

7.7 Arthritis

An estimated 50 million U.S. adults (about 1 in 5) report doctor-diagnosed arthritis. Arthritis is the most common cause of disability in the United States, limiting the activities of nearly 21 million adults. The number of adults with arthritis is expected to increase sharply to 67 million by 2030, and more than one-third of these adults will have limited activity as a result.¹

According to the Centers for Disease Control and Prevention, while the word *arthritis* actually means joint inflammation, the term *arthritis* is used in the public health world to describe more than 100 rheumatic diseases and conditions that affect joints, the tissues which surround the joint and other connective tissue, the most common of which is osteoarthritis. Other frequently occurring forms of arthritis include rheumatoid arthritis, lupus, fibromyalgia, and gout. Common 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.²

Among U.S. adults with arthritis, 47% also have at least one other disease or condition, including 35% who are obese (compared with only 21% of people without arthritis). In addition, more than half of adults with heart disease (57%) or diabetes (52%) and more than one-third with obesity (36%) also have arthritis.³

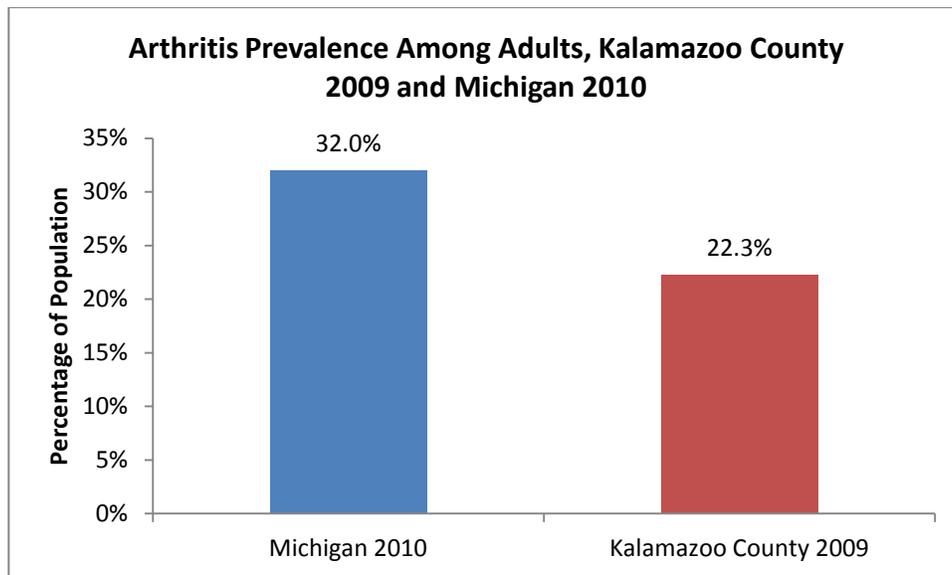
¹ Arthritis Basics, 2012, National Centers for Disease Control and Prevention, accessed at <http://www.cdc.gov/arthritis/basics.htm>.

² Arthritis Basics, 2012, National Centers for Disease Control and Prevention, accessed at <http://www.cdc.gov/arthritis/basics.htm>.

