



ARTHRITIS – THE LEADING CAUSE OF DISABILITY

Introduction

Arthritis is the leading cause of disability in the United States,¹ affecting 43 million U.S. adults.² The total annual cost attributable to arthritis is estimated at \$51 billion for medical costs and \$35 billion for indirect costs such as lost productivity (in 1997 dollars).³ Results from the 2005 Los Angeles County Health Survey (LACHS) show that nearly one in five county adults (1.3 million) report being diagnosed with arthritis (Table 1).⁴ The prevalence of arthritis was higher among women than men and varied by racial/ethnic background, with the highest prevalence found among African-Americans (29%), followed by Whites (21%), Latinos (19%), and Asians/Pacific Islanders (12%). The prevalence of arthritis increased markedly with age, from 3% among adults aged 18-29, up to 52% among those 65 years and older (Figure 1). As the average age of our population continues to increase, the percent of adults with arthritis and associated costs are expected to rise even more.

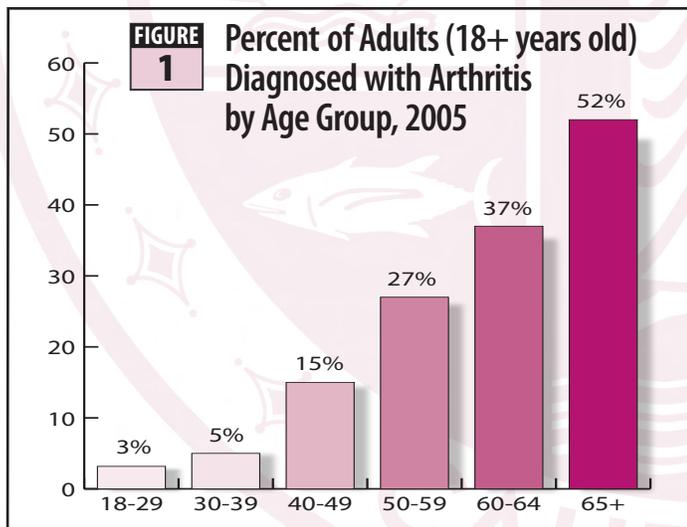


TABLE 1 Percent of Adults (18+ years old) Diagnosed with Arthritis, 2005

	Age-Adjusted Percent [†]	Estimated Numbers
Los Angeles County	19.5%	1,313,000
Gender		
Male	15.2%	465,000
Female	23.2%	848,000
Race/Ethnicity		
Latino	19.3%	382,000
White	20.6%	600,000
African-American	28.7%	190,000
Asian/Pacific Islander	12.3%	109,000
Federal Poverty Level[§]		
0-99% FPL	22.8%	250,000
100%-199% FPL	20.0%	311,000
200%-299% FPL	20.7%	276,000
300% or above FPL	17.6%	476,000
Service Planning Area		
Antelope Valley	25.2%	55,000
San Fernando	18.6%	270,000
San Gabriel	17.6%	231,000
Metro	18.5%	137,000
West	15.8%	81,000
South	25.4%	137,000
East	20.1%	169,000
South Bay	21.0%	233,000

[†] Age-adjusted percentage according to the 2000 U.S. standard population aged 18 years and older.

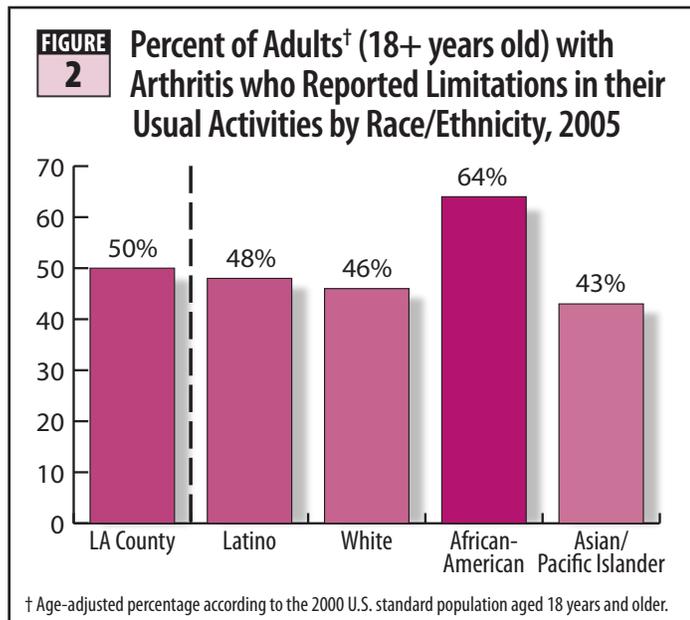
[§] Based on U.S. Census 2003 Federal Poverty Level (FPL) thresholds which for a family of four (2 adult, 2 dependents) correspond to annual incomes of \$18,700 (100% FPL), \$37,300 (200% FPL) and \$56,500 (300% FPL).

