

# Respiratory Sinus Arrhythmia

While it may seem odd to call an abnormal heart rhythm a sign of a healthy heart, this is actually the case with sinus arrhythmia. Your heart beats at a different rate when you breathe in than when you breathe out. And it's normal. If your heart doesn't have sinus arrhythmia, it's a reason for concern.

## What is sinus arrhythmia?

Sinus arrhythmia is the most common type of arrhythmia (abnormal heart rhythm). In sinus arrhythmia, the time between heartbeats can be slightly shorter or longer depending on whether you're breathing in or out. Your heart rate increases when you breathe in and slows down when you breathe out. This kind of arrhythmia is considered normal. It's usually a sign that your heart is healthy.

## What is the difference between sinus arrhythmia and other conditions?

Respiratory sinus arrhythmia is usually normal and doesn't have symptoms.

## Who does sinus arrhythmia affect?

Providers see this often in healthy children and young adults.

## How common is sinus arrhythmia?

It's very common in young, healthy people. And it's actually a sign of good heart health.

## How does sinus arrhythmia affect my body, and what are the symptoms?

It's rare for people to have symptoms of sinus arrhythmia.

## What causes respiratory sinus arrhythmia?

It's normal to have respiratory sinus arrhythmia simply because you're breathing. When you take a breath, your heart rate goes up. When you breathe out, it slows down. The time between each heartbeat is known as the P-P interval. In most people, there's a slight variation of less than 0.16 seconds. In cases of respiratory sinus arrhythmia, the P-P interval will often be longer than 0.16 seconds when the person breathes out.

## How is sinus arrhythmia diagnosed?

Healthcare providers often find sinus arrhythmia while doing a routine electrocardiogram (EKG).



### **How is sinus arrhythmia treated?**

Since respiratory sinus arrhythmia is normal, people without symptoms rarely need treatment.

### **How can I prevent sinus arrhythmia?**

You can't prevent respiratory sinus arrhythmia. And you don't want to, because it's a sign of a healthy heart.

### **Can sinus arrhythmia cause chest pain?**

No. Respiratory sinus arrhythmia does not cause chest pain.

### **What can I expect if I have sinus arrhythmia? Is it dangerous?**

If you have respiratory sinus arrhythmia, your outlook is good. It is actually a sign of a healthy heart.

You might feel concerned if your healthcare provider notices an abnormal heart rhythm in your routine EKG. But respiratory sinus arrhythmia is not a cause for worry. The time between heartbeats can be different depending on whether you're breathing in or out. So, this abnormal rhythm is actually a sign of a heart that's working right.

