

Sitting Still Can Kill You: Sedentary Lifestyle Linked to Higher Risk of Heart Failure

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Men who report being sedentary, with low levels of physical activity outside of work, are at a significantly higher risk for heart failure than those who are more active, according to a Kaiser Permanente study published in the journal *Circulation: Heart Failure*. Jan. 27, 2014 [Sandy Smith](#)

A group of researchers from Kaiser Permanente examined the electronic health records of more than 82,000 men aged 45 years and older who were part of the California Men's Health Study. The study participants did not have prevalent heart failure and were enrolled in Kaiser Permanente health plans in the Northern and Southern California regions.

The researchers followed these men for more than 10 years and found that those who reported high levels of sedentary time and low levels of physical activity had 2.2 times the risk of developing heart failure as compared with men who reported high physical activity and low sedentary time. The results were published in the journal [Circulation: Heart Failure](#).

"Our society is based upon a lot of sitting," said Deborah Rohm Young, Ph.D., a research scientist with the Kaiser Permanente Department of Research & Evaluation and the lead author of this study. In an [interview published on the Kaiser web site](#) she added, "The message is when you can walk instead of stand, walk. When you can stand instead of sit, stand. But the answer isn't to get everyone standing desks, because there also can be problems with too much standing. What can help is changing it up and allowing for more movement."

The question asked in the study was, "Outside of work, how much time do you spend sitting?" Young noted, "Most people do sit all day long at work. If you're one of those, it's a call to action: When you get home, don't sit in front of the TV on top of that. If people can walk, they should walk. If they can putter around the house, they should putter rather than doing nothing."

She said that though traditionally researchers know quite a bit about the positive impact that physical activity has on cardiovascular disease, they know significantly less about the relationship between physical activity and heart failure, "The results of this large study of a racially and ethnically diverse population reinforce the importance of a physically active and, importantly, a non-sedentary lifestyle for reducing the risk of heart failure," said Young.

Heart failure occurs when the heart is unable to maintain a proper blood flow. It is a serious and major cardiovascular disease that affected about 5.7 million Americans in 2012, according to the [American Heart Association](#). Though the condition does not necessarily mean that the heart has stopped beating, about

half of the people who develop heart failure will die within five years of diagnosis. Primary risk factors for the condition include coronary heart disease, high blood pressure, diabetes, obesity and a lack of physical activity.

“Kaiser Permanente considers physical activity an important part of a comprehensive approach to patient wellness and has included exercise as one of the patient’s vital signs for several years now,” said Young. “Hopefully, this study will provide even more evidence that moving more and sitting less can be prescribed for better health.”

Kaiser Permanente is one of the first health care organizations to implement Exercise as a Vital Sign in a patient’s electronic health record. The measure was launched in [Kaiser Permanente Southern California](#) in 2009 and has since been applied across the organization. As part of these efforts, patients are asked during routine outpatient visits how many minutes per week they exercise. Patients’ responses are included in their electronic medical record, along with other traditional vital signs such as blood pressure, pulse and temperature.

An [October 2012 study](#), published in the journal *Medicine & Science in Sports & Exercise*, found that among nearly 1.8 million Kaiser Permanente Southern California patients, 86 percent had an exercise vital sign in their record and that one third of the patients met national guidelines for physical activity. And last month, [a study published in the Journal of General Internal Medicine](#) found that asking patients about their exercise habits was associated with weight loss in overweight patients and improved glucose control for patients with diabetes.

Other authors on the study include Kristi Reynolds, Ph.D., Margo Sidell, Sc.D., Nirupa R. Ghai, Ph.D., Steven J. Jacobsen, MD, Ph.D., Jeffrey M. Slezak, MS, and Virginia P. Quinn, Ph.D., of the Kaiser Permanente Southern California Department of Research & Evaluation; Somjot Brar, MD, MPH, Kaiser Permanente Los Angeles Medical Center, Department of Cardiology; and Barbara Sternfeld, Ph.D., and Bette Caan, Ph.D., of the Kaiser Permanente Division of Research in Northern California.