GUARDIAN A Publication of the Commercial Vehicle Safety Alliance

Volume 31, Issue 2 2nd Quarter 2024

NAVIGATING THE PUWER OF LITHIUM



Buying Into
Fatigue Management
Solutions

Fleet Owner Charged
After Threatening Commercial
Motor Vehicle Safety Officer
Via Voicemail

Essential Steps for Post-Crash Protocol for Drivers and Motor Carriers GUARDIAN Second Quarter Volume 31, Issue 2 www.cvsa.org

GUARDIAN

IN THIS ISSUE

| Forensics Students Participate in Crash Reconstruction Course | 1 1001010110 0 181000080 | |
|---|--|----------------|
| Regional News Forensics Students Participate in Crash Reconstruction Course | Executive Director's Message | |
| Forensics Students Participate in Crash Reconstruction Course | | |
| Fleet Owner Charged After Threatening Commercial Motor Vehicle Safety Officer Via Voicemail Garland Police Department Partners with FMCSA in the Field Texas Local Members Assist with CVSA Post-Crash Inspection Training North Carolina State Highway Patrol Commercial Vehicle Enforcement Section Updates Florida Highway Patrol Updates It. Erica Elias Named First Female Commander of the Gilroy Commercial Vehicle Enforcement Facility Arizona Local Members Conduct Joint Inspections Using SafeSpect Halton Police Department Participates in Mohawk CMV Safety Blitz 1 Cover Story Navigating the Power of Lithium: Safeguarding Commercial Motor Vehicle Fleets, Enforcement and the Public 1 CVSA Committee and Program News Buying Into Fatigue Management Solutions 2 Meet the Candidates for CVSA Secretary 2 2024 CVSA Workshop Yearbook 3 Inspector's Corner Life's Challenges: Obstacles or Opportunities 3 Government News The Legislative and Regulatory Rundown 3 FIBI Liaison Information Report: Criminals Using Social Engineering to Conduct Sophisticated Cargo Theft Across the United States 3 From the Driver's Seat The Warmer the Weather, the More Work Zones 3 Knowledge Matters Educate Yourself and Act on Driver Fatigue Impairment 3 Essential Steps for Post-Crash Protocol for Drivers and Motor Carriers 3 Industry Perspectives U.S. DOT Oral Fluid Testing: Keeping Our Highways Safe | Regional News | |
| Safety Officer Via Voicemail Garland Police Department Partners with FMCSA in the Field | | |
| Garland Police Department Partners with FMCSA in the Field | Fleet Owner Charged After Threatening Commercial Motor Vehi | cle |
| Texas Local Members Assist with CVSA Post-Crash Inspection Training North Carolina State Highway Patrol Commercial Vehicle Enforcement Section Updates | Safety Officer Via Voicemail | |
| North Carolina State Highway Patrol Commercial Vehicle Enforcement Section Updates | Garland Police Department Partners with FMCSA in the Field | |
| Enforcement Section Updates | • | ning |
| Elorida Highway Patrol Updates | | |
| Lt. Erica Elias Named First Female Commander of the Gilroy Commercial Vehicle Enforcement Facility | Enforcement Section Updates | |
| Commercial Vehicle Enforcement Facility | Florida Highway Patrol Updates | |
| Arizona Local Members Conduct Joint Inspections Using SafeSpect | Lt. Erica Elias Named First Female Commander of the Gilroy | |
| Updates from Mexico | | |
| Cover Story Navigating the Power of Lithium: Safeguarding Commercial Motor Vehicle Fleets, Enforcement and the Public | Arizona Local Members Conduct Joint Inspections Using SafeSpec | t ⁻ |
| Cover Story Navigating the Power of Lithium: Safeguarding Commercial Motor Vehicle Fleets, Enforcement and the Public | | |
| Navigating the Power of Lithium: Safeguarding Commercial Motor Vehicle Fleets, Enforcement and the Public | Halton Police Department Participates in Mohawk CMV Safety Blit | Z |
| Navigating the Power of Lithium: Safeguarding Commercial Motor Vehicle Fleets, Enforcement and the Public | Comments of the comments of th | |
| CVSA Committee and Program News Buying Into Fatigue Management Solutions | • | |
| CVSA Committee and Program News Buying Into Fatigue Management Solutions | | |
| Buying Into Fatigue Management Solutions | verificie i feets, Efforcement and the rabile | |
| Buying Into Fatigue Management Solutions | CVSA Committee and Program News | |
| Meet the Candidates for CVSA Secretary | <u> </u> | |
| Inspector's Corner Life's Challenges: Obstacles or Opportunities | | |
| Inspector's Corner Life's Challenges: Obstacles or Opportunities | | |
| Government News The Legislative and Regulatory Rundown | ' | _ |
| Government News The Legislative and Regulatory Rundown | Inspector's Corner | |
| The Legislative and Regulatory Rundown | Life's Challenges: Obstacles or Opportunities | 3 |
| The Legislative and Regulatory Rundown | Covernment News | |
| FBI Liaison Information Report: Criminals Using Social Engineering to Conduct Sophisticated Cargo Theft Across the United States | | |
| to Conduct Sophisticated Cargo Theft Across the United States | 0 , | - |
| From the Driver's Seat The Warmer the Weather, the More Work Zones | , | _ |
| The Warmer the Weather, the More Work Zones | to conduct sophisticated cargo ment across the officed states | |
| Knowledge Matters Educate Yourself and Act on Driver Fatigue Impairment Essential Steps for Post-Crash Protocol for Drivers and Motor Carriers Industry Perspectives U.S. DOT Oral Fluid Testing: Keeping Our Highways Safe | From the Driver's Seat | |
| Educate Yourself and Act on Driver Fatigue Impairment | The Warmer the Weather, the More Work Zones | |
| Educate Yourself and Act on Driver Fatigue Impairment | | |
| Essential Steps for Post-Crash Protocol for Drivers and Motor Carriers | | |
| Industry Perspectives U.S. DOT Oral Fluid Testing: Keeping Our Highways Safe | Knowledge Matters | |
| U.S. DOT Oral Fluid Testing: Keeping Our Highways Safe | Knowledge Matters Educate Yourself and Act on Driver Fatigue Impairment | - |
| U.S. DOT Oral Fluid Testing: Keeping Our Highways Safe | Knowledge Matters Educate Yourself and Act on Driver Fatigue Impairment | - |
| | Knowledge Matters Educate Yourself and Act on Driver Fatigue Impairment Essential Steps for Post-Crash Protocol for Drivers and Motor Ca | - |
| Good Answers Take Time | Knowledge Matters Educate Yourself and Act on Driver Fatigue Impairment Essential Steps for Post-Crash Protocol for Drivers and Motor Ca Industry Perspectives | rriers |
| Responsibilities | Knowledge Matters Educate Yourself and Act on Driver Fatigue Impairment Essential Steps for Post-Crash Protocol for Drivers and Motor Ca Industry Perspectives U.S. DOT Oral Fluid Testing: Keeping Our Highways Safe | rriers3 |
| Why Regulations? | Knowledge Matters Educate Yourself and Act on Driver Fatigue Impairment Essential Steps for Post-Crash Protocol for Drivers and Motor Ca Industry Perspectives U.S. DOT Oral Fluid Testing: Keeping Our Highways Safe | rriers3 |

GUARDIAN

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Commercial Vehicle Safety Alliance







PRESIDENT'S MESSAGE

Ensuring the Health of the CMV Enforcement Training and Support Grant/Cooperative Agreement

By Col. Russ Christoferson, Bureau Chief, Montana Department of Transportation; CVSA President

Developing and delivering high-quality roadside inspector training is essential to conducting commercial motor vehicle (CMV) safety activities across all states and local jurisdictions. In Guardian Q1 2023, CVSA Executive Director Collin Mooney wrote an article about the new Commercial Motor Vehicle Enforcement Training and Support grant/cooperative agreement from the Federal Motor Carrier Safety Administration (FMCSA) that was awarded to CVSA in January 2023. As the sole recipient of the \$5 million grant, the Alliance assumed the responsibility for the roadside inspector training curriculum. CVSA is now more than one year into providing these services, and it has been a very successful transition in my eyes.

One of the tasks CVSA completed during this timeframe was updating all the training materials inherited from the FMCSA National Training Center, To accomplish this, CVSA staff utilized currently certified instructors as subject matter experts. The members are the owners of the course materials and CVSA staff works at the behest of the membership; so having staff work hand-in-hand with instructors is crucial to maintaining high-quality training materials.

To effectively roll out the new training material, a new event was created: the CVSA Instructor In-Service.

This new, in-person event was held in Boston, Massachusetts, this March to introduce the updated training and course materials to currently certified state instructors. It was held in conjunction with the CVSA/FMCSA Data

Quality and Systems Training, which historically has not been on a set schedule. Moving forward, the plan is to co-locate these two training events and hold them annually, each spring. The Instructor In-Service training will bring together all the CVSA members who are instructors, allowing them to keep current on the course materials and network with other instructors from across North America.

I was fortunate enough to attend the inaugural CVSA Instructor In-Service along with the CVSA/FMCSA Data Quality and Systems Training. As CVSA president, I spoke at the general session and was able to attend the different breakout sessions.

When observing the presentation of new training material to the instructors, I saw firsthand all the hard work that came to fruition. In speaking with many of the officers I know from my time as an instructor, they said the event was a success, and I received very positive feedback.

CVSA cannot sit idle and still deliver highquality training to the enforcement community, so keeping the materials up to date will be an ongoing process. To assist with this, the CVSA Training Committee is working with the leadership of the Audits and Investigations. Driver-Traffic Enforcement, Hazardous Materials. Passenger Carrier and Vehicle committees to form ad-hoc committees consisting of instructors from the various courses. The ad-hoc committees will review all the course revision submissions from instructors with their requested changes.

To learn more about or to be a part of this process, consider joining the Training Committee. You can do that through the CVSA member portal at www.cvsa.org/ memberportal.

Every member of the Alliance has a vested interest in ensuring inspectors receive quality training. As we move into the future, the Alliance will continue to apply each year for the FMCSA CMV Enforcement Training and Support Grant. I am confident that CVSA will continue to make every effort possible and use every resource available to make certain the training courses and materials are preserved and enhanced by the Alliance and its membership, which is exactly what we have worked toward for many years.

I urge anyone who has the desire and ability to contribute to the continuing success of the inspector training curriculum to actively get involved with the various CVSA technical committees, which will in turn safeguard the program for years to come.

To learn more about and view the full list of CVSA's committees, visit www.cvsa.org/ committees.

>> "To be idle is a short road to death. To be diligent is a way of life. Foolish people are idle; wise people are diligent." - Buddha



Attendees of both trainings gather for lunch and share stories and ideas.



EXECUTIVE DIRECTOR'S MESSAGE

The Importance of Research and Data to Reduce CMV Crashes

By Collin B. Mooney, MPA, CAE, Executive Director, Commercial Vehicle Safety Alliance

The Federal Motor Carrier Safety Administration's (FMCSA) Large Truck Crash Causal Factors Study (LTCCFS) is an important source for the type of research and data that play crucial roles in reducing commercial motor vehicle (CMV) crashes. The LTCCFS is a research effort investigating the causes and contributing factors of crashes involving large trucks within the U.S.

The study involves in-depth investigations of a representative sample of crashes involving large trucks, collecting detailed data on factors, such as driver behavior, vehicle conditions, road and weather conditions, and other relevant variables. By analyzing this data, researchers aim to identify common patterns and factors contributing to large truck crashes, with the ultimate goal of informing safety initiatives, regulations and interventions to reduce the frequency and severity of such crashes.

The LTCCFS provides valuable insights into the complexities of large truck crashes and guides efforts to improve CMV safety through evidence-based policies, targeted interventions and technological advancements. Here are several reasons why the LTCCES is vital:

More Effective Prevention Strategies

Research helps to identify the root causes of CMV crashes. By analyzing data from past incidents, researchers can pinpoint common factors, such as driver fatigue, inadequate training, vehicle maintenance issues or external factors, like the roadway environment, design, conditions and weather. Understanding these causes is essential for developing effective prevention strategies.

Targeted Interventions

Crash data allows policymakers and safety agencies to target interventions where they are most needed. For example, if data analysis reveals a high incidence of CMV crashes on a particular stretch of road, authorities can focus resources on improving safety measures in that area, such as adding signage, improving lighting or redesigning intersections.



Improved Regulatory Guidance

The study can inform the development of regulations and guidelines aimed at improving CMV safety. Insights gained from the research help policymakers establish standards for driver training, hours-of-service regulations, vehicle maintenance requirements and other safety measures designed to mitigate crash risks.

Innovative Technology Development

Research drives the development of innovative technologies designed to enhance CMV safety. For example, studies on crash avoidance systems or fatigue detection technologies contribute to the refinement and adoption of these systems in CMVs, potentially preventing crashes before they occur.

Training and Education

Data on common causes of CMV crashes inform the development of training programs for drivers and fleet operators. By understanding the factors contributing to crashes, training programs can focus on teaching defensive driving techniques, emphasizing the importance of vehicle maintenance and raising awareness of potential hazards on the road.

Evaluation of Effectiveness

Research allows for evaluating the effectiveness of interventions and policies over time. By continuously monitoring crash data and assessing the impact of implemented measures, policymakers can make informed decisions about adjusting strategies or allocating resources to further improve CMV safety.

International Collaboration

Sharing research and data facilitates collaboration between stakeholders, including government agencies, industry partners, research institutions and international organizations. This collaboration allows for the exchange of best practices, data standards and research findings, leading to more comprehensive approaches to reducing CMV crashes globally.

Research and data, like the LTCCFS, are essential tools in the ongoing efforts to reduce CMV crashes. They provide the foundation for evidence-based policies, targeted interventions, technological advancements and ongoing evaluation, ultimately contributing to safer roads for all users.

Forensics Students Participate in Crash Reconstruction Course

By Jonathan Nicastro, Director, Motor Carrier Compliance Program, New York State Department of **Transportation**

I recently taught a course to my daughter, Kate, and her classmates, who are students in a forensics course at Our Lady of Mercy Academy in Syosset, New York. The course gave the students a taste of crash reconstruction. I concentrated the classroom lecture on identifying and recognizing the various types of skid marks and applying a formula to compute vehicle speeds.

Additionally, I delivered a teen driving safety program by utilizing materials CVSA provides within the Operation Safe Driver program. I also ran a field exercise that allowed the students to conduct an investigation, apply the principles they learned in their classroom and compute the speed of a vehicle involved in a crash.

It was a great experience to be able to teach my daughter and her friends. The students were laser-focused and interested in the topics, and they really had fun with the field exercise. I was especially proud knowing that my daughter will be joining her sister in her college years as a midshipman at the United States Naval Academy in Annapolis, Maryland.



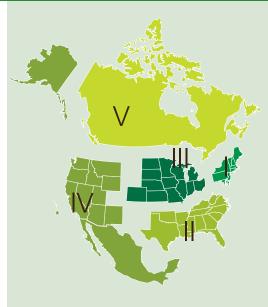
Students complete the field exercise by measuring skid marks and determining the coefficient of friction on the roadway.



Our Lady of Mercy Academy in Syosset, New York.



Jonathan and Kate Nicastro and forensics students.



REGIONAL MAP

Region I

Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Puerto Rico, Rhode Island, U.S. Virgin Islands and Vermont

Region II

Alabama, American Samoa, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia

Region III

Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Northern Mariana Islands, Ohio, South Dakota and Wisconsin

Region IV

Alaska, Arizona, California, Guam, Hawaii, Idaho, Mexico, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming

Region V

Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Quebec, Saskatchewan and Yukon

Fleet Owner Charged After Threatening Commercial Motor Vehicle Safety Officer Via Voicemail

By Lt. Abraham Rosario, Commercial Vehicle Safety Division, Connecticut Department of Motor Vehicles

I am a member of the Connecticut Department of Motor Vehicles (DMV) Commercial Vehicle Safety Division (CVSD). In February, I received a threat via agency office voicemail from the owner of several trucking companies. The owner, who we'll call John Doe, owns three trucking companies based out of New York which typically haul large amounts of dirt and construction materials.

In 2023 and early 2024, all three companies also had large trucks operating in Connecticut. During this time period, several DMV/CVSD and Connecticut State Police inspectors stopped a number of John Doe's trucks for weight and safety inspections. Most of the inspections revealed egregious driver/vehicle violations and excessive weight violations. The following are examples of some of the most critical violations found on roadside inspections of the companies' vehicles in Connecticut in 2023 and 2024:

- ☑ Jan. 26, 2024 Inspection: Driver operating without a commercial driver's license (CDL). Vehicle operated without proper registration (no International Registration Plan (IRP) number). Vehicle over gross weight by 13,400 pounds, overweight on drive axles by 19,750 pounds, overweight on steering axle by 4,060 pounds. Excessive weight exceeded tire load weight ratings on rearmost axle.
- Dec. 15, 2023 Inspection: Vehicle over gross weight by 13,800 pounds, overweight on drive axles by 10,200 pounds. Two out of six brakes defective.
- Dec. 9, 2023 Inspection: Driver/owner, John Doe, operating without a CDL and not medically qualified. John Doe failed to carry a driver's license and provided an erroneous name and date of birth. Vehicle over gross weight by 18,750 pounds, overweight on drive axles by 14,750 pounds, overweight on steering axle by 2,660 pounds.
- Nov. 30, 2023 Inspection via Traffic **Enforcement:** Driver exited interstate to bypass open weigh station. Vehicle over gross weight by 13,060 pounds, overweight on drive axles by 10,440 pounds.
- Nov. 1, 2023 Inspection: Three out of six brakes defective.
- 🛛 Oct. 26, 2023 Inspection via Traffic **Enforcement:** Unlawful parking on limited access highway.
- Sept. 27, 2023 Accident/Inspection: Driver/owner, John Doe, operating without a CDL and not medically qualified. Five out of eight brakes defective.

- ☑ Aug. 19, 2023 Inspection: Driver operating without a CDL and prohibited per Drug and Alcohol Clearinghouse. Vehicle over gross weight by 7,580 pounds, overweight on drive axles by 10,640 pounds.
- ☑ Aug. 18, 2023 Inspection: Driver operating without a CDL. Vehicle over gross weight by 27.460 pounds, overweight on drive axles by 13,880 pounds. Critical brake failure warning violation. New York IRP suspended.
- ☑ Aug. 8, 2023 Inspection: Driver operating without a CDL. Vehicle operated without proper registration (no IRP).
- 🛛 Aug. 8, 2023 Inspection via Traffic **Enforcement:** Driver failed to enter open weigh station. Vehicle over gross weight by 32,380 pounds, overweight on group axles by 10,940 pounds. Critical brake failure warning violation and defective brake air hose.
- ☑ July 25, 2023 Inspection via Traffic **Enforcement:** Driver exited interstate to bypass open weigh station. Vehicle over gross weight by 32,660 pounds, overweight on drive axles by 27,00 pounds, overweight on steering axle by 4,720 pounds. Broken major suspension component.
- ☑ June 19, 2023 Inspection via Traffic **Enforcement Assisted by Local Police Department:** Driver failed to enter open weigh station. Driver operating without a CDL. Vehicle over gross weight by 15,220 pounds, overweight on drive axles by 13,020 pounds, overweight on steering axle by 1,260 pounds. Two out of eight brakes defective.

All three companies were collectively issued infraction tickets with a potential fine of more than \$85,000. Several of the trucks were towed from the scene. On the inspection dated Dec. 9, 2023, John Doe was arrested and charged with a misdemeanor for operating without a CDL when one is required. He was released on a promise to appear.

Past inspections show that the New York State Police have conducted several inspections on some of the vehicles, which have resulted in similar outcomes and enforcement.

On Feb. 1, around 10:02 a.m., I received a voicemail message in Spanish from owner John Doe. He stated in the message that he was tired of Connecticut inspectors "picking on him," he was going to "get a gun," and when he lost his business, anyone responsible was "going to pay." Ofc. Ramos of the CVSD's Western District Truck Squad was assigned the case. With the assistance of Ofc. Miller, who is assigned to the CVSD's Investigations Unit and has nearly 30 years of law enforcement experience, proper documentation was gathered, and solid probable cause was established

On Feb. 8, a Connecticut Judicial Court successfully completed and signed an arrest warrant application with bail set at \$100,000. On Feb. 22, John Doe was arrested without incident. He was charged with one count of threatening in the second degree and one count of harassment in the second degree. John Doe was also issued a no-contact order with any Connecticut DMV office unless the visit is legitimately business related.

I would like to share what it was like to hear someone make a threat that could possibly harm a law enforcement officer. At first, I was in disbelief. Of course, threats happen all the time, and they always need to be taken seriously, no matter how bad the threat is. However, when a threat is made over a voicemail message, the person making the threat is identified and the threat is very clear, this makes it more real.

This person had been calling our office on a regular basis, complaining about the inspectors who inspected his trucks. He expressed that he was tired of being targeted on several of the calls. Knowing this, I knew that he was serious. I took immediate action by alerting my staff and state police. An officer safety message was sent out to ensure that other jurisdictions were made aware. I could not help but think about the safety of the men and women who are out protecting the public. I asked myself, why would an officer have to worry about their lives when all they are doing is their job?

Unfortunately, this is what an officer has to go through daily when they are out protecting the public and saving lives. On a brighter note, the quick response and support I received from all who were aware of the threat was overwhelming. As a lieutenant, I thank every single member of the law enforcement community for going out and doing a job that many are afraid to do. I am very grateful to be part of this amazing community.

Garland Police Department Partners with FMCSA in the Field

By Alexis Crockett, Garland (Texas) Police Department

Garland (Texas) Police Department commercial motor vehicle expert Ofc. Alexis Crockett, along with officers from the Richardson (Texas) Police Department and members of the Federal Motor Carrier Safety Administration (FMCSA), partnered in the field in February to inspect heavy-duty trucks and semi-trucks on Texas roadways.

They cited drivers for safety and license violations and took four trucks out of service for major violations. The safety of the community and roadways are top priorities, and we can accomplish that mission by working together.



Ofc. Alexis Crockett, Garland (Texas) Police Department.



Deana Marion, FMCSA; Hailey Hicks, FMCSA; Ofc. Alexis Crockett, Garland (Texas) Police Department.





Deana Marion, FMCSA; Hailey Hicks, FMCSA; Ofc. Richelle Esquivel, Richardson (Texas) Police Department; Ofc. David Chapman, Richardson (Texas) Police Department; Ofc. Alexis Crockett, Garland (Texas) Police Department.

Texas Local Members Assist with CVSA Post-Crash Inspection Training

By Kevin Andrews, Traffic Enforcement Specialist, Commercial Vehicle Safety Alliance

Two CVSA Local Members, Ofc. Derek Malena of the Allen (Texas) Police Department and Ofc. Thomas Mrozinski of the Frisco (Texas) Police Department, assisted in teaching a CVSA Post-Crash Inspection Training Course, held Feb. 26 through March 1 in Allen, Texas. During this training, commercial motor vehicle (CMV) roadside inspectors learned how to conduct a complete forensic examination of CMVs involved in a crash, identify causal factors that contributed to the crash, and assist reconstructionists and prosecutors more thoroughly in criminal cases.

Twenty-eight students from 15 different Texas agencies attended the Post-Crash Inspection Training: Frisco Police, Irving Police, Alvarado Police, Cedar Hill Police, Prosper Police, Dallas Police, Fort Worth Police, Flower Mound Police, Grand Prairie Police, Plano Police, Richardson Police, Wylie Police, Dallas County Sheriff's Department and Texas Department of Public Safety.

Visit www.cvsa.org/training-type/post-crash for more information about CVSA Post-Crash Inspection Training. ■



























North Carolina State Highway Patrol Commercial Vehicle Enforcement Section Updates

By Monica Greiss, Commercial Vehicle Enforcement Section, North Carolina State Highway Patrol, North Carolina Department of Public Safety

United Motorcoach Association Expo

The 40th annual United Motorcoach Association (UMA) Expo took place Feb. 4-7 in Raleigh, North Carolina. This event encourages networking and the education of industry colleagues. The UMA Driver Competition also took place during the expo. North Carolina State Highway Patrol (NCSHP) Commercial Vehicle Enforcement (CVE) members from Troop C were invited to judge the UMA Driver Competition, which was held in Wendell, North Carolina.

Tpr. Brandon S. Johnson, Sgt. Joe D. Berrong II, and Tpr. Christopher S. Baker were invited to participate in this event. Tpr. Johnson and Sgt. Berrong assisted CVSA personnel.

Tpr. Baker and CVSA Roadside Inspection Specialist Jeremy Disbrow presented a Level I Inspection. This event accounted for one of many events that Tpr. Baker was requested to participate in and present. Tpr. Baker

accounted for 67% of the Traffic Safety Information (TSI) presentations conducted in North Carolina for 2023. The TSIs that Tpr. Baker presented included the Just Drive: Deliver Distraction Free program, Truckers Against Trafficking human trafficking awareness and Operation Lifesaver. Tpr. Baker's hard work and efforts are well noticed, ensuring our roadways are safer through education. ■





Behind the scenes of the UMA Expo.

Drivewyze Van

The NCSHP CVE section deployed its first Drivewyze mobile inspection van during the Troop B port check on March 4-8 in Wilmington, North Carolina. The Drivewyze van screens commercial motor vehicles (CMVs) for enforcement operations. This tool provides automated readings of USDOT numbers, license plates and any hazardous material placards the CMV may have.

The van's thermal imaging camera helps check brakes and tires. It is also equipped with a surveillance camera that monitors traffic and can be used for other patrol needs. The Drivewyze van will serve as an additional tool for our members to help ensure safety on our roadways.









Tpr. Kathryn R. Genao and Col. Freddy L. Johnson Jr.



Sgt. Michael G. Conley and Col. Freddy L. Johnson Jr.



Drivewyze van.

Commercial Vehicle Enforcement Section 2024 Spring Conference

The 2024 Spring CVE Conference took place March 6-8 in Wilmington, North Carolina. This conference allows supervisors of all CVE districts in North Carolina to come together and check in halfway through the fiscal year to ensure goals are being met. It also allows for discussion to ensure best practices are being used and to develop a strategic plan for the rest of the federal fiscal year.

The highlights of the CVE conference included the Drivewyze van debut, a recap of training completed for 2023 and an overview of training projected for 2024. FMCSA State Program Specialist Teresa Murray presented various topics, including the importance of utilizing data analytics for high-crash corridors and the catch rate when checking the Drug and Alcohol Clearinghouse. Team members from the North Carolina State University Institute for Transportation Research and Education provided an overview of the importance of data analytics and introduced updates made to COVERLAB. This information was provided to ensure supervisors are aware of the various tools that are available.

Tpr. Kathryn R. Genao and Sgt. Michael G. Conley presented during the conference. Tpr. Genao was invited to share her story about a compliance investigation that led to the capture of a kidnapper. Sgt. Conley was invited to debut a post-crash trailer project. Col. Freddy L. Johnson Jr. awarded Tpr. Genao and Sgt. Conley each with a colonel coin for their efforts and hard work.



Post-crash trailer and Dodge Durango trooper vehicle.

Continued on next page

Continued from page 9

Compliance Investigation Leads to Capture of Kidnapper

NCSHP Trooper/CMV Compliance Investigator Kathryn R. Genao was invited to present during the 2024 CVE Spring Conference to share her story about a compliance investigation that led to the capture of a kidnapper.

Tpr. Genao was assigned to a company for a compliance investigation. During the investigation, she discovered that one of the drivers was wanted by the U.S. Marshals Service in Arlington, Texas, for a kidnapping charge that had been active for quite some time. After ensuring all the gathered information matched the driver, Tpr. Genao and a deputy marshal in Texas worked sideby-side to develop a game plan, which was then put into action. The U.S. Marshal's office in New Hampshire was able to take the wanted driver into custody safely without incident. Col. Freddy L. Johnson Jr. awarded Tpr. Genao a colonel coin for her efforts and hard work. ■

>>> Keep an eye out out for Tpr. Genao's first-hand account, coming in the Q3 2024 edition of Guardian.



Tpr. Kathryn Genao accepts her colonel coin from Col. Freddy L. Johnson Jr.

Post-Crash Trailer Debut

During this year's CVE Spring Conference, a post-crash trailer made its official debut. This trailer will be one of eight trailers. Sgt. Michael G. Conley, along with his team, Tpr. Chesley M. McGinnis, Tpr. Jamie D. Warren and Tpr. Brandon M. Albertson, worked diligently on this post-crash trailer project. The trailer is equipped with mechanics' tools, various air fittings, air tools and download equipment for heavy-vehicle event data recorders. There will also be an air compressor to supply air for braking systems on the CMV or to power air tools. This is an ongoing partnership with the NCSHP CVE Section and its Crash Reconstruction Unit. Col. Freddy L. Johnson Jr. awarded Sgt. Conley a colonel coin for his efforts and hard work.



Post-crash trailer.



Post-crash trailer interior.



Cpt. P. Marshall, 1st Sgt. Travis L. Ingold, Sgt. Michael G. Conley, Lt. Timothy. G. Wilson and Sgt. Brandon D. Vick.





| LOCATION: I-140 | LOCATION: I-140 EB 15.5 MM NEW HANOVER COUNTY | | | |
|---|---|----------------------|--|--|
| Level 1 | ENF 500s: Level 2 10 | Level 3 15 | | |
| CVE-507 5 | CVE-001 1 | CVE-004 | | |
| CITATIONS ISSUED: Cell Phone Seatbelt Other 4 16 12 | | | | |

Troop B Port Check

The Troop B Hazardous Materials Port Check occurred March 4-7 at state ports in Wilmington, North Carolina. Participating agencies included members from the NCSHP, the Federal Motor Carrier Safety Administration (FMCSA), the Brunswick County Sheriff's Department, the New Hanover County Sheriff's Department, the State Port Police, the North Carolina Department of Revenue (Motor Fuels Tax Division) and the License and Theft Bureau.

CVE members concentrated on CMV driver and vehicle inspections, with an emphasis on hazardous materials being transported to and from the state ports and the Military Ocean Terminal Sunny Point. A total of 82 Level I Inspections, 331 Level II Inspections, 224 Level III Inspections and three Level IV Inspections were completed. Inspectors issued 94 outof-service fine citations and 22 citations and notices of assessment. A total of 973,400 pounds of cargo were assessed.

The Acusensus technology was utilized March 5-7 in Hanover County; the data is indicated in the chart (left). A total of 26 CMVs were inspected, and 32 citations were issued, including cell phone and seatbelt citations.



Florida Highway Patrol Updates

By Chief Troy Thompson, Office of Commercial Vehicle Enforcement, Florida Highway Patrol

Safe DRIVE Event Takes Place in 23 U.S. States

The Safe DRIVE (Distracted Reckless Impaired Visibility Enforcement) initiative was developed in 2013 as a response to surging commercial motor vehicle (CMV) traffic fatality crashes on I-95 in North Carolina, South Carolina, Georgia and Florida. The initiative focused on high-visibility enforcement and education to improve driver behavior and prevent CMV crashes and fatalities along the I-95 corridor. Over the past 10 years, collaboration efforts have expanded to 23 southeastern and eastern U.S. states on multiple interstate corridors.

From Feb. 27-29, partner agencies participated in the first of five Safe DRIVE waves scheduled in 2024. During this wave, 8,547 inspections were conducted, resulting in 1,188 vehicles and 566 drivers being placed out of service.

- Drivers of CMVs were issued 700 traffic citations for driver behavior-based violations, with unlawful speed, distracted driving and improper lane change being the most cited violations recorded.
- Drivers of non-CMVs were issued more than 1,000 traffic citations for driver behavior-based violations, with unlawful speed citations being issued to 959 drivers.

More than 5,000 warnings were issued to motorists during the three-day detail in an effort to correct their driving behaviors.

For more information on Safe DRIVE, visit www.fmcsa.dot.gov/ourroads/safedrive-outreach-materials.



FHP Capt. Santiago Conducts Outreach Event

On March 8, Florida Highway Patrol (FHP) Capt. Amos Santiago conducted an outreach event at Alta Vista Elementary School in Haines City, Florida, where he spoke to approximately 200 children of varying ages about the importance of seat belts, bicycle safety and helmets, anti-bullying, and respect for others. Capt. Santiago then allowed the students to see the inside of his patrol vehicle and ask questions about police work. Outreach efforts like this build trust between the community and police, perhaps even inspiring youth to pursue careers in law enforcement.



Alta Vista Elementary students had many thoughtful questions for FHP Capt. Santiago during the community outreach event.

FHP Partners with Florida Trucking Association

On Jan. 30, FHP Chief Troy Thompson and Maj. Erick McGuire partnered with the Florida Trucking Association (FTA) during the FTA board of directors meeting. In the morning, Chief Thompson and Maj. McGuire discussed CMV enforcement safety efforts, the legislative process and technology trends with FTA's emerging leaders group. In the afternoon, Chief Thompson and Maj. McGuire met with the FTA board of directors and led discussions on the FHP wrecker allocation system, enhancements to the Florida Highway Safety and Motor Vehicles International Registration Plan/International Fuel Tax Agreement platform and the department's legislative bill. ■

FHP Members Participate in FTA Safety Summit

On Feb. 29, FHP Capt. Ezra Folsom and Lt. Michael Mattiza participated in FTA's Safety Summit. The event included discussions on truck parking, compliance investigations, and safety and accountability scoring, among other topics. FHP provided support and insight for each topic.

Maj. Pikul and Capt. Folsom Deliver Presentation to Florida Transportation Road Builders Association

On March 21, Maj. Tom Pikul and Capt. Ezra Folsom provided an outreach presentation to the Florida Transportation Road Builders Association's Emerging Leaders group. During the presentation, Maj. Pikul and Capt. Folsom discussed effective driving behaviors, commercial driver's license requirements, driver behavior-based traffic laws, cargo securement, size and weight laws, and human trafficking prevention while answering a variety of other questions.



Florida Highway Patrol Members Complete Training

In February, 23 members of the Florida Highway Patrol who transferred to the commercial vehicle enforcement (CVE) division completed North American Standard Inspection Part A and B. These members will be assigned throughout the state of Florida.



Local Florida Officers Attend Truck and Bus Enforcement Course

From Jan. 10-12, FHP provided four truck and bus traffic enforcement training sessions to more than 200 local law enforcement from throughout southwest Florida. The purpose of the course was to provide awareness about commercial motor vehicles, including relevant statutes and regulations, so traffic enforcement units from local law enforcement agencies would be more knowledgeable when conducting traffic stops on CMVs. During the training, cargo securement, commercial driver's license requirements and disqualification, driver behavior-based traffic laws, and human trafficking awareness were discussed.



Fort Meyers CVE District Hosts Safety Outreach Events

From Feb. 5-9, FHP's Fort Myers CVE unit provided a series of safety outreach events to multiple motor carriers and government entities to increase education, compliance and most importantly, safety. These events focused on cargo securement, hours of service, commercial driver's license requirements, effective driving behaviors and human trafficking awareness. Additionally, members demonstrated an inspection of a CMV.





REGION IV

Lt. Erica Elias Named First **Female Commander of the Gilroy Commercial Vehicle Enforcement Facility**

By Ofc. Jordan Richards, California Highway Patrol



Congratulations to Lt. Erica Elias, as she paves the way as the first female commander of the Gilroy (California) Commercial Vehicle Enforcement Facility (CVEF) since it was built in 1985. Lt. Elias is ecstatic to give

back to the community where she was raised. She graduated from Hollister High School and Gavilan College before attending the California Highway Patrol (CHP) Academy in 1999.

According to Lt. Elias, "If I can do this profession as a first generation born in the U.S. of Mexican parents - my first language was Spanish - then anyone can do this."

Lt. Elias would like to motivate others to join the noble policing profession, regardless of gender. Her favorite CHP community outreach program is the El Protector Program, where she can educate the Spanish-speaking community on California laws.

"Enforcement is one way to save lives daily; through education, we can make an impact on the community we serve as well," said Lt. Elias, describing how the CVEF educates commercial drivers on the Commercial Industry Education Program and the Farm Labor Vehicles and Passenger Vehicle Inspection Program that the Gilroy CVEF provides.

Congratulations, Lt. Elias, and welcome home.

Arizona Local Members Conduct Joint Inspections Using SafeSpect

By **Tpr. Chase Livingston**, Commercial Vehicle Enforcement, Arizona Department of Public Safety

On March 20, two Arizona local members completed several truck inspections using the Federal Motor Carrier Safety Administration's new roadside inspection program, SafeSpect. Ofc. Samantha Webster is the only truck inspector at the Goodyear (Arizona) Police Department. Ofc. Dante Herron is a truck inspector for the Buckeye (Arizona) Police Department. Both officers are newer to their roles and off to a great start.











Ofc. Dante Herron conducts inspections.

UPDATES FROM

Transforming Mobility from Inclusion and Sustainability in **Mexico and Latin America**

On Feb. 27, the Ministry of Infrastructure, Communications and Transportation (SICT) participated in the Transforming Mobility forum from the Inclusion and Sustainability in Mexico and Latin America - Hamburg Sustainability Conference Roundtable Series. This forum was promoted by the German Technical Cooperation in Mexico, with the collaboration of the Ministry of Agrarian, Territorial and Urban Development and the National Institute of Women, as well as representatives of the Urban Mobility Initiative and Women Mobilize Women.

Since Mexico ratified mobility as a universal right in 2020, there has been significant momentum to work toward gender equality in all areas, including transportation and mobility.

The event featured three interactive sessions, each focusing on a specific topic that addressed the issues raised. These sessions included dedicated time for questions and answers, with the objective of collecting and prioritizing participant concerns.

This meeting represented an essential step toward promoting gender equality in transportation and mobility and demonstrated the joint commitment of diverse actors to finding inclusive and equitable solutions for our society.

SICT and ITF Sign Collaboration Agreement

On Feb. 26, Undersecretary of the SICT Rogelio Jiménez Pons met with prominent representatives of the International Transport Workers' Federation (ITF) to establish a collaborative dialogue and explore opportunities for joint work between the SICT and the ITF.

Among the participants were International Project Coordinator for Peace and Justice Laura Álvarez, Deputy General Secretary of the ITF Rob Johnston, Regional Secretary of the ITF for Latin America and the Caribbean Edgar Díaz, and ITF Coordinator Katie Finn. Jiménez Pons expressed his enthusiasm for personally meeting with the representatives of the ITF and voiced his interest in developing models of mutual collaboration in areas of common interest, especially in the Mexican transport sector.

During the meeting, various areas of cooperation were proposed, including:

- Promoting worker participation through democratic unions
- Encouraging the inclusion of more women and young workers in the transportation
- Improving labor safety and health standards

ITF Deputy General Secretary Mr. Rob Johnston.

- Working together on the implementation of International Labor Organization Convention C190, which addresses violence and harassment in the workplace
- Promoting and developing more sustainable transportation solutions

Both parties expressed their commitment to strengthening cooperation for a more sustainable future. The parties agreed to establish a solid foundation of collaboration toward safer, fairer and environmentally friendlier transportation in Mexico.

This meeting represents a significant step toward greater collaboration between the SICT and ITF, with the shared goal of improving working conditions and promoting sustainability in the transportation sector in Mexico.



The meeting of SICT and ITF.



SICT Undersecretary of Communications and Transportation Rogelio Jiménez Pons.

Halton Police Department Participates in Mohawk CMV Safety Blitz

By **Darren Bonney**, Constable, Halton Regional Police Service, Ontario

Halton is a regional police department just to the west of Toronto, Ontario, Canada. Currently, we have five CVSA-trained officers who work for our department - two full time and three part time.

Each year, we participate in several large commercial motor vehicle (CMV) blitzes with other regional departments, the Ontario Provincial Police and the Ontario Ministry of Transportation. We also host the largest joint CMV blitz in Ontario, nicknamed the Mohawk CMV Safety Blitz. This event is held annually over two days in the first week of October in Milton, Ontario. October 2023 marked our 22nd year running this event. We had more than 60 CVSA-trained inspectors participate. Below are the results from the event. ■

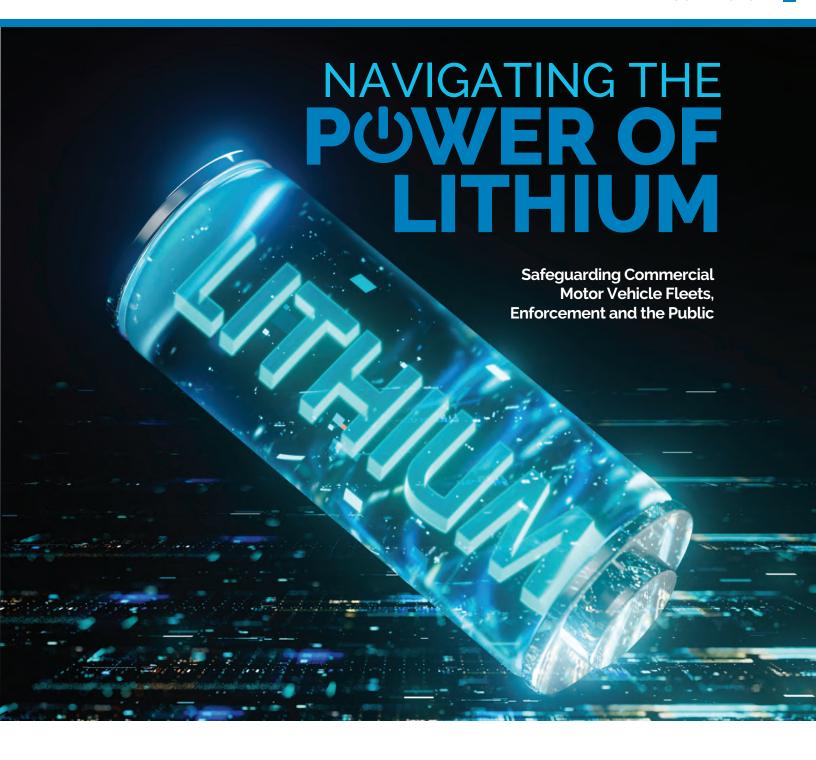




Constable Marc Taraso (left) and Constable Shane Barnes (right).







Lithium batteries, renowned for their lightweight design and high energy density, have revolutionized the world of portable power. From smartphones to electric vehicles (EVs), these batteries have become ubiquitous in modern technology. However, with their widespread use comes a heightened awareness of the risks associated with their transportation, particularly via commercial motor vehicles (CMVs). Fleet managers and enforcement authorities must be well-versed in the types of lithium batteries, the hazards they pose during shipping and the measures necessary to ensure safe transportation.











Continued on next page

Continued from page 17

On Your **Very Own Doorstep**

CVSA Director of Hazardous Materials Programs Bill Reese Receives Undeclared Shipments

"I know that undeclared shipments are rampant, not only from reading news stories and hearing from our membership," said Reese, "but because I have personally received them not once, not twice, but three times - three lithium power stations: 1,000-watt hour, 2,000-watt hour and 2322-watt hour. Each time, the shipper removed or covered up the required hazard communication, likely to save money and resources. They're aware of the risks, but they make the conscious choice to be negligent to make more money. These undeclared shipments are dangerous, and we must work together to identify and punish these negligent shippers."



The shipper camouflaged the label, packaging code of this power station with a cardboard-colored sticker to make it seem like no label or markings were there to begin with. In this picture, the camoflaged sticker has been removed and you can see where it was ripped off.



Above: Lithium ion rechargeable battery; Bosch e-bike - 500 Wh. Right: Lithium metal rechargeable bus battery -27.28 kg of lithium.

History of Lithium Batteries

Lithium batteries have been around for more than 50 years. In the 1970s, non-rechargeable lithium batteries became commercially accessible. In the 1980s, the lithium-ion battery was developed. That technology began to gain customer acceptance in the 1990s. In the decades since, the popularity of lithium batteries has continued to grow, and they are now used in mobile phones, computers, electronic scooters, vehicles of all sizes and more.

Types of Lithium Batteries

Lithium batteries come in various forms, each with its own characteristics and applications. The two primary types are lithium-ion (Li-ion) and lithium metal (Li-metal) batteries.

Li-ion Batteries:

Widely used in consumer electronics and electric vehicles, Li-ion batteries offer a high energy density and rechargeability. They contain lithium ions that move from the negative electrode (anode) to the positive electrode (cathode) during discharge and vice versa during charging. They have a high cell voltage of 3.6 volts and can be adapted to provide extremely high currents for applications such as power tools.

Li-metal Batteries: Most lithium metal batteries are one-time-use and have a longer life than a comparable alkaline battery. Li-metal batteries are commonly used in hearing aids, watches, smoke detectors, TV remote controls, key fobs, cameras and children's toys. They also have military and industrial applications.

Understanding the differences between these battery types is crucial for fleet managers and enforcement authorities to implement appropriate safety measures.



Packaging Requirements of Lithium Batteries

Packaging and labeling requirements for lithium batteries in the U.S. are governed by the Hazardous Materials Regulations (HMR) issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA). These regulations apply to lithium batteries transported by CMVs and other modes of transportation, including air, rail and maritime.

In 1996, the packaging section for lithium batteries in § 173.185 was just over two pages. Today, it is more than seven pages.

- Type of Packaging: Lithium batteries must be packaged in strong, durable outer packaging designed to prevent damage or leakage during transportation. Depending on the size and type of battery, it may be in United Nations (UN) performance-oriented packaging or other equivalent means of packaging. The packaging must be capable of withstanding the rigors of normal handling and transportation conditions.
- Compatibility: The packaging materials must be compatible with the contents and must not react with lithium batteries or their components.
- Inner Packaging: For lithium batteries in inner packaging, each inner packaging must be designed and constructed to protect the batteries from damage and prevent short circuits. Inner packaging must be secure within the outer packaging to prevent movement or shifting during transport.
- Cushioning and Absorbent Materials: Packaging must include suitable cushioning and absorbent materials to prevent damage from shock, vibration or leakage.
- Markings and Labels: Packages containing lithium batteries must be marked and labeled in accordance with the applicable regulations to indicate the presence of hazardous materials and provide information for safe handling and transportation.



Hazard Communication Requirements of Lithium Batteries

CMV operators and shippers need to familiarize themselves with the packaging and labeling requirements outlined in the HMRs to ensure compliance and the safe transportation of lithium batteries. Failure to comply with these requirements may result in safety hazards, as well as penalties and fines.

Lithium battery hazard communication requirements are based on the grams of lithium in lithium metal cells and batteries and the watt hours (Wh) of lithium-ion cells and batteries. Lithium cells and batteries may be shipped using an exception in § 173.185 (c) when the limits for each transit mode in the chart below are not exceeded for air and vessel or highway and rail as outlined in the chart. Lithium cells and batteries shipped by highway and rail have a higher threshold for grams of lithium in lithium metal cells and batteries and Wh for lithium-ion cells and batteries than if shipped by air and sea. Batteries below the limits listed are excepted from Subparts C to H in Part 172 and usually require the lithium battery mark described in § 173.185(c)(3). Batteries that exceed the listed limits are fully regulated and require all hazard communications (shipping papers, marking, labeling and emergency response information).

Risks of Shipping Lithium Batteries via CMVs

While lithium batteries provide numerous benefits, they also pose significant risks, especially during transportation. There are several primary hazards.

- ▲ Thermal Runaway: Lithium batteries are susceptible to thermal runaway - a rapid, uncontrollable increase in temperature caused by internal short circuits, overcharging or external damage. This can lead to fires or explosions, particularly in large quantities.
- Fire Suppression Challenges: Traditional fire suppression methods may not effectively extinguish lithium battery fires due to the batteries' ability to reignite even after initial extinguishment.
- A Toxic Gas Release: In the event of a fire, lithium batteries can release toxic gases, including carbon monoxide and hydrogen fluoride, posing risks to both human health and the environment.

Given these risks, CMV fleets must adopt robust safety protocols and adhere to regulations governing the transportation of lithium batteries.







Lithium batteries shipped under the exception in § 173.185(c) displaying the lithium battery mark and the appropriate aviation warning.

| LITHIUM BATTERY TRANSPORTATION LIMITS | | | |
|---------------------------------------|---|---|--|
| | Air and Vessel Limits | Highway and Rail Limits | Fully Regulated by Highway and Rail |
| Cells | | | |
| Lithium Metal | 1 g Li | 5 g Li | >5 g Li |
| Lithium-lon | 20 Wh | 60 Wh | >60 Wh |
| Batteries | | | |
| Lithium Metal | 2 g Li | 25 g Li | >25 g Li |
| Lithium-Ion | 100 Wh | 300 Wh | >300 Wh |
| Hazard Communication Requirements | Lithium battery mark* and aviation warning § 173.185(c)(1) — (3) | Lithium battery mark* and aviation warning § 173.185(c)(1) — (3) | Shipping papers, marking, labeling and placarding** § 173.185(c)(1)(iv), § 172.200, § 172.300, § 172.400 |

^{*} There are two exceptions from the lithium battery mark in § 173.185(c)(3).

^{**} Placarding is not required for domestic transportation. However, there is one exception for UN3536, Lithium Batteries Installed in Cargo Transport Unit, which has a special provision 389. This special provision requires placarding on two opposing sides.

Continued from page 19

Did You Know?

Did you know CVSA offers comprehensive, virtual lithium battery training courses for enforcement and industry? Course attendees learn about lithium battery types, common uses, chemistry and safety; lithium battery classification in § 173.185, including exceptions; marking, labeling, placarding and shipping papers, when required; emergency response and incident investigation; and undeclared lithium battery shipments. The course also includes case studies and the stepby-step process for shipping lithium batteries. These free courses take place regularly; keep an eye on www.cvsa.org/training for a course that is convenient for you.



Key Considerations for Fleets

Fleet managers and enforcement authorities must collaborate to ensure the safe transportation of lithium batteries. Key considerations include regulatory compliance, risk assessment, battery management systems and EV fleets.

- Regulatory Compliance: Familiarize yourself with federal, state and local regulations governing the transportation of hazardous materials, including lithium batteries. Ensure that drivers and personnel receive proper training on handling and emergency response procedures. For example, the HMRs provide detailed requirements for the safe transportation of lithium batteries, including packaging standards, segregation requirements and training obligations for personnel handling hazardous materials.
- Risk Assessment: Conduct a thorough risk assessment to identify potential hazards associated with transporting lithium batteries. Develop contingency plans and emergency response protocols tailored to your fleet's specific operations and the types of batteries being transported. Although it is most applicable to air shipments, the International Air Transport Association has a <u>resource</u> (pictured below) on risk assessment that may be helpful in developing your fleet's plan.

| SAFETY RIS | K | SEVERITY | | | | |
|------------------------|---|-------------------|----------------|------------|------------|-----------------|
| Probability | , | Catastrophic A | Hazardous B | Major C | Minor D | Negligible E |
| Frequent | 5 | 5A | 5B | 5C | 5D | 5E |
| Occasional | 4 | 4A | 4B | 4C | 4D | 4E |
| Remote | 3 | 3A | 3B | 3C | 3D | 3E |
| Improbable | 2 | 2A | 2B | 2C | 2D | 2 E |
| Exremely Improbable | 1 | 1A | 1B | 1C | 1D | 1E |

Example of a safety risk matrix, courtesy of the International Air Transport Association.

| SAFETY RISK INDEX RANGE | SAFETY RISK DESCRIPTION | RECOMMENDED ACTION |
|---|----------------------------|--|
| 5A, 5B, 5C, 4A, 4B, 3A | INTOLERABLE | Take immediate action to mitigate the risk or stop the activity. Perform priority safety risk mitigation to ensure additional or enhanced preventative controls are in place to bring down the safety risk index to tolerable. |
| 5D, 5E, 4C, 4D, 4E, 3B, 3C, 3D, 2A, 2B, 2C, 1A | TOLERABLE | Can be tolerated based on the safety risk mitigation. It may require management decision to accept the risk. |
| 3E, 2D, 2E, 1B, 1C, 1D, 1E | ACCEPTABLE | Acceptable as is. No further safety risk mitigation required. |

Possible safety risk tolerability.

- Battery Management Systems: Implement robust battery management systems (BMS) to monitor and control the performance of lithium batteries during transportation. BMS can detect abnormalities, such as overcharging or overheating, and take corrective actions to prevent safety incidents. Key functions of
 - **Voltage Monitoring:** Continuously monitor the voltage of individual battery cells to detect overcharging or undercharging conditions that could lead to thermal runaway.

BMS include:

- **A Temperature Regulation:** Monitor the temperature of batteries and surrounding environments to prevent overheating or exposure to extreme temperatures that could compromise battery safety.
- **■** State of Charge Management: Track the state of charge of batteries to prevent over-discharge, which can lead to reduced battery performance or damage.
- **☒** Fault Detection and Isolation: Identify and isolate faulty battery cells or modules to prevent cascading failures that could result in safety incidents.
- **EV Fleets:** What happens when the vehicles themselves contain lithium batteries? Designate dedicated storage areas specifically for EV and hybrid fleets to ensure proper organization and minimize risks. These areas should be wellventilated, adequately lit and equipped with appropriate fire suppression systems. Maintain optimal temperature conditions within the vehicle storage area to prevent exposure to extreme heat or cold, which can affect the performance and longevity of lithium batteries. Implement climatecontrol systems to regulate temperature and humidity levels, as needed. Install fire detection and suppression systems, such as smoke detectors, fire alarms and sprinklers, to mitigate the risk of fire incidents. Conduct regular inspections and maintenance of these systems to ensure they are functioning properly.

Enforcement Roles and Responsibilities

Members of CMV enforcement have many essential roles and responsibilities within their departments and the general public when it comes to the application of lithium battery regulations. Officers must understand not only the HMRs but also have a rudimentary knowledge of how lithium batteries work, their chemistry and uses, notable incidents and causes of thermal runaway, undeclared shipments, and counterfeit batteries. Although CMV enforcement typically focuses on road transportation, in this case, they must also be knowledgeable about air, rail and sea shipment since lithium batteries are often shipped nationally or internationally via several transit methods; and regardless of the mode, these batteries always end up on our roadways at some point.

Fleet Responsibilities

Fleet managers bear significant responsibilities in safeguarding their vehicles, personnel and the communities they serve. Key responsibilities include training and education, preventative maintenance, and emergency preparedness.

Training and Education: Provide comprehensive training to drivers, handlers and maintenance personnel on the safe handling, storage and transportation of lithium batteries. Emphasize proper packaging, labeling and loading procedures to minimize the risk of incidents.

Preventive Maintenance: Regularly inspect CMVs and associated equipment to ensure they meet safety standards and can safely transport lithium batteries. Address any maintenance issues promptly to prevent mechanical failures or breakdowns that could compromise safety.

Emergency Preparedness: Develop and regularly update emergency response plans that outline procedures for mitigating lithium battery incidents, including fire suppression, evacuation and communication protocols. Conduct drills and exercises to ensure all personnel are prepared to respond effectively in an emergency.

Emergency Procedures for Lithium Batteries

In a lithium-battery-related emergency, swift and decisive action is essential to minimize risks and protect personnel and property. Emergency procedures should include:

mmediate Response: If a lithium battery fire or thermal runaway occurs, prioritize the safety of personnel and the public by evacuating the area and establishing a safe perimeter. Contact emergency services and provide detailed information about the nature of the incident and the type of batteries involved.

Fire Suppression: Use appropriate fire suppression methods, such as Class D fire extinguishers or specialized lithium battery firesuppression agents, to extinguish lithium battery fires. Avoid using water or traditional fire suppression methods that may exacerbate the situation.

Containment and Mitigation: Prevent

ost-Incident Assessment: Conduct a thorough investigation following a lithium-battery-related incident to identify root causes, evaluate response effectiveness and implement corrective actions to prevent future occurrences.

Enforcement officers must be prepared to respond effectively to lithium battery incidents, including fires, leaks or other emergencies. This requires training in emergency response procedures, coordination with other first responders, and access to appropriate equipment and resources.

CMV enforcement officers should be familiar with the characteristics of lithium battery fires and the specific challenges associated with extinguishing them. They should also be trained to identify signs of thermal runaway, such as smoke, heat or unusual odors, and take appropriate actions to mitigate risks and ensure public safety.

Continued on next page

Safety Talks

CVSA Director of Member Services Brian Neal Talks EV Safety and Compliance for Fleets

"Recently, having participated in discussions regarding a new electric vehicle development project for a motor carrier, I became keenly aware of the safety and compliance risks that motor carriers, developers and stakeholders may overlook. Or they may simply be unaware of the risks associated when transporting EV battery cells, especially EV battery cells for motorized vehicles of varying sizes and types. Now is the time for all motor carriers to engage their safety teams, implement training specific to safe and compliant transportation, create their risk mitigation plans for EV battery cells, and seek professional guidance as needed to ensure safe operations. The CVSA training on Li-ion batteries is important to help understand the compliance dependencies.

Additionally, plans need to be in place for the intake (shipping/hazard communication/packaging), storage, handling and transport of any EV battery cell transported by the motor carrier. This extends to include risk management, safety and compliance plans specific to large alternative fuel (EV/hydrogen) CMVs if a fleet has this as a part of their sustainability goals. In addition, motor carriers and shippers should be prepared when engaging in the reverse logistics transportation of EV battery cells. The risk profile of potentially damaged battery cells requires increased internal controls to ensure the safety of the carrier personnel, first responders, the general public and the environment."

Continued from page 21

A Year in the Life of Lithium Battery Fires



















Four Die in Fire Caused by
Batteries in E-Bike Shop
Near Chinatown

Authorities Say Drill Battery
Caused Explosion, Truck Fire

Laptop Battery Fire Causes
Flight to Divert to Chicago

Going Beyond Compliance with Lithium Batteries

Fleets can go beyond mere compliance with regulations when shipping lithium batteries by implementing proactive measures to enhance safety, efficiency and sustainability. Here are several strategies that fleets may adopt to elevate their practices:

Enhanced Training and Education: Provide comprehensive training programs for drivers, handlers and personnel involved in shipping lithium batteries. Beyond regulatory requirements, emphasize best practices for safe handling, storage and transportation. Offer ongoing education to stay updated on emerging technologies and industry trends. Be sure to check out www.cvsa.org for industry training and

✓ Investment in Advanced Technology: Utilize advanced technology and equipment to improve battery management and monitoring systems. Implement real-time tracking and monitoring solutions to ensure the integrity and safety of lithium battery shipments. Consider investing in automated inventory management systems and predictive analytics to optimize logistics operations and prevent potential risks.

Risk Assessment and Mitigation:

webinars on these topics.

Conduct regular risk assessments to identify potential hazards and vulnerabilities in the transportation of lithium batteries. Develop and implement proactive mitigation strategies to address identified risks effectively. This may include additional safety measures, such as enhanced packaging, specialized handling procedures or route optimization, to minimize exposure to high-risk areas.

Collaboration and Information Sharing:
Foster collaboration and information
sharing within the industry to exchange
best practices, lessons learned and
innovative solutions for safe lithium battery
transportation. Participate in industry
forums, working groups and partnerships
to stay informed about emerging
technologies, regulatory updates and safety
initiatives. CVSA events are a great way
to meet and share information with those
involved in the shipping of lithium batteries
and the enforcement of regulations. Visit
www.cvsa.org/events to view our upcoming
events.

- ▼ Continuous Improvement: Establish a culture of continuous improvement within the fleet by encouraging feedback, innovation and proactive problem-solving. Regularly review and evaluate processes, procedures and performance metrics to identify areas for enhancement and optimization. Implement a feedback loop to incorporate lessons learned from incidents, near misses or operational challenges into future practices and protocols.

By going beyond compliance and embracing proactive strategies, fleets can enhance the safety, efficiency and sustainability of shipping lithium batteries while fostering innovation and continuous improvement within the industry. These efforts not only mitigate risks and ensure regulatory compliance but also position fleets as leaders in safe and responsible transportation practices.

In conclusion, there are many risks associated with lithium batteries, but with analysis, knowledge and care, they can be used and transported safely. The transportation of lithium batteries via CMVs presents unique challenges and risks that require careful planning, coordination and adherence to safety protocols. By understanding the types of lithium batteries, implementing robust battery management systems and establishing comprehensive emergency procedures, fleet managers and CMV enforcement can safeguard their personnel, vehicles and the communities they serve against the hazards associated with these powerful energy sources.

Buying Into Fatigue Management Solutions

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

Imagine this: You're cruising down a deserted highway. The stereo is blasting your favorite tunes. Hours tick by, the scenery blurs and a sneaky tiredness starts creeping in. Your eyelids get heavy, and your reaction time slows - a recipe for disaster. This is driver fatigue, a silent killer responsible for lethal crashes. Motor carriers have an essential role in thwarting this danger. Yet, keeping drivers alert isn't just about courtesy naps; it's about building a robust fatigue risk management system (FRMS).

Here's the secret sauce for doing so: No FRMS, no matter how sophisticated, can truly succeed without a strong safety culture. Think of it this way: Your FRMS is like a hightech engine packed with data analysis and monitoring tools. A safety culture is the highoctane fuel that propels it forward. Together, they drive your organization's fatigue management program (FMP).

"While FRMSs are likely to be effective, in organizations where safety cultures are insufficiently mature and resources are less available, these systems may be challenging to implement successfully," said a review in Accident Analysis and Prevention and funded by the Centers for Disease Control and Prevention and the National Institute for Occupational Safety and Health. Read the full review here: www.sciencedirect.com/ science/article/pii/S0001457521004292.

That's why the North American Fatigue Management Program (NAFMP) recommends that carriers should start a FMP by building a safety culture. How do you cultivate this? Here's where education and training come in, not as one-off lectures, but as ongoing conversations that shift mindsets. We need to move beyond viewing safety and fatigue management as mere "priorities" - something to be squeezed into a busy schedule - and elevate it to a core value, as essential as delivering cargo and passengers on time.

Building a safety culture isn't about micromanagement or finger-pointing. It's about fostering trust, open communication and a shared responsibility for everyone's well-being, from the CEO to the newest driver. Drivers should feel comfortable reporting tiredness without fear of repercussion, for instance. It's also about creating a work environment where getting a good night's sleep isn't viewed as a luxury, but as a biological necessity. NAFMP's Module 2



course, Safety Culture and Management Practices, describes how to go about this at lms.nafmp.org.

Additionally, chapter 4 of the NAFMP Implementation Manual (www.nafmp. org/wp-content/uploads/2021/04/ implementation_manual_en.pdf) describes the main components of a FRMS, noting that two primary functions of such systems are to identify and mitigate fatigue risks. A FRMS should also include three types of risk identification processes and risk mitigation controls: predictive, proactive and reactive. Predictive measures could include scheduling practices that allow motor carriers to analyze driver sleep patterns and routes. Proactive steps may involve implementing a sleep disorder management program and installing in-cab fatigue detection systems to monitor alertness levels. Reactive controls determine when fatigue was involved in any incident, including violations, near-crashes and crashes.

Managing fatigue goes beyond preventing the suffering caused by fatal crashes and avoiding legal exposure to nuclear verdicts.

It is also about improving your organization's productivity, increasing driver retention, raising fuel efficiency, reducing medical costs, planning efficient routing and parking, and reducing detention/delays at customer facilities. If you are not managing driver fatigue, you are leaving money on the table.

Luckily, you do not have to do it all by yourself. You can quickly start building your fatigue management program (FMP) with CVSA's FMP template, available at www.bit.ly/fmptemplate.

There are also vendors that provide fatigue management solutions. On the next pages, we review the types of solutions available and go over best practices for implementation.

Lastly, you will find sources that will point you to specific providers. This year, CVSA has been conducting an ongoing NAFMP series showcasing fatigue management vendor solutions. You can watch the recordings and register for future webinars at www.nafmp. org/webinars.

Continued on next page

Continued from page 23

A Look at Fatigue Management Solutions for Motor Carriers

Let's review the different types of solutions offered by fatigue management vendors, exploring their benefits and the required investments.

1. CONSULTING AND TRAINING: Building a Foundation of Knowledge and Skills

The cornerstone of any successful FRMS is knowledge and skills. Consulting firms can provide expertise in crafting customized FRMS that adhere to industry standards and best practices. They can also offer training programs for drivers and management personnel, covering topics such as recognizing fatigue symptoms, managing sleep schedules, implementing alertness techniques and using FRMS technologies properly.

- Driver Education on Sleep Hygiene: Educational programs can equip drivers with knowledge and strategies for developing healthy sleep habits. This includes information on sleep schedules, napping techniques, sleep-conducive environments, and the importance of avoiding caffeine and alcohol before sleep.
- Benefits: Tailored solutions and an improved understanding of fatigue risks empower drivers and managers.
- Investment: The upfront cost may be high and requires an ongoing commitment to training programs.
- Tip: Leverage the free NAFMP eLearning platform at Ims.nafmp.org to find courses for drivers and their families, carrier management, dispatchers, trainers, shippers, receivers, and brokers. Each of the 10 courses offers participants a verifiable certificate of completion for download.

2. SLEEP DISORDER MANAGEMENT PROGRAMS: Identifying Fatigue Susceptibility

Addressing underlying sleep disorders that can significantly contribute to driver fatigue susceptibility is a crucial component of a comprehensive FRMS.

- Sleep Apnea Screening and Treatment: Sleep apnea is a prevalent sleep disorder characterized by breathing disruptions during sleep. Companies can offer testing programs and facilitate treatment with CPAP machines or other therapies. Effective sleep apnea treatment can dramatically improve driver alertness.
- Benefits: Addressing the root cause of fatigue susceptibility significantly improves driver well-being and alertness and reduces the risk of fatigue-related crashes.
- Investment: Carriers must budget for screening and treatment costs, and drivers must commit to testing and treatment protocols.

3. SCHEDULING AND TRIP PLANNING: Optimizing Routes for Alertness

Technology can play a vital role in optimizing schedules and trip planning in order to improve driver alertness.

- Fatigue Prediction Mathematical Models: These models account for factors like driver's hours of service (HOS), sleep patterns and circadian rhythms to predict fatigue risk during a trip.
- Route Optimization Tools: These tools analyze traffic congestion, weather conditions, rest stop availability and other factors to create efficient routes that minimize driver fatigue. The resulting data can be used to help drivers maintain a more predictable schedule and prevent situations that induce fatigue by factoring in potential delays and ensuring access to rest areas.
- Dispatch and Communication Tools: Realtime communication tools allow dispatchers to monitor driver fatigue signs and adjust schedules or routes if needed. Dispatchers can use this information to proactively intervene and prevent fatigued drivers from taking on or continuing unsafe journeys.
- Benefits: Proactive risk mitigation, increased efficiency and improved driver well-being are some benefits of schedule and trip-planning technologies.
- Investment: Integration with existing systems is required; data accuracy is crucial for model effectiveness.

4. FITNESS FOR DUTY TESTING: Assessing Readiness Before Each Trip

Before a driver even sets off, their fitness for duty can be assessed.

- Psychomotor Vigilance Tests: Simple yet effective, psychomotor vigilance tests measure a driver's ability to sustain attention over long periods, and can identify drivers who may struggle with vigilance, a key factor in fatigue-related crashes.
- Reaction Time Tests: Gauge how quickly a driver can respond to a stimulus, which can be slowed by fatigue. Faster reaction times generally indicate greater alertness.
- Speech Analysis: Technology can analyze speech patterns for indicators of fatigue, such as slurring or slowed speech. While promising, this technology is still under development and may require further refinement before widespread use.
- Fatigue Questionnaires: Self-reported questionnaires may provide insight into a driver's perceived level of fatigue. However, the accuracy of this data can be limited by a driver's willingness to be honest.
- Behavioral Observation: Supervisors can be trained to identify physical and behavioral signs of fatigue through visual observation. This method can be subjective and requires well-trained personnel.
- Wellness Checks: Regular wellness checks can reveal potential health issues that contribute to fatigue. By promoting a culture of preventative health care, companies can address underlying conditions that exacerbate fatigue.
- Benefits: Fitness for duty testing provides a baseline for alertness, identifies at-risk drivers and promotes a safety-conscious culture.
- Investment: Some tests can be time consuming and self-reported data may not be entirely reliable and requires trained personnel for observation and wellness checks.

5. PERFORMANCE MONITORING TECHNOLOGIES: Keeping an Eye on the Road

Onboard technologies can continuously monitor driver performance and alert for signs of fatigue.

- Computer Vision with Front-Facing Cameras: Cameras analyze the road ahead, focusing on vehicle movements to identify potential signs of driver fatigue. The system can detect erratic steering patterns, such as swerving or weaving, slow reaction time and unusual stopping events.
- Steering Movements Monitoring: Monitoring steering wheel movements can reveal signs of fatigue, such as weaving or erratic lane changes. Sudden or jerky movements can be a red flag indicating compromised alertness.
- Lane Departure Warning Systems: Lane departure warning systems alert drivers when they unintentionally stray from their lane, potentially due to fatigue. These systems can provide a crucial wake-up call for drowsy drivers.
- ◆ Telematics Systems: These systems collect a wealth of data, including GPS tracking, fuel consumption and harsh braking/acceleration events, which can be analyzed for patterns indicative of fatigue. For instance, a sudden increase in harsh braking events or erratic fuel consumption could suggest a decline in driver alertness.
- Benefits: Performance monitoring technologies provide real-time monitoring, can offer immediate alerts and promotes safer driving practices.
- Investment: Monitoring raises privacy concerns for drivers. Data overload can lead to alert fatigue and reliable in-vehicle technology infrastructure is required.

6. DRIVER MONITORING TECHNOLOGIES: Knowing Thyself

Cutting-edge technologies go deeper into physiological and behavioral data to assess fatigue.

- Computer Vision Eyelid Detection, Gaze Tracking, Head Pose Monitoring: These more advanced computer vision applications go beyond simple detection of closed eyes. Eye-tracking can monitor blink rate and duration, with a higher blink rate or prolonged closures potentially indicating fatigue. Head pose monitoring can detect signs of drowsiness, like head nodding or tilting.
- Eye-Tracking (PERCLOS, Blink Rate and Duration): PERCLOS (percentage of eyelid closure over the pupil over time) also provides a more objective gauge of fatigue than simple closed-eye detection, measuring eyelid closure. Analyzing blink rate and duration can provide insights into alertness levels.
- Physiological Sensors:
 - Electroencephalography (EEG): EEG measures brain activity, with certain patterns indicating fatigue.
 - Heart Rate Variability (HRV): HRV
 measures the time variation between
 heartbeats. Reduced HRV is linked to
 fatigue, but external factors, like stress,
 can also influence HRV.
 - **Skin Conductance:** Skin conductance measures the electrical conductivity of the skin, which can increase with fatigue.

- Activity Trackers: Wearable devices can monitor movement patterns and sleep quality, providing valuable data on a driver's overall wellbeing. However, separating fatigue from physical activity can be challenging.
- Emerging Technologies:
 - Skin Temperature: Skin temperature fluctuations may be linked to fatigue, but further research is needed.
 - Speech Analysis: Advanced speech analysis techniques may offer more reliable fatigue detection in the future.
 - Facial Expression Analysis: Analyzing facial expressions for subtle signs of fatigue is being explored.
 - Brain-Computer Interfaces (BCIs): Still in its early stages, BCIs hold the potential for directly measuring brain fatigue.
- Benefits: Highly objective data collection, potential for early fatigue detection and valuable insights into driver well-being.
- Investment: Some emerging technologies are expensive or intrusive, data interpretation can be complex and privacy concerns for drivers need to be addressed.

By strategically implementing a combination of available solutions, motor carrier companies can create a robust FRMS that prioritizes driver safety and well-being. However, it's crucial to remember that no single solution is a silver bullet. The ideal FMP will be tailored to a company's specific needs and continuously evaluated for effectiveness.

Continued on next page



Continued from page 25

Best Practices for Incorporating Fatigue Management Solutions

Motor carriers should follow industry best practices when combining cutting-edge technology with a commitment to driver education and health, ensuring their FMP is robust and driver-centric.

- ▼ Integration is Key. Effective fatigue management solutions shouldn't exist in a silo. They need to be fully integrated into the overall FMP. This means ensuring policies, training programs and technological tools complement and reinforce each other. For example, driver training on recognizing fatigue signs should align with the types of alerts generated by a fatigue monitoring system.
- ▼ Take Advantage of All Features. Don't settle for half measures with your fatigue management solutions. Many systems offer more than basic features. Imagine fatigue detection tools that not only identify drowsiness, but also trigger real-time driver alerts, notify dispatch for support and collect data for personalized fatigue training. By maximizing these capabilities, you can move beyond basic detection to proactive fatigue management, creating a safer and more well-rested driving force.
- ◆ Have Clear Protocols for Everyone. Well-defined protocols are essential for drivers and all company personnel. These protocols should outline clear procedures for handling situations like fatigue-related trip extensions or unexpected delays. Carriers also need to establish protocols for responding to fatigue alerts from monitoring devices, ensuring a swift and safe resolution. For instance, protocols might dictate that upon receiving a fatigue alert, the driver should pull over at the nearest safe rest stop and contact dispatch. Dispatch should then work with the driver to adjust the trip plan or find a replacement driver, if necessary.
- ② Demystify Technology. Technology can be intimidating. It's crucial to explain the role of fatigue-detection systems to drivers clearly. Frame it as a tool to help them stay safe and avoid pushing themselves beyond their limits. Transparency is key − explain how the technology works, what data it collects, and how it supports driver well-being. Reassure drivers that the data collected is used solely for safety purposes.

- Set Realistic Expectations. Setting clear and achievable expectations for drivers is critical. Unrealistic schedules or pressure to meet tight deadlines can exacerbate fatigue. Work with drivers to create realistic trip plans that factor in mandatory rest breaks and potential delays. Consider implementing software that helps with route planning and accounts for factors like traffic patterns and weather conditions, which can increase trip duration. Open communication and flexibility are essential for achieving this balance.
- ▼ Feedback is a Two-Way Street. Meaningful feedback for drivers is a cornerstone of any successful program. Analyze data from ELDs and fatigue detection systems to identify fatigue trends and provide targeted feedback to help drivers improve their sleep habits and trip planning. However, feedback should be a two-way street. Encourage drivers to report their concerns about fatigue or unrealistic schedules. Create anonymous reporting channels if drivers are hesitant to come forward directly.
- ▼ Foster a Positive Work Environment. A culture of safety and well-being starts with a positive work environment. This means valuing driver feedback, addressing concerns promptly and recognizing good decision-making around fatigue management. Reward drivers who consistently prioritize rest and adhere to HOS regulations. Consider offering wellness programs that promote healthy sleep habits and stress management techniques.
- Safety is a Shared Responsibility. It's important to reinforce that safety is everyone's responsibility. From dispatchers to managers, everyone within the company should be invested in creating a culture that values driver well-being and fatigue management. Dispatchers should avoid pressuring drivers to meet unrealistic deadlines or take on trips that would violate HOS regulations. Managers should hold themselves and their teams accountable for upholding the FMP.

By implementing these best practices, motor carrier companies can create an effective FMP, reducing the risk of fatigue-related crashes and creating a safer work environment for drivers, leading to a more positive and productive work experience for the entire organization.

Ultimately, a strong FMP benefits the motor carrier and its drivers and the rest of us who share the roads with them.

Sources for information on specific vendors:

- 2020 Review of Commercially Available
 Devices to Detect Fatigue and Distraction
 in Drivers, by the Institute for Road Safety
 Research in the Hague, Netherlands.
 www.swov.nl/en/publicatie/fatigue-anddistraction-detection
- 2019 Commercial Motor Vehicle Operator Fatigue Detection Technology Catalog and Review, by National Surface Transportation Safety Center for Excellence.
 vtechworks.lib.vt.edu/items/dadfoc8f-70ed-4833-909e-7b38fb615ca1
- 2019 Research Report Fatigue/distraction detection technology use in the Australian road freight transport sector, by Australia's National Heavy Vehicle Regulator.
 www.nhvr.gov.au/safety-accreditationcompliance/fatigue-management/about/ fatigue-monitoring-trial

Need a fatigue management consultation, presentation or course, free of charge? Send me an email at **rodolfo.giacoman@cvsa.org**. Thank you for keeping your questions and feedback coming.

Meet the Candidates for CVSA Secretary

TPR. WILLIAM (BILL) ALARCON

New Jersey State Police, Region I



I am Trooper William (Bill) Alarcon of the New Jersey State Police, and I am running for CVSA secretary. Please accept the following as some insight into my thoughts and experiences.

I've been a trooper for more than 17 years. During that time, I've been actively engaged in all aspects of commercial motor vehicle (CMV) inspections, (including hazardous materials, passenger carrier vehicles, and performancebased brake testers (PBBT)), new entrant safety audits, post-crash investigations and overweight enforcement. These experiences helped expand my CVSA involvement early on. I have also found New Jersey's diverse CMV needs to be a great asset. As small a state as we are, we boast one of the most heavily CMV-trafficked highways in North America and one of its largest ports. We have vast farm areas with major agricultural exports and a motorcoach industry that seemingly never stops running to and from New York City and Atlantic City.

Throughout my career, I have pushed myself toward greater involvement (instructor, master instructor, supervisor, etc.). But it's my time as an inspector, the years spent interacting with drivers and companies daily, that shapes so much of my views. We, at CVSA, constantly talk about communication and collaboration between enforcement and industry. I believe this is where it starts; those concepts build from the bottom up. Even now, I take every opportunity to talk to drivers about their trip, their understanding of their vehicles and the loads they carry. The list of things I learn about what they believe works and what doesn't goes on and on. I then compare it to a similar list compiled from our inspectors. When the April and September CVSA meetings roll around, I use what I've learned to help facilitate unified, uniform answers that can be passed on to inspectors, drivers and companies alike.

I teach North American Standard Part A and B Inspections, Passenger Carrier Vehicle Inspections, PBBT and weights/dimensions to troopers and the Port Authority of New York and New Jersey. This is my chance to ensure the fruits of our collaboration are passed to the right hands, in the right way. But this endeavor is not without challenges. Throughout conversations with my peers, I hear some common difficulties inspectors and agencies face, such as getting properly equipped with materials, receiving an updated curriculum, and maintaining and growing a staff of instructors, despite a wealth of qualified candidates. As the CVSA training program moves forward, we must endeavor to work with our current instructors and build

a program that supports their needs. At the same time, we need to support industry by sharing much of the same information and education across their ranks. I believe well-trained, knowledgeable inspectors conducting uniform inspections is a great start.

I am committed to CVSA and our mission. I have been the Region I president, chaired the Passenger Carrier Committee, and currently chair the Policy and Regulatory Affairs Committee and the Reauthorization Task Force. As I worked my way toward these positions, I studied leaders across the Alliance. Even now, I'm still learning. During board meetings, I listen to topics being discussed in every program and committee, and how our leadership is attempting to achieve the best results. I was also fortunate enough to take part in developing the CVSA Strategic Plan, which was another opportunity to see many accomplished CVSA members collaborate on guiding the Alliance to a strong, successful future. As a result, I maintain my belief that we must continue to support our current chairs and facilitate them moving the Alliance forward via their respective committees.

I also believe we must identify those waiting in the wings and prepare them to continue our growth. I have always been grateful to receive guidance from those with more experience, and I believe we can share our collective knowledge with the next generation of region/committee leaders long before they step into these roles. Because of your collective work, there is a bright future on the CVSA horizon. We should not overlook this, or any opportunity to invest in it.



Meet the Candidates for CVSA Secretary

CORY AYON

New Mexico Department of Public Safety, Region IV



First off, I want it to be known that I am honored to be part of such a great organization. When I think of commercial motor vehicles (CMV), I do not think specifically of the vehicles themselves – I think of the people at the forefront and behind the scenes of the industry that make a difference and make things happen day in and day out. These are the safety professionals who make the conscious decisions that affect CMV safety every day.

I have been involved with CMVs for most of my life, starting as a teenager cleaning cattle pots/bull wagon trailers with a shovel, garden hose and wheelbarrow (a very humbling experience, I might add). I am also a proud U.S. Navy Seabee veteran and served as an equipment operator for seven years from 1994 to 2001. During my last two years of military service, I served as an instructor at a naval ordnance magazine on the East Coast, teaching U.S. Navy and Marine personnel how to load and transport explosives on trucks and truck tractors.

From there, as a civilian, I unloaded trucks for Home Depot before becoming a CVSA-certified inspector with the New Mexico Motor Transportation Division working at the Anthony Port of Entry in southern New Mexico in 2002, thus starting my relationship with CVSA many years ago. In my CMV enforcement career, I have had the honor of serving with the New Mexico Motor Transportation Division, Texas Department of Public Safety as a compliance review/new entrant safety auditor investigator and, currently, as the program coordinator for the New Mexico State Police CMV Bureau.

I also spent eight years in the private sector serving as a regional safety manager and fleet director for an oilfield company based in Austin, Texas. I am a proud commercial driver's license holder, a current certified CVSA instructor, and a master instructor instructing North American Standard Inspection (NASI) Part A, NASI Part B, General Hazmat and Cargo Tank Inspection courses.

I have always believed it is not so much where you are from that matters in life, it's where you are at. There is a reason that the windshield is bigger than the rearview mirror. You can't forget where you came from, but you also can't let it dictate your future. As the industry changes, we must change with it... or we will get left behind.

In my tenure, I have worked with the best in the industry and if elected as your CVSA secretary, I would be humbled to continue to work with and represent the best, in both the industry and enforcement sides of the aisle.

Whether serving my country, my state, my department or my community, I have always been in the service of others. I do not claim to know everyone or everything. I do, however, know folks from Canada to Mexico, and all parts in between – and I can find answers.

United as a team, we can accomplish anything. Make good choices, be safe and keep it between the ditches. If what we did was easy, everyone would do it. ■



Class I Member jurisdictions and Class II Local Membership will vote for secretary at the 2024 CVSA Annual Conference and Exhibition this September in Big Sky, Montana.

Remember, when you cast your vote for secretary, you are electing a future CVSA president. The secretary position is a one-year term, which transitions to a year as vice president, followed by a year serving as president, after which comes three years serving as past president.

Get to know this year's candidates by reading the articles on pages 27-29, written by each candidate, which include information on their careers, philosophies on commercial motor vehicle safety and qualifications for serving as the next secretary of CVSA.



Meet the Candidates for CVSA Secretary

RICHARD ROBERTS

British Columbia Ministry of Transportation and Infrastructure, Region V



Hello, everyone. My name is Richard Roberts, and I am running in this year's election for CVSA secretary. For the past 27 years, I have dedicated my career to improving commercial motor vehicle safety in British Columbia and Canada. Having the opportunity to further this ideal through the role of CVSA secretary and as a member of the executive committee is a long-held aspiration. I am both humbled and thrilled to be seeking your vote to take on this important role.

I am currently the deputy director of compliance and operations with commercial vehicle safety and enforcement, in B.C.'s Ministry of Transportation and Infrastructure. I represent my agency on the Canadian Education Quality Assurance Team and the National Compliance Working Group for Transport of Dangerous Goods, and I continue

to participate in the Canadian Council of Motor Transport Administrators working groups related to electronic logging devices and cargo securement.

My first introduction to CVSA was as a North American Inspectors Championship (NAIC) competitor in 2002. Four years later I was named NAIC Grand Champion, and in recognition, my agency sent me to CVSA's annual conference in Toronto where I learned the importance of the Alliance. I was hooked and began attending as many workshops and conferences as I could.

In 2015, I joined the NAIC Program, which I have chaired since 2016. In 2017, I became Region V president, holding the role for more than six years, during which I was an active voting member of the CVSA Board of Directors as well as a Finance Committee member. Since joining CVSA, I've contributed to the development of two strategic plans, participated in many committees as a voting member, worked in several ad hoc groups, and taken part in numerous discussions and decisions on CVSA's growth and direction. I have had the opportunity to build equally valuable relationships with every level of CVSA's membership.

During my time in CVSA leadership, the organization evolved significantly, quadrupling in value from \$4 to \$16 million. It was amazing to be part of the board during that time of

growth, and I am invested in CVSA's continued success. As we look to the future, I believe communication with our membership and partners to hear different perspectives and innovative ideas will be essential to navigating new opportunities and challenges, ensuring sound decisions are made. I believe in the balance between never losing sight of our roots or the lessons and knowledge passed down by our mentors, while reaching the "boots on the ground" future leaders currently keeping our highways safe and embracing the excitement, passion and ideas of today.

As CVSA continues to grow as an organization, these ideals will be essential for me should I be elected. If I am I successful, in my year of presidency, the CVSA Annual Conference and Exhibition would be held in beautiful Vancouver, a host city with endless attractions for our membership.

Executive leadership, board members and lead agency contacts, your voice is what drives the Alliance. If successful, and as your president, it will be my duty and my honor to ensure your voice is heard as we advance CVSA. I have a proven record of leadership and I am confident that with my experience, knowledge and connections I would be an excellent choice for CVSA secretary. I am passionate about making a positive impact and am committed to working hard to help achieve our shared goals. Thank you for your consideration, and I hope I have gained your support.



2024 CVSA Workshop Yearbook



For individuals who are new to the workshop, CVSA offers a First-Time Attendees Information Session.



CVSA's new Audits and Investigations Committee had its inaugural meeting.



Kentucky State Police Commissioner Col. Phillip Burnett Jr. welcomed workshop attendees to Louisville, Kentucky, at the general session.



The general session kicked off the 2024 CVSA Workshop.



CVSA's committees and programs met throughout the week.



CVSA Executive Director Collin Mooney delivered the State of the Alliance at the general session by starting off with some fun facts about the mint julep, the signature drink of the Kentucky Derby.



CVSA's committee meetings encourage participation from those in attendance.



The CVSA Board of Directors met on the first and last day of the workshop.



CVSA's events provide a unique environment where attendees can gain real-world knowledge from other jurisdictions and companies.



Registrants check in for the CVSA Workshop.



Attendees gathered for a Louisville-inspired meal at the Welcome Networking Reception.



Information Systems Committee Chair Holly Skaar provides an update to the board.



INSPECTOR'S CORNER

Life's Challenges: Obstacles or Opportunities

By **Tomasz Krolak**, Minnesota State Patrol; North American Inspectors Championship Jimmy K. Ammons Grand Champion

The journey of life is a winding road through mountainous terrain in a perpetual state of construction. With every twist and turn, we're faced with challenges that test our commitment, intellect and resilience. These challenges may metaphorically include poor road conditions that require us to tread carefully or closed roads that demand detours. Whatever the case may be, we're faced with challenges that will ultimately impact if, how and when we arrive at our final destination.

While on our journey through life, we may perceive challenges as insurmountable obstacles and turn back to our point of origin. Or, we may see them as obstacles that will eventually be resolved on their own – similar to waiting for a future road extension to come to fruition; or we may choose to see them as opportunities to take new, more scenic routes.

Most of the challenges we face require wellcalculated and deliberate action. The action must be a conscious, thoughtful response to the stimuli and not a knee-jerk reaction just to get something done. We must use our intellect, which affects how we perceive these challenges, to adequately assess our situation and then rely on our commitment to keep us focused on the ultimate goal. We must also learn to be more resilient if we suffer any setbacks along our journey.

Many people, including me, become discouraged when faced with challenges, and risk never living life to its fullest potential. We don't think the universe is aligned for us, or we believe life should have gone a different way when, in reality, we should have improvised and adapted to overcome those challenges. Even the most ambitious people who know what they want out of life will sometimes perceive their situation as dire, negatively affecting their thinking.

Why do I bring this up? To serve as a reminder to count your blessings and make the most of what you've been given. I've recently had several challenges present themselves on my life's journey. Instead of dwelling on circumstances beyond my control, I decided to lean into the challenge. As a result, I've opened new avenues that present exciting opportunities that will help me grow personally

and professionally. I'm learning more about hazardous materials, wastes and organic chemistry on this new journey. I'm unsure where this renewed interest in chemistry will lead, but it's new and exciting, and I'm learning something along the way.

My message to you is this: many things in life are beyond our control or may take some time to overcome. We can only control how we respond to life's challenges. Trying to control things beyond your thoughts and actions will ultimately lead to disappointment and fuel skewed views of reality.

The next time you're dealing with a challenge or difficult situation, stop and think for a moment before you respond. Don't look at the challenges as obstacles that garner negative thoughts and feelings. Instead, think of them as opportunities to get better at something, learn a new skill or step out of your comfort zone. When you do this, you may discover that a positive view of the situation will lead to better results and a feeling of achievement, which you can use to fuel your other ambitious goals.





THE LEGISLATIVE AND REGULATORY RUNDOWN

By Adrienne Gildea, CAE, Deputy Executive Director, Commercial Vehicle Safety Alliance

CVSA Reaffirms and Adds to Legislative Portfolio

In the Q1 2024 edition of Guardian, this column highlighted two of the Alliance's current top legislative priorities: establishing a requirement that all commercial motor vehicles (CMV) be equipped with a universal electronic vehicle identifier and clarifying the definition of the personal convenience designation within the hours-of-service regulations to reduce abuse and improve safety.

At the 2024 CVSA Workshop in Louisville, Kentucky, the CVSA Board of Directors, at the recommendation of both the CVSA Reauthorization Task Force and the Policy and Regulatory Affairs Committee, voted to reaffirm a number of the Alliance's existing legislative asks. This includes several broad positions taken by the Alliance, such as support for identifying sustainable, long-term revenue sources to address the Highway Trust Fund solvency and opposition to efforts to devolve the federal program to the states, as well as more specific policy positions on a number of issues, ranging from exemptions to the need for funding to address U.S. truck parking challenges, as well as additional flexibility in the drug and alcohol testing requirements to allow for the use of hair testing in place of urinalysis.

Specifically, the package included a position expressing CVSA's opposition to the inclusion of exemptions from federal safety regulations in legislation, as well as requests that any such exemptions include an implementation window between when legislative exemptions are passed and when they go into effect, and a requirement that all drivers who wish to operate under an exemption from federal safety regulations be required to present official documentation from the Federal Motor Carrier Safety Administration (FMCSA), either a physical or digital copy, demonstrating that they qualify for the exemption.

In addition, the board reaffirmed the Alliance's support for removing the requirement that Mexico-domiciled motor carriers display a CVSA decal after the initial 18 months of provisional operating authority, to improve uniformity and international harmonization. Currently, any Mexico-domiciled motor carrier that operates outside of the Mexican motor carrier commercial zone must be inspected at

least every 90 days and display a CVSA decal indicating that the vehicle has no major safety defects. The existing requirement applies to Mexico-domiciled motor carriers during their first 18 months of provisional operating authority and for three consecutive years afterwards. Crash and violation data show no significant difference between Mexicodomiciled motor carriers and Canada or U.S.domiciled motor carriers, and the Alliance believes the time to end this requirement has come.

CVSA also supports reauthorization and additional funding for the Hazardous Materials Cooperative Research Program, which provides much-needed research and guidance on the safe transportation of hazardous materials. A strong research program ensures industry and the agencies responsible for overseeing hazardous materials safety have the tools and information they need to develop and implement strategies and programs that work.

And of course, we reaffirmed CVSA's core two priorities, establishing a universal electronic identifier requirement and revising the scope of personal conveyance within the hours-ofservice regulations.

In addition, the board approved two new legislative priorities:

- First, CVSA will be supporting legislation that expands Commercial Driver's License Program Implementation (CDLPI) grant eligibility to include Puerto Rico and the U.S. Virgin Islands. Currently, these jurisdictions do not have a commercial driver's license (CDL) program, which can lead to unqualified individuals driving CMVs. Access to CDLPI funding will help support the jurisdictions as they establish CDL programs, ensuring that drivers are properly credentialed will increase safety on roadways.
- CVSA will also support legislation that ensures funding stability for the Commercial Driver's License Information System (CDLIS), in addition to solutions that assure state funds are correctly and responsibly allocated to supporting CDLIS.

Another significant policy position that was approved at the 2024 Workshop relates to how an entity becomes a motor carrier. Currently, very little is required of an entity to obtain registration and begin operations as a commercial motor carrier. In comparison, CMV inspectors and enforcement personnel must be trained and certified to conduct inspections, and CMV drivers must go through a rigorous Entry Level Driver Training and/ or qualification process and be properly credentialed in order to drive a CMV. No such standards or qualifications exist, however, to become a motor carrier. CVSA has added a statement to its Standing Policy Guide in support of the creation of a standard for entry as a motor carrier. Creating a standard for entry for motor carriers reinforces an industry-wide safety priority.

Given this direction from the Alliance, the Reauthorization Task Force will begin engaging with industry and FMCSA to consider what these standards might look like and how such a qualification process would work. Over the summer, the task force will tackle motor carrier qualification standards, along with necessary changes to grant programs, the New Entrant Safety Audit program and other issues highlighted by the CVSA membership, in order to recommend another package of legislative priorities for consideration at the 2024 Annual Conference and Exhibition in Big Sky, Montana, in early September.

If you have thoughts on these topics, or other issues you believe the Alliance should work to address, please don't hesitate to reach out. Development of sound policy positions and legislative priorities relies on input from the CVSA membership.

FBI Liaison Information Report: Criminals Using Social Engineering to Conduct Sophisticated Cargo Theft Across the United States

The FBI's Little Rock Field Office, in coordination with the Office of Private Sector, prepared this liaison information report (LIR) to inform private sector partners in the transportation systems sector about sophisticated cargo theft schemes targeting businesses across the U.S. The schemes use social engineering to take over carrier administrator accounts or online accounts for third-party transportation services and trick shippers, brokers or carriers into transferring loads to criminal actors for financial gain. Third-party transportation services include, but are not limited to, motor carrier onboarding, load boards and transportation management systems.

Sophisticated cargo theft occurs when cargo is moved from one point to another using deceptive means, such as identity theft, fictitious pick-ups, double brokering scams or fraudulent motor carriers. In 2023, transportation systems sector losses from cargo theft totaled \$694,327,811, compared to \$223,096,369 in 2022 and \$57,906,276 in 2021. Between November 2022 and July 2023, there were nearly 500 fraud and fictitious pick-up incidents recorded. Crimes of this nature have increased year over year by 503%.

The FBI has identified three types of schemes:

- Insider Threat
- Third Party
- Good Samaritan

Insider Threat

In the **insider threat** scheme, criminals use social engineering techniques to take over a targeted business's administrator or online account for third-party transportation services.

This may include criminals recruiting an employee to contact a third-party transportation service for assistance with account lockouts. Criminals then update the account's contact details with an email address and telephone number they control.

In another insider threat version of the scheme, an employee takes over a business's improperly secured administrator account. Then, the employee either uses the account to book loads or sells access to the account for financial gain.



Third-Party Threat

In a **third-party** scheme, criminals take over one or more of a motor carrier's account credentials by identifying a vulnerability in the motor carrier's network or website that allows access to administrator account login credentials. Criminals then use these stolen accounts to book loads for financial gain.

'Good Samaritan' Threat

In the **good Samaritan** scheme, criminals monitor U.S. Department of Transportation or other driver databases to obtain information about cargo shipments. The criminals contact a carrier and advise they have a driver close by who can pick up the shipment, then convince the carrier's administrator to provide the shipper's pick-up number to the criminals, who then steal the load.

An indicator alone does not accurately determine cargo theft activity; organizations should evaluate the totality of behavior, including message delivery and other relevant circumstances when notifying security/law enforcement personnel.

The following suspicious activities/indicators include, but are not limited to, any individual, group or business. Observe these indicators in context:

- Individuals outside your business soliciting information about scheduled or in-progress shipments
- Outside entities offering to assist with shipments
- Unusual or unexpected changes in business contact information or login credentials
- Unusual login attempts to load management systems
- Vendors or contractors showing unusual interest in business processes or systems.

The FBI's Office of Private Sector disseminated this LIR. Direct any requests and questions to your local FBI field office: www.fbi.gov/contact-us/field-offices. ■



FROM THE DRIVER'S SEAT

The Warmer the Weather, the More Work Zones

By **Bernie Wanyo**, Professional Driver, UPS; America's Road Team Captain

Spring and summer bring about rain showers, flowers and the full swing of work zone season. Some projects you might come across at this time of year include the repair or replacement of road surfaces, roadway widening, and full bridge replacements. Whether you drive on interstates, state routes or country roads, your normal commute will be affected, and road construction workers will need your cooperation and patience to keep everyone safe.

I am Bernie Wanyo, an America's Road Team Captain and a professional truck driver for UPS. I have been in the trucking industry for 26 years and have more than 1.8 million miles of safe driving. My wife, Angela, is also a professional driver for a local trucking company, driving a tri-axle dump truck. When I started writing this op-ed, I asked about her work zone safety experiences since she is often delivering or working at those sites.

The following are some of her statements that really illustrate how dangerous work zones can be for both workers and drivers.

"I have seen hard hats blown off of ground crew workers from passing traffic."

"Sometimes, the workers are forced to be close to the edge of the traffic pattern, and at the end of the day, they talk about how many close calls they had just in one shift."

"Since I work with many different crews, I travel through all active zones below the speed limit to help protect all of the workers."

Pennsylvania, my home state, recently began cracking down on speeding within work zones, setting up cameras to help slow motorists. Since the program launched, there has been a decrease in work zone crashes and fatalities. Having a loved one who works in work zones, I am thankful for this initiative. If everyone in the motoring public knew someone who was employed in work zones, maybe nobody would speed or drive distracted in these areas.

Below are some essential safety tips when traveling through work zones:

- △ Drive at or below the posted work zone speed limit.
- △ Stay alert and pay close attention to signs and flaggers.
- A Give workers as much room as you
- Turn on your headlights if signs instruct you to do so.
- Maintain a safe distance around vehicles. Do not tailgate.
- △ Use four-way flashers when stopped or traveling slowly.
- Avoid distractions and give your full attention to the road.
- Buckle up.
- Be patient.

Federal Highway Administration statistics show that in 2021, there were 106,000 crashes within construction zones, resulting in 956 fatalities - a 10.8% increase from 2020. Of those fatalities, 173 were pedestrians or bicyclists.

From my family to yours, please take note of the advice in this article and travel safely during this work zone season. Everybody's family wants them to make it home safely.

I want to end on this last thought from Angela: "I am not trying to sound like a billboard, but slow down and treat every worker like they are a family member. All we want to do is make the roads better and get home to our families." ■



Educate Yourself and Act on Driver Fatigue Impairment

By Mark Samber, Industry Business Advisor - Canada, J. J. Keller and Associates

Most people are aware of the risks of drinking and driving, but they don't realize that drowsy driving can be just as dangerous – and it happens more often than we think. Like alcohol, fatigue impairment slows reaction time, decreases awareness, impairs judgment and increases the risk of crashing. If you've ever been tired and driven to a destination but don't really remember the journey or the route you took, that could be due to fatigue impairment.

It is widely understood that driver fatigue is a serious issue for commercial motor vehicle (CMV) drivers. Under the Motor Vehicle Transport Act, Transport Canada is responsible for the hours-of-service (HOS) regulations. However, while central to mitigating fatigue and fatigue management, HOS rules need to be complemented by additional programs and adopted by the industry.

Fatigue is a general term commonly used to describe the experience of being sleepy, tired, drowsy or exhausted. While all these terms have different meanings, they tend to be used interchangeably in the transportation field.

What Is Fatigue Impairment?

Given the long hours professional truck drivers spend on the road and the high amount of traffic on our roads, it is no wonder that driver fatigue is one of the biggest problems facing the motor carrier industry these days. Trucking companies and drivers must do what they can to prevent driver fatigue.

When a driver is fatigued, the driver is impaired. Driving in this state can have tragic results, just like driving while impaired by alcohol or drugs. The Canadian Centre for Occupational Health and Safety Fatigue Fact Sheet indicates that one in five motor vehicle crashes is related to fatigue.

What Are the Effects of Fatigue?

Fatigue is the progressive reduction in physical and mental alertness, leading to sleepiness and eventually, sleep. Fatigue becomes problematic when it compromises a driver's reflexes and ability to concentrate or use judgment. Some of the effects can be:

- Decreased vigilance, concentration and attention
- Altered judgment and decision quality
- Decreased reaction time
- Worsened memory
- Increased sleepiness and periods of micro-sleeps (lasting 4 to 6 seconds)

Fatigue can often be traced to one or more habits or routines, particularly lack of sleep or exercise.



Fighting Driver Fatigue

These are some precautions a driver can take to combat fatigue:

- Avoid operating a vehicle beyond the allowable driving time.
- Make frequent rest stops. Any physical activity that disrupts the monotony of driving helps to refresh the driver.
- Drink coffee or water, as they may sharpen a driver's senses. However, note that caffeine is not a cure for fatigue.
- Avoid the use of drugs, even over-thecounter medications, for alertness. Certain commonly used drugs may increase alertness and efficiency for a short period, but may often be followed by headaches, dizziness, agitation, irritability, decreased concentration or hallucinations.

Tips and Tricks for Developing a Solid Fatigue Management Policy

Fleet managers are ultimately responsible for protecting drivers and ensuring road safety for others. They must strategically solve driver fatigue problems.

A fatigue management policy can outline the organization's commitment and approach to managing fatigue risks in the workplace. Such a policy is intended to improve workers' health, safety and performance, especially those who work shifts, extended hours or on-call arrangements. Developing a fatigue management policy can help reduce the risk of fatigue-related injuries and incidents among your drivers.

Should a Carrier Have a Fatigue **Management Policy?**

The simple answer is yes, a carrier should have a fatigue management policy. Fatigue is a critical safety issue affecting the transportation industry. It impacts a driver's attention and alertness and increases the risk of crashes, jeopardizing the motoring public's safety. It is estimated that 20% of fatal crashes can be linked to driver fatigue as a contributing factor. A fatigue management policy can help carriers address fatigue-related issues in the work environment while reducing risks related to fatigue and decreasing the number of fatiguerelated incidents.

What Should a Fatigue **Management Policy Include?**

When developing a solid fatigue management policy, include the following:

- Educate and train employees on the signs, symptoms and effects of fatigue, as well as the strategies to prevent and cope with it.
- Plan and implement scheduling practices to minimize exposure to fatigue-inducing factors, such as long hours, night shifts and irregular shifts.
- Establish hours-of-service limitations and rest periods for employees who work extended hours or on-call arrangements.
- Provide alertness strategies for employees in safety-sensitive or high-demand situations, such as grabbing caffeine, naps and breaks.
- Ensure rest environments are comfortable, quiet and conducive to sleep for employees who need to rest between shifts or during travel.
- Develop implementation policies defining roles and responsibilities, reporting procedures, monitoring systems, and corrective actions for fatigue management.
- Evaluate the effectiveness of the fatigue management policy and plans regularly and adjust as needed.

How Do I Communicate Fatigue Risks?

Communicating fatigue risks is an essential part of fatigue risk management. It can help you educate and engage employees and stakeholders, raising awareness of the causes, effects and prevention of fatigue.

Here are some tips and tricks for effective communication:

- Identify the sources and consequences of fatigue in your situation. For example, are you or your employees working long hours, irregular shifts or under high stress?
- Use clear and straightforward language to explain fatigue's impact on health and wellbeing. For example, "Fatigue can impair our ability to do our work safely and effectively."
- Provide evidence or examples that support your message. For example, share statistics, personal stories or testimonials that illustrate the negative effects of fatigue or the benefits of managing it.
- Offer solutions or recommendations to reduce or prevent fatigue. For example, suggest strategies to improve sleep quality or recommend professional help if needed.

How Can a Carrier Implement a **Fatigue Management Program?**

A carrier can follow the guidelines and resources provided by CVSA's North American Fatigue Management Program, which develops comprehensive, integrated fatigue management recommendations for the CMV industry.

To implement a fatigue management program, follow these steps:

- Arrange schedules to allow for frequent rest and sleep breaks.
- Description Educate drivers on the hazards of fatigue at work
- Follow the fatigue management principles, policies and procedures that meet your business needs.
- Identify potential sleep disorders and provide support for affected workers.
- Use fatigue management technologies to monitor and mitigate fatigue risks.

Implementing these initiatives can help alleviate driver fatigue:

- Set limits on overtime and maximum allowable consecutive shifts.
- Offer comprehensive training regarding sleep health and fatigue management.
- Develop a sleep disorder screening and management program.
- Make sure drivers get enough breaks during extended work shifts.
- Encourage self-reporting by providing supervisors and drivers with a fatigue symptoms checklist.
- Check for fatigue-related symptoms and encourage peer-to-peer monitoring.
- Keep tabs on data from in-vehicle monitoring systems to help identify signs of possible fatigue, like lane departures, irregular speeding, etc.

Additionally, ensure that the employees who investigate incidents are educated and knowledgeable about determining the role of fatigue, if any, when an incident occurs and even in near-miss incidents.

Key to remember: Driver fatigue is much more than feeling a little sleepy. Implementing initiatives to combat driver fatigue is a must for motor carriers. Combating driver fatigue helps ensure a business runs safely. An effective fatigue management policy and program can address factors that may contribute to fatigue, reducing the incident risk for your drivers. ■



A crash is one of the most stressful situations a truck driver can face on the job. Beyond damaged vehicles and personal injuries, a crash can domino into complex legal, logistical and financial challenges.

Distracted driving is a leading cause of crashes and is one of the nation's biggest public health threats. The National Highway Traffic Safety Administration (NHTSA) estimates that 400,000 people are injured in distracted driving crashes each year and reported a 16% increase in these crashes from 2020 to 2021.1

Everyone wants to get home safely.

With unending risks on the road, commercial motor vehicle (CMV) fleets should adopt a higher standard of care by building safer operations, improving driver training and fostering a culture that puts safety first.

One place to start is by improving processes that help increase safety standard compliance. For example, paper-based workflows can migrate to digital processes, especially for pre- and post-trip inspections. When one pencil-whipped mistake can cause cascading consequences, electronically verified inspections are a proven method to ensure pre-trip checks

are thorough: that cargo is secure, tires are properly inflated and vehicles are roadworthy. This ultimately reduces safety risks for both the driver and the motorists around them.

Forward-thinking carriers and owneroperators are also adopting technology, such as internet-connected devices and smart dual-facing cameras, to help drivers anticipate and react to risky situations. These devices can also provide a second set of eyes, alerting drivers to unsafe behavior, such as speeding, tailgating, lane drifting and hard cornering.

According to the Centers for Disease Control and Prevention's National Institute for Occupational Safety and Health, one in three long-haul truckers2 will be involved in a crash at some point in their career. Knowing what to do in the aftermath of a crash can influence the outcome of a claim and avoid unnecessary legal issues. Read on for key guidance on the post-crash protocols every CMV driver should consider.

Prioritize safety and don't panic.

Take a deep, slow breath and calm your nerves before you exit your vehicle. Ensure no hazards are present. Secure your vehicle and activate four-way flashers or place triangles and flares. This is especially important if road

conditions aren't ideal or visibility is limited. Stay at the scene.

Assess the situation.

Check for injuries. If anyone needs medical attention, call emergency services and if it is safe to do so, provide assistance until help arrives. Watch what you say and resist the urge to apologize. A well-meaning "I'm sorry" can be construed as an admission of fault. Cooperate with officers to fully document the crash. exchange information with involved parties and take pictures of the scene.

Do post-crash drug and alcohol testing.

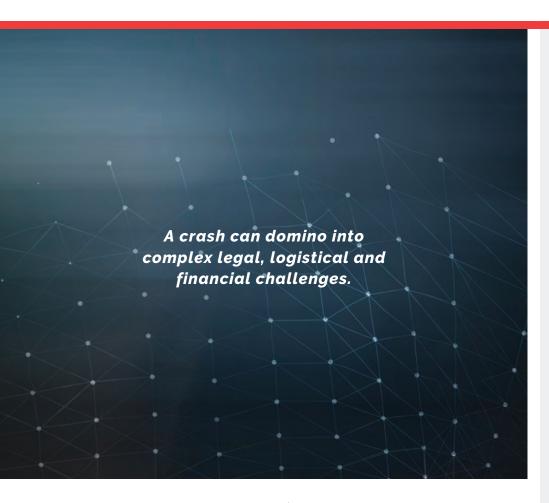
In fatalities, testing for drugs and alcohol is always required. There are also requirements for bodily injury and tow-away crashes: alcohol tests within eight hours of receiving a citation and drug tests within 32 hours.

Follow fleet policies consistently.

Fleets need to ensure that every incident is similarly managed. If your policy is to keep records for three years - the length of the statute of limitations - ensure you save all of them. If a court can show you saved records in all other instances except the one tried, you may be accused of destroying evidence.

¹ NHTSA report: crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813298

²CDC report; www.cdc.gov/niosh/topics/truck/safetv.html



Ensure information stays in the right hands.

Some post-crash policies may advise drivers only to give statements to the fleet's insurance carrier. Others may advise drivers to turn over any evidence or records to law enforcement immediately. Whatever the policy is, follow it consistently across all incidents.

Review and learn.

After the dust settles, review your in-cab dashcam footage and identify any lessons learned. Regardless of who was at fault, consider the factors that contributed to the crash and how to prevent a similar incident. Like reviewing post-game footage, look for opportunities to be safer and more vigilant in the future.

Provide data for the Crash **Preventability Determination**

This program gives motor carriers and drivers a platform to submit crash evidence to the Federal Motor Carrier Safety Administration (FMCSA) for the agency to review and determine whether the incident could have been prevented. Along with a police report and any required drug and alcohol screenings, drivers can submit videos, pictures and court documents.

If FMCSA determines that a crash was not preventable, it will be listed on the Safety

Measurement System but not included when calculating a carrier's Crash Indicator Behavior Analysis and Safety Improvement Category measurement. Crashes deemed not preventable will still be noted on a driver's pre-employment screening report.

Protect yourself and your fleet.

Building a modern, data-based safety program requires more than developing a solid postcrash protocol. Using preventative technology is also essential.

When in-vehicle cameras were first introduced in law enforcement, they were met with resentment. However, their effectiveness has been proven. Now, all police vehicles have them, and most departments have implemented body-worn cameras in today's law enforcement world.

Likewise, today's fleets are also equipped with numerous sensors, smart devices and connected technology. Data is hard to argue and so is video footage. Intelligent video technology helps protect everyone on the road, empowers drivers and managers, exonerates falsely accused drivers, and reimagines driver training. Rather than just analyzing crashes, dashcams equipped with artificial intelligence may help prevent crashes by alerting drivers so they can self-correct in real time. By capturing data and video, fleets gain an objective digital platform that builds a safer fleet from the tires up.

MARK YOUR CALENDAR

CVSA Annual Conference and Exhibition

SEPTEMBER 8-12, 2024

The Alliance's premier meeting, the CVSA Annual Conference and Exhibition, provides the opportunity for government officials, enforcement and industry to gather together to affect meaningful changes to the overall culture of transportation safety throughout Canada, Mexico and the United States.

The next CVSA Annual Conference and Exhibition is scheduled for Sept. 8-12 in Big Sky, Montana, at the Big Sky Resort.

Visit www.cvsa.org/events/cvsa-annualconference-and-exhibition to learn more information and register for this year's annual conference.

Don't miss your opportunity to join your colleagues at the year's most important gathering of the commercial motor vehicle safety community. Together, we make a difference and save lives.



U.S. DOT Oral Fluid Testing: Keeping Our Highways Safe

By Kim Claytor, Compliance Director, Nationwide Testing Association Inc.

On May 2, 2023, the U.S. Department of Transportation (DOT) published a final rule in the Federal Register (88 FR 27596). This final rule, among other items, amends the U.S. DOT's regulated industry drug testing program to include oral fluid testing.

This new option is a game changer for the U.S. DOT-regulated employer in several ways:

- Oral fluid specimens are much less likely to be adulterated or substituted than traditional urine specimens. Studies show that .05% to 3% of all urine specimens are adulterated or tampered with. There are multiple ways to "cheat" a traditional urine test with commercially purchased adulterants, synthetic urine and prosthetic devices, such as the Whizzinator Kit.
- Adulterating or tampering with an oral fluid specimen is extremely difficult. This makes for a cleaner, safer professional driver.
- The window of detection time for THC is much shorter in oral fluid than in urine. This makes oral fluid testing a more attractive option for reasonable suspicion and postincident testing, as the test is more likely to show recent use versus use in the past 14-30 days as detected by traditional urine specimens. This allows the employer to know if THC use is current.
- The oral fluid collection procedures are less time consuming, invasive and burdensome than existing urine collection procedures. In situations where toilet facilities are not available, such as post-incident situations, oral fluid collection will be a viable option. Oral testing accuracy is the same as urine testing accuracy.
- Because the oral fluid collection swab results in a much quicker collection process, time is saved on hours of service. Studies show that, on average, when employees must travel to a collection site and potentially wait to provide a urine sample, they typically miss four hours of the workday. The Federal Motor Carrier Safety Administration requires that all time spent at the collection site, plus all the time spent traveling to and from the site, be counted against the driver's hours. Oral fluid collections are much easier to conduct in-house, saving time and money. Even if done at a collection site, the collection time will still be shorter.

- Oral fluid collections provide an alternative to the "shy bladder" issues that occur with urine specimen collections. The urine specimen collection procedures in 49 Code of Federal Regulations Part 40 (Drug and Alcohol Regulations) currently require up to three hours to obtain the required 45 milliliters of urine in shy bladder situations. The collector will be able to switch to an oral fluid specimen collection in these situations.
- For return-to-duty tests, follow-up tests and, in certain situations, such as out-oftemperature-range tests, directly observed collections are required. If a same-gender collector is not available, an oral fluid specimen collection can be conducted if a trained collector is available. Important: the U.S. DOT mandates that all collections from transgender individuals be conducted via oral fluid collections when the test devices are approved.

However, oral fluid drug testing isn't ready to go just yet. While the final rule was published on May 2, 2023, it only outlined the collection procedures and a few other items. The actual oral fluid testing devices and approval of such devices with at least two U.S. Substance Abuse and Mental Health Services Administration labs were not finalized and approved - one lab for the primary specimen and the second lab if the split specimen needs to be sent for retest. As of this writing, no devices have been approved for use. The U.S. DOT and laboratory representatives indicate it may be late 2024 before any devices are approved.

When these devices are finally approved, representatives from the Office of Drug and Alcohol Policy and Compliance and the National Drug and Alcohol Screening Association strongly recommend that employers, collection sites and consortium/third-party administrations be ready to go.

U.S. DOT-regulated employers will need to:

- · Provide updated policies and educational materials to drivers regarding oral fluid
- · Develop what are referred to as "standing orders" for their collection sites. Standing orders are detailed instructions for the collection site/collector regarding what type of test to conduct for the various U.S. DOT-required test reasons.

For example, an employer may require a urine drug screen for all pre-employment tests but may want oral fluid tests for all post-incident or reasonable suspicion tests. Employers will not be restricted to one or the other. However. they must instruct the collectors with their standing orders. The employee will not be able to choose, only the employer.

It is recommended that employers contact collection sites now to find out if they will be offering oral fluid testing once the test devices are approved. This allows time to locate collection sites that can accommodate them. Not all collection sites will be ready, so now is the time to reach out.

Start having careful, thoughtful discussions about what type of drug testing will be the best fit in post-incident situations, reasonable suspicion, random testing, pre-employment testing, etc. This proactively positions the U.S. DOT-regulated employer on the cutting edge of safety with their testing program.

The bottom line is this: oral fluid testing reduces excuses and provides an effective alternative that will decrease cheating and time spent on drug testing, keeping our highways safer.

To learn more, visit www.transportation.gov/ odapc/Notice Summary May 2023. ■



There are many ways to "cheat" a traditional urine test with commercially purchased adulterants, synthetic urine and prosthetic devices.

Good Answers Take Time

By Dave Elniski, MA, CTSP, CRSP, ATCL, Industry Advisor – Safety and Compliance, Alberta Motor Transportation

It really helps to be pointed in the right direction.

As a trucker, I always liked knowing where to go, whether the information came from a computer or a person. In the army, I appreciated clear orders. As a safety professional, I like knowing the right sources of information for specific questions. Let's take a deeper look at where to find the right sources of information.

In my role as an advisor at the Alberta Motor Transport Association, I regularly talk to representatives of trucking and busing companies of all sizes on topics related to best practices for safety and complying with regulations. I often have the answers industry members need and can back them up with references - no brag, just fact.

However, it's also common that I can't immediately answer their questions. I don't like winging it. So, when presented with a challenging question, I prefer to gather as

much information as possible by listening to the client and then doing my own research before presenting them with a detailed response.

Sometimes, I don't give an answer and instead direct them to another organization or person better suited to their needs. For example, I have received questions about motor carriers buying American vehicles and importing them into Canada for use in their operations. I can provide a lot of information on this topic, but my response will almost always include directing them to appropriate specialists to further assist them, like a customs broker or the Canada Border Services Agency.

I'll admit that when I first started in safety, I felt the need to have all the answers; otherwise, I felt I wasn't a good safety professional. What I've learned, though, is that the best responses and solutions are rarely the quickest, and there is no shame in bringing in additional support, even if it means completely handing the questioner off to another professional or organization.

As a trucker, fleet safety manager and now safety association advisor, I've seen this sort of issue play out in interactions with law enforcement. In my experience, law enforcement officers are often expected to immediately have all the answers to questions related to carrier safety – and they often do. After all, there's not a lot of time for consultation and research when doing a roadside inspection. Defects must be identified, and decisions must be made on the spot.

However, it's important that carriers and drivers alike recognize the complexity of safety compliance. There's so much to know. Like, so much. And things change all the time.

Yes, you can often get the answer you need by calling a scale or otherwise connecting with commercial vehicle enforcement. But whether you're talking to someone like me or an officer, there's nothing wrong with waiting for answers sometimes. Good things come to those who wait.



Responsibilities

By Sulev "Swede" Oun, Owner, O&K Truck Repairs

I want to share an impact portion from some of my trainings and presentations throughout the years. I call this portion "Responsibilities." Certainly, it would be much easier to do this with a live class or audience. Live presentations always open the door for spontaneous responses and discussions. That being said, this article can still provide a glimpse into the value of these discussions. Let's take a look at the opening question:

"Why do we seem to have problems?"

After all, there is nothing complicated about our goal: to save lives and properties.

First, let's look at all of our responsibilities, regardless of the roles we play, as we all must perform our duties within the laws and regulations governing the commercial motor vehicle (CMV) industry.

Technicians

• Important: Regardless of whether there are specific laws governing repairs, a technician is always liable for damage or injuries resulting from repairs performed in an unprofessional or unworkmanlike manner.

 Considering the lives and property that depend on good repairs, there is only one acceptable goal when making vehicle repairs and/or inspections: to restore or maintain the vehicle systems and their components so they perform to their original specifications.

Drivers

- Important: Duties include not putting a vehicle on the road if deemed unsafe and committing to driving safely.
- · How does a driver determine the vehicle's safety? If you said via a pre-trip inspection, you are correct. But also don't forget a posttrip inspection. This question always opens up a discussion on proper pre-trips.

Managers, Dispatchers, Owners

• Important: Do not allow unsafe vehicles and/or drivers on the road. Note: Code of Federal Regulations Part 396.1(a) states: Every motor carrier, its officers, drivers, agents, representatives and employees directly concerned with the inspection or maintenance of commercial motor vehicles must be knowledgeable of and comply

with the rules of this part. This is from Part 396 - Inspection, Repair and Maintenance. Familiarize yourself with it.

Law Enforcement

• Important: Do not allow a vehicle and/or driver to continue operating if either is deemed to be unsafe.

Considering the lives and properties that depend on a safe vehicle, there is only one acceptable goal for technicians, drivers, carriers and law enforcement: to ensure that all CMVs operating on our roadways are doing so safely. To do any less than the stated responsibilities for any of the previously mentioned roles could result in an incident, injury or death and may leave you, your company or your agency open to legal action. Repeatedly asking, "How do you operate?" opens the door for conversations on the following:

- · Lack of communication
- · Lack of training
- Unwillingness to perform our duties (until it is too late)
- Economics



PICTURE #1: Bus pulled over by Ofc. Murphy, who found multiple violations. Look at the coiled line screaming, "Here I am! Pull me over!"

During these training discussions, we as a group conclude that laws are on the books because we (meaning every group represented) haven't always done our jobs right in the past. When it all comes down to it, each entity has the same responsibilities and liabilities. Therefore, each entity must have a thorough understanding of today's CMVs.

Duties

- Technician: To maintain a safe vehicle.
- **Driver:** To operate a safe vehicle.
- Managers, Dispatchers: To allow only safe vehicles/drivers on the road.
- **Law Enforcement:** To ensure only safe vehicles/drivers operate on our highways.

Nearly all these responsibilities are spelled out in the various parts of the Federal Motor Carrier Safety Regulations.

Now, let's put this into a real-world context. A recently retired CMV inspector friend from my region, Ofc. Kevin Murphy, formerly of the Town of Amherst Police Department in Buffalo, New York, had pulled over a bus loaded with

passengers. Take a look at picture #1 on page 40 and you'll find the reason to be pretty obvious: there was a visible air compressor hose running along the outside of the bus.

Why would anyone do this? Let's speculate. My intuition says the driver initially did a pretrip inspection. He probably determined that the bus failed because air would not build up in the air system. The air compressor was not working and there was likely no air to even release the brakes. The driver probably brought that concern to the manager, owner or other decision-maker, who contacted a technician and asked them to make a repair. To overcome this issue, they went with this temporary, out-ofregulation fix. See picture #2.

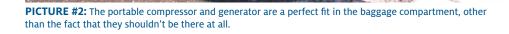
Chances are pretty good that parts were not available on the weekend, but the manager/ decision-maker was desperate to transport the passengers to their promised destination. So, someone came up with the idea of purchasing a portable gas-driven generator to run a portable air compressor that would fit in one of the baggage compartments. If you take a look at picture #3, you may agree with me when I say I think a technician was involved.

Additionally, when officers pulled the bus over for the inspection, there was also gas in the baggage compartment. Think of the potential for leaks through the gas cap while the bus is driven over bumpy highways. What a mess.

Let's revisit. With the new set-up (compressor/ generator in baggage compartment), did the driver meet his responsibilities? Did the driver perform a proper pre-trip? Did the owner/ manager/carrier decision-maker meet their responsibility? According to my responsibility training above, only one person met their responsibilities, and that was Ofc. Murphy by taking that bus out of service.

It's often easy to lose sight of our responsibilities and WHY we perform tasks. Our goal is the safety of everyone traveling on our highways. Thank you to all the good people who are doing their part to the best of their ability. We are all in this together, and we truly need each other. I wish there was a way for someone to come up with data on the number of lives saved due to our collective efforts; I know we make a difference each and every day. ■







PICTURE #3: The final connection from compressor to air supply tank, which is a pretty sly fix, yet completely unsafe and against regulation.

CVSA's 2024 Out-of-Service Criteria Available for Purchase

CVSA offers different formats of the new out-ofservice criteria. Find the format that works best for you.

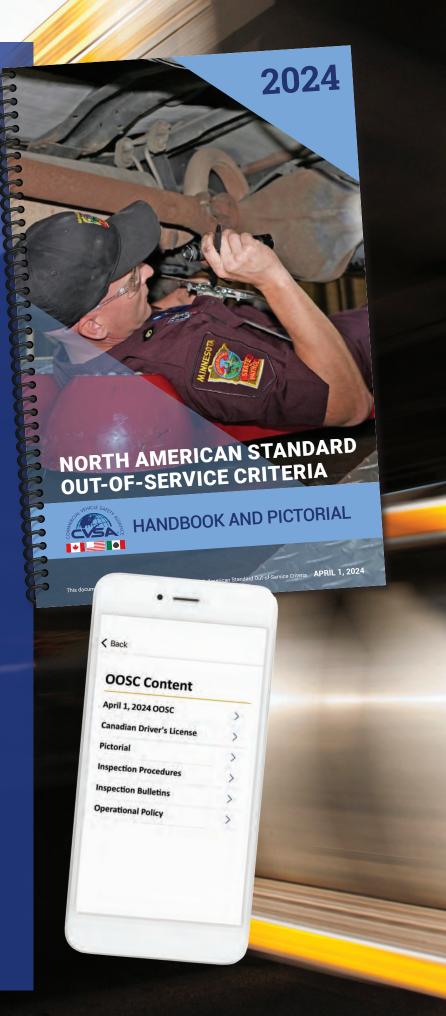
- Spiral-bound, hard-copy handbook
- Electronic PDF file with a restricted three device and/or web browser limit (cannot be printed or copyand-pasted and is best viewed on a desktop computer)
- Spanish U.S. version (8.5" x 11")
- Bilingual English/Spanish U.S. version (8.5" x 11")
- French Canadian version (8.5" x 11")
- Bilingual English/French Canadian version (8.5" x 11")

To purchase the 2024 out-of service criteria, visit www.cvsa.org/store.

If the app is more your style, it contains the out-of-service criteria, inspection bulletins, real-life photo examples of violations, access to the CVSA Learning portal and the Emergency Declarations portal, inspection procedures, operational policies and more.

To download the app, search for "CVSA" in the Apple Store or Google Play. Select "CVSA Out-of-Service Criteria." Once you've downloaded the app, set up your account with your first and last name and email address. You'll then have the option to purchase the 2024 out-of-service criteria.





Why Regulations?

By **Sulev "Swede" Oun**, Owner, O&K Truck Repairs

One of the questions I often pose in my regulations and brake training is this: "Why do we have regulations?" Most trainees reply with some variation of "for safety." That most certainly is a good, broad statement, but it doesn't go far enough. I try to take that question and go a little deeper to make sure it really sinks in. Defining regulations helps them make more sense.

As a class, we come up with answers like this: "To ensure that vehicles are maintained to a high level of safety" and "So drivers and motor carriers know the rules and standards that govern them as they drive on our highways." One way or another, these regulations are applicable to everyone in our industry. The motor carriers bear the responsibility of ensuring everyone in their organization abides by the regulations.

The regulations are also set up to ensure safety on our roads by rewarding or punishing those of us in industry. If we follow and abide by them, we are rewarded by being allowed to perform commerce via our highways. However, if we don't abide by the regulations, we are punished by removing our ability to transport commercial goods via our highways. Most regulatory violations have stipulations allowing us to continue operations if the violations are rectified in a timely fashion. Of course, if the issue is grave enough, drivers and carriers may lose the right to travel on our highways.

The Code of Federal Regulations (CFR) is set up in a manner that makes it easy to enforce. I want to concentrate on the aspects of the regulations related to vehicles to better understand the pros and cons of the criteria. The three primary areas we contend with are CFR Part 393 (Parts and Accessories Necessary for Safe Operation), Part 396 (Inspection, Repair and Maintenance) and of course, Appendix A to Part 396 (Minimum Periodic Inspection Standard).

One paragraph of Part 393.1 states: "Every motor carrier and its employees must be knowledgeable of and comply with the requirements and specifications of this part." Unfortunately, that's not the case with many carriers in North America.

Similarly, Part 396.1 states: "Every motor carrier, its officers, drivers, agents, representatives and employees directly concerned with the inspection or maintenance of commercial motor vehicles must be knowledgeable of and comply with the rules of this part."

Finally, Part 396.17 (Periodic Inspection) charges the motor carrier with periodically (annually)

inspecting the vehicle according to the criteria outlined in Appendix A.

In all the years I have provided various training for our industry, I can count on my hands the few industry members who have read or are aware of these parts of the regulations. Yet, we perform tasks and inspections required by the regulations daily.

In every class I teach, I expose the participants to the Federal Motor Carrier Safety Regulations (FMCSR) and try to enforce that these "parts" are your bible if you maintain and/or inspect vehicles. If you don't get into these parts, you only assume you are doing the right thing.

This leads me to another point. I find that so many companies/carriers concentrate on drivers' pre-trip inspections to reduce roadside violations. Many carriers reward drivers for coming away with a "clean inspection." However, this result is likely due to a mechanic/technician who ensured there were no vehicle defects so that the driver wouldn't get nailed at a roadside inspection. After all, when was the last time a typical driver went underneath the vehicle on a creeper to perform a pre-trip? Yet, that's where many of the violations have been discovered. Who is out there rewarding the mechanics and technicians for a clean inspection? Oftentimes, the right person isn't receiving the credit here.

Now, let's take a deeper dive into the FMCSRs and, more specifically, some of the criteria. Regarding service brakes, the phrase "readjustment limits" is used. Let's think about those two words. "Limit" means there is a very specific number in the regulations/criteria. Using a standard type 30 brake chamber, the specific number, the limit, would be 2 inches. I am now assuming that if I go under a vehicle and check the pushrod stroke and it is at 2 inches, it is okay. Enforcement and inspectionwise, we have not exceeded the criteria limit.

Unfortunately, that 2 inches has been so ingrained in people's minds that it has become an actual goal for many instead of being the bare minimum. In my brake training, I emphasize that we are technicians, and our goal should never be the limit. If you are at the limit or even slightly below it, when the drum gets hot, chances are pretty good that the pushrod stroke will exceed the limit due to drum expansion, failing the inspection. So yes, the regulations set an enforceable limit, but as an industry, we should not accept the limits as the goal for our maintenance practices. We can use the same philosophy, recognizing the limits as the bare minimum for all the criteria.

for anything ranging from brake linings/pad thicknesses to tire tread depth, etc.

I bring this up because if we have been doing everything correctly all these years, there should be no violations and no need for regulations. Of course, there will always be some issues beyond our control, but our goal is to reduce the number of violations. Proper training and awareness are the keys to reducing roadside violations. It needs to be a team effort.

Enforcement personnel are a perfect example. Before becoming CMV enforcement inspectors, they must undergo various training and pass tests. And it doesn't stop there; training is a requirement throughout their career. They are trained to look for the limits. Industry needs to be trained not to reach those limits and ensure that we are far enough away from them to give the vehicle components and systems ample usage time without worrying if the limits will be exceeded the next day, week, etc.

Ultimately, each arm of the CMV industry has the same goal: safety. However, we all must approach it differently. Carriers must maintain vehicles so they are safe, drivers must ensure they only drive safe vehicles and obey the rules of the road, and enforcement must ensure only safe vehicles and drivers operate on our highways.

Regulations are meant to be a tool to assure, enforce and protect. Stay safe.



Time for Change

By National Traffic Law Center Staff; Contributions by Sqt. Seth Turner, New Hampshire State Police

On Friday, June 21, 2019, a drug-impaired man driving a commercial motor vehicle (CMV) struck a group of motorcyclists. This crash killed seven people on a rural road in Randolph, New Hampshire. This incident, later known as "The Fallen Seven" crash, claimed the lives of seven members of the Jarhead Motorcycle Club – mainly Marine Corp veterans on a group ride. To date, it stands as the largest single loss-of-life incident on New Hampshire's roads.

The ensuing investigation was extensive and involved the National Transportation Safety Board (NTSB). Sgt. Seth Turner, a member of the New Hampshire State Police Motor Carrier Enforcement Unit, also participated in the investigation with the singular focus of the motor carrier aspect of this deadly crash.

The investigation revealed that at the time of the crash, all driving privileges of the CMV driver should have been revoked in Massachusetts due to his refusal to submit to a chemical test in an impaired driving arrest in Connecticut two months prior. Massachusetts treats offenses committed out of state relating to operating under the influence of alcohol or other drugs, including chemical test refusals, as though the offenses occurred in Massachusetts.

Despite the federal mandate for "one driver, one license and one record," the investigation of this crash revealed some

serious flaws existing in the effort for states to share commercial driver's license (CDL) information. This article outlines the issues discovered and the innovative solution created to help overcome those issues in an effort to prevent another senseless tragedy. Through the collective effort of various traffic safety stakeholders, Sgt. Turner brought a level of uniformity to this inherently intricate matter in New Hampshire through ingenuity and the use of technology to make the roads safer every day. It serves to illustrate that even from such a tragic crash, positive change can emerge.

The Fall Out

The NTSB investigation revealed that the CMV driver possessed a Massachusetts's driver's license. The license, however, was suspended due to the driver's refusal to submit to a chemical test in a Connecticut DUI incident earlier in the year. The Connecticut state driver licensing agency (SDLA) reported the suspension to an electronic system designed to alert other states of out-of-state convictions and suspensions. This report by Connecticut should have resulted in the revocation of the driver's Massachusetts license. The status of his Massachusetts license, however, did not accurately reflect the revocation due to a backlog of unprocessed suspensions.

Following the investigation, which included substantial contributions from the New Hampshire State Police, the NTSB issued >>> The investigation revealed that at the time of the crash, all driving privileges of the CMV driver should have been revoked in Massachusetts due to his refusal to submit to a chemical test in an impaired driving arrest in Connecticut two months prior.



a series of recommendations to SDLAs nationwide.

Among these recommendations were the following:

"Direct your state licensing agencies to review existing procedures or develop new ones to accurately and expeditiously,

- (1) process notifications received from other states about infractions and suspensions committed by the home state's drivers in those jurisdictions, and
- (2) notify other jurisdictions of infractions and suspensions committed in the home state by drivers licensed in those jurisdictions."

In pursuit of implementing the NTSB's recommendations, Sgt. Turner collaborated with a neighboring state's law enforcement counterparts and found issues existed in the reporting process, far before a conviction even reached the SDLA. In the review of the other state's CDL program, they discovered that due to the issues at the beginning of the reporting process, citations and charges involving a CMV or CDL holder were not being appropriately identified as such. As a result, that state's SDLA did not receive accurate data from the judicial bureau, thereby preventing the SDLA from properly disqualifying a driver in accordance with 49 Code of Federal Regulations (CFR) § 383.51, which mandates disqualification for certain offenses involving CMVs and/or CDL holders.

Proper identification of a CMV or CDL holder involvement starts at the roadside by law enforcement officers. The initial identification and notation of these indicators are critically important to hold CMV drivers accountable as well as to prevent the masking of violations for CDL holders. Failure to properly document these indicators could result in missing an appropriate disqualification, or even an unwarranted imposition of one. Additionally, failure to document the correct status of a CDL or CMV at the time of initial enforcement action against the driver prevents prosecutors, the court and, ultimately, the SDLA, from properly identifying and imposing sanctions against the driver as required by 49 CFR § 383.51.

A Start in the Right Direction

Upon first glance, the reporting issue seemed to stem from law enforcement officers, prosecutors, judicial staff and/or SDLA personnel neither understanding the indicators nor the importance of them. Sgt. Turner

essentially viewed the crux of the reporting problem as a training issue, the solution to which was providing specific training. Ultimately, Sgt. Turner discovered there were two main areas in the process presenting problems: the first was overall knowledge and education on CDL- and CMV-related charges and issues and the second was the process by which information was recorded. While the two issues are closely linked, each problem required a distinct, yet complementary, solution.

In early 2020, based on the recommendations of the NTSB, Sgt. Turner started working on a project called Accuracy is Critical, to address what he initially perceived as a training issue. The project began as a simple PowerPoint presentation designed to help train New Hampshire law enforcement (mainly troopers) how to properly execute CDL-related citations.

In early 2023, Sgt. Turner realized the issue reached far beyond just training. While the Accuracy is Critical project was stalled for other reasons, Sgt. Turner began participation in a new Federal Motor Carrier Safety Administration (FMCSA) grant-funded project called the National Commercial Driver License Program Assessment. The goal of the assessment was to identify opportunities to strengthen the National CDL Program and enhance the ability of SDLAs to maintain compliance with § 383 and 384 that govern CDLs and CDL programs. More specifically, the assessment involved an in-depth look at the lifecycle of a CDL-related citation to better educate and train law enforcement officers as well as to identify potential points of failure in the reporting process.

The lifecycle of a citation issued to a CDL holder begins when a law enforcement officer executes a traffic stop, verifies the CDL status of the driver, and issues the traffic citation or court complaint, allowing the citation or complaint to continue through the adjudicatory process. The cycle is complete when the SDLA receives a conviction notice, updates the CDL holder's driving record, imposes the appropriate § 383.51 (disqualification of drivers) table sanction, as applicable, and reports the conviction to the Commercial Driver's License Information System (CDLIS), as required.

Continued on next page

>> Proper identification of a CMV or CDL holder involvement starts at the roadside by law enforcement officers.



Continued from page 47

Sgt. Turner immediately recognized a key part of the problem that arose even prior to the start of the lifecycle. Specifically, with CDLs and CMVs, law enforcement needed to be educated on the intricacies of CDLs and CMVs before they were faced with actually making a roadside stop. Secondary to the importance of the timing of the training, the information an officer needed during the traffic stop also needed to be easily accessible and dynamic enough to sustain iterative changes.

Historically, law enforcement officers used visor cards or quick reference cab cards as a printed one-page reference sheet to keep in their vehicles. Printed material quickly becomes outdated, however, and is logistically difficult to manage and update. The fact that all law enforcement officers generally have access to the internet while roadside made the use of a technology-based platform the most practical solution. From the necessity of having a convenient-to-use tool that was easy to update, the idea for a web-based application was born.

Understanding and believing this web-based application tool would be the solution to the accuracy issues in reporting CMV and CDLrelated incidents, Sgt. Turner collaborated with a web designer to build a beta-version of the web-based application, which they named CDL-QR (New Hampshire version). The team's vision was to develop the foundation for the application in New Hampshire in such a way that the application could later be reproduced and customized for other states. The team quickly realized this vision through incorporating partners throughout the process. The project team showcased the project to representatives from Vermont who became involved in the project in the early stages and have since designed a version of CDL-QR specific to Vermont.

The application, in its current form, serves a couple of functions through a series of questions and photos depicted below. The first step of the tool assists a user to determine if the vehicle being driven is being used in commerce. The second step assists a user to determine if the vehicle being operated is indeed a CMV based on the federal definition. If the vehicle meets the federal definition of a CMV. the tool then assists a user to determine whether it is a CDL-required CMV, a non CDLrequired CMV, or a vehicle not qualifying as a commercial motor vehicle at all.

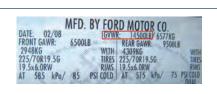
Overview of Categories of Information/Questions

Use in Commerce Questions:



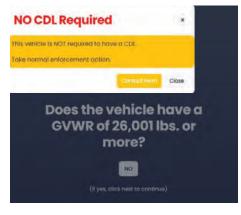
Federal Definition of CMV Questions and Tips:

Does the vehicle have a gross vehicle weight rating GVWR or gross combination weight rating GCWR, or gross vehicle weight or gross combination weight of 10,001 pounds (4,536 kg) or more, whichever is greater?



WARNING: Use the weight in pounds from this mylar sticker, DO NOT use the registered weight from the registration certificate. If the sticker is missing from inside the door, use VIN Assist link to check for the vehicle's minimum GVWR".

CDL Requirement Questions:



Conduct Federal and State Enforcement actions as necessary paying close attention to 49 CFR, Part 383.51 RSA INFORMATION CUCK HERE FOR Section

Training Is Only Part of the **Problem**

While the CDL-QR (New Hampshire version) application served a key function in solving the overall education problem, education was not the only issue plaguing the reporting of CDL and CMV cases in New Hampshire. A month or so after starting the National Commercial Driver License Program Assessment, Sgt. Turner identified an inconsistency between New Hampshire's two charging instruments. While the discrepancy between the two forms was not the root of the problem, the discrepancy underscored the flaws in the CMV and CDL indicator fields which lead to inaccurate reporting. The lack of clarity in the indicator fields proved to have a detrimental impact on the CDL and CMV reporting process.

In New Hampshire, the Uniform Traffic Citation (Form DSMV 428, reproduced in part below) is used to identify traffic violations against non-CDL and CDL holders approximately 90% of the time (i.e., at traffic stops and/or roadside inspections), while the New Hampshire long form complaint (NH-JB- 2962-D, reproduced in part below) is used when the DSMV 428 is not applicable (i.e., custodial arrest). Both forms include a box to indicate a "Commercial Vehicle," but neither form provides a clear explanation of when the indicator is applicable. The long form complaint contained an additional box for a "Commercial Driver's License" but again, no explanation as to when this indicator should be used.

DSMV 428 Form:

Reproduced in part, showing only the indicators.

| □COMM.VEH. | | □COMM.DR.LIC. | | □HAZ.MAT. | □16+PASSENGER |
|------------|----|---------------|---------------------------------------|-----------|---------------|
| AT: | | | | | |
| On | at | in | County NH, did commit the offense of: | | |

NH-JB-2962-D Form:

Reproduced in part, showing only the indicators.



Upon identification of the discrepancy in the two forms, Sgt. Turner informally polled both new and more experienced officers, asking when the commercial vehicle box should be checked. Most officers were unable to articulate when the box should be checked and there was even confusion among the certified motor carrier inspectors. Answers varied across the board with some believing the box was for a driver operating a CDL-required vehicle, while others believed it was for a driver operating a commercial vehicle as defined by

49 CFR § 390.5. Some officers even admitted they never checked the box. It was obvious the lack of clarity led to improper reporting and, in some cases, no reporting at all.

A change to the forms was clearly needed, primarily to ensure New Hampshire reported properly and in compliance with the federal regulations governing CDLs and CMVs. The added benefit, however, is the changes allow law enforcement officers to communicate more effectively, both to the defendant and to those who handle the complaints/ citations, that the charges may have further implications relating to a CMV and possible sanctions to a CDL. Sgt. Turner proposed the following changes (DSMV 428 change proposal, reproduced in part below) that would better align with federal regulations surrounding CMV and CDL reporting. The changes clearly identify if the driver possessed a CDL and if the vehicle being driven was a CMV requiring a CDL.

Proposed Update DSMV 428

Reproduced in part.



These proposed changes, coupled with the use of e-citation/e-complaint, require the CDL/CMV-related questions to be accurately answered by the issuing officer in order for them to issue the complaint or citation. The technology, in the form of an e-citation/ecomplaint, is vital to ensure officers properly report as it requires their affirmative action to answer the CDL/CMV question(s) before they can proceed to the next step with the citation. Aside from the format of the questions, the only barrier to an officer accurately checking the correct box is the lack of requisite knowledge of what defines a CDL required vehicle. When an officer encounters this problem, they can use the CDL-QR (NH version) application to determine the type of vehicle.

Some resisted these proposed changes, as it seemingly put an extra burden on all officers when many perceived this as purely a motor carrier enforcement function. To the contrary, this is a law enforcement-wide issue requiring a global resolution and should not be limited to just a select, specially trained few within each jurisdiction.

Be the Change

From a horrific tragedy and its ensuing investigation, the ingenuity and dedication of the New Hampshire State Police identified systemic issues likely to be similarly impacting other agencies across the country. The key is for every state to heavily scrutinize and review its own citation and complaint forms to ensure they provide accurate information, to properly educate all traffic safety holders, to review current business practices as it relates to CDLIS reporting and to review the workflow with real world cases by tracking them from beginning to end. As New Hampshire found, something so simple as a check box on a citation or complaint greatly impacted the potential for subsequent sanctions to be brought against a CDL holder upon conviction. Elevating education for all traffic safety stakeholders and improving the reporting procedures greatly increase the ability to take high risk drivers off the road, keeping our nation's roadways safe.

The hope is that these New Hampshire projects can influence change when it comes to enforcement against CDL holders and CMV drivers. Enforcement saves lives and it is incumbent on every traffic safety stakeholder to be educated and enforce the laws governing CMVs and CDLs. Each and every step forward brings something positive and good to the senseless loss of seven people who were just out for a ride with friends in the beautiful White Mountains of New Hampshire. Let their loss not be in vain.

If You Are Interested in the CDL-QR Application:

The pilot project utilized to design and construct the CDL-QR application for New Hampshire is completed, but there are many areas to expand upon as it relates to its further development.

An FMCSA grant application is currently pending. This grant will allow for the expansion of the CDL-QR application's abilities and will provide for the application development for other states who are interested. This webbased, state-specific application will aid officers/ troopers with effective traffic enforcement against CDL holders and CMV drivers and increase data accuracy for enforcement and crash reporting.

New Hampshire worked with eScience & Technology Solutions Inc. to develop the initial concept of the CDL QR application.

Lead state enforcement agencies interested in additional information about the CDL QR application or in participating in this next grant, if awarded, are encouraged to contact **Bill Haynes from eScience & Technology** Solutions Inc. at bill.haynes@estsi.com. ■

About the Contributor

Sgt. Seth Turner, a native of New Hampshire, is currently a supervisor with New Hampshire State Police's Motor Carrier Enforcement Unit. He currently holds North American Standard Inspection Part A/B, Hazmat, Cargo Tank, Passenger Vehicle and Level VI certifications and recently obtained his Advanced CMV Post-Crash Inspection certification from CVSA. Sgt. Turner is a U.S. Army veteran and recently completed his 20th year in law enforcement. He is the proud father of two young men, both currently serving in the U.S. Armed Forces.

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