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Technical Writing

Extended Definition

**Rhetorical Situation:** The negative effects of fatigue are often downplayed. Few realize that lack of sleep can result in the same level of cognitive impairment as alcohol, or that drowsiness results in over 72,000 car accidents annually. Hadron is a fictional software company that produces software that calculates and predicts risk of fatigue in employees. Currently, Hadron has products available to mitigate fatigue risk for the aviation industry and the trucking industry. The trucking industry could greatly benefit from the use of this software to mitigate risk and prevent accidents that would otherwise result in a large amount of property damage and preventable injury or even death. As a representative of Hadron, I will hand out brochures to managers of trucking companies. This brochure will define and explain fatigue, fatigue risk management, and the various fatigue risk management options available. This brochure will also outline tips for how drivers can recognize and mitigate fatigue in themselves, demonstrating Hadron’s commitment to public safety.



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HADRON SOFTWARE

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Generally, fatigue is

caused by a lack of sleep or a lack of

quality sleep.3 You may also feel fatigued when

driving at night, due to your **circadian rhythm,** which dictates when you feel alert and when you feel drowsy.4

Fatigue slows your reaction time, makes it difficult to focus on the road, and impairs judgement – this makes fatigued driving highly dangerous. Driving after 17 hours without sleep is equivalent to driving with a **blood alcohol content** (BAC) of 0.05%, just under the legal limit of 0.08%.5

**A fatigued driver is an impaired driver.**

• Roadway accident fatalities make up 23% of all deaths.5

• 1 in 25 adult drivers report having fallen asleep at the

wheel in the previous 30 days.6

• Drowsy driving was responsible for an estimated

72,000 crashes and 44,000 injuries in 2013.6

• Fatigue is the most common cause in 31% of all fatal

truck driver crashes.7

**What is fatigue?**

Fatigue is more than just drowsiness or tiredness.

Fatigue is a mental state of **impairment** that can seriously affect

driving ability and judgement. You may be fatigued if you

find yourself unable to keep your eyes open, unable to

focus, zoning out, or drifting in and out of your lane.3

Combating Fatigue

**in the Trucking Industry**

Fatigue risk management protects what’s important.

A HUMAN SOLUTION FOR A HUMAN PROBLEM.

**Fatigue risk management software** uses data to predict

when drivers are likely to become fatigued,

preventing impairment before

it even begins.

**STAY SAFE – PREVENT FATIGUE**

Don’t fight nature!

Your natural circadian rhythm makes you tired at night and awake during the day. Avoid driving between the hours of 12 a.m. to 6 a.m..1

Take a nap.

Nap for 10-45 minutes when you’re feeling drowsy or, ideally, just before you begin to feel drowsy.1

Avoid drowsiness-inducing medication.

This includes sleeping pills, allergy medicines, and cold medicines. If you’re unsure, check the label for a drowsiness warning or ask your doctor.1

Know when it’s unsafe to drive.

It’s time to pull over if you’re experiencing difficulty focusing, difficulty keeping your eyes open or your head up, repeated yawning, or drifting out of your lane.9



Fatigue affects many industries, but none moreso than the trucking industry. Not only are truck drivers often required to drive long distances at night, fighting their natural circadian rhythm, they frequently have to do so alone. This means that drivers must rely only on themselves to notice symptoms of fatigue, which is made especially difficult by the impaired judgement that goes hand-in-hand with fatigue.

**Trucking managers need a method of fatigue risk management to protect their drivers.**

SEE HOW FATIGUE METER™ CAN PROTECT YOUR FLEET.

Use real, measureable data to manage your fleet and mitigate fatigue risk. Email info@hadron.com to request a demo.

HOURS-OF-SERVICE (HoS) REGULATIONS

These regulations, set by the Federal Motor Carrier Safety Administration, are intended to keep truck drivers and their fellow motorists safe.8 However, they are not enough to fully prevent fatigue: HoS rules can only mandate the amount of time drivers spend off-duty before driving. They cannot address the root cause of fatigue, lack of quality sleep.2

EYE-TRACKING TECHNOLOGY

This technology, available from several different companies, estimates the driver’s drowsiness using a camera that monitors the brightness of the reflection of the surface of the driver’s eyeball.3 This technology can roughly determine if the driver is currently fatigued, but it is unable to predict when the driver may become fatigued.

HADRON® TRUCKING FATIGUE METER™

Fatigue Meter™ is fatigue risk management software that uses continuous data sampling to monitor and predict fatigue risk levels across an entire fleet of trucks. When risk levels increase above a set threshold, managers are immediately notified, allowing for an immediate response.10

Find the fatigue risk management method that best fits your needs.

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