Arthritis

In addition, moderate physical activity is clearly essential for maintaining the health of joints. CDC continues to accumulate scientific knowledge on the benefits of physical activity. *Physical Activity and Health: A Report of the Surgeon General*, published in 1996, indicates that regular moderate exercise can reduce arthritis symptoms and improve function among people with osteoarthritis or rheumatoid arthritis.

Evaluating Intervention Strategies

To develop and evaluate promising prevention strategies for a variety of diseases, CDC supports 14 Prevention Research Centers at universities around the country. One of these centers, the Prevention Center at the University of Washington in Seattle, is focusing specifically on comparing the effectiveness of different interventions for arthritis. Information from this work will be used to direct public health efforts targeting arthritis.

Surveillance

Information on arthritis trends and prevalence is essential for effectively targeting prevention measures. One mechanism through which such information can be collected is CDC's state-based Behavioral Risk Factor Surveillance System (BRFSS). All 50 states use this unique surveillance system to collect information from adults on knowledge, attitudes, and practices related to a variety of health issues. CDC has worked with states to develop an optional arthritis module for the BRFSS that will allow states to develop their own estimates of the prevelance of joint problems in different populations and to monitor trends. Expanding the use of this module by states would provide more accurate and reliable data on the numbers of persons reporting joint-related symptoms.

Future Directions

Effective help is available now for people with arthritis. In addition to medications and physical therapy, knowing how to manage their arthritis can greatly benefit people with this disease. A course developed at Stanford University, the "Arthritis Self-Help Course," teaches people about arthritis and how to minimize its symptoms. This 6-week course, taught in a group setting, has been shown to reduce arthritis pain by 20% and physician visits by 40%. However, in 1997, it still reached less than 1% of people with arthritis. More widespread use of this course nationwide would save money as well as reduce the impact of arthritis.

CDC is helping states target arthritis by coordinating and supporting the development of partnerships between state health departments, state agencies on aging, managed care organizations, and state and local chapters of voluntary groups. At the national level, CDC is collaborating with the Arthritis Foundation, the American College of Rheumatology, other federal agencies (e.g., the National Institutes of Health), and others to build a public health framework that addresses arthritis. This framework will foster improved understanding of the various types of arthritis, ensure better arthritis education for health care providers and the public, promote early detection and treatment, and facilitate interventions to ease the growing burden of arthritis.

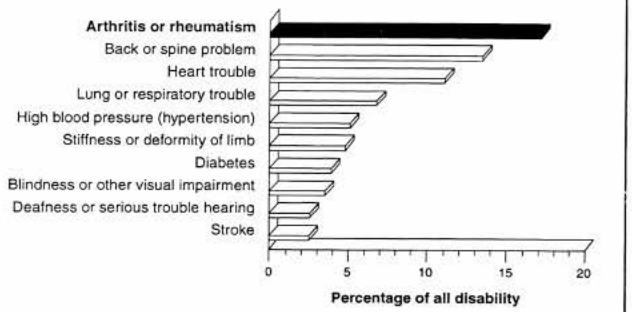
> ***"The Arthritis Self-Help Course helped me learn how to manage the pain, find out that there really are lots of things I CAN do, keep a positive attitude, and better meet the challenges of the workplace."***
>
> ***—Joyce Gallagher, age 48***
> ***Denver, Colorado***

For more information, contact the Technical Information and Editorial Services Branch, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Mail Stop K–13, 4770 Buford Highway, NE, Atlanta, GA 30341-3724; telephone: (770) 488-5080.
World Wide Web at http://www.cdc.gov/nccdphp

Targeting Arthritis:
The Nation's Leading Cause of Disability

AT-A-GLANCE
1998

Leading Causes of Disability Among Persons Aged 15 Years and Older, United States, 1991–1992



Source: CDC. Prevalence of disability and associated health conditions—United States, 1991–1992. *MMWR* 1994;43(40):730–731, 737–739.

"Arthritis and other rheumatic conditions have an annual economic impact on the nation roughly equivalent to a moderate recession, with an aggregate cost of about 1.1% of the gross national product."

Edward H. Yelin, Ph.D., Professor (Adjunct) of Medicine and Health Policy, University of California, San Francisco

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

Arthritis: The Nation's Leading Cause of Disability

Arthritis affects more than 40 million Americans, or almost one out of every six people, making it one of the most prevalent diseases in the United States. Women and certain racial and ethnic groups (e.g., American Indians and Alaska Natives) are particularly at risk.

