

What Is Raynaud's Disease?

Raynaud's (ray-NOSE) disease, also known as Raynaud's phenomenon, affects the arteries that carry blood from the heart to different parts of the body. It can cause some areas of the body to feel numb or cold in response to cold temperatures or stress. When a person has an episode, their arteries experience short periods of vasospasms (temporary narrowing of the blood vessels) that reduce blood flow to the fingers and toes. As a result, their skin may turn white or blue for a short time. When blood returns, the impacted areas may turn red and throb, burn, or feel numb.

The cause of Raynaud's disease is unclear. Experts don't fully understand why blood vessels in the hands and feet overreact to changes in temperature or emotional state.

Symptoms

Raynaud's disease can cause the following symptoms:

- Cold fingers or toes
- Color changes in the skin due to cold temperatures or stress
- Numb, prickly feeling, or stinging pain as fingers warm or stress is relieved

Types of Raynaud's Disease

There are two main types of Raynaud's disease.

- Primary Raynaud's (also called Raynaud's disease) has no known cause. This type is more common and is likely less severe.
- Secondary Raynaud's can be caused by an underlying disease such as scleroderma or lupus. This type is often called Raynaud's phenomenon.

Risk Factors

Primary and Secondary Raynaud's disease have different risk factors.

The risk factors for Primary Raynaud's include:

- Gender. People who are born female are more likely to have Primary Raynaud's than males.
- Age. It usually develops before age 30.
- Genetics. Someone in your family has Ravnaud's.
- **Cold weather.** Cold temperatures can trigger attacks.



The risk factors for secondary Raynaud's include:

- Exposure to certain workplace chemicals, such as vinyl chloride (usually found in plastic manufacturing plants)
- Certain diseases and conditions, such as damage to arteries and nerves that control the arteries in the hands and feet
- Previous injury to hands or feet
- Repetitive actions with hands such as typing or using a vibrating tool
- Smoking
- Age (Secondary Raynaud's usually develops after age 30)
- Cold weather
- Taking certain medications for migraines, cancer, over-the-counter cold or allergy medicine, and some blood pressure medications

Diagnosis

A health care provider or specialist may diagnose Primary or Secondary Raynaud's based on medical history, a physical exam, and test results from blood work and diagnostic procedures.

Medical History

Your health care provider may ask about risk factors for Raynaud's and your exposure to cold weather or stress. If you have any symptoms, write them down when they happen. This will help your doctor determine what type of tests or treatment you will need. (See the tips on managing emotional stress below.)

Physical Exam

During a physical exam, your provider may examine your skin, nails, fingers, toes, and the blood flow to these areas. In addition, your provider may look for other illnesses that could cause Secondary Raynaud's.

Diagnostic Tests

The following tests may help find Raynaud's and related conditions:

- Cold stimulation test: A small temperature device is taped to
 the fingers. The hands are exposed to cold (sometimes briefly
 put into ice water) and the device measures how quickly
 the fingers return to a normal temperature. If a person has
 Raynaud's, it may take up to 20 minutes for their temperature
 to return to normal.
- Nailfold capillaroscopy (KAP-ih-lar-OS-ko-pe): A drop of oil
 is placed at the base of the fingernail and examined under a
 microscope. Abnormal arteries may mean there is a link to a
 disease that causes Raynaud's symptoms.
- Other tests: The health care team may order blood tests to see whether there are conditions linked to Secondary Raynaud's.
 These tests include antinuclear antibody (ANA), erythrocyte sedimentation rate (ESR, or "sed rate"), and C-reactive protein (CRP) blood tests.

Treatment and Prevention

There is no cure for Primary or Secondary Raynaud's; however, lifestyle changes, medicines, and (very rarely) surgery may help reduce attacks or make them less severe.

If a person with Raynaud's develops sores on their fingers, toes, or other parts of the body, they should contact their health care team immediately. Getting treatment right away can prevent more permanent damage.

Lifestyle Changes

Most people can reduce their symptoms by making some lifestyle changes. Here are some tips for limiting your exposure to cold temperatures:

- Wear a hat, mittens (rather than gloves), scarf, coat, ear warmers, warm socks, and shoes during cold weather. Layering clothing will help you stay extra warm.
- Use hand and foot warmers and place them in gloves or in shoes. Remember: They should NOT be placed directly on the skin. Some warmers are small heat packs or battery-operated. These can usually be found in sporting goods or camping stores.

If reactions to cold temperature are severe, wear gloves or mittens when taking food out of the refrigerator or freezer.

Raynaud's disease can also be triggered by the physical stress of using a vibrating tool or by the repetitive hand actions of typing or playing the piano. Speak with a health care provider if you need to make any changes in your work duties to avoid overuse of hands.

TIPS ON MANAGING EMOTIONAL STRESS

Some people may find it hard to adapt stress management techniques into their daily lives, and it's not always easy to avoid stressful situations or triggers. However, learning certain strategies can help you cope with stressful situations:

- Practice focused breathing or mindfulness to help bring awareness to stressful triggers. Take five long and slow breaths into your belly (exhale slowly) to help reduce anxiety or other strong feelings.
- Try yoga or Tai chi to help manage stress.

Things to Avoid

Some medicines could trigger an attack. Ask your provider about medicines that are safe. The following medicines may cause an attack:

- Migraine headache medicines (they cause the arteries to narrow)
- Certain cancer medicines, such as cisplatin and vinblastine
- Over-the-counter cold, allergy, or diet medicines
- Beta-blockers, which can slow down the heart rate and decrease blood pressure
- Pills that impact hormones, which can also affect blood flow (birth control pills)

You can manage symptoms better if you limit your use of substances that cause the veins to constrict or narrow. Substances to limit or avoid completely include:

- Caffeine
- Alcohol
- Tobacco and nicotine. Living with someone who smokes can trigger an attack. Even if you don't smoke, breathing secondhand smoke can have the same effect.



Questions for Your Doctor It is important to work closely with your health care provider about your diagnosis and treatment. You can bring this form with you to help talk to your medical provider about any questions and

concerns you may have.