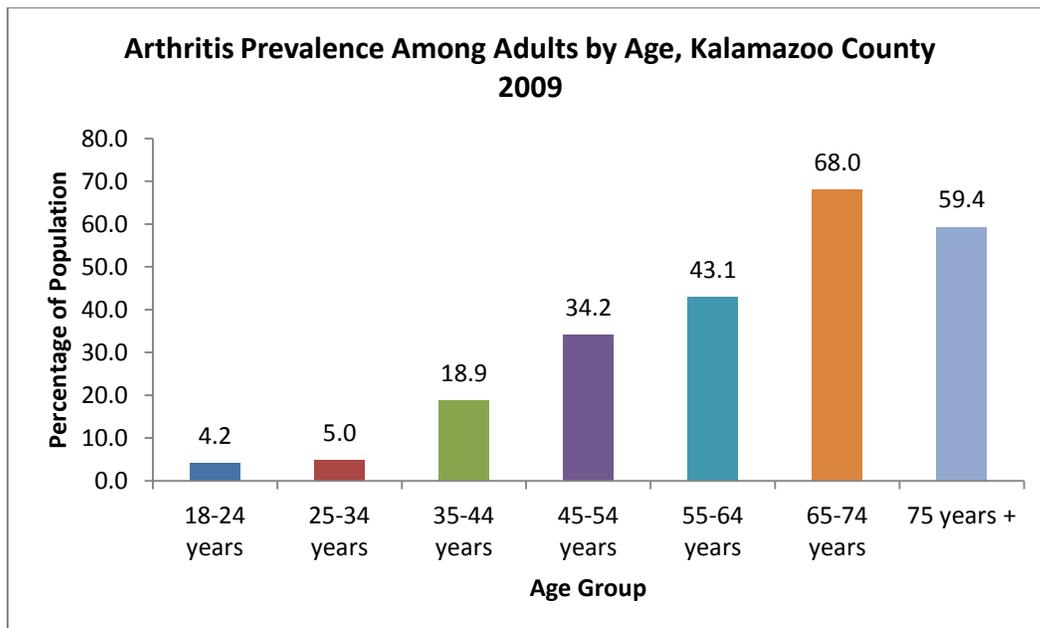
³ Arthritis, 2012, National Centers for Disease Control and Prevention, accessed at <http://www.cdc.gov/chronicdisease/resources/publications/aag/arthritis.htm>.

7.7.1 Arthritis Prevalence

In Kalamazoo County in 2009, 22.3% of adults were told by a health care professional that they had some form of arthritis, gout, lupus, or fibromyalgia. According to the 2010 Michigan BRFSS, 32.0% or 2.4 million Michigan adults age 18 and older had arthritis that was diagnosed by a health care professional (a rate higher than in Kalamazoo County). In addition, generally as age increased, arthritis prevalence increased as well.

