



North American Fatigue
Management Program

Sleep Hygiene NAFMP Driver Series

December 7, 2022

These presentation slides available in the live chat shortly

Recording & slides will be available by Friday at
nafmp.org/webinars/

Please pardon our French



French captioning is auto-generated
by PowerPoint

Featured Speaker



Tom DiSalvi

Vice Chairman, Board of Directors
National Sleep Science Foundation

&

Vice President of Safety, Driver Training and Compliance
Schneider National, Inc.



Rodolfo Giacoman

Fatigue Management Specialist
Commercial Vehicle Safety Alliance

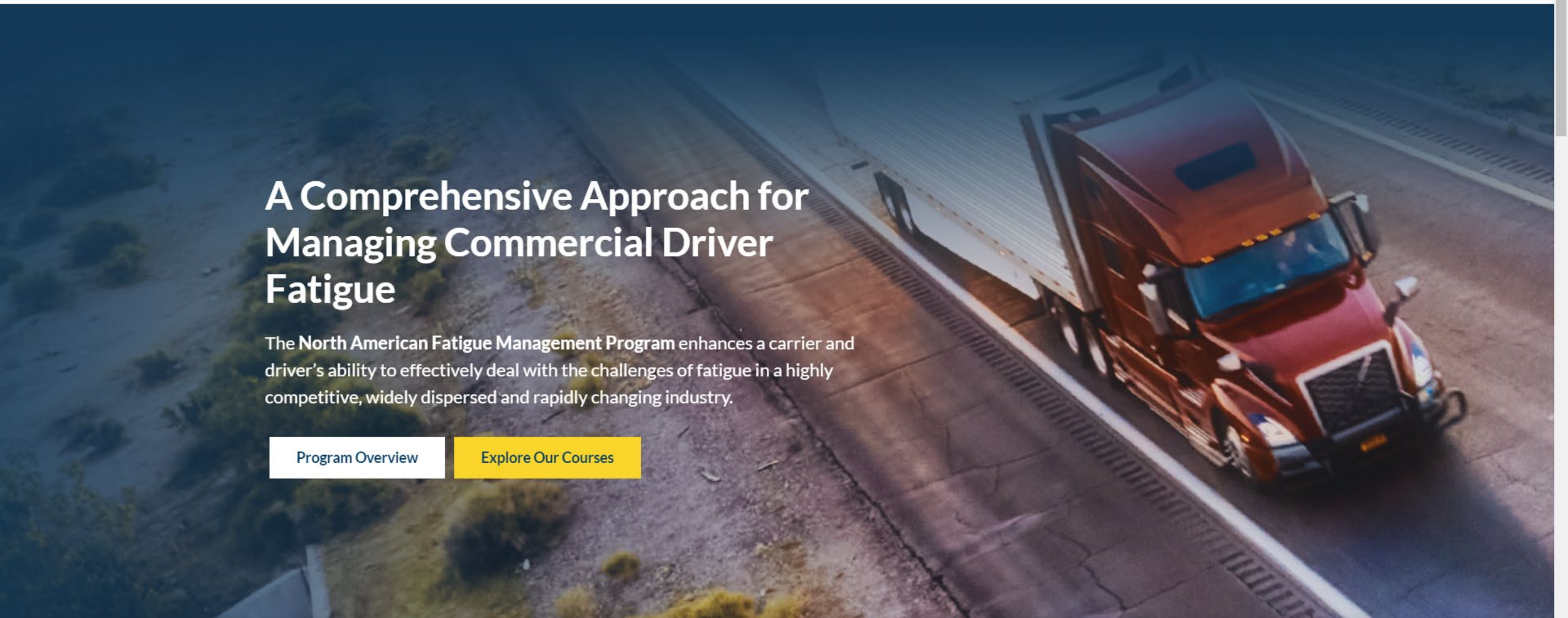
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[About NAFMP](#) ▾[Improve Driver Safety](#)[Training](#) ▾[ROI Calculator](#)[Contact](#)[Webinars](#)

A Comprehensive Approach for Managing Commercial Driver Fatigue

The North American Fatigue Management Program enhances a carrier and driver's ability to effectively deal with the challenges of fatigue in a highly competitive, widely dispersed and rapidly changing industry.