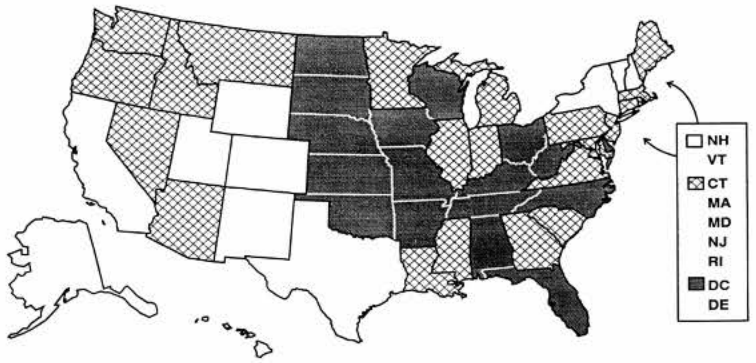
Arthritis is not just an "old person's disease": nearly three out of five people with arthritis are younger than 65 years.

Arthritis is the leading cause of disability in the United States, limiting everyday activities for more than 7 million Americans. It is second only to heart disease as a cause of work disability. In many cases, arthritis deprives individuals of their freedom and independence and disrupts the lives of family members and other caregivers. Severe arthritis can shorten life expectancy.

In addition, disabilities from arthritis result in enormous health care costs for individuals, their families, and the nation. Each year, arthritis results in 39 million physician visits and more than half a million hospitalizations. Estimated medical care costs for people with arthritis total $15 billion annually, and total costs (medical care and lost productivity) are estimated at almost $65 billion annually.

The impact of arthritis is expected to increase dramatically as the "baby boomers" age. An estimated 60 million Americans, or almost 20% of the population, will be affected by 2020. More than 11 million of these individuals will be disabled as a result of arthritis.

State-Specific Prevalence of Self-Reported Arthritis, United States, 1990



Source: CDC. Arthritis prevalence and activity limitations—United States, 1990. *MMWR* 1994; 43(24):433–438.

Arthritis Takes Many Forms

Arthritis, a singular and nonspecific term, represents a variety of diseases and conditions. These include, but are not limited to, osteoarthritis, rheumatoid arthritis, lupus, childhood arthritis, gout, bursitis, rheumatic fever, Lyme arthritis, and carpal tunnel syndrome. These diseases and conditions can result in debilitating and at times life-threatening complications. Osteoarthritis and rheumatoid arthritis, the two most common forms of arthritis, have the greatest public health implications.

Osteoarthritis, also known as "degenerative joint disease," results from physical changes in joints and surrounding tissues, leading to pain, tenderness, swelling, and decreased function. The joints most often affected are the hip and knee.

Osteoarthritis affects more than 20 million people. The risk of having osteoarthritis increases as people get older. Among people younger than age 45, this disease is more common among men than women. However, among people older than age 54, osteoarthritis is more common among women, and women generally have more joints involved and more frequently experience stiffness and swelling.

In addition to advancing age, risk factors for osteoarthritis include joint trauma, obesity, and repetitive joint use.

Rheumatoid arthritis is a painful, potentially disabling disease characterized by chronic inflammation of the joint lining. In severe cases, this inflammation extends to other joint tissues and surrounding cartilage, where it may erode bone and cartilage and lead to joint deformities. Symptoms include stiffness, pain, and swelling of multiple joints.

In addition to affecting joints, rheumatoid arthritis can also affect connective tissue throughout the body and can cause disease in a variety of organs, including the lungs and heart. Individuals with this disease are at an increased risk of dying from respiratory and infectious diseases.

Rheumatoid arthritis affects more than 2 million people in the United States. Two to three times more women are affected than men. The prevalence of rheumatoid arthritis is particularly high among several Native American tribes.

Innovative Activities Under Way

Despite the significant impact of arthritis on the nation's health and economy, our current understanding of how to prevent arthritis and its disability is quite limited. In the past few years, the Centers for Disease Control and Prevention (CDC) has begun innovative efforts to better characterize arthritis, identify modifiable risk factors, and develop intervention strategies through prevention research and surveillance.

Targeting Hip and Knee Osteoarthritis

Hip and knee osteoarthritis are the leading causes of arthritis disability and the primary reasons for expensive joint replacement surgery. These conditions will become more prevalent and have a greater impact on our nation as the population ages.

To learn more about hip and knee osteoarthritis, CDC, in collaboration with the University of North Carolina at Chapel Hill and the National Institutes of Health, is assessing risk factors for these conditions and their incidence and progression among residents of Johnston County, a rural area of North Carolina. In 1997, almost 3,600 participants were enrolled in this study, the first ever to look at a biracial population over time with the goal of learning more about how to prevent and limit the progression of arthritis and associated disabilities.

Clarifying the Important Role of Good Nutrition and Physical Activity

Much remains to be learned about what the modifiable risk factors for arthritis are and how they can be effectively addressed. However, certain forms of arthritis, particularly osteoarthritis of the knee, are more common among people who are overweight or obese. Because healthy eating reduces an individual's risk of becoming overweight, good nutrition plays an important role in preventing knee osteoarthritis.