



## Rheumatoid Arthritis

People have long feared rheumatoid arthritis (commonly called RA) as one of the most disabling types of arthritis. The good news is that the outlook has greatly improved for many people with newly diagnosed (detected) RA.

Of course, RA remains a serious disease, and one that can vary widely in symptoms (what you feel) and outcomes. Even so, treatment advances have made it possible to stop or at least slow the progression (worsening) of joint damage. Rheumatologists now have many new treatments that target the inflammation that RA causes. They also understand better when and how to use treatments to get the best effects.

### Fast facts

- RA is an autoimmune disease. A faulty immune system (the body's defense system) triggers it.
- RA is the most common type of autoimmune arthritis.
- At least 1.3 million U.S. adults have RA.
- Treatments have improved greatly and help many of those affected.
- Rheumatologists are doctors who have the expertise to correctly diagnose this disease and to offer patients the most advanced treatments.

### What is rheumatoid arthritis?

RA is a chronic (long-term) disease that causes pain, stiffness, swelling and limited motion and function of many joints. While RA can affect any joint, the small joints in the hands and feet tend to be involved most often. Inflammation sometimes can affect organs as well, for instance, the eyes or lungs.

The stiffness seen in active RA is most often worst in the morning. It may last one to two hours (or even the whole day). Stiffness for a long time in the morning is a clue that you may have RA, since few other arthritic diseases behave this way. For instance, [osteoarthritis](#) most often does not cause prolonged morning stiffness.

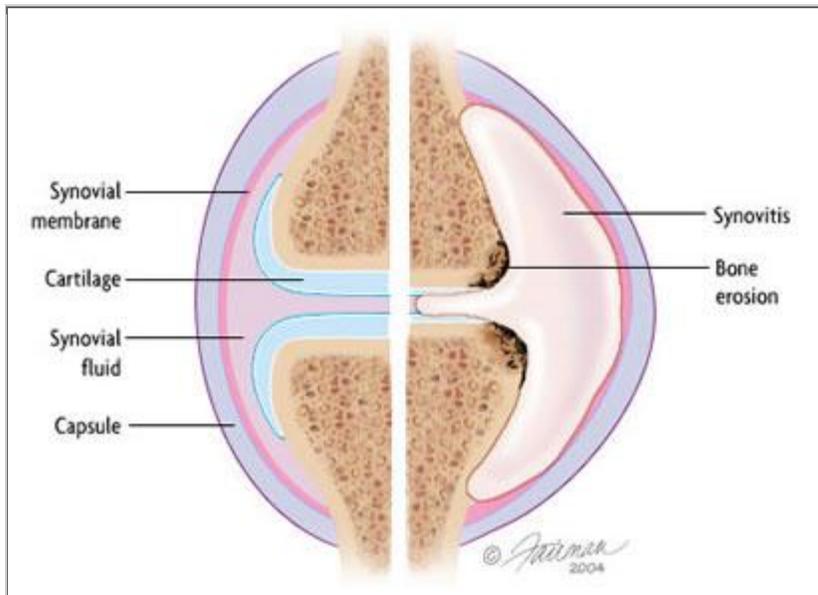


Other signs and symptoms that can occur in RA include:

- Loss of energy
- Low fevers
- Loss of appetite
- Dry eyes and mouth from a related health problem, [Sjogren's syndrome](#)
- Firm lumps, called rheumatoid nodules, which grow beneath the skin in places such as the elbow and hands

### What causes rheumatoid arthritis?

RA is an autoimmune disease. This means that certain cells of the immune system do not work properly and start attacking healthy tissues — the joints in RA. The cause of RA is not known. Yet, new research is giving us a better idea of what makes the immune system attack the body and create inflammation. In RA, the focus of the inflammation is in the synovium, the tissue that lines the joint. Immune cells release inflammation-causing chemicals. These chemicals can damage cartilage (the tissue that cushions between joints) and bone.



The normal joint structure appears on the left. On the right is the joint with rheumatoid arthritis. RA causes synovitis, pain and swelling of the synovium (the tissue that lines the joint). This can make cartilage (the tissue that cushions between joints) and bone erode, or wear away.

Other things likely play a role in RA as well. For instance, genes that affect the immune system may make some people more prone to getting RA.