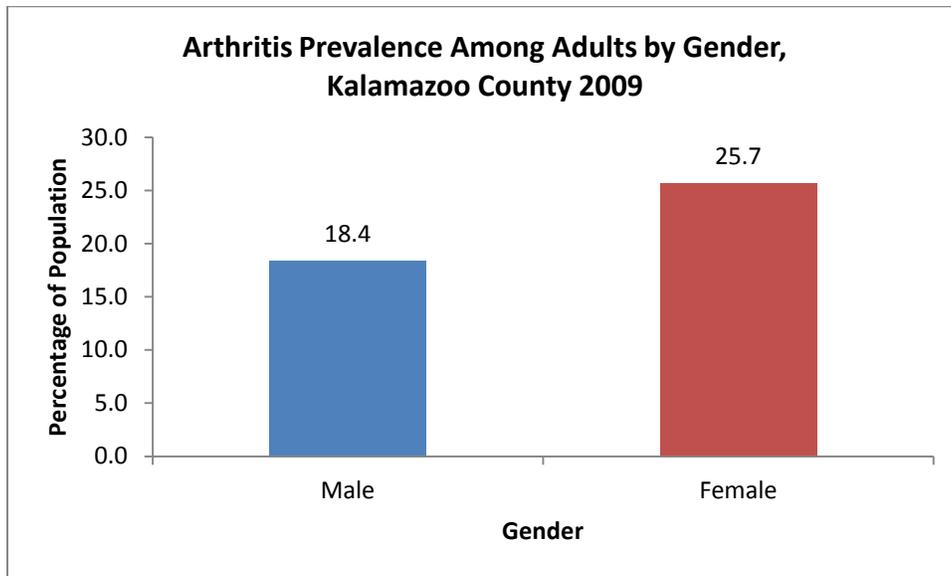


Source: Kalamazoo County 2009, Michigan 2010 Behavioral Risk Factor Survey

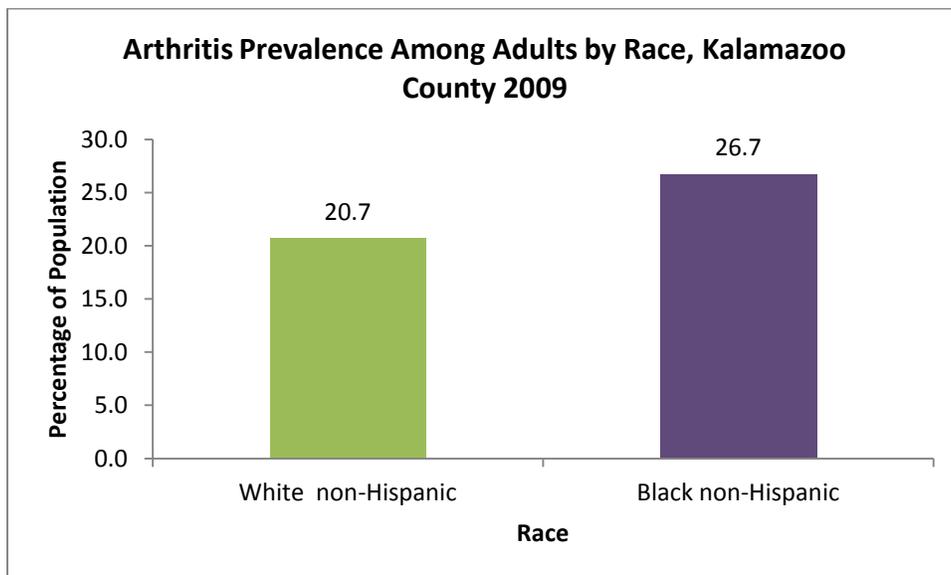


Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

In Kalamazoo County, females were more likely than males to have been told that they have some form of arthritis. Black adults were more likely than white adults to have been told they have arthritis in 2009.

