

Caffeine reduces mistakes made by shift workers

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Caffeine can help those working shifts or nights to make fewer errors, according to a new study by Cochrane researchers. The findings have implications for health workers and for any industry relying on shift or night work, such as transportation.

More than 15% of workers in industrialised countries are involved in some shift or night time work, which may upset natural circadian rhythms or 'body clocks'. In so-called [shift work](#) disorder (SWD), workers sleep only for short periods and consequently can become very sleepy during working hours. Sleepiness is thought to increase the risk of adverse events such as traffic crashes, occupational injuries and [medical errors](#).

The researchers reviewed data from 13 trials studying the effects of caffeine on performance in shift workers, mostly in simulated working conditions. Caffeine was given in coffee, pills, [energy drinks](#) or caffeinated food. In some trials, performance was assessed by tasks such as driving, whereas in others it was assessed by neuropsychological tests. Caffeine appeared to reduce errors compared to placebos or naps, and improve performance in various neuropsychological tests, including those focusing on memory, attention, perception and concept formation and reasoning.

None of the trials measured injuries directly, but improved performance may translate into reduced numbers of injuries caused by sleepiness, according to researchers. "It seems reasonable to assume that reduced

errors are associated with fewer injuries, although we cannot quantify such a reduction," says lead researcher Katharine Ker of the London School of Tropical Medicine in London, UK.

The average age in most trials was between 20 and 30 years and thus, because the effect of disruption to the circadian rhythm varies with age, there is still a need for more research on how caffeine affects alertness in older workers. The study also finds that there is a need for research to explore the effects of [caffeine](#) compared to other measures in order to reduce errors made by [shift workers](#).

Provided by Wiley

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