### Who gets rheumatoid arthritis?

RA is the most common form of autoimmune arthritis, affecting more than 1.3 million Americans. Of these, about 75% are women. In fact, 1–3% of women may get rheumatoid arthritis in their lifetime. The disease most often begins between the fourth and sixth decades of life. However, RA can start at any age.



### How is rheumatoid arthritis diagnosed?

RA can be hard to detect because it may begin with subtle symptoms, such as achy joints or a little stiffness in the morning. Also, many diseases behave like RA early on. For this reason, if you or your primary care physician thinks you have RA, you should see a rheumatologist. A rheumatologist is a physician with the skill and knowledge to reach a correct diagnosis of RA and to make the most suitable treatment plan.

Diagnosis of RA depends on the symptoms and results of a physical exam, such as warmth, swelling and pain in the joints. Some blood tests also can help confirm RA. Telltale signs include:

- Anemia (a low red blood cell count)
- Rheumatoid factor (an antibody, or blood protein, found in about 80% of patients with RA in time, but in as few as 30% at the start of arthritis)
- Antibodies to cyclic citrullinated peptides (pieces of proteins), or anti-CCP for short (found in 60–70% of patients with RA)
- Elevated erythrocyte sedimentation rate (a blood test that, in most patients with RA, confirms the amount of inflammation in the joints)

X-rays can help in detecting RA, but may not show anything abnormal in early arthritis. Even so, these first X-rays may be useful later to show if the disease is progressing. Often, MRI and ultrasound scanning are done to help judge the severity of RA.

There is no single test that confirms an RA diagnosis for most patients with this disease. (This is above all true for patients who have had symptoms fewer than six months.) Rather, a doctor makes the diagnosis by looking at the symptoms and results from the physical exam, lab tests and X-rays.

### How is rheumatoid arthritis treated?

Therapy for RA has improved greatly in the past 30 years. Current treatments give most patients good or excellent relief of symptoms and let them keep functioning at, or near, normal levels. With the right medications, many patients can achieve “remission” — that is, have no signs of active disease.

There is no cure for RA. The goal of treatment is to lessen your symptoms and poor function. Doctors do this by starting proper medical therapy as soon as possible, before your joints have lasting damage. No single treatment works for all patients. Many people with RA must change their treatment at least once during their lifetime.

Good control of RA requires early diagnosis and, at times, aggressive treatment. Thus, patients with a diagnosis of RA should begin their treatment with disease-modifying antirheumatic drugs — referred to as DMARDs. These drugs not only relieve symptoms but also slow progression of the disease. Often, doctors prescribe DMARDs along with nonsteroidal anti-inflammatory drugs or NSAIDs and/or low-dose corticosteroids, to lower swelling, pain and fever. DMARDs have greatly improved the symptoms,



function and quality of life for nearly all patients with RA. Ask your rheumatologist about the need for DMARD therapy and the risks and benefits of these drugs.

Common DMARDs include [methotrexate](#) (brand names include Rheumatrex® and Folex®), [leflunomide](#) (Arava), [hydroxychloroquine](#) (Plaquenil) and [sulfasalazine](#) (Azulfidine). Older DMARDs include [gold](#), given as a pill — auranofin (Ridaura) — or more often as an injection into a muscle (such as Myochrysin). The antibiotic [minocycline](#) (e.g., Minocin, Dynacin and Vectrin) also is a DMARD, as are the immune suppressants [azathioprine](#) (Imuran) and [cyclosporine](#) (Sandimmune and Neoral). These three drugs and gold are rarely prescribed for RA these days because other drugs work better or have fewer side effects.

Patients with more serious disease may need medications called biologic response modifiers or “biologic agents.” They can target the parts of the immune system and the signals that lead to inflammation and joint and tissue damage. These medications are also DMARDs. FDA-approved drugs of this type include [abatacept](#) (Orencia), adalimumab (Humira), anakinra (Kineret), certolizumab (Cimzia), etanercept (Enbrel), golimumab (Simponi) infliximab (Remicade), [rituximab](#) (Rituxan) and [tocilizumab](#) (Actemra). Most often, patients take these drugs with methotrexate, as the mix of medicines is more helpful.

