

Anger May Raise Heart Attack Risk

Bursts of anger may temporarily reduce blood vessel function, which can increase the risk for a heart attack and stroke.

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Feelings of anger could increase your risk of [heart disease](#), a recent study published in the [Journal of the American Heart Association](#) (AHA) found.

Previous observational research has shown that negative emotions, such as [anger](#), [anxiety](#) and sadness, can increase risk for heart attacks and [stroke](#). The current study may help explain how anger produces changes in the body that lead to cardiovascular events, according to an [AHA news release](#).

“Anger is bad for your blood vessel function,” said lead study author and cardiologist Daichi Shimbo, MD, in the release. “It impairs the function of your arteries, which is linked to future heart attack risk.”

For the study, Shimbo and his team observed 280 healthy young adults with no history of heart disease or stroke, serious mental health conditions or other chronic illnesses. To start, participants spent 30 minutes relaxing while researchers monitored their [blood pressure](#), [blood vessel](#) health and other cardiac measurements.

Researchers then asked groups of participants to recount personal memories that evoked feelings of either anger, anxiety or sadness for several minutes.

Within 40 minutes, those in the group who shared anger-inducing memories experienced a 50% reduction in their blood vessel dilation, putting them at greater risk for a heart attack or stroke. While the restricted dilation was temporary, experts warn that longer periods of anger could have more harmful effects.

“We showed that if you get angry once, it impairs your ability to dilate,” said Shimbo, a codirector

of the hypertension center at Columbia University Irving Medical Center. “But what if you get angry 10,000 times over a lifetime? This chronic insult to your arteries eventually may lead to permanent damage. That’s what we think is going on.”

Participants who shared anxiety- and sadness-inducing memories had no statistically significant effects, which surprised Shimbo. “People lump negative emotions into one bucket,” he said. “This tells me that maybe anger, anxiety and sadness are different from each other in how they affect heart risk.”

Similarly, a [study published last year](#) found that higher levels of stress over time contribute to people’s risk for cardiovascular disease. Even after accounting for high blood pressure and high cholesterol among participants, researchers found that higher levels of stress were linked to [atherosclerosis](#), a buildup of plaque in the arteries. The study also found that stress was higher among people who were younger, female, Latino and Black and had a low income.

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