

| National Transportation Safety Board



Fatigue Management Programs Jana Price, PhD NTSB Most Wanted List Webinar October 27, 2020

Overview

- Why is fatigue a problem?
- What causes fatigue?
- What are fatigue management programs (FMP) and why are they important?
- Where can I go to learn more about developing an FMP?



Why is Fatigue a Problem?



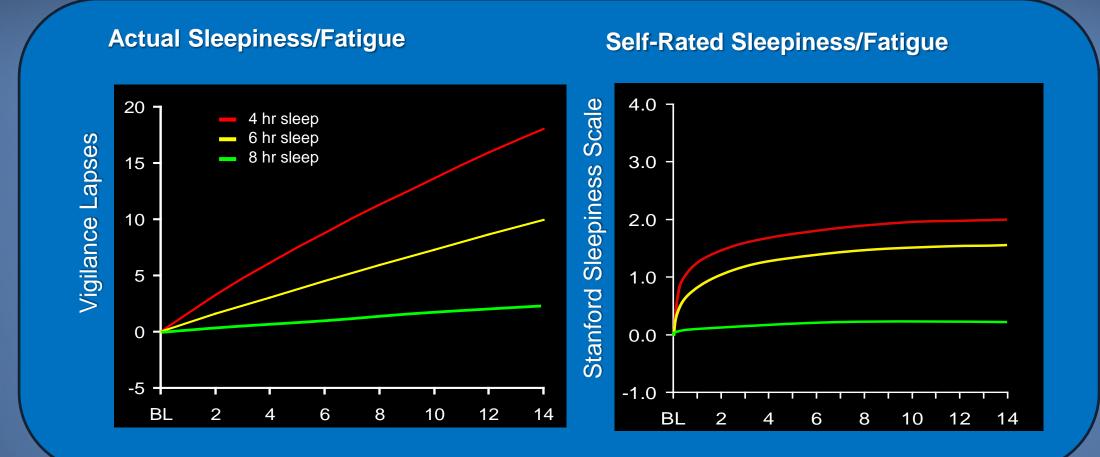








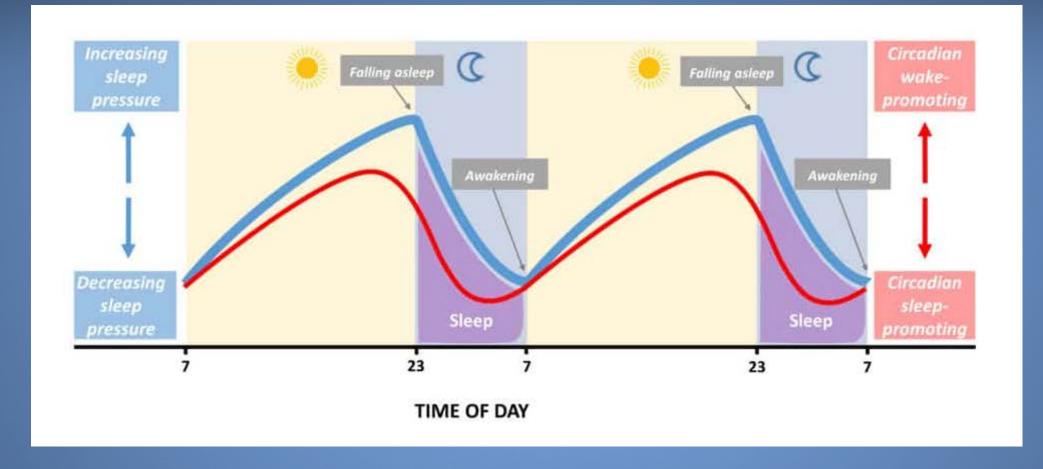
Sleeping Less Leads to Lapses in Vigilance



4 Van Dongen HPA et al. (2003). The cumulative cost of additional wakefulness: Dose-response effects on neurobehavioral functions and sleep physiology from chronic sleep restriction and total sleep deprivation. Sleep, 26:117-126. Figure 1



Factors That Regulate Sleep and Sleepiness



5



Several Factors Can Cause Fatigue

- Inadequate sleep length or quality
- Time of day
- Continuous time awake
- Sleep disorders and other health issues
- Certain drugs





Why Have a Fatigue Management Program?

- FMPs can improve safety and health by incorporating:
 - Fatigue management education for drivers and others
 - Scheduling/trip planning practices
 - Sleep disorder screening/treatment
 - In-vehicle technologies
 - Incident reporting and evaluation systems



North American Fatigue Management Program (NAFMP)

- 4-year project (Canada & US)
- Collaboration between government, carriers, insurance and researchers
- Link to NAFMP: https://saaq.gouv.qc.ca/en/tran sportation-goods/driver/northamerican-fatiguemanagement-program/





North American Fatigue Management Program

Modules	Target Group
FMP – Introduction and Overview	Carrier executives and managers
Safety Culture and Management Practices	Carrier executives and managers
Driver Education	Drivers
Family Education	Drivers' spouses and families
Train-the-Trainer	Safety managers and other trainers
Truck Driver Safety and Compliance: The Role of Shippers and Receivers	Shippers and receivers
Sleep Disorders Management for Motor Carriers	Carrier executives and managers
Driver Sleep Disorders Management	Drivers
Driver Scheduling and Tools	Dispatchers and managers
Fatigue Monitoring and Management Technologies	Carrier executives and managers

Link to NAFMP: https://saaq.gouv.qc.ca/en/transportation-goods/driver/northamerican-fatigue-management-program/



Fatigue-Related Resources

- North American Fatigue Management Program (Société de l'assurance automobile, Quebec)
- Your Guide to Healthy Sleep (National Heart Lung, and Blood Institute)
- Driver Fatigue On the Job (National Institute of Occupational Safety and Health)
- <u>2016 Joint Recommendations Concerning Obstructive Sleep Apnea</u> (FMCSA Motor Carrier Safety Advisory Committee and Medical Review Board)
- Fatigue Risk Management in the Workplace (Journal of Occupational and Environmental Medicine)
- Managing Workplace Fatigue During COVID-19 (National Institute of Occupational Safety and Health)





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