



# Arthritis



**A**rthritis is the most common chronic disease in the world, and it's the leading cause of disability in the United States. There are more than 100 types of arthritis. Osteoarthritis is the most common form—it affects some 21 million Americans. Because it becomes more common with age, nearly everyone older than 65 has at least some arthritis.

## Osteoarthritis

Osteoarthritis begins with a breakdown of cartilage—the protective layer that covers each bone's ending. Fingers, hips, knees, lower back, and neck are affected most often. As cartilage wears away, bones begin to rub on each other, first causing pain and then adding stiffness and swelling. At first, the pain comes on after strenuous activity, then stiffness the first thing in the morning. But over months and years, symptoms become more persistent and severe.

## Inflammatory Arthritis

Inflammation is the hallmark of several other types of arthritis, including rheumatoid arthritis (RA), ankylosing spondylitis, and psoriatic arthritis. These conditions all stem from a misguided immune system. Instead of behaving normally and attacking bacteria and other invaders, the immune system attacks the body's own tissues.

Although RA affects only one-tenth as many people as osteoarthritis, it can be more debilitating. It usually strikes many joints, more or less equally on both sides of the body. Joints become swollen, red, warm, painful, and stiff. Over time, the



joints can become badly deformed. Other common symptoms include weight loss, fever, and fatigue. In severe cases, RA involves the lungs, heart, and other organs.

Gout is a type of inflammatory arthritis. Although osteoarthritis and RA progress slowly and are chronic conditions, gout starts with a bang. It usually hits only one joint at a time. The big toe is a prime target. Uric acid crystals are deposited in the joint, triggering intense pain, swelling, and redness.

## Who Gets Arthritis?

Several things increase the risk:

**Age.** Osteoarthritis is most common in men aged 45 and older and in women aged 55 and older. RA usually strikes in middle age.

**Sex.** RA is more common in women, gout in men.

**Heredity.** Genes account for about half the risk of osteoarthritis. They also influence gout and RA.

**Excess weight.** Being overweight increases the risk of osteoarthritis of the knee and gout.

**Diet.** Foods high in chemicals called purines can trigger gout. Anchovies, nuts, and organ meats (liver, kidney, etc.) contain high levels of purines. Drinking too much alcohol may also contribute to gout.

**Joint injury.** Athletes who have suffered joint injuries and people in occupations that involve repetitive stress are at increased risk of osteoarthritis.

**Other illnesses.** Arthritis can be a symptom of many illnesses, including Lyme disease, other infections, and inflammatory bowel disease.



## Diagnosis

Your symptoms will help your doctor tell if you have arthritis. The doctor will also watch how you move and examine your joints for telltale signs such as joint swelling, limited range of motion, and a crunching or grinding sensation. Simple x-ray tests will usually be used to confirm a diagnosis of osteoarthritis. Blood tests and other studies may be needed for other types of arthritis.

## Easing Symptoms

There is no cure for arthritis, but there are many ways to reduce your symptoms and prevent disability.

**Exercise.** Regular exercise can limit pain, reduce stiffness, and improve balance. Physical therapists can help you get started. See pages 5 and 6 for sample exercises.

**Protection.** Overuse of arthritic joints can lead to pain, swelling, and additional damage. If you are having a flare-up, take some time away from exercise and rest your joints. Don't stay in 1 position for too long. Avoid positions or movements that put extra stress on joints. If necessary, use adaptive aids, such as long-handled grippers for reaching objects that are out of reach.

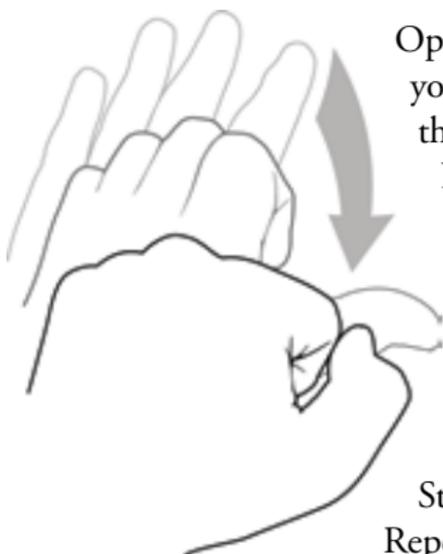


**Weight control.** If you are overweight, losing weight can reduce pain by taking pressure off of your joints, especially your knees and hips.

**Hot and cold therapy.** A warm shower or bath can relieve the morning stiffness and relax joints and muscles before exercise. Cold packs, which reduce inflammation, can ease pain after exercise or injury.



## Hand



Open your hand, holding your fingers straight. Bend the middle finger joints.

Next, touch your fingertips to the tops of your palm.

