

Transportation Safety

Training ADVISOR

J. J. Keller®  COMPLIANCE LIBRARY™

October 2022

Fuel efficiency

Train drivers to increase their miles per gallon

The driver's role in
conserving fuel

NHTSA estimates an increase
in traffic fatalities

MRB issues guidance
regarding CPAP recall

Information and resources to help your drivers operate safely



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In This Issue

Training Blueprint3

Make sure drivers know their role in conserving fuel

Training Handout4

Reduce idling time to improve fuel efficiency

Test Your Knowledge5

Check your understanding of fuel efficiency

MRB issues guidance regarding CPAP recall.6

Drivers and CMEs have options for treating sleep apnea

NHTSA estimates an increase in traffic fatalities.6

Fatality rates varied widely by state

Expert Help7

Learn what our experts have to say about ELDT completion and DOT technician qualifications



MESSAGE FROM THE EDITOR

Training drivers with fuel efficiency in mind

If nothing else, the recent surge in gas prices serves as a reminder for motor carriers and drivers to do all that they can to keep fuel consumption low. Not only will using less fuel benefit your carrier's bottom line and minimize your fleet's impact on the environment, but fuel-efficient driving techniques are also safe driving techniques. By focusing on the driver behaviors covered in this month's newsletter, you can improve driver safety and fuel efficiency.

In addition to training your drivers to follow the practices described in this newsletter, there are additional steps carriers can take to maximize fuel efficiency. Some of the ways that companies can lower fuel costs include:

- Installing idle-optimization systems, aerodynamic equipment, and speed-reducing governors.
- Purchasing low-resistance tires where practical and installing tire pressure monitoring systems and auto-inflation equipment.
- Installing in-cab heaters or engine pre-heaters and APUs for idle reduction and auxiliary power.
- Using fuel- and route-optimization software.
- Planning routes in advance and consolidating loads with multiple stops, reducing deadhead and empty miles by laying over drivers, if practical.
- Locking down fuel caps and leaving fuel tanks empty when trucks are not being utilized.
- Offering incentives to drivers who achieve fuel-efficiency goals.



A word of warning regarding monitoring drivers' fuel consumption: A driver's miles per gallon (MPG) may be the result of conditions outside of the driver's control. For instance, distance traveled, weather, engine size and design, road surface, and traffic can all affect the final number. Each analysis needs to take extenuating circumstances into account.

We hope that the suggestions we provide this month help you train your drivers to keep fuel efficiency — and safety — in mind while they're on the road. ♦



Jen Loomis

Jen Loomis joined J. J. Keller in 2021 on the Content & Consulting Services Transportation Team. As an Associate Editor, Jen edits a variety of products including the *Transportation Safety Training Advisor*, *Driver Report*, and *Driver Training Awareness Program* newsletters. She also provides regulatory support in the area of DOT drug and alcohol testing.



The driver's role in conserving fuel

Any fuel economy measures that are specified will be quickly wiped out by poor driving practices. Your role as a driver in any fuel economy effort is an extremely important one. Personal efforts at high-efficiency driving can make a real difference.



There are some driving and handling techniques that should be part of your basic skills “package.” These techniques have nothing to do with a specific piece of equipment, but they do have to do with common sense, good judgment, and intelligent decision making. Driving

with fuel efficiency in mind all the time can improve your miles per gallon as much as 10 percent.

TIP: Make sure drivers are aware of your company's specific policies regarding fuel efficiency and idling.

Ways you can conserve fuel

You can control several of the factors that determine how economically fuel is used. Let's look at some specifics:

- **Preventive maintenance** — A solid preventive maintenance program helps a vehicle use fuel efficiently. Small steps on your part, such as making sure tires are properly inflated and the engine is tuned on a regular basis, can make a real difference.
- **Trip planning** — Besides saving time, good trip planning can save fuel. When selecting a route in a specific situation, consider fuel efficiency. Select a route with fewer stops and starts. Stop-and-go traffic or driving in small towns uses more fuel than driving a few miles out of the way to reach a controlled-access highway.
- **Smooth acceleration** — After starting, select a gear that allows you to roll without slipping the clutch. Accelerate smoothly; uneven action wastes fuel.
- **Steady speed** — Maintain steady speed. Braking unnecessarily causes a loss of momentum. The only

way to regain it is by accelerating, which means burning more fuel.

- **Speed limits** — Tests have clearly proven that every mile per hour of additional speed over 55 mph costs an additional two percent or more in fuel consumption. Faster speed also increases air resistance, causing the engine to work harder at 65 mph than it would traveling at 55 mph.

TIP: If your company has any policies regarding maximum speed, or if you equip your vehicles with speed limiters, make sure your drivers are aware of the policies and understand the purpose behind the imposed limits.

- **Progressive shifting** — This practice reduces equipment wear, cuts down on noise, and saves fuel. By using progressive shifting, you only accelerate enough to bring RPM up to the point where you can shift. Shifting before running the engine up to the governor saves fuel by not relying on the governor. ♦

TIP: Progressive shifting works best for drivers who make stops and shift gears frequently. The advantage is less for over-the-road drivers. If you employ over-the-road drivers, emphasize other fuel-saving techniques, such as idle reduction, that will have a bigger impact on your company's fuel costs.





TRAINING HANDOUT — FUEL EFFICIENCY

Use fuel efficiently

Up to a gallon and a half of fuel is burned each hour an engine idles. Keep these tips in mind to reduce wasted fuel:

- **Startup** — In most cases you don't need to idle for a long time when starting your day. Starting out slowly and smoothly allows lubricants to get circulating and is sufficient with newer tractors. An engine should idle for no more than five minutes. This should be enough time to get it warmed up properly.



- **Cool down** — After a hard run, cool down time should be limited to two or three minutes of low-RPM running under low engine-load conditions before turning off the engine. If you have traveled at a slow speed for at least 15 minutes (for example, on city streets), that time should replace cool down time.



- **Loading and unloading** — Leaving an engine idling while loading and unloading adds significantly to fuel costs. It takes less fuel to shut off and restart an engine than it does to leave it idling. ♦





TEST YOUR KNOWLEDGE — FUEL EFFICIENCY

Directions: Read each statement or question carefully and mark the best answer.

1. How much fuel does it take to idle for an hour?
 - A. More than five gallons
 - B. Between three and a half and five gallons
 - C. Up to a gallon and a half
 - D. Less than one gallon

2. It's important to let an engine warm up for at least 15 minutes before driving.
 - A. True
 - B. False

3. An engine should be allowed to cool down for two to three minutes before being turned off.
 - A. True
 - B. False

4. Traveling at a slow speed for at least 15 minutes can replace cool down time.
 - A. True
 - B. False

5. It takes less fuel to leave an engine idling than to stop and restart it.
 - A. True
 - B. False

NAME: _____ DATE: _____



MRB issues guidance for drivers and MEs regarding CPAP recall

The Medical Review Board (MRB) has issued recommendations to certified medical examiners (CMEs) and drivers of commercial motor vehicles (CMVs) for responding to a recall of Phillips or other recalled CPAP machines.



Drivers with untreated moderate to severe sleep apnea, defined as having an Apnea-Hypopnea index (AHI) of 15 or greater, are not medically qualified to drive CMVs per current advisory guidance. Drivers who rely on a CPAP machine will need to seek out another treatment option if their CPAP machine was recalled.

The MRB suggests drivers consult with their physicians to see if they are a candidate for oral appliance therapy (OAT), positional therapy, tracheostomy, or jaw surgery.

For drivers who have a recalled CPAP device, cannot use the device in the interim, and are a candidate for switching to OAT:

- A trial device can be ordered and fitted at home. A more permanent device may be obtained within two to three weeks. A sleep study would be performed after about a week of adjustment to the device.
- The appliance must be worn a minimum of four to five hours a night at least five times per week.
- The OAT should include a way to monitor compliance for reporting to the treating physician.

CMEs who examine drivers with sleep apnea and are good candidates for treatment with OAT per a sleep specialist:

- May give these drivers a 90-day medical certification to provide the drivers time to complete a sleep study and start treatment. This guidance does not apply to drivers with previously diagnosed sleep apnea.
- Also, a 90-day card is only an option if the driver does not have symptoms and is not considered high risk. Extensions are not permitted.

OAT is accepted for recertification of drivers only until CPAP machines are again available.

Affected drivers, carriers, and MEs should refer to MRB's report on the FMCSA website for more specific information. ♦

NHTSA estimate shows a seven percent increase in traffic fatalities

The National Highway Traffic Safety Administration (NHTSA) recently released its estimated traffic fatalities for January through March of this year. The news isn't good: the early estimate shows 9,560 deaths, a seven percent increase over 2021 fatalities for the same period. These deaths mark the largest number of first-quarter fatalities in 20 years.

Although the average number of fatalities increased nationwide, several states did show improvements in their fatality rates. The states that showed the biggest drop in fatalities are:

- Rhode Island (-50%)
- North Dakota (-41.7%)
- Montana (-32.7%)
- Arizona (-31.4%)
- South Dakota (-25.0%)
- Wyoming (-25.0%)



The states that saw the biggest increases in quarter one fatalities include:

- Delaware (163.2%)
- Connecticut (73.6%)
- Virginia (71.8%)
- Vermont (66.7%)
- District of Columbia (62.5%)
- Hawaii (58.3%)



The average number of fatalities per 100 million vehicle miles traveled for quarter one jumped from 1.25 to 1.27. ♦

Expert Help: Questions of the Month

Question: Can drivers who have a CDL study the hazardous materials endorsement curriculum independently and test with the DMV to receive the endorsement?

Answer: All entry-level driver training requires training to be administered by a school or entity listed on the Training Provider Registry (TPR). After the course, the training provider is responsible for submitting students' scores to the TPR. The state licensing agency won't allow the individual to take the theory test until the driver has successfully completed the hazmat theory course and the instructor has entered the driver's score into the TPR.

Question: Are there specific qualifications that an individual needs to have in order to legally perform DOT repairs?

Answer: The only FMCSA requirements are for those who perform annual inspections and brake inspections or repair. Any mechanic who works on brakes and is employed by a motor carrier must be qualified per §396.25. There are no other DOT requirements. Technicians who service or repair motor vehicle air conditioners are required to have specific training under U.S. Environmental Protection Agency (EPA) rules. The training (and proof of the training) must be provided through an EPA-approved program. SAE, ASE, and vehicle and component manufacturers typically provide this training. Finally, states may have their own licensing or qualification/certification requirements for becoming a mechanic. ♦



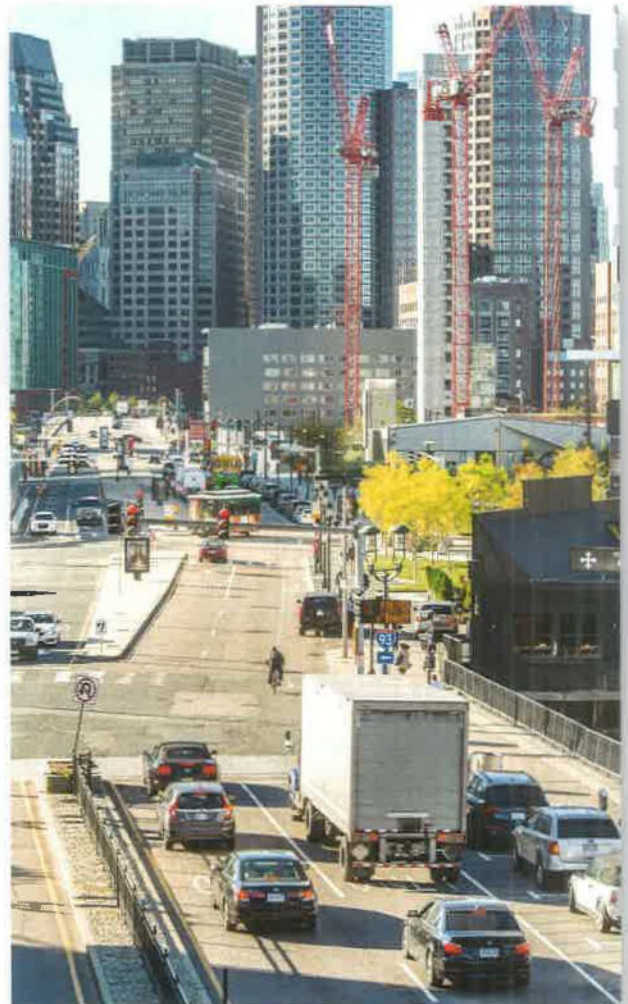
Got a question?

Your subscription includes online access to our subject matter experts! Visit the Compliance Library at JJKellerLibrary.com and click on  Expert Help to take advantage of this great feature.



Next Month's Topic: City Driving

The importance of defensive driving is magnified when operating in an urban area. City driving requires a driver's undivided attention. Heavy traffic, narrow streets, and obstructed views are just some of the challenges the professional driver faces when operating in the city. ♦



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ISSN 2688-1616

GST R123-317687

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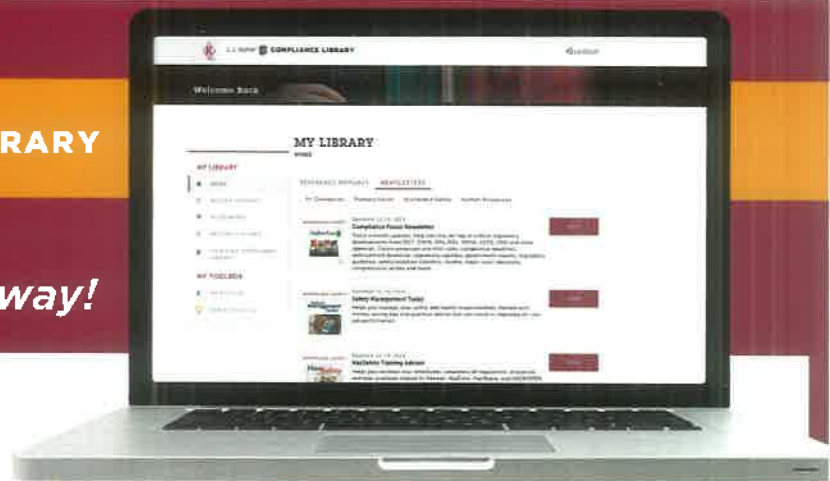
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