[Program Overview](#)[Explore Our Courses](#)

Implementation Manual



**Guidelines and Materials to Enable
Motor Carriers to Implement
a Fatigue Management Program**

IMPLEMENTATION MANUAL

Sponsored by the North American Fatigue Management Program



eLearning Platform: lms.nafmp.org



NAFMP

English (en) ▾

You are not logged in. (Log in)



Fatigue Management Community Forum

No matter your role in managing fatigue, you are welcome to join in the conversation. Questions, comments, and feedback are encouraged. Thank you for your participation. Please select here to [log in](#) or [create a new free account](#).



Available courses

Module 01



FMP Introduction and Overview

Target Audience: Carrier executives and other managers

Estimated Duration: 45 min

Module 02



Safety Culture and Management Practices

Target Audience: Carrier executives and other managers

Estimated Duration: 1.5 hours

PowerPoint Presentations



Français English



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Webinars



Training Overview

Motor Carrier Executives & Managers

Safety Managers & Other Trainers

Dispatchers & Driver Managers

Commercial Vehicle Drivers

Driver Spouses & Families

Freight Shippers & Receivers

PowerPoint Training (Downloads)

Training



PowerPoint Training (Downloads)

NAFMP online training is a comprehensive, interactive experience. We encourage you to participate in the program via our free and [self-paced e-learning system](#). Through the system, you'll have access to periodic check-ins, quizzes and scores. Motor carriers can also encourage their drivers and other personnel to register and complete the appropriate modules through the online system.

PowerPoints with Audio Narration

Access the Complete Training Program Online →

📄 How to get started (PDF)

Improve Driver Safety

Reduce fatigue-related risks, reduce crashes, improve alertness and

ROI Calculator



Français English



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ROI Calculator

Return on Investment (ROI) Calculator

Estimate the monetary benefits of implementing the North American Fatigue Management Program either in its entirety or in select components in a customized program, i.e., fatigue management training, sleep disorder screening and treatment, technology deployment, and scheduling tools.

Click on the links below to download the ROI Calculator and User Guide:

Calculator User Guide (PDF)

Calculator Download (Excel)

Access the Complete Training Program Online →

How to get started (PDF)

Improve Driver Safety

Reduce fatigue-related risks, reduce crashes, improve alertness and promote job satisfaction.



Webinars

Webinars and Courses

Register for upcoming live NAFMP webinars and courses or check out previous recordings below.

Upcoming

Sleep Hygiene – North American Fatigue Management Program Driver Series

Wednesday, Dec. 7, 1-2 p.m. EST

Good and sufficient sleep is arguably the most important factor in determining drivers' general health and state of alertness. In this session, learn why sleep is so important, what "good" and "sufficient" sleep looks like, and how sleep hygiene can help drivers get the sleep needed to stay

Access the Complete
Training Program Online →

How to get started (PDF)

Improve Driver Safety

Reduce fatigue-related risks, reduce crashes, improve alertness and promote job satisfaction.

1. Safety Culture
2. Fatigue Risk Management System
3. Sleep Disorder Screening & Treatment Program
4. Scheduling Practices
5. Fatigue Management Technologies
6. Education & Training

Reminders, Please



- Not medical professionals
- Consult your medical provider before following any lifestyle recommendations or if you feel any discomfort
- You are responsible for any consequences of following any recommendations provided
- Be aware and try to eliminate the stigma associated sometimes with sleeping, metabolic diseases, substance abuse and mental health
- Do not allow any recommendations cause you to worry or become obsessed with a toxic wellness culture

Part I

1. Importance of Sleep: Biology
2. Sleep Quality & Quantity: Architecture
3. When to Sleep: Clock & Timer
4. Other Sleep Hygiene: Energy Stimulation & Release
5. Fatigue Susceptibility: Sleep Deprivation & Disorders