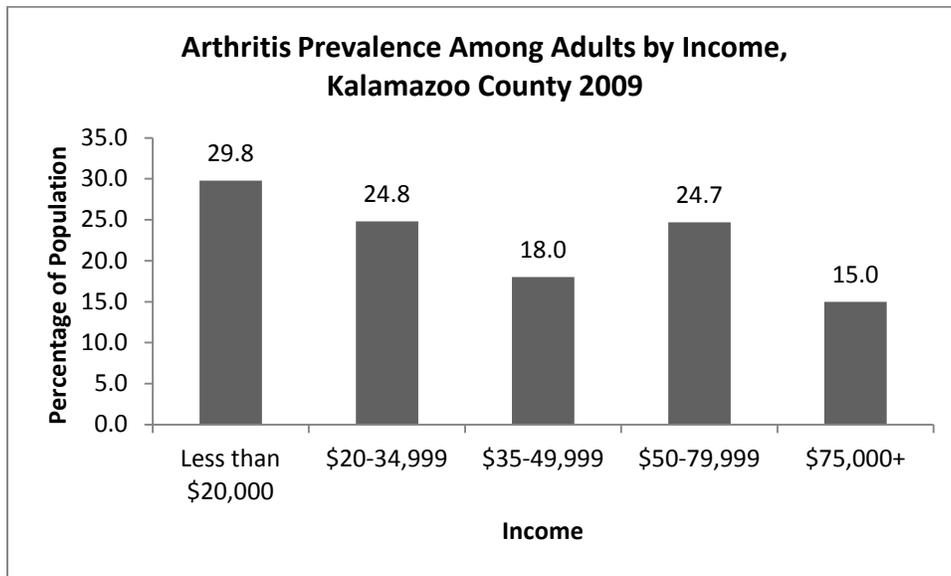


Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

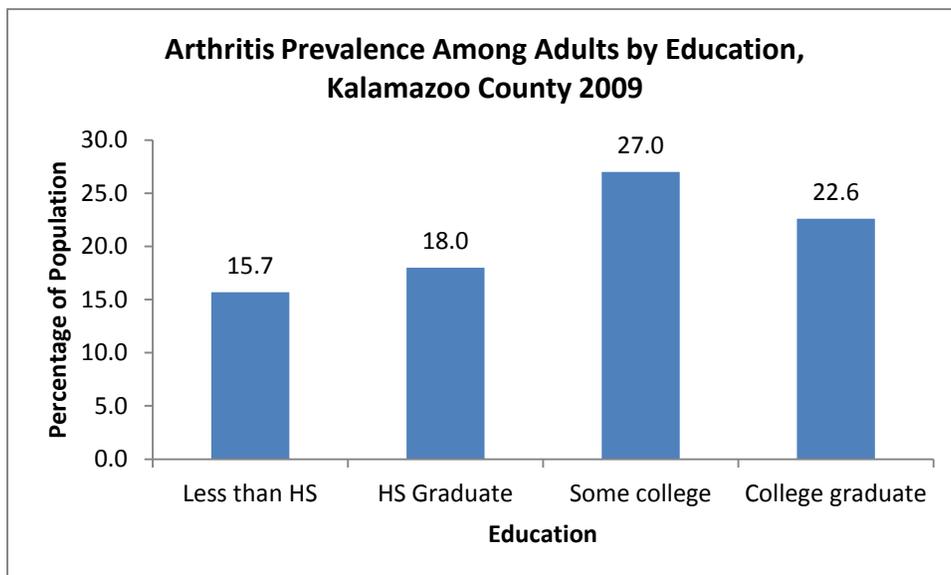


Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

In 2009, generally as income increased, the percentage of adults who had ever been told they have arthritis decreased, with those earning \$75,000 or more having the lowest rates of arthritis. Additionally, as education increased, arthritis prevalence increased as well.



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

Arthritis Prevalence Among Adults, Kalamazoo County 2009

Demographic Characteristics	Ever Told Arthritis ^a	
	%	95% C.I.
Total	22.3	(17.8 - 27.6)
Age		
18-24 years	4.2	(0.9 - 16.7)
25-34 years	5.0	(1.4 - 16.1)
35-44 years	18.9	(11.6 - 29.4)
45-54 years	34.2	(25.4 - 44.3)
55-64 years	43.1	(32.7 - 54.2)
65-74 years	68.0	(57.8 - 76.8)
75 years +	59.4	(47.5 - 70.3)
Gender		
Male	18.4	(12.5 - 26.1)
Female	25.7	(19.2 - 33.6)
Race		
White non-Hispanic	20.7	(16.0 - 26.4)
Black non-Hispanic	26.7	(14.1 - 44.8)
Education		
Less than HS	15.7	(5.7 - 36.2)
HS Graduate	18.0	(12.7 - 24.9)
Some college	27.0	(18.2 - 38.0)
College graduate	22.6	(16.3 - 30.5)
Income		
Less than \$20,000	29.8	(19.1 - 43.2)
\$20-34,999	24.8	(15.4 - 37.3)
\$35-49,999	18.0	(9.7 - 30.9)
\$50-79,999	24.7	(15.3 - 37.3)
\$75,000+	15.0	(8.7 - 24.7)
City/Out-County		
City of Kalamazoo	29.4	(21.3 - 39.2)
Rest of County	18.0	(12.7 - 25.1)
Within City of Kalamazoo		
White in City	26.9	(17.4 - 39.1)
Black in City	30.9	(16.2 - 50.8)

