

Michigan Fact Sheet (Released January 2007)



What is arthritis?

The term “arthritis” covers more than 100 diseases and conditions affecting *joints*, the *surrounding tissues*, and *other connective tissues*. Arthritis and other rheumatic conditions include osteoarthritis, rheumatoid arthritis, systemic lupus erythematosus, juvenile rheumatoid arthritis, gout, bursitis, rheumatic fever, Lyme arthritis, carpal tunnel disease and other disorders.¹ This report is based on information from the Michigan 2005 Behavioral Risk Factor and the 2005 Diabetes, Arthritis and Osteoporosis Surveys. For these surveys, arthritis is defined as doctor-diagnosed arthritis.

How does arthritis affect people?

- 2.4 million Michigan adults age 18 and older reported doctor-diagnosed arthritis in 2005.² 31% of Michigan adults reported having arthritis, the *sixth* highest arthritis prevalence rate in the country.³
- 850,000 Michigan adults reported arthritis-attributable activity limitations.²
- Arthritis and related disability is expected to increase as the population ages: it is projected that nearly 2.9 million Michigan adults will have arthritis in 2030 and over one million will have arthritis-attributable activity limitations.^{2,4}
- Two-thirds of people with arthritis in Michigan were younger than 65 years of age.² Children were affected as well.
- Non-Hispanic black adults with arthritis were significantly more likely than white adults to report: 1) activity limitations due to their arthritis² and 2) being unable to get care for their arthritis when needed.⁵

What is the cost?

- Arthritis is the leading cause of disability in the United States.⁶
- The estimated direct and indirect costs of arthritis and other rheumatic conditions in Michigan in 2003 were \$5.6 billion.⁷
- *One-third* of working-aged Michigan adults with arthritis in 2005 (about 800,000 people) reported that arthritis or joint symptoms now affected *whether* they work, the *type* of work they do, or the *amount* of work they do. Thirty percent or 240,000 of these people reported that

they lost one or more days of work due to their arthritis or joint symptoms in the past 30 days.⁵

- In 2004, there were 31,109 hospitalizations for arthritis-related hip and knee replacements among Michigan adults.⁸ The estimated total cost - for hospitalization only - of these procedures was \$878 million.⁹
- Michigan adults with arthritis were three to four times more likely than those without arthritis to report fair or poor health status. They were three to four times more likely to report having other diseases such as diabetes, osteoporosis or cardiovascular disease.^{2,5}

What increases risk?

- **Gender:** Michigan women had a 34% higher risk of arthritis than men in 2005.²
- **Older age:** Arthritis risk increases with age, from 5.4% among Michigan adults age 18-24 to 63.5% among those age 75 and over.²
- **Family history:** Certain genes are known to be associated with a higher risk of some types of arthritis.¹⁰
- **Obesity:** The most common type of arthritis, osteoarthritis, is associated with obesity in all adults.^{10,11} Gout in men is also associated with obesity.^{10,12}
- **Joint injuries:** Sports, occupational and repetitive motion joint injuries increase the risk of arthritis.^{10,11,13} Occupations such as farming, heavy industry, and those involving repetitive motion are associated with arthritis.¹³

What helps?

- Medications for some types of arthritis can limit disease progression, control symptoms and prevent serious complications.¹
- Physical activity in the form of regular, moderate exercise maintains joint health, relieves pain and improves function.^{14,15}
- Physical activity can reduce the risk of functional decline by 38-41% and disability by 47% among adults with arthritis.^{16,17} Several community-based physical activity programs are available for people with arthritis and have demonstrated positive results. These include Arthritis Foundation programs and Enhance Fitness.

Michigan Arthritis Fact Sheet (Released January 2007)



- Reducing excess weight can reduce the risk of knee osteoarthritis and limit progression of disease. Losing as little as 11 pounds may reduce the risk of developing knee osteoarthritis by 50%.¹¹ Weight loss programs incorporating both exercise participation and dietary restriction are the most effective and result in significant improvements in pain and function.¹⁸
- The Arthritis Foundation Self-Help Program and the Chronic Disease Self-Management Program have proven to reduce arthritis-related pain and decrease physician visits. These courses involve small group education with a focus on problem solving, exercise, relaxation and communication.¹⁴
- Physical and rehabilitation therapy are effective in reducing pain and improving function and disability.¹⁹
- Joint replacement therapy often reduces pain and improves activity.¹

The Michigan Arthritis Program

In response to the recommendations of the *National Arthritis Action Plan (NAAP)*, the Center for Disease Control and Prevention (CDC) established cooperative agreements with state health departments to develop and enhance state-based programs that aim to decrease the burden of arthritis and improve the quality of life among people with arthritis.

<http://www.cdc.gov/arthritis/>

- **Since 1999, the Michigan Arthritis Program has received funding from the Centers for Disease Control and Prevention.**
- Currently, the Michigan Arthritis Program is focusing on activities outlined in the Michigan Arthritis Action Plan.
- Activities include: the Michigan Arthritis Collaborative Partnership, self-management and physical activity opportunities for people with arthritis, and surveillance to better understand the burden of arthritis.
- If questions or comments, contact Peter DeGuire at (517) 335-8703 or deguirep@michigan.gov.
- To view the Michigan arthritis website: www.michigan.gov/arthritis

References

1. Arthritis Foundation, Association of State and Territorial Health Officials, Centers for Disease Control and Prevention. National Arthritis Action Plan: A Public Health Strategy. Atlanta, GA. Arthritis Foundation, 1999.
2. Preliminary data from the 2005 Michigan Behavioral Risk Factor Survey (BRFS).
3. CDC national BRFS website. <http://apps.nccd.cdc.gov/brfss/list.asp?cat=AR&yr=2005&qkey=4498&state=All>
4. U.S. Census Bureau. Interim Population Projections for Five-Year Age Groups and Selected Age Groups by Sex for States: July 2004-July 2030. Released April 21, 2005. http://michigan.gov/documents/hal_lm_census_BOC_Proj05MI_122918_7.xls
5. Data from the 2005 Michigan Diabetes, Arthritis and Osteoporosis Survey.
6. Prevalence of disabilities and associated health conditions—United States, 1999. MMWR 2001; 50:120-5.
7. Centers for Disease Control and Prevention. National and state medical expenditures and lost earnings attributable to arthritis and other rheumatic conditions—United States, 2003. MMWR 2007; 56:4-7.
8. Data from the 2004 Michigan Inpatient Data Base (MIDB).
9. American Academy of Orthopedic Surgeons website. <http://www.aaos.org/wordhtml/research/stats/Hipkneefacts.htm>
10. Silman A and Hochberg M. Epidemiology of the rheumatic diseases. Oxford University Press. 2001.
11. 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
12. Choi HK, Atkinson K, Karlson EW, Curhan G. Obesity, weight change, hypertension, diuretic use, and risk of gout in men: the health professionals follow-up study. Arch Intern Med 2005; 165(7):742-8.
13. Felson DT, Hannan MT, Naimark A, et al. Occupational physical demands, knee bending and knee osteoarthritis: results from the Framingham Study. J Rheumatol 1999; 18:1587-92..
14. Brady TJ, Kruger J, Helmick CG, Callahan LF, Boutaugh ML. Intervention Programs for Arthritis and Other Rheumatic Diseases. Health Education and Behavior 2003; 30(1): 44-63.
15. Roddy E, Zhang W, Doherty M, et al. Evidence-based recommendations for the role of exercise in the management of osteoarthritis of the hip or knee – the MOVE consensus. Rheumatology, 2005;44(1):67-73.
16. Feinglass J, Thompson JA, He XZ, et al. Effect of physical activity on functional status among older middle-age adults with arthritis. Arthritis Rheum, 2005;53(6):879-85.
17. Penninx BW, Messier SP, Rejeski WJ et al. Physical exercise and the prevention of disability in activities of daily living in older persons with osteoarthritis. Arch Intern Med, 2001;161(19):2309-16.
18. Messier SP, Loesser RF, Miller GD t al. Exercise and dietary weight loss in overweight and obese older adults with knee osteoarthritis : the Arthritis, Diet, and Activity Promotion Trial. Arthritis Rheum, 2004;50(5):1501-10.
19. Harris GR, Susuman JL. Managing musculoskeletal complaints with rehabilitation therapy: Summary of the Philadelphia Panel evidence-based clinical practice guidelines on musculoskeletal rehabilitation interventions. J Fam Pract, 2002;51:1042-1046

This publication was supported by Grant/Cooperative Agreement Number U58/CCU 522826-04 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.