1. McNeil J, Binette J, Bureau of Census, US Department of Commerce, Centers for Disease Control and Prevention. Prevalence of disabilities and associated health conditions among adults-United States, 1999. *MMWR Morb and Mortal Wkly Rep* 2001;50:120-5.
 2. Bolen J, Snizek J, Theis K, et al. Racial/Ethnic differences in the prevalence and impact of doctor-diagnosed arthritis-United States, 2002. *MMWR Morb and Mortal Wkly Rep* 2005;54:119-23.
 3. Yelin E, Cisternas MG, Pasta DJ, Trupin L, Murphy L, Helmick CG. Medical care expenditures

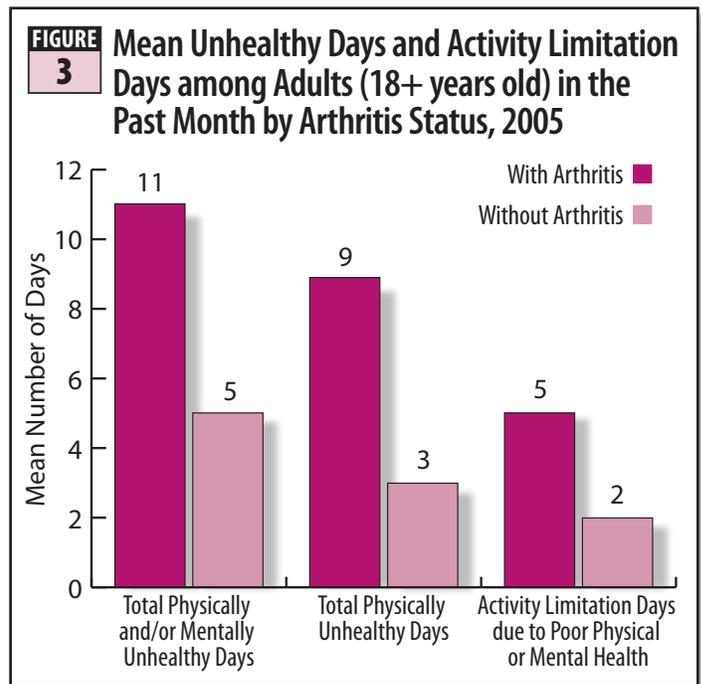
and earnings losses of persons with arthritis and other rheumatic conditions in the United States in 1997: total and incremental estimates. *Arthritis Rheum* 2004;50:2317-26.
 4. Most health conditions do not occur at the same rate throughout the life span; for example, arthritis increases with age. Certain population sub-groups can have different age distributions, so age-adjustment allows for comparisons of a condition between groups while controlling for such age differences.

Arthritis Burden

Arthritis poses a huge societal burden not only because of its high prevalence and large economic impact, but also because of the pain and limitations it causes in both physical and social functioning. Nationally, more than 16 million Americans report being limited in their everyday activities because of arthritis, and nearly one-third of working age adults with arthritis report arthritis-related work limitations.² Although the prevalence of arthritis in Los Angeles County (20%) is similar to the national prevalence (21%), the proportion of adults with arthritis who reported limitations in their usual activities because of their arthritis was notably higher in LA County (50%) than nationally (38%). Activity limitation was found to differ by race/ethnicity, with 64% of African-Americans with arthritis reporting arthritis-associated activity limitations compared to 48% of Latinos, 46% of Whites, and 43% of Asians/Pacific Islanders (Figure 2).



