

## Electronic Fatigue Monitoring

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### Has anyone tried or had experience with electronic fatigue monitoring?

I have heard that the Marines use “fatigue sensing” technology in haul truck drivers. A system monitors eye movement (or lack thereof) and provides a warning to the operator if the system senses fatigue. If there are three such warnings triggered, the long haul truck will shut down.

An employer is investigating using a device in employees’ bump or hard hats that uses EEG activity to calculate the employees’ “fatigue level.” The EEG data is not stored or transmitted.

Thanks very much.

Howard

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Howard

First time I saw anything utilizing this type of technology it was for an extensive study that Caterpillar conducted on MSHA sites I believe. They may be a good resource?

Joe

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Joe,

Below is some of the technical information I found. One of my partners also investigated possible employment law issues.

Mike’s question triggered a fair amount of interest in the Firm. I emailed various Construction and Distribution contacts, who also found the question to be of interest.

The only substantive results were multiple compliments of Caterpillar’s Fatigue Management System. [https://www.cat.com/en\\_US/by-industry/mining/articles/fatigue-management.html](https://www.cat.com/en_US/by-industry/mining/articles/fatigue-management.html)

I also heard compliments of the Marine Corps effort to manage long-haul driver fatigue. <https://www.nrel.gov/docs/fy18osti/70223.pdf>

I found this 2005 Study: Pilot Test of Fatigue Management Technologies:  
[https://www.med.upenn.edu/uep/assets/user-content/documents/Dingesetal.--  
TRBProceedingspaper05-1234.pdf](https://www.med.upenn.edu/uep/assets/user-content/documents/Dingesetal.--TRBProceedingspaper05-1234.pdf)

See also: <https://www.ncbi.nlm.nih.gov/books/NBK384956/> and National American fatigue  
Management program: <https://www.nafmp.com/index.php?lang=en>

Best regards,

Howard