

Sleep deprivation affects airport baggage screeners' ability to detect rare targets

June 11 2007

A lack of sleep may affect the performance of airport employees, which can, in turn, compromise the safety of airline passengers. Sleep deprivation can impair the ability of airport baggage screeners to visually search for and detect infrequently occurring or low prevalence targets that may ultimately pose a threat to an airline and its passengers, according to a research abstract that will be presented Monday at SLEEP 2007, the 21st Annual Meeting of the Associated Professional Sleep Societies (APSS).

Nayantara Santhi, MD, of Brigham & Women's Hospital in Boston, surveyed 31 healthy subjects, who participated in a 36-hour constant routine. A visual search task was administered every two hours. The subjects reported whether a target was present in a set of simultaneously presented distractors. According to the results, sleep deprivation induced a speed/accuracy trade-off, in that the search rate sped up with time awake, but errors increased, indicating decision stage impairments.

“These results suggest that safety and performance in socially critical low target prevalence search tasks may be especially vulnerable to the detrimental effects of sleep deprivation,” said Santhi.

The amount of sleep a person gets affects his or her physical health, emotional well-being, mental abilities, productivity and performance. Recent studies associate lack of sleep with serious health problems such as an increased risk of depression, obesity, cardiovascular disease and diabetes.

Experts recommend that adults get between seven and eight hours of sleep each night to maintain good health and optimum performance.

Persons who think they might be suffering from a sleep disorder are encouraged to consult with their primary care physician, who will refer them to a sleep specialist.

Source: American Academy of Sleep Medicine

Citation: Sleep deprivation affects airport baggage screeners' ability to detect rare targets (2007, June 11) retrieved 20 September 2024 from <https://medicalxpress.com/news/2007-06-deprivation-affects-airport-baggage-screeners.html>

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