

Title: Shift Work and Ischemic Heart Disease

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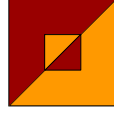
Key words: Shift Work Ischemic Heart Disease

Abstract: Although previous studies have linked shift work with Ischemic Heart Disease, after controlling for social class as a confounder, shift work does not appear to independently increase the risk of IHD.

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## More about Ischemic Heart Disease (IHD)

- A disease in which there is reduced blood flow to the heart muscle
- Often due to blockage of the arteries that supply the heart with blood (atherosclerosis)
- May be caused by sudden spasm of the arteries that supply the heart
- Affects about 14 million people in the U.S.
- May lead to heart attack



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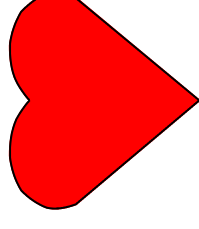
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Patient Education Tool Project

Created by  
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A Patient Education Tool

## Shift Work and Ischemic Heart Disease



## What the research has found

## Is there a link between shift work and Ischemic Heart Disease?

### Previous studies

It is hard to study the link between shift work and IHD because researchers cannot assign people to work a certain job for the rest of their lives. That means that we have to look at groups of people who already do shift work and compare them to groups of people who work day jobs. Many of these studies have linked shift work to IHD, but there may be other factors related to the type of job a person works which are the true cause of the problem. One study stands out from the rest because it has controlled for these other factors.

### This study\*

Researchers in Denmark were able to get rid of social class as a risk factor that might affect the results of their study. They matched shift workers to non-shift workers and then compared rates of IHD within each social class.

### What they did

This group of researchers followed 5249 men over the course of 22 years and looked at these men's medical records, noting hospital stays for non-fatal heart attacks (myocardial infarction) and death certificate diagnoses.

### What they found

The results showed that there was an increased risk of IHD with lower social classes and that more than 90% of shift workers belonged to these lower social classes compared to less than 70% of day workers. However, after controlling for social class, there was no difference in risk of IHD between shift workers and day workers.

### What this means

This study shows no support for the idea that shift work is, in itself, a risk factor for IHD.

### Other factors thought to increase the risk of IHD

- Old age
- Smoking
- High cholesterol
- Diabetes
- High blood pressure
- Obesity



### How can I learn more?

For more information about signs and symptoms, diagnosis, or treatment of IHD, please ask your doctor.

\*Boggild H, Saudicani P, Hein HO, Gyntelberg F. Shift work, social class, and ischemic heart disease in middle aged and elderly men; a 22 year follow up in the Copenhagen Male Study. *Occup Environ Med* 1999; 56:640-645