

“ The health benefits of becoming physically active are great. I’m losing weight, my clothes fit looser, I’m feeling more energized, and I’ve met new people.

—Walk with Ease participant

**Public Health Message**

Regular, moderate, physical activity for people with arthritis is safe, improves function, and reduces pain.

# Arthritis and Physical Activity

Arthritis affects over 5.3 million California adults (22%)<sup>1</sup> and is the nation’s most common cause of disability.<sup>2</sup> Physical activity is an important, but underused, intervention for adults with arthritis that decreases pain, delays the onset of disability, improves physical functioning, mood and independence, and enhances quality of life, aerobic capacity, and muscle strength.<sup>3</sup> Low physical activity levels place people with arthritis at added risk of inactivity-associated conditions such as cardiovascular disease, diabetes, obesity and functional limitations, including difficulty walking three city blocks and climbing a flight of stairs.<sup>2</sup> Of California adults with arthritis, 50% have activity limitation due to their arthritis.<sup>1</sup>

## Benefits of Physical Activity (PA)

- Decreases pain, improves function, and reduces disability associated with all forms of arthritis.<sup>4</sup>
- Improves body composition, increases strength, reduces the risk for falls, and reduces depression.<sup>5</sup>
- Is a key component of weight management. Maintaining a healthy weight reduces the risk of developing arthritis and may decrease the disease progression.<sup>6</sup>

## Barriers to Physical Activity

Arthritis commonly occurs in individuals with heart disease, diabetes, high blood pressure, and obesity. The presence of pain may be a barrier to being physically active, which is an important part of any disease management.<sup>7,8</sup>

**Common PA Barriers:**

- Lack of time
- Competing responsibilities
- Lack of motivation
- Difficulty finding an enjoyable activity

**Disease-specific PA Barriers:**

- Concerns about aggravating arthritis pain
- Fear about causing further joint damage
- Uncertainty about safety of activities

## Physical Activity Recommendations

Most people who engage in regular physical activity begin to feel better within four to six weeks.<sup>9</sup> Walking is the most preferred exercise among people with arthritis; however, 58% of California adults with arthritis walk less than 90 minutes per week.<sup>10</sup>

**F.I.T.T.**

**Frequency, Intensity, Time, and Type<sup>11</sup>**

**Frequency (How often?):** 5 days a week

**Intensity (How hard?):** Moderate

- Feel slightly faster heart rate
- Experience faster, deeper breathing
- Feel slightly warmer
- Able to comfortably carry on a conversation

**Time (How long?):**

- Goal - 30 minutes a day (2.5 hours a week = 30 minutes a day, five days a week)
- 30 minutes can be done in two 15-minute periods, three 10-minute periods, or six-five minute periods.

**Type**

- Endurance activities - 5 days a week
- Muscle strengthening - 2 or more days per week
- Balance exercises - 3 days per week
- Flexibility, range of motion exercises - daily

## Getting Active: Be S.M.A.R.T

**S** Start low, and go slow

**M** Modify activity when arthritis symptoms increase

**A** Activities should be “joint friendly”

**R** Recognize safe places and ways to be active

**T** Talk to a health professional or exercise specialist<sup>12</sup>

**Use the 2-Hour Pain Rule<sup>13</sup>**

*Any increased joint pain or discomfort lasting more than 2 hours after exercise should be discussed with a health care and/or exercise professional.*

## Public Health Strategies

The Centers for Disease Control and Prevention Guide to Community Preventive Services recommends both behavioral and social approaches as well as environmental and policy approaches to increase physical activity. Individually adapted behavior-change programs that incorporate skills such as goal setting, building social support, and problem solving have been shown to increase time spent in physical activity.<sup>5</sup> The environment also plays a unique and vital role in addressing barriers to physical activity and provides sustainable approaches to improve public health.

## Strategies for Increasing Physical Activity

Additional strategies available at: <http://www.arthritis.org/physical-activity>

<b>Community and Public Health</b>	<ul style="list-style-type: none"> <li>Invest resources in the delivery of evidence-based physical activity programs for adults with arthritis in convenient settings</li> <li>Establish partnerships and create joint-use agreements to share community facilities to host physical activity opportunities</li> </ul>
<b>Health Care</b>	<ul style="list-style-type: none"> <li>At every visit, ask patients with arthritis about physical activity levels, screen for arthritis-specific barriers to physical activity, encourage physical activity, and recommend evidence-based community programs</li> </ul>
<b>Business and Industry</b>	<ul style="list-style-type: none"> <li>Include at least one evidence-based, arthritis appropriate physical activity program in worksite wellness program offerings without requiring disclosure of arthritis diagnosis</li> <li>Offer opportunities and scheduling flexibility to support employees engaging in physical activity during the workday</li> </ul>
<b>Park, Recreation, Fitness, and Sport</b>	<ul style="list-style-type: none"> <li>Include at least one evidence-based, arthritis appropriate physical activity program in program offerings</li> <li>Install, upgrade, and maintain sidewalks and benches to create functional pathways and resting areas to and within park and recreation facilities; use a walkability checklist</li> </ul>
<b>Mass Media and Communication</b>	<ul style="list-style-type: none"> <li>Promote community evidence-based physical activity programs through information, guidelines, signage, media promotion, and public outreach</li> </ul>
<b>Transportation, Land Use, and Community Design</b>	<ul style="list-style-type: none"> <li>Examine planning and zoning efforts to ensure adults with arthritis can walk safely to school, workplace, shopping areas, places of worship, parks, and other public venues including public transportation</li> <li>Install, upgrade, and maintain sidewalks and benches in new and existing neighborhoods to create functional pathways and resting areas</li> </ul>

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[www.cdph.ca.gov/arthritis](http://www.cdph.ca.gov/arthritis)

## Evidence-Based PA Programs

The Arthritis Foundation offers physical activity interventions:

- Walk with Ease Program
- Exercise Program
- Aquatics Program

### Healthy People 2020 Objectives<sup>14</sup>

- "Reduce the proportion of adults with doctor-diagnosed arthritis who experience a limitation in activity due to arthritis or joint symptoms."
- "Increase the proportion of adults with doctor-diagnosed arthritis who receive health care provider counseling for physical activity or exercise."
- "Reduce the proportion of adults with doctor-diagnosed arthritis who find it "very difficult" to perform specific joint-related activities."

## References

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- <sup>11</sup>United States. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. Web. 20 Feb. 2013.
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- <sup>14</sup>U.S. Department of Health and Human Services. Healthy People 2020. Arthritis, Osteoporosis, and Chronic Back Conditions: Objectives. Washington, DC, 2013. Web. 20 Feb. 2013.