

# Summary of: Assessment of Excessive Daytime Sleepiness in Railroad Workers A Survey of Class 1 Railroad Workers, May 2008

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This study was designed to identify Excessive Daytime Sleepiness (EDS) in workers of a Class 1 Railroad. The primary aims were to establish that a study could be performed successfully through joint cooperation between the employer and the workers, and to also raise awareness of the risk and prevalence of EDS in railroad workers. The study was funded by the Federal Railroad Administration (FRA) and the Railroad with a specific stipulation for ensuring the confidentiality of any participating employee. The study was designed and performed by University Services Sleep Diagnostic & Treatment Centers.

Concern has greatly increased in recent years about EDS in workers in safety sensitive positions. Untreated Obstructive Sleep Apnea [OSA], a common cause of EDS, is recognized to be a significant risk factor of both commercial and private motor vehicle crashes (resulting in a two- to seven-fold increased risk) and increases the possibility of an individual subsequently developing a significant health problem such as diabetes, hypertension, stroke, ischemic heart disease, and mood disorders.

It is likely that there will be federal regulations and requirements in the near future that will mandate screening for EDS in workers employed in certain safety sensitive positions in several transportation modes in the United States. An established working model that proves its validity will be extremely beneficial in helping to develop practical guidelines as well as allowing employers to be ready to be in compliance.

The study successfully screened for and confirmed the presence of OSA using a model of screening with a validated instrument [an HRA] and confirming using an ambulatory device that does not require an overnight stay in a Sleep Disorders Center.

It was demonstrated that the prevalence of risk of OSA among participants [40%] was much higher than in the general population. It is consistent with that described for CDL [commercial drivers license] holders. Of those railroad worker participants who were identified to be at risk, the subset who were entered into the confirmation arm of the study, 80% were confirmed to have OSA by the study's criteria.

Finally recommendations and processes to enhance the likelihood of the industry (management, labor, and regulator) creating non-proscriptive solutions by using scientific research and working collaboratively were proposed.

- 1) Create process to continue further research into EDS through voluntary cooperation of employees and management.
- 2) Share results of all studies with management, labor, FRA and the rest of the industry.
- 3) Continue offering voluntary sleep disorder screening as part of the recertification process. Additionally, initiate discussions with other stakeholders (labor unions, management and FRA) regarding mandatory screening.
- 4) Use the recertification process, and other voluntary screenings, to continue to collect and analyze data.
- 5) Develop a sleep disorder screening tool or methodology for all new hires in safety sensitive positions, e.g., switchman/brakeman, etc. and reinforce education and awareness of the risks of EDS with all employees.
- 6) Provide voluntary assessment opportunities to all employees.
- 7) Consider developing an industry specific screening tool.
- 8) Expand research to include other railroad partners and assess industry needs.
- 9) This should be approached as a risk management issue that, with proper assessments and processes in place, can be successfully managed.

A larger, more robust study is indicated. This sleep diagnostic model can be applied to other industries to promote a healthy work environment. For more information contact University Services.



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