Part II

Expert Perspective: Tom DiSalvi

Part III

Qs & As

Importance of Sleep: Biology



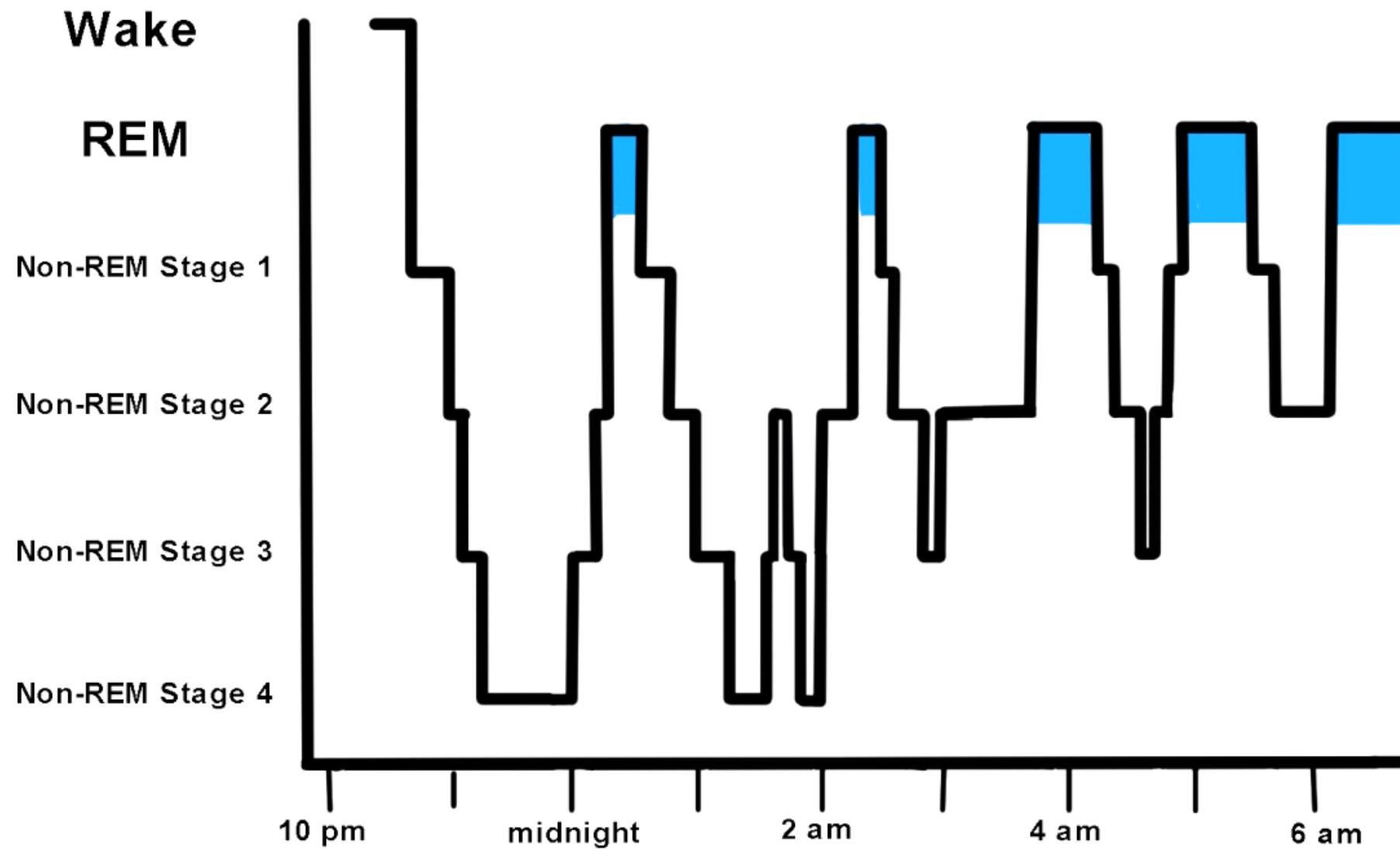
Sleep Functions

- Energy recharge
- Cellular restoration
- Brain function
- Emotional wellbeing
- Metabolism maintenance
- Immunity enhancement
- Heart health

