

The term arthritis is used to describe more than 100 rheumatic diseases and conditions that affect joints. Most are characterized by pain, aching, stiffness, and swelling in and around the joint or elsewhere in the musculoskeletal system. The most common forms of arthritis are osteoarthritis, fibromyalgia, gout, rheumatoid arthritis, and systemic lupus erythematosus.

Arthritis in California

Arthritis in the U.S.

- Over 46 million U.S. adults report doctor-diagnosed arthritis.¹ By the year 2030, an estimated 67 million adults will have doctor-diagnosed arthritis.²
- Arthritis is the leading cause of disability in the United States, limiting activity levels of nearly 19 million U.S. adults.²
- U.S. estimates for the most common forms of arthritis in adults:^{1,3}

Osteoarthritis	27.0 million
Fibromyalgia	5.0 million
Gout	3.0 million
Rheumatoid Arthritis	1.3 million
Systemic Lupus Erythematosus	161,000 to 322,000

Risk Factors for Arthritis

Non-modifiable	Modifiable
• Age	• Overweight and Obesity
• Gender	• Infection
• Genetics	• Joint Injuries
	• Occupation

Arthritis in California

- Arthritis affects over 5.6 million California adults (22%).⁴
- Of adults with arthritis in California, 3.4 million are women (61%) and over 2.2 million are men (39%).⁴
- Adults with arthritis are almost twice as likely to report fair or poor health status than are adults without arthritis.⁴
- Among adults with arthritis, 39% have activity limitations due to arthritis or joint symptoms.⁴
- Nearly 57% of adults over 65 years of age and 32% of adults ages 45 to 64 have doctor-diagnosed arthritis.⁴
- In 2003, the total cost of arthritis care in California was over \$12 billion.⁵

Arthritis and Self-Management

- In California, less than 16% of the people with arthritis have taken a self-management educational workshop.⁴
- Offered in both English and Spanish, self-management workshops are effective in improving knowledge and self-care behaviors, and in reducing outcomes such as pain, depression, and physician visits.¹²
- Appropriate self-management skills can help people with arthritis decrease pain, improve function, stay productive, and lower health care costs.

Arthritis and Physical Activity

- Almost half of Californians with doctor-diagnosed arthritis (41%) do not engage in the recommended amount of physical activity.⁴
- Rates of physical activity vary among ethnic/racial groups.⁴
- Regular, moderate physical activity for people with arthritis is safe, improves function, and reduces pain.

Arthritis and Weight

- California adults with arthritis are 35% more likely to be obese than adults without arthritis.⁴
- A strong association exists between increasing body mass index (BMI) and total hip and total knee replacements.^{9,10}
- Maintaining a healthy weight reduces the risk of developing arthritis and may decrease disease progression. A weight loss of 11 pounds can reduce the risk of developing knee osteoarthritis by as much as 50%.¹¹

Arthritis and Work

- In California, the prevalence of arthritis-attributable work limitation among working-age adults with arthritis is 35%.⁶
- Prevalence of arthritis-attributable work limitation is highest among those with less than a high school education, compared with those who have had more education.⁷
- Arthritis-attributable pain is common in the U.S. workforce and results in reduced performance and lost productive time.⁸
- Identifying people at risk for arthritis-related work disability before work limitations arise and offering them timely access to appropriate, evidence-based interventions may be more effective than beginning interventions after job loss or work disability has occurred.

Arthritis and Other Chronic Conditions

Arthritis affects a large proportion of Californians who also have other chronic health conditions, such as diabetes, cardiovascular disease, high blood pressure, and depression. Although arthritis is not a risk factor for these other chronic conditions, it may present a barrier to adopting healthier lifestyles, such as physical activity, for fear of increasing joint damage or pain.

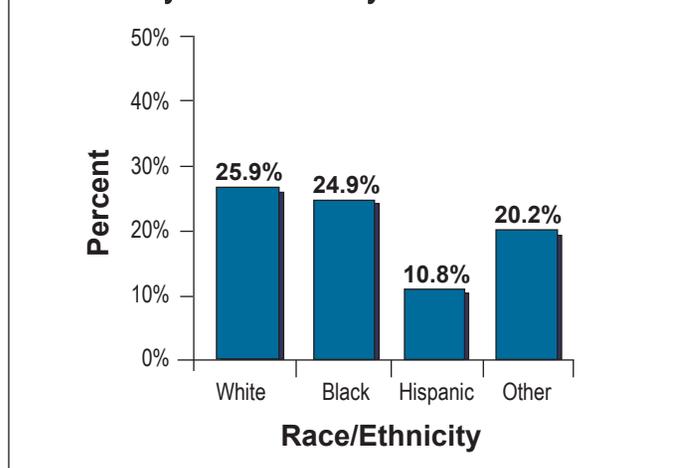
- Of California adults with diabetes, 821,000 (46%) also have arthritis.⁴
- Of California adults with heart disease, 643,000 (46%) also have arthritis.⁴
- Of California adults with high blood pressure, 2,680,000 (41%) also have arthritis.⁴