The best treatment of RA needs more than medicines alone. Patient education, such as how to cope with RA, also is important. Proper care requires the expertise of a team of providers, including rheumatologists, primary care physicians, and physical and occupational therapists. You will need frequent visits through the year with your rheumatologist. These checkups let your doctor track the course of your disease and check for any side effects of your medications. You likely also will need to repeat blood tests and X-rays or ultrasounds from time to time.

### **What is the broader health impact of rheumatoid arthritis?**

Research shows that people with RA, mainly those whose disease is not well controlled, have a higher risk for heart disease and stroke. Talk with your doctor about these risks and ways to lower them.

### **Living with rheumatoid arthritis**

It is important to be physically active most of the time, but to sometimes scale back activities when the disease flares. In general, rest is helpful when a joint is inflamed, or when you feel tired. At these times, do gentle range-of-motion exercises, such as stretching. This will keep the joint flexible.

When you feel better, do low-impact aerobic exercises, such as walking, and exercises to boost muscle strength. This will improve your overall health and reduce pressure on your joints. A physical or occupational therapist can help you find which types of activities are best for you, and at what level or pace you should do them.



Finding that you have a chronic illness is a life-changing event. It can cause worry and sometimes feelings of isolation or depression. Thanks to greatly improved treatments, these feelings tend to decrease with time as energy improves, and pain and stiffness decrease. Discuss these normal feelings with your health care providers. They can provide helpful information and resources.

### Points to remember

- **Newer treatments are effective.** RA drugs have greatly improved outcomes for patients. For most people with RA, early treatment can control joint pain and swelling, and lessen joint damage.
- **Seek an expert in arthritis: a rheumatologist.** Expertise is vital to make an early diagnosis of RA and to rule out diseases that mimic RA, thus avoiding unneeded tests and treatments. A doctor who is an expert in RA also can design a customized treatment plan that is best suited for you. Therefore, the rheumatologist, working with the primary care physician and other health care providers, should supervise the treatment of the patient with RA.
- **Start treatment early.** Studies show that people who receive early treatment for RA feel better sooner and more often, and are more likely to lead an active life. They also are less likely to have the type of joint damage that leads to joint replacement.

### The rheumatologist's role in the treatment of rheumatoid arthritis

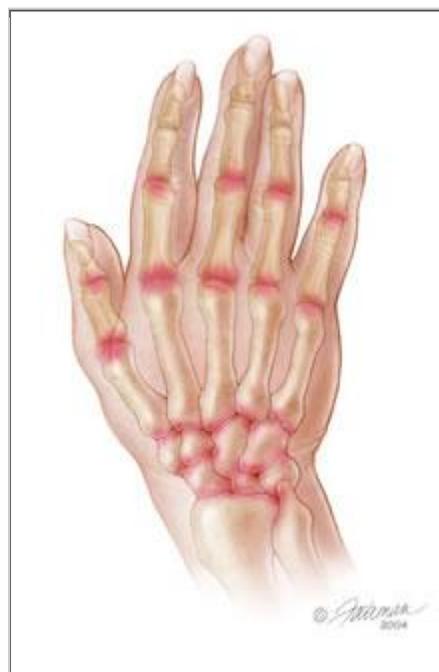
RA is a complex disease, but many advances in treatment have occurred recently. Rheumatologists are doctors who are experts in diagnosing and treating arthritis and other diseases of the joints, muscles and bones. Thus, they are best qualified to make a proper diagnosis of RA. They can also advise patients about the best treatment options.

### To find a rheumatologist

For a list of rheumatologists in your area, [click here](#). Learn more about [rheumatologists](#) and [rheumatology health professionals](#).

### For more information

The American College of Rheumatology has compiled this list to give you a starting point for your own additional research. The ACR does not endorse or maintain these web sites, and is not responsible for any information or claims provided on them. It is always best to talk with your rheumatologist for more information and before making any decisions about your care.



Rheumatoid arthritis affects the wrist and the small joints of the hand, including the knuckles and the middle joints of the fingers.



The Arthritis Foundation

[www.arthritis.org](http://www.arthritis.org)

National Institute of Arthritis and Musculoskeletal and Skin  
Diseases Information Clearinghouse

[www.niams.nih.gov](http://www.niams.nih.gov)

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Written by Eric Ruderman, MD, and Siddharth Tambar, MD, and reviewed by the American College of  
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