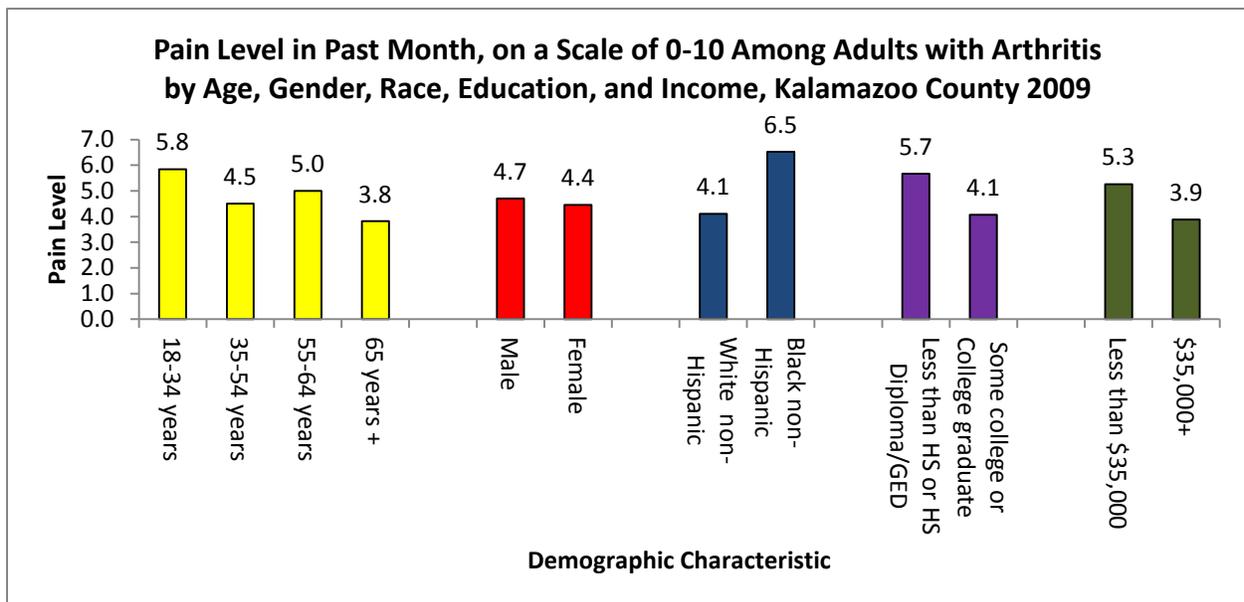
^a The proportion who reported that they were ever told by a health care professional that they had some form of arthritis, gout, lupus, or fibromyalgia.