Public Health Strategies

Untreated or inadequately managed arthritis can have a negative impact on people with arthritis by limiting physical function, ability to engage in valued life activities, to work, and to manage other chronic conditions successfully. Women with arthritis report greater prevalence of activity and work limitations, psychological distress, and severe joint pain than their male counterparts.¹³ As new intervention programs are developed, women and other disproportionately impacted groups merit particular consideration in tailoring and delivering arthritis programs.¹³ Currently, several public health interventions exist that can reduce the burden and impact of arthritis. Evidence-based programs include:

- Arthritis Foundation Self-Help Program (English and Spanish)
- Chronic Disease Self-Management Program
- Arthritis Foundation Exercise and Aquatic Programs

Percentage of Doctor-Diagnosed Arthritis by Race/Ethnicity in California



Source: State of California, Department of Public Health, Behavioral Risk Factor Surveillance System (BRFSS), 2005.

Arthritis is a frequent problem with a large impact on all racial/ethnic groups, but the disabling effects of arthritis, such as arthritis-attributable activity limitations, work limitations, and severe pain, affect some racial/ethnic groups more severely.¹⁴ Examining racial/ethnic disparities in the prevalence and impact of arthritis is important to identify priority populations for public health interventions.¹⁴

California Arthritis Partnership Program (CAPP)

The goal of the California Arthritis Partnership Program is to improve the quality of life of Californians affected by arthritis and other rheumatic conditions, to increase awareness of the importance of physical activity and self-management, and to increase access to evidence-based interventions.

References

- ¹Centers for Disease Control and Prevention (CDC). 2007. Data and Statistics: Arthritis related statistics. Available online at: http://www.cdc.gov/arthritis/data_statistics/arthritis_related_statistics.htm.
- ²Helmick, C.G., Felson, D.T., Lawrence, R.C., Gabriel, S., Hirsch, R., Kwoh, K., Kwoh, C.K., Liang, M.H., Kremers, H.M., Mayes, M.D., Merkel, P.A., Pillemer, S.R., Reveille, J.D., and Stone, J.H. 2008. Estimates of the prevalence of arthritis and other rheumatic conditions in the United States: Part I. *Arthritis and Rheumatism* 58(1):15-25.
- ³Lawrence, R.C., Felson, D.T., Helmick, C.G., Arnold, L.M., Choi, H., Deyo, R.A., Gabriel, S., Hirsch, R., Hochberg, M.C., Hunder, G.G., Jordan, J.M., Katz, J.N., Kremers, H.M., and Wolfe, F. 2008. Estimates of the prevalence of arthritis and other rheumatic conditions in the United States: Part II. *Arthritis and Rheumatism* 58(1):26-35.
- ⁴State of California, Department of Public Health, Behavioral Risk Factor Surveillance System (BRFSS). 2005.
- ⁵Morbidity and Mortality Weekly Report (MMWR). Jan. 12, 2007. National and state medical expenditures and lost earnings attributable to arthritis and other rheumatic conditions: United States, 2003.
- ⁶Morbidity and Mortality Weekly Report (MMWR). Oct. 12, 2007. State-specific prevalence of arthritis-attributable work limitation: United States, 2003.
- ⁷Theis, K.A., Murphy, L., Hootman, J.M., Helmick, C.G., and Yelin, E. 2007. Prevalence and correlates of arthritis-attributable work limitation in the U.S. population among persons ages 18-64: 2002 national health interview survey data. *Arthritis and Rheumatism* 57(3):355-363.
- ⁸Kessler, R.C., Greenberg, P.E., Mickelson, K.D., Meneades, L.M., and Wang, P.S. 2001. The effects of chronic medical conditions on work loss and work cutback. *Journal of Occupational and Environmental Medicine* 43(3):218-225.
- ⁹Ciccittini, F.M., Baker, J.R., and Spector, T.D. 1996. The association of obesity of the hand and the knee in women: a twin study. *Journal of Rheumatology* 23(7):1221-1226.
- ¹⁰Wendelboe, A.M., Hegmann, K.T., Biggs, J.J., Cox, C.M., Portmann, A.J., Gildea, J.H., Gren, L.H., and Lyon, J.L. 2003. Relationships between body mass indices and surgical replacements of knee and hip joints. *American Journal of Preventative Medicine* 25(4):290-295.
- ¹¹Felson, D.T., Zhang, Y., Anthony, J.M., Naimark, A., and Anderson, J.J. 1992. Weight loss reduces the risk for symptomatic knee osteoarthritis in women. The Framingham Study. *Annals of Internal Medicine* 116:535-539.
- ¹²Brady, T.J., Kruger, J., Helmick, C.G., Callahan, L.F., and Boutaugh, M.L. 2003. Intervention programs for arthritis and other rheumatic diseases. *Health Education and Behavior* 30(1):44-63.
- ¹³Theis, K.A., Helmick, C.G., and Hootman, J.M. 2007. Arthritis burden and impact greater among U.S. women than men: Intervention opportunities. *Journal of Women's Health* 16(4):441-453.
- ¹⁴Morbidity and Mortality Weekly Report (MMWR). Feb. 11, 2005. Racial/ethnic differences in the prevalence and impact of doctor-diagnosed arthritis.

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