. The "Physical Activity. The Arthritis Pain Reliever." campaign has been used by state health departments and several Arthritis Foundation chapters. A similar campaign for Hispanic audiences is now available, and a new physical activity campaign is being developed.

Projected Number of Adults with Arthritis and Arthritis-Attributable Activity Limitations, 2005–2030



Source: *Arthritis and Rheumatism* 2006;54(1):226–229.

3. Improving the science base.
CDC supports research to learn more about arthritis and effective management strategies. For example,

- Systemic lupus erythematosus is a serious autoimmune inflammatory disease that affects multiple systems in the body. It can be difficult to diagnose, and prevalence estimates vary widely. CDC is supporting researchers at the University of Michigan and Emory University, through the Michigan and Georgia state health departments, to establish registries to produce more reliable estimates of lupus.
- Physical activity is crucial for arthritis self-management. CDC is evaluating existing physical activity programs and developing new ones for people who have arthritis. Walking is one of the most feasible forms of physical activity for most people, since it is low impact, requires no special equipment or facilities, and can be done anywhere and at anytime. CDC is supporting researchers at the University of North Carolina at Chapel Hill to evaluate group-based and self-directed walking programs among a culturally diverse sample of adults with arthritis.
- Self-management education programs have been proven to reduce pain and costs, yet not all people with arthritis are able to participate. CDC is supporting researchers at the University of North Carolina at Chapel Hill and Stanford University to develop and evaluate programs that can be delivered by mail or online, making self-management education more widely available.

4. Measuring the burden of arthritis.
At the national level, CDC uses surveys to define the burden of arthritis, monitor trends, and assess how arthritis affects quality of life. At the state level, CDC and states use the Behavioral Risk Factor Surveillance System (BRFSS) to collect arthritis data. In addition, the Arthritis Conditions Health Effects Survey (ACHES), a national telephone survey completed in 2006 among adults aged 45 years or older who reported arthritis, collected information about the effects of arthritis on everyday life.

5. Making policy and systems changes.
CDC's epidemiology and surveillance activities collect data useful to policy decision makers. Examples include cost estimates and data on arthritis-attributable work limitations at state and national levels. CDC researchers also collect and analyze data on the occurrence of arthritis among people with diabetes and heart disease, as well as related risk factors. Future CDC and state efforts will include attention to these risk factors as starting points for policy changes that support public health approaches to addressing arthritis. In partnership with the Arthritis Foundation, CDC is convening science, program, and policy leaders to develop a national public health agenda for addressing osteoarthritis, the most common type of arthritis and a frequent cause of disability. The agenda will develop strategies for making osteoarthritis a major public health issue in the next 5 years.

State Programs in Action: Minnesota

The Minnesota Arthritis Program partnered with the Elderberry Institute Living at Home Block Nurse Program, which delivers community services that help older adults remain at home as long as possible. This partnership allowed the arthritis program to significantly expand the reach of self-management education and exercise programs across the state. For example, the number of new participants in the Arthritis Foundation Self-Help Program increased 229% in 2006. The number of new participants in the Arthritis Foundation Exercise Program increased 125%. These programs are now available in 50 of the state's 87 counties.

Future Directions

With funded states and other partners, CDC aims to

- Create a nationwide program to improve the quality of life for people affected by arthritis.
- Build on expert recommendations to move state programs from building capacity to implementing programs on a wider scale. CDC will focus on providing effective programs through groups that already work with people with arthritis. Examples include networks of aging services agencies, cooperative extension programs, large health care systems, and large employers.
- Identify model dissemination efforts that can be replicated in other states, as well as models for working with partners at state, regional, and national levels.
- Develop innovative interventions that meet the needs of diverse populations.
- Work collaboratively with other chronic disease programs at federal and state levels.

For more information or copies of the *National Arthritis Action Plan: A Public Health Strategy*, please contact
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