About 1 out of every 5 US adults has doctor-diagnosed arthritis. The term arthritis includes more than 100 different rheumatic diseases and conditions, the most common of which is osteoarthritis. Other forms of arthritis that occur often are rheumatoid arthritis, lupus, fibromyalgia, and gout.

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.

Many people think of arthritis as a disease that only affects the elderly, but it affects people of all ages, including children. Although the risk of developing arthritis increases with age, nearly two-thirds of people with arthritis are younger than 65. Arthritis is more common among women (26%) than men (19%), and it affects members of all racial and ethnic groups.

As the US population ages, the number of adults with arthritis is expected to increase to 67 million by 2030. The Centers for Disease Control and Prevention (CDC) is leading the nation’s efforts to help the millions of adults with arthritis to live well and manage their condition.

Public Health Problem

Arthritis Can Make Physical Activity Difficult

Research has shown that people with arthritis are less likely to be physically active than people without arthritis. Some people with arthritis believe that being active will cause pain, make their symptoms worse, or damage their joints. Others don’t know how to exercise safely.

Nearly 44% of adults with arthritis report no leisure-time physical activity (compared with about 36% of adults without arthritis). Not being physically active is bad for arthritis, is a risk factor for other chronic diseases, and interferes with management of other conditions.
Arthritis Occurs with Other Chronic Conditions

Arthritis is much more common among people who have other chronic conditions. About half of US adults with heart disease (49%) or diabetes (47%) also have arthritis. In addition, 44% of those with high blood pressure and 31% of those who are obese have arthritis. Having arthritis in addition to other chronic conditions can reduce quality of life and make disease management more difficult.

What Can People Do to Manage Arthritis?

People can manage and reduce the symptoms of arthritis in many ways, but many don’t know how. For example, people with arthritis can

- **Learn ways to manage arthritis.** Self-management education interventions, such as the Chronic Disease Self-Management Program (CDSMP) or the online Better Choices, Better Health for Arthritis program, provide the skills and confidence to live well with arthritis on a daily basis.

- **Be physically active.** Research shows that physical activity—such as walking, bicycling, and swimming—decreases pain, improves function, and delays disability. People with arthritis should try to get at least 150 minutes of moderate activity each week. This activity can be done for 30 minutes, 5 days a week, or in as little as 10 minutes at a time. The Walk with Ease Program and the EnhanceFitness program are examples of community exercise interventions that have been shown to improve health among participants with arthritis.

- **Maintain a healthy weight and protect their joints.** People can reduce their risk of knee osteoarthritis by controlling their weight and avoiding injuries. Weight loss can also reduce symptoms for people with knee osteoarthritis who are overweight or obese.

- **Talk with a doctor.** Recommendations from health care providers are among the most influential factors in convincing people to be physically active and join a self-management education program. People with inflammatory arthritis, like rheumatoid arthritis, will have a better quality of life if they are diagnosed early and learn how to manage their condition.

CDC’s Response

The National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) works in four key areas or domains: epidemiology and surveillance, environmental approaches, health care system interventions, and community programs linked to clinical services. This comprehensive approach supports healthy choices and behaviors, makes healthier options more available, and helps Americans better manage their health.

CDC envisions a world where people with arthritis live the fullest life possible, with the ability to pursue valued life activities with minimal pain. CDC works with partners—such as state health departments, other federal agencies, and organizations like the National Recreation
and Parks Association (NRPA), YMCA of the USA (the Y), University of North Carolina, American Physical Therapy Association, Arthritis Foundation, and National Association of Chronic Disease Directors—to improve the quality of life for adults with arthritis.

With nearly $9.6 million in FY 2015 funding, CDC’s Arthritis Program supports these efforts by focusing its activities in three of NCCDPHP’s four domains: epidemiology and surveillance, environmental approaches, and community programs linked to clinical services.

**Epidemiology and Surveillance**

**Collecting Data**

CDC collects data on arthritis, including information on prevalence, trends, and how the disease affects quality of life for people with multiple conditions. Tools used to collect these data include the Behavioral Risk Factor Surveillance System (BRFSS) and the National Health Interview Survey (NHIS). Public health practitioners use these data to more efficiently focus their efforts to help people with arthritis.

