

THE HIDDEN IMPACT

Joint Disease: Arthritis in Patient Populations Who is affected by arthritis?

The term "arthritis" is an umbrella term for hundreds of conditions that cause pain and disease in and around the body's joints. Different types of arthritis have different causes, symptoms, and treatments, but together they affect people of all ages, genders, and races/ethnicities and are the leading cause of disability in the United States. Some, like osteoarthritis and rheumatoid arthritis, are more prevalent. More than 1 in 4 adults has doctor-diagnosed arthritis; by 2040, an estimated 78 million Americans will have doctor-diagnosed arthritis if current trends continue.

Types of Arthritis

Osteoarthritis (OA) is the most common form of arthritis, affecting one in seven adults (or 32.5 million adults annually). OA occurs when the cartilage that cushions the ends of bones wears away, causing symptoms such as pain, swelling, and stiffness. Knee OA accounts for about one-third of OA visits. Women, who are 51 percent of the general population, account for 78 percent of adults with OA.

Inflammatory arthritis as the name suggests, is a group of diseases in which the synovial membrane in joints becomes inflamed (often along with other tissues).

Rheumatoid arthritis (RA) and lupus (an immune system disease that affects the skin and kidneys, as well as joints) are examples of autoimmune diseases, where the body's immune system attacks healthy tissue. Inflammatory arthritic diseases lead to joint pain, swelling, warmth, and tenderness in joints, sometimes also causing deformity and loss of function. Between 1.3 and 1.5 million adults in the United States are estimated to have RA, with prevalence higher among women and older adults.

Other forms of inflammatory arthritis include **spondyloarthropathies** (**SpA**), a family of inflammatory arthropathies that primarily affect the vertebral column and the connective tissue where tendons and ligaments attach to bone, axial spondyloarthritis, reactive arthritis, psoriatic arthritis, and enteropathic arthritis/spondylitis. Connective tissue disorders also are included in category of inflammatory arthritis. Prevalence rates for all of these are difficult to establish because classification criteria are not defined, but estimates can be found in the full BMUS chapter.



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When uric acid builds up in the body, serum levels of uric acid are elevated (hyperuricemia). In some people, this leads to **gout**—recurring attacks of painful, red, tender, warm, and swollen joints. Gout generally affects one joint at a time, most often the big toe, but repeated flare-ups can lead to severe chronic arthritis, joint damage, and deformity. Gout is more common in males than females, is believed to be increasing in prevalence, and occurs frequently in patients with metabolic syndrome, diabetes, hypertension, and obesity.

Although **fibromyalgia** does not fit within the arthritis classifications described above, it is considered a chronic pain condition, with symptoms of widespread pain throughout the body and fatigue. Between 4 million (2 percent) and 10 million (5 percent) of the adult population is estimated to have this condition, with up to 90 percent of cases among females.

Juvenile Arthritis (JA) describes a number of autoimmune and inflammatory conditions that can develop in children. Like other forms of arthritis, JA prevalence and incidence data are difficult to obtain, with estimates approaching 294,000 children in the United States having arthritis or another rheumatic disease.

Joint pain and joint replacements drive millions of people to seek medical care, but self-reported surveys do not distinguish among different causes of pain (e.g., arthritis or injuries). Among the 40.2 million adults who reported doctor-diagnosed arthritis, the most common site of joint pain was the knee. This contributes to the steady increase in knee replacement procedures in the United States, which comprised 56 percent of all joint replacement procedures in 2013 (723,000 knee replacement procedures).

Health Disparities

Arthritis is one of many conditions that reveal **health disparities**. Arthritis prevalence is lowest among non-Hispanic Asians (11.8%) and highest among non-Hispanic, multiracial adults (25.2%). American Indian/Alaska Natives reported the highest prevalence of limitations on their activities due to arthritis (51.5%).

Key Challenges and Unmet Needs

Barriers to care such as insurance coverage, high co-pays, and limits on the number of visits for rehabilitative services (such as physical therapy and occupational therapy) limit access to specialty care, which in turn makes it more difficult for patients to receive timely and accurate diagnoses. Additional challenges include funding research that develops more evidence-based treatment modalities and making sure existing recommendations on both non-pharmacologic and pharmacologic treatments are translated into clinical practice. Patients need to be actively involved in their treatments, since most forms of these conditions are chronic. Patients with arthritis also are at increased risk of other chronic diseases, such as coronary artery disease. Patients with arthritis need new and effective interventions to safely treat chronic pain. Investments in research to better understand the pathophysiology of

various forms of arthritis and how to intervene most effectively are needed, as well as explorations of the reasons underlying disparities by sex/gender and race/ethnicity. Finally, the current **workforce** cannot meet the demand and will need to be expanded, especially as the population ages.

For more information and sources of data quoted in this document, visit the chapter on Arthritis (4th Edition) and Fast Facts sheet on Arthritis (Joint Disease: Arthritis in Patient Populations) at **boneandjointburden.org**.





About the United States Bone and Joint Initiative

The United States Bone and Joint Initiative (USBJI) is part of the worldwide multi-specialty campaign to advance understanding, prevention, and treatment of musculoskeletal disorders through education and research.

To learn more, visit usbji.org.