

Daylight-saving time leads to less sleep, more injuries on the job

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Every March, most Americans welcome the switch to daylight saving time because of the longer days, but also dread losing an hour of sleep after they move their clocks forward. Now a new study shows that losing just an hour of sleep could pose some dangerous consequences for those in hazardous work environments.

The findings are reported in the September issue of the [Journal of Applied Psychology](#), which is published by the American Psychological Association.

"One hour of lost sleep may not seem like a lot. But our findings suggest it could have an impact on people's ability to stay alert on the job and prevent serious injuries." said the article's lead author, Christopher Barnes, PhD. Barnes and co-author David Wagner, PhD, were both doctoral students in organizational behavior at Michigan State University when they conducted this research.

They analyzed the number of injuries reported to the Mine Safety and Health Administration from 1983 to 2006. The U.S. Department of Labor requires all mine operators to investigate and report all mining-related injuries. The researchers also looked at the number of work days employees missed as a result of their injuries. Across the 24 years, there were 576,292 reported injuries on the job.

On average, there were 3.6 more injuries on the Mondays following the switch to daylight saving time compared to other days, and 2,649 more

days of work were lost as a result of those injuries. That's approximately a 68 percent increase in lost work days. In their analysis, the researchers controlled for weekends and holidays. Work experience did not appear to play a role in the number of injuries suffered.

The researchers also confirmed that people do sleep less in the days after they're forced to turn their clocks forward. They looked at data from the Bureau of Labor Statistics' American Time Use Survey, which measures the amount of time Americans spend engaged in various activities, including sleep. For this study, the researchers looked at data from 14,310 interviews from 2004 to 2006. Results showed that after the switch to daylight saving time, people slept an average of 40 minutes less on the Sunday night they switched to daylight saving time.

The researchers did not find any significant changes in the number and severity of workplace injuries on the Mondays after the switch to standard time, when people gained an hour. Further analysis of the American Time Use Survey showed that people had a much easier time adjusting their sleep schedules and did not, on average, sleep less or more after they changed to standard time. These findings would help explain why there were no significant effects, according to Barnes.

The study could have some important practical implications for employers, Barnes said. "We think managers and organizations can use this information to help improve safety in the days following the switch to daylight saving time," he said. "They can schedule particularly dangerous work on other days, perhaps later in the week after employees have had more time to adjust their sleep schedules." Another suggestion would be to implement extra safety precautions on those days.

More information: "Changing to Daylight Saving Time Cuts Into Sleep and Increases Workplace Injuries," Christopher M. Barnes, PhD, and David T. Wagner, PhD, Michigan State University; *Journal of Applied*

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