CDC also supports surveillance research on lupus (systemic lupus erythematosus), an autoimmune inflammatory disease that affects multiple systems in the body. This condition is difficult to diagnose, and prevalence estimates vary widely. CDC is completing projects with four states and universities and the Indian Health Service to produce better estimates of the incidence and prevalence of lupus among different racial and ethnic groups in the United States. Follow-up studies are being conducted to look at factors such as disease progression and treatment and to identify any risk or protective factors associated with lupus outcomes.

**Estimating Costs**

In 2003, medical expenditures and lost earnings due to arthritis and other rheumatic conditions in the United States were about $128 billion. CDC is conducting studies to update these estimates and better understand the direct (medical) and indirect (lost earnings) costs associated with arthritis. Estimates of annual medical expenditures and absenteeism (average lost workdays) at the state level for 2006-2010 are available from the online [Chronic Disease Cost Calculator](#).

Current studies are assessing medical expenditures for all types of arthritis combined and for specific conditions (e.g., osteoarthritis, rheumatoid arthritis) and for specific services and treatments (e.g., ambulatory care, hospitalizations, medications).

**Environmental Approaches**

CDC is a sponsor and member of the Osteoarthritis (OA) Action Alliance, a national coalition that works to promote and respond to the goals and recommendations of *A National Public Health Agenda for Osteoarthritis*. A study conducted by the OA Action Alliance and the Center for Enhancing Activity and Participation among Persons with Arthritis (ENACT) at Boston University reviewed “walkability”...
and “rollability” assessment tools and identified a need for a more specialized assessment for people with arthritis. ENACT is now working with partners, such as the University of North Carolina, the Arthritis Foundation, and CDC, to identify environmental factors that help increase walkability and rollability for people with arthritis.

**Community Programs Linked to Clinical Services**

**Supporting State Health Departments**

State health departments use funding from CDC to expand the reach of evidence-based interventions by involving community organizations that can embed these interventions into their routine operations and sustain them over time. Organizations such as local YMCAs, cooperative extension service programs, and state and local recreation and parks associations have partnered with state arthritis programs to deliver interventions in their communities.

CDC is midway into a 5-year cooperative agreement that began in FY 2012 and awarded 12 states an average of $427,000 a year to use innovative, system-based strategies and communication approaches to reach adults with arthritis.

**Reaching the Public**

Since 2012, state arthritis programs funded by CDC have worked to help people with arthritis better manage their condition through intensive self-management education and physical activity interventions. In 2013, CDC began funding the National Association of County and City Health Officials to help 12 local health departments increase access to the CDSMP.

CDC is also working with the National Recreation and Parks Association (NRPA) and other partners to expand the use of evidence-based physical activity interventions for people with arthritis. The NRPA is supporting more than 30 local park agencies to offer the Arthritis Foundation Exercise Program and the Walk with Ease Program. These agencies received seed funding for staff training and start-up costs.

The NRPA has also developed resources that highlight key successes, challenges, and lessons learned from the pilot test of this project. It created a webinar that promotes arthritis interventions to park and recreation agencies and a website that highlights arthritis interventions and partnerships.

In addition, the Y continues to build a national infrastructure to support and expand delivery of the EnhanceFitness program at local YMCAs. The Y has adopted EnhanceFitness as a signature program and offers classes in more than 22 states. The Y is also participating in a new initiative to address health equity by bringing EnhanceFitness to more YMCAs in low-income and underserved communities. These local YMCAs will receive intensive technical assistance and small grants to offset training and start-up costs.

**Future Directions**

Improving the lives of the millions of people with arthritis is a top priority for CDC. To meet this goal, we will continue to

- Increase access to self-management education and physical activity programs that help people with arthritis reduce symptoms and improve their quality of life through state and national partners.
- Strengthen the science base to guide public health practices related to arthritis.
- Help state programs promote the use of environmental approaches that help people with arthritis be more active and improve the quality of their lives.
- Increase awareness of the effect of arthritis on the nation’s health and well-being, including its costs and its effect on other chronic conditions.
- Promote walking as an effective, low-cost, and pain-reducing intervention for people with arthritis.