

## P7. Health effects of the shift work system

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Technological advances and the changes to methods of production in many industrialized countries led to the introduction of shift work systems to ensure the continuity in operation of industries. Shift work has long been known to disrupt circadian rhythm, sleep, and work-life balance.

Alfredsson et al. carried out a study of 334 cases with myocardial infarction and 882 controls, who were selected randomly from the general population in the same region. The shift-work exposure was assessed from the occupational code, and from an interview of 14 500 people belonging to a random sample of households in Sweden. The results showed that shift work was associated with myocardial infarction [age-standardized relative risk (RR) = 1.25, 95% CI = 0.97–1.62].

In a study by Peter et al., who found chronic psychosocial work stress—according to the model of effort-reward imbalance—to mediate the effects of shift work on cardiovascular risk factors, such as hypertension and atherogenic lipids, suggest a correlation between stressful psychosocial work environment, shift work and hypertension.

According to Westerberg et al., functional gastrointestinal disorders, i.e. medically unexplained abdominal symptoms, are more frequent in shift workers, However, they are as well associated with other potential hazards to gastrointestinal functioning such as anxiety and depression. Both of which are correlated to somatoform disorders independently from work schedule issues.

In a cross-sectional study from China, night shift work was found as a predictor of greater severity of gastroesophageal reflux disease.

Due to the economic, industrial and social developments in industrialized countries, shift work and irregular work patterns are becoming more and more inevitable. Regulation of working hours by taking into consideration the problems that may occur in employees will contribute to improving the quality of life.

**Keywords:** health effects, shift work, work stress