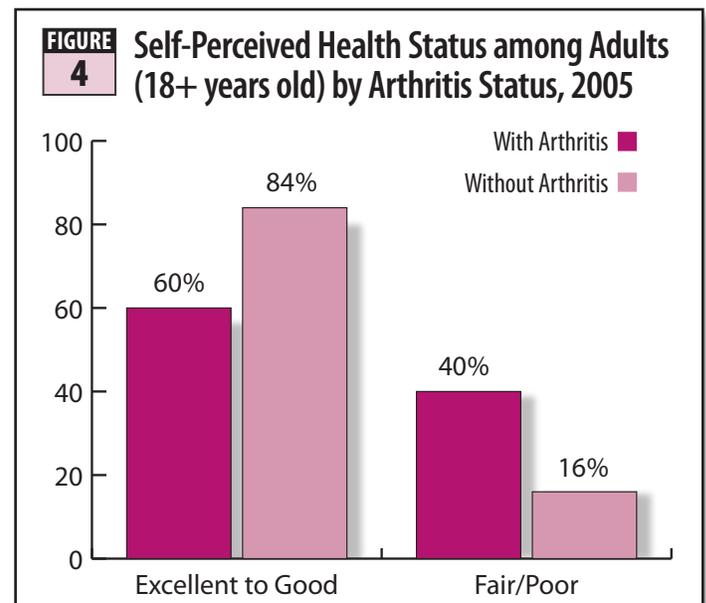
People with arthritis are also significantly more likely to report worse quality of life than people without arthritis.⁵ Results from the 2005 LACHS showed that adults with arthritis reported more unhealthy days, and more days where their daily activity was limited by poor physical or mental health than adults without arthritis (Figure 3). Adults with arthritis were also more likely to perceive their health as being poorer than adults



without arthritis, with 40% reporting their health as being fair or poor compared to only 16% of adults without arthritis (Figure 4). Self-perceived health status among adults with arthritis was also found to vary by race/ethnicity, with African-Americans more likely to rate their health as fair to poor compared to Whites (60% vs. 23%, respectively).

Risk Factors for Arthritis

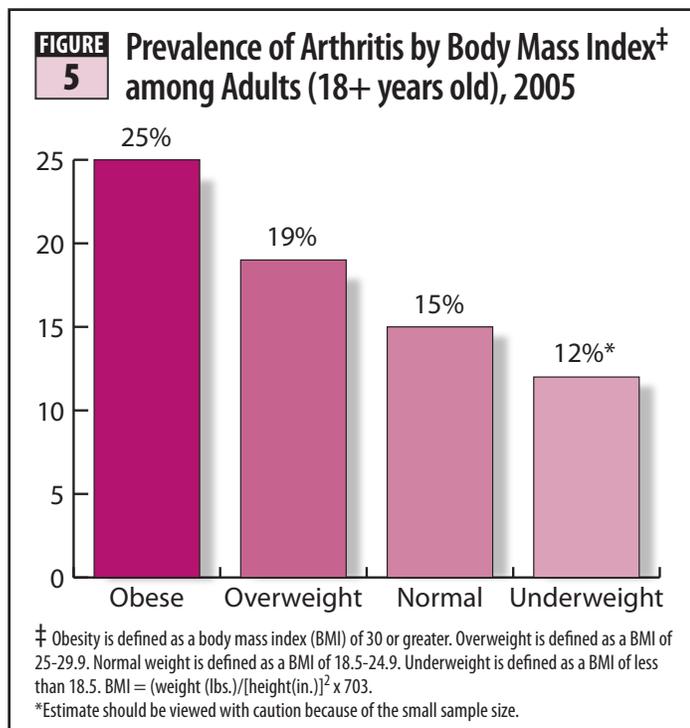
There are many different forms of arthritis, most affecting joints or the tissues that surround the joints (the most common forms of arthritis



5. Mili F, Helmick C, Zack M, Moriarty D. Health-related quality of life among adults reporting arthritis: Behavioral Risk Factor Surveillance System, 15 states and Puerto Rico, 1996-1999. *J Rheumatol* 2003;30:160-6.

are osteoarthritis, rheumatoid arthritis, gout, and fibromyalgia). The more severe forms (for example, systemic lupus erythematosus) can affect multiple organs. Although the prevalence of arthritis increases with age, arthritis affects people of all ages, including children. In addition to non-modifiable risk factors such as age, gender, and genetics, a person's risk of developing arthritis is increased by being overweight, having a previous joint injury or joint infection, and sometimes by having an occupation that involves repetitive motions that put a lot of stress on the joints.