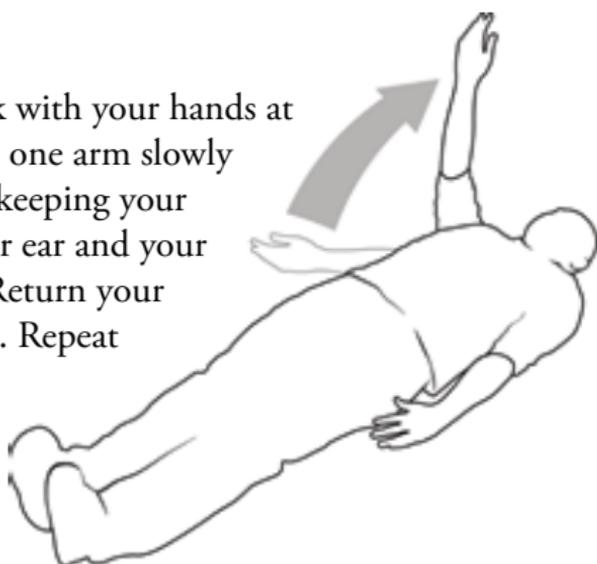
Open your hand. Repeat 10 times with each hand.

Next, reach your thumb across your hand to touch the base of your little finger.

Stretch your thumb back out. Repeat 10 times.

## Shoulder

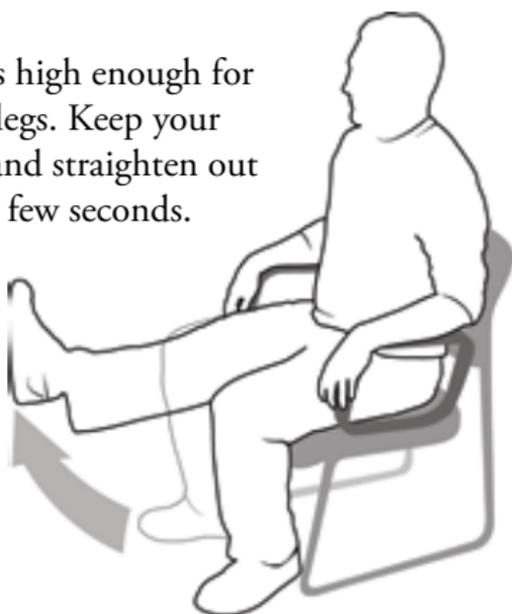
Lie on your back with your hands at your sides. Raise one arm slowly over your head, keeping your arm close to your ear and your elbow straight. Return your arm to your side. Repeat with the other arm. Repeat 10 times.



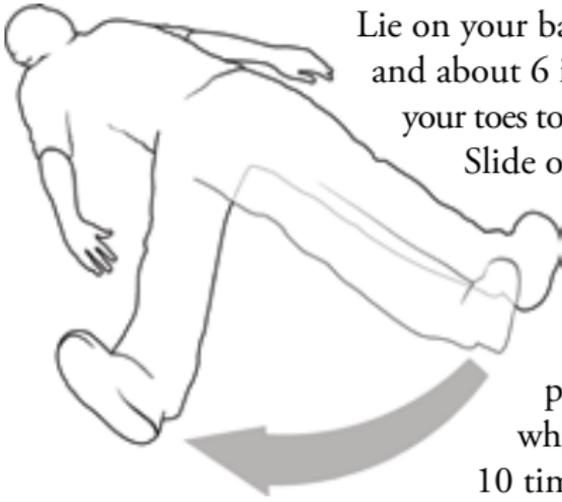
## Knee

Sit in a chair that is high enough for you to swing your legs. Keep your thighs on the seat and straighten out one leg. Hold for a few seconds.

Then bend your knee and bring your foot as far back as possible. Repeat with the other leg. Repeat 10 times.



## Hip



Lie on your back, legs straight and about 6 inches apart. Flex your toes toward the ceiling.

Slide one leg out to the side and then back to its original position. Try to keep your toes pointed up the whole time. Repeat 10 times with each leg.

## Medical Treatments

RA responds best to special drugs that alter the function of the immune system. Treatment of osteoarthritis and gout is simpler and often relies on over-the-counter drugs.

**Acetaminophen.** Doctors often suggest acetaminophen first because it's effective for mild pain and easy on the stomach.



**NSAIDs.** Nonsteroidal anti-inflammatory drugs (NSAIDs) include aspirin, ibuprofen, and naproxen. NSAIDs may be more effective than acetaminophen because they not only relieve pain but also reduce inflammation.

The most common side effects are stomach problems, which may include bleeding and ulcers.

For gout, NSAIDs work best when treatment begins promptly. A week of medication will usually do the trick. Long-term therapy with allopurinol, which lowers blood uric acid levels, can prevent additional attacks.

**Cortisone injections.** This procedure is reserved for severe symptoms, especially for osteoarthritis

of the knee. The doctor first removes a small amount of joint fluid and then injects a corticosteroid. Cortisone injections are usually used no more than four times a year because more frequent injections may increase the risk of infection and can damage joints.

**Topical analgesics.**

Over-the-counter creams containing salicylate or capsaicin can relieve mild pain when applied to the skin.

**Hyaluronate injections.** Injections of hyaluronate may provide mild relief of knee osteoarthritis. These drugs are synthetic forms of a natural substance that lubricates the joint and supplies it with nutrients. Injections are given weekly for 3 to 5 weeks. But the jury is out on the effectiveness of this relatively new approach.

**Surgery.** Some patients need surgery to relieve extremely painful or badly damaged joints. Surgical options include arthroscopy to smooth over ragged joint edges and remove debris; joint reconstruction or replacement; and, in some circumstances, cartilage transplantation.





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