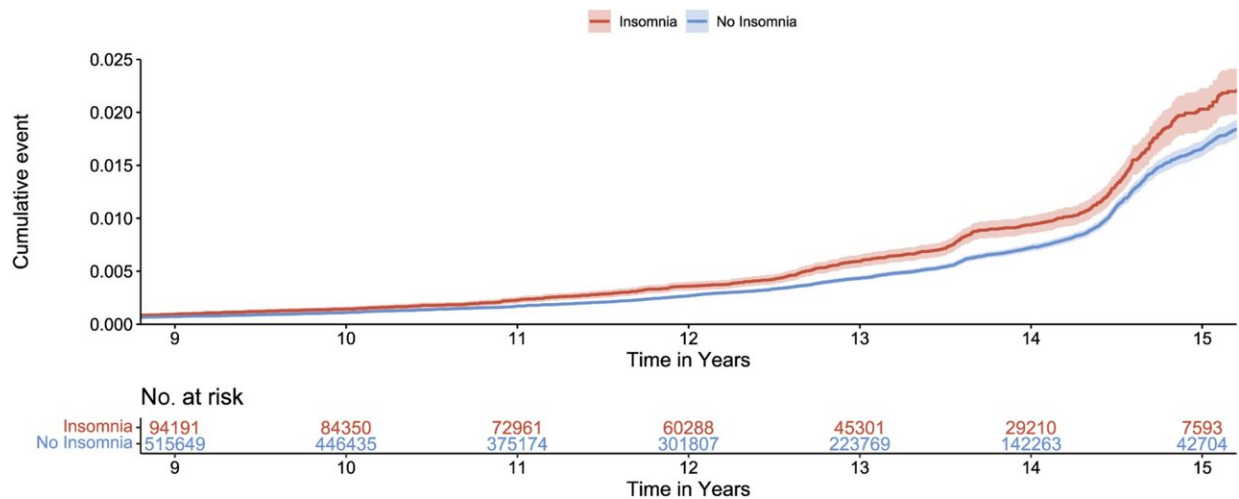


# Insomnia may be an early risk factor for irregular heart rhythm

October 5 2023, by Laura Williamson



Cumulative incidence of atrial fibrillation (AFib) among younger adults by insomnia diagnosis. Among a cohort of 1,063,723 post-9/11 veterans, the cumulative incidence of AFib and number of veterans at risk are displayed according to the presence and absence of an insomnia diagnosis. Because of a low AFib incidence across the earlier years of follow-up, data are depicted as of year nine. Credit: *Journal of the American Heart Association* (2023). DOI: 10.1161/JAHA.123.030331

Younger adults diagnosed with insomnia were more likely to develop a type of irregular heartbeat—and to do so earlier—than those without a history of insomnia, according to a large study of military veterans. The findings suggest difficulty falling or staying asleep may be an early risk

factor for atrial fibrillation, or AFib.

A growing body of evidence links sleep disturbances and disorders to a higher risk for cardiovascular problems, including AFib. The new study, published Oct. 4 in the [\*Journal of the American Heart Association\*](#), adds to that evidence and explores how early in life those risks may begin.

"We know a lot about the risk factors for AFib in middle-aged and older adults but less about [risk factors](#) earlier in life," said lead study author Dr. Allison Gaffey, a [clinical psychologist](#) and instructor in the section of cardiovascular medicine at the Yale School of Medicine in New Haven, Connecticut. "To better guide efforts for earlier prevention, we started looking at younger adults."

AFib occurs when there is a sustained irregular heart rhythm. It is typically diagnosed after age 60 and can lead to [blood clots](#), stroke, [heart failure](#) and other types of heart problems. Prior research has linked [sleep apnea](#), which causes breathing to stop and restart during sleep, to a higher risk for AFib. But the impact of other sleep problems on AFib is largely unknown.

Researchers looked back at [electronic health records](#) for more than 1 million veterans. Participants were an average 28 years old at the beginning of the study and received health care from the Veterans Health Administration between October 2001 and the end of 2017. The vast majority—87%—were men and 61% had been in active duty. Roughly 11% had been diagnosed with [insomnia](#).

Over 16 years of follow-up, 4,168 cases of AFib were diagnosed. Veterans who also had been diagnosed with insomnia at the beginning of the study had a 32% higher risk for AFib than those without the sleep disorder.

Being male or having a history of obesity, alcohol abuse, sleep apnea, high blood pressure, heart disease, heart failure and a psychiatric disorder also increased the risk for AFib. But even after controlling for these factors, the higher AFib risk for people with insomnia persisted.

Gaffey and her colleagues also analyzed the age at which veterans developed the irregular heart rhythm. They did so after adjusting for data on veterans who had sleep apnea, since it is already known to raise AFib risk. They found veterans with insomnia developed AFib more than two years earlier on average than those without sleep issues—at 42.8 years old, compared to 45.1.

The findings may not be generalizable to non-military veterans, Gaffey said. "Veterans have unique health risks due to their service history, including a higher risk for [traumatic brain injury](#), psychiatric conditions such as PTSD (post-[traumatic stress disorder](#)), anxiety and depression and musculoskeletal conditions. They also may have more chronic pain. Just one of these factors can affect their ability to get a good night's sleep."

But, she said, the findings "suggest an imperative to explore insomnia and cardiovascular risk in civilians."

Cardiologist Dr. Jose Joglar, a professor in the department of internal medicine and program director of the clinical cardiac electrophysiology fellowship program at UT Southwestern Medical Center in Dallas, said studies that follow people into the future are needed to confirm insomnia is indeed a risk factor for AFib. Joglar was not involved in the new research.

However, he said, there is enough evidence showing poor sleep can be harmful to heart health that people who struggle with insomnia should be encouraged to seek medical assistance.

"You don't need AFib to tell you that insomnia is bad," Joglar said.

Last year, the American Heart Association added sleep to its Life's Essential 8 list of critical components for good heart and brain health, recommending adults get an average seven to nine hours each night.

Stress and anxiety are often to blame when people have trouble sleeping, Gaffey said, adding that sleep challenges can be overcome.

"First and foremost, determine if there are ways you can reduce or better manage the stress in your life," she said.

If that isn't enough, Gaffey suggested meeting with a [health care](#) professional to discuss a referral for cognitive behavioral therapy, a sleep apnea evaluation or sleep medications. "Lifestyle-based approaches, including increasing [physical activity](#), changing diet and lowering caffeine intake, may also help to improve sleep," she said.

**More information:** Allison E. Gaffey et al, Insomnia and Early Incident Atrial Fibrillation: A 16-Year Cohort Study of Younger Men and Women Veterans, *Journal of the American Heart Association* (2023). [DOI: 10.1161/JAHA.123.030331](https://doi.org/10.1161/JAHA.123.030331)

Provided by American Heart Association

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