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

7.7.2 Arthritis Limitations and Pain

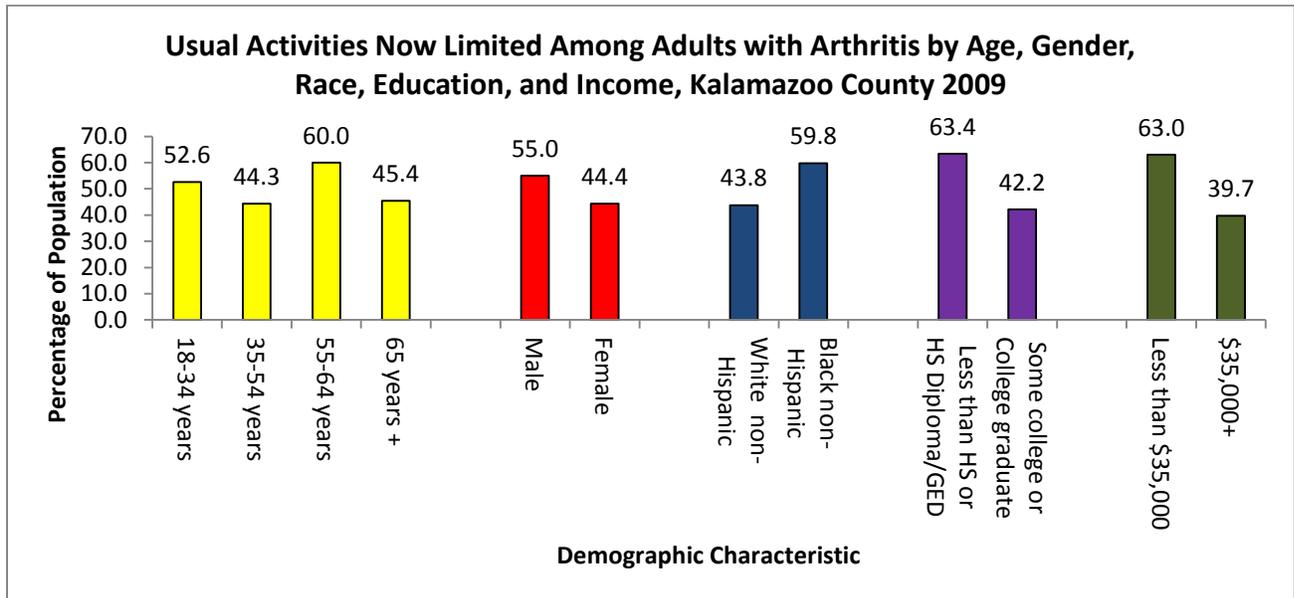
In Kalamazoo County in 2009, among adults who had ever been told they have arthritis by a health care professional, 48.5% reported that their usual activities are now limited by their arthritis or joint symptoms. Additionally, 36.1% reported that whether they work, the type of work they do, or the amount of work they do is affected by their arthritis or joint symptoms; 44.0% reported that their normal social activities (going shopping, to movies, or to religious social gatherings) are now limited by their arthritis or joint symptoms. The average degree of pain experienced in the past 30 days on a scale from 0 to 10 was 4.5 (where 0 is no pain and 10 is pain or aching as bad as it can be) among adults with arthritis.

Among the population with arthritis, young adults aged 18-34 years, black adults, adults with a high school diploma/GED or less, and adults earning less than \$35,000 reported the highest pain levels in the past month due to arthritis symptoms.

