

Juvenile Arthritis Fact Sheet

Juvenile arthritis (JA) refers to any form of arthritis or an arthritis-related condition that develops in children or teenagers who are less than 18 years of age.

Impact of Juvenile Arthritis:

- Approximately 294,000 children under the age of 18 are affected by pediatric arthritis and rheumatologic conditions.
[Sacks, J., Helmick, C., Yao-Hua L., Ilowite N., & Bowyer S. (2007). Prevalence of and Annual ambulatory Health Care Visits for Pediatric Arthritis and Other Rheumatologic Conditions in the US in 2001-2004. *Arthritis Rheum*, vol. 57, 1439-1445].
- State prevalence numbers for pediatric arthritis and rheumatologic conditions are available in the *“Prevalence of and Annual Ambulatory Health Care Visits for Pediatric Arthritis and Other Rheumatologic Conditions in the US in 2001-2004”*.
[Sacks, J., Helmick, C., Yao-Hua L., Ilowite N., & Bowyer S. (2007). Prevalence of and Annual ambulatory Health Care Visits for Pediatric Arthritis and Other Rheumatologic Conditions in the US in 2001-2004. *Arthritis Rheum*, vol. 57, 1439-1445].
- Ambulatory care visits for pediatric arthritis and rheumatologic conditions averaged 827,000 annually.
[Sacks, J., Helmick, C., Yao-Hua L., Ilowite N., & Bowyer S. (2007). Prevalence of and Annual ambulatory Health Care Visits for Pediatric Arthritis and Other Rheumatologic Conditions in the US in 2001-2004. *Arthritis Rheum*, vol. 57, 1439-1445].
- Juvenile arthritis is one of the most common childhood diseases in the United States.
[Lawrence, R. C., Helmick, C. G., Arnett, F. C., Deyo, R. A., Felson, David T., Giannini, E. H., Heyse, S. P., Hirsch, R., Hochberg, Marc C., Hunder, G. G., Liang, M. H., Pillemer, S. R., Steen, V. D., and Wolfe, F. Estimates of the Prevalence of Arthritis and Selected Musculoskeletal Disorders in the United States. *Arthritis & Rheumatism* 41(5), 778-799. 1998].
- Arthritis and related conditions, such as juvenile arthritis, cost the U.S. economy nearly \$128 billion per year in medical care and indirect expenses, including lost wages and productivity.
[MMWR](#) 2007;56(01):4-7. [Data Source: 2003 Medical Expenditure Panel Survey]

Common Symptoms of Juvenile Arthritis:

- Pain, swelling, tenderness and stiffness of joints, causing limited range of motion
- Joint contracture, which results from holding a painful joint in a flexed position for an extended period
- Damage to joint cartilage and bone leading to joint deformity and impaired use of the joint
- Altered growth of bone and joints leading to short stature

Types of Juvenile Arthritis:

- Polyarticular JA affects five or more joints and:
 - affects girls more frequently than boys
 - most commonly affects knees, wrists and ankles
 - can affect weight-bearing and other joints, including hips, neck, shoulders and jaw
 - often affects the same joint on both sides of the body

- Pauciarticular JA affects four or fewer joints and:
 - usually affects the large joints: knees, ankles or wrists
 - often affects a joint on one side of the body only, particularly the knee
 - may cause eye inflammation (uveitis) which is seen most frequently in young girls with positive anti-nuclear antibodies (ANA)
- Systemic Onset JA can:
 - affect boys and girls equally
 - cause high, spiking fevers of 103 degrees or higher, lasting for weeks or even months
 - cause a rash consisting of pale, red spots on the child's chest, thighs and sometimes other parts of the body
 - cause arthritis in the small joints of the hands, wrists, knees and ankles

Other Types of Juvenile Arthritis:

- Juvenile Spondyloarthropies (ankylosing spondylitis, seronegative enthesopathy and arthropathy syndrome) are a group of diseases that involve the spine and joints of the lower extremities, most commonly the hips and knees.
- Juvenile Psoriatic Arthritis is a type of arthritis affecting both girls and boys that occurs in association with the skin condition psoriasis.
- Juvenile Dermatomyositis is an inflammatory disease that causes muscle weakness and a characteristic skin rash on the eyelids.
- Juvenile Systemic Lupus Erythematosus is an autoimmune disease associated with skin rashes, arthritis, pleurisy, kidney disease and neurologic movement.
- Juvenile Vasculitis is an inflammation of the blood vessels and can be both a primary childhood disease and a feature of other syndromes, including dermatomyositis and systemic lupus erythematosus.

Causes of Juvenile Arthritis:

- The cause of most forms of juvenile arthritis is unknown, but it is not contagious and there is no evidence that foods, toxins, allergies or vitamin deficiencies play a role.

Diagnosis of Juvenile Arthritis:

- A diagnosis of juvenile arthritis is based on a complete medical history and careful medical examination. Evaluation by a specialist – either a pediatric rheumatologist or a rheumatologist – is often required.
- Laboratory studies including blood and urine tests are often needed to assist in a diagnosis of JA.
- Imaging studies including X-rays or magnetic resonance images may be needed to check for signs of joint or organ involvement in JA.

Management of Juvenile Arthritis:

- Management varies depending on the specific form of juvenile arthritis.
- Care by a pediatric rheumatologist is important for most forms of JA.
- The primary goals of treatment for juvenile arthritis are to control inflammation, relieve pain, prevent joint damage and maximize functional abilities.
- Treatment plans for children usually include medication, physical activity, physical and/or occupational therapy, education, eye care, dental care and proper nutrition.
- Nonsteroidal anti-inflammatory drugs (NSAIDs) are the first line of medication used in juvenile arthritis to help control pain and inflammation.
- Corticosteroids such as prednisone can be taken orally to relieve inflammation or injected into joints that are inflamed.
- Biologic Response Modifiers (BRMs), such as anti-TNF drugs, are a class of drugs that inhibit proteins called cytokines. They must be injected under the skin or given as an infusion in the vein.
- Disease-modifying anti-rheumatic drugs such as methotrexate are often used in conjunction with NSAIDs to treat joint inflammation and reduce the risk of bone and cartilage damage.

How does the Arthritis Foundation help?

The Arthritis Foundation supports research, health education and government advocacy efforts to improve the lives of the nearly 46 million Americans with arthritis, one of the nation's most common causes of disability. These services include:

- Number-one ranked comprehensive arthritis website, www.arthritis.org
- Toll-free information phone line: 1-800-283-7800
- Nearly 100 consumer educational brochures, booklets and books
- *Arthritis Today*, the Arthritis Foundation's bi-monthly consumer magazine reaching 3.8 million readers per issue
- Water- and land-based exercise classes, self-help courses and support groups
- Local chapter offices nationwide
- Physician referral lists
- Extensive funding of arthritis research grants at institutions nationwide
- Federal and state advocacy efforts to ensure rights and access to care for all people with arthritis

For a free brochure about juvenile arthritis or to locate the nearest Arthritis Foundation chapter, call the Arthritis Foundation toll-free at 1-800-283-7800 or visit its website at www.arthritis.org. Or, write to: Arthritis Foundation, P. O. Box 7669, Atlanta, GA 30357-0669.

The Arthritis Foundation is the only nationwide, nonprofit health organization helping people take greater control of arthritis.

The mission of the Arthritis Foundation is to improve lives through leadership in the prevention, control and cure of arthritis and related diseases.