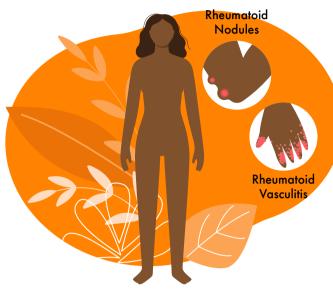
# **How Rheumatoid Arthritis Can Affect the Body**

Rheumatoid arthritis (RA) can have effects beyond the joints that might surprise you: RA-related inflammation can damage the skin, lungs, eyes, mouth, bones, brain, heart and blood vessels and more. And other conditions — like diabetes and fibromyalgia — occur more frequently with RA. If RA is well controlled, then its symptoms and related conditions are less likely to occur.

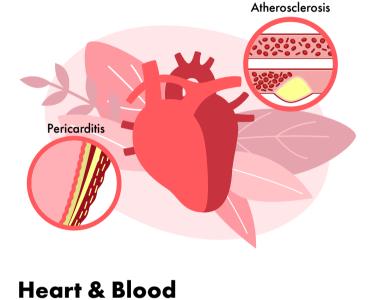


## Eyes

RA can lead to inflammation and scarring of the whites of the eyes (sclera), called "scleritis," or of the layer between the retina and the sclera (uvea), called "uveitis." Sjögren's, an autoimmune disease that can accompany RA, may damage the body's moisture-producing glands, including the eyes, creating a dry, gritty feeling. Medications, including tear-replacement solutions, may ease symptoms. Regular ophthalmology checkups are necessary.



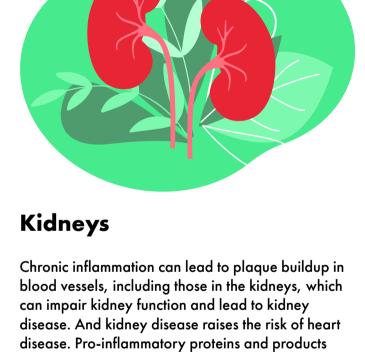
Rheumatoid nodules are hard lumps that form under the skin, typically near bony areas like elbows and finger joints, but sometimes in the lungs or other areas. They may go away on their own or with drug treatment. RA-related vasculitis is a rare inflammation of blood vessels that can cause a red rash, typically on fingertips, and in more severe cases create leg ulcers. Underlying inflammation must be controlled to ease vasculitis symptoms. RA can also cause wounds to take longer to heal.



### People with RA have more than 20% higher risk of heart failure than the general population.

vessel damage in cardiovascular disease (CVD). RA also can lead to inflammation in the lining of the heart (pericarditis), and chronic inflammation can cause plaque buildup (atherosclerosis), which narrows arteries and blocks blood flow. This raises blood pressure and may lead to heart attack or stroke. Plus, people with RA have some of the same risk factors as those for heart disease, including high blood pressure, obesity, metabolic syndrome (a group of disorders including diabetes, which is also common with RA) and abnormal blood lipids. Get regular checkups, know the symptoms you should watch for, and improve your lifestyle if needed: don't smoke, eat healthfully, get plenty of physical activity and reduce weight.

Inflammatory proteins that drive RA also fuel blood



inflammation is key. Let your doctor know about unusual nausea, loss of appetite, changes in urination and other telltale sians.

that help filter waste in the kidneys may contribute to

reduced kidney function and damage. Controlling

Nerves RA can cause inflammation or impingement on nerves. It raises the risk by about 50% of developing peripheral neuropathy, damage to nerves that results in numbness, twitching and pain often in the hands, wrists, arms and feet. In addition to controlling underlying inflammation, medications and medical



Lymphatic System

Enlarged lymph nodes are common with RA, but

many conditions can cause them, so be sure to tell

your doctor about them in case there's a different

cause. RA also raises the risks for lymphoma, and

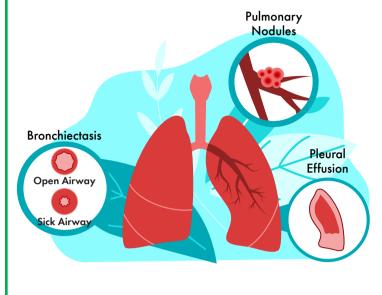
sweating, bruising, bleeding and loss of appetite.

while it is rare, be alert to symptoms, including fever,



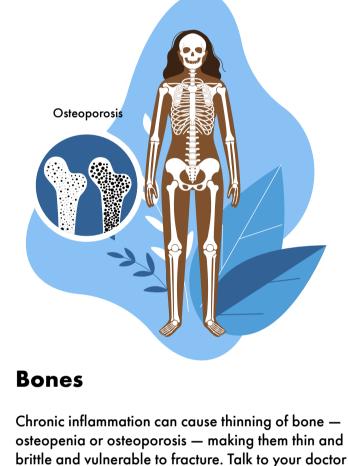
Mouth

People who have RA are twice as likely to have gum disease as those who don't, and the worse the gum disease, the more severe the RA. Good dental hygiene is essential with RA. Sjögren's also can cause dry mouth, making eating or swallowing difficult and leading to cavities. Let your doctor know about your symptoms; some medical therapies might help.



Lungs

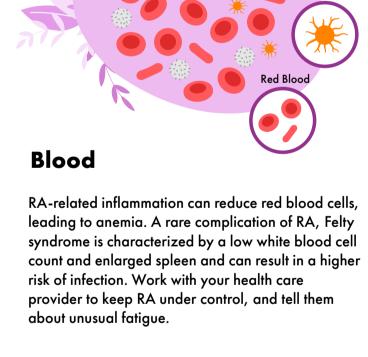
RA is commonly associated with lung problems. Interstitial lung diseases are a group of serious diseases in which inflammation causes scarring in the lungs. Also serious is pulmonary hypertension, which involves too much pressure in the artery that carries blood to the lungs. Pulmonary nodules are small growths in the lungs that usually don't have symptoms, but in rare cases can cause complications. Pleural effusion, a buildup of fluid between the lung and chest wall, typically goes away on its own, but worse cases can cause shortness of breath, fever and pain with breathing. Inflammation may cause thickening or damage to the small airways (bronchiectasis), leading to shortness of breath and fatigue. If you have a cough, shortness of breath or unusual weakness or fatigue, see your doctor.



White Blood Cell

**Platelet** 

about testing your bone density.





rates of depression and anxiety, and fatigue and "brain fog," or cognitive murkiness, are common symptoms of the disease. Having RA also raises the likelihood of developing fibromyalgia, a disorder that affects the central nervous system, causing widespread pain. In addition to improving overall health through diet, stress relief and exercise, mental health therapy can help. Medications may ease depression, anxiety and fibromyalgia.

RA can affect the brain and the central nervous

system in several ways. People with RA have higher

**Brain** 



\*Medications used to treat RA can also cause many side effects and result in additional complications, especially to bones, liver and kidneys. Be sure you understand the drugs you are taking, their potential side effects, and alert your doctor to any new or changing symptoms.

Ingelheim