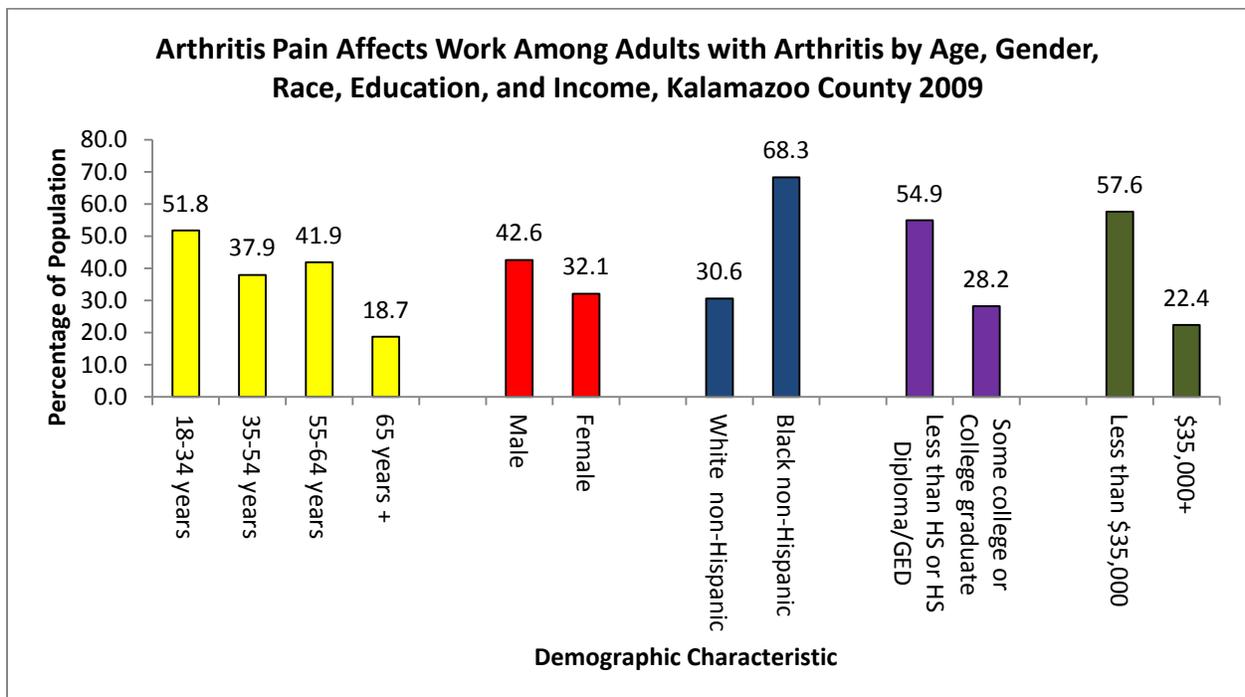


Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

In Kalamazoo County in 2009 among adults with arthritis, adults aged 55-64 years, males, black adults, adults with less education, and adults with lower incomes were most likely to report that their usual activities are limited by arthritis symptoms. Those aged 18-34, males, black adults, those with a high school education or less, and those earning less than \$35,000 were the most likely to report that arthritis pain affects their work.

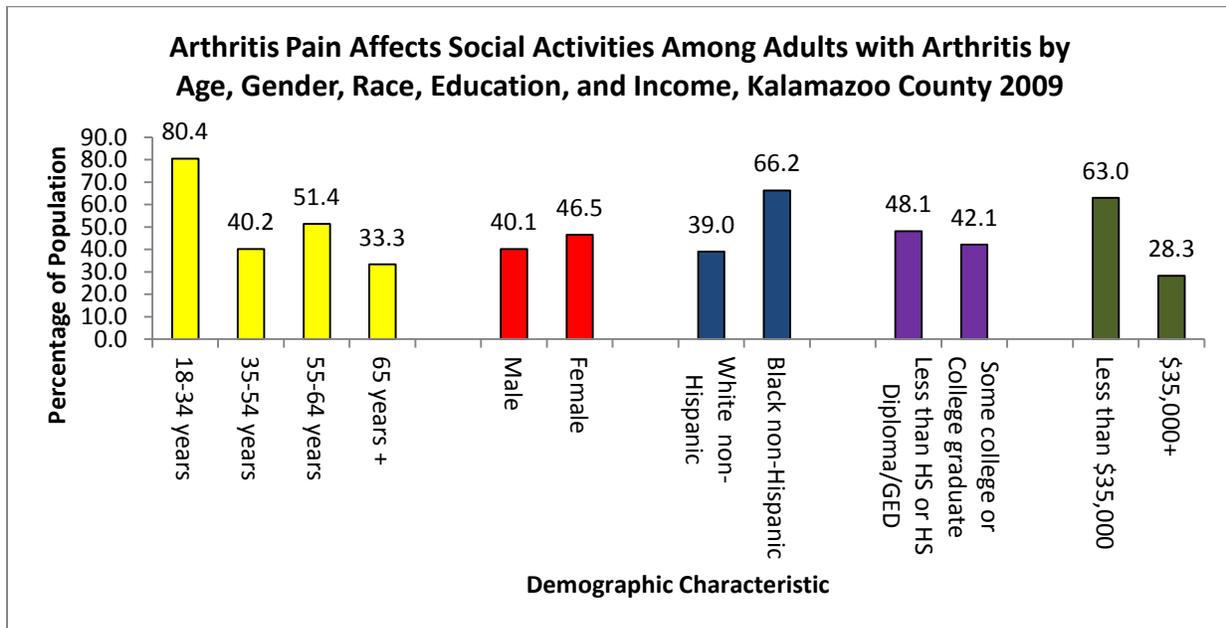


Source: Kalamazoo County 2009 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

In Kalamazoo County among adults with arthritis, those aged 18-34 years, black adults, and those with lower incomes were the most likely to report that arthritis pain affects their social activities in 2009.