Overweight is strongly associated with increased risk for both the development and progression of arthritis, particularly osteoarthritis.⁶ The LACHS found the prevalence of arthritis to increase with increasing body mass index, from a low of 12%* among those underweight, up to 25% among those who were obese (Figure 5).

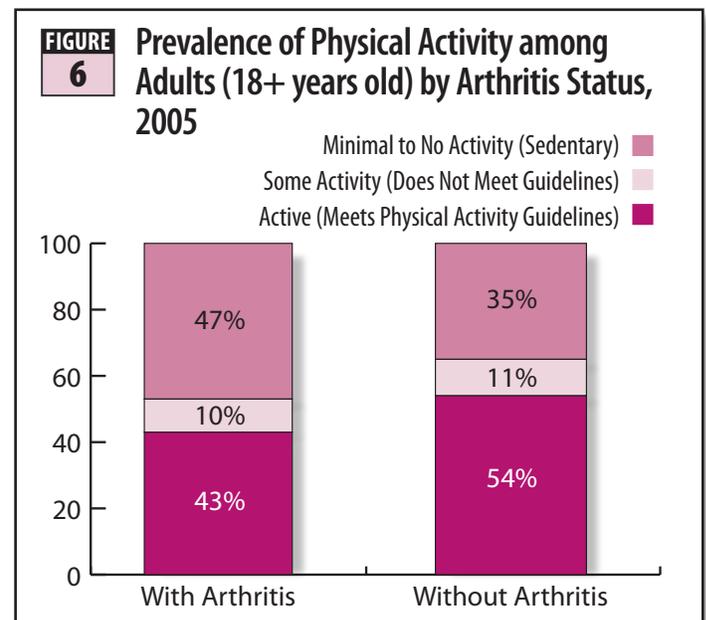


Arthritis Prevention and Management

Many people do not realize that arthritis is not a normal part of aging and can be prevented. Maintaining a healthy weight, avoiding joint injuries, and prevention or early treatment of infectious diseases can prevent the development of arthritis. Once arthritis develops, early diagnosis and treatment is important for preventing or

delaying the disability associated with arthritis and reducing the need for joint replacements.

Self-management activities, engaging in regular physical activity, and maintaining a healthy weight are very important in preventing the progression of arthritis and have been shown to decrease pain, improve function, and delay disability. Each of these interventions can help people with arthritis maintain their independence and quality of life, but are widely under-utilized. For example, the Arthritis Foundation offers a 6-week Arthritis Self Help Course (see [on the web](#)) that teaches people how to manage their arthritis. People completing the course have been found to have less pain, improved function, and fewer visits to physicians.



Another important step people with arthritis can take to manage their arthritis is to engage in regular physical activity. Both strength training and aerobic exercise have been shown to benefit persons with arthritis, significantly decreasing pain while delaying disability and improving physical functioning. Older adults with arthritis who do not engage in regular vigorous activity have been shown to be twice as likely to experience functional decline as those who do.⁷ In addition, participating in physical activity helps prevent not only obesity, but also lowers a person's risk for developing other inactivity associated conditions such as heart disease and diabetes.

Although studies have found that low-to-

6. Mehrotra C, Naimi TS, Serdula M, Bolen J, and Pearson, K. Arthritis, body mass index, and professional advice to lose weight. Implications for clinical medicine and public health. *Am J Prev Med* 2004;27:16-21.

7. Dunlop DD. Risk factors for functional decline in older adults with arthritis. *Arthritis Rheum* 2005;52:1274-82.

WHAT SHOULD I DO?

Visit your doctor early – Early diagnosis and treatment is important because it can prevent the progression of arthritis and postpone the need for expensive procedures like joint replacements.

Learn to manage your arthritis – The Arthritis Foundation's Arthritis Self-Help Course (ASHC), which was developed at Stanford University, is a 6-week course that teaches people how to manage their arthritis better. People completing the course have been found to have less pain and fewer visits to physicians.

Make time to be active – Regular, moderate physical activity has been shown to reduce pain, improve physical functioning, and improve mental well-being in persons with arthritis. People with arthritis should be participating in at least 30 minutes of moderate physical activity a minimum of 3 days per week. Programs such as the Arthritis Foundation's Exercise Program and Aquatics Program are designed especially to help people with arthritis.

Maintain a healthy weight – Maintaining a healthy weight can reduce a person's risk for developing knee osteoarthritis and may slow the progression of arthritis.

Avoid injury – Protect your joints from injuries that can occur during sports activities and avoid injuries that can occur on the job by avoiding repetitive motions and using ergonomic principles to adapt tasks to the worker.

www.cdc.gov/arthritis/arthritis/key.htm

moderate-intensity physical activity generally does not worsen arthritis symptoms or disease activity, people with arthritis have traditionally been resistant to increasing physical activity levels due to misplaced concerns about potential harm to joints or worsened arthritis pain; and people with arthritis have consistently worse physical activity profiles than those without arthritis.⁸ The LACHS found that 47% of adults with arthritis reported minimal to no activity, compared to 35% of adults without arthritis (Figure 6). The level of physical activity among adults with arthritis varied by race/ethnicity, with 59% of African-Americans, 49% of

8. Hootman JM, Macera CA, Ham SA, Helmick CG, Sniezek JE. Physical activity levels among the general US adult population and in adults with and without arthritis. *Arthritis Care Res* 2003;49:129-35.



on the web



The Arthritis Foundation is a national not-for-profit organization that provides extensive information, resources, and services (for example, the Arthritis Self-Help Course, Arthritis Foundation Exercise Program, and Arthritis Foundation Aquatic Program) to those living with arthritis, to researchers, and to policymakers.

www.arthritis.org

The Bone and Joint Decade is a global, multi-disciplinary initiative targeting the care of people with musculoskeletal conditions--bone and joint disorders.

www.usbjd.org

The Centers for Disease Control and Prevention, Arthritis Program is working to improve the quality of life for people affected by arthritis.

www.cdc.gov/arthritis/

The California Arthritis Partnership Program aims to reduce the burden of arthritis in California through population-based interventions.

www.dhs.ca.gov/ps/cdic/cdcb/medicine/gerontology/oaunit/index.htm

The American College of Rheumatology advances rheumatology through programs of education, research, advocacy and practice.

www.rheumatology.org

Latinos, 45% of Asians/Pacific Islanders, and 43% of Whites reporting minimal to no activity.

Lastly, maintaining a healthy weight can not only slow the progression of arthritis, but can also prevent the development of certain types of arthritis, including knee osteoarthritis. Obese adults are up to 4 times more likely to develop knee osteoarthritis than normal weight adults.⁹

Healthcare providers can play an important role not only in diagnosing and treating people with arthritis, but also in increasing self-management behaviors by providing counseling on arthritis, weight management, and physical activity. Increasing healthcare provider counseling for arthritis management is an arthritis-related Healthy People 2010 objective. Only 11% of adults with arthritis report receiving arthritis education from a healthcare provider and only 56% report receiving physical activity counseling. Among overweight

9. Felson DT, Zhang Y. An update on the epidemiology of knee and hip osteoarthritis with a view to prevention. *Arthritis Rheum* 1998;41(8):1343-55.



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or obese adults with arthritis, only 37% reported receiving weight management counseling.¹⁰ These represent missed opportunities for healthcare providers to provide counseling.

Arthritis is a common condition that significantly affects health-related quality of life and disproportionately impacts racial/ethnic minorities. The burden of arthritis will continue to increase, with the prevalence of arthritis in the United States projected to reach 67 million (25% of the adult population) by 2030,¹¹ even without

taking into account the rising prevalence of obesity. Strategies to reduce the burden of arthritis should include increasing access to and participation in self-management programs, increasing awareness of the importance of physical activity and weight management, and developing programs for groups at higher risk for disability, including racial/ethnic minorities and the elderly.

10. Hootman JM, Langmaid G, Helmick CG, Bolen J, Kim I, Shih M et al. Monitoring progress in arthritis management-United States and 25 states, 2003. *MMWR Morb and Mortal Wkly Rep* 2005;54(19):484-488.

11. Hootman JM, Helmick CG. Projections of US prevalence of arthritis and associated activity limitations. *Arthritis Rheum* 2006;54:226-9.

The Los Angeles County Health Survey is a periodic, population-based telephone survey that collects information on sociodemographic characteristics, health status, health behaviors, and access to health services among adults and children in the county. The most recent survey was conducted in 2005 for the Los Angeles County Department of Health Services by Field Research Corporation and was supported by grants from First 5 LA, the California Department of Health Services, and the Public Health Response and Bioterrorism Preparedness federal grant.

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For additional information about the L.A. County Health Survey, visit: www.lapublichealth.org/ha