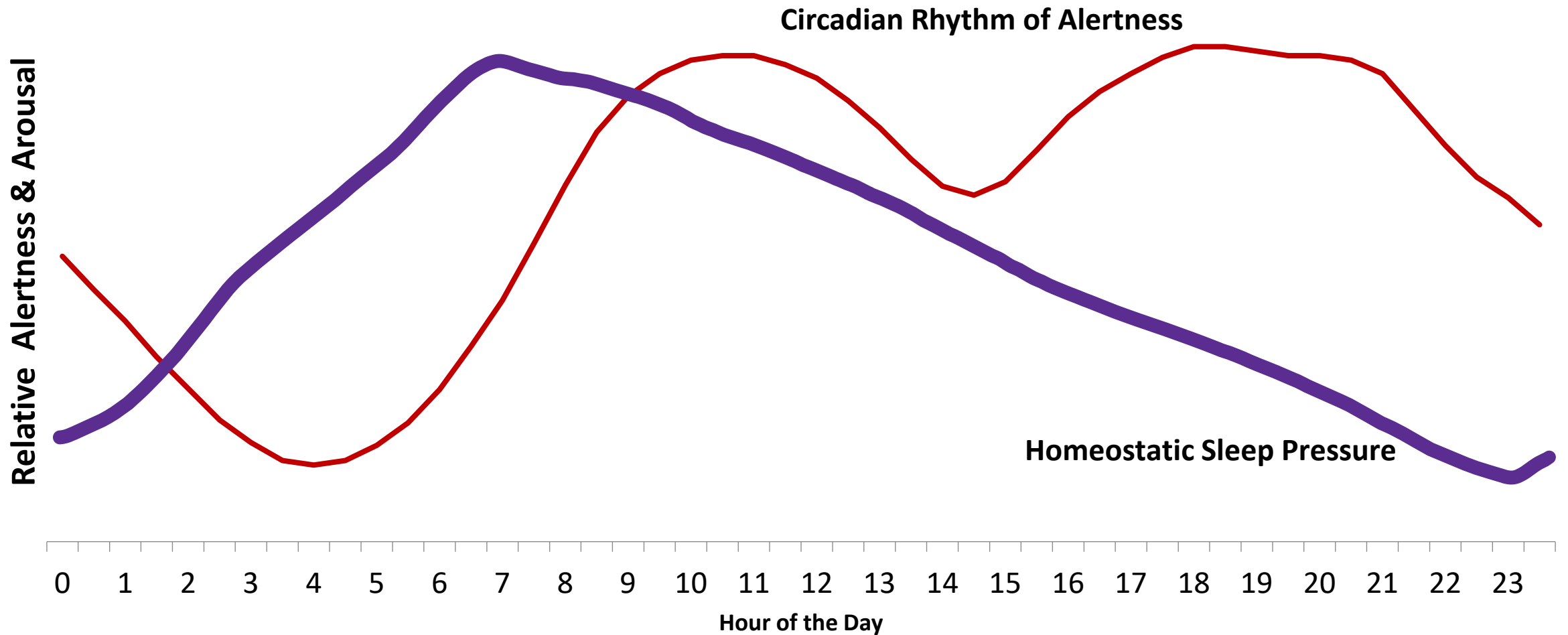
Sleep Deprivation Effects

- Metabolic disorder
 - Increased appetite
 - Obesity
 - Increased diabetes risk
 - Increased blood pressure
 - Increased risk of heart disease
- Reduced immune system functioning
- Gastrointestinal problems
- Disrupts relationships
 - Irritability
 - Infertility
- Worsens psychiatric conditions
 - Alzheimer's disease, anxiety, depression, bipolar disorder, suicide, stroke, chronic pain
- Decreased quality of life & Increased sick days

Sleep Architecture



Sleep Drivers: The Clock & the Timer



Energy Stimulation Hygiene



- Light
- Temperature
- Sound
- Substances
 - Food
 - Caffeine
 - Alcohol
 - Nicotine
 - Amphetamines
 - Medications

Energy Release Hygiene



- Exercise
 - Early: Cardio & Strength
 - Anytime: Stretching & Breathing (Blow your nose & sleep position)
- Make bed the sleep trigger
 - Spine alignment
 - Supportive bed & pillows
- If cannot sleep after 20 min
 - Get up
 - Don't throw a party
 - Do something relaxing
- Relax
 - Land worries on paper
 - Meditate, practice yoga, pray or read something calming
 - Intimacy

Sleep Quantity & Quality



- During a 48-hour break, test how much sleep you need
 - Practicing energy stimulation and release hygiene
 - Without an alarm
- Lack of sufficient sleep quantity or quality symptoms
 - Excessive daytime sleepiness
 - Extremes in ability to go to sleep
 - Loud irregular snoring with gasping

How to Payback a Sleep Debt?



- Full night sleep
- May require several nights of full sleep
- Avoid deprivation
- Sleep until you wake up
- Make extra deposits on the weekend

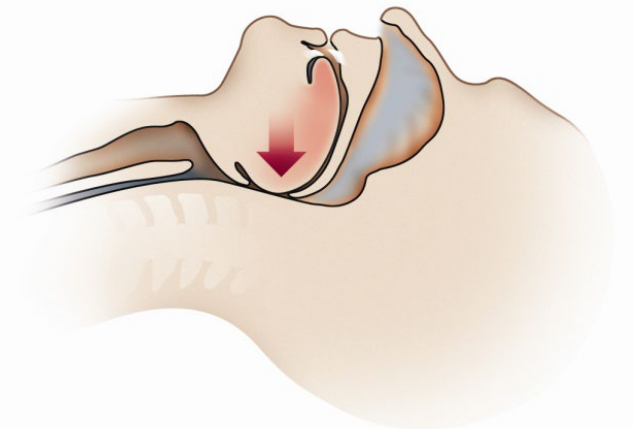
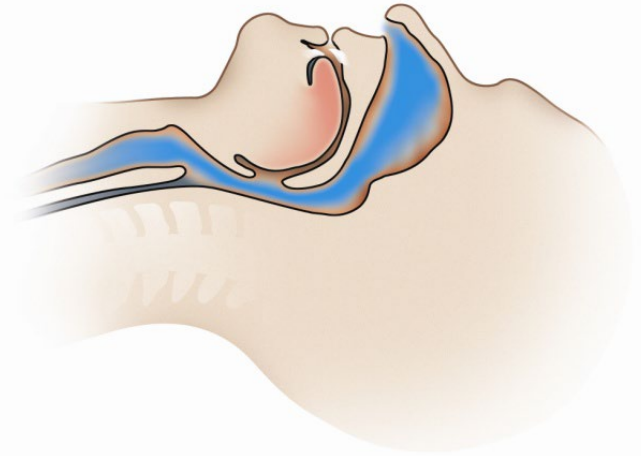
Fatigue Susceptibility



- Sleep Deprivation
 - Sleep-related behaviors
 - Differences in health & fitness
 - Sleep hygiene
- Medical conditions
 - Genetic variations
 - Medications
 - Sleep disorders
 - Insomnia, narcolepsy, restless leg syndrome, sleepwalking, abnormal circadian rhythms, obstructive sleep apnea (OSA)

Obstructive Sleep Apnea

- **Apnea** = stoppage of breathing lasting 10+ seconds
- OSA = breathing stops repeatedly during sleep due to closures of the upper airway
- Apnea rate per hour:
 - <5 = normal
 - ≥ 5 = OSA
- OSA severity (mild, moderate, severe) based on rate
- Some people with severe OSA can have 100 per hour



OSA Risk and Warning Signs



- OSA higher risk
 - Obese individuals, male, 40+ years old, large neck size, recessed chin, small jaw, large overbite, family history
- OSA warning signs
 - Reduced performance, loud and irregular snoring especially with gasping, high blood pressure, diabetes

Module 8: Driver Sleep Disorders Management (Module 7 for Motor Carriers)

- May 4, 2022 Webinar:
 - A Motor Carrier's Guide to Establishing a Sleep Disorders Management Program

General Strategies



- SLEEP!!!
 - Main sleep
 - Naps
- Maintain a healthful lifestyle
 - Follow the five wellness basics
- Practice sleep hygiene
 - Try to keep a regular schedule
 - Go with your circadian rhythm – don't fight it
 - Wind down before sleep
 - Less physical activity
 - Lower lights
- Be smart about caffeine use

At-Home Strategies



- Get the best sleep possible before starting a trip or work week
- Communicate your sleep needs and get your family's support
- Bedroom should be:
 - Completely dark
 - Cool
 - Quiet
- Pre-sleep routine
- Be active but don't exhaust yourself. Take time to relax

On-the-Road Strategies



- Try to get as much sleep on the road as you get at home
- Rest breaks with **naps** are most beneficial
- Rest breaks without naps
- Moving your body
- Conversation if it is not distracting
- Exercise
- Avoid heavy meals
- Wear your safety belt

Night Driving Strategies



- Advantage of night driving: less traffic
- Disadvantages:
 - Fatigue, related to circadian rhythms
 - More drunk/reckless motorists
 - Poor visibility
- Use light and dark to “fool” your body:
 - Bright lights simulate daybreak
 - Dark simulates night and bedtime
- Use caffeine, but carefully
- Consider taking sleeper berth period/nap in pre-dawn hours
- Get more recovery sleep on weekends
- Not for everybody

- Be aware of your “body clock”
- Short trips/shift changes: stick with your regular sleep schedule
- Longer changes:
 - “Pre-adjust” before change
 - Shift your pre-bed, “evening” routine
 - Use light and dark to help you adjust
 - To stay awake, be physically active and interact with others
- Getting more sleep generally makes changes easier

Team Driving Strategies



- Plan sleeper berth periods in advance to be compliant and beneficial
- When possible, take sleep periods during circadian valleys
- Avoid both caffeine and strenuous activity in hours before breaks
- Keep sleeper berth totally dark or use eyeshades
- Don't drive immediately after awakening
- Team driving is a partnership
- To sleep well, each driver must have full confidence in the other driver
- Driver should strive to be a “smooth operator”
- Agree on a game plan for sleep and rest that meets each driver's needs

Tom DiSalvi

Sleep Hygiene Questions (1 of 3)



- Please discuss the importance of sunlight.
- What is minimal amount of sleep necessary for alertness?
- Is there a correlation between hydration and quality of sleep?
- How beneficial is a 2-hour nap in a truck sleeper?
- Have you done a pilot with drivers using actigraphy devices to track and educate on Heart Rate Variability during sleep?
- Is a Fitbit helpful?
- What is the difference between sleep and fatigue?
- Sleeping during the day compared to sleeping during the night?
- Early bedtime vs. family life
- Is there a link between deficient sleep and mortality?
- Hello, Is it possible an outdoor workout park in to be build truck stops? Walking in truck stops very dangerous...
- How nutrition plays a significant role in fatigue
- Are there benefits to including tart cherry in your diet for good sleep?
- List of 10 snacks you highly recommend on the road.

10 Types of Snacks for the Road



1. Unsweetened drinks: Water, sparkling water with lime/lemon, coffee, tea, herbal infusions
2. Any seeds: Pumpkin, sunflower, cacao nibs, flax, chia, hemp
3. Any nuts: Almonds, walnuts, pecans, cashews, pistachios
4. Any veggies: Romaine hearts, celery, carrots, cucumber, cherry tomatoes, bell peppers
5. Any fruits: Berries, apples, oranges, clementines, bananas, plums, pears, pineapple
6. Spreads: Guacamole, hummus, plain yogurt/Greek, plain nut butters, cheese, pesto
7. Not so smooth smoothies (keep fiber): Made with any of those above
8. Any protein: Boiled eggs, rotisserie chicken, ribs, lamb/steak skewers, sashimi
9. Beans: Pinto, black, kidney, edamame, chickpeas
10. Minimally processed cereals: Steel cut oatmeal, barley, burghul, brown rice, plain popcorn

Sleep Hygiene Questions (2 of 3)



- Effects of uppers (caffeine, energy drinks) while driving CMV
- What are good exercise/diet tips for those working night shifts?
- How to minimize the effects of shift changes - example - going from running during the day to nights
- What should you do if you can't fall asleep
- What to do if wake up too early?
- What effects does waking-up several times a night have
- What are some physical effects of bad sleep do drivers experience?
- Effects of fatigue?
- What signs to look for to detect sleep deprived drivers
- What are the signs of a fatigued driver?
- What are common signs of sleep deprivation that can be observed in the cab of the CMV

Objective Signs of Fatigue



- Eyelid drop or loss of focus
- Yawning
- Wandering, scattered or disjointed thoughts, dreamlike visions
- Head movements, gentle swaying, jerking
- Reduced field-of-view (AKA: tunnel vision, highway hypnosis, white line fever)
- Fidgeting, shifting positions, adjusting windows & HVAC
- Progressive weaving, crossing rumble strip, drift and jerk steering
- Delayed or incorrect responses
- Microsleeps

Sleep Hygiene Questions (3 of 3)



- When and how long to sleep
- Are naps valuable?
- Is melatonin ok to take daily
- Do you have any data on splitting of sleep cycles and the overall fatigue impact?
- What is the optimal temperature to fall asleep?
- Are there any recent statistics on how much sleep is recommended?
- What the role of Circadian Rhythm in proper sleep?
- What is the approximate minimum number of minutes taking a short nap will actually benefit a driver?
- How time of day affects sleep
- Please share best practice for workers who work random schedules

NAFMP Questions (1 of 2)



- Can you please let us know what areas of the implementation guide these topics relate to? Thank you!
- What means are available to better manage fatigue in the workplace
- Drivers not having proper sleep. Or short time sleepers. How do we make sure they had sufficient rest needed?
- I'd like to gain some more knowledge in general on the topic of fatigue management
- What is a good way and delivery method to get the families of the driver involved and aware of sleep hygiene practices.
- Any information that we can share with SCHOOL bus drivers that do daily routes AND/or sports trips would be AMAZING!
- Registering as an introduction at recommendation of my leadership. I will be facilitating training at our facility in Phoenix.

- eLearning & PowerPoint
 - Motor carrier executives and managers
 - Module 1 (Intro), 2 (Safety Culture), 7 (Sleep Disorders), 10 (Technologies)
 - Motor carrier trainers
 - Module 5 (Train-the-Trainer)
 - Motor carrier dispatchers and driver managers
 - Module 9 (Scheduling)
 - Freight Shippers, Receivers, Brokers
 - Module 6 (Role of shippers & receivers on driver safety)
 - Drivers
 - Module 3 (Driver Ed), 8 (Sleep Disorders) & 9 (Scheduling)
 - Driver Families
 - Module 4 (Family Ed)

NAFMP Questions (2 of 2)



- What are some effective ways to communicate the importance of sleep hygiene to truck drivers that have a negative view?
- How can an employer influence a worker to have proper sleep when this is an activity in their personal life
- How is this program monitored by the company?
- As a company how can we make sure a driver is rested enough to drive a CMV?
- Can we use your link on our websites?
- Why does CVSA ignore the fact that shippers/receivers are allowed to disrupt a normal sleep schedule?

GUARDIAN

A Publication of the Commercial Vehicle Safety Alliance

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4th Quarter 2022

A Supportive Approach to Fatigue Management Guidance for Shippers, Receivers and Brokers



U.S. DOT
Brings Together Trucking
Community to Help
Expand Truck Parking

North Dakota
Improves Commercial
Motor Vehicle Safety
Through Partnerships

CVSA Creates
Two New Inspection
Bulletins, Updates One
Existing Bulletin



A Supportive Approach to Fatigue Management Guidance for Shippers, Receivers and Brokers

By Rodolfo Giacoman, Fatigue Management Specialist, Commercial Vehicle Safety Alliance

The burden of managing fatigue should not solely fall on drivers and carriers. Unfortunately, far too often, drivers are treated as the elastic band holding together many of the links in the supply chain. In reality, every professional in this industry has a role to play in supporting drivers so that they, and their passengers and cargo, arrive safely to their destinations.

The North American Fatigue Management Program (NAFMP) recommends enlisting the support of shippers, receivers and brokers to foster a team approach to drivers' hours-of-service compliance and improved alertness, offering an online course to teach them how to achieve this. The NAFMP Module 6 course includes the following shipper and receiver best practices:

Realistic Trip Schedules

Start with better communication among all parties. Set standard and acceptable delivery times in advance when possible. Cut some slack: unplanned delays should be expected. If loading is delayed, delivery will likely be delayed too — perhaps by more than 10 hours. Planning should also maximize the use of interstate and other freeways in setting travel routes.

Reduced Loading and Unloading Delays

All parties should respect appointment times and plan accordingly. Embrace two hours as the expected loading and unloading time. Consider physical upgrades to facilities to make the process more efficient.

Driver-Friendly Queuing Practices

Queues that require drivers to physically wait in line, continuously ready to move without knowing when their turn will come, are demoralizing and waste time. Instead, turn the wait into downtime for drivers. When possible,

assign time slots so drivers may take sleeper-berth periods, nap or just rest rather than waiting in line. Don't disturb drivers who are taking mandatory off-duty or sleeper-berth periods. Allow drivers access to comfort facilities. Set and maintain loading and unloading standards.

Off-Hour Parking Access

Understand the difficulties drivers face in finding places to park and sleep. Consider allowing off-hour parking access to yard areas. This may require upgraded building security.

On July 6, J.J. Keller's Senior Editor of Transport Management Mark Schedler and CVSA Hazardous Materials Specialist Katie Morton joined me to present the CVSA webinar "Supporting Driver Hours-of-Service Compliance, Alertness and Productivity Through a Mutually Beneficial Partnership with Shippers, Receivers and Brokers."

During the webinar, we conducted an informal poll asking motor carriers if they, as recommended by the NAFMP, had incorporated into their contracts the voluntary

guidelines established by the Truckload Carriers Association (TCA) and the National Industrial Transportation League (NITL) on Good Business Relations for Shippers, Receivers, Carriers and Drivers. Very few had.

The following week, TCA and NITL issued a press release titled "TCA, NITL Places Renewed Focus on Voluntary Guide to Business Relations for Shippers, Receivers, Carriers and Drivers to Retain Workforce."

While these guidelines may not be the silver bullet to managing driver fatigue, they do foster the mutual understanding and cooperation required to facilitate driver alertness and hours-of-service compliance. These voluntary guidelines should be incorporated by reference in your carrier-shipper contracts.

Here's a sample of the TCA/NITL guidelines.

Shippers/Receivers Will:

- Collaborate to confirm that transit times meet realistically achieved driver hours-of-service regulations and prevailing speed limits.
- Promptly load/unload trucks that arrive within the scheduled time. Accommodate or reschedule pickups/deliveries when unforeseeable events intervene. Make reasonable effort to be flexible in loading/unloading trucks that arrive early or late or without an appointment.
- Maintain reasonable hours for loading and unloading according to volume of shipments, with appropriate consideration for offering evening and weekend hours. Provide carriers/drivers with 24-hour access to facility contacts to facilitate resolution of loading/unloading issues.
- Treat drivers with courtesy and respect. Provide drivers with access to safe, clean and well-lit restrooms, water and other comfort facilities where available.

» If you have any questions or feedback about managing fatigue or the NAFMP, please contact me at rodolfo.giacoman@cvsa.org.

Carriers Will:

- Quote transit times that can clearly be achieved within driver hours-of-service regulations and prevailing speed limits.
- Communicate in a timely manner to shipping and receiving personnel all significant delays or problems with pickup or delivery specifications prior to failure.
- Comply with all shipper and receiver safety and security protocols and requirements.
- Give clear instructions to drivers on their responsibilities for service and contract requirements expected by shippers and receivers.

Download the complete TCA/NITL guide at www.nitl.org/wp-content/uploads/2019/08/Voluntary-Guide-June-2022-Final-1.pdf.

If you haven't already done so, watch the July 6 webinar at www.nafmp.org/webinars. The NAFMP and all of its courses are available for free at www.nafmp.org. ■

Sleep Disorders Questions



- CPAP and Sleep Apnea
- How does Sleep Apnea affect truck drivers?
- What % of drivers suffer from sleep apnea?
- Is it fair for a Medical Examiner to profile you because you have a fat neck?
- Sleep apnea in our drivers
- What are some challenges and best practices with CPAP by commercial drivers?
- Is 4 hours enough time to have restorative sleep on a CPAP machine.

- Can you list States with drowsy driving laws?
- Are there any case studies about driver fatigue that resulted in a fatal collision in a CMV?
- Does CVSA/FMCSA plan on tracking this data?
- Should carriers allow short haul drivers to be on duty 14 hours a day when they must also commute and interact with family?
- What is our legal right if a driver is taking a class 1 medication that causes drowsiness etc.
- What positive steps is the DOT taking to address this situation by addressing safe truck parking.
- Are there any updates to the sleep apnea criteria?

Any Other Questions?



Thank you!

Next NAFMP Webinar



Exercise – NAFMP Driver Series

Wednesday, Jan. 18, 2023, 1-2 p.m. EST

Professional drivers have very limited opportunities to exercise. Learn why exercise is necessary to maintain drivers' state of alertness, what types of exercise may benefit drivers the most, and how/when to exercise while on the road.

Featured speaker: Dr. Mark Manera, founder and chief executive officer of Supply Chain Fitness.

Please complete anonymous survey on this session at the end of the webinar

The image features a large, white, stylized logo for the Commercial Vehicle Safety Alliance (CVSA) centered over a blue-tinted photograph. The photograph shows the front of a white Peterbilt truck with a 'HEIL' sign on the top of the hood. Two police officers in dark uniforms are standing to the right of the truck, one looking at a clipboard. The background consists of trees and a clear sky. The CVSA logo is composed of the letters 'CVSA' in a bold, sans-serif font, with a registered trademark symbol (®) to the right. The 'C' and 'V' are connected, and the 'S' and 'A' are also connected. The entire image has a monochromatic blue tint.

CVSA®