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

Arthritis Limitations and Pain Among Adults with Arthritis, Kalamazoo County 2009

Demographic Characteristics	Pain Level in Past Month, on a Scale of 0 to 10		Usual Activities Now Limited		Arthritis Pain Affects Work		Arthritis Pain Affects Social Activities	
	#	95% C.I.	%	95% C.I.	%	95% C.I.	%	95% C.I.
Total	4.5	(3.9 - 5.2)	48.5	(39.2 - 57.9)	36.1	(27.3 - 45.9)	44.0	(34.9 - 53.6)
Age								
18-34 years	5.8	(1.4 - 10.3)	52.6	(12.9 - 89.3)	51.8	(12.4 - 89.0)	80.4	(29.8 - 97.5)
35-54 years	4.5	(3.7 - 5.2)	44.3	(30.9 - 58.6)	37.9	(25.2 - 52.6)	40.2	(27.3 - 54.6)
55-64 years	5.0	(4.0 - 6.0)	60.0	(45.1 - 73.2)	41.9	(28.0 - 57.3)	51.4	(36.9 - 65.7)
65 years +	3.8	(3.3 - 4.4)	45.4	(35.7 - 55.6)	18.7	(10.8 - 30.4)	33.3	(24.0 - 44.2)
Gender								
Male	4.7	(3.4 - 6.0)	55.0	(38.0 - 71.0)	42.6	(26.4 - 60.5)	40.1	(24.3 - 58.2)
Female	4.4	(3.8 - 5.1)	44.4	(34.2 - 55.2)	32.1	(22.9 - 42.9)	46.5	(36.0 - 57.3)
Race								
White non-Hispanic	4.1	(3.4 - 4.8)	43.8	(33.6 - 54.5)	30.6	(21.4 - 41.8)	39.0	(29.1 - 49.9)
Black non-Hispanic	6.5	(5.4 - 7.7)	59.8	(34.6 - 80.8)	68.3	(43.8 - 85.7)	66.2	(40.9 - 84.7)
Education								
Less than HS or HS Diploma/GED	5.7	(4.9 - 6.5)	63.4	(50.1 - 74.9)	54.9	(41.4 - 67.7)	48.1	(34.7 - 61.8)
Some college or College graduate	4.1	(3.3 - 4.9)	42.2	(30.9 - 54.3)	28.2	(18.1 - 41.2)	42.1	(30.7 - 54.4)
Income								
Less than \$35,000	5.3	(4.2 - 6.3)	63.0	(46.5 - 76.9)	57.6	(41.6 - 72.2)	63.0	(46.0 - 77.3)
\$35,000+	3.9	(2.9 - 4.9)	39.7	(26.5 - 54.5)	22.4	(11.3 - 39.6)	28.3	(16.1 - 44.7)
City/Out-County								
City of Kalamazoo	4.7	(3.5 - 5.8)	47.2	(31.8 - 63.2)	38.4	(24.1 - 54.9)	44.9	(29.9 - 60.8)
Rest of County	4.0	(3.4 - 4.7)	46.0	(33.2 - 59.2)	30.2	(19.3 - 44.0)	37.2	(25.6 - 50.5)
Within City of Kalamazoo								
White in City	3.6	(2.0 - 5.1)	34.0	(18.6 - 53.8)	17.5	(7.4 - 36.2)	29.4	(15.3 - 48.9)
Black in City	6.3	(5.2 - 7.4)	57.3	(30.0 - 80.8)	68.9	(41.5 - 87.3)	66.4	(38.3 - 86.3)
Among adults who reported ever being told by a health care professional that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia:								

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey