

Musical Chairs Discussion Strips

Answers for the Instructor

Why is fatigue important to the FMCSA?

The FMCSA is concerned about driver fatigue. In their Large Truck Crash Causation Study (LTCCS), they found that driver fatigue was a factor in 13% of commercial motor vehicle (CMV) crashes. 4% of large truck crashes were due to the driver falling asleep at the wheel.

The FMCSA cites inadequate sleep, extended work hours, strenuous work and non-work activities or a combination of these and other factors as the reasons why CMV drivers experience fatigue. Although Hours of Service (HOS) regulations are intended to reduce driver fatigue by limiting the number of hours you drive and the length of your work day, driving 11 hours and performing other activities like fueling and inspecting your truck, all within in a 14-hour work day, is a strenuous schedule. You may also be called upon to work an irregular schedule that further interferes with your ability to sleep or rest. Having said all of this, ultimately, it's up to you, the driver, to manage your sleep and your life in such a way that you are alert, awake and attentive while driving.

What is fatigue?

Feeling overtired, with low energy and a strong desire to sleep that interferes with normal daily activities.

What are signs of fatigue?

- Decreased attention to the environment
- Reduced performance
- Reduced motivation
- Irritability
- Impaired judgment
- Feelings of drowsiness

How do you feel when you are fatigued?

Answers may vary



What are factors that may impact how you feel fatigue?

Our individual susceptibility to fatigue,

- The amount of sleep we've had recently,
- The time of day,
- The amount of time we've been awake,
- Our use of stimulants and other drugs,
- Our overall health, and
- Our mood.
- Yep, being sad, worried or upset can make us more fatigued.

What is chronic fatigue?

Fatigue can also be acute or chronic. Acute fatigue may be experienced every day and is short-term, meaning you get over it with a nap or a good night's sleep. Even caffeine and rest without sleep can reduce this kind of fatigue.

Chronic fatigue sets in when you don't get enough sleep over a longer period of time than a day or two. It's referred to as sleep deprivation, and it takes several nights of long, sound sleep to get over.

What are signs that you can look for that another driver on the road might be experiencing fatigue?

- Loss of alertness or attention – your eyelids droop and your eyes go in and out of focus
- Yawning
- Wandering thoughts – you might even feel like you're dreaming
- Poor response or reaction time
- Loss of motivation – you don't really care about much of anything at that moment
- Feeling depressed
- Having tunnel vision – all you see is the white line in the middle of the road
- Swaying or jerking "awake"
- Microsleeps – coming to and realizing you don't know where you are or if you've missed your exit
- Having trouble maintaining speed or staying within your lane



When do fatigue related crashes most occur?

Here are the circumstances involved in fatigue-related crashes involving large trucks and CMV drivers:

- Single vehicle road-departures
- Driver is alone and often driving a boring road
- Mostly happen in the hours from 2:00 a.m. to 7:00 a.m.
- Usually serious, sometimes fatal
- Male drivers 30 and younger are most at risk.

Why is a schedule so important?

Here are some things to consider:

- Your body temperature changes and your hormones secrete differently at different times of day and night. Sleep inducing hormones kick in during late evening.
- Circadian rhythms are affected by light and dark making you more sleepy after the sun goes down.
- Circadian rhythms are difficult to change.
- You are impacted by your circadian rhythms even if you get plenty of sleep.
- Peak performance times are mornings after 8 a.m. and evenings.
- Performance is lowest in the early morning hours before sunrise and there's another dip in performance in the early to mid-afternoons, usually after lunch.

When are the best times for sleep in general?

The best times for sleep are when your circadian rhythms set you up for sleep – at night, when it's dark, especially in the early morning hours

Describe your sleeping patterns. Are they good or bad? Why?

Answers may vary.

Do you take vitamins? Did you know that it is important to take your vitamins?

If you eat a healthy diet of fruits and vegetables, you may not need vitamin supplements, but eating healthy on the road has its challenges. Here's a link to a website that talks about various vitamins, their impact on fatigue, how they work in the



body and what foods have them. <https://www.healthline.com/nutrition/best-supplements-for-energy#section3>

What are some solutions you would provide another driver for driver fatigue?

To avoid the negative impacts of fatigue on your driving safety and your health, here are some suggestions:

- Work days and sleep nights whenever possible.
- Work a regular schedule.
- If you change to a different work schedule, try to do so gradually.
- When changing a work schedule, use a forward rotation schedule. This means starting work an hour or two LATER each day, rather than starting earlier.

What happens to your body when you get a good night's rest?

During periods of deep, restful sleep:

- Brain cells grow and make connections.
- Brain chemistry returns to normal balance.
- The central nervous system is beneficially stimulated.
- Mind and body healing are promoted, so you get sick less often and get well quicker.
- The immune system is boosted.
- Risk of serious health problems like heart disease is reduced.
- Stress is reduced and your mood improved.

Good sleep also helps you maintain a healthy body weight, improves memory and makes you more alert.

How much sleep do we need?

Most adults need between 7 and 8 hours of sleep a night. The amount of sleep you need on any given night is affected by when you last slept, the time of day or night when you go to sleep and whether or when you napped. Studies show that driving performance remains high when you get as much as 9 hours of sleep every night for a week. As you get less sleep per night, your driving performance declines with performance getting worse the less sleep you get each night and the longer you are sleep deprived.



What are the keys to sleeping well?

Whether you sleep at home, in a motel or in your truck, here are some ways to ensure you get a good night's sleep.

- Make your room or bunk as dark as possible—shut out all light and even block your clock. Use a sleep mask, if needed.
- Get a comfortable mattress or bed. If this isn't in the cards, consider investing in a mattress topper, gel foam pillow or anything else that increases your sleeping comfort.
- Keep it quiet. Consider using earplugs or a white noise machine to block unpleasant or disturbing sounds.
- Keep your sleeping area on the cooler side and make sure you have enough blankets to keep warm.
- Cut out caffeine and nicotine several hours before bedtime.
- Avoid heavy foods and big meals right before bedtime. Allow 3-4 hours for food to digest before going to sleep.
- Unwind before turning in—read for a while, listen to music or meditate to calm your